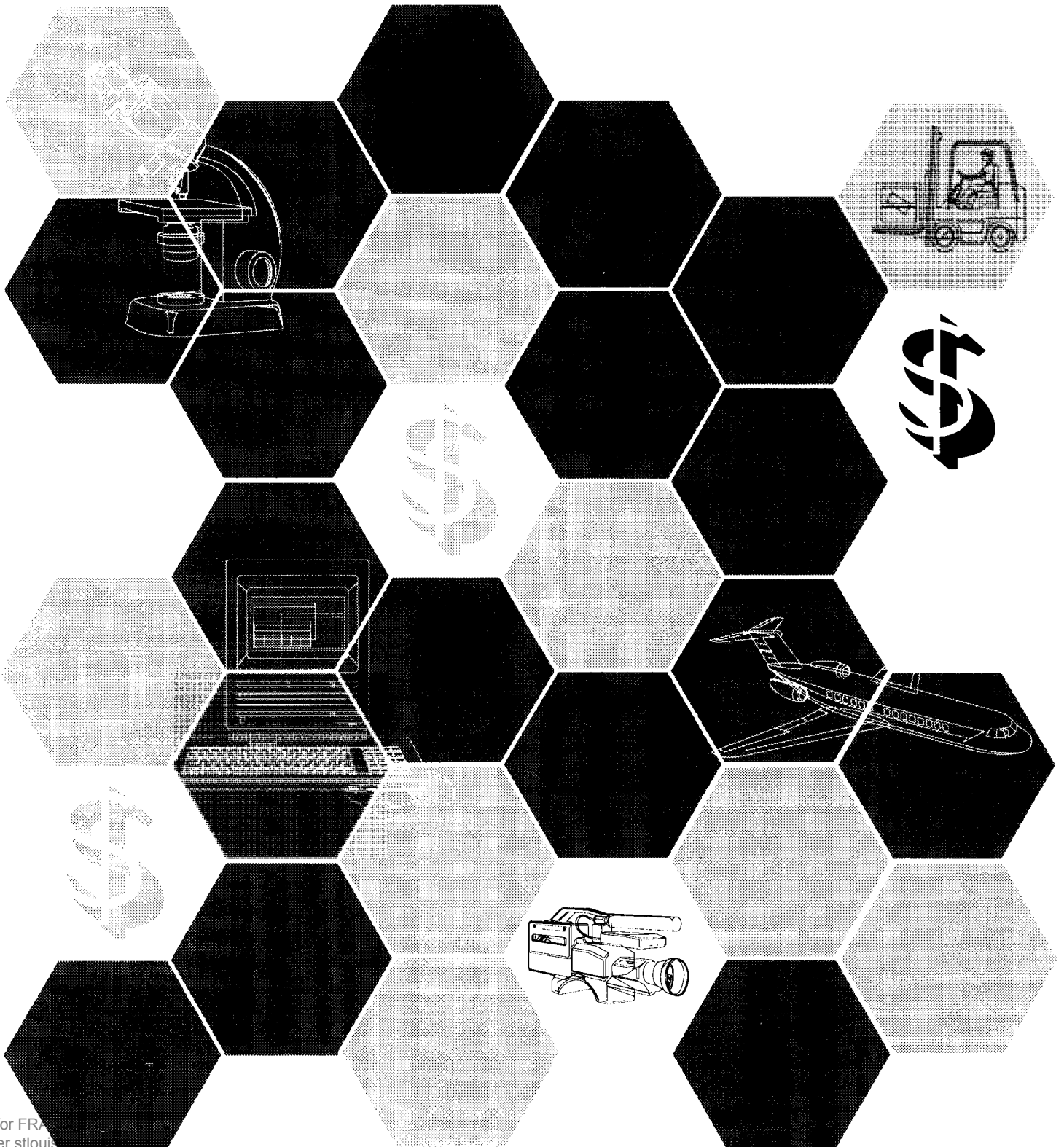




EMPLOYMENT AND EARNINGS

U.S. Department of Labor
Bureau of Labor Statistics
September 1998





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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.
Earnings by detailed occupation	Jan.
Employee absences	Jan.
Revised seasonally adjusted series	Jan.
Quarterly averages: Seasonally adjusted data, persons of Hispanic origin, Vietnam-era veterans and nonveterans, and weekly earnings data	Jan., Apr., July, Oct.

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State and area annual averages	May
Area definitions	May

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Employment and Earnings

Editors: Gloria Peterson Green, Eugene H. Becker

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Employment and Unemployment Developments, August 1998

Payroll employment rose, and unemployment was unchanged in August. Nonfarm payroll employment increased by 365,000, in part because workers who were off payrolls in July due to strikes and plant shutdowns in automobile-related manufacturing returned to their jobs. The jobless rate remained at 4.5 percent.

Unemployment

Since June, the number of unemployed persons has remained essentially unchanged at 6.2 million, and the unemployment rate has held at 4.5 percent. Among the major demographic groups, the jobless rates for adult men (3.7 percent), adult women (4.1 percent), teenagers (15.0 percent), whites (4.0 percent), blacks (9.0 percent), and Hispanics (7.5 percent) were little changed in August. (See tables A-3 and A-4.)

The number of persons employed part time for economic reasons declined by 320,000 to 3.5 million. (See table A-7.)

Total employment and the labor force

Total employment was about unchanged over the month at 131.2 million. The employment-population ratio—the proportion of the population age 16 and older with jobs—was 63.8 percent, likewise little changed from the previous month. (See table A-3.)

About 7.5 million persons (not seasonally adjusted) held more than one job in August. These multiple jobholders comprised 5.6 percent of the total employed, compared with 5.8 percent a year earlier. (See table A-37.)

The civilian labor force, 137.4 million in August, has remained about unchanged since April. The labor force participation rate—66.9 percent in August—also has remained little changed over this period. (See table A-3.)

Persons not in the labor force

About 1.3 million persons (not seasonally adjusted) were marginally attached to the labor force in August. These were people who wanted and were available for work and had looked for a job sometime in the prior 12 months but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey.

The number of discouraged workers—a subset of the marginally attached who were not currently looking for work specifically because they believed no jobs were available for

them—totaled 280,000 in August, essentially unchanged from a year earlier. (See table A-36.)

Industry payroll employment

Nonfarm payroll employment rose by 365,000 in August to 126.2 million, seasonally adjusted, following a gain of only 68,000 in July. Part of the August rebound reflected the return of workers to their jobs after strikes and associated plant shutdowns in auto-related manufacturing industries. The average monthly increase in payroll employment in July and August was 217,000. (See table B-3.)

Manufacturing employment rose by 95,000 in August, following a loss of 200,000 in July, much of which was strike related. (Persons on strike or on layoff for the entire reference period are not on payrolls and, thus, are not counted as employed in the establishment survey.) In August, employment in motor vehicles and equipment was up by 117,000, largely representing a return to work of persons who were either on strike or on layoff due to strike-related plant shutdowns. Other over-the-month gains at least partly attributable to the settlement of strikes occurred in primary metals (11,000), fabricated metals (7,000), and rubber and miscellaneous plastics (8,000). Despite the return of nearly all of the workers in autos and related industries, manufacturing employment overall was down by 105,000 from its June level. In August, employment in apparel and other textile products declined by 18,000. Other manufacturing industries that experienced over-the-month job losses included electronic components (-6,000), food and kindred products (-4,000), and textile mill products (-3,000).

Construction employment continued to grow in August (up 16,000); the industry has added 261,000 jobs since last October.

Employment in services rose by 135,000 in August. Help supply services increased by 42,000 jobs, following a decrease of similar magnitude in July. At least some of this movement was attributable to the strikes in auto-related industries. After showing no growth in July, health services rebounded in August with a gain of 24,000 jobs. Nevertheless, average monthly growth in the industry this year has been sharply lower than in 1997. Social services employment increased by 15,000, and the industry has added 75,000 jobs since April. In August, computer and data processing services had a job gain (11,000) that was below the monthly

average (17,000) this year. Employment in engineering and management services was little changed, following 3 months of strong gains.

Transportation and public utilities added 24,000 jobs in August. Most of the gain was in transportation (23,000), with about half of that increase (12,000) in trucking and warehousing. Employment growth in communications has slowed since April.

Employment in retail trade, and in eating and drinking places in particular, was little changed in August, following a substantial gain in July. Employment in wholesale trade increased by 11,000, entirely in durable goods.

Employment growth in finance, insurance, and real estate in August (13,000) was well below the average (23,000) for the prior 12 months. Almost all of the August gain was in finance (12,000), led by mortgage brokerages (5,000) and security brokerages (3,000). Employment in real estate did not grow for only the second time this year, and growth in insurance was sluggish, following 4 months of strong gains.

Government added 57,000 jobs in August, nearly all in local government (55,000). Local government education increased by 38,000. In contrast, employment in the Federal Government continued to decline.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls was unchanged in August at 34.6 hours, seasonally adjusted. It has been at this level since June. The manufacturing workweek also was unchanged at 41.7 hours. Factory overtime decreased over the month by 0.3 hour to 4.4 hours. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls was little changed in August at 145.3 (1982=100), seasonally adjusted. The manufacturing index rose by 0.6 percent to 107.9, reflecting the returns from strikes and layoffs in auto-related industries. The manufacturing index in August was 1.0 percent lower than in June. (See table B-9.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls rose by 7 cents in August to \$12.86, seasonally adjusted. This follows increases of 3 cents an hour in each of the prior 3 months. Average weekly earnings rose by 0.5 percent in August to \$444.96. Over the year, average hourly and weekly earnings have risen by 4.2 and 3.9 percent, respectively. (See table B-11.)

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

Summary table A. Major labor force status categories, seasonally adjusted

(Numbers in thousands)

Category	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Labor force status													
Civilian noninstitutional population	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899	205,085	205,270	205,479
Civilian labor force	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364	137,447	137,296	137,415
Percent of population	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0	67.0	66.9	66.9
Employed	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067	131,168
Percent of population	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2	64.0	63.9	63.8
Unemployed	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230	6,247
Not in labor force	66,960	67,131	67,361	67,077	66,929	66,745	66,844	67,024	67,489	67,535	67,639	67,973	68,064
Unemployment rates													
All workers	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5	4.5
Men, 20 years and over	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9	3.7
Women, 20 years and over	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0	4.1
Both sexes, 16 to 19 years	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8	15.0
White	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8	4.0
Black	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7	9.0
Hispanic origin	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2	7.5

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

Summary table B. Employment, hours, and earnings of production or nonsupervisory workers on nonfarm payrolls, seasonally adjusted

(Numbers in thousands)

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Employment													
Total	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,234	125,562	125,751	125,819	126,184
Total private	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,470	105,734	105,938	105,992	106,300
Goods-producing industries	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,339	25,301	25,304	25,118	25,227
Mining	592	594	592	591	592	592	590	587	582	579	578	571	569
Construction	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,930	5,917	5,946	5,967	5,983
Manufacturing	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,827	18,805	18,780	18,580	18,675
Service-producing industries	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,895	100,261	100,447	100,701	100,957
Transportation and public utilities	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,513	6,534	6,538	6,556	6,580
Wholesale trade	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,798	6,815	6,821	6,825	6,836
Retail trade	22,043	22,078	22,105	22,206	22,245	22,280	22,283	22,259	22,335	22,423	22,448	22,545	22,561
Finance, insurance, and real estate	7,110	7,125	7,151	7,172	7,194	7,213	7,232	7,258	7,289	7,311	7,333	7,368	7,381
Services	36,225	36,363	36,484	36,638	36,795	36,932	37,020	37,106	37,196	37,350	37,494	37,580	37,715
Government	19,609	19,607	19,848	19,862	19,680	19,686	19,720	19,728	19,764	19,828	19,813	19,827	19,884
Over-the-month change													
Total	83	386	288	376	345	351	192	82	320	328	189	68	365
Total private	66	388	249	360	327	345	158	74	284	264	204	54	308
Goods-producing industries	49	21	39	67	94	104	17	-38	63	-38	3	-166	109
Mining	-1	2	-2	-1	1	0	-2	-3	-5	-3	-1	-7	-2
Construction	17	14	9	28	60	71	21	-42	70	-13	29	21	16
Manufacturing	33	5	32	40	33	33	-2	7	-2	-22	-25	-200	95
Service-producing industries	34	365	249	309	251	247	175	120	257	366	186	254	256
Transportation and public utilities	-147	171	18	3	-5	22	21	10	9	21	4	18	24
Wholesale trade	16	8	18	14	20	28	10	14	15	17	6	4	11
Retail trade	56	35	27	101	39	35	3	-24	76	88	25	97	16
Finance, insurance, and real estate	15	15	26	21	22	19	19	26	31	22	22	35	13
Services	77	138	121	154	157	137	88	86	90	154	144	86	135
Government	17	-2	39	16	18	6	34	8	36	64	-15	14	57
Hours of work¹													
Total private	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6	34.6
Manufacturing	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7	41.7
Overtime	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.7	4.4
Indexes of aggregate weekly hours (1982=100)¹													
Total private	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2	145.3
Manufacturing	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.7	109.4	109.0	107.3	107.9
Earnings¹													
Average hourly earnings, total private:													
Current dollars	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79	\$12.86
Constant (1982) dollars ²	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.74	7.73	7.75	7.75	N.A.
Average weekly earnings, total private	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53	444.96

¹ Data relate to private production or nonsupervisory workers.

N.A. = not available.

² The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

^P = preliminary.

Chart 1. Nonfarm payroll employment, seasonally adjusted, 1994-98

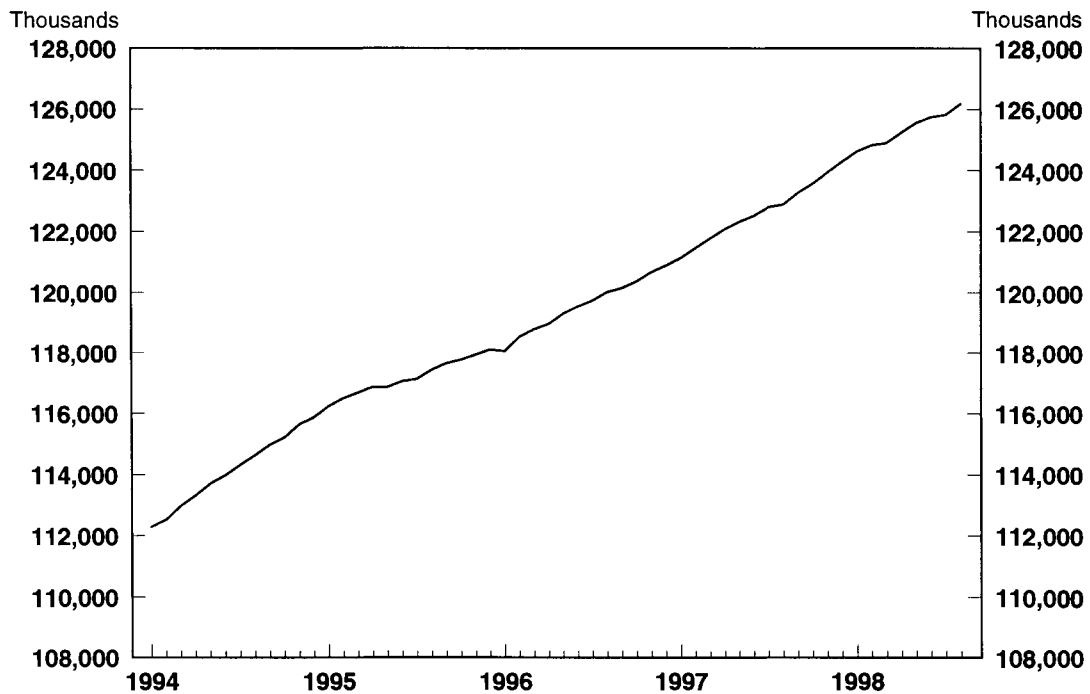
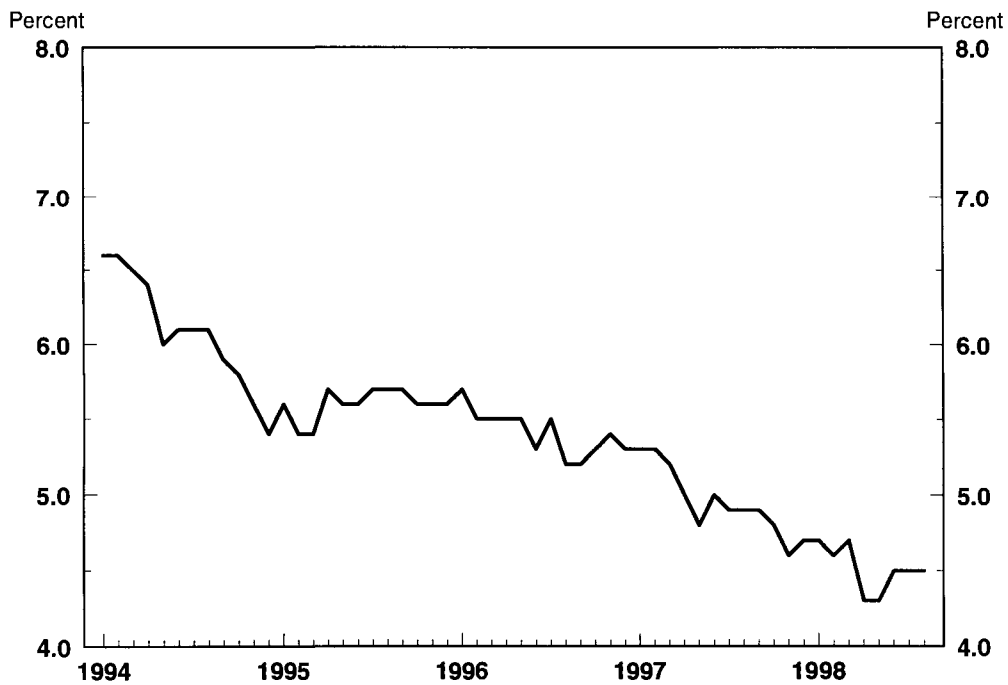


Chart 2. Unemployment rate, seasonally adjusted, 1994-98



NOTE: Beginning in 1990, data reflect 1990 census-based population controls, adjusted for the estimated undercount. Beginning in 1994, data reflect the introduction of a major redesign of the Current Population Survey. Beginning in 1997, data incorporate revisions in the population controls. Beginning in 1998, data incorporate new composite estimation procedures and updated population controls. These changes affect comparability with data for prior periods.

**HOUSEHOLD DATA
HISTORICAL**

A-1. Employment status of the civilian noninstitutional population 16 years and over, 1964 to date

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
1964	124,485	73,091	58.7	69,305	55.7	4,523	64,782	3,786	5.2	51,394
1965	126,513	74,455	58.9	71,088	56.2	4,361	66,726	3,366	4.5	52,058
1966	128,058	75,770	59.2	72,895	56.9	3,979	68,915	2,875	3.8	52,288
1967	129,874	77,347	59.6	74,372	57.3	3,844	70,527	2,975	3.8	52,527
1968	132,028	78,737	59.6	75,920	57.5	3,817	72,103	2,817	3.6	53,291
1969	134,335	80,734	60.1	77,902	58.0	3,606	74,296	2,832	3.5	53,602
1970	137,085	82,771	60.4	78,678	57.4	3,463	75,215	4,093	4.9	54,315
1971	140,216	84,382	60.2	79,367	56.6	3,394	75,972	5,016	5.9	55,834
1972 ¹	144,126	87,034	60.4	82,153	57.0	3,484	78,669	4,882	5.6	57,091
1973 ¹	147,096	89,429	60.8	85,064	57.8	3,470	81,594	4,365	4.9	57,667
1974	150,120	91,949	61.3	86,794	57.8	3,515	83,279	5,156	5.6	58,171
1975	153,153	93,775	61.2	85,846	56.1	3,408	82,438	7,929	8.5	59,377
1976	156,150	96,158	61.6	88,752	56.8	3,331	85,421	7,406	7.7	59,991
1977	159,033	99,009	62.3	92,017	57.9	3,283	88,734	6,991	7.1	60,025
1978 ¹	161,910	102,251	63.2	96,048	59.3	3,387	92,661	6,202	6.1	59,659
1979	164,863	104,962	63.7	98,824	59.9	3,347	95,477	6,137	5.8	59,900
1980	167,745	106,940	63.8	99,303	59.2	3,364	95,938	7,637	7.1	60,806
1981	170,130	108,670	63.9	100,397	59.0	3,368	97,030	8,273	7.6	61,460
1982	172,271	110,204	64.0	99,526	57.8	3,401	96,125	10,678	9.7	62,067
1983	174,215	111,550	64.0	100,834	57.9	3,383	97,450	10,717	9.6	62,665
1984	176,383	113,544	64.4	105,005	59.5	3,321	101,685	8,539	7.5	62,839
1985	178,206	115,461	64.8	107,150	60.1	3,179	103,971	8,312	7.2	62,744
1986 ¹	180,587	117,834	65.3	109,597	60.7	3,163	106,434	8,237	7.0	62,752
1987	182,753	119,865	65.6	112,440	61.5	3,208	109,232	7,425	6.2	62,888
1988	184,613	121,669	65.9	114,968	62.3	3,169	111,800	6,701	5.5	62,944
1989	186,393	123,869	66.5	117,342	63.0	3,199	114,142	6,528	5.3	62,523
1990 ¹	189,164	125,840	66.5	118,793	62.8	3,223	115,570	7,047	5.6	63,324
1991	190,925	126,346	66.2	117,718	61.7	3,269	114,449	8,628	6.8	64,578
1992	192,805	128,105	66.4	118,492	61.5	3,247	115,245	9,613	7.5	64,700
1993	194,838	129,200	66.3	120,259	61.7	3,115	117,144	8,940	6.9	65,638
1994 ¹	196,814	131,056	66.6	123,060	62.5	3,409	119,651	7,996	6.1	65,758
1995	198,584	132,304	66.6	124,900	62.9	3,440	121,460	7,404	5.6	66,280
1996	200,591	133,943	66.8	126,708	63.2	3,443	123,264	7,236	5.4	66,647
1997 ¹	203,133	136,297	67.1	129,558	63.8	3,399	126,159	6,739	4.9	66,837
Monthly data, seasonally adjusted²										
1997:										
August	203,364	136,404	67.1	129,747	63.8	3,379	126,368	6,657	4.9	66,960
September	203,570	136,439	67.0	129,761	63.7	3,422	126,339	6,678	4.9	67,131
October	203,767	136,406	66.9	129,910	63.8	3,327	126,583	6,496	4.8	67,361
November	203,941	136,864	67.1	130,575	64.0	3,384	127,191	6,289	4.6	67,077
December	204,098	137,169	67.2	130,777	64.1	3,385	127,392	6,392	4.7	66,929
1998:										
January ³	204,238	137,493	67.3	131,083	64.2	3,319	127,764	6,409	4.7	66,745
February	204,400	137,557	67.3	131,163	64.2	3,335	127,829	6,393	4.6	66,844
March	204,547	137,523	67.2	130,994	64.0	3,132	127,862	6,529	4.7	67,024
April	204,731	137,242	67.0	131,383	64.2	3,350	128,033	5,859	4.3	67,489
May	204,899	137,364	67.0	131,453	64.2	3,335	128,118	5,910	4.3	67,535
June	205,085	137,447	67.0	131,209	64.0	3,343	127,867	6,237	4.5	67,639
July	205,270	137,296	66.9	131,067	63.9	3,441	127,626	6,230	4.5	67,973
August	205,479	137,415	66.9	131,168	63.8	3,529	127,640	6,247	4.5	68,064

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

² The population figures are not adjusted for seasonal variation.

³ Beginning in January 1998, data are not strictly comparable with data

for 1997 and earlier years because of the introduction of new composite estimation procedures and revisions in the population controls used in the household survey. For additional information, see "Revisions in the Current Population Survey Effective January 1998" in the February 1998 issue of this publication.

A-2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1986 to date

(Numbers in thousands)

Sex, year, and month	Civilian noninsti- tutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
MEN										
1986 ¹	85,798	65,422	76.3	60,892	71.0	2,511	58,381	4,530	6.9	20,376
1987	86,899	66,207	76.2	62,107	71.5	2,543	59,564	4,101	6.2	20,692
1988	87,857	66,927	76.2	63,273	72.0	2,493	60,780	3,655	5.5	20,930
1989	88,762	67,840	76.4	64,315	72.5	2,513	61,802	3,525	5.2	20,923
1990 ¹	90,377	69,011	76.4	65,104	72.0	2,546	62,559	3,906	5.7	21,367
1991	91,278	69,168	75.8	64,223	70.4	2,589	61,634	4,946	7.2	22,110
1992	92,270	69,964	75.8	64,440	69.8	2,575	61,866	5,523	7.9	22,306
1993	93,332	70,404	75.4	65,349	70.0	2,478	62,871	5,055	7.2	22,927
1994 ¹	94,355	70,817	75.1	66,450	70.4	2,554	63,896	4,367	6.2	23,538
1995	95,178	71,360	75.0	67,377	70.8	2,559	64,818	3,983	5.6	23,818
1996	96,206	72,087	74.9	68,207	70.9	2,573	65,634	3,880	5.4	24,119
1997 ¹	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
Monthly data, seasonally adjusted ²										
1997:										
August	97,838	73,265	74.9	69,748	71.3	2,504	67,244	3,517	4.8	24,573
September	97,946	73,192	74.7	69,856	71.1	2,552	67,104	3,536	4.8	24,754
October	98,050	73,311	74.8	69,785	71.2	2,468	67,317	3,526	4.8	24,739
November	98,141	73,682	75.1	70,352	71.7	2,503	67,849	3,330	4.5	24,459
December	98,225	73,662	75.0	70,195	71.5	2,497	67,698	3,467	4.7	24,563
1998:										
January ³	98,241	73,852	75.2	70,518	71.8	2,463	68,056	3,333	4.5	24,389
February	98,331	73,780	75.0	70,459	71.7	2,458	68,001	3,320	4.5	24,551
March	98,405	73,695	74.9	70,297	71.4	2,356	67,941	3,399	4.6	24,710
April	98,503	73,799	74.9	70,831	71.9	2,584	68,246	2,969	4.0	24,704
May	98,591	73,783	74.8	70,685	71.7	2,492	68,193	3,098	4.2	24,808
June	98,691	73,818	74.8	70,570	71.5	2,535	68,035	3,249	4.4	24,873
July	98,785	74,027	74.9	70,605	71.5	2,596	68,009	3,422	4.6	24,759
August	98,892	73,695	74.5	70,441	71.2	2,654	67,787	3,253	4.4	25,198
Annual averages										
WOMEN										
1986 ¹	94,789	52,413	55.3	48,706	51.4	652	48,054	3,707	7.1	42,376
1987	95,853	53,658	56.0	50,334	52.5	666	49,668	3,324	6.2	42,195
1988	96,756	54,742	56.6	51,696	53.4	676	51,020	3,046	5.6	42,014
1989	97,630	56,030	57.4	53,027	54.3	687	52,341	3,003	5.4	41,601
1990 ¹	98,787	56,829	57.5	53,689	54.3	678	53,011	3,140	5.5	41,957
1991	99,646	57,178	57.4	53,496	53.7	680	52,815	3,683	6.4	42,468
1992	100,535	58,141	57.8	54,052	53.8	672	53,380	4,090	7.0	42,394
1993	101,506	58,795	57.9	54,910	54.1	637	54,273	3,885	6.6	42,711
1994 ¹	102,460	60,239	58.8	56,610	55.3	855	55,755	3,629	6.0	42,221
1995	103,406	60,944	58.9	57,523	55.6	881	56,642	3,421	5.6	42,462
1996	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997 ¹	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
Monthly data, seasonally adjusted ²										
1997:										
August	105,527	63,139	59.8	59,999	56.9	875	59,124	3,140	5.0	42,388
September	105,623	63,247	59.9	60,105	56.9	870	59,235	3,142	5.0	42,376
October	105,718	63,095	59.7	60,125	56.9	859	59,266	2,970	4.7	42,623
November	105,799	63,182	59.7	60,223	56.9	881	59,342	2,959	4.7	42,617
December	105,873	63,507	60.0	60,582	57.2	888	59,694	2,925	4.6	42,366
1998:										
January ³	105,997	63,641	60.0	60,565	57.1	856	59,709	3,076	4.8	42,356
February	106,070	63,777	60.1	60,704	57.2	876	59,827	3,073	4.8	42,293
March	106,141	63,827	60.1	60,697	57.2	776	59,921	3,130	4.9	42,314
April	106,228	63,443	59.7	60,553	57.0	766	59,787	2,890	4.6	42,785
May	106,308	63,581	59.8	60,768	57.2	844	59,924	2,813	4.4	42,727
June	106,394	63,628	59.8	60,640	57.0	808	59,832	2,989	4.7	42,766
July	106,484	63,270	59.4	60,462	56.8	845	59,617	2,808	4.4	43,215
August	106,587	63,721	59.8	60,727	57.0	874	59,853	2,994	4.7	42,866

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

² The population figures are not adjusted for seasonal variation.

³ Beginning in January 1998, data are not strictly comparable with data for 1997 and

earlier years because of the introduction of new composite estimation procedures and revisions in the population controls used in the household survey. For additional information, see "Revisions in the Current Population Survey Effective January 1998" in the February 1998 issue of this publication.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-3. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted

(Numbers in thousands)

Employment status, sex, and age	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Civilian noninstitutional population ¹ ..	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899	205,085	205,270	205,479
Civilian labor force	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364	137,447	137,296	137,415
Percent of population	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0	67.0	66.9	66.9
Employed	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067	131,168
Employment-population ratio	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2	64.0	63.9	63.8
Unemployed	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230	6,247
Unemployment rate	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5	4.5
Men, 16 years and over													
Civilian noninstitutional population ¹ ..	97,838	97,946	98,050	98,141	98,225	98,241	98,331	98,405	98,503	98,591	98,691	98,785	98,892
Civilian labor force	73,265	73,192	73,311	73,682	73,662	73,852	73,780	73,695	73,799	73,783	73,818	74,027	73,695
Percent of population	74.9	74.7	74.8	75.1	75.0	75.2	75.0	74.9	74.9	74.8	74.8	74.9	74.5
Employed	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685	70,570	70,605	70,441
Employment-population ratio	71.3	71.1	71.2	71.7	71.5	71.8	71.7	71.4	71.9	71.7	71.5	71.5	71.2
Agriculture	2,504	2,552	2,468	2,503	2,497	2,463	2,458	2,356	2,584	2,492	2,535	2,596	2,654
Nonagricultural industries	67,244	67,104	67,317	67,849	67,698	68,056	68,001	67,941	68,246	68,193	68,035	68,009	67,787
Unemployed	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098	3,249	3,422	3,253
Unemployment rate	4.8	4.8	4.8	4.5	4.7	4.5	4.5	4.6	4.0	4.2	4.4	4.6	4.4
Not in labor force	24,573	24,754	24,739	24,459	24,563	24,389	24,551	24,710	24,704	24,808	24,873	24,759	25,198
Men, 20 years and over													
Civilian noninstitutional population ¹ ..	89,982	90,068	90,140	90,251	90,339	90,391	90,476	90,502	90,580	90,622	90,700	90,802	90,889
Civilian labor force	69,198	69,136	69,193	69,500	69,561	69,652	69,601	69,451	69,697	69,624	69,545	69,790	69,490
Percent of population	76.9	76.8	76.8	77.0	77.0	77.1	76.9	76.7	76.9	76.8	76.7	76.9	76.5
Employed	66,386	66,298	66,337	66,824	66,676	67,008	66,990	66,753	67,301	67,190	66,950	67,040	66,901
Employment-population ratio	73.8	73.6	73.6	74.0	73.8	74.1	74.0	73.8	74.3	74.1	73.8	73.8	73.6
Agriculture	2,311	2,383	2,298	2,323	2,314	2,282	2,264	2,168	2,420	2,324	2,333	2,394	2,443
Nonagricultural industries	64,075	63,915	64,039	64,501	64,362	64,726	64,726	64,585	64,881	64,866	64,617	64,646	64,457
Unemployed	2,812	2,838	2,856	2,676	2,885	2,644	2,611	2,699	2,396	2,434	2,595	2,750	2,589
Unemployment rate	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9	3.7
Not in labor force	20,784	20,932	20,947	20,751	20,778	20,738	20,875	21,051	20,883	20,998	21,154	21,012	21,399
Women, 16 years and over													
Civilian noninstitutional population ¹ ..	105,527	105,623	105,718	105,799	105,873	105,997	106,070	106,141	106,228	106,308	106,394	106,484	106,587
Civilian labor force	63,139	63,247	63,095	63,182	63,507	63,641	63,777	63,827	63,443	63,581	63,628	63,270	63,721
Percent of population	59.8	59.9	59.7	59.7	60.0	60.0	60.1	60.1	59.7	59.8	59.8	59.4	59.8
Employed	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768	60,640	60,462	60,727
Employment-population ratio	56.9	56.9	56.9	56.9	57.2	57.1	57.2	57.2	57.0	57.2	57.0	56.8	57.0
Agriculture	875	870	859	881	888	856	876	776	766	844	808	845	874
Nonagricultural industries	59,124	59,235	59,266	59,342	59,694	59,709	59,827	59,921	59,787	59,924	59,832	59,617	59,853
Unemployed	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813	2,989	2,808	2,994
Unemployment rate	5.0	5.0	4.7	4.7	4.6	4.8	4.8	4.9	4.6	4.4	4.7	4.4	4.7
Not in labor force	42,388	42,376	42,623	42,617	42,366	42,356	42,293	42,314	42,785	42,727	42,766	43,215	42,866
Women, 20 years and over													
Civilian noninstitutional population ¹ ..	98,000	98,082	98,144	98,212	98,300	98,420	98,471	98,534	98,583	98,668	98,735	98,778	98,901
Civilian labor force	59,362	59,432	59,338	59,348	59,624	59,652	59,721	59,771	59,486	59,573	59,599	59,539	59,712
Percent of population	60.6	60.6	60.5	60.4	60.7	60.6	60.6	60.3	60.3	60.4	60.4	60.1	60.4
Employed	56,789	56,883	56,919	56,953	57,255	57,040	57,146	57,186	57,075	57,253	57,172	57,000	57,286
Employment-population ratio	57.9	58.0	58.0	58.0	58.2	58.0	58.0	58.0	57.9	58.0	57.9	57.7	57.9
Agriculture	824	826	814	833	845	811	801	717	705	755	747	793	819
Nonagricultural industries	55,965	56,057	56,105	56,120	56,410	56,229	56,345	56,470	56,370	56,499	56,424	56,207	56,468
Unemployed	2,573	2,549	2,419	2,395	2,369	2,612	2,575	2,585	2,411	2,320	2,427	2,359	2,426
Unemployment rate	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0	4.1
Not in labor force	38,638	38,650	38,806	38,864	38,676	38,768	38,750	38,762	39,097	39,095	39,136	39,419	39,189
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹ ..	15,382	15,420	15,483	15,478	15,459	15,427	15,453	15,511	15,569	15,609	15,651	15,690	15,689
Civilian labor force	7,844	7,871	7,875	8,016	7,984	8,189	8,235	8,300	8,059	8,166	8,302	8,147	8,213
Percent of population	51.0	51.0	50.9	51.8	51.6	53.1	53.3	53.5	51.8	52.3	53.0	51.9	52.4
Employed	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010	7,088	7,027	6,981
Employment-population ratio	42.7	42.7	43.0	43.9	44.3	45.6	45.5	45.5	45.0	44.9	45.3	44.8	44.5
Agriculture	244	213	215	228	226	227	270	247	225	256	262	254	267
Nonagricultural industries	6,328	6,367	6,439	6,570	6,620	6,809	6,758	6,808	6,782	6,754	6,826	6,773	6,715
Unemployed	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156	1,215	1,120	1,232
Unemployment rate	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8	15.0
Not in labor force	7,538	7,549	7,608	7,462	7,475	7,238	7,218	7,210	7,510	7,442	7,349	7,542	7,476

¹ The population figures are not adjusted for seasonal variation.

NOTE: Detail for the seasonally adjusted data shown in tables A-3 through A-13 will not necessarily add to totals because of the independent seasonal

adjustment of the various series. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-4. 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	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
WHITE													
Civilian noninstitutional population ¹ ..	170,148	170,290	170,427	170,545	170,649	170,810	170,917	171,016	171,141	171,257	171,387	171,513	171,655
Civilian labor force	114,669	114,758	114,784	115,073	115,263	115,253	115,392	115,297	115,057	115,309	115,137	114,975	115,275
Percent of population	67.4	67.4	67.4	67.5	67.5	67.5	67.5	67.4	67.2	67.3	67.2	67.0	67.2
Employed	109,832	109,904	110,063	110,604	110,729	110,698	110,842	110,605	110,859	111,025	110,535	110,630	110,708
Employment-population ratio	64.6	64.5	64.6	64.9	64.9	64.8	64.9	64.7	64.8	64.8	64.5	64.5	64.5
Unemployed	4,837	4,854	4,721	4,469	4,534	4,555	4,550	4,692	4,198	4,284	4,602	4,346	4,567
Unemployment rate	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8	4.0
Men, 20 years and over													
Civilian labor force	59,118	59,110	59,098	59,355	59,389	59,262	59,372	59,201	59,307	59,366	59,257	59,403	59,314
Percent of population	77.4	77.3	77.2	77.5	77.5	77.3	77.4	77.1	77.2	77.2	77.0	77.2	77.0
Employed	57,011	56,989	56,966	57,363	57,272	57,336	57,456	57,209	57,562	57,516	57,302	57,436	57,385
Employment-population ratio	74.6	74.5	74.4	74.9	74.7	74.8	74.9	74.5	74.9	74.8	74.5	74.6	74.5
Unemployed	2,107	2,121	2,132	1,992	2,117	1,926	1,916	1,992	1,745	1,850	1,955	1,967	1,929
Unemployment rate	3.6	3.6	3.6	3.4	3.6	3.3	3.2	3.4	2.9	3.1	3.3	3.3	3.3
Women, 20 years and over													
Civilian labor force	48,910	48,955	48,976	48,906	49,134	49,077	49,057	49,077	48,955	49,019	48,886	48,705	49,013
Percent of population	60.0	60.0	60.0	59.9	60.1	60.0	59.9	59.9	59.7	59.8	59.6	59.3	59.7
Employed	47,122	47,165	47,284	47,265	47,474	47,250	47,279	47,276	47,300	47,416	47,197	47,087	47,287
Employment-population ratio	57.8	57.8	57.9	57.8	58.1	57.7	57.7	57.7	57.7	57.8	57.5	57.4	57.6
Unemployed	1,788	1,790	1,692	1,641	1,660	1,827	1,778	1,801	1,654	1,603	1,688	1,618	1,726
Unemployment rate	3.7	3.7	3.5	3.4	3.4	3.7	3.6	3.7	3.4	3.3	3.5	3.3	3.5
Both sexes, 16 to 19 years													
Civilian labor force	6,641	6,693	6,710	6,812	6,740	6,914	6,963	7,019	6,795	6,924	6,994	6,867	6,949
Percent of population	54.4	54.8	54.9	55.6	55.0	56.3	56.6	56.9	54.9	55.8	56.2	55.1	55.6
Employed	5,699	5,750	5,813	5,976	5,983	6,113	6,107	6,120	5,996	6,093	6,036	6,107	6,036
Employment-population ratio	46.7	47.0	47.5	48.8	48.8	49.8	49.6	49.6	48.5	49.1	48.5	49.0	48.3
Unemployed	942	943	897	836	757	802	857	899	799	831	958	760	913
Unemployment rate	14.2	14.1	13.4	12.3	11.2	11.6	12.3	12.8	11.8	12.0	13.7	11.1	13.1
Men	15.1	14.4	14.3	12.8	11.3	14.2	14.7	14.9	12.7	14.0	14.7	13.1	14.3
Women	13.1	13.7	12.3	11.6	11.1	8.8	9.8	10.6	10.7	9.8	12.6	8.9	11.9
BLACK													
Civilian noninstitutional population ¹ ..	24,043	24,081	24,117	24,149	24,180	24,196	24,229	24,257	24,289	24,317	24,349	24,381	24,418
Civilian labor force	15,728	15,691	15,555	15,638	15,709	15,788	15,885	15,971	15,907	15,756	16,013	16,059	15,907
Percent of population	65.4	65.2	64.5	64.8	65.0	65.3	65.6	65.8	65.5	64.8	65.8	65.9	65.1
Employed	14,237	14,180	14,067	14,128	14,149	14,316	14,349	14,498	14,499	14,344	14,700	14,508	14,476
Employment-population ratio	59.2	58.9	58.3	58.5	58.5	59.2	59.2	59.8	59.7	59.0	60.4	59.5	59.3
Unemployed	1,491	1,511	1,488	1,510	1,560	1,472	1,535	1,473	1,408	1,412	1,313	1,551	1,431
Unemployment rate	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7	9.0
Men, 20 years and over													
Civilian labor force	7,035	6,978	6,945	6,965	6,957	7,012	6,974	7,044	7,097	7,009	7,088	7,120	7,017
Percent of population	73.3	72.6	72.3	72.1	72.0	72.6	72.1	72.8	73.2	72.2	73.0	73.2	72.0
Employed	6,480	6,424	6,367	6,420	6,356	6,456	6,428	6,511	6,573	6,536	6,599	6,485	6,470
Employment-population ratio	67.5	66.8	66.3	66.5	65.8	66.9	66.5	67.3	67.8	67.4	67.9	66.7	66.4
Unemployed	555	554	578	545	601	556	546	533	524	473	489	635	547
Unemployment rate	7.9	7.9	8.3	7.8	8.6	7.9	7.8	7.6	7.4	6.7	6.9	8.9	7.8
Women, 20 years and over													
Civilian labor force	7,771	7,790	7,680	7,731	7,791	7,799	7,952	7,935	7,822	7,787	7,866	7,921	7,894
Percent of population	64.6	64.6	63.6	63.9	64.4	64.3	65.5	65.3	64.3	64.0	64.5	64.9	64.6
Employed	7,115	7,135	7,044	7,080	7,163	7,178	7,265	7,284	7,182	7,130	7,256	7,296	7,296
Employment-population ratio	59.1	59.2	58.3	58.6	59.2	59.2	59.8	60.0	59.0	58.6	59.5	59.8	59.7
Unemployed	656	655	636	651	628	621	687	651	640	657	609	625	597
Unemployment rate	8.4	8.4	8.3	8.4	8.1	8.0	8.6	8.2	8.2	8.4	7.7	7.9	7.6

See footnotes at end of table.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

**A-4. 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	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	922	923	930	942	961	977	959	992	988	960	1,060	1,018	996
Percent of population	38.3	38.3	38.2	39.2	39.8	40.5	39.6	40.9	40.6	39.4	43.4	41.6	40.6
Employed	642	621	656	628	630	683	656	703	744	678	846	727	709
Employment-population ratio	26.6	25.8	26.9	26.1	26.1	28.3	27.1	29.0	30.6	27.8	34.6	29.7	28.9
Unemployed	280	302	274	314	331	294	302	289	244	283	214	291	287
Unemployment rate	30.4	32.7	29.5	33.3	34.4	30.1	31.5	29.1	24.7	29.4	20.2	28.6	28.8
Men	33.9	37.6	30.1	35.0	36.2	31.8	34.7	27.8	23.9	30.2	20.4	30.6	29.7
Women	27.2	28.6	28.8	31.9	33.1	28.5	28.4	30.3	25.3	28.8	20.1	26.4	28.1
HISPANIC ORIGIN													
Civilian noninstitutional population ¹ ..	20,407	20,464	20,519	20,575	20,629	20,741	20,798	20,851	20,915	20,975	21,036	21,097	21,159
Civilian labor force	13,886	13,861	13,896	13,880	13,973	13,954	14,149	14,298	14,369	14,458	14,420	14,240	14,277
Percent of population	68.0	67.7	67.7	67.5	67.7	67.3	68.0	68.6	68.7	68.9	68.5	67.5	67.5
Employed	12,867	12,807	12,806	12,921	12,921	12,988	13,181	13,305	13,434	13,480	13,328	13,219	13,203
Employment-population ratio	63.1	62.6	62.4	62.8	62.6	62.6	63.4	63.8	64.2	64.3	63.4	62.7	62.4
Unemployed	1,019	1,054	1,090	959	1,052	966	968	993	935	978	1,092	1,022	1,074
Unemployment rate	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2	7.5

¹ The population figures are not adjusted for seasonal variation.

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. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-5. Employment status of the civilian noninstitutional population 25 years and over by educational attainment, seasonally adjusted

(Numbers in thousands)

Educational attainment	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Less than a high school diploma													
Civilian noninstitutional population ¹	29,314	29,350	29,046	29,505	29,566	29,981	29,228	29,251	29,638	29,931	30,064	29,027	29,204
Civilian labor force	12,534	12,555	12,468	12,511	12,555	12,682	12,555	12,392	12,664	12,690	12,888	12,548	12,450
Percent of population	42.8	42.8	42.9	42.4	42.5	42.3	43.0	42.4	42.7	42.4	42.9	43.2	42.6
Employed	11,573	11,548	11,502	11,575	11,606	11,771	11,676	11,500	11,773	11,839	11,963	11,648	11,567
Employment-population ratio	39.5	39.3	39.6	39.2	39.3	39.3	39.9	39.3	39.7	39.6	39.8	40.1	39.6
Unemployed	961	1,007	966	936	949	911	879	891	891	851	925	901	883
Unemployment rate	7.7	8.0	7.7	7.5	7.6	7.2	7.0	7.2	7.0	6.7	7.2	7.2	7.1
High school graduates, no college²													
Civilian noninstitutional population ¹	57,607	57,483	57,459	57,310	57,631	57,606	57,418	57,885	57,484	57,706	57,446	57,374	57,729
Civilian labor force	37,842	37,585	37,759	37,641	37,827	37,787	37,807	37,931	37,340	37,496	37,096	37,219	37,381
Percent of population	65.7	65.4	65.7	65.7	65.6	65.6	65.8	65.5	65.0	65.0	64.6	64.9	64.8
Employed	36,225	36,003	36,179	36,193	36,287	36,303	36,302	36,331	35,885	36,114	35,602	35,694	35,898
Employment-population ratio	62.9	62.6	63.0	63.2	63.0	63.0	63.2	62.8	62.4	62.6	62.0	62.2	62.2
Unemployed	1,617	1,582	1,580	1,448	1,540	1,485	1,505	1,600	1,454	1,383	1,494	1,525	1,483
Unemployment rate	4.3	4.2	4.2	3.8	4.1	3.9	4.0	4.2	3.9	3.7	4.0	4.1	4.0
Less than a bachelor's degree³													
Civilian noninstitutional population ¹	42,401	42,075	42,613	42,417	42,085	41,718	42,527	42,313	42,303	42,024	41,880	42,293	41,842
Civilian labor force	31,445	31,401	31,328	31,544	31,506	31,440	31,505	31,515	31,517	31,408	31,227	31,174	30,863
Percent of population	74.2	74.6	73.5	74.4	74.9	75.4	74.1	74.5	74.5	74.7	74.6	73.7	73.8
Employed	30,438	30,382	30,410	30,574	30,484	30,429	30,538	30,471	30,669	30,437	30,333	30,224	29,987
Employment-population ratio	71.8	72.2	71.4	72.1	72.4	72.9	71.8	72.0	72.5	72.4	72.4	71.5	71.7
Unemployed	1,007	1,019	918	970	1,022	1,011	967	1,043	848	971	894	950	876
Unemployment rate	3.2	3.2	2.9	3.1	3.2	3.2	3.1	3.3	2.7	3.1	2.9	3.0	2.8
College graduates													
Civilian noninstitutional population ¹	41,232	41,769	41,696	41,739	41,822	41,974	42,238	42,085	42,197	42,090	42,464	43,309	43,431
Civilian labor force	33,290	33,577	33,510	33,505	33,678	33,685	33,672	33,777	33,989	33,920	34,274	34,721	34,847
Percent of population	80.7	80.4	80.4	80.3	80.5	80.3	79.7	80.3	80.5	80.6	80.7	80.2	80.2
Employed	32,592	32,891	32,868	32,916	33,083	33,040	33,029	33,145	33,419	33,364	33,674	34,146	34,236
Employment-population ratio	79.0	78.7	78.8	78.9	79.1	78.7	78.2	78.8	79.2	79.3	79.3	78.8	78.8
Unemployed	698	686	642	589	595	645	643	632	571	556	600	575	611
Unemployment rate	2.1	2.0	1.9	1.8	1.8	1.9	1.9	1.9	1.7	1.6	1.7	1.7	1.8

¹ The population figures are not adjusted for seasonal variation.

² Includes high school diploma or equivalent.

³ Includes the categories, some college, no degree; and associate degree.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-6. Employed and unemployed full- and part-time workers by sex and age, seasonally adjusted

(Numbers in thousands)

Full- and part-time status, sex, and age	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
EMPLOYED													
Full-time workers	106,672	106,926	106,824	107,491	107,452	107,777	107,788	107,696	108,107	108,155	107,607	107,737	108,136
Men, 16 years and over	62,376	62,487	62,439	63,014	62,829	62,909	62,810	62,740	63,092	63,098	63,098	63,117	63,164
Men, 20 years and over	61,101	61,197	61,142	61,672	61,505	61,652	61,534	61,434	61,810	61,742	61,680	61,682	61,789
Women, 16 years and over	44,375	44,436	44,369	44,452	44,589	44,741	44,869	44,855	44,957	44,983	44,599	44,794	45,124
Women, 20 years and over	43,468	43,518	43,479	43,546	43,691	43,856	43,898	43,810	43,997	44,017	43,694	43,749	44,012
Both sexes, 16 to 19 years	2,103	2,211	2,203	2,273	2,256	2,268	2,356	2,452	2,300	2,396	2,233	2,306	2,335
Part-time workers	23,061	23,004	23,163	23,244	23,422	23,373	23,249	23,428	23,201	23,222	23,494	23,187	22,875
Men, 16 years and over	7,436	7,348	7,401	7,432	7,459	7,469	7,547	7,550	7,641	7,424	7,466	7,488	7,315
Men, 20 years and over	5,355	5,278	5,255	5,226	5,257	5,273	5,319	5,305	5,404	5,296	5,236	5,337	5,139
Women, 16 years and over	15,623	15,652	15,766	15,802	16,014	15,833	15,704	15,901	15,580	15,770	16,045	15,699	15,594
Women, 20 years and over	13,291	13,366	13,432	13,447	13,559	13,258	13,175	13,382	13,099	13,232	13,468	13,257	13,227
Both sexes, 16 to 19 years	4,415	4,360	4,476	4,571	4,606	4,842	4,755	4,742	4,698	4,694	4,790	4,593	4,509
UNEMPLOYED													
Looking for full-time work	5,305	5,309	5,215	4,987	5,203	5,075	5,070	5,126	4,690	4,784	4,905	4,957	4,941
Men, 16 years and over	2,958	2,984	2,991	2,834	2,994	2,645	2,610	2,725	2,461	2,662	2,769	2,876	2,752
Men, 20 years and over	2,568	2,571	2,600	2,466	2,689	2,438	2,386	2,462	2,167	2,250	2,409	2,515	2,368
Women, 16 years and over	2,369	2,361	2,254	2,205	2,220	2,296	2,369	2,322	2,252	2,160	2,224	2,041	2,219
Women, 20 years and over	2,116	2,069	1,979	1,905	1,914	2,102	2,137	2,050	1,993	1,916	1,920	1,892	1,976
Both sexes, 16 to 19 years	621	669	636	616	600	536	547	613	530	617	576	550	597
Looking for part-time work	1,346	1,328	1,288	1,329	1,238	1,339	1,279	1,409	1,170	1,157	1,300	1,285	1,301
Men, 16 years and over	577	561	570	551	502	549	583	582	504	494	566	545	530
Men, 20 years and over	233	245	263	226	220	206	220	234	228	180	182	224	202
Women, 16 years and over	752	751	705	779	753	760	708	806	686	679	757	751	748
Women, 20 years and over	459	458	440	499	462	505	443	536	426	415	490	494	461
Both sexes, 16 to 19 years	654	625	585	604	556	627	615	640	516	562	628	568	638
UNEMPLOYMENT RATES¹													
Full-time workers	4.7	4.7	4.7	4.4	4.6	4.5	4.5	4.5	4.2	4.2	4.4	4.4	4.4
Men, 16 years and over	4.5	4.6	4.6	4.3	4.5	4.0	4.0	4.2	3.8	4.0	4.2	4.4	4.2
Men, 20 years and over	4.0	4.0	4.1	3.8	4.2	3.8	3.7	3.9	3.4	3.5	3.8	3.9	3.7
Women, 16 years and over	5.1	5.0	4.8	4.7	4.7	4.9	5.0	4.9	4.8	4.6	4.8	4.4	4.7
Women, 20 years and over	4.6	4.5	4.4	4.2	4.2	4.6	4.6	4.5	4.3	4.2	4.2	4.1	4.3
Both sexes, 16 to 19 years	22.8	23.2	22.4	21.3	21.0	19.1	18.8	20.0	18.7	20.5	20.5	19.3	20.4
Part-time workers	5.5	5.5	5.3	5.4	5.0	5.4	5.2	5.7	4.8	4.7	5.2	5.3	5.4
Men, 16 years and over	7.2	7.1	7.2	6.9	6.3	6.8	7.2	7.2	6.2	6.2	7.0	6.8	6.8
Men, 20 years and over	4.2	4.4	4.8	4.1	4.0	3.8	4.0	4.2	4.0	3.3	3.4	4.0	3.8
Women, 16 years and over	4.6	4.6	4.3	4.7	4.5	4.6	4.3	4.8	4.2	4.1	4.5	4.6	4.6
Women, 20 years and over	3.3	3.3	3.2	3.6	3.3	3.7	3.3	3.8	3.2	3.0	3.5	3.6	3.4
Both sexes, 16 to 19 years	12.9	12.5	11.6	11.7	10.8	11.5	11.5	11.9	9.9	10.7	11.6	11.0	12.4

¹ These rates reflect a refined definition of the full- and part-time labor force and differ from the rates published elsewhere in this publication prior to 1994.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-7. Employed persons by marital status, occupation, class of worker, and part-time status, seasonally adjusted

(In thousands)

Category	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
MARITAL STATUS													
Total	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067	131,168
Married men, spouse present	42,680	42,648	42,771	42,967	42,952	42,977	42,915	42,779	42,865	42,471	42,539	42,837	42,833
Married women, spouse present	32,861	32,846	32,978	32,840	32,975	32,793	32,821	32,872	32,973	32,805	32,805	32,658	32,597
Women who maintain families	7,892	7,876	7,865	7,726	7,822	7,784	7,884	7,776	7,813	7,848	7,922	7,846	7,932
OCCUPATION													
Managerial and professional specialty	37,765	37,860	37,844	37,986	38,205	38,099	38,164	38,454	38,643	38,641	38,732	39,011	38,916
Technical, sales, and administrative support	38,334	38,535	38,537	38,540	38,562	38,382	38,491	38,693	38,585	38,401	38,567	38,500	38,889
Service occupations	17,713	17,746	17,723	17,827	17,890	18,162	17,950	17,752	17,478	17,749	17,873	17,584	17,727
Precision production, craft, and repair	14,038	13,859	14,051	14,191	14,299	14,285	14,456	14,656	14,673	14,853	14,509	14,312	14,079
Operators, fabricators, and laborers	18,452	18,302	18,385	18,467	18,394	18,622	18,632	18,179	18,447	18,322	18,120	18,145	17,866
Farming, forestry, and fishing	3,442	3,483	3,438	3,512	3,472	3,355	3,436	3,269	3,495	3,479	3,503	3,503	3,618
CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,853	1,889	1,815	1,855	1,844	1,949	1,928	1,866	1,987	1,871	1,841	2,018	2,165
Self-employed workers	1,477	1,495	1,475	1,493	1,496	1,348	1,324	1,242	1,324	1,395	1,470	1,383	1,345
Unpaid family workers	50	44	55	49	54	44	41	32	28	51	48	30	28
Nonagricultural industries:													
Wage and salary workers	117,372	117,303	117,635	118,083	118,403	118,529	118,961	119,131	118,774	119,013	118,654	118,543	118,676
Private industries	99,169	99,194	99,560	99,913	100,155	100,108	100,583	101,058	100,571	100,979	100,157	100,179	100,419
Private households	935	877	877	910	946	985	1,035	1,022	1,014	1,015	961	974	853
Other industries	98,234	98,317	98,683	99,003	99,209	99,123	99,547	100,037	99,557	99,964	99,195	99,205	99,566
Government	18,203	18,109	18,075	18,170	18,248	18,421	18,378	18,072	18,202	18,034	18,497	18,364	18,257
Self-employed workers	8,955	8,949	8,930	9,004	8,886	8,964	8,761	8,784	9,069	9,023	8,969	9,094	8,947
Unpaid family workers	126	83	92	97	99	131	117	102	124	97	100	91	83
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	3,988	3,928	3,913	3,890	3,855	4,082	3,882	3,902	3,735	3,772	3,837	3,783	3,463
Slack work or business conditions	2,164	2,187	2,211	2,221	2,230	2,282	2,123	2,188	2,074	2,104	2,230	2,372	1,989
Could only find part-time work	1,487	1,455	1,406	1,386	1,323	1,400	1,455	1,445	1,300	1,344	1,246	1,192	1,175
Part time for noneconomic reasons	18,096	17,901	18,113	18,083	18,386	18,515	18,407	18,448	18,084	18,662	18,665	18,584	18,648
Nonagricultural industries:													
Part time for economic reasons	3,832	3,739	3,732	3,689	3,654	3,865	3,743	3,726	3,608	3,630	3,676	3,632	3,307
Slack work or business conditions	2,066	2,067	2,103	2,100	2,113	2,162	2,025	2,057	1,998	2,024	2,151	2,261	1,900
Could only find part-time work	1,455	1,417	1,378	1,346	1,291	1,373	1,433	1,416	1,276	1,315	1,199	1,162	1,143
Part time for noneconomic reasons	17,521	17,381	17,537	17,486	17,791	17,898	17,786	17,929	17,470	18,067	18,019	17,972	18,001

¹ Persons at work excludes employed persons who were absent from their jobs during the entire reference week for reasons such as vacation, illness, or industrial dispute. Part time for noneconomic reasons excludes persons who usually work full time but worked only 1 to 34 hours during the reference week for reasons such as

holidays, illness, and bad weather.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-8. Employed persons by age and sex, seasonally adjusted

(In thousands)

Age and sex	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067	131,168
16 to 24 years	18,855	19,013	19,002	19,257	19,304	19,574	19,587	19,563	19,691	19,597	19,587	19,412	19,383
16 to 19 years	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010	7,088	7,027	6,981
16 to 17 years	2,567	2,640	2,680	2,680	2,676	2,843	2,803	2,840	2,823	2,741	2,685	2,755	2,699
18 to 19 years	3,976	3,936	3,976	4,118	4,176	4,193	4,224	4,215	4,173	4,287	4,421	4,293	4,255
20 to 24 years	12,283	12,433	12,348	12,459	12,458	12,539	12,560	12,508	12,684	12,587	12,499	12,385	12,402
25 years and over	110,858	110,831	110,964	111,251	111,445	111,463	111,505	111,398	111,755	111,855	111,635	111,680	111,722
25 to 54 years	94,910	94,772	94,707	94,859	94,941	95,125	95,099	95,055	95,148	95,217	95,124	95,087	95,207
55 years and over	16,063	16,104	16,220	16,417	16,523	16,367	16,401	16,388	16,475	16,562	16,442	16,620	16,574
Men, 16 years and over	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685	70,570	70,605	70,441
16 to 24 years	9,895	9,880	9,889	10,070	10,010	10,178	10,132	10,167	10,263	10,126	10,236	10,075	10,085
16 to 19 years	3,362	3,358	3,448	3,528	3,519	3,510	3,470	3,544	3,529	3,495	3,620	3,565	3,541
16 to 17 years	1,339	1,360	1,398	1,401	1,377	1,472	1,397	1,452	1,444	1,375	1,368	1,402	1,360
18 to 19 years	1,996	1,980	2,075	2,128	2,151	2,041	2,080	2,093	2,088	2,121	2,263	2,175	2,160
20 to 24 years	6,533	6,522	6,441	6,542	6,491	6,668	6,662	6,622	6,733	6,631	6,616	6,510	6,544
25 years and over	59,850	59,877	59,952	60,234	60,168	60,288	60,315	60,117	60,520	60,543	60,346	60,542	60,364
25 to 54 years	50,906	50,871	50,867	51,125	51,034	51,235	51,201	51,144	51,357	51,315	51,161	51,203	51,135
55 years and over	9,007	9,009	9,060	9,152	9,151	9,048	9,087	8,991	9,114	9,226	9,122	9,336	9,223
Women, 16 years and over	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768	60,640	60,462	60,727
16 to 24 years	8,960	9,133	9,113	9,187	9,294	9,396	9,455	9,397	9,429	9,471	9,351	9,337	9,299
16 to 19 years	3,210	3,222	3,206	3,270	3,327	3,525	3,558	3,511	3,478	3,515	3,468	3,462	3,441
16 to 17 years	1,228	1,280	1,282	1,279	1,299	1,371	1,406	1,388	1,380	1,366	1,317	1,353	1,339
18 to 19 years	1,980	1,956	1,901	1,990	2,025	2,152	2,144	2,122	2,086	2,166	2,158	2,119	2,095
20 to 24 years	5,750	5,911	5,907	5,917	5,967	5,871	5,898	5,886	5,951	5,956	5,883	5,875	5,858
25 years and over	51,008	50,954	51,012	51,017	51,277	51,175	51,190	51,281	51,235	51,311	51,289	51,138	51,358
25 to 54 years	44,004	43,901	43,840	43,734	43,907	43,890	43,898	43,910	43,791	43,902	43,963	43,884	44,072
55 years and over	7,056	7,095	7,160	7,265	7,372	7,319	7,314	7,397	7,361	7,336	7,320	7,284	7,351

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-9. Unemployed persons by age and sex, seasonally adjusted

(In thousands)

Age and sex	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230	6,247
16 to 24 years	2,393	2,408	2,375	2,360	2,300	2,371	2,378	2,335	2,063	2,184	2,318	2,230	2,417
16 to 19 years	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156	1,215	1,120	1,232
16 to 17 years	559	631	568	574	576	596	638	579	506	514	597	494	557
18 to 19 years	722	669	654	646	555	549	538	670	546	650	618	637	678
20 to 24 years	1,121	1,117	1,154	1,142	1,162	1,218	1,171	1,090	1,011	1,028	1,103	1,109	1,185
25 years and over	4,296	4,304	4,122	3,923	4,149	4,019	4,018	4,184	3,751	3,758	3,901	3,940	3,853
25 to 54 years	3,778	3,791	3,636	3,461	3,659	3,588	3,571	3,712	3,293	3,372	3,480	3,460	3,391
55 years and over	504	512	472	472	480	459	450	486	426	407	427	479	450
Men, 16 years and over	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098	3,249	3,422	3,253
16 to 24 years	1,334	1,347	1,350	1,325	1,250	1,278	1,348	1,282	1,105	1,250	1,246	1,293	1,301
16 to 19 years	705	698	670	654	582	689	709	700	573	664	653	672	664
16 to 17 years	295	314	311	312	310	330	371	330	253	300	363	294	311
18 to 19 years	417	381	360	349	268	357	313	374	320	370	303	371	357
20 to 24 years	629	649	680	671	668	588	639	582	532	586	592	621	637
25 years and over	2,220	2,182	2,176	2,005	2,213	2,050	1,975	2,102	1,854	1,875	1,991	2,104	1,979
25 to 54 years	1,921	1,901	1,887	1,727	1,896	1,785	1,718	1,828	1,602	1,639	1,762	1,816	1,729
55 years and over	284	276	277	278	325	289	268	285	244	225	231	283	241
Women, 16 years and over	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813	2,989	2,808	2,994
16 to 24 years	1,059	1,061	1,025	1,035	1,050	1,094	1,030	1,053	958	935	1,073	937	1,116
16 to 19 years	567	593	551	564	556	464	498	545	479	493	562	448	568
16 to 17 years	264	317	257	262	266	266	267	249	253	214	235	200	246
18 to 19 years	305	288	294	297	287	191	225	296	226	280	315	266	322
20 to 24 years	492	468	474	471	494	629	532	508	479	442	511	489	548
25 years and over	2,076	2,122	1,946	1,918	1,936	1,969	2,043	2,082	1,897	1,883	1,910	1,836	1,874
25 to 54 years	1,857	1,890	1,749	1,734	1,763	1,802	1,853	1,884	1,692	1,733	1,718	1,644	1,663
55 years and over	220	236	195	194	155	170	181	201	182	182	196	196	209

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-10. Unemployment rates by age and sex, seasonally adjusted

(Percent)

Age and sex	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5	4.5
16 to 24 years	11.3	11.2	11.1	10.9	10.6	10.8	10.8	10.7	9.5	10.0	10.6	10.3	11.1
16 to 19 years	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8	15.0
16 to 17 years	17.9	19.3	17.5	17.6	17.7	17.3	18.5	16.9	15.2	15.8	18.2	15.2	17.1
18 to 19 years	15.4	14.5	14.1	13.6	11.7	11.6	11.3	13.7	11.6	13.2	12.3	12.9	13.8
20 to 24 years	8.4	8.2	8.5	8.4	8.5	8.9	8.5	8.0	7.4	7.6	8.1	8.2	8.7
25 years and over	3.7	3.7	3.6	3.4	3.6	3.5	3.5	3.6	3.2	3.3	3.4	3.4	3.3
25 to 54 years	3.8	3.8	3.7	3.5	3.7	3.6	3.6	3.8	3.3	3.4	3.5	3.5	3.4
55 years and over	3.0	3.1	2.8	2.8	2.8	2.7	2.7	2.9	2.5	2.4	2.5	2.8	2.6
Men, 16 years and over	4.8	4.8	4.8	4.5	4.7	4.5	4.5	4.6	4.0	4.2	4.4	4.6	4.4
16 to 24 years	11.9	12.0	12.0	11.6	11.1	11.2	11.7	11.2	9.7	11.0	10.8	11.4	11.4
16 to 19 years	17.3	17.2	16.3	15.6	14.2	16.4	17.0	16.5	14.0	16.0	15.3	15.9	15.8
16 to 17 years	18.1	18.8	18.2	18.2	18.4	18.3	21.0	18.5	14.9	17.9	21.0	17.3	18.6
18 to 19 years	17.3	16.1	14.8	14.1	11.1	14.9	13.1	15.2	13.3	14.8	11.8	14.6	14.2
20 to 24 years	8.8	9.1	9.5	9.3	9.3	8.1	8.7	8.1	7.3	8.1	8.2	8.7	8.9
25 years and over	3.6	3.5	3.5	3.2	3.5	3.3	3.2	3.4	3.0	3.0	3.2	3.4	3.2
25 to 54 years	3.6	3.6	3.6	3.3	3.6	3.4	3.2	3.5	3.0	3.1	3.3	3.4	3.3
55 years and over	3.1	3.0	3.0	2.9	3.4	3.1	2.9	3.1	2.6	2.4	2.5	2.9	2.5
Women, 16 years and over	5.0	5.0	4.7	4.7	4.6	4.8	4.8	4.9	4.6	4.4	4.7	4.4	4.7
16 to 24 years	10.6	10.4	10.1	10.1	10.2	10.4	9.8	10.1	9.2	9.0	10.3	9.1	10.7
16 to 19 years	15.0	15.5	14.7	14.7	14.3	11.6	12.3	13.4	12.1	12.3	13.9	11.5	14.2
16 to 17 years	17.7	19.8	16.7	17.0	17.0	16.3	16.0	15.2	15.5	13.5	15.1	12.9	15.5
18 to 19 years	13.3	12.8	13.4	13.0	12.4	8.2	9.5	12.2	9.8	11.4	12.7	11.2	13.3
20 to 24 years	7.9	7.3	7.4	7.4	7.6	9.7	8.3	7.9	7.5	6.9	8.0	7.7	8.6
25 years and over	3.9	4.0	3.7	3.6	3.6	3.7	3.8	3.9	3.6	3.5	3.6	3.5	3.5
25 to 54 years	4.0	4.1	3.8	3.8	3.9	3.9	4.1	4.1	3.7	3.8	3.8	3.6	3.6
55 years and over	3.0	3.2	2.7	2.6	2.1	2.3	2.4	2.6	2.4	2.4	2.6	2.6	2.8

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-11. Unemployment rates by occupation, industry, and selected demographic characteristics, seasonally adjusted

(Percent)

Category	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5	4.5
Men, 20 years and over	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9	3.7
Women, 20 years and over	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0	4.1
Both sexes, 16 to 19 years	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8	15.0
White	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8	4.0
Black and other	8.4	8.4	8.2	8.4	8.6	8.3	8.3	8.2	7.5	7.6	7.3	8.3	7.6
Black	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7	9.0
Hispanic origin	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2	7.5
Married men, spouse present	2.6	2.6	2.6	2.4	2.6	2.6	2.5	2.5	2.2	2.4	2.2	2.3	2.4
Married women, spouse present	3.0	3.1	2.8	2.8	2.8	3.1	3.1	3.3	2.8	2.8	2.9	2.8	3.2
Women who maintain families	8.0	7.8	7.8	8.1	7.7	7.6	7.6	7.6	7.6	7.7	6.9	6.8	6.8
OCCUPATION¹													
Managerial and professional specialty	2.0	2.0	1.8	1.7	1.9	2.0	2.0	1.8	1.9	1.7	1.7	1.7	1.9
Technical, sales, and administrative support	4.1	4.0	3.9	3.9	4.0	4.2	4.0	4.1	3.7	3.9	3.9	3.8	3.7
Precision production, craft, and repair	4.7	4.8	5.3	4.5	4.7	4.6	4.1	4.5	3.7	4.4	4.3	4.4	4.6
Operators, fabricators, and laborers	7.6	7.8	7.1	7.1	7.0	5.9	6.5	6.9	6.1	6.5	6.9	6.9	6.7
Farming, forestry, and fishing	7.2	6.7	7.3	6.6	7.2	6.8	6.3	7.1	5.8	6.4	6.5	7.0	5.5
INDUSTRY													
Nonagricultural private wage and salary workers ...	5.0	5.0	4.8	4.7	4.8	4.7	4.7	4.7	4.3	4.5	4.7	4.6	4.7
Goods-producing industries	5.3	5.2	5.0	4.6	5.0	4.8	4.7	5.0	4.4	4.6	4.7	4.9	4.8
Mining	4.9	3.4	4.5	3.3	3.3	4.0	2.6	3.7	2.3	1.3	3.9	3.7	3.9
Construction	9.0	8.7	8.7	7.9	8.9	7.9	7.8	8.6	6.3	8.0	8.0	6.7	7.4
Manufacturing	4.1	4.1	3.8	3.6	3.8	3.9	3.7	3.8	3.9	3.6	3.6	4.4	3.9
Durable goods	3.5	3.3	3.1	3.1	3.1	3.4	2.9	3.6	3.5	3.0	2.9	4.3	3.7
Nondurable goods	5.0	5.3	4.8	4.4	4.9	4.5	5.0	4.2	4.4	4.6	4.6	4.5	4.4
Service-producing industries	4.9	4.9	4.7	4.7	4.7	4.7	4.7	4.6	4.3	4.5	4.7	4.5	4.7
Transportation and public utilities	3.7	3.8	3.3	3.1	3.3	3.8	3.2	3.3	3.1	3.0	3.6	3.4	3.7
Wholesale and retail trade	6.2	6.2	6.1	6.2	5.8	5.9	5.8	5.4	5.2	5.1	5.7	5.6	5.6
Finance, insurance, and real estate	3.0	3.0	2.9	2.4	2.8	2.6	2.6	2.6	2.2	2.0	2.1	2.0	2.7
Services	4.5	4.6	4.3	4.4	4.5	4.3	4.7	4.7	4.3	4.8	4.7	4.5	4.7
Government workers	2.6	2.6	2.4	2.3	2.1	2.4	2.3	2.9	2.0	2.4	2.0	2.5	2.2
Agricultural wage and salary workers	8.9	9.0	9.6	8.6	9.7	10.6	8.6	9.7	8.0	7.9	8.1	8.2	7.0

¹ Seasonally adjusted data for service occupations are not available because the seasonal component, which is small relative to the trend-cycle and irregular components, cannot be separated with sufficient precision.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-12. Unemployed persons by reason for unemployment, seasonally adjusted

(Numbers in thousands)

Reason	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
NUMBER OF UNEMPLOYED													
Job losers and persons who completed temporary jobs	3,010	3,007	2,934	2,886	2,991	2,807	2,795	2,980	2,631	2,772	2,819	2,908	2,852
On temporary layoff	891	893	963	815	961	860	821	980	696	786	841	966	978
Not on temporary layoff	2,119	2,114	1,971	2,071	2,030	1,947	1,975	2,000	1,935	1,986	1,978	1,941	1,874
Job leavers	894	853	732	655	692	808	786	744	625	748	766	799	740
Reentrants	2,173	2,263	2,247	2,229	2,170	2,229	2,266	2,215	2,096	2,033	2,096	2,042	2,132
New entrants	554	560	555	560	552	518	543	549	511	493	532	463	503
PERCENT DISTRIBUTION													
Job losers and persons who completed temporary jobs	45.4	45.0	45.4	45.6	46.7	44.1	43.7	45.9	44.9	45.8	45.4	46.8	45.8
On temporary layoff	13.4	13.4	14.9	12.9	15.0	13.5	12.8	15.1	11.9	13.0	13.5	15.6	15.7
Not on temporary layoff	32.0	31.6	30.5	32.7	31.7	30.6	30.9	30.8	33.0	32.8	31.8	31.3	30.1
Job leavers	13.5	12.8	11.3	10.3	10.8	12.7	12.3	11.5	10.7	12.4	12.3	12.9	11.9
Reentrants	32.8	33.9	34.7	35.2	33.9	35.0	35.5	34.1	35.7	33.6	33.7	32.9	34.2
New entrants	8.4	8.4	8.6	8.8	8.6	8.1	8.5	8.5	8.7	8.2	8.6	7.5	8.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers and persons who completed temporary jobs	2.2	2.2	2.2	2.1	2.2	2.0	2.0	2.2	1.9	2.0	2.1	2.1	2.1
Job leavers .....	.7	.6	.5	.5	.5	.6	.6	.5	.5	.5	.6	.6	.5
Reentrants	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.6
New entrants .....	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.3	.4

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-13. Unemployed persons by duration of unemployment, seasonally adjusted

(Numbers in thousands)

Duration	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
NUMBER OF UNEMPLOYED													
Less than 5 weeks	2,564	2,484	2,558	2,423	2,531	2,488	2,622	2,858	2,632	2,634	2,519	2,625	2,675
5 to 14 weeks	2,121	2,115	1,912	2,048	1,922	1,971	1,909	1,979	1,901	1,954	2,084	1,983	1,960
15 weeks and over	2,027	2,109	1,990	1,865	1,964	1,811	1,830	1,731	1,417	1,462	1,621	1,600	1,647
15 to 26 weeks	950	1,031	919	899	936	773	855	841	584	656	852	793	820
27 weeks and over	1,077	1,078	1,071	966	1,028	1,038	974	891	833	806	769	807	827
Average (mean) duration, in weeks	15.8	15.9	16.3	15.6	16.3	15.6	15.6	14.3	14.3	14.6	13.8	14.3	13.5
Median duration, in weeks	7.9	8.1	7.7	7.8	7.7	7.4	7.2	6.8	6.4	5.9	6.6	6.6	6.9
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	38.2	37.0	39.6	38.2	39.4	39.7	41.2	43.5	44.2	43.5	40.5	42.3	42.6
5 to 14 weeks	31.6	31.5	29.6	32.3	30.0	31.4	30.0	30.1	31.9	32.3	33.5	31.9	31.2
15 weeks and over	30.2	31.4	30.8	29.4	30.6	28.9	28.8	26.4	23.8	24.2	26.0	25.8	26.2
15 to 26 weeks	14.2	15.4	14.2	14.2	14.6	12.3	13.4	12.8	9.8	10.8	13.7	12.8	13.0
27 weeks and over	16.0	16.1	16.6	15.2	16.0	16.6	15.3	13.6	14.0	13.3	12.4	13.0	13.2

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-14. Employment status of the civilian noninstitutional population by age, sex, and race

(Numbers in thousands)

Age, sex, and race	August 1998									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
TOTAL										
16 years and over	205,479	138,379	67.3	132,206	64.3	3,818	128,388	6,173	4.5	67,100
16 to 19 years	15,689	9,130	58.2	7,955	50.7	379	7,577	1,175	12.9	6,559
16 to 17 years	7,899	3,758	47.6	3,226	40.8	188	3,038	531	14.1	4,141
18 to 19 years	7,790	5,372	69.0	4,729	60.7	190	4,539	643	12.0	2,417
20 to 24 years	17,585	13,932	79.2	12,766	72.6	407	12,360	1,166	8.4	3,652
25 to 54 years	117,487	98,454	83.8	95,098	80.9	2,297	92,800	3,357	3.4	19,033
25 to 34 years	38,653	32,628	84.4	31,259	80.9	740	30,519	1,369	4.2	6,025
25 to 29 years	18,519	15,715	84.9	14,935	80.6	393	14,543	779	5.0	2,805
30 to 34 years	20,134	16,913	84.0	16,323	81.1	348	15,976	590	3.5	3,221
35 to 44 years	44,433	37,556	84.5	36,322	81.7	935	35,387	1,234	3.3	6,877
35 to 39 years	22,532	18,933	84.0	18,253	81.0	508	17,745	680	3.6	3,599
40 to 44 years	21,901	18,623	85.0	18,069	82.5	427	17,641	554	3.0	3,278
45 to 54 years	34,401	28,270	82.2	27,517	80.0	622	26,895	753	2.7	6,131
45 to 49 years	18,907	15,926	84.2	15,488	81.9	359	15,129	438	2.8	2,980
50 to 54 years	15,494	12,344	79.7	12,028	77.6	262	11,766	315	2.6	3,150
55 to 64 years	22,432	13,170	58.7	12,819	57.1	450	12,369	352	2.7	9,261
55 to 59 years	12,296	8,507	69.2	8,286	67.4	240	8,046	222	2.6	3,788
60 to 64 years	10,136	4,663	46.0	4,533	44.7	210	4,323	130	2.8	5,473
65 years and over	32,287	3,692	11.4	3,568	11.1	285	3,283	124	3.4	28,595
65 to 69 years	9,384	2,005	21.4	1,935	20.6	117	1,819	70	3.5	7,379
70 to 74 years	8,555	1,037	12.1	1,002	11.7	91	911	35	3.3	7,519
75 years and over	14,347	650	4.5	631	4.4	78	553	19	3.0	13,697
Men										
16 years and over	98,892	74,540	75.4	71,537	72.3	2,852	68,685	3,003	4.0	24,352
16 to 19 years	8,003	4,717	58.9	4,073	50.9	296	3,777	644	13.6	3,286
16 to 17 years	4,065	1,953	48.0	1,654	40.7	142	1,512	299	15.3	2,112
18 to 19 years	3,938	2,764	70.2	2,419	61.4	154	2,264	345	12.5	1,175
20 to 24 years	8,817	7,440	84.4	6,853	77.7	334	6,519	588	7.9	1,376
25 to 54 years	57,729	52,997	91.8	51,456	89.1	1,673	49,784	1,541	2.9	4,731
25 to 34 years	18,995	17,671	93.0	17,049	89.8	557	16,492	623	3.5	1,324
25 to 29 years	9,078	8,385	92.4	8,032	88.5	275	7,757	353	4.2	692
30 to 34 years	9,918	9,286	93.6	9,016	90.9	281	8,735	270	2.9	632
35 to 44 years	21,933	20,377	92.9	19,808	90.3	670	19,137	569	2.8	1,556
35 to 39 years	11,149	10,447	93.7	10,146	91.0	359	9,787	301	2.9	702
40 to 44 years	10,784	9,930	92.1	9,662	89.6	312	9,350	268	2.7	854
45 to 54 years	16,800	14,949	89.0	14,600	86.9	446	14,155	349	2.3	1,851
45 to 49 years	9,282	8,396	90.5	8,208	88.4	264	7,944	188	2.2	886
50 to 54 years	7,518	6,553	87.2	6,392	85.0	181	6,210	162	2.5	965
55 to 64 years	10,691	7,246	67.8	7,076	66.2	319	6,758	169	2.3	3,445
55 to 59 years	5,906	4,619	78.2	4,525	76.6	171	4,354	93	2.0	1,287
60 to 64 years	4,784	2,627	54.9	2,551	53.3	147	2,404	76	2.9	2,158
65 years and over	13,653	2,140	15.7	2,079	15.2	231	1,848	61	2.9	11,513
65 to 69 years	4,284	1,133	26.4	1,105	25.8	96	1,009	28	2.5	3,152
70 to 74 years	3,822	621	16.2	602	15.8	73	529	19	3.1	3,201
75 years and over	5,546	386	7.0	372	6.7	61	311	14	3.7	5,160
Women										
16 years and over	106,587	63,839	59.9	60,669	56.9	966	59,703	3,170	5.0	42,748
16 to 19 years	7,686	4,413	57.4	3,882	50.5	82	3,800	531	12.0	3,272
16 to 17 years	3,834	1,805	47.1	1,572	41.0	46	1,526	232	12.9	2,029
18 to 19 years	3,852	2,609	67.7	2,310	60.0	36	2,274	299	11.4	1,243
20 to 24 years	8,768	6,492	74.0	5,914	67.4	72	5,841	578	8.9	2,276
25 to 54 years	59,759	45,457	76.1	43,641	73.0	625	43,016	1,816	4.0	14,302
25 to 34 years	19,658	14,957	76.1	14,210	72.3	184	14,026	747	5.0	4,701
25 to 29 years	9,442	7,329	77.6	6,903	73.1	117	6,785	427	5.8	2,112
30 to 34 years	10,216	7,627	74.7	7,307	71.5	66	7,241	320	4.2	2,589
35 to 44 years	22,500	17,179	76.4	16,514	73.4	265	16,249	665	3.9	5,321
35 to 39 years	11,383	8,487	74.6	8,107	71.2	149	7,958	379	4.5	2,896
40 to 44 years	11,117	8,693	78.2	8,407	75.6	116	8,291	286	3.3	2,424
45 to 54 years	17,600	13,321	75.7	12,917	73.4	176	12,740	404	3.0	4,280
45 to 49 years	9,625	7,530	78.2	7,280	75.6	95	7,184	251	3.3	2,094
50 to 54 years	7,976	5,791	72.6	5,637	70.7	81	5,556	154	2.7	2,185
55 to 64 years	11,741	5,925	50.5	5,742	48.9	131	5,611	183	3.1	5,816
55 to 59 years	6,389	3,888	60.9	3,760	58.9	68	3,692	128	3.3	2,501
60 to 64 years	5,352	2,036	38.1	1,982	37.0	63	1,919	54	2.7	3,315
65 years and over	18,634	1,552	8.3	1,490	8.0	55	1,435	62	4.0	17,082
65 to 69 years	5,100	873	17.1	831	16.3	21	810	42	4.8	4,227
70 to 74 years	4,733	416	8.8	400	8.5	17	383	16	3.8	4,318
75 years and over	8,801	263	3.0	259	2.9	17	242	5	1.9	8,537

See footnotes at end of table.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-14. Employment status of the civilian noninstitutional population by age, sex, and race — Continued

(Numbers in thousands)

Age, sex, and race	August 1998									
	Civilian noninsti- tutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agri- culture	Nonagri- cultural industries	Number	Percent of labor force	
WHITE										
16 years and over	171,655	115,959	67.6	111,511	65.0	3,529	107,982	4,448	3.8	55,696
16 to 19 years	12,497	7,681	61.5	6,863	54.9	345	6,518	818	10.7	4,816
16 to 17 years	6,274	3,189	50.8	2,809	44.8	170	2,640	379	11.9	3,085
18 to 19 years	6,224	4,492	72.2	4,053	65.1	175	3,878	439	9.8	1,731
20 to 24 years	14,151	11,512	81.3	10,722	75.8	376	10,346	789	6.9	2,640
25 to 54 years	97,044	81,918	84.4	79,469	81.9	2,105	77,364	2,450	3.0	15,125
25 to 34 years	31,195	26,553	85.1	25,612	82.1	690	24,923	941	3.5	4,642
25 to 29 years	14,962	12,886	86.1	12,351	82.5	362	11,989	535	4.2	2,076
30 to 34 years	16,233	13,667	84.2	13,262	81.7	328	12,934	405	3.0	2,566
35 to 44 years	36,644	31,116	84.9	30,234	82.5	850	29,384	882	2.8	5,528
35 to 39 years	18,509	15,594	84.3	15,123	81.7	446	14,676	472	3.0	2,915
40 to 44 years	18,134	15,522	85.6	15,111	83.3	403	14,708	411	2.6	2,612
45 to 54 years	29,205	24,249	83.0	23,622	80.9	566	23,057	627	2.6	4,956
45 to 49 years	15,836	13,489	85.2	13,144	83.0	321	12,822	345	2.6	2,347
50 to 54 years	13,368	10,760	80.5	10,479	78.4	244	10,234	281	2.6	2,609
55 to 64 years	19,312	11,507	59.6	11,226	58.1	421	10,805	281	2.4	7,804
55 to 59 years	10,592	7,453	70.4	7,279	68.7	218	7,061	174	2.3	3,140
60 to 64 years	8,719	4,055	46.5	3,947	45.3	203	3,744	108	2.7	4,664
65 years and over	28,651	3,341	11.7	3,231	11.3	282	2,949	110	3.3	25,311
65 to 69 years	8,137	1,800	22.1	1,737	21.3	116	1,621	63	3.5	6,338
70 to 74 years	7,601	957	12.6	926	12.2	90	836	31	3.2	6,644
75 years and over	12,913	584	4.5	568	4.4	76	492	16	2.8	12,329
Men										
16 years and over	83,448	63,510	76.1	61,328	73.5	2,618	58,710	2,182	3.4	19,939
16 to 19 years	6,418	3,995	62.2	3,541	55.2	269	3,272	454	11.4	2,423
16 to 17 years	3,238	1,662	51.3	1,453	44.9	126	1,328	208	12.5	1,576
18 to 19 years	3,180	2,333	73.4	2,088	65.7	143	1,945	245	10.5	847
20 to 24 years	7,175	6,286	87.6	5,891	82.1	310	5,581	394	6.3	890
25 to 54 years	48,363	44,888	92.8	43,741	90.4	1,515	42,226	1,147	2.6	3,475
25 to 34 years	15,599	14,686	94.1	14,236	91.3	518	13,718	450	3.1	913
25 to 29 years	7,477	7,021	93.9	6,755	90.3	255	6,500	266	3.8	457
30 to 34 years	8,122	7,666	94.4	7,481	92.1	263	7,219	184	2.4	456
35 to 44 years	18,327	17,186	93.8	16,785	91.6	600	16,185	402	2.3	1,140
35 to 39 years	9,264	8,742	94.4	8,543	92.2	305	8,238	200	2.3	522
40 to 44 years	9,062	8,444	93.2	8,242	90.9	294	7,947	202	2.4	618
45 to 54 years	14,437	13,015	90.2	12,720	88.1	398	12,323	295	2.3	1,422
45 to 49 years	7,861	7,200	91.6	7,058	89.8	234	6,824	142	2.0	661
50 to 54 years	6,576	5,816	88.4	5,662	86.1	163	5,499	153	2.6	761
55 to 64 years	9,325	6,399	68.6	6,273	67.3	296	5,977	126	2.0	2,926
55 to 59 years	5,149	4,087	79.4	4,020	78.1	156	3,864	68	1.7	1,062
60 to 64 years	4,176	2,312	55.4	2,254	54.0	140	2,113	58	2.5	1,864
65 years and over	12,167	1,942	16.0	1,881	15.5	228	1,653	61	3.1	10,225
65 to 69 years	3,779	1,015	26.9	987	26.1	95	891	28	2.8	2,764
70 to 74 years	3,381	575	17.0	556	16.5	73	483	19	3.3	2,805
75 years and over	5,008	352	7.0	339	6.8	59	279	14	3.9	4,655
Women										
16 years and over	88,207	52,449	59.5	50,183	56.9	911	49,272	2,266	4.3	35,758
16 to 19 years	6,079	3,686	60.6	3,322	54.6	76	3,246	364	9.9	2,393
16 to 17 years	3,036	1,527	50.3	1,356	44.7	44	1,312	171	11.2	1,509
18 to 19 years	3,044	2,159	70.9	1,965	64.6	32	1,933	194	9.0	885
20 to 24 years	6,976	5,226	74.9	4,831	69.3	67	4,765	395	7.6	1,750
25 to 54 years	48,680	37,030	76.1	35,727	73.4	590	35,138	1,303	3.5	11,650
25 to 34 years	15,596	11,867	76.1	11,376	72.9	172	11,204	490	4.1	3,729
25 to 29 years	7,485	5,865	78.4	5,596	74.8	107	5,489	269	4.6	1,619
30 to 34 years	8,111	6,002	74.0	5,781	71.3	65	5,715	221	3.7	2,110
35 to 44 years	18,317	13,930	76.0	13,449	73.4	250	13,199	480	3.4	4,387
35 to 39 years	9,245	6,852	74.1	6,580	71.2	141	6,439	272	4.0	2,393
40 to 44 years	9,072	7,078	78.0	6,869	75.7	109	6,760	208	2.9	1,994
45 to 54 years	14,768	11,234	76.1	10,902	73.8	168	10,734	332	3.0	3,534
45 to 49 years	7,976	6,289	78.9	6,086	76.3	87	5,999	204	3.2	1,686
50 to 54 years	6,792	4,944	72.8	4,816	70.9	81	4,735	128	2.6	1,848
55 to 64 years	9,986	5,108	51.2	4,953	49.6	125	4,828	155	3.0	4,878
55 to 59 years	5,443	3,365	61.8	3,260	59.9	62	3,198	106	3.1	2,077
60 to 64 years	4,544	1,743	38.4	1,694	37.3	63	1,631	49	2.8	2,801
65 years and over	16,484	1,398	8.5	1,349	8.2	54	1,296	49	3.5	15,086
65 to 69 years	4,359	785	18.0	751	17.2	21	730	35	4.4	3,574
70 to 74 years	4,220	382	9.0	370	8.8	16	353	12	3.1	3,839
75 years and over	7,905	232	2.9	229	2.9	17	212	3	1.2	7,673

See footnotes at end of table.

A-14. Employment status of the civilian noninstitutional population by age, sex, and race — Continued

(Numbers in thousands)

Age, sex, and race	August 1998									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force	
BLACK										
16 years and over	24,418	16,129	66.1	14,663	60.1	175	14,488	1,466	9.1	8,289
16 to 19 years	2,453	1,161	47.3	848	34.6	16	832	313	27.0	1,292
16 to 17 years	1,240	437	35.2	319	25.7	13	306	118	27.0	803
18 to 19 years	1,213	724	59.7	529	43.6	3	526	195	27.0	489
20 to 24 years	2,548	1,838	72.1	1,508	59.2	20	1,488	331	18.0	710
25 to 54 years	14,483	11,725	81.0	10,970	75.7	119	10,851	756	6.4	2,758
25 to 34 years	5,215	4,325	82.9	3,975	76.2	37	3,938	350	8.1	890
25 to 29 years	2,545	2,066	81.2	1,867	73.4	21	1,846	198	9.6	479
30 to 34 years	2,670	2,259	84.6	2,108	78.9	16	2,092	151	6.7	411
35 to 44 years	5,520	4,570	82.8	4,266	77.3	54	4,212	303	6.6	951
35 to 39 years	2,845	2,375	83.5	2,195	77.1	43	2,152	180	7.6	470
40 to 44 years	2,675	2,194	82.0	2,071	77.4	11	2,060	123	5.6	481
45 to 54 years	3,748	2,831	75.5	2,729	72.8	28	2,701	103	3.6	917
45 to 49 years	2,197	1,697	77.3	1,617	73.6	21	1,596	80	4.7	500
50 to 54 years	1,551	1,134	73.1	1,111	71.6	7	1,105	23	2.0	417
55 to 64 years	2,248	1,157	51.5	1,101	49.0	19	1,081	56	4.9	1,091
55 to 59 years	1,244	737	59.3	700	56.3	13	687	38	5.1	506
60 to 64 years	1,004	419	41.8	401	39.9	6	395	19	4.5	584
65 years and over	2,686	247	9.2	237	8.8	2	235	10	4.0	2,438
65 to 69 years	883	134	15.2	127	14.4	-	127	7	5.4	749
70 to 74 years	693	55	7.9	55	7.9	-	55	-	(¹)	638
75 years and over	1,110	58	5.2	55	5.0	2	53	3	(¹)	1,052
Men										
16 years and over	10,948	7,620	69.6	6,950	63.5	155	6,795	670	8.8	3,329
16 to 19 years	1,206	565	46.8	402	33.4	16	387	162	28.8	641
16 to 17 years	622	212	34.1	146	23.4	13	133	66	31.3	410
18 to 19 years	584	353	60.4	257	44.0	3	254	96	27.2	231
20 to 24 years	1,167	842	72.2	680	58.3	16	664	162	19.3	325
25 to 54 years	6,543	5,518	84.3	5,205	79.6	105	5,101	313	5.7	1,025
25 to 34 years	2,332	2,029	87.0	1,901	81.5	32	1,869	128	6.3	303
25 to 29 years	1,125	952	84.6	892	79.3	16	876	60	6.3	173
30 to 34 years	1,207	1,076	89.2	1,009	83.6	16	993	67	6.3	131
35 to 44 years	2,524	2,168	85.9	2,026	80.3	49	1,977	142	6.6	356
35 to 39 years	1,295	1,145	88.4	1,058	81.7	38	1,020	87	7.6	150
40 to 44 years	1,229	1,023	83.2	968	78.8	11	957	55	5.3	206
45 to 54 years	1,687	1,322	78.3	1,279	75.8	24	1,255	43	3.3	365
45 to 49 years	996	801	80.4	761	76.5	17	744	39	4.9	195
50 to 54 years	691	521	75.4	517	74.8	49	511	4	.7	170
55 to 64 years	961	559	58.2	527	54.9	17	510	32	5.7	402
55 to 59 years	537	360	67.1	343	63.9	10	333	17	4.7	177
60 to 64 years	423	198	46.9	184	43.4	6	177	15	7.4	225
65 years and over	1,072	136	12.7	135	12.6	2	134	1	.4	936
65 to 69 years	357	72	20.2	72	20.2	-	72	-	(¹)	284
70 to 74 years	323	31	9.5	31	9.5	-	31	-	(¹)	292
75 years and over	392	33	8.4	32	8.3	2	31	1	(¹)	359
Women										
16 years and over	13,469	8,509	63.2	7,713	57.3	20	7,693	796	9.4	4,960
16 to 19 years	1,247	597	47.8	446	35.7	-	446	151	25.3	651
16 to 17 years	618	225	36.4	173	28.1	-	173	51	22.9	393
18 to 19 years	629	372	59.1	272	43.2	-	272	100	26.8	258
20 to 24 years	1,381	996	72.1	828	59.9	3	824	168	16.9	385
25 to 54 years	7,940	6,207	78.2	5,764	72.6	14	5,750	443	7.1	1,733
25 to 34 years	2,883	2,296	79.6	2,074	71.9	5	2,069	222	9.7	587
25 to 29 years	1,420	1,113	78.4	975	68.7	5	970	138	12.4	307
30 to 34 years	1,463	1,183	80.8	1,099	75.1	-	1,099	84	7.1	280
35 to 44 years	2,996	2,402	80.2	2,240	74.8	5	2,235	161	6.7	594
35 to 39 years	1,550	1,230	79.4	1,137	73.4	5	1,133	93	7.5	320
40 to 44 years	1,446	1,171	81.0	1,103	76.3	-	1,103	68	5.8	275
45 to 54 years	2,061	1,510	73.2	1,450	70.3	4	1,446	60	4.0	552
45 to 49 years	1,201	896	74.6	856	71.3	4	852	41	4.5	305
50 to 54 years	860	613	71.3	594	69.1	-	594	19	3.1	247
55 to 64 years	1,287	598	46.5	574	44.6	2	571	24	4.1	689
55 to 59 years	706	377	53.4	357	50.5	2	354	21	5.5	329
60 to 64 years	581	221	38.1	217	37.4	-	217	4	1.8	360
65 years and over	1,614	111	6.9	102	6.3	-	102	9	8.5	1,503
65 to 69 years	527	62	11.8	55	10.4	-	55	7	(¹)	464
70 to 74 years	370	24	6.5	24	6.5	-	24	-	(¹)	345
75 years and over	718	25	3.5	23	3.2	-	23	2	(¹)	693

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

NOTE: Beginning in January 1998, data reflect new composite estimation procedures

and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-15. 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. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
TOTAL								
Civilian noninstitutional population	203,364	205,479	89,982	90,889	98,000	98,901	15,382	15,689
Civilian labor force	137,460	138,379	69,571	69,823	59,123	59,426	8,765	9,130
Percent of population	67.6	67.3	77.3	76.8	60.3	60.1	57.0	58.2
Employed	130,865	132,206	67,000	67,464	56,311	56,786	7,554	7,955
Agriculture	3,661	3,818	2,424	2,556	888	883	348	379
Nonagricultural industries	127,205	128,388	64,576	64,908	55,423	55,903	7,205	7,577
Unemployed	6,594	6,173	2,571	2,359	2,811	2,639	1,212	1,175
Unemployment rate	4.8	4.5	3.7	3.4	4.8	4.4	13.8	12.9
Not in labor force	65,904	67,100	20,410	21,066	38,877	39,476	6,617	6,559
White								
Civilian noninstitutional population	170,148	171,655	76,391	77,030	81,550	82,127	12,207	12,497
Civilian labor force	115,365	115,959	59,307	59,515	48,677	48,763	7,382	7,681
Percent of population	67.8	67.6	77.6	77.3	59.7	59.4	60.5	61.5
Employed	110,654	111,511	57,418	57,787	46,699	46,861	6,538	6,863
Agriculture	3,426	3,529	2,237	2,349	857	835	332	345
Nonagricultural industries	107,228	107,982	55,180	55,438	45,841	46,026	6,206	6,518
Unemployed	4,711	4,448	1,889	1,728	1,978	1,902	843	818
Unemployment rate	4.1	3.8	3.2	2.9	4.1	3.9	11.4	10.7
Not in labor force	54,783	55,696	17,085	17,516	32,873	33,364	4,825	4,816
Black								
Civilian noninstitutional population	24,043	24,418	9,599	9,743	12,034	12,222	2,410	2,453
Civilian labor force	15,953	16,129	7,077	7,055	7,793	7,912	1,083	1,161
Percent of population	66.4	66.1	73.7	72.4	64.8	64.7	44.9	47.3
Employed	14,409	14,663	6,554	6,548	7,081	7,267	774	848
Agriculture	130	175	115	139	14	20	1	16
Nonagricultural industries	14,280	14,488	6,439	6,409	7,068	7,247	773	832
Unemployed	1,544	1,466	523	507	712	645	309	313
Unemployment rate	9.7	9.1	7.4	7.2	9.1	8.2	28.5	27.0
Not in labor force	8,089	8,289	2,521	2,687	4,241	4,310	1,327	1,292

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	August 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time	Part time	Total	Looking for full-time work	Looking for part-time work	
TOTAL ENROLLED										
Total, 16 to 24 years	9,585	4,873	50.8	4,432	1,797	2,635	441	167	274	9.1
16 to 19 years	6,217	2,806	45.1	2,481	747	1,735	325	104	221	11.6
20 to 24 years	3,368	2,067	61.4	1,950	1,050	900	116	63	53	5.6
High school	4,219	1,682	39.9	1,418	293	1,125	265	72	192	15.7
College	5,366	3,191	59.5	3,014	1,504	1,510	177	95	82	5.5
Full-time students	4,379	2,365	54.0	2,225	970	1,255	140	74	66	5.9
Part-time students	987	826	83.7	789	534	255	37	21	16	4.5
Men, 16 to 24 years	4,713	2,355	50.0	2,129	908	1,221	226	80	146	9.6
16 to 19 years	3,129	1,412	45.1	1,243	388	855	169	48	121	12.0
20 to 24 years	1,584	943	59.5	886	520	367	57	32	25	6.0
High school	2,203	883	40.1	752	171	580	132	35	97	14.9
College	2,510	1,471	58.6	1,378	736	641	94	45	49	6.4
Full-time students	2,041	1,079	52.8	1,003	481	522	75	39	36	7.0
Part-time students	469	393	83.7	374	255	119	19	6	13	4.8
Women, 16 to 24 years	4,872	2,518	51.7	2,302	889	1,413	216	87	129	8.6
16 to 19 years	3,088	1,394	45.2	1,238	359	880	156	56	100	11.2
20 to 24 years	1,784	1,124	63.0	1,064	531	534	59	31	28	5.3
High school	2,016	799	39.6	666	121	545	133	37	95	16.6
College	2,856	1,719	60.2	1,636	768	868	83	50	33	4.8
Full-time students	2,338	1,286	55.0	1,221	489	732	65	35	30	5.0
Part-time students	518	433	83.7	415	279	136	18	15	3	4.2
White										
Total, 16 to 24 years	7,390	4,050	54.8	3,757	1,539	2,217	294	115	179	7.2
16 to 19 years	4,798	2,374	49.5	2,149	666	1,483	225	72	153	9.5
20 to 24 years	2,593	1,676	64.7	1,607	873	734	69	43	26	4.1
Men	3,676	2,022	55.0	1,861	804	1,057	162	62	100	8.0
Women	3,715	2,028	54.6	1,896	735	1,161	132	53	79	6.5
High school	3,169	1,383	43.6	1,215	245	970	168	47	121	12.2
College	4,221	2,667	63.2	2,542	1,295	1,247	125	67	58	4.7
Full-time students	3,408	1,967	57.7	1,864	845	1,018	103	50	53	5.2
Part-time students	813	700	86.1	678	449	229	23	18	5	3.2
Black										
Total, 16 to 24 years	1,547	590	38.1	472	186	286	118	49	69	19.9
16 to 19 years	1,058	337	31.8	253	52	202	83	30	53	24.8
20 to 24 years	488	253	51.8	219	134	85	34	18	16	13.5
Men	703	225	31.9	181	70	111	44	16	28	19.4
Women	843	365	43.3	291	116	175	74	33	41	20.3
High school	829	242	29.2	163	27	135	79	24	55	32.7
College	717	348	48.5	309	159	151	38	25	14	11.0
Full-time students	609	268	43.9	236	93	143	32	21	10	11.8
Part-time students	108	80	74.4	73	66	7	7	3	3	8.5
Hispanic origin										
Total, 16 to 24 years	1,197	468	39.1	391	157	233	77	44	34	16.5
16 to 19 years	846	281	33.3	219	64	154	63	33	30	22.2
20 to 24 years	351	187	53.2	172	93	79	15	11	4	7.9
Men	638	276	43.2	237	95	141	39	21	18	14.1
Women	559	193	34.4	154	62	92	38	23	16	20.0
High school	665	183	27.6	134	37	97	50	23	26	27.0
College	532	285	53.5	257	120	137	28	21	7	9.8
Full-time students	370	158	42.6	138	57	81	20	13	7	12.7
Part-time students	162	127	78.4	119	63	56	8	8	-	6.1

See footnotes at end of table.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	August 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
Total	Full time			Part time	Total	Looking for full-time work	Looking for part-time work			
TOTAL NOT ENROLLED										
Total, 16 to 24 years	23,689	18,189	76.8	16,290	12,016	4,274	1,899	1,518	381	10.4
16 to 19 years	9,472	6,324	66.8	5,474	2,862	2,613	850	556	293	13.4
20 to 24 years	14,217	11,866	83.5	10,816	9,154	1,662	1,049	962	87	8.8
Less than a high school diploma	8,113	4,955	61.1	4,154	2,334	1,820	801	580	221	16.2
High school graduates, no college	8,097	6,640	82.0	5,948	4,742	1,206	693	601	92	10.4
Less than a bachelor's degree	5,900	5,120	86.8	4,827	3,689	1,138	293	235	59	5.7
College graduates	1,580	1,474	93.3	1,362	1,251	111	112	103	9	7.6
Men, 16 to 24 years	12,107	9,802	81.0	8,797	7,015	1,781	1,006	836	169	10.3
16 to 19 years	4,874	3,305	67.8	2,830	1,659	1,171	475	331	144	14.4
20 to 24 years	7,233	6,497	89.8	5,967	5,356	610	531	505	26	8.2
Less than a high school diploma	4,377	2,942	67.2	2,497	1,612	885	445	346	100	15.1
High school graduates, no college	4,278	3,754	87.7	3,366	2,908	458	388	342	46	10.3
Less than a bachelor's degree	2,752	2,445	88.8	2,318	1,905	412	127	105	22	5.2
College graduates	700	662	94.5	616	590	25	46	43	2	6.9
Women, 16 to 24 years	11,582	8,387	72.4	7,493	5,001	2,493	894	682	212	10.7
16 to 19 years	4,598	3,019	65.7	2,644	1,202	1,442	375	225	150	12.4
20 to 24 years	6,984	5,368	76.9	4,849	3,798	1,051	519	457	62	9.7
Less than a high school diploma	3,735	2,013	53.9	1,657	722	935	356	234	122	17.7
High school graduates, no college	3,819	2,886	75.6	2,582	1,834	748	305	259	46	10.6
Less than a bachelor's degree	3,148	2,675	85.0	2,509	1,784	725	166	129	37	6.2
College graduates	879	813	92.4	746	661	85	66	60	7	8.2
White										
Total, 16 to 24 years	19,258	15,142	78.6	13,829	10,242	3,586	1,314	995	319	8.7
16 to 19 years	7,700	5,307	68.9	4,713	2,498	2,215	594	359	235	11.2
20 to 24 years	11,559	9,835	85.1	9,115	7,744	1,371	720	636	84	7.3
Men	9,918	8,258	83.3	7,571	6,086	1,485	687	548	139	8.3
Women	9,341	6,884	73.7	6,257	4,156	2,101	627	447	180	9.1
Less than a high school diploma	6,450	4,065	63.0	3,523	1,996	1,527	542	365	176	13.3
High school graduates, no college	6,509	5,421	83.3	4,958	3,970	987	463	382	81	8.5
Less than a bachelor's degree	4,939	4,375	88.6	4,158	3,183	975	217	165	53	5.0
College graduates	1,359	1,281	94.2	1,190	1,093	97	92	83	9	7.1
Black										
Total, 16 to 24 years	3,455	2,410	69.8	1,883	1,331	552	526	479	47	21.8
16 to 19 years	1,395	824	59.1	595	274	321	230	184	45	27.9
20 to 24 years	2,060	1,585	77.0	1,289	1,058	231	296	295	1	18.7
Men	1,670	1,182	70.8	901	671	230	281	260	21	23.8
Women	1,785	1,227	68.8	982	660	322	245	219	26	20.0
Less than a high school diploma	1,327	741	55.8	508	264	244	233	201	32	31.4
High school graduates, no college	1,300	1,007	77.5	792	598	194	215	204	11	21.3
Less than a bachelor's degree	722	573	79.4	502	392	110	72	68	4	12.5
College graduates	105	88	84.0	81	77	4	7	7	-	7.8
Hispanic origin										
Total, 16 to 24 years	3,809	2,733	71.8	2,379	1,881	498	354	278	76	13.0
16 to 19 years	1,369	786	57.4	629	384	245	157	95	63	20.0
20 to 24 years	2,440	1,947	79.8	1,750	1,497	253	197	184	13	10.1
Men	2,004	1,660	82.8	1,475	1,249	225	185	154	31	11.2
Women	1,805	1,073	59.4	904	631	273	169	124	45	15.7
Less than a high school diploma	1,887	1,161	61.5	962	766	195	199	146	53	17.2
High school graduates, no college	1,257	1,005	80.0	894	702	192	111	88	23	11.0
Less than a bachelor's degree	610	511	83.8	469	365	105	42	42	-	8.2
College graduates	56	56	(¹)	53	48	5	3	3	-	(¹)

¹ 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. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-17. Employment status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic origin

(Numbers in thousands)

Educational attainment	Total		Men		Women		White		Black		Hispanic origin	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
TOTAL												
Civilian noninstitutional population ...	170,555	172,205	81,290	82,072	89,265	90,133	143,950	145,006	19,115	19,417	15,623	16,153
Civilian labor force	114,933	115,317	62,150	62,383	52,783	52,934	96,625	96,766	13,088	13,129	11,016	11,219
Percent of population	67.4	67.0	76.5	76.0	59.1	58.7	67.1	66.7	68.5	67.6	70.5	69.5
Employed	110,658	111,484	60,161	60,611	50,498	50,873	93,532	93,926	12,122	12,307	10,404	10,579
Employment-population ratio	64.9	64.7	74.0	73.9	56.6	56.4	65.0	64.8	63.4	63.4	66.6	65.5
Unemployed	4,275	3,833	1,990	1,771	2,285	2,061	3,092	2,841	966	822	612	640
Unemployment rate	3.7	3.3	3.2	2.8	4.3	3.9	3.2	2.9	7.4	6.3	5.6	5.7
Less than a high school diploma												
Civilian noninstitutional population ...	29,314	29,204	13,873	13,914	15,441	15,291	23,377	23,382	4,557	4,333	6,951	7,259
Civilian labor force	12,460	12,402	7,658	7,697	4,802	4,705	10,001	10,084	1,836	1,661	4,107	4,331
Percent of population	42.5	42.5	55.2	55.3	31.1	30.8	42.8	43.1	40.3	38.3	59.1	59.7
Employed	11,589	11,602	7,225	7,282	4,363	4,320	9,403	9,486	1,616	1,500	3,814	4,023
Employment-population ratio	39.5	39.7	52.1	52.3	28.3	28.2	40.2	40.6	35.5	34.6	54.9	55.4
Unemployed	872	800	433	414	439	386	598	598	220	161	293	308
Unemployment rate	7.0	6.5	5.6	5.4	9.1	8.2	6.0	5.9	12.0	9.7	7.1	7.1
High school graduates, no college												
Civilian noninstitutional population ...	57,607	57,729	26,201	26,490	31,405	31,239	48,906	48,825	6,802	7,029	4,230	4,151
Civilian labor force	37,798	37,305	20,059	20,046	17,739	17,259	31,668	31,072	4,856	4,984	3,219	3,049
Percent of population	65.6	64.6	76.6	75.7	56.5	55.3	64.8	63.6	71.4	70.9	76.1	73.5
Employed	36,262	35,898	19,334	19,373	16,928	16,525	30,626	30,096	4,424	4,600	3,056	2,892
Employment-population ratio	62.9	62.2	73.8	73.1	53.9	52.9	62.6	61.6	65.0	65.4	72.3	69.7
Unemployed	1,535	1,407	724	673	811	734	1,041	976	432	384	163	158
Unemployment rate	4.1	3.8	3.6	3.4	4.6	4.3	3.3	3.1	8.9	7.7	5.1	5.2
Less than a bachelor's degree¹												
Civilian noninstitutional population ...	42,401	41,842	19,630	19,024	22,771	22,817	35,934	35,269	4,939	5,014	2,846	3,051
Civilian labor force	31,689	31,106	16,153	15,585	15,536	15,521	26,538	26,017	3,971	3,875	2,337	2,438
Percent of population	74.7	74.3	82.3	81.9	68.2	68.0	73.9	73.8	80.4	77.3	82.1	79.9
Employed	30,673	30,227	15,703	15,211	14,970	15,016	25,772	25,366	3,761	3,695	2,235	2,344
Employment-population ratio	72.3	72.2	80.0	80.0	65.7	65.8	71.7	71.9	76.1	73.7	78.5	76.8
Unemployed	1,016	879	450	374	566	505	766	651	211	180	102	94
Unemployment rate	3.2	2.8	2.8	2.4	3.6	3.3	2.9	2.5	5.3	4.7	4.4	3.9
Some college, no degree												
Civilian noninstitutional population ...	29,819	29,152	14,245	13,433	15,574	15,719	25,143	24,387	3,698	3,758	2,106	2,168
Civilian labor force	21,841	21,170	11,524	10,768	10,317	10,401	18,139	17,532	2,957	2,876	1,737	1,716
Percent of population	73.2	72.6	80.9	80.2	66.2	66.2	72.1	71.9	80.0	76.5	82.5	79.1
Employed	21,093	20,510	11,197	10,472	9,896	10,038	17,564	17,046	2,798	2,724	1,661	1,641
Employment-population ratio	70.7	70.4	78.6	78.0	63.5	63.9	69.9	69.9	75.7	72.5	78.9	75.7
Unemployed	748	660	328	297	420	363	575	486	159	151	76	75
Unemployment rate	3.4	3.1	2.8	2.8	4.1	3.5	3.2	2.8	5.4	5.3	4.4	4.4
Associate degree												
Civilian noninstitutional population ...	12,582	12,689	5,385	5,591	7,197	7,098	10,791	10,882	1,241	1,255	740	883
Civilian labor force	9,848	9,936	4,629	4,816	5,219	5,120	8,400	8,485	1,014	1,000	600	723
Percent of population	78.3	78.3	86.0	86.1	72.5	72.1	77.8	78.0	81.7	79.6	81.1	81.9
Employed	9,580	9,717	4,506	4,739	5,074	4,978	8,209	8,320	963	971	574	703
Employment-population ratio	76.1	76.6	83.7	84.8	70.5	70.1	76.1	76.5	77.6	77.3	77.6	79.7
Unemployed	268	219	122	77	145	142	191	166	52	29	26	20
Unemployment rate	2.7	2.2	2.6	1.6	2.8	2.8	2.3	2.0	5.1	2.9	4.3	2.7
College graduates												
Civilian noninstitutional population ...	41,232	43,431	21,585	22,644	19,648	20,787	35,734	37,531	2,817	3,041	1,596	1,692
Civilian labor force	32,986	34,504	18,281	19,056	14,706	15,448	28,417	29,593	2,424	2,609	1,353	1,401
Percent of population	80.0	79.4	84.7	84.2	74.8	74.3	79.5	78.9	86.0	85.8	84.8	82.8
Employed	32,135	33,757	17,898	18,745	14,236	15,012	27,731	28,978	2,321	2,512	1,299	1,321
Employment-population ratio	77.9	77.7	82.9	82.8	72.5	72.2	77.6	77.2	82.4	82.6	81.4	78.1
Unemployed	852	747	382	310	469	437	687	615	103	96	54	80
Unemployment rate	2.6	2.2	2.1	1.6	3.2	2.8	2.4	2.1	4.3	3.7	4.0	5.7

¹ Includes the categories, some college, no degree; and associate degree.
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. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-18. Employed and unemployed full- and part-time workers by age, sex, and race

(In thousands)

Age, sex, and race	August 1998									
	Employed ¹								Unemployed	
	Full-time workers				Part-time workers				Looking for full-time work	Looking for part-time work
	Total	At work		Not at work	Total	At work ²		Not at work		
35 hours or more		1 to 34 hours for economic or noneconomic reasons	Part time for economic reasons			Part time for noneconomic reasons				
TOTAL										
Total, 16 years and over	110,900	93,548	9,972	7,379	21,306	2,278	16,618	2,410	4,932	1,241
16 to 19 years	3,608	3,009	467	132	4,347	367	3,702	278	660	515
16 to 17 years	815	652	146	17	2,411	77	2,162	172	174	357
18 to 19 years	2,793	2,357	321	115	1,936	290	1,540	105	486	157
20 years and over	107,292	90,539	9,505	7,247	16,959	1,911	12,916	2,132	4,272	727
20 to 24 years	10,205	8,766	1,073	366	2,562	423	1,971	168	1,025	140
25 years and over	97,087	81,773	8,432	6,881	14,397	1,488	10,945	1,964	3,246	586
25 to 54 years	84,796	71,548	7,324	5,923	10,302	1,278	7,536	1,489	2,928	429
55 years and over	12,291	10,226	1,108	958	4,095	210	3,410	475	319	157
Men, 16 years and over	64,887	56,537	4,958	3,392	6,651	981	5,175	495	2,536	466
16 to 19 years	2,047	1,771	206	69	2,026	154	1,735	137	379	265
20 years and over	62,839	54,766	4,751	3,322	4,625	827	3,440	358	2,157	201
20 to 24 years	5,876	5,256	461	159	977	195	736	46	537	50
25 years and over	56,964	49,509	4,290	3,164	3,648	632	2,704	311	1,620	151
25 to 54 years	49,458	43,076	3,699	2,682	1,998	532	1,286	180	1,441	100
55 years and over	7,506	6,433	591	482	1,649	100	1,419	131	179	52
Women, 16 years and over	46,013	37,011	5,015	3,987	14,655	1,297	11,443	1,915	2,395	775
16 to 19 years	1,561	1,238	261	63	2,321	213	1,967	141	281	250
20 years and over	44,452	35,774	4,754	3,925	12,334	1,083	9,476	1,774	2,114	525
20 to 24 years	4,329	3,510	612	207	1,585	228	1,235	122	488	90
25 years and over	40,123	32,264	4,142	3,718	10,749	856	8,241	1,653	1,626	435
25 to 54 years	35,338	28,471	3,625	3,241	8,303	745	6,250	1,308	1,487	329
55 years and over	4,786	3,793	517	476	2,446	110	1,991	344	140	106
White										
Men, 16 years and over	55,679	48,370	4,289	3,020	5,649	769	4,446	434	1,834	348
16 to 19 years	1,811	1,565	189	57	1,730	112	1,499	119	251	203
20 years and over	53,868	46,805	4,101	2,963	3,918	656	2,947	315	1,583	145
20 to 24 years	5,080	4,541	391	148	811	152	620	40	358	36
25 years and over	48,789	42,264	3,710	2,815	3,107	504	2,327	275	1,224	109
25 to 54 years	42,129	36,586	3,165	2,379	1,612	414	1,044	154	1,084	63
55 years and over	6,659	5,678	545	436	1,495	90	1,284	121	141	46
Women, 16 years and over	37,318	29,807	4,158	3,352	12,865	1,018	10,115	1,732	1,640	626
16 to 19 years	1,353	1,057	234	63	1,968	176	1,667	125	179	185
20 years and over	35,964	28,750	3,924	3,290	10,897	842	8,448	1,606	1,460	441
20 to 24 years	3,538	2,884	489	164	1,294	185	1,009	101	320	74
25 years and over	32,427	25,866	3,435	3,126	9,603	658	7,440	1,506	1,140	367
25 to 54 years	28,315	22,615	2,985	2,715	7,413	581	5,638	1,194	1,029	274
55 years and over	4,112	3,251	450	411	2,191	77	1,802	312	111	93
Black										
Men, 16 years and over	6,271	5,558	454	259	679	161	484	35	585	85
16 to 19 years	177	160	12	5	225	36	179	10	119	44
20 years and over	6,094	5,398	443	253	454	124	306	25	466	41
20 to 24 years	564	510	44	10	116	36	77	3	158	5
25 years and over	5,529	4,888	398	243	338	89	229	21	309	36
25 to 54 years	4,981	4,404	369	208	225	80	131	14	282	31
55 years and over	549	484	30	35	114	8	98	8	27	5
Women, 16 years and over	6,447	5,264	664	519	1,266	209	930	127	678	118
16 to 19 years	148	129	20	-	297	24	258	15	96	55
20 years and over	6,299	5,136	645	519	969	185	672	112	582	63
20 to 24 years	628	484	107	37	200	37	145	18	156	13
25 years and over	5,671	4,651	538	482	769	148	527	94	427	50
25 to 54 years	5,190	4,263	503	425	574	122	382	71	400	43
55 years and over	480	388	35	57	195	26	145	23	27	7

¹ Employed persons are classified as full- or part-time workers based on their usual weekly hours at all jobs regardless of the number of hours they are at work during the reference week. Persons absent from work also are classified according to their usual status.

² Includes some persons at work 35 hours or more classified by their reason for working part time.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-19. Employed persons by occupation, sex, and age

(Percent distribution)

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. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
Total	130,865	132,206	70,890	71,537	67,000	67,464	59,976	60,669	56,311	56,786
Managerial and professional specialty	37,407	38,558	19,311	19,969	19,175	19,783	18,096	18,589	17,916	18,341
Executive, administrative, and managerial	18,649	19,235	10,417	10,808	10,365	10,738	8,232	8,427	8,165	8,339
Officials and administrators, public administration	704	672	369	324	369	324	334	348	335	348
Other executive, administrative, and managerial	13,206	13,882	7,952	8,417	7,912	8,363	5,254	5,465	5,198	5,391
Management-related occupations	4,739	4,681	2,096	2,068	2,084	2,051	2,644	2,614	2,632	2,601
Professional specialty	18,758	19,323	8,894	9,161	8,811	9,046	9,864	10,162	9,751	10,002
Engineers	2,031	2,011	1,853	1,802	1,852	1,795	178	209	178	209
Mathematical and computer scientists	1,455	1,919	1,032	1,337	1,029	1,319	423	581	423	570
Natural scientists	521	554	352	399	352	398	169	155	170	155
Health diagnosing occupations	1,059	1,167	767	826	767	826	292	341	293	341
Health assessment and treating occupations	2,824	2,764	414	402	414	402	2,411	2,362	2,409	2,351
Teachers, college and university	742	815	438	483	437	479	304	332	301	328
Teachers, except college and university	4,486	4,450	1,084	1,075	1,057	1,058	3,402	3,375	3,359	3,301
Lawyers and judges	939	998	695	724	692	715	244	274	244	274
Other professional specialty occupations	4,700	4,644	2,260	2,113	2,210	2,053	2,441	2,531	2,375	2,472
Technical, sales, and administrative support	38,475	39,045	13,822	14,136	12,984	13,211	24,654	24,909	22,860	23,015
Technicians and related support	4,323	4,326	2,053	2,076	1,995	2,041	2,270	2,250	2,235	2,216
Health technologists and technicians	1,703	1,716	335	313	333	310	1,368	1,404	1,349	1,382
Engineering and science technicians	1,336	1,278	982	971	941	954	354	307	344	301
Technicians, except health, engineering, and science	1,285	1,331	736	792	721	777	548	539	542	532
Sales occupations	15,841	16,079	7,933	7,995	7,404	7,377	7,908	8,084	6,746	6,869
Supervisors and proprietors	4,709	4,781	2,895	2,851	2,877	2,822	1,814	1,930	1,795	1,901
Sales representatives, finance and business services	2,620	2,740	1,478	1,583	1,466	1,534	1,142	1,157	1,117	1,110
Sales representatives, commodities, except retail	1,481	1,694	1,078	1,228	1,069	1,215	403	466	395	460
Sales workers, retail and personal services	6,956	6,781	2,451	2,303	1,965	1,778	4,505	4,478	3,395	3,344
Sales-related occupations	75	83	31	30	28	28	44	54	44	53
Administrative support, including clerical	18,312	18,640	3,836	4,065	3,585	3,793	14,476	14,575	13,878	13,930
Supervisors	693	679	264	243	262	239	429	437	422	437
Computer equipment operators	349	367	145	162	146	156	205	204	199	200
Secretaries, stenographers, and typists	3,730	3,678	69	71	64	69	3,661	3,607	3,587	3,505
Financial records processing	2,202	2,274	169	199	156	192	2,034	2,075	2,011	2,048
Mail and message distributing	968	1,009	617	659	595	649	352	350	340	340
Other administrative support, including clerical	10,369	10,633	2,574	2,731	2,361	2,488	7,795	7,902	7,318	7,402
Service occupations	18,041	18,081	7,490	7,311	6,361	6,274	10,550	10,770	9,235	9,396
Private household	856	808	30	44	31	35	826	764	699	622
Protective service	2,492	2,556	2,012	2,078	1,932	2,010	480	477	381	374
Service, except private household and protective	14,692	14,718	5,448	5,189	4,398	4,229	9,244	9,529	8,154	8,400
Food service	6,128	6,091	2,696	2,642	1,952	1,966	3,433	3,449	2,709	2,689
Health service	2,424	2,666	281	283	267	265	2,143	2,383	2,045	2,266
Cleaning and building service	3,216	3,141	1,842	1,678	1,677	1,519	1,373	1,463	1,312	1,390
Personal service	2,924	2,821	629	586	503	478	2,295	2,234	2,088	2,055
Precision production, craft, and repair	14,349	14,360	13,073	13,177	12,711	12,807	1,277	1,183	1,248	1,160
Mechanics and repairers	4,820	4,710	4,627	4,485	4,518	4,386	193	225	192	223
Construction trades	5,451	5,686	5,321	5,591	5,148	5,374	129	95	126	94
Other precision production, craft, and repair	4,079	3,965	3,124	3,101	3,045	3,048	955	863	929	843
Operators, fabricators, and laborers	18,754	18,138	14,116	13,707	13,062	12,556	4,638	4,431	4,372	4,176
Machine operators, assemblers, and inspectors	8,141	7,769	5,083	4,892	4,882	4,687	3,058	2,876	2,962	2,781
Transportation and material moving occupations	5,370	5,185	4,866	4,699	4,764	4,561	504	487	478	474
Motor vehicle operators	4,057	3,901	3,605	3,506	3,516	3,402	451	395	425	383
Other transportation and material moving occupations	1,313	1,285	1,260	1,192	1,249	1,159	53	92	53	91
Handlers, equipment cleaners, helpers, and laborers	5,243	5,184	4,167	4,117	3,416	3,308	1,076	1,068	933	922
Construction laborers	906	895	862	855	744	737	44	40	40	34
Other handlers, equipment cleaners, helpers, and laborers	4,337	4,290	3,305	3,261	2,672	2,572	1,032	1,028	893	888
Farming, forestry, and fishing	3,839	4,023	3,078	3,236	2,707	2,832	761	786	681	698
Farm operators and managers	1,379	1,243	1,065	958	1,050	947	314	285	313	280
Other farming, forestry, and fishing occupations	2,460	2,780	2,014	2,278	1,657	1,885	447	501	368	417

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-20. Employed persons by occupation, race, and sex

(Percent distribution)

Occupation and race	Total		Men		Women	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
TOTAL						
Total, 16 years and over (thousands)	130,865	132,206	70,890	71,537	59,976	60,669
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	28.6	29.2	27.2	27.9	30.2	30.6
Executive, administrative, and managerial	14.3	14.5	14.7	15.1	13.7	13.9
Professional specialty	14.3	14.6	12.5	12.8	16.4	16.7
Technical, sales, and administrative support	29.4	29.5	19.5	19.8	41.1	41.1
Technicians and related support	3.3	3.3	2.9	2.9	3.8	3.7
Sales occupations	12.1	12.2	11.2	11.2	13.2	13.3
Administrative support, including clerical	14.0	14.1	5.4	5.7	24.1	24.0
Service occupations	13.8	13.7	10.6	10.2	17.6	17.8
Private household .....	.7	.6	(¹)	.1	1.4	1.3
Protective service	1.9	1.9	2.8	2.9	.8	.8
Service, except private household and protective	11.2	11.1	7.7	7.3	15.4	15.7
Precision production, craft, and repair	11.0	10.9	18.4	18.4	2.1	2.0
Operators, fabricators, and laborers	14.3	13.7	19.9	19.2	7.7	7.3
Machine operators, assemblers, and inspectors	6.2	5.9	7.2	6.8	5.1	4.7
Transportation and material moving occupations	4.1	3.9	6.9	6.6	.8	.8
Handlers, equipment cleaners, helpers, and laborers	4.0	3.9	5.9	5.8	1.8	1.8
Farming, forestry, and fishing	2.9	3.0	4.3	4.5	1.3	1.3
White						
Total, 16 years and over (thousands)	110,654	111,511	60,822	61,328	49,832	50,183
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	29.6	30.3	28.1	29.0	31.4	32.0
Executive, administrative, and managerial	14.9	15.3	15.4	16.0	14.3	14.5
Professional specialty	14.7	15.0	12.7	13.0	17.0	17.4
Technical, sales, and administrative support	29.6	29.6	19.7	19.8	41.8	41.5
Technicians and related support	3.3	3.2	2.9	2.8	3.8	3.7
Sales occupations	12.4	12.5	11.7	11.7	13.3	13.4
Administrative support, including clerical	13.9	13.9	5.1	5.3	24.6	24.4
Service occupations	12.5	12.4	9.4	9.0	16.3	16.5
Private household .....	.6	.6	(¹)	.1	1.4	1.3
Protective service	1.7	1.8	2.6	2.7	.7	.7
Service, except private household and protective	10.2	10.0	6.8	6.3	14.2	14.5
Precision production, craft, and repair	11.4	11.3	19.1	19.1	2.1	1.9
Operators, fabricators, and laborers	13.6	13.1	19.0	18.3	7.1	6.7
Machine operators, assemblers, and inspectors	5.9	5.5	6.9	6.6	4.6	4.2
Transportation and material moving occupations	4.0	3.8	6.6	6.3	.8	.7
Handlers, equipment cleaners, helpers, and laborers	3.8	3.8	5.5	5.5	1.7	1.7
Farming, forestry, and fishing	3.2	3.3	4.6	4.8	1.5	1.5
Black						
Total, 16 years and over (thousands)	14,409	14,663	6,918	6,950	7,492	7,713
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	19.7	19.2	16.7	15.8	22.4	22.3
Executive, administrative, and managerial	9.5	9.6	8.9	8.5	10.0	10.6
Professional specialty	10.2	9.6	7.9	7.3	12.4	11.7
Technical, sales, and administrative support	27.8	29.3	16.6	18.3	38.1	39.3
Technicians and related support	3.0	3.3	2.5	3.1	3.5	3.5
Sales occupations	9.0	9.8	6.2	7.1	11.5	12.3
Administrative support, including clerical	15.8	16.1	7.9	8.0	23.1	23.4
Service occupations	23.4	22.9	19.8	19.7	26.7	25.9
Private household .....	.9	.5	.1	.1	1.6	.9
Protective service	3.4	3.6	5.3	5.8	1.6	1.6
Service, except private household and protective	19.2	18.8	14.4	13.8	23.5	23.3
Precision production, craft, and repair	8.0	7.9	14.6	14.7	1.9	1.8
Operators, fabricators, and laborers	19.8	19.1	29.7	28.7	10.6	10.5
Machine operators, assemblers, and inspectors	8.2	7.9	9.5	9.0	7.0	6.8
Transportation and material moving occupations	5.9	5.9	10.9	10.7	1.3	1.5
Handlers, equipment cleaners, helpers, and laborers	5.7	5.4	9.4	8.9	2.3	2.1
Farming, forestry, and fishing	1.3	1.5	2.5	2.9	.2	.3

¹ Less than 0.05 percent.

NOTE: Beginning in January 1998, data reflect new composite estimation

procedures and revised population controls used in the household survey.

A-21. Employed persons by industry and occupation

(In thousands)

Industry	August 1998												
	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	3,818	113	132	55	38	139	-	32	44	14	42	27	3,180
Mining	614	86	71	24	19	66	-	8	193	32	94	19	1
Construction	8,860	1,463	158	62	62	449	-	40	5,001	79	525	1,003	17
Manufacturing	20,994	3,138	2,020	659	736	2,118	-	294	3,862	6,195	788	1,101	83
Durable goods	12,707	1,872	1,397	431	333	1,215	-	151	2,713	3,579	415	528	74
Nondurable goods	8,287	1,266	624	228	403	903	-	143	1,149	2,617	373	573	9
Transportation and public utilities	9,101	1,253	543	324	281	2,328	-	260	1,258	128	2,192	513	22
Wholesale and retail trade	27,458	2,645	598	186	11,514	2,250	-	5,307	1,493	381	1,036	1,940	110
Wholesale trade	5,338	682	132	44	2,208	783	-	53	360	155	498	339	83
Retail trade	22,120	1,963	465	141	9,305	1,467	-	5,254	1,133	225	538	1,601	27
Finance, insurance, and real estate	8,530	2,425	415	151	2,171	2,798	-	310	169	5	13	19	52
Services	46,970	6,826	14,391	2,636	1,230	7,204	808	9,276	2,160	916	453	542	527
Private households	921	12	-	2	2	18	808	39	4	-	-	1	34
Other service industries	46,049	6,814	14,391	2,633	1,227	7,186	-	9,238	2,156	916	453	541	494
Professional services	30,557	4,158	12,406	2,164	206	5,125	-	5,427	460	178	213	113	107
Public administration	5,863	1,286	995	229	29	1,288	-	1,747	179	18	41	20	30

¹ Includes protective service, not shown separately.

procedures and revised population controls used in the household survey.

NOTE: Beginning in January 1998, data reflect new composite estimation

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-22. Employed persons in agriculture and nonagricultural industries by age, sex, and class of worker

(In thousands)

Age and sex	August 1998									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Wage and salary workers					Self-employed workers	Unpaid family workers
				Total	Private industries			Government		
Total					Private household workers	Other private industries				
Total, 16 years and over	2,315	1,466	37	119,366	101,584	914	100,670	17,782	8,938	84
16 to 19 years	316	47	15	7,509	7,082	162	6,920	427	64	4
16 to 17 years	155	31	3	2,998	2,819	84	2,736	179	36	4
18 to 19 years	162	17	12	4,511	4,262	78	4,184	248	28	-
20 to 24 years	358	42	6	12,099	11,204	81	11,123	895	251	10
25 to 34 years	550	184	5	28,934	25,353	158	25,195	3,581	1,571	14
35 to 44 years	566	363	7	32,666	27,624	197	27,427	5,042	2,701	19
45 to 54 years	282	340	-	24,482	19,084	187	18,897	5,398	2,394	19
55 to 64 years	188	259	3	10,995	8,923	86	8,837	2,072	1,362	12
65 years and over	55	230	-	2,681	2,315	43	2,272	366	596	6
Men, 16 years and over	1,738	1,096	18	63,245	55,233	84	55,149	8,012	5,417	23
16 to 19 years	244	39	14	3,748	3,530	20	3,510	218	25	4
16 to 17 years	116	24	2	1,491	1,397	8	1,389	94	17	4
18 to 19 years	128	15	11	2,257	2,134	12	2,121	123	8	-
20 to 24 years	296	36	2	6,370	5,989	6	5,984	381	145	4
25 to 34 years	414	140	3	15,613	13,985	20	13,965	1,628	875	4
35 to 44 years	398	273	-	17,528	15,286	26	15,260	2,242	1,605	4
45 to 54 years	199	247	-	12,597	10,185	8	10,177	2,413	1,553	5
55 to 64 years	141	177	-	5,919	4,953	-	4,953	966	838	2
65 years and over	47	184	-	1,469	1,304	4	1,299	166	376	2
Women, 16 years and over	576	370	19	56,121	46,351	830	45,521	9,769	3,521	61
16 to 19 years	73	8	1	3,761	3,551	142	3,409	210	39	-
16 to 17 years	39	7	1	1,507	1,423	76	1,346	85	19	-
18 to 19 years	34	1	-	2,254	2,129	66	2,063	125	20	-
20 to 24 years	62	6	5	5,728	5,215	75	5,139	514	106	6
25 to 34 years	137	44	3	13,321	11,368	138	11,230	1,953	695	10
35 to 44 years	168	90	7	15,138	12,338	171	12,166	2,800	1,096	16
45 to 54 years	83	94	-	11,884	8,899	179	8,720	2,986	841	15
55 to 64 years	47	81	3	5,076	3,970	86	3,884	1,106	524	11
65 years and over	8	47	-	1,212	1,011	38	973	200	219	4

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-23. Persons at work in agriculture and nonagricultural industries by hours of work

Hours of work	August 1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	122,417	3,667	118,750	100.0	100.0	100.0
1 to 34 hours	27,962	1,003	26,959	22.8	27.4	22.7
1 to 4 hours	1,573	70	1,503	1.3	1.9	1.3
5 to 14 hours	3,951	233	3,718	3.2	6.4	3.1
15 to 29 hours	13,787	427	13,360	11.3	11.6	11.3
30 to 34 hours	8,651	273	8,378	7.1	7.5	7.1
35 hours and over	94,455	2,664	91,791	77.2	72.6	77.3
35 to 39 hours	8,322	214	8,108	6.8	5.8	6.8
40 hours	46,097	907	45,189	37.7	24.7	38.1
41 hours and over	40,036	1,542	38,494	32.7	42.1	32.4
41 to 48 hours	14,637	348	14,290	12.0	9.5	12.0
49 to 59 hours	14,685	464	14,221	12.0	12.7	12.0
60 hours and over	10,714	730	9,984	8.8	19.9	8.4
Average hours, total at work	39.9	42.5	39.9	-	-	-
Average hours, persons who usually work full time	43.3	48.4	43.2	-	-	-

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-24. Persons at work 1 to 34 hours in all and nonagricultural industries by reason for working less than 35 hours and usual full- or part-time status

(Numbers in thousands)

Reason for working less than 35 hours	August 1998					
	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	27,962	9,972	17,990	26,959	9,669	17,289
Economic reasons	3,508	1,369	2,139	3,350	1,289	2,061
Slack work or business conditions	1,908	1,018	889	1,813	952	861
Could only find part-time work	1,201	-	1,201	1,164	-	1,164
Seasonal work	124	76	49	100	64	36
Job started or ended during week	275	275	-	273	273	-
Noneconomic reasons	24,454	8,603	15,851	23,609	8,380	15,229
Child-care problems	848	85	763	844	85	759
Other family or personal obligations	4,906	690	4,216	4,734	673	4,062
Health or medical limitations	706	-	706	658	-	658
In school or training	4,779	108	4,671	4,625	107	4,518
Retired or Social Security limit on earnings	1,695	-	1,695	1,591	-	1,591
Vacation or personal day	5,170	5,170	-	5,058	5,058	-
Holiday, legal or religious	74	74	-	71	71	-
Weather-related curtailment	98	98	-	75	75	-
All other reasons	6,178	2,378	3,800	5,953	2,312	3,641
Average hours:						
Economic reasons	22.4	23.2	21.9	22.5	23.1	22.1
Other reasons	21.5	23.6	20.3	21.6	23.6	20.4

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-25. Persons at work in nonagricultural industries by class of worker and usual full- or part-time status

(Numbers in thousands)

Industry and class of worker	August 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over	118,750	26,959	3,350	8,380	15,229	91,791	39.9	43.2
Wage and salary workers	110,466	24,239	3,000	7,777	13,463	86,226	39.9	42.9
Mining	560	54	7	30	17	506	46.6	47.7
Construction	7,043	1,084	262	492	331	5,959	41.8	43.2
Manufacturing	19,508	2,080	279	1,204	597	17,428	43.0	43.8
Durable goods	11,821	1,162	144	773	245	10,660	43.3	43.8
Nondurable goods	7,687	918	135	431	352	6,769	42.5	43.7
Transportation and public utilities	8,099	1,102	148	508	446	6,997	43.0	44.5
Wholesale and retail trade	24,463	7,493	973	1,289	5,231	16,970	37.9	43.3
Finance, insurance, and real estate	7,521	1,260	62	540	658	6,261	40.7	42.6
Service industries	37,781	10,309	1,234	3,127	5,948	27,472	38.1	41.9
Private households	862	462	84	60	317	400	31.1	42.2
All other industries	36,919	9,848	1,150	3,067	5,630	27,072	38.3	41.9
Public administration	5,490	857	36	587	234	4,634	40.9	42.0
Self-employed workers	8,200	2,662	349	598	1,714	5,538	39.9	46.6
Unpaid family workers	84	58	1	5	52	27	29.9	(¹)

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

NOTE: Beginning in January 1998, data reflect new composite estimation

procedures and revised population controls used in the household survey.

A-26. Persons at work in nonagricultural industries by age, sex, race, marital status, and usual full- or part-time status

(Numbers in thousands)

Age, sex, race, and marital status	August 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
TOTAL								
Total, 16 years and over	118,750	26,959	3,350	8,380	15,229	91,791	39.9	43.2
16 to 19 years	7,173	4,185	423	339	3,422	2,989	29.6	39.9
16 to 17 years	2,852	2,203	86	122	1,994	650	24.2	37.6
18 to 19 years	4,321	1,982	337	217	1,428	2,339	33.2	40.5
20 years and over	111,577	22,774	2,927	8,041	11,806	88,803	40.5	43.3
20 to 24 years	11,839	3,252	570	877	1,805	8,586	37.7	41.2
25 years and over	99,738	19,522	2,357	7,164	10,001	80,216	40.9	43.5
25 to 54 years	85,475	15,186	2,034	6,255	6,896	70,290	41.4	43.6
55 years and over	14,263	4,336	322	909	3,105	9,927	37.4	43.0
Men, 16 years and over	64,878	10,174	1,512	4,068	4,594	54,704	42.7	44.7
16 to 19 years	3,576	1,878	170	134	1,574	1,698	31.2	41.0
16 to 17 years	1,416	1,033	46	49	938	383	25.3	38.7
18 to 19 years	2,159	844	124	84	636	1,315	35.0	41.7
20 years and over	61,302	8,296	1,342	3,934	3,020	53,006	43.4	44.9
20 to 24 years	6,320	1,301	262	365	674	5,019	40.1	42.7
25 years and over	54,982	6,995	1,080	3,569	2,346	47,987	43.8	45.1
25 to 54 years	46,968	5,127	929	3,097	1,102	41,841	44.4	45.2
55 years and over	8,014	1,867	152	472	1,244	6,146	40.2	44.5
Women, 16 years and over	53,872	16,785	1,838	4,312	10,635	37,087	36.4	40.9
16 to 19 years	3,598	2,307	253	206	1,848	1,291	28.1	38.4
16 to 17 years	1,436	1,169	40	73	1,057	267	23.1	36.2
18 to 19 years	2,161	1,137	213	132	792	1,024	31.5	39.0
20 years and over	50,275	14,478	1,585	4,107	8,786	35,797	37.0	41.0
20 to 24 years	5,518	1,951	309	511	1,131	3,567	34.9	39.1
25 years and over	44,756	12,527	1,276	3,595	7,656	32,229	37.3	41.2
25 to 54 years	38,507	10,059	1,105	3,159	5,794	28,449	37.9	41.3
55 years and over	6,249	2,469	171	437	1,861	3,780	33.9	40.7
Race								
White, 16 years and over	99,584	23,066	2,694	7,059	13,314	76,518	39.9	43.4
Men	55,327	8,670	1,233	3,496	3,941	46,657	42.9	45.0
Women	44,257	14,396	1,460	3,563	9,373	29,861	36.2	40.9
Black, 16 years and over	13,557	2,789	496	965	1,327	10,769	39.2	41.8
Men	6,510	1,021	213	376	431	5,489	41.1	43.1
Women	7,047	1,768	283	589	897	5,279	37.4	40.5
Marital status								
Men, 16 years and over:								
Married, spouse present	38,736	4,665	602	2,542	1,521	34,071	44.2	45.4
Widowed, divorced, or separated	7,682	1,096	224	510	362	6,586	43.3	44.8
Single (never married)	18,459	4,413	685	1,016	2,711	14,047	39.3	43.1
Women, 16 years and over:								
Married, spouse present	27,727	8,721	669	2,222	5,830	19,006	36.2	40.8
Widowed, divorced, or separated	11,053	2,734	376	924	1,434	8,319	38.5	41.6
Single (never married)	15,092	5,330	793	1,167	3,370	9,763	35.4	40.6

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-27. Persons at work in nonfarm occupations by sex and usual full- or part-time status

(Numbers in thousands)

Occupation and sex	August 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over ¹	118,552	26,893	3,329	8,350	15,214	91,659	39.9	43.2
Managerial and professional specialty	34,318	6,436	569	2,920	2,947	27,882	41.8	44.1
Executive, administrative, and managerial	18,051	2,607	166	1,346	1,095	15,444	43.7	45.4
Professional specialty	16,267	3,828	403	1,574	1,852	12,438	39.7	42.7
Technical, sales, and administrative support	36,562	9,695	911	2,589	6,195	26,867	38.2	42.3
Technicians and related support	4,088	764	77	306	380	3,324	40.5	42.5
Sales occupations	15,198	4,414	508	893	3,013	10,784	39.1	44.5
Administrative support, including clerical	17,277	4,518	326	1,390	2,803	12,758	37.0	40.5
Service occupations	16,757	6,051	849	1,020	4,182	10,706	35.7	41.8
Private household	761	416	64	58	294	345	31.1	42.4
Protective service	2,384	384	21	167	196	2,001	42.5	44.5
Service, except private household and protective	13,612	5,251	765	795	3,692	8,361	34.8	41.2
Precision production, craft, and repair	13,712	1,837	407	946	485	11,875	42.5	43.6
Operators, fabricators, and laborers	17,203	2,874	593	876	1,406	14,329	41.3	43.5
Machine operators, assemblers, and inspectors	7,407	913	190	398	326	6,494	41.8	42.9
Transportation and material moving occupations	4,849	698	145	238	315	4,152	44.3	46.2
Handlers, equipment cleaners, helpers, and laborers	4,946	1,263	258	240	765	3,683	37.7	41.6
Men, 16 years and over ¹	64,509	10,027	1,481	4,026	4,520	54,481	42.8	44.8
Managerial and professional specialty	18,450	2,450	221	1,360	869	16,001	44.7	46.1
Executive, administrative, and managerial	10,198	1,111	89	666	355	9,087	46.1	47.1
Professional specialty	8,253	1,339	132	694	514	6,914	43.0	44.8
Technical, sales, and administrative support	13,454	2,231	215	792	1,223	11,223	42.6	45.1
Technicians and related support	1,968	231	34	123	74	1,738	43.4	44.5
Sales occupations	7,658	1,324	121	383	819	6,335	43.7	46.9
Administrative support, including clerical	3,827	676	60	286	330	3,151	40.1	42.1
Service occupations	6,891	1,778	263	370	1,146	5,112	38.9	43.3
Private household	44	17	3	3	11	27	(²)	(²)
Protective service	1,939	263	16	140	107	1,676	43.7	45.1
Service, except private household and protective	4,907	1,499	243	228	1,028	3,409	37.1	42.5
Precision production, craft, and repair	12,615	1,584	363	862	359	11,031	42.9	43.8
Operators, fabricators, and laborers	13,099	1,984	420	642	923	11,115	42.1	44.1
Machine operators, assemblers, and inspectors	4,701	461	104	240	117	4,240	42.8	43.6
Transportation and material moving occupations	4,451	593	126	221	246	3,858	44.8	46.4
Handlers, equipment cleaners, helpers, and laborers	3,947	930	189	181	559	3,018	38.2	41.8
Women, 16 years and over ¹	54,043	16,866	1,848	4,324	10,695	37,177	36.4	40.9
Managerial and professional specialty	15,867	3,986	348	1,560	2,078	11,881	38.5	41.6
Executive, administrative, and managerial	7,853	1,497	77	680	740	6,357	40.7	42.9
Professional specialty	8,014	2,489	271	880	1,339	5,525	36.4	40.2
Technical, sales, and administrative support	23,108	7,465	696	1,796	4,972	15,644	35.7	40.4
Technicians and related support	2,120	533	44	183	306	1,586	37.8	40.4
Sales occupations	7,539	3,090	387	510	2,193	4,449	34.4	41.2
Administrative support, including clerical	13,450	3,842	265	1,104	2,473	9,608	36.1	39.9
Service occupations	9,867	4,272	587	649	3,036	5,594	33.5	40.5
Private household	717	399	61	55	283	318	31.0	42.6
Protective service	445	121	5	27	89	324	37.3	41.2
Service, except private household and protective	8,705	3,753	521	567	2,664	4,952	33.5	40.4
Precision production, craft, and repair	1,097	253	44	84	125	844	38.5	41.2
Operators, fabricators, and laborers	4,103	890	173	234	483	3,213	38.8	41.6
Machine operators, assemblers, and inspectors	2,706	452	86	158	208	2,255	40.0	41.7
Transportation and material moving occupations	398	105	19	17	69	293	38.3	42.7
Handlers, equipment cleaners, helpers, and laborers	999	333	69	59	206	665	36.1	40.7

¹ Excludes farming, forestry, and fishing occupations.

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

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-28. 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. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
Total, 16 years and over	3,259	3,003	4.4	4.0	3,335	3,170	5.3	5.0
Married, spouse present	1,012	915	2.3	2.1	1,118	1,167	3.3	3.5
Widowed, divorced, or separated	451	378	5.2	4.3	694	589	5.4	4.6
Single (never married)	1,796	1,711	8.3	7.8	1,523	1,414	9.0	8.0
White, 16 years and over	2,358	2,182	3.7	3.4	2,352	2,266	4.5	4.3
Married, spouse present	810	746	2.1	1.9	934	983	3.2	3.4
Widowed, divorced, or separated	348	278	4.9	3.9	497	426	4.9	4.2
Single (never married)	1,200	1,157	6.8	6.5	922	856	7.3	6.5
Black, 16 years and over	700	670	9.2	8.8	844	796	10.1	9.4
Married, spouse present	131	125	3.8	3.8	126	132	4.9	5.0
Widowed, divorced, or separated	83	78	6.8	6.3	177	153	7.9	6.8
Single (never married)	485	466	16.3	15.3	541	512	15.5	14.0
Total, 25 years and over	1,990	1,771	3.2	2.8	2,285	2,061	4.3	3.9
Married, spouse present	946	879	2.2	2.1	1,031	1,038	3.2	3.3
Widowed, divorced, or separated	432	352	5.1	4.1	653	542	5.3	4.4
Single (never married)	611	540	5.4	4.8	602	480	7.3	5.5
White, 25 years and over	1,484	1,334	2.8	2.5	1,608	1,507	3.7	3.5
Married, spouse present	756	718	2.0	1.9	859	867	3.1	3.1
Widowed, divorced, or separated	331	257	4.8	3.7	459	388	4.7	4.0
Single (never married)	397	359	4.4	4.1	290	252	5.1	4.2
Black, 25 years and over	382	345	6.1	5.6	584	477	8.5	6.9
Married, spouse present	123	119	3.7	3.7	119	124	4.7	4.9
Widowed, divorced, or separated	84	75	6.9	6.1	174	144	7.9	6.6
Single (never married)	175	151	10.3	8.7	292	209	13.5	9.4

NOTE: Beginning in 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-29. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
Total, 16 years and over ¹	6,594	6,173	4.8	4.5	4.4	4.0	5.3	5.0
Managerial and professional specialty	872	858	2.3	2.2	1.8	1.6	2.7	2.8
Executive, administrative, and managerial	350	356	1.8	1.8	1.5	1.5	2.2	2.3
Professional specialty	522	503	2.7	2.5	2.2	1.7	3.2	3.3
Technical, sales, and administrative support	1,674	1,509	4.2	3.7	3.2	2.9	4.7	4.2
Technicians and related support	95	76	2.2	1.7	1.8	1.2	2.5	2.2
Sales occupations	771	748	4.6	4.4	3.6	3.1	5.7	5.8
Administrative support, including clerical	807	684	4.2	3.5	3.3	3.5	4.5	3.5
Service occupations	1,204	1,306	6.3	6.7	5.6	5.8	6.7	7.4
Private household	80	89	8.5	10.0	(²)	(²)	8.7	10.5
Protective service	84	60	3.3	2.3	3.1	1.4	3.8	5.8
Service, except private household and protective	1,040	1,157	6.6	7.3	6.5	7.5	6.6	7.2
Precision production, craft, and repair	620	606	4.1	4.1	3.9	3.9	6.2	5.6
Mechanics and repairers	144	159	2.9	3.3	2.9	3.2	3.7	5.3
Construction trades	309	268	5.4	4.5	5.3	4.4	7.8	10.1
Other precision production, craft, and repair	167	178	3.9	4.3	3.1	4.1	6.5	5.1
Operators, fabricators, and laborers	1,420	1,215	7.0	6.3	6.5	6.0	8.6	7.1
Machine operators, assemblers, and inspectors	546	415	6.3	5.1	4.6	4.5	8.9	6.0
Transportation and material moving occupations	311	269	5.5	4.9	5.1	4.4	8.9	9.8
Handlers, equipment cleaners, helpers, and laborers	563	531	9.7	9.3	10.3	9.5	7.5	8.5
Construction laborers	133	139	12.8	13.5	12.5	13.6	(²)	(²)
Other handlers, equipment cleaners, helpers, and laborers	430	392	9.0	8.4	9.7	8.3	6.9	8.4
Farming, forestry, and fishing	209	162	5.2	3.9	5.1	4.0	5.3	3.4
No previous work experience	561	506	-	-	-	-	-	-
16 to 19 years	393	340	-	-	-	-	-	-
20 to 24 years	82	81	-	-	-	-	-	-
25 years and over	85	85	-	-	-	-	-	-

¹ Includes a small number of persons whose last job was in the Armed Forces.

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

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-30. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
Total, 16 years and over	6,594	6,173	4.8	4.5	4.4	4.0	5.3	5.0
Nonagricultural private wage and salary workers	5,032	4,851	4.8	4.6	4.4	4.2	5.3	5.0
Mining	31	23	4.6	3.7	4.0	3.9	7.8	2.7
Construction	485	407	6.8	5.6	6.9	5.8	6.5	4.3
Manufacturing	830	797	3.9	3.7	3.2	3.4	5.3	4.4
Durable goods	419	453	3.4	3.5	2.7	3.5	5.1	3.5
Lumber and wood products	29	46	3.7	5.7	3.5	6.2	4.3	3.0
Furniture and fixtures	26	36	4.3	4.8	3.5	4.5	6.5	5.6
Stone, clay, and glass products	20	17	3.3	2.7	3.1	2.7	4.2	2.5
Primary metal industries	32	46	4.3	5.7	3.4	6.4	8.3	2.5
Fabricated metal products	37	52	2.8	3.4	2.6	3.9	3.5	2.2
Machinery and computing equipment	82	78	3.1	3.1	2.4	3.3	5.4	2.4
Electrical machinery, equipment, and supplies	64	63	3.3	3.3	2.6	2.8	4.3	4.2
Transportation equipment	60	62	2.6	2.6	2.3	2.3	3.4	3.5
Automobiles	46	32	3.4	2.5	3.6	2.5	2.7	2.3
Other transportation equipment	14	30	1.4	2.7	.6	2.1	4.3	4.9
Professional and photographic equipment	24	15	3.3	1.9	3.2	.8	3.5	3.5
Other durable goods industries	45	38	6.2	5.1	2.7	5.0	11.2	5.2
Nondurable goods	412	344	4.6	4.1	3.9	3.2	5.5	5.4
Food and kindred products	121	87	6.7	5.0	7.0	4.7	6.2	5.8
Textile mill products	19	18	2.7	2.6	1.9	1.6	3.8	4.0
Apparel and other textile products	96	70	9.1	9.0	7.7	6.1	9.6	10.4
Paper and allied products	36	16	4.5	2.3	2.6	1.5	9.7	4.4
Printing and publishing	55	60	3.0	3.5	3.3	3.4	2.6	3.5
Chemicals and allied products	49	17	3.4	1.2	2.5	1.8	4.8	.1
Rubber and miscellaneous plastics products	24	54	2.5	5.2	2.7	2.5	2.1	10.6
Other nondurable goods industries	13	21	3.3	5.7	3.0	5.4	4.4	6.3
Transportation and public utilities	282	274	3.8	3.7	3.2	3.5	5.3	4.3
Transportation	213	196	4.6	4.3	4.0	3.9	6.4	5.4
Communications and other public utilities	69	77	2.4	2.8	1.5	2.6	4.1	3.1
Wholesale and retail trade	1,615	1,483	6.0	5.5	5.2	4.7	6.9	6.3
Wholesale trade	191	188	3.9	3.6	3.2	3.0	5.5	4.9
Retail trade	1,424	1,296	6.5	5.9	5.9	5.3	7.0	6.5
Finance, insurance, and real estate	234	210	2.9	2.6	3.0	2.2	2.9	3.0
Service industries	1,555	1,658	4.6	4.8	4.3	4.3	4.8	5.0
Professional services	613	667	3.1	3.3	2.7	2.5	3.3	3.6
Other service industries	942	991	6.7	6.9	5.6	5.8	7.8	8.0
Agricultural wage and salary workers	144	120	6.7	4.9	6.8	4.4	6.5	6.3
Government, self-employed, and unpaid family workers	858	696	2.9	2.4	2.6	1.9	3.3	3.0
No previous work experience	561	506	-	-	-	-	-	-

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-31. Unemployed persons by reason for unemployment, sex, age, and race

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
NUMBER OF UNEMPLOYED												
Total unemployed	6,594	6,173	2,571	2,359	2,811	2,639	1,212	1,175	4,711	4,448	1,544	1,466
Job losers and persons who completed temporary jobs	2,859	2,715	1,530	1,399	1,149	1,135	180	181	2,114	2,026	608	586
On temporary layoff	716	782	339	320	335	421	43	42	548	622	138	135
Not on temporary layoff	2,143	1,932	1,191	1,079	814	714	138	140	1,567	1,404	469	452
Permanent job losers	1,438	1,342	826	776	540	514	71	51	1,081	988	278	293
Persons who completed temporary jobs	705	590	364	303	274	199	66	88	485	417	191	159
Job leavers	958	795	389	292	412	383	157	120	739	617	168	144
Reentrants	2,217	2,157	595	588	1,140	1,036	481	534	1,539	1,487	579	585
New entrants	561	506	57	80	110	86	393	340	319	318	189	151
PERCENT DISTRIBUTION												
Job losers and persons who completed temporary jobs	43.4	44.0	59.5	59.3	40.9	43.0	14.9	15.4	44.9	45.6	39.4	40.0
On temporary layoff	10.9	12.7	13.2	13.6	11.9	16.0	3.5	3.5	11.6	14.0	9.0	9.2
Not on temporary layoff	32.5	31.3	46.3	45.8	29.0	27.0	11.4	11.9	33.3	31.6	30.4	30.8
Job leavers	14.5	12.9	15.1	12.4	14.7	14.5	13.0	10.2	15.7	13.9	10.9	9.8
Reentrants	33.6	34.9	23.1	24.9	40.6	39.3	39.7	45.4	32.7	33.4	37.5	39.9
New entrants	8.5	8.2	2.2	3.4	3.9	3.3	32.4	29.0	6.8	7.1	12.2	10.3
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers and persons who completed temporary jobs	2.1	2.0	2.2	2.0	1.9	1.9	2.1	2.0	1.8	1.7	3.8	3.6
Job leavers .....	.7	.6	.6	.4	.7	.6	1.8	1.3	.6	.5	1.1	.9
Reentrants	1.6	1.6	.9	.8	1.9	1.7	5.5	5.8	1.3	1.3	3.6	3.6
New entrants .....	.4	.4	.1	.1	.2	.1	4.5	3.7	.3	.3	1.2	.9

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-32. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment

(Percent distribution)

Reason, sex, and age	August 1998						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over	6,173	100.0	40.6	34.8	24.5	11.0	13.5
Job losers and persons who completed temporary jobs	2,715	100.0	38.6	36.1	25.3	12.4	12.9
On temporary layoff	782	100.0	46.8	43.5	9.7	5.2	4.5
Not on temporary layoff	1,932	100.0	35.2	33.2	31.6	15.3	16.3
Permanent job losers	1,342	100.0	32.7	30.8	36.5	19.0	17.6
Persons who completed temporary jobs	590	100.0	40.9	38.7	20.4	7.1	13.3
Job leavers	795	100.0	51.7	34.0	14.3	9.1	5.1
Reentrants	2,157	100.0	42.0	31.7	26.3	11.1	15.2
New entrants	506	100.0	28.8	42.2	28.9	5.7	23.3
Men, 20 years and over	2,359	100.0	35.9	33.5	30.6	13.0	17.6
Job losers and persons who completed temporary jobs	1,399	100.0	37.1	32.9	30.0	13.6	16.4
On temporary layoff	320	100.0	54.4	33.5	12.1	5.6	6.6
Not on temporary layoff	1,079	100.0	32.0	32.7	35.3	16.0	19.3
Permanent job losers	776	100.0	31.6	29.9	38.5	19.8	18.7
Persons who completed temporary jobs	303	100.0	33.2	40.0	26.8	6.3	20.6
Job leavers	292	100.0	38.6	40.5	20.9	11.3	9.6
Reentrants	588	100.0	34.8	30.7	34.6	13.7	20.9
New entrants	80	100.0	12.1	39.0	48.9	4.9	44.0
Women, 20 years and over	2,639	100.0	41.5	34.7	23.8	11.6	12.3
Job losers and persons who completed temporary jobs	1,135	100.0	35.0	42.0	23.0	12.6	10.4
On temporary layoff	421	100.0	39.2	52.0	8.8	5.5	3.3
Not on temporary layoff	714	100.0	32.6	36.1	31.4	16.8	14.5
Permanent job losers	514	100.0	29.9	33.6	36.5	19.4	17.1
Persons who completed temporary jobs	199	100.0	39.4	42.5	18.1	10.2	7.9
Job leavers	383	100.0	55.2	31.6	13.2	10.1	3.1
Reentrants	1,036	100.0	44.6	28.1	27.3	11.2	16.1
New entrants	86	100.0	29.5	30.7	39.9	8.1	31.8
Both sexes, 16 to 19 years	1,175	100.0	48.3	37.9	13.8	5.6	8.2
Job losers and persons who completed temporary jobs	181	100.0	71.8	24.5	3.7	2.0	1.7
On temporary layoff	42	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Not on temporary layoff	140	100.0	73.4	21.8	4.8	2.6	2.2
Permanent job losers	51	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Persons who completed temporary jobs	88	100.0	70.7	25.6	3.7	3.0	.7
Job leavers	120	100.0	72.8	25.6	1.5	.7	.8
Reentrants	534	100.0	44.9	40.0	15.1	8.2	6.9
New entrants	340	100.0	32.6	45.9	21.5	5.2	16.2

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

NOTE: Beginning in January 1998, data reflect new composite estimation

procedures and revised population controls used in the household survey.

A-33. Unemployed total and full-time workers by duration of unemployment

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
Total, 16 years and over	6,594	6,173	100.0	100.0	5,300	4,932	100.0	100.0
Less than 5 weeks	2,409	2,509	36.5	40.6	1,765	1,849	33.3	37.5
5 to 14 weeks	2,322	2,150	35.2	34.8	1,877	1,751	35.4	35.5
5 to 10 weeks	1,582	1,477	24.0	23.9	1,246	1,180	23.5	23.9
11 to 14 weeks	740	673	11.2	10.9	631	571	11.9	11.6
15 weeks and over	1,863	1,514	28.3	24.5	1,658	1,331	31.3	27.0
15 to 26 weeks	780	679	11.8	11.0	696	582	13.1	11.8
27 weeks and over	1,084	835	16.4	13.5	962	749	18.2	15.2
27 to 51 weeks	501	397	7.6	6.4	466	374	8.8	7.6
52 weeks and over	583	438	8.8	7.1	497	375	9.4	7.6
Average (mean) duration, in weeks	16.0	13.7	-	-	17.1	14.6	-	-
Median duration, in weeks	8.0	7.0	-	-	8.9	7.7	-	-

NOTE: Beginning in January 1998, data reflect new composite estimation

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-34. Unemployed persons by age, sex, race, marital status, and duration of unemployment

Sex, age, race, and marital status	August 1998							Average (mean) duration	Median duration
	Thousands of persons								
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
TOTAL									
Total, 16 years and over	6,173	2,509	2,150	1,514	679	835	13.7	7.0	
16 to 19 years	1,175	568	445	162	66	96	9.4	4.9	
20 to 24 years	1,166	498	403	264	108	156	13.1	6.2	
25 to 34 years	1,369	570	479	320	138	181	12.8	6.6	
35 to 44 years	1,234	449	427	358	177	181	15.0	8.4	
45 to 54 years	753	263	260	231	122	109	15.4	8.5	
55 to 64 years	352	111	106	135	43	92	23.0	9.4	
65 years and over	124	50	30	44	24	19	18.7	10.9	
Men, 16 years and over									
16 to 19 years	3,003	1,149	1,045	810	341	469	14.7	7.7	
16 to 19 years	644	303	254	87	33	54	9.3	5.4	
20 to 24 years	588	236	202	149	49	99	14.4	6.9	
25 to 34 years	623	235	237	150	65	86	14.0	7.2	
35 to 44 years	569	174	201	195	87	108	17.2	9.9	
45 to 54 years	349	116	91	142	75	67	18.5	10.2	
55 to 64 years	169	61	44	64	18	46	22.2	9.4	
65 years and over	61	23	14	23	14	9	(¹)	(¹)	
Women, 16 years and over									
16 to 19 years	3,170	1,361	1,105	704	338	366	12.7	6.4	
16 to 19 years	531	265	191	75	33	42	9.6	4.5	
20 to 24 years	578	262	201	115	58	57	11.8	5.6	
25 to 34 years	747	335	242	169	74	96	11.8	5.8	
35 to 44 years	665	276	226	163	90	73	13.1	7.2	
45 to 54 years	404	146	168	90	47	42	12.7	7.7	
55 to 64 years	183	50	61	71	25	46	23.7	9.4	
65 years and over	62	26	16	20	10	10	(¹)	(¹)	
Race									
White, 16 years and over									
White, 16 years and over	4,448	1,939	1,513	996	468	528	12.8	6.4	
Men	2,182	915	715	552	256	296	13.6	6.9	
Women	2,266	1,024	798	444	212	232	12.0	5.9	
Black, 16 years and over									
Black, 16 years and over	1,466	472	562	432	177	255	15.6	8.6	
Men	670	184	286	199	65	134	16.9	9.3	
Women	796	287	276	233	112	121	14.5	7.8	
Marital status									
Men, 16 years and over:									
Married, spouse present	915	316	297	301	124	177	17.2	8.8	
Widowed, divorced, or separated	378	121	118	139	73	66	17.6	10.0	
Single (never married)	1,711	712	630	369	144	225	12.8	6.7	
Women, 16 years and over:									
Married, spouse present	1,167	541	399	227	113	114	11.6	5.7	
Widowed, divorced, or separated	589	211	206	172	71	102	16.8	8.1	
Single (never married)	1,414	609	501	304	154	151	11.9	6.2	

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

NOTE: Beginning in January 1998, data reflects new composite estimation

procedures and revised population controls used in the household survey.

A-35. Unemployed persons by occupation, industry, and duration of unemployment

Occupation and industry	August 1998							Average (mean) duration	Median duration	
	Thousands of persons						Weeks			
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over			Average (mean) duration			Median duration
				Total	15 to 26 weeks	27 weeks and over				
OCCUPATION										
Managerial and professional specialty	858	328	318	212	108	103	13.5	7.3		
Technical, sales, and administrative support	1,509	652	525	331	138	193	12.4	6.4		
Service occupations	1,306	558	432	316	171	145	13.0	6.4		
Precision production, craft, and repair	606	266	162	179	79	99	14.5	6.5		
Operators, fabricators, and laborers	1,215	476	457	283	135	148	13.7	7.7		
Farming, forestry, and fishing	162	77	42	44	17	27	14.5	5.9		
INDUSTRY¹										
Agriculture	120	53	37	30	13	17	14.6	6.9		
Construction	418	182	147	89	42	47	12.7	6.0		
Manufacturing	797	340	245	212	98	114	13.1	7.0		
Durable goods	453	194	143	116	64	52	11.8	6.4		
Nondurable goods	344	146	101	97	34	63	14.8	7.8		
Transportation and public utilities	888	137	91	76	24	53	15.8	6.3		
Wholesale and retail trade	4,496	675	503	319	144	175	12.0	5.7		
Finance, insurance, and real estate	649	85	59	71	41	30	16.1	7.9		
Services	3,662	759	789	456	240	216	12.8	7.6		
Public administration	261	31	18	38	14	25	22.1	11.9		
No previous work experience	506	146	214	146	29	118	18.4	8.8		

¹ Includes wage and salary workers only.

procedures and revised population controls used in the household survey.

NOTE: Beginning in January 1998, data reflect new composite estimation

A-36. Persons not in the labor force by desire and availability for work, age, and sex

(In thousands)

Category	Total		Age						Sex			
	Aug. 1997	Aug. 1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
	Total not in the labor force	65,904	67,100	10,283	10,211	18,423	19,033	37,199	37,856	23,688	24,352	42,216	42,748
Do not want a job now ¹	60,874	61,920	8,503	8,447	15,943	16,512	36,428	36,961	21,790	22,360	39,085	39,560
Want a job ¹	5,030	5,180	1,780	1,765	2,479	2,521	771	895	1,899	1,992	3,132	3,188
Did not search for work in previous year	3,023	3,274	1,009	1,039	1,452	1,547	561	687	1,077	1,216	1,946	2,058
Searched for work in previous year ²	2,007	1,907	770	725	1,027	974	210	207	822	777	1,185	1,130
Not available to work now	710	655	298	259	375	355	37	42	247	197	463	459
Available to work now	1,298	1,251	472	466	652	619	173	166	575	580	723	671
Reason not currently looking:												
Discouragement over job prospects ³	311	280	98	99	172	130	41	51	175	168	136	112
Reasons other than discouragement	987	971	375	368	480	489	132	115	400	412	586	559
Family responsibilities	110	166	15	42	80	114	15	11	5	22	104	145
In school or training	167	147	113	115	54	32	-	-	76	59	91	88
Ill health or disability	85	95	10	20	38	54	37	21	27	52	58	43
Other ⁴	625	563	238	191	307	289	80	82	292	280	333	283

¹ Includes some persons who are not asked if they want a job.

² Persons who had a job in the prior 12 months must have searched since the end of that job.

³ Includes believes no work available, could not find work, lacks necessary schooling or training, employer thinks too young or old, and other types of discrimination.

⁴ Includes those who did not actively look for work in the prior 4 weeks for such reasons as child-care and transportation problems, as well as a small number for which reason for nonparticipation was not ascertained.

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-37. Multiple jobholders by selected demographic and economic characteristics

(Numbers in thousands)

Characteristic	Both sexes				Men				Women			
	Number		Rate ¹		Number		Rate ¹		Number		Rate ¹	
	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
AGE												
Total, 16 years and over ²	7,583	7,462	5.8	5.6	4,123	4,015	5.8	5.6	3,460	3,447	5.8	5.7
16 to 19 years	423	431	5.6	5.4	161	173	4.1	4.2	262	258	7.2	6.6
20 years and over	7,160	7,031	5.8	5.7	3,962	3,842	5.9	5.7	3,198	3,189	5.7	5.6
20 to 24 years	712	756	5.6	5.9	379	378	5.5	5.5	333	378	5.7	6.4
25 years and over	6,448	6,275	5.8	5.6	3,583	3,464	6.0	5.7	2,865	2,812	5.7	5.5
25 to 54 years	5,741	5,537	6.1	5.8	3,181	3,043	6.2	5.9	2,560	2,494	5.9	5.7
55 years and over	707	738	4.5	4.5	402	421	4.5	4.6	305	317	4.4	4.4
55 to 64 years	592	648	4.8	5.1	329	359	4.8	5.1	263	290	4.8	5.0
65 years and over	115	90	3.2	2.5	73	63	3.4	3.0	42	27	2.9	1.8
RACE AND HISPANIC ORIGIN												
White	6,554	6,386	5.9	5.7	3,541	3,484	5.8	5.7	3,013	2,903	6.0	5.8
Black	754	783	5.2	5.3	438	380	6.3	5.5	315	403	4.2	5.2
Hispanic origin	452	451	3.5	3.4	277	269	3.5	3.3	175	181	3.4	3.4
MARITAL STATUS												
Married, spouse present	4,172	3,945	5.5	5.3	2,596	2,444	6.1	5.7	1,576	1,501	4.9	4.7
Widowed, divorced, or separated	1,290	1,332	6.4	6.5	460	495	5.6	5.9	830	837	6.9	6.9
Single (never married)	2,122	2,184	6.0	6.0	1,068	1,076	5.4	5.3	1,054	1,109	6.8	6.8
FULL- OR PART-TIME STATUS												
Primary job full time, secondary job part time	4,313	4,344	-	-	2,584	2,541	-	-	1,730	1,803	-	-
Primary and secondary jobs both part time	1,437	1,408	-	-	447	469	-	-	990	939	-	-
Primary and secondary jobs both full time	258	271	-	-	161	184	-	-	97	87	-	-
Hours vary on primary or secondary job	1,528	1,384	-	-	909	796	-	-	618	588	-	-

¹ Multiple jobholders as a percent of all employed persons in specified group.

² Includes a small number of persons who work part time on their primary job and full time on their secondary jobs(s), not shown separately.

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. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

A-38. 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. 1997	Aug. 1998	Total		Employed		Unemployed			
			Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998	Number		Percent of labor force	
							Aug. 1997	Aug. 1998	Aug. 1997	Aug. 1998
VIETNAM-ERA VETERANS										
Total, 40 years and over	7,773	7,804	6,575	6,537	6,378	6,366	197	171	3.0	2.6
40 to 54 years	6,226	5,924	5,590	5,301	5,410	5,152	180	149	3.2	2.8
40 to 44 years	965	700	878	632	836	607	41	25	4.7	4.0
45 to 49 years	2,644	2,175	2,374	1,940	2,305	1,877	69	63	2.9	3.2
50 to 54 years	2,617	3,049	2,338	2,729	2,268	2,667	70	61	3.0	2.3
55 years and over	1,547	1,880	985	1,236	969	1,215	16	22	1.7	1.8
NONVETERANS										
Total, 40 to 54 years	19,596	20,343	17,788	18,373	17,334	17,935	454	439	2.6	2.4
40 to 44 years	9,036	9,217	8,361	8,484	8,133	8,258	228	226	2.7	2.7
45 to 49 years	6,251	6,923	5,680	6,281	5,531	6,164	148	117	2.6	1.9
50 to 54 years	4,309	4,203	3,748	3,609	3,670	3,512	78	96	2.1	2.7

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. Beginning in January 1998, data

reflect new composite estimation procedures and revised population controls used in the household survey.

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

B-1. Employees on nonfarm payrolls by major industry, 1947 to date

(In thousands)

Year and month	Total	Total private	Goods-producing				Service-producing						Government		
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Federal	State	Local
Annual averages															
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,478	6,477	1,728	5,025	1,892	(1)	(1)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,612	6,659	1,800	5,181	1,863	(1)	(1)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,610	6,654	1,828	5,239	1,908	(1)	(1)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,643	6,743	1,888	5,356	1,928	(1)	(1)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,735	7,007	1,956	5,547	2,302	(1)	(1)
1952	48,793	42,185	20,198	898	2,668	16,632	28,595	4,248	2,821	7,184	2,035	5,699	2,420	(1)	(1)
1953	50,202	43,556	21,074	866	2,659	17,549	29,128	4,290	2,862	7,385	2,111	5,835	2,305	(1)	(1)
1954	48,990	42,238	19,751	791	2,646	16,314	29,239	4,084	2,875	7,360	2,200	5,969	2,188	(1)	(1)
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	2,934	7,601	2,298	6,240	2,187	1,168	3,558
1956	52,369	45,091	21,104	822	3,039	17,243	31,264	4,244	3,027	7,831	2,389	6,497	2,209	1,250	3,819
1957	52,855	45,239	20,967	828	2,962	17,176	31,889	4,241	3,037	7,848	2,438	6,708	2,217	1,328	4,071
1958	51,322	43,483	19,513	751	2,817	15,945	31,811	3,976	2,989	7,761	2,481	6,765	2,191	1,415	4,230
1959 ²	53,270	45,186	20,411	732	3,004	16,675	32,857	4,011	3,092	8,035	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	3,153	8,238	2,628	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,142	8,195	2,688	7,619	2,279	1,607	4,708
1962	55,549	46,680	20,451	650	2,948	16,853	35,098	3,906	3,207	8,359	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	3,258	8,520	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	3,347	8,812	2,911	8,660	2,348	1,856	5,392
1965	60,763	50,689	21,926	632	3,232	18,062	38,839	4,036	3,477	9,239	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	3,608	9,637	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	3,700	9,906	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,158	4,318	3,791	10,308	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,381	619	3,575	20,167	46,023	4,442	3,919	10,785	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	4,006	11,034	3,645	11,548	2,731	2,664	7,158
1971	71,211	58,331	22,935	609	3,704	18,623	48,276	4,476	4,014	11,338	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	4,127	11,822	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	4,291	12,315	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	4,447	12,539	4,148	13,441	2,724	3,039	8,407
1975	78,945	62,289	22,600	752	3,525	18,323	54,345	4,542	4,430	12,630	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,578	18,997	56,030	4,582	4,562	13,193	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	4,723	13,972	4,467	15,302	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,985	14,556	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,878	26,461	958	4,463	21,040	63,363	5,136	5,221	14,972	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	5,292	15,018	5,160	17,890	2,866	3,610	9,765
1981	91,152	75,121	25,497	1,139	4,188	20,170	65,655	5,165	5,375	15,171	5,298	18,615	2,772	3,640	9,619
1982	89,544	73,707	23,812	1,128	3,904	18,780	65,732	5,081	5,295	15,158	5,340	19,021	2,739	3,640	9,458
1983	90,152	74,282	23,330	952	3,946	18,432	66,821	4,952	5,283	15,587	5,466	19,664	2,774	3,662	9,434
1984	94,408	78,384	24,718	966	4,380	19,372	69,690	5,156	5,568	16,512	5,684	20,746	2,807	3,734	9,482
1985	97,387	80,992	24,842	927	4,668	19,248	72,544	5,233	5,727	17,315	5,948	21,927	2,875	3,832	9,687
1986	99,344	82,651	24,533	977	4,810	18,947	74,811	5,247	5,761	17,880	6,273	22,957	2,899	3,893	9,901
1987	101,958	84,948	24,674	717	4,958	18,999	77,284	5,362	5,848	18,422	6,533	24,110	2,943	3,967	10,100
1988	105,209	87,823	25,125	713	5,098	19,314	80,084	5,512	6,030	19,023	6,630	25,504	2,971	4,076	10,339
1989	107,884	90,105	25,254	692	5,171	19,391	82,630	5,614	6,187	19,475	6,668	26,907	2,988	4,182	10,609
1990	109,403	91,098	24,905	709	5,120	19,076	84,497	5,777	6,173	19,601	6,709	27,934	3,085	4,205	10,914
1991	108,249	89,847	23,745	689	4,650	18,406	84,504	5,755	6,081	19,284	6,646	28,336	2,966	4,355	11,081
1992	108,601	89,956	23,231	635	4,492	18,104	85,370	5,718	5,997	19,356	6,602	29,052	2,969	4,408	11,267
1993	110,713	91,872	23,352	610	4,688	18,075	87,361	5,811	5,981	19,773	6,757	30,197	2,915	4,488	11,438
1994	114,163	95,036	23,908	601	4,986	18,321	90,256	5,984	6,162	20,507	6,896	31,579	2,870	4,576	11,682
1995	117,191	97,885	24,265	581	5,160	18,524	92,925	6,132	6,378	21,187	6,806	33,117	2,822	4,635	11,849
1996	119,608	100,189	24,493	580	5,418	18,495	95,115	6,253	6,482	21,597	6,911	34,454	2,757	4,606	12,056
1997	122,690	103,120	24,934	592	5,686	18,657	97,756	6,395	6,648	22,011	7,091	36,040	2,699	4,584	12,276
Monthly data, seasonally adjusted															
1997:															
August	122,894	103,285	24,972	592	5,699	18,681	97,922	6,264	6,871	22,043	7,110	36,225	2,691	4,602	12,316
September	123,280	103,673	24,993	594	5,713	18,686	98,267	6,435	6,679	22,078	7,125	36,363	2,684	4,604	12,319
October	123,568	103,922	25,032	592	5,722	18,718	98,536	6,453	6,697	22,105	7,151	36,484	2,690	4,609	12,347
November	123,944	104,282	25,099	591	5,750	18,758	98,845	6,456	6,711	22,206	7,172	36,638	2,689	4,613	12,360
December	124,289	104,609	25,193	592	5,810	18,791	99,096	6,451	6,731	22,245	7,194	36,795	2,688	4,611	12,381
1998:															
January	124,640	104,954	25,297	592	5,881	18,824	99,343	6,473	6,759	22,280	7,213	36,932	2,670	4,613	12,403
February	124,832	105,112	25,314	590	5,902	18,822	99,518	6,494	6,769	22,283	7,232	37,020	2,676	4,613	12,431
March	124,914	105,186	25,276	587	5,860	18,829	99,638	6,504	6,783	22,259	7,258	37,106	2,671	4,619	12,438
April	125,234	105,470	25,339	582	5,930	18,827	99,895	6,513	6,798	22,335	7,289	37,196	2,674	4,620	12,470
May	125,562	105,734	25,301	579	5,917	18,805	100,261	6,534	6,815	22,423	7,311	37,350	2,671	4,637	12,520
June	125,751	105,938	25,304	578	5,946	18,780	100,447	6,538	6,821	22,448	7,333	37,494	2,674	4,632	12,507
July ^P	125,819	105,992	25,118	571	5,967	18,580	100,701	6,556	6,825	22,545	7,368	37,580	2,677	4,653	12,497
August ^P	126,184	106,300	25,227	569	5,983	18,675	100,957	6,580	6,836	22,561	7,381	37,715	2,672	4,660	12,552

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 nonfarm total for the March 1959 benchmark month.
P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1997) and all seasonally adjusted data (beginning January 1994) are subject to revision.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

B-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry, 1964 to date

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.54	531.70	37.8	12.71	480.44
1988	34.7	9.28	322.02	42.3	12.80	541.44	37.9	13.08	495.73
1989	34.6	9.66	334.24	43.0	13.26	570.18	37.9	13.54	513.17
1990	34.5	10.01	345.35	44.1	13.68	603.29	38.2	13.77	526.01
1991	34.3	10.32	353.98	44.4	14.19	630.04	38.1	14.00	533.40
1992	34.4	10.57	363.61	43.9	14.54	638.31	38.0	14.15	537.70
1993	34.5	10.83	373.64	44.3	14.60	646.78	38.5	14.38	553.63
1994	34.7	11.12	385.86	44.8	14.88	666.62	38.9	14.73	573.00
1995	34.5	11.43	394.34	44.7	15.30	683.91	38.9	15.09	587.00
1996	34.4	11.82	406.61	45.3	15.62	707.59	39.0	15.47	603.33
1997	34.6	12.28	424.89	45.4	16.17	734.12	38.9	16.03	623.57
Monthly data, not seasonally adjusted									
1997:									
August	35.0	\$12.22	\$427.70	45.6	\$15.98	\$728.69	39.7	\$16.12	\$639.96
September	34.8	12.40	431.52	45.5	16.26	739.83	40.1	16.30	653.63
October	34.7	12.45	432.02	45.3	16.23	735.22	39.8	16.33	649.93
November	34.8	12.53	436.04	45.6	16.41	748.30	37.8	16.28	615.38
December	34.8	12.53	436.04	45.2	16.52	746.70	38.5	16.37	630.25
1998:									
January	34.2	12.60	430.92	45.0	16.65	749.25	37.4	16.25	607.75
February	34.6	12.65	437.69	44.0	16.89	743.16	37.9	16.21	614.36
March	34.5	12.68	437.46	43.4	16.89	733.03	37.9	16.29	617.39
April	34.2	12.69	434.00	43.4	16.84	730.86	38.0	16.34	620.92
May	34.6	12.70	439.42	44.4	16.73	742.81	39.2	16.42	643.66
June	34.7	12.66	439.30	44.0	16.73	736.12	39.1	16.44	642.80
July ^P	34.8	12.66	440.57	44.1	16.77	739.56	40.1	16.63	666.86
August ^P	35.2	12.75	448.80	44.2	16.93	748.31	40.1	16.76	672.08

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

B-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm 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	2.60	106.08
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	2.87	115.66
1968	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.04	121.90
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	3.43	136.86
1971	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.4	3.64	143.42
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	39.2	4.07	159.54
1974	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.38	169.94
1975	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.6	4.72	182.19
1976	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.02	194.27
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	38.4	6.95	266.88
1981	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.55	290.68
1982	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.08	309.46
1983	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.54	328.79
1984	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.88	341.88
1985	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.15	351.36
1986	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.34	357.72
1987	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
1988	41.1	10.19	9.73	418.81	38.2	12.24	467.57	38.1	9.98	380.24
1989	41.0	10.48	10.02	429.68	38.3	12.57	481.43	38.0	10.39	394.82
1990	40.8	10.83	10.37	441.86	38.4	12.92	496.13	38.1	10.79	411.10
1991	40.7	11.18	10.71	455.03	38.1	13.20	502.92	38.1	11.15	424.82
1992	41.0	11.46	10.95	469.86	38.3	13.43	514.37	38.2	11.39	435.10
1993	41.4	11.74	11.18	486.04	39.3	13.55	532.52	38.2	11.74	448.47
1994	42.0	12.07	11.43	506.94	39.7	13.78	547.07	38.4	12.06	463.10
1995	41.6	12.37	11.74	514.59	39.4	14.13	556.72	38.3	12.43	476.07
1996	41.6	12.77	12.12	531.23	39.6	14.45	572.22	38.3	12.87	492.92
1997	42.0	13.17	12.45	553.14	39.7	14.93	592.72	38.4	13.44	516.10
Monthly data, not seasonally adjusted										
1997:										
August	42.0	\$13.14	\$12.41	\$551.88	40.5	\$15.04	\$609.12	38.5	\$13.48	\$518.98
September	42.4	13.23	12.46	560.95	40.3	15.06	606.92	38.4	13.53	519.55
October	42.2	13.28	12.53	560.42	39.8	15.09	600.58	38.4	13.57	521.09
November	42.6	13.36	12.60	569.14	40.4	15.19	613.68	38.7	13.76	532.51
December	43.0	13.47	12.68	579.21	39.8	15.17	603.77	38.4	13.72	526.85
1998:										
January	41.9	13.40	12.70	561.46	39.3	15.27	600.11	38.1	13.77	524.64
February	41.7	13.41	12.72	559.20	39.9	15.29	610.07	38.5	13.85	533.23
March	41.7	13.47	12.76	561.70	39.4	15.24	600.46	38.4	13.86	532.22
April	40.8	13.46	12.83	549.17	39.1	15.27	597.06	38.1	13.90	529.59
May	41.8	13.47	12.78	563.05	39.5	15.21	600.80	38.4	13.96	536.06
June	41.8	13.43	12.74	561.37	39.6	15.22	602.71	38.3	13.89	531.99
July ^P	41.1	13.38	12.71	549.92	39.7	15.34	609.00	38.4	13.99	537.22
August ^P	41.7	13.46	12.76	561.28	40.2	15.32	615.86	38.7	14.12	546.44

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

B-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry, 1964 to date—Continued

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976	32.1	3.57	114.60	36.4	4.27	155.43	33.3	4.31	143.52
1977	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987	29.2	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988	29.1	6.31	183.62	35.9	9.06	325.25	32.6	8.88	289.49
1989	28.9	6.53	188.72	35.8	9.53	341.17	32.6	9.38	305.79
1990	28.8	6.75	194.40	35.8	9.97	356.93	32.5	9.83	319.48
1991	28.6	6.94	198.48	35.7	10.39	370.92	32.4	10.23	331.45
1992	28.8	7.12	205.06	35.8	10.82	387.36	32.5	10.54	342.55
1993	28.8	7.29	209.95	35.8	11.35	406.33	32.5	10.78	350.35
1994	28.9	7.49	216.46	35.8	11.83	423.51	32.5	11.04	358.80
1995	28.8	7.69	221.47	35.9	12.32	442.29	32.4	11.39	369.04
1996	28.8	7.99	230.11	35.9	12.80	459.52	32.4	11.79	382.00
1997	28.9	8.34	241.03	36.1	13.33	481.21	32.6	12.28	400.33
Monthly data, not seasonally adjusted									
1997:									
August	29.7	\$8.30	\$246.51	36.1	\$13.38	\$483.02	32.9	\$12.12	\$398.75
September	29.0	8.45	245.05	35.8	13.48	482.58	32.5	12.36	401.70
October	28.8	8.47	243.94	35.9	13.56	486.80	32.6	12.41	404.57
November	28.8	8.51	245.09	36.7	13.72	503.52	32.8	12.57	412.30
December	29.2	8.51	248.49	35.9	13.64	489.68	32.6	12.61	411.09
1998:									
January	28.1	8.63	242.50	36.1	13.70	494.57	32.4	12.66	410.18
February	28.7	8.62	247.39	37.1	13.95	517.55	32.8	12.75	418.20
March	28.7	8.67	248.83	36.8	13.97	514.10	32.7	12.77	417.58
April	28.7	8.70	249.69	36.1	13.98	504.68	32.4	12.77	413.75
May	29.0	8.71	252.59	36.1	13.99	505.04	32.5	12.75	414.38
June	29.3	8.70	254.91	36.0	13.93	501.48	32.7	12.70	415.29
July ^p	29.8	8.71	259.56	36.1	13.93	502.87	32.9	12.67	416.84
August ^p	29.9	8.73	261.03	36.9	14.14	521.77	33.2	12.76	423.63

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 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

B-3. Employees on nonfarm payrolls by major industry and selected component groups, seasonally adjusted

(In thousands)

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP	Aug.P
Total	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,234	125,562	125,751	125,819	126,184
Total private	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,470	105,734	105,938	105,992	106,300
Goods-producing	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,339	25,301	25,304	25,118	25,227
Mining	592	594	592	591	592	592	590	587	582	579	578	571	569
Metal mining	54	53	53	53	52	52	52	51	51	51	51	50	50
Coal mining	95	95	95	94	94	94	93	93	92	92	90	89	88
Oil and gas extraction	336	338	337	337	338	338	338	336	332	329	330	325	323
Nonmetallic minerals, except fuels	107	108	107	107	108	108	107	107	107	107	107	107	108
Construction	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,930	5,917	5,946	5,967	5,983
General building contractors	1,318	1,320	1,326	1,335	1,351	1,365	1,371	1,373	1,385	1,388	1,401	1,406	1,409
Heavy construction, except building	791	792	789	788	805	817	813	805	819	819	821	828	829
Special trade contractors	3,590	3,601	3,607	3,627	3,654	3,699	3,718	3,682	3,726	3,710	3,724	3,733	3,745
Manufacturing	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,827	18,805	18,780	18,580	18,675
Durable goods	11,028	11,030	11,060	11,094	11,118	11,154	11,159	11,166	11,170	11,156	11,144	10,978	11,095
Lumber and wood products	794	794	794	795	798	800	800	801	802	803	801	802	803
Furniture and fixtures	509	510	511	513	515	517	519	520	524	526	524	527	524
Stone, clay, and glass products	552	553	554	554	555	562	561	558	561	559	562	562	564
Primary metal industries	712	714	714	715	716	719	718	719	718	716	717	705	716
Fabricated metal products	1,478	1,480	1,485	1,488	1,491	1,496	1,497	1,497	1,498	1,495	1,490	1,478	1,485
Industrial machinery and equipment	2,172	2,175	2,185	2,191	2,196	2,200	2,202	2,205	2,201	2,201	2,202	2,191	2,190
Computer and office equipment	379	379	380	379	381	381	381	381	377	376	375	374	372
Electronic and other electrical equipment	1,694	1,698	1,702	1,707	1,712	1,719	1,720	1,722	1,720	1,716	1,714	1,699	1,694
Electronic components and accessories	660	664	669	672	676	680	680	681	678	677	672	667	661
Transportation equipment	1,862	1,852	1,861	1,878	1,878	1,882	1,886	1,887	1,890	1,886	1,882	1,765	1,876
Motor vehicles and equipment	998	986	990	1,005	1,001	1,002	1,004	1,002	1,004	998	993	872	989
Aircraft and parts	508	510	513	516	519	521	523	525	525	524	524	526	526
Instruments and related products	865	865	866	867	869	870	866	868	867	866	864	861	858
Miscellaneous manufacturing	390	389	388	386	388	389	390	389	389	388	388	388	385
Nondurable goods	7,653	7,656	7,658	7,664	7,673	7,670	7,663	7,663	7,657	7,649	7,636	7,602	7,580
Food and kindred products	1,682	1,688	1,689	1,696	1,702	1,702	1,703	1,704	1,708	1,710	1,706	1,696	1,692
Tobacco products	41	40	41	42	41	40	41	41	42	41	40	40	39
Textile mill products	613	613	612	611	611	608	606	604	605	603	599	592	589
Apparel and other textile products	822	817	814	810	808	805	796	796	787	780	776	772	754
Paper and allied products	684	685	685	686	686	688	688	688	686	685	682	680	680
Printing and publishing	1,556	1,556	1,558	1,560	1,561	1,564	1,564	1,564	1,565	1,566	1,570	1,571	1,569
Chemicals and allied products	1,032	1,033	1,034	1,035	1,036	1,035	1,036	1,036	1,035	1,039	1,037	1,038	1,037
Petroleum and coal products	139	139	139	138	139	136	136	136	137	136	137	135	135
Rubber and misc. plastics products	995	997	998	999	1,002	1,006	1,007	1,009	1,008	1,006	1,006	997	1,005
Leather and leather products	89	88	88	87	87	86	86	85	84	83	83	81	80
Service-producing	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,895	100,261	100,447	100,701	100,957
Transportation and public utilities	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,513	6,534	6,538	6,556	6,580
Transportation	3,973	4,141	4,149	4,147	4,135	4,148	4,164	4,170	4,173	4,191	4,196	4,214	4,237
Railroad transportation	225	227	227	228	230	231	231	231	231	232	232	232	233
Local and interurban passenger transit	455	451	452	453	455	456	459	460	453	459	458	467	466
Trucking and warehousing	1,675	1,680	1,680	1,678	1,676	1,684	1,688	1,690	1,702	1,703	1,709	1,712	1,724
Water transportation	181	180	180	180	179	177	181	183	181	185	183	188	191
Transportation by air	981	1,147	1,154	1,151	1,138	1,142	1,145	1,146	1,147	1,151	1,154	1,155	1,160
Pipelines, except natural gas	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services	442	442	442	443	443	444	446	446	445	447	446	446	449
Communications and public utilities	2,291	2,294	2,304	2,309	2,316	2,325	2,330	2,334	2,340	2,343	2,342	2,342	2,343
Communications	1,430	1,432	1,443	1,449	1,457	1,466	1,471	1,475	1,484	1,486	1,488	1,488	1,490
Electric, gas, and sanitary services	861	862	861	860	859	859	859	859	856	857	854	854	853
Wholesale trade	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,798	6,815	6,821	6,825	6,836
Durable goods	3,959	3,964	3,977	3,989	4,002	4,017	4,030	4,039	4,050	4,059	4,067	4,071	4,082
Nondurable goods	2,712	2,715	2,720	2,722	2,729	2,742	2,739	2,744	2,748	2,756	2,754	2,754	2,754

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

B-3. Employees on nonfarm payrolls by major industry and selected component groups, seasonally adjusted—Continued

(In thousands)

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP	Aug.P
Retail trade	22,043	22,078	22,105	22,206	22,245	22,280	22,283	22,259	22,335	22,423	22,448	22,545	22,561
Building materials and garden supplies	940	939	938	944	946	954	959	966	971	972	975	976	978
General merchandise stores	2,723	2,726	2,738	2,761	2,771	2,771	2,756	2,759	2,784	2,788	2,784	2,791	2,796
Department stores	2,393	2,397	2,409	2,433	2,434	2,439	2,427	2,428	2,447	2,462	2,457	2,455	2,469
Food stores	3,503	3,506	3,512	3,516	3,517	3,528	3,533	3,536	3,533	3,542	3,538	3,550	3,557
Automotive dealers and service stations	2,317	2,321	2,325	2,328	2,329	2,331	2,331	2,333	2,337	2,345	2,351	2,353	2,355
New and used car dealers	1,052	1,053	1,055	1,056	1,056	1,056	1,056	1,056	1,058	1,060	1,064	1,066	1,065
Apparel and accessory stores	1,098	1,100	1,103	1,105	1,103	1,108	1,100	1,098	1,105	1,106	1,108	1,113	1,113
Furniture and home furnishings stores	1,013	1,019	1,023	1,029	1,035	1,039	1,043	1,048	1,045	1,055	1,058	1,064	1,072
Eating and drinking places	7,633	7,641	7,630	7,666	7,682	7,685	7,694	7,645	7,681	7,714	7,726	7,780	7,775
Miscellaneous retail establishments	2,816	2,826	2,836	2,857	2,862	2,864	2,867	2,874	2,879	2,901	2,908	2,918	2,915
Finance, insurance, and real estate	7,110	7,125	7,151	7,172	7,194	7,213	7,232	7,258	7,289	7,311	7,333	7,368	7,381
Finance	3,423	3,434	3,451	3,463	3,478	3,485	3,496	3,512	3,521	3,536	3,547	3,566	3,578
Depository institutions	2,028	2,027	2,032	2,035	2,040	2,037	2,039	2,041	2,041	2,044	2,042	2,044	2,046
Commercial banks	1,460	1,459	1,462	1,464	1,466	1,463	1,464	1,465	1,463	1,463	1,459	1,460	1,461
Savings institutions	261	261	261	261	263	262	262	262	263	264	264	265	264
Nondepository institutions	571	576	581	582	586	589	593	602	605	611	616	623	628
Mortgage bankers and brokers	253	256	260	261	262	264	270	276	278	281	284	290	295
Security and commodity brokers	602	606	611	616	620	625	629	633	636	641	648	655	658
Holding and other investment offices	222	225	227	230	232	234	235	236	239	240	241	244	246
Insurance	2,265	2,267	2,275	2,281	2,291	2,293	2,297	2,302	2,312	2,320	2,328	2,336	2,338
Insurance carriers	1,538	1,540	1,546	1,550	1,558	1,558	1,560	1,566	1,574	1,579	1,586	1,593	1,595
Insurance agents, brokers, and service	727	727	729	731	733	735	737	736	738	741	742	743	743
Real estate	1,422	1,424	1,425	1,428	1,425	1,435	1,439	1,444	1,456	1,455	1,458	1,466	1,465
Services¹	36,225	36,363	36,484	36,638	36,795	36,932	37,020	37,106	37,196	37,350	37,494	37,580	37,715
Agricultural services	685	690	692	694	694	696	696	695	706	700	706	713	719
Hotels and other lodging places	1,740	1,745	1,754	1,754	1,754	1,762	1,756	1,755	1,767	1,769	1,773	1,781	1,785
Personal services	1,180	1,180	1,181	1,185	1,178	1,176	1,177	1,178	1,186	1,190	1,186	1,184	1,185
Business services	8,055	8,112	8,147	8,226	8,294	8,351	8,384	8,412	8,422	8,491	8,556	8,560	8,624
Services to buildings	937	947	948	947	955	960	961	966	965	975	975	980	976
Personnel supply services	2,991	3,013	3,030	3,074	3,111	3,139	3,152	3,149	3,140	3,156	3,189	3,152	3,188
Help supply services	2,657	2,686	2,694	2,741	2,783	2,804	2,820	2,819	2,806	2,818	2,853	2,816	2,858
Computer and data processing services	1,433	1,448	1,462	1,475	1,493	1,507	1,522	1,538	1,561	1,578	1,601	1,619	1,630
Auto repair, services, and parking	1,127	1,131	1,134	1,138	1,143	1,147	1,144	1,145	1,146	1,153	1,159	1,162	1,166
Miscellaneous repair services	378	378	378	379	380	381	382	382	383	385	387	385	386
Motion pictures	554	556	556	557	564	563	569	565	563	567	554	553	558
Amusement and recreation services	1,580	1,593	1,597	1,610	1,625	1,633	1,641	1,647	1,660	1,662	1,670	1,691	1,689
Health services	9,749	9,766	9,789	9,807	9,827	9,837	9,852	9,867	9,873	9,887	9,905	9,904	9,928
Offices and clinics of medical doctors	1,747	1,754	1,764	1,772	1,779	1,784	1,788	1,796	1,801	1,806	1,813	1,818	1,826
Nursing and personal care facilities	1,757	1,757	1,759	1,760	1,761	1,759	1,761	1,761	1,760	1,762	1,761	1,756	1,758
Hospitals	3,878	3,885	3,894	3,901	3,908	3,916	3,920	3,925	3,938	3,945	3,953	3,963	3,968
Home health care services	716	716	715	714	713	706	702	698	687	684	683	672	671
Legal services	949	953	956	959	963	964	967	970	972	977	980	983	985
Educational services	2,128	2,136	2,146	2,155	2,160	2,169	2,179	2,189	2,192	2,195	2,200	2,189	2,199
Social services	2,532	2,541	2,546	2,552	2,561	2,570	2,577	2,587	2,595	2,609	2,627	2,655	2,670
Child day care services	578	572	572	571	572	575	574	575	577	575	581	582	583
Residential care	720	726	728	730	736	736	741	744	746	749	747	749	752
Museums and botanical and zoological gardens	90	90	91	91	91	91	92	92	92	91	91	91	92
Membership organizations	2,252	2,250	2,252	2,247	2,255	2,260	2,261	2,263	2,265	2,266	2,270	2,275	2,271
Engineering and management services	3,032	3,048	3,070	3,089	3,111	3,137	3,148	3,164	3,178	3,212	3,234	3,258	3,262
Engineering and architectural services	873	876	881	885	892	897	899	904	910	913	921	927	928
Management and public relations	959	962	970	975	988	1,004	1,007	1,012	1,011	1,029	1,037	1,050	1,052
Government	19,609	19,607	19,646	19,662	19,680	19,686	19,720	19,728	19,764	19,828	19,813	19,827	19,884
Federal, except Postal Service	2,691	2,684	2,690	2,689	2,688	2,670	2,676	2,671	2,674	2,671	2,674	2,677	2,672
State	1,833	1,827	1,829	1,826	1,819	1,822	1,819	1,815	1,814	1,810	1,813	1,811	1,804
Education	4,602	4,604	4,609	4,613	4,611	4,613	4,613	4,619	4,620	4,637	4,632	4,653	4,660
Other State government	1,917	1,921	1,922	1,923	1,924	1,924	1,924	1,928	1,925	1,932	1,933	1,943	1,944
Other State government	2,685	2,683	2,687	2,690	2,687	2,689	2,689	2,691	2,695	2,705	2,699	2,710	2,716
Local	12,316	12,319	12,347	12,360	12,381	12,403	12,431	12,438	12,470	12,520	12,507	12,497	12,552
Education	6,933	6,941	6,947	6,959	6,965	6,980	6,999	7,003	7,023	7,053	7,045	7,067	7,105
Other local government	5,383	5,378	5,400	5,401	5,416	5,423	5,432	5,435	5,447	5,467	5,462	5,430	5,447

¹ Includes other industries, not shown separately.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997

benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

B-4. Women employees on nonfarm payrolls by major industry and manufacturing group, seasonally adjusted

(In thousands)

Industry	1997							1998					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total	59,335	59,506	59,564	59,663	59,810	59,974	60,114	60,220	60,308	60,380	60,460	60,689	60,791
Total private	48,485	48,621	48,614	48,763	48,884	49,026	49,142	49,239	49,306	49,369	49,446	49,626	49,725
Goods-producing	6,703	6,705	6,711	6,717	6,732	6,741	6,759	6,766	6,767	6,770	6,759	6,762	6,763
Mining	82	82	83	82	82	82	83	83	83	83	82	82	82
Construction	632	634	636	639	643	645	648	650	654	655	656	662	669
Manufacturing	5,989	5,989	5,992	5,996	6,007	6,014	6,028	6,033	6,030	6,032	6,021	6,018	6,012
Durable goods	2,909	2,915	2,926	2,932	2,945	2,952	2,962	2,973	2,979	2,982	2,980	2,976	2,976
Lumber and wood products	137	138	138	138	138	139	139	140	141	141	141	141	142
Furniture and fixtures	160	160	160	160	161	161	162	163	164	165	166	166	167
Stone, clay, and glass products	104	104	105	105	105	106	105	107	107	107	106	107	107
Primary metal industries	103	103	103	103	103	104	104	104	104	104	105	103	105
Fabricated metal products	327	326	328	329	330	330	331	333	334	334	334	334	334
Industrial machinery and equipment	473	475	477	478	481	482	484	485	486	485	485	482	482
Electronic and other electrical equipment	695	697	698	702	706	708	712	714	716	716	712	710	708
Transportation equipment	387	387	393	394	397	399	401	400	401	402	404	406	406
Instruments and related products	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing	172	173	172	171	171	169	170	171	171	171	171	171	170
Nondurable goods	3,080	3,074	3,066	3,064	3,062	3,062	3,066	3,060	3,051	3,050	3,041	3,042	3,036
Food and kindred products	557	555	554	554	555	557	558	559	559	559	560	562	560
Tobacco products	13	13	12	13	13	13	13	13	13	13	14	13	13
Textile mill products	287	288	284	285	284	283	283	281	280	278	279	279	277
Apparel and other textile products	612	609	608	602	598	594	594	589	582	583	575	571	567
Paper and allied products	166	166	166	167	167	168	168	168	168	168	167	167	167
Printing and publishing	703	704	703	703	704	705	705	706	705	706	705	707	710
Chemicals and allied products	330	329	329	330	330	330	331	330	331	330	330	332	331
Petroleum and coal products	25	25	24	24	24	24	25	24	24	24	24	24	24
Rubber and misc. plastics products	339	337	339	340	341	342	343	345	344	344	343	343	343
Leather and leather products	48	48	47	46	46	46	46	45	45	45	44	44	44
Service-producing	52,632	52,801	52,853	52,946	53,078	53,233	53,355	53,454	53,541	53,610	53,701	53,927	54,028
Transportation and public utilities	1,945	1,943	1,900	1,943	1,944	1,944	1,939	1,946	1,948	1,949	1,951	1,960	1,963
Wholesale trade	2,054	2,059	2,060	2,058	2,066	2,066	2,067	2,078	2,077	2,078	2,082	2,089	2,090
Retail trade	11,576	11,580	11,602	11,614	11,632	11,677	11,700	11,713	11,712	11,707	11,720	11,786	11,819
Finance, insurance, and real estate	4,459	4,469	4,478	4,486	4,498	4,511	4,526	4,539	4,546	4,563	4,582	4,593	4,604
Services	21,748	21,865	21,863	21,945	22,012	22,087	22,151	22,197	22,256	22,302	22,352	22,436	22,486
Government	10,850	10,885	10,950	10,900	10,926	10,948	10,972	10,981	11,002	11,011	11,014	11,063	11,066
Federal	1,145	1,143	1,143	1,135	1,142	1,144	1,154	1,141	1,140	1,137	1,136	1,136	1,142
State	2,339	2,357	2,354	2,351	2,360	2,365	2,363	2,365	2,367	2,371	2,369	2,375	2,377
Local	7,366	7,385	7,453	7,414	7,424	7,439	7,455	7,475	7,495	7,503	7,509	7,552	7,547

¹ This series is not published seasonally adjusted because the seasonal component, which is small relative to the trend-cycle and irregular components, cannot be separated with sufficient precision.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

B-5. Production or nonsupervisory workers¹ on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted

(In thousands)

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total private	84,567	84,966	85,176	85,441	85,705	85,947	86,073	86,113	86,282	86,526	86,698	86,747	86,898
Goods-producing	17,773	17,787	17,818	17,870	17,947	18,039	18,037	17,996	18,043	17,989	17,984	17,806	17,882
Mining	447	448	448	449	449	450	450	445	440	440	438	434	430
Construction	4,418	4,424	4,425	4,451	4,497	4,566	4,563	4,538	4,596	4,578	4,603	4,619	4,622
Manufacturing	12,908	12,915	12,945	12,970	13,001	13,023	13,024	13,013	13,007	12,971	12,943	12,753	12,830
Durable goods	7,573	7,573	7,598	7,621	7,644	7,669	7,676	7,669	7,666	7,642	7,626	7,476	7,580
Lumber and wood products	653	653	654	655	658	660	660	659	660	660	658	660	661
Furniture and fixtures	405	405	406	408	410	412	413	415	418	419	417	420	417
Stone, clay, and glass products	431	431	433	434	436	441	441	436	436	436	438	439	440
Primary metal industries	558	559	559	560	562	564	565	563	561	561	561	550	561
Fabricated metal products	1,116	1,117	1,120	1,122	1,125	1,130	1,132	1,131	1,132	1,127	1,122	1,113	1,116
Industrial machinery and equipment	1,369	1,370	1,379	1,382	1,386	1,389	1,391	1,391	1,389	1,389	1,392	1,383	1,383
Electronic and other electrical equipment	1,072	1,075	1,078	1,080	1,086	1,089	1,087	1,085	1,081	1,079	1,075	1,061	1,058
Transportation equipment	1,270	1,264	1,270	1,283	1,280	1,279	1,283	1,281	1,279	1,267	1,262	1,148	1,245
Motor vehicles and equipment	792	784	786	791	790	787	788	784	784	774	768	651	752
Instruments and related products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing	274	272	272	270	272	273	273	273	274	271	270	271	269
Nondurable goods	5,335	5,342	5,347	5,349	5,357	5,354	5,348	5,344	5,341	5,329	5,317	5,277	5,250
Food and kindred products	1,248	1,254	1,255	1,260	1,263	1,265	1,267	1,267	1,271	1,273	1,270	1,255	1,248
Tobacco products	30	31	32	33	32	32	32	32	33	32	31	30	30
Textile mill products	518	519	520	518	519	516	514	513	513	511	509	502	497
Apparel and other textile products	670	665	663	659	656	652	645	643	633	627	624	622	604
Paper and allied products	520	521	522	523	524	525	525	524	524	522	520	516	518
Printing and publishing	849	847	849	849	850	850	848	845	846	847	848	845	844
Chemicals and allied products	570	573	575	576	578	580	582	583	583	584	584	585	580
Petroleum and coal products	92	92	91	91	92	89	89	89	90	89	89	89	89
Rubber and misc. plastics products	771	773	773	774	777	780	781	783	784	781	780	771	779
Leather and leather products	67	67	67	66	66	65	65	64	64	63	62	62	61
Service-producing	66,794	67,179	67,358	67,571	67,758	67,908	68,036	68,117	68,239	68,537	68,714	68,941	69,016
Transportation and public utilities	5,199	5,373	5,375	5,370	5,367	5,374	5,372	5,375	5,373	5,402	5,401	5,425	5,464
Wholesale trade	5,369	5,371	5,382	5,392	5,407	5,426	5,431	5,436	5,448	5,457	5,464	5,471	5,465
Retail trade	19,398	19,422	19,463	19,539	19,570	19,585	19,605	19,582	19,596	19,710	19,719	19,815	19,799
Finance, insurance, and real estate	5,191	5,202	5,223	5,245	5,264	5,287	5,307	5,329	5,353	5,367	5,391	5,412	5,417
Services	31,637	31,811	31,915	32,025	32,150	32,236	32,321	32,395	32,469	32,601	32,739	32,818	32,871

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

² This series is not published seasonally adjusted because the seasonal component, which is small relative to the trend-cycle and irregular components,

cannot be separated with sufficient precision.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
DIFFUSION INDEXES
SEASONALLY ADJUSTED**

B-6. Diffusion indexes of employment change, seasonally adjusted

(Percent)

Time span	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Private nonfarm payrolls, 356 industries ¹												
Over 1-month span:												
1994	59.3	60.5	67.0	64.5	58.6	63.3	63.8	61.7	61.5	60.4	64.0	61.7
1995	62.5	60.0	54.9	55.6	47.8	55.6	54.8	59.0	58.0	55.8	54.5	58.8
1996	50.8	64.6	59.6	56.6	62.8	61.0	57.3	61.5	56.0	62.5	62.2	60.7
1997	58.0	61.4	59.8	63.6	60.1	54.6	61.1	59.1	60.0	64.3	62.4	64.9
1998	63.8	58.7	59.6	56.9	56.6	59.0	P53.5	P54.8				
Over 3-month span:												
1994	64.5	69.2	69.9	68.4	66.6	67.1	69.0	69.5	66.2	65.6	66.6	66.3
1995	63.6	61.4	59.4	53.1	55.2	53.2	59.7	60.1	59.1	58.0	56.6	54.6
1996	61.9	62.8	64.0	63.8	63.5	64.9	64.2	61.5	63.9	64.2	67.0	66.6
1997	64.9	63.3	65.6	66.2	63.9	61.2	60.1	65.9	67.4	68.1	70.8	71.9
1998	68.4	67.3	64.2	61.7	60.4	P57.7	P58.0					
Over 6-month span:												
1994	70.9	69.9	69.7	71.2	70.2	69.8	69.8	70.2	68.7	67.4	66.7	65.4
1995	66.4	60.1	59.1	57.3	59.0	60.1	57.6	60.4	59.7	59.3	61.1	63.2
1996	62.8	65.4	64.7	65.7	66.2	65.0	66.4	66.0	66.2	67.6	66.9	66.3
1997	67.6	67.0	65.3	64.9	65.6	67.3	68.0	67.3	70.6	72.3	73.3	72.6
1998	72.1	70.9	69.4	P63.6	P63.5							
Over 12-month span:												
1994	70.2	71.6	71.8	71.8	72.1	71.8	71.5	72.1	70.1	69.5	66.6	65.0
1995	63.6	62.4	62.6	63.3	61.7	61.9	58.7	62.2	62.2	61.5	63.5	65.4
1996	64.5	66.7	64.5	65.6	68.5	67.3	67.7	66.4	68.0	69.9	69.1	68.3
1997	69.8	67.6	69.2	70.1	69.8	69.8	71.2	71.2	71.1	73.0	72.9	72.3
1998	P70.9	P70.5										
Manufacturing payrolls, 139 industries ¹												
Over 1-month span:												
1994	56.8	56.5	60.1	59.0	53.6	58.3	59.0	55.8	53.6	56.5	58.3	56.8
1995	54.7	54.3	46.4	53.2	42.4	44.2	46.4	49.6	48.6	52.2	45.3	48.2
1996	42.8	54.7	48.2	42.1	55.4	50.7	47.1	55.4	47.8	52.9	54.3	55.4
1997	49.3	54.3	50.0	56.8	51.4	52.2	50.4	48.9	56.5	57.2	56.1	60.8
1998	55.8	51.8	52.5	48.6	45.0	47.8	P39.6	P47.1				
Over 3-month span:												
1994	60.4	63.7	63.7	60.4	57.6	59.7	61.9	56.8	54.3	55.4	60.8	59.0
1995	56.8	50.0	47.8	42.1	43.2	38.8	40.6	43.5	48.2	47.1	45.3	39.9
1996	43.9	46.8	46.0	47.5	46.4	49.3	51.4	50.0	53.6	51.1	57.6	54.7
1997	54.3	49.3	54.3	54.0	55.4	50.4	47.5	52.2	57.9	62.6	64.7	65.5
1998	60.1	59.0	50.7	46.4	43.2	P38.8	P37.8					
Over 6-month span:												
1994	60.4	62.9	61.2	62.6	59.4	57.2	57.6	58.6	58.6	54.7	57.2	55.0
1995	55.4	46.4	42.8	40.3	41.4	42.4	41.0	41.0	43.9	43.2	43.2	45.3
1996	42.1	45.3	46.4	47.1	48.2	48.6	51.1	50.4	52.9	52.9	53.2	52.2
1997	54.3	54.3	51.4	52.9	51.4	55.0	56.8	57.6	60.4	64.4	67.6	65.8
1998	61.5	56.8	52.2	P40.6	P41.4							
Over 12-month span:												
1994	57.9	58.6	60.8	60.8	60.8	63.3	59.4	60.1	57.2	56.5	50.4	49.6
1995	46.0	44.2	46.0	47.8	41.0	41.7	38.5	38.8	36.3	38.5	39.9	44.6
1996	43.5	47.5	45.3	45.3	50.4	49.6	50.4	48.6	51.1	55.0	54.0	51.8
1997	57.2	52.5	54.7	56.5	57.9	57.6	58.6	58.6	60.4	60.4	59.4	58.3
1998	P51.1	P54.0										

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

P = preliminary.

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

where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1997) and all seasonally adjusted data (beginning January 1994) are subject to revision.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Total ¹												
Alabama	1,869.9	1,869.5	1,869.5	1,870.7	1,871.0	1,871.9	1,876.0	1,877.2	1,879.4	1,878.2	1,882.3	1,884.4	1,882.7
Alaska	270.2	269.5	269.0	268.1	268.8	268.3	270.2	273.1	273.7	273.8	274.1	274.1	276.2
Arizona	1,972.4	1,983.3	1,994.0	2,000.5	2,011.8	2,021.9	2,031.5	2,037.9	2,045.6	2,048.3	2,060.0	2,073.8	2,060.4
Arkansas	1,103.4	1,106.8	1,106.1	1,107.2	1,110.6	1,111.6	1,110.5	1,113.1	1,118.9	1,124.0	1,125.8	1,125.5	1,125.8
California	13,203.2	13,224.5	13,277.7	13,318.5	13,367.0	13,398.3	13,401.2	13,439.9	13,485.6	13,512.4	13,556.0	13,582.6	13,582.1
Colorado	1,989.2	1,985.8	1,996.8	2,001.8	2,003.3	2,009.5	2,017.8	2,019.9	2,023.9	2,022.0	2,038.1	2,045.3	2,051.4
Connecticut	1,611.9	1,616.1	1,621.7	1,627.2	1,634.6	1,642.6	1,639.6	1,641.2	1,639.6	1,641.9	1,641.8	1,644.9	1,643.7
Delaware	388.1	390.1	391.4	392.5	393.6	395.5	394.6	396.6	398.0	398.3	400.3	399.7	399.1
District of Columbia	619.1	614.7	614.8	612.9	610.8	610.4	613.1	609.4	610.9	609.7	610.3	610.6	604.8
Florida	6,439.7	6,458.7	6,487.4	6,508.8	6,534.1	6,551.6	6,566.0	6,577.9	6,604.1	6,610.3	6,645.5	6,667.0	6,697.7
Georgia	3,613.6	3,626.1	3,649.9	3,664.2	3,674.8	3,690.0	3,690.7	3,707.4	3,714.9	3,718.2	3,729.2	3,727.7	3,726.3
Hawaii	531.3	533.0	534.6	533.4	532.8	530.5	528.6	528.4	529.0	527.8	527.7	525.6	522.6
Idaho	512.6	511.5	510.2	512.9	513.5	514.0	515.1	516.1	516.7	516.6	516.1	516.9	517.5
Illinois	5,784.6	5,783.4	5,795.4	5,816.0	5,823.5	5,833.8	5,837.8	5,833.2	5,834.5	5,852.9	5,863.7	5,874.4	5,880.7
Indiana	2,861.8	2,862.4	2,866.2	2,868.9	2,873.9	2,884.0	2,874.6	2,878.8	2,880.0	2,891.4	2,898.7	2,885.8	2,862.5
Iowa	1,407.8	1,404.7	1,406.4	1,419.1	1,416.9	1,419.2	1,423.0	1,426.1	1,429.2	1,436.7	1,439.0	1,439.9	1,450.2
Kansas	1,270.8	1,274.3	1,275.6	1,281.9	1,282.8	1,287.4	1,291.5	1,294.4	1,294.4	1,297.7	1,305.7	1,304.2	1,305.9
Kentucky	1,717.1	1,718.6	1,722.5	1,720.3	1,726.2	1,732.0	1,738.5	1,735.4	1,738.0	1,745.1	1,749.3	1,751.9	1,748.4
Louisiana	1,854.0	1,855.1	1,858.5	1,863.9	1,867.7	1,869.8	1,870.5	1,875.8	1,879.5	1,879.4	1,884.5	1,890.0	1,887.6
Maine	554.6	555.2	557.1	558.5	560.8	561.4	558.1	560.8	561.0	561.0	560.9	562.3	564.1
Maryland	2,258.9	2,255.5	2,258.2	2,263.3	2,272.1	2,273.8	2,282.0	2,282.4	2,277.2	2,272.8	2,272.0	2,275.3	2,277.2
Massachusetts	3,121.3	3,125.8	3,134.4	3,144.8	3,157.6	3,168.4	3,173.0	3,185.5	3,190.6	3,196.7	3,207.5	3,205.1	3,210.7
Michigan	4,447.0	4,451.3	4,462.8	4,473.4	4,471.1	4,489.6	4,495.7	4,506.7	4,503.3	4,525.7	4,541.4	4,541.2	4,480.5
Minnesota	2,491.9	2,496.0	2,498.1	2,504.5	2,512.6	2,518.5	2,514.1	2,522.3	2,530.1	2,528.3	2,541.8	2,551.7	2,557.5
Mississippi	1,109.4	1,111.0	1,110.5	1,112.7	1,113.1	1,112.6	1,117.6	1,120.9	1,117.2	1,120.7	1,122.9	1,121.4	1,128.0
Missouri	2,637.9	2,643.2	2,645.0	2,649.5	2,652.0	2,658.9	2,664.4	2,662.9	2,651.6	2,663.3	2,675.3	2,677.7	2,673.4
Montana	367.5	367.9	368.2	368.6	369.0	370.9	368.7	370.6	370.2	370.6	373.0	368.4	370.6
Nebraska	861.0	859.3	861.8	864.0	866.4	868.6	874.0	878.5	873.0	878.2	876.5	876.2	880.2
Nevada	891.9	893.8	898.7	901.9	904.2	907.2	907.0	912.8	916.0	920.9	921.8	927.8	933.0
New Hampshire	573.8	572.4	570.5	573.4	572.5	570.0	572.7	572.6	570.7	573.8	574.2	573.9	576.0
New Jersey	3,728.0	3,724.1	3,746.9	3,748.4	3,758.2	3,766.5	3,771.3	3,784.2	3,788.0	3,785.2	3,796.8	3,801.8	3,794.6
New Mexico	709.1	709.5	709.1	712.2	713.3	713.9	712.7	713.1	714.4	713.0	715.2	719.2	719.7
New York	8,030.1	8,032.9	8,057.7	8,075.7	8,083.4	8,095.6	8,082.4	8,098.6	8,117.5	8,124.9	8,140.0	8,146.4	8,138.8
North Carolina	3,681.5	3,694.9	3,697.4	3,704.2	3,716.8	3,715.4	3,719.6	3,734.1	3,735.5	3,739.3	3,746.2	3,739.5	3,725.9
North Dakota	313.6	313.6	314.1	314.4	315.1	316.2	317.4	319.0	318.1	318.0	318.6	320.0	319.5
Ohio	5,384.3	5,394.1	5,405.7	5,409.0	5,417.1	5,421.7	5,439.2	5,436.3	5,445.3	5,448.6	5,460.4	5,459.1	5,429.5
Oklahoma	1,384.9	1,388.7	1,397.7	1,397.3	1,403.4	1,405.1	1,405.7	1,410.7	1,415.9	1,418.4	1,427.8	1,423.5	1,421.4
Oregon	1,528.6	1,527.0	1,532.2	1,537.8	1,536.9	1,551.0	1,551.8	1,557.3	1,561.9	1,563.9	1,564.6	1,563.6	1,565.5
Pennsylvania	5,396.8	5,395.4	5,421.7	5,425.9	5,434.4	5,446.5	5,453.9	5,448.0	5,447.2	5,455.7	5,457.8	5,444.0	5,452.2
Rhode Island	449.8	449.7	452.3	451.9	451.1	453.4	452.7	454.1	453.7	455.3	456.8	455.0	454.3
South Carolina	1,724.1	1,725.9	1,727.8	1,730.6	1,735.0	1,749.1	1,763.5	1,767.8	1,775.6	1,784.8	1,788.2	1,804.1	1,794.9
South Dakota	356.5	355.6	355.8	356.3	355.7	356.1	354.9	357.0	357.3	358.0	360.3	358.5	360.2
Tennessee	2,589.3	2,587.3	2,590.4	2,595.9	2,603.0	2,605.3	2,618.6	2,620.7	2,623.6	2,623.5	2,621.3	2,623.5	2,623.8
Texas	8,626.0	8,655.9	8,682.6	8,703.4	8,732.1	8,760.7	8,755.4	8,801.2	8,824.5	8,855.0	8,873.9	8,877.8	8,893.0
Utah	997.1	997.4	1,002.1	1,003.7	1,010.6	1,014.3	1,015.6	1,018.2	1,024.3	1,024.4	1,026.3	1,024.1	1,021.4
Vermont	279.7	279.2	279.4	279.5	279.7	281.4	279.3	280.0	280.1	281.5	282.6	283.8	282.7
Virginia	3,225.6	3,232.5	3,240.2	3,259.8	3,267.2	3,278.7	3,280.0	3,291.1	3,303.6	3,306.9	3,314.1	3,322.2	3,333.2
Washington	2,526.0	2,522.8	2,525.5	2,529.9	2,534.5	2,543.6	2,546.0	2,558.5	2,566.4	2,576.5	2,587.9	2,593.4	2,605.1
West Virginia	706.1	706.9	708.7	716.9	717.7	717.1	715.3	715.6	715.2	715.1	724.2	714.2	712.1
Wisconsin	2,657.7	2,662.5	2,668.0	2,674.5	2,679.4	2,684.9	2,691.4	2,694.1	2,696.5	2,702.6	2,709.6	2,713.1	2,708.6
Wyoming	226.5	226.7	223.2	223.4	223.2	223.0	222.8	222.4	223.9	224.3	225.8	224.4	227.7

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Construction												
Alabama	97.3	96.9	97.0	96.6	96.5	96.2	97.1	97.9	97.0	98.7	100.2	100.8	100.9
Alaska	12.9	12.8	12.5	12.4	12.7	12.8	12.8	12.8	12.8	13.0	13.0	13.2	13.2
Arizona	131.9	131.2	131.4	131.8	131.4	131.6	134.5	133.5	134.5	133.3	135.2	136.7	137.0
Arkansas	48.0	47.9	47.4	48.0	48.0	48.1	47.5	47.5	47.7	48.8	49.4	49.3	49.5
California	557.2	562.1	566.1	570.2	573.1	577.9	583.4	582.3	591.9	591.6	593.1	604.6	612.2
Colorado	119.6	120.0	121.2	121.6	118.0	122.1	127.3	128.0	127.9	126.5	127.1	126.8	127.3
Connecticut	56.3	56.3	57.2	57.7	58.1	58.9	60.1	60.1	59.8	59.6	59.0	58.4	58.4
Delaware	21.1	21.3	21.6	21.9	22.2	22.5	23.1	22.8	22.2	22.1	21.7	22.1	22.5
District of Columbia	9.0	8.9	8.8	8.8	8.4	8.8	8.7	8.8	8.9	8.7	8.6	8.8	8.8
Florida	335.4	335.7	335.4	337.6	339.3	339.9	340.5	340.6	342.6	344.5	347.0	348.1	349.3
Georgia	169.0	170.9	171.9	172.2	173.3	175.2	177.2	177.2	178.2	178.5	179.7	180.0	179.5
Hawaii ²	22.2	22.0	22.0	22.0	21.9	21.8	21.9	21.9	22.1	21.8	21.9	21.6	20.9
Idaho	32.2	32.4	32.7	32.6	32.5	32.3	32.7	33.2	32.6	32.9	31.9	32.4	32.7
Illinois	234.8	237.2	238.2	238.2	239.3	239.1	239.8	240.8	235.9	241.4	238.8	239.5	237.6
Indiana	139.8	139.7	139.8	140.6	142.3	142.9	143.3	143.8	140.6	144.5	143.2	138.6	140.0
Iowa	61.0	60.6	60.3	60.2	60.5	61.0	60.1	60.3	60.6	62.3	62.6	62.5	63.4
Kansas	58.9	59.2	59.1	59.3	59.4	59.3	60.7	60.8	58.5	60.2	61.7	62.0	62.3
Kentucky	81.6	83.3	82.1	82.1	81.6	82.3	85.2	83.3	85.4	86.3	86.4	86.1	85.6
Louisiana	118.0	118.7	117.8	117.8	117.4	117.1	117.9	118.0	118.4	118.6	119.8	122.2	123.5
Maine	23.9	24.0	24.0	24.2	24.4	24.4	24.4	24.4	24.2	24.1	24.2	24.4	24.6
Maryland	137.6	137.6	137.2	138.5	139.7	140.3	140.6	140.1	137.4	136.6	134.4	134.6	136.3
Massachusetts	100.2	100.7	99.0	99.7	102.5	104.4	107.9	108.8	108.3	108.2	107.8	107.4	109.1
Michigan	181.2	182.7	182.5	183.7	184.1	186.1	184.8	187.3	184.6	190.3	188.0	189.0	189.4
Minnesota	93.4	93.9	94.2	94.5	95.7	96.3	97.6	99.4	99.2	99.7	100.4	99.7	99.1
Mississippi	51.5	51.6	51.7	52.4	51.6	51.5	52.7	52.6	51.9	52.4	52.2	53.5	55.3
Missouri	121.6	123.5	124.6	124.6	125.2	124.9	123.1	124.8	118.5	123.6	124.0	122.8	128.0
Montana	18.4	19.0	18.5	18.5	18.6	18.9	18.9	18.7	18.2	18.0	18.2	17.8	18.2
Nebraska	38.9	38.8	38.9	39.2	39.2	40.9	42.8	42.4	40.8	40.9	40.7	39.9	39.8
Nevada	82.0	82.5	82.8	83.4	83.7	84.0	85.1	85.2	86.1	87.0	87.6	89.6	90.2
New Hampshire	21.1	21.3	21.5	21.2	21.0	21.4	21.8	22.0	22.2	22.4	22.4	21.9	22.0
New Jersey	131.3	131.5	131.5	131.2	131.8	131.9	135.6	137.1	136.4	136.2	135.4	135.8	136.6
New Mexico	42.5	42.8	42.6	42.3	42.2	42.2	42.1	42.1	42.2	42.6	42.9	43.2	43.3
New York	262.1	264.1	265.3	267.9	267.8	268.1	265.6	268.5	270.6	271.8	273.5	275.8	280.5
North Carolina	204.4	205.5	206.7	207.2	207.9	208.7	211.7	208.7	209.5	210.3	210.6	210.6	209.9
North Dakota	15.5	14.9	14.7	14.7	14.8	14.9	15.1	15.2	15.1	15.3	15.5	16.2	16.1
Ohio	222.6	224.6	224.9	225.0	225.4	225.3	226.7	228.4	228.1	232.9	233.5	233.4	231.8
Oklahoma	50.5	50.5	50.8	50.6	50.9	50.8	51.8	52.1	52.3	52.5	53.0	53.0	52.9
Oregon	81.9	82.5	83.0	82.7	83.1	84.6	82.3	84.3	84.9	85.7	83.0	82.0	81.8
Pennsylvania	212.3	213.0	213.9	214.7	216.4	217.1	218.4	219.4	220.6	222.2	223.2	222.9	220.4
Rhode Island	14.4	14.6	14.9	14.9	14.9	15.1	15.4	15.5	16.1	16.9	16.6	16.4	16.3
South Carolina	99.7	100.4	100.7	101.1	101.6	103.3	104.9	106.0	106.7	107.9	108.8	109.7	109.4
South Dakota	15.5	15.6	15.5	15.6	15.7	15.9	15.9	16.0	15.6	15.9	15.9	15.8	15.7
Tennessee	116.0	116.6	116.9	117.4	117.8	118.1	117.0	117.7	119.2	120.3	120.7	119.4	121.0
Texas	459.6	462.5	463.2	462.4	464.5	467.0	468.1	476.7	477.8	480.3	484.7	484.6	487.6
Utah	65.5	65.4	65.1	64.7	65.8	66.5	65.7	66.5	67.3	67.7	68.6	67.9	68.2
Vermont	13.2	13.3	13.1	12.9	12.8	13.3	12.7	12.6	12.5	13.0	13.2	13.3	13.2
Virginia	185.1	185.7	185.1	187.3	188.3	189.0	190.2	191.5	192.9	193.4	194.9	195.5	196.8
Washington	136.9	137.0	136.3	136.1	136.8	136.6	137.7	138.2	138.9	140.1	141.5	141.9	143.6
West Virginia	34.3	34.5	34.6	35.4	35.6	35.5	36.2	35.4	34.3	35.5	33.9	35.2	35.1
Wisconsin	109.5	109.3	108.8	108.9	109.4	110.0	110.2	111.6	110.9	111.9	113.3	112.8	113.9
Wyoming	15.5	15.6	15.4	14.9	15.2	14.9	14.9	15.0	15.1	15.3	15.9	15.2	16.0

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
	Manufacturing												
Alabama	381.2	382.2	380.0	378.7	378.7	378.6	380.2	379.2	378.0	377.1	376.6	375.0	372.7
Alaska	15.4	14.8	14.7	15.0	15.5	13.9	15.5	16.4	16.3	15.5	14.1	14.8	15.8
Arizona	206.9	208.1	209.3	210.1	211.6	212.9	214.7	215.0	215.1	215.5	215.1	215.7	215.3
Arkansas	253.0	253.4	252.9	253.5	253.3	254.0	255.5	255.3	255.1	255.6	255.3	255.8	253.5
California	1,925.8	1,925.8	1,927.4	1,935.0	1,936.5	1,941.6	1,943.2	1,945.2	1,947.1	1,944.3	1,947.4	1,944.9	1,932.6
Colorado	204.0	204.6	205.1	205.8	206.6	207.7	206.9	208.4	208.8	208.4	208.0	208.3	208.2
Connecticut	278.2	277.2	276.6	276.5	276.0	276.3	277.1	276.9	277.0	277.6	276.4	277.3	277.3
Delaware	56.6	57.5	57.9	58.3	58.4	58.7	56.7	57.3	58.8	58.8	59.1	59.4	57.0
District of Columbia	12.5	12.6	12.5	12.6	12.6	12.6	12.8	12.7	12.8	12.8	12.8	12.7	12.8
Florida	492.3	492.3	491.9	491.7	491.5	491.9	491.8	491.7	491.3	491.9	492.1	490.6	491.3
Georgia	588.9	587.8	587.5	588.1	589.3	590.0	589.1	587.1	589.9	590.4	591.4	591.3	586.8
Hawaii	16.8	16.7	16.4	16.4	16.5	16.5	16.5	16.4	16.4	16.3	16.2	16.1	16.0
Idaho	74.1	74.5	74.8	75.2	75.5	75.8	76.4	76.7	76.3	76.3	76.2	75.7	75.2
Illinois	975.9	977.7	978.8	983.3	979.5	980.9	981.3	980.2	980.5	981.8	980.1	980.2	978.2
Indiana	676.8	677.5	675.2	678.0	678.4	679.6	681.3	680.1	682.9	681.4	682.0	681.8	667.9
Iowa	253.9	255.2	254.4	256.3	256.1	256.3	256.5	257.0	258.4	258.3	259.1	259.2	263.7
Kansas	206.3	206.9	207.3	207.1	208.4	208.9	209.7	210.2	210.4	210.8	211.8	210.6	209.2
Kentucky	318.6	319.5	320.2	315.6	315.9	316.7	318.6	317.9	314.9	315.7	316.1	316.0	315.0
Louisiana	191.3	191.0	190.7	190.0	190.7	190.8	190.8	190.4	190.5	189.9	190.2	189.0	187.6
Maine	87.3	87.9	87.6	87.5	87.8	88.1	88.1	88.2	87.4	87.3	87.0	86.8	86.5
Maryland	175.3	176.0	173.5	173.6	176.6	176.7	176.6	177.1	176.8	176.1	175.8	175.8	172.9
Massachusetts	448.9	448.7	448.2	450.2	451.6	452.9	455.8	456.9	456.3	454.5	453.3	452.3	455.1
Michigan	964.1	967.8	963.3	969.8	970.7	969.3	970.9	973.2	973.8	981.3	978.8	972.8	913.1
Minnesota	434.5	435.1	434.9	437.5	439.3	440.4	440.7	438.7	442.4	441.6	442.5	444.8	443.7
Mississippi	242.5	240.4	239.3	240.3	241.2	241.1	241.8	242.6	241.5	241.8	242.2	240.6	240.3
Missouri	416.4	422.1	418.6	420.8	419.8	420.2	426.7	420.0	421.6	421.4	421.7	421.7	417.4
Montana	24.1	24.3	24.3	24.4	24.5	24.3	24.4	24.6	24.5	24.7	24.9	24.3	24.1
Nebraska	118.0	116.0	116.2	116.5	116.8	117.0	117.7	118.7	118.2	119.8	119.8	119.6	120.6
Nevada	40.4	40.7	40.9	40.9	41.2	41.4	41.7	41.9	42.4	42.3	42.5	42.9	42.9
New Hampshire	107.4	107.3	107.7	107.7	107.7	108.1	108.8	108.5	108.7	108.2	108.0	106.7	105.9
New Jersey	481.9	482.4	482.0	481.6	483.5	484.4	486.0	485.5	485.2	483.3	482.0	481.7	477.0
New Mexico	46.4	46.9	46.9	47.1	47.3	47.3	46.9	46.3	45.6	45.2	45.1	45.2	44.8
New York	921.3	921.7	921.6	922.3	923.3	925.1	923.0	920.3	920.4	918.2	916.9	917.2	901.6
North Carolina	835.6	831.4	834.0	834.2	834.7	833.5	833.1	833.7	833.1	831.2	830.8	827.1	824.8
North Dakota	23.5	23.8	23.4	23.6	23.7	23.6	24.0	23.9	23.9	23.8	24.1	23.6	23.4
Ohio	1,082.2	1,090.0	1,090.1	1,090.5	1,090.8	1,093.8	1,095.3	1,096.9	1,097.8	1,094.9	1,091.2	1,088.9	1,054.0
Oklahoma	181.2	181.1	181.6	182.2	183.2	183.7	184.2	184.4	184.4	183.7	185.1	185.3	184.6
Oregon	244.3	242.1	243.7	245.6	246.2	246.7	247.0	247.5	247.7	246.7	247.4	246.0	246.8
Pennsylvania	936.4	935.4	938.7	939.3	938.6	938.6	943.0	941.6	939.7	938.5	937.3	935.0	936.4
Rhode Island	79.8	79.3	79.7	79.3	78.8	80.1	79.4	79.4	79.3	78.8	79.1	78.9	79.4
South Carolina	362.3	362.2	361.5	361.8	362.1	362.2	362.2	361.4	362.5	364.2	364.2	364.1	367.5
South Dakota	50.2	49.3	49.3	49.7	49.7	49.9	49.0	49.6	49.6	49.2	49.0	48.9	49.7
Tennessee	517.3	517.1	515.3	516.0	517.5	517.7	517.8	518.2	518.5	516.4	514.2	514.2	511.9
Texas	1,085.2	1,086.3	1,087.8	1,089.0	1,091.8	1,093.9	1,093.3	1,093.4	1,095.9	1,097.2	1,098.0	1,098.0	1,096.7
Utah	133.3	133.4	133.7	133.6	134.0	134.0	135.1	135.3	135.4	135.4	135.7	135.0	134.3
Vermont	46.5	46.5	46.7	46.9	46.9	47.2	47.3	47.4	47.3	47.9	48.0	48.1	48.3
Virginia	403.8	404.1	403.9	405.3	405.3	405.8	406.4	406.6	407.6	407.5	405.7	405.5	404.6
Washington	372.0	373.2	374.2	373.8	375.1	376.0	376.5	377.4	377.8	376.9	378.2	379.5	379.6
West Virginia	80.8	81.6	81.1	82.2	82.4	82.7	83.0	83.1	82.9	83.1	83.0	82.9	82.4
Wisconsin	610.3	612.3	612.6	614.4	615.8	617.4	620.8	619.4	620.0	620.1	619.3	621.3	613.9
Wyoming	10.8	10.8	11.0	10.9	10.9	10.9	10.9	10.8	11.0	11.0	11.0	11.1	11.0

See footnotes at end of table.

ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
	Transportation and public utilities												
Alabama	91.3	89.6	91.5	91.4	90.7	91.0	91.6	91.7	91.8	91.5	91.7	91.3	91.4
Alaska	24.0	24.2	24.3	24.3	24.0	24.4	24.4	24.7	24.6	25.0	25.7	25.2	25.4
Arizona	95.4	92.5	96.4	96.0	97.0	97.8	98.2	97.0	97.5	97.7	98.5	98.8	98.6
Arkansas	65.9	64.7	66.1	66.6	66.9	67.2	67.1	67.5	67.7	67.7	68.0	67.8	67.8
California	665.5	642.8	669.1	672.7	675.4	675.1	675.6	676.5	679.0	680.1	680.1	680.2	680.1
Colorado	121.8	118.7	121.7	122.0	121.8	121.2	122.5	122.5	122.0	122.7	123.3	124.7	125.0
Connecticut	74.2	71.9	74.8	75.0	75.3	75.7	75.3	75.8	76.1	76.0	76.7	76.4	76.3
Delaware	16.0	15.9	15.7	15.8	15.7	15.8	15.5	15.6	15.6	15.6	15.7	15.6	15.9
District of Columbia	17.7	17.7	17.5	17.5	17.5	17.5	17.7	17.3	17.2	17.1	17.0	16.8	17.0
Florida	328.8	321.8	330.3	330.3	330.9	332.2	335.6	336.2	338.1	336.6	338.9	339.9	340.8
Georgia	231.3	226.5	233.6	234.8	235.7	236.4	236.3	237.5	238.4	238.4	238.6	239.7	240.9
Hawaii	41.7	41.5	41.4	41.4	41.5	41.0	41.1	41.2	40.9	40.2	40.4	40.6	40.6
Idaho	24.0	23.9	24.0	23.9	24.1	24.2	24.7	24.4	25.8	24.4	24.3	24.4	24.4
Illinois	336.1	323.3	338.9	340.3	340.8	342.0	342.0	341.3	342.1	343.7	345.7	344.5	343.4
Indiana	138.8	136.1	140.2	140.4	140.7	141.5	142.3	142.6	142.8	142.9	142.5	140.7	139.8
Iowa	65.3	62.9	65.4	66.2	66.5	66.7	66.9	67.0	67.2	68.1	68.2	68.4	68.7
Kansas	71.9	72.5	72.8	73.0	73.0	72.9	72.9	73.0	73.3	73.5	73.9	74.1	73.4
Kentucky	97.1	90.9	97.7	98.5	98.6	99.4	99.5	99.7	100.0	101.5	101.7	102.4	102.1
Louisiana	111.2	109.7	111.5	111.8	111.8	112.1	111.7	112.5	112.8	113.4	113.8	114.2	114.0
Maine	23.5	22.5	23.5	23.4	23.4	23.5	23.5	23.9	23.8	23.8	24.0	24.1	24.1
Maryland	106.7	102.5	106.6	105.7	105.9	106.3	105.3	106.2	105.5	105.4	105.9	106.0	106.0
Massachusetts	134.9	131.3	135.7	137.0	136.0	135.3	136.8	137.5	137.6	138.6	138.4	138.6	138.3
Michigan	173.8	169.6	174.4	174.7	175.1	175.3	175.4	175.0	174.0	174.4	176.3	175.9	175.2
Minnesota	123.8	120.8	124.8	125.2	125.3	126.0	125.9	125.4	125.6	125.6	126.0	126.1	127.3
Mississippi	52.9	51.5	53.0	53.4	53.6	53.5	54.1	53.9	53.7	53.9	53.8	53.3	53.0
Missouri	165.3	162.0	164.6	164.0	163.6	164.3	165.9	165.4	165.6	166.4	166.0	165.5	165.3
Montana	20.9	20.4	21.1	21.2	21.4	21.3	21.5	21.6	21.5	21.6	21.5	21.3	21.2
Nebraska	53.7	53.8	54.8	54.2	54.4	54.6	54.9	55.0	54.8	55.1	54.9	55.6	55.7
Nevada	46.0	44.9	46.4	46.6	46.7	46.7	46.7	46.9	46.9	47.0	47.3	47.5	47.5
New Hampshire	19.8	19.7	19.4	19.3	19.4	19.4	19.7	19.4	19.3	19.8	19.3	19.0	19.2
New Jersey	258.3	248.1	258.5	259.9	259.4	260.4	260.4	261.9	261.9	262.0	263.0	263.8	263.7
New Mexico	32.0	31.8	32.1	32.7	32.6	32.5	32.5	32.5	32.7	33.0	33.3	33.3	33.4
New York	408.2	395.2	410.5	411.3	410.6	410.7	411.7	410.6	411.1	409.8	409.8	410.2	409.8
North Carolina	170.3	164.1	169.8	170.8	171.0	170.9	171.0	171.3	170.7	169.8	169.2	169.8	171.6
North Dakota	18.1	18.1	18.0	18.0	18.0	18.0	18.3	18.2	18.3	18.4	18.6	18.5	18.5
Ohio	233.8	226.0	234.5	234.6	233.8	233.3	235.4	235.4	235.2	234.9	234.9	234.4	233.3
Oklahoma	79.5	78.6	79.9	80.3	80.7	80.9	80.7	81.1	81.6	81.7	82.3	82.4	82.7
Oregon	74.1	71.2	74.6	74.5	74.6	74.4	74.5	74.6	74.7	75.6	75.7	75.5	76.4
Pennsylvania	278.3	267.1	279.9	279.3	278.4	278.2	281.0	280.8	280.4	281.5	280.7	280.3	280.9
Rhode Island	15.6	14.8	15.5	15.5	15.7	15.9	15.4	15.9	16.0	15.8	15.8	15.8	16.0
South Carolina	75.9	73.8	76.0	76.2	76.5	76.9	75.8	76.3	77.2	77.5	77.3	77.3	78.7
South Dakota	16.4	15.7	16.2	16.1	15.9	15.8	16.1	16.0	15.9	16.1	16.1	15.8	15.6
Tennessee	150.7	146.4	150.6	150.6	150.4	150.1	153.1	153.0	152.4	153.3	152.6	151.9	152.5
Texas	517.2	510.0	519.9	522.4	524.7	526.0	527.8	531.2	532.4	538.0	540.1	540.7	540.9
Utah	56.5	54.4	56.8	56.9	57.3	57.7	57.4	57.5	57.8	58.2	58.1	58.1	58.2
Vermont	12.3	11.9	12.2	12.3	12.3	12.3	12.4	12.5	12.5	12.6	12.4	12.4	12.4
Virginia	168.2	164.8	168.8	170.4	170.7	171.3	170.9	171.6	172.0	173.1	172.3	172.0	172.2
Washington	133.9	131.0	133.6	133.7	133.9	133.9	135.6	136.3	136.7	136.9	137.5	137.0	137.7
West Virginia	38.8	38.1	39.0	39.0	39.2	38.8	39.2	38.7	38.5	38.6	38.6	38.7	38.8
Wisconsin	123.4	119.1	123.1	123.1	123.0	122.5	124.0	124.4	123.8	124.1	123.6	124.1	123.9
Wyoming	13.9	13.8	13.9	13.9	14.0	13.9	13.7	13.8	13.9	13.9	14.0	13.9	13.9

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Trade												
Alabama	428.0	428.1	428.0	428.8	429.2	429.4	430.3	431.4	432.9	432.2	434.5	435.5	436.1
Alaska	56.5	56.4	55.7	55.0	54.9	55.4	55.9	56.4	56.9	56.6	57.2	57.5	57.2
Arizona	478.4	480.8	480.9	483.3	487.8	491.3	496.7	497.6	499.0	498.8	500.0	500.4	497.2
Arkansas	251.5	251.9	252.4	252.2	253.7	252.7	251.6	251.2	254.4	255.1	256.3	256.5	256.0
California	3,066.6	3,070.3	3,073.8	3,081.6	3,100.1	3,106.6	3,091.3	3,107.1	3,114.7	3,117.4	3,129.0	3,129.1	3,132.1
Colorado	483.8	484.4	483.0	484.3	486.6	486.5	489.5	490.7	491.9	492.2	496.3	499.7	501.4
Connecticut	352.7	353.9	355.0	356.6	359.6	362.3	360.2	359.9	359.0	357.9	358.8	358.4	359.2
Delaware	85.1	85.3	85.4	85.7	85.9	86.1	86.7	87.7	87.7	87.2	87.3	86.4	86.9
District of Columbia	48.5	48.4	48.4	48.6	48.6	48.8	48.6	48.2	48.7	48.1	48.1	48.3	48.7
Florida	1,648.4	1,656.8	1,663.4	1,670.0	1,675.7	1,680.9	1,678.4	1,681.8	1,687.8	1,686.9	1,690.5	1,696.4	1,697.7
Georgia	912.0	919.2	923.2	926.0	929.1	932.4	931.9	936.9	936.5	936.8	941.9	937.0	936.6
Hawaii	134.2	134.3	134.7	134.9	134.7	134.4	133.8	133.7	133.3	132.5	132.6	131.9	130.4
Idaho	128.9	128.1	128.4	128.7	129.4	129.7	129.6	130.1	129.2	130.1	131.1	131.2	130.7
Illinois	1,323.8	1,323.8	1,323.4	1,330.1	1,331.7	1,336.8	1,339.7	1,335.1	1,337.3	1,340.0	1,343.3	1,344.4	1,337.5
Indiana	683.7	684.7	682.7	682.7	682.9	681.9	676.9	682.0	683.8	684.6	684.7	684.3	685.6
Iowa	345.3	344.4	344.5	348.7	348.5	347.7	347.8	348.0	348.5	349.5	350.2	350.0	349.4
Kansas	310.8	311.8	311.3	313.3	313.6	314.4	314.7	316.1	316.4	317.3	318.6	318.6	319.3
Kentucky	409.0	411.8	409.7	410.2	414.4	416.1	418.2	416.4	415.6	417.4	419.0	417.2	416.5
Louisiana	430.1	430.6	429.6	433.1	434.7	436.2	434.7	436.8	436.7	436.0	438.1	437.3	439.4
Maine	140.2	140.6	141.2	141.7	142.8	142.4	140.4	139.9	140.8	141.0	140.6	141.2	141.6
Maryland	533.4	534.1	533.6	536.2	539.1	539.1	543.2	541.0	541.6	538.9	539.4	539.2	539.6
Massachusetts	709.9	713.4	715.6	717.4	722.0	723.6	727.4	729.4	728.6	728.6	732.1	729.1	729.9
Michigan	1,049.1	1,047.2	1,048.6	1,049.7	1,049.9	1,050.9	1,050.2	1,056.0	1,055.3	1,059.1	1,066.6	1,061.8	1,061.9
Minnesota	602.6	603.6	603.6	605.0	607.0	608.6	605.1	605.5	606.2	604.1	608.0	610.5	616.0
Mississippi	237.7	238.5	238.5	238.2	238.0	237.8	238.7	238.6	238.1	239.9	239.6	238.5	240.7
Missouri	623.4	623.3	624.2	625.0	625.4	626.4	625.4	626.5	628.4	631.5	632.8	632.7	634.5
Montana	100.0	99.9	99.7	99.2	99.3	99.4	98.8	99.4	99.4	99.2	99.7	99.0	98.8
Nebraska	210.9	210.8	211.4	211.5	212.0	211.7	214.5	214.2	213.2	214.8	214.3	214.7	215.2
Nevada	179.8	180.4	181.1	181.6	182.4	183.1	183.1	184.3	185.9	186.2	186.6	186.7	187.5
New Hampshire	149.5	149.1	149.3	150.9	150.1	150.2	149.8	149.3	148.8	149.5	149.7	150.5	150.7
New Jersey	871.5	873.5	875.6	876.1	877.8	880.1	879.5	885.9	886.6	884.3	890.7	891.1	890.9
New Mexico	167.4	167.3	166.9	168.1	168.8	169.1	168.7	169.2	169.9	169.7	170.8	171.0	172.1
New York	1,642.5	1,645.8	1,646.6	1,646.6	1,651.6	1,655.5	1,654.3	1,650.1	1,654.3	1,657.3	1,660.4	1,662.6	1,665.8
North Carolina	842.5	840.6	841.2	839.8	845.1	840.5	841.8	846.6	847.2	847.1	845.9	845.9	850.5
North Dakota	80.5	80.9	80.7	81.4	81.5	82.0	81.3	81.9	81.5	80.9	80.8	80.6	80.8
Ohio	1,308.0	1,311.2	1,313.3	1,314.6	1,318.5	1,321.3	1,317.1	1,317.6	1,318.1	1,316.5	1,318.7	1,320.5	1,317.6
Oklahoma	323.4	324.2	323.6	324.4	326.6	327.3	326.4	327.0	327.9	328.3	328.3	327.7	327.4
Oregon	378.7	378.8	378.0	380.9	381.9	384.8	383.0	384.5	387.0	386.5	388.1	387.0	388.6
Pennsylvania	1,214.4	1,216.2	1,220.6	1,222.6	1,223.9	1,228.0	1,216.7	1,221.3	1,224.1	1,227.9	1,230.4	1,229.9	1,229.3
Rhode Island	98.4	98.4	98.7	98.8	98.7	98.6	98.5	99.2	99.0	98.6	99.1	98.8	98.2
South Carolina	413.2	413.3	414.2	415.8	426.5	427.6	430.0	431.0	433.2	436.2	437.7	439.8	440.9
South Dakota	88.5	88.9	88.0	88.2	88.3	88.1	87.2	87.5	87.3	87.9	89.3	89.5	88.9
Tennessee	607.0	607.8	608.5	610.7	614.8	618.4	618.1	619.5	620.1	624.6	621.5	617.6	618.2
Texas	2,053.3	2,057.8	2,058.9	2,063.2	2,071.0	2,081.5	2,084.5	2,086.0	2,091.1	2,092.0	2,097.2	2,097.4	2,099.5
Utah	238.7	239.3	239.8	240.2	241.2	242.7	242.7	243.9	245.0	244.2	244.6	242.9	243.4
Vermont	65.4	65.0	65.0	65.0	65.1	65.3	64.8	65.0	65.4	65.2	65.5	65.9	65.8
Virginia	721.3	723.3	724.3	730.0	732.3	734.4	730.9	735.3	737.5	735.4	736.6	739.5	740.9
Washington	611.0	609.0	608.2	610.1	611.9	612.8	615.4	618.1	621.3	621.4	625.6	626.6	628.5
West Virginia	161.2	160.9	161.0	164.1	164.3	164.5	163.4	163.6	164.7	163.9	163.1	163.3	162.9
Wisconsin	605.2	608.9	607.4	607.8	608.5	609.5	608.6	611.7	613.4	613.0	615.3	614.5	616.2
Wyoming	52.3	52.1	51.9	52.5	52.3	52.3	52.5	51.9	52.3	52.4	52.3	52.5	52.4

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Finance, insurance, and real estate												
Alabama	84.7	84.7	84.7	84.9	84.9	85.1	85.1	85.3	85.6	85.8	86.2	86.4	86.4
Alaska	12.3	12.4	12.3	12.2	12.2	12.2	12.1	12.1	12.2	12.3	12.4	12.5	12.6
Arizona	127.3	127.6	128.0	129.2	130.0	130.3	130.5	131.4	132.4	132.9	133.4	134.7	135.4
Arkansas	44.1	44.2	44.2	44.3	44.4	44.5	44.3	44.4	44.8	44.8	44.8	44.7	44.5
California	759.3	760.0	761.2	763.5	764.7	765.1	765.8	769.9	772.7	776.1	780.0	782.2	785.7
Colorado	128.3	128.7	128.7	129.0	129.5	130.0	130.0	130.9	131.2	130.7	131.5	132.5	134.2
Connecticut	130.9	131.1	131.4	131.8	132.8	133.6	133.7	133.8	134.7	134.5	135.5	135.6	135.7
Delaware	47.3	47.6	48.3	48.5	48.2	48.6	48.4	48.6	48.9	49.5	49.7	49.3	49.4
District of Columbia	28.5	28.5	28.5	28.4	28.3	28.4	28.9	28.4	28.5	28.4	28.4	28.5	28.9
Florida	410.1	411.4	413.1	416.8	419.3	419.2	418.8	419.9	422.8	424.5	426.3	427.4	427.5
Georgia	187.0	188.5	189.2	190.6	190.8	191.7	191.8	192.8	193.8	194.5	195.1	195.3	194.9
Hawaii	36.1	36.1	36.0	35.9	35.8	35.7	35.6	35.3	35.3	35.3	35.1	34.9	35.1
Idaho	25.7	25.7	25.8	25.7	25.6	25.6	25.7	26.0	26.2	26.5	26.6	26.7	26.9
Illinois	399.1	400.9	401.0	402.9	404.3	405.2	406.3	406.5	406.8	407.9	409.2	410.4	412.1
Indiana	139.0	139.3	139.6	139.9	140.1	140.4	140.2	140.0	140.2	140.6	140.8	140.6	141.2
Iowa	79.5	79.6	79.8	80.5	80.7	80.9	81.3	81.0	81.1	81.3	81.8	81.9	81.8
Kansas	60.5	60.7	60.7	60.7	60.8	60.9	60.8	61.1	61.0	61.4	61.2	61.2	61.1
Kentucky	69.9	70.2	70.1	70.2	70.4	70.6	70.5	70.7	70.8	71.1	71.2	71.0	70.9
Louisiana	85.9	86.0	86.0	86.1	86.5	86.8	86.5	86.6	86.8	86.5	86.6	87.1	87.0
Maine	28.7	28.7	28.6	28.8	29.0	29.2	29.4	29.7	30.2	30.2	30.4	30.1	30.6
Maryland	130.4	130.7	130.8	130.7	130.9	131.3	131.5	131.8	131.1	131.9	132.3	132.8	132.7
Massachusetts	212.3	213.2	213.9	214.6	215.2	215.7	215.9	216.1	216.5	216.3	216.7	217.4	217.9
Michigan	205.5	204.9	205.7	206.2	206.6	207.1	207.9	208.9	209.4	209.7	209.0	207.9	208.4
Minnesota	146.2	146.4	146.7	147.9	148.5	149.1	149.2	149.8	149.9	150.9	151.3	151.4	152.4
Mississippi	41.4	40.6	40.8	41.1	41.1	41.1	41.2	41.5	41.3	41.5	41.5	41.5	41.6
Missouri	154.4	153.7	154.1	154.7	154.8	155.5	155.8	156.0	156.7	156.8	157.7	158.2	159.4
Montana	16.4	16.5	16.6	16.6	16.6	16.6	16.7	16.8	16.7	16.9	16.8	16.6	16.8
Nebraska	54.7	54.8	55.0	55.3	55.4	55.9	55.8	56.4	56.5	56.9	57.1	57.5	57.8
Nevada	40.4	40.4	40.5	40.9	41.1	41.2	41.4	41.5	41.7	41.8	42.2	42.6	42.7
New Hampshire	29.6	29.6	29.4	29.5	29.4	29.2	29.3	29.3	29.4	29.8	29.5	29.2	29.3
New Jersey	237.9	238.2	238.8	239.9	240.9	242.2	243.3	244.1	244.0	244.6	244.2	244.0	244.7
New Mexico	31.4	31.4	31.2	31.2	31.3	31.4	31.5	31.5	31.6	31.5	31.5	31.6	31.7
New York	720.3	720.7	721.3	721.3	721.5	722.1	721.3	724.1	725.8	726.3	727.6	728.7	730.1
North Carolina	167.6	168.0	168.3	168.5	168.9	169.3	170.6	172.5	173.4	173.0	174.2	174.8	175.2
North Dakota	14.9	14.9	14.9	15.0	15.0	15.2	15.3	15.4	15.3	15.4	15.4	15.5	15.7
Ohio	286.7	287.5	287.9	288.4	288.7	288.9	290.0	289.8	290.5	291.9	292.1	292.0	292.6
Oklahoma	69.3	69.3	69.5	69.9	70.2	70.2	70.3	70.5	70.7	70.9	71.1	71.0	71.3
Oregon	95.4	95.5	95.2	95.7	96.1	96.0	96.4	96.0	96.7	96.5	97.0	97.4	97.3
Pennsylvania	312.4	312.5	313.3	314.4	315.3	317.6	317.5	318.5	318.5	319.3	320.2	320.6	321.4
Rhode Island	26.7	26.6	26.6	26.6	26.7	26.6	26.9	27.0	26.8	27.0	27.2	27.7	27.4
South Carolina	75.1	75.2	75.2	75.3	75.3	75.8	76.0	76.6	76.9	77.6	78.1	78.5	78.9
South Dakota	21.1	21.1	21.2	21.4	21.6	21.7	21.7	21.6	21.6	21.7	22.0	22.3	22.2
Tennessee	120.7	120.8	121.6	122.0	121.7	121.7	123.4	123.5	123.2	122.7	122.8	122.8	122.9
Texas	465.2	466.7	467.9	469.0	469.7	471.2	473.5	475.6	477.4	478.5	479.8	481.8	483.4
Utah	52.8	52.9	53.2	53.6	54.0	53.9	53.7	53.8	53.7	53.7	53.5	54.1	54.3
Vermont	12.4	12.4	12.4	12.3	12.3	12.2	12.2	12.1	12.1	12.2	12.3	12.2	12.3
Virginia	168.1	168.1	167.6	168.6	169.1	169.5	170.6	170.7	170.7	170.6	171.1	170.9	172.5
Washington	129.2	129.6	129.8	130.3	130.4	131.0	131.5	132.0	132.5	133.7	134.5	134.4	135.4
West Virginia	28.3	28.3	28.3	28.5	28.5	28.6	28.4	28.3	28.4	28.4	28.2	28.1	28.0
Wisconsin	140.5	140.4	140.5	141.1	141.8	141.9	141.8	142.2	142.3	142.6	143.0	144.2	144.9
Wyoming	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.2	8.3

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Services												
Alabama	432.0	432.0	432.0	433.2	433.9	434.3	435.1	435.6	438.0	437.8	438.4	439.6	439.2
Alaska	65.6	65.8	66.0	66.1	66.1	66.0	66.5	67.0	67.1	67.4	67.8	67.4	68.0
Arizona	600.1	603.3	607.2	608.8	612.5	616.3	617.3	619.9	621.1	624.3	630.9	633.0	632.5
Arkansas	253.4	255.6	255.8	256.3	257.3	257.7	257.2	259.6	260.9	263.0	263.2	262.4	260.7
California	4,072.4	4,089.0	4,098.9	4,110.9	4,124.2	4,142.0	4,154.9	4,168.6	4,180.9	4,198.7	4,217.7	4,226.9	4,240.0
Colorado	602.2	600.3	606.7	608.7	610.4	610.8	609.5	607.4	609.8	609.0	617.0	620.6	620.9
Connecticut	495.4	500.8	500.7	503.5	506.4	508.7	506.6	506.9	505.4	509.3	509.0	512.9	510.9
Delaware	108.5	108.7	108.5	108.8	109.5	109.9	110.2	110.7	111.0	110.9	111.9	112.2	112.1
District of Columbia	267.7	265.6	267.6	267.0	266.0	266.6	266.0	266.3	266.5	265.7	266.2	268.7	269.6
Florida	2,279.2	2,291.8	2,302.2	2,311.0	2,321.5	2,330.5	2,337.5	2,347.9	2,363.5	2,370.1	2,389.7	2,403.3	2,420.1
Georgia	938.8	945.1	955.2	963.1	967.4	973.2	972.3	981.5	982.8	983.4	983.3	986.9	990.1
Hawaii	169.7	169.7	169.7	170.1	170.3	169.5	168.4	169.1	169.7	170.3	169.5	169.4	168.4
Idaho	124.9	123.7	121.7	124.0	123.9	123.9	121.8	121.4	121.5	121.2	121.4	121.7	121.7
Illinois	1,695.2	1,699.9	1,695.1	1,701.8	1,709.9	1,714.0	1,713.4	1,716.7	1,717.1	1,722.6	1,732.7	1,740.0	1,748.3
Indiana	683.5	686.3	689.0	691.2	696.7	700.7	691.3	692.1	693.1	699.4	702.9	697.5	696.2
Iowa	366.3	365.4	364.9	368.3	369.1	369.9	371.6	373.0	373.9	376.6	377.0	378.5	381.5
Kansas	318.4	319.8	321.4	323.2	324.1	325.0	324.9	325.8	326.9	329.5	329.1	330.3	331.5
Kentucky	426.2	429.0	429.7	430.7	431.7	433.3	432.0	432.3	434.5	437.5	441.5	442.8	441.9
Louisiana	501.3	500.2	502.5	503.8	504.6	506.0	507.4	507.7	511.0	511.6	512.6	515.2	516.0
Maine	158.0	158.5	159.2	159.7	160.5	160.7	160.6	161.6	162.0	162.4	163.2	163.0	164.3
Maryland	754.1	755.6	756.8	760.4	762.7	764.0	763.1	764.5	763.7	762.3	763.4	763.2	769.1
Massachusetts	1,106.6	1,109.6	1,113.4	1,117.6	1,121.6	1,126.1	1,119.3	1,126.2	1,133.6	1,140.3	1,148.0	1,147.1	1,150.9
Michigan	1,220.1	1,226.9	1,228.2	1,234.5	1,235.2	1,243.2	1,244.1	1,243.7	1,246.3	1,247.9	1,259.8	1,260.8	1,262.5
Minnesota	703.2	705.4	706.1	706.8	708.9	710.5	708.1	714.6	716.3	718.2	724.9	729.3	729.3
Mississippi	258.7	259.9	261.0	261.1	261.5	261.3	262.7	263.7	263.7	263.8	265.3	264.9	264.1
Missouri	737.5	738.2	738.6	740.3	744.3	746.5	746.2	747.0	740.7	742.1	749.0	744.1	748.0
Montana	105.5	105.6	105.5	105.9	106.0	106.6	106.1	107.1	107.0	107.1	107.5	107.8	107.7
Nebraska	230.0	230.6	232.0	232.8	233.4	233.3	234.3	236.8	235.6	236.1	236.4	236.4	238.1
Nevada	381.8	383.2	385.1	386.1	386.7	387.2	386.5	389.6	390.0	392.2	392.3	393.1	394.2
New Hampshire	166.4	166.1	164.9	166.1	166.0	165.7	165.2	165.3	164.0	164.2	165.7	167.4	167.1
New Jersey	1,176.4	1,180.2	1,182.7	1,187.1	1,192.9	1,195.1	1,194.6	1,198.2	1,203.7	1,206.3	1,212.5	1,217.7	1,218.2
New Mexico	194.9	195.2	196.0	197.2	197.4	197.2	196.8	197.7	197.7	197.7	198.5	199.8	199.1
New York	2,698.1	2,705.8	2,713.2	2,722.0	2,729.4	2,736.5	2,734.3	2,750.1	2,759.4	2,769.0	2,774.6	2,777.9	2,785.3
North Carolina	878.2	882.1	886.5	891.3	896.2	899.5	899.8	904.2	905.4	909.5	916.3	916.7	907.1
North Dakota	87.5	87.1	87.1	87.2	87.5	87.8	88.4	89.1	89.0	89.1	89.4	89.1	89.1
Ohio	1,473.2	1,477.1	1,478.5	1,481.9	1,485.0	1,484.7	1,497.6	1,494.3	1,500.5	1,501.6	1,510.4	1,511.6	1,513.8
Oklahoma	378.7	380.7	382.0	381.7	382.6	383.0	382.9	385.2	386.2	389.7	394.2	393.1	392.8
Oregon	403.7	403.8	404.2	404.5	404.2	408.7	412.0	412.9	412.7	414.7	413.9	415.6	415.7
Pennsylvania	1,710.8	1,717.2	1,719.8	1,721.6	1,728.8	1,732.9	1,739.0	1,733.9	1,732.6	1,733.4	1,733.4	1,738.1	1,743.2
Rhode Island	151.2	151.7	152.3	152.5	152.3	152.1	151.9	151.7	151.6	152.2	152.6	151.4	151.6
South Carolina	396.3	399.1	398.5	398.6	400.2	401.4	409.3	410.9	413.0	415.4	416.3	417.9	418.8
South Dakota	92.7	92.7	92.8	92.7	92.2	92.5	92.9	94.4	94.5	95.0	95.6	94.4	95.0
Tennessee	687.7	689.3	688.2	690.6	692.6	691.1	699.0	698.7	700.4	696.6	700.0	698.7	702.5
Texas	2,401.8	2,419.1	2,425.1	2,436.5	2,447.2	2,457.1	2,448.9	2,473.4	2,479.6	2,492.8	2,498.8	2,506.9	2,512.4
Utah	270.0	271.7	272.5	273.6	275.6	276.4	277.7	277.1	279.1	278.7	279.5	279.8	278.0
Vermont	83.8	84.1	84.0	84.0	84.3	84.7	83.9	84.2	84.4	84.8	85.9	85.9	85.7
Virginia	976.8	981.3	984.9	989.3	991.9	999.2	1,004.5	1,007.8	1,014.7	1,018.1	1,024.6	1,028.3	1,032.7
Washington	677.5	680.2	680.8	683.3	686.6	689.4	689.5	695.6	698.8	704.6	709.5	710.2	711.9
West Virginia	199.3	199.8	200.6	202.8	202.9	202.5	202.5	203.4	203.7	202.7	203.5	204.4	205.9
Wisconsin	683.0	684.8	687.5	688.8	690.7	692.3	693.5	691.0	693.6	696.0	700.9	703.0	702.3
Wyoming	49.0	48.8	48.6	48.9	48.9	49.0	48.8	48.5	48.8	48.7	49.6	48.8	49.2

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

B-7. Employees on nonfarm payrolls by State and major industry, seasonally adjusted — Continued

(In thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
	Government												
Alabama	345.3	346.0	346.2	347.0	347.1	347.3	346.7	346.2	346.3	345.2	344.9	346.3	346.6
Alaska	73.5	73.0	72.8	72.9	73.3	73.5	73.1	73.3	73.2	73.6	73.4	73.1	73.5
Arizona	318.2	325.7	326.6	327.0	327.3	327.5	325.4	329.5	332.6	332.3	333.5	341.2	331.1
Arkansas	184.0	185.6	183.7	182.8	183.5	183.9	183.7	184.0	184.7	185.3	185.1	185.5	190.2
California	2,127.0	2,145.2	2,151.8	2,155.2	2,163.6	2,160.5	2,157.5	2,161.0	2,170.2	2,175.6	2,180.2	2,186.0	2,171.1
Colorado	315.6	315.3	318.4	316.2	316.2	317.0	318.2	317.8	318.0	318.3	320.7	318.9	320.7
Connecticut	223.5	224.2	225.2	225.3	225.6	226.3	225.8	227.0	226.8	226.2	225.3	226.0	225.1
Delaware	53.4	53.7	53.9	53.4	53.6	53.8	53.9	53.8	53.7	54.1	54.8	54.6	55.2
District of Columbia	235.1	232.9	231.4	229.9	229.3	228.6	230.0	227.9	227.2	228.8	229.1	226.7	218.9
Florida	938.8	942.2	944.4	944.8	949.3	950.5	956.9	953.2	951.3	949.1	954.2	954.6	964.2
Georgia	578.4	580.0	581.1	581.3	581.1	582.9	584.0	586.2	587.1	588.0	590.8	588.9	588.9
Hawaii	110.6	112.7	114.4	112.7	112.1	111.6	111.3	110.8	111.3	111.4	112.0	111.1	111.2
Idaho	99.7	100.1	99.7	99.7	99.6	99.4	101.1	101.4	102.1	102.1	101.4	101.5	102.7
Illinois	808.1	808.8	808.3	807.5	806.2	804.1	803.8	801.2	803.4	804.1	802.4	806.8	811.8
Indiana	393.4	392.1	393.0	389.4	386.1	390.4	395.2	391.0	389.9	391.4	396.1	395.8	385.4
Iowa	234.5	234.5	235.0	236.8	233.4	234.6	236.8	237.8	237.5	238.6	238.0	237.4	239.6
Kansas	235.8	235.2	234.7	237.0	235.2	237.8	239.4	239.0	239.7	238.8	241.2	239.3	240.9
Kentucky	291.5	291.1	290.3	290.2	291.0	291.1	294.1	292.5	294.3	293.1	291.1	294.1	293.8
Louisiana	361.9	364.5	365.3	365.9	366.5	365.2	365.4	367.0	367.0	367.4	367.9	369.3	364.5
Maine	92.9	92.9	92.9	93.1	92.8	93.0	91.6	93.0	92.5	92.1	91.4	92.6	92.3
Maryland	420.1	417.7	418.4	416.9	416.0	414.8	420.4	420.4	419.8	420.3	419.5	422.4	419.4
Massachusetts	407.2	407.5	407.3	406.9	407.3	409.0	408.5	409.3	407.7	408.8	409.8	411.8	408.0
Michigan	646.1	644.6	652.6	647.3	643.9	650.0	654.7	655.1	652.3	655.5	655.5	665.3	662.5
Minnesota	380.3	382.9	379.9	379.8	380.1	379.9	379.7	381.1	382.6	380.2	380.9	382.0	381.9
Mississippi	218.8	222.3	220.3	220.3	220.3	220.3	220.2	221.7	220.7	221.3	222.1	223.1	227.0
Missouri	414.6	415.7	415.6	415.4	414.1	416.4	416.4	418.3	415.3	416.5	419.1	427.9	416.0
Montana	76.5	76.7	77.0	77.3	77.3	77.9	77.0	77.0	77.6	77.8	79.0	78.3	78.6
Nebraska	153.6	153.3	152.3	153.3	153.9	154.0	152.8	153.6	152.7	153.3	152.0	151.2	151.6
Nevada	106.9	107.2	107.4	108.0	108.0	109.2	108.4	109.5	109.3	110.5	109.5	111.6	114.1
New Hampshire	79.5	78.8	77.8	78.2	78.4	75.6	77.8	78.4	77.9	79.5	79.1	78.7	81.3
New Jersey	568.8	568.3	575.9	570.7	570.0	570.5	570.0	569.6	568.4	566.6	567.2	565.9	561.7
New Mexico	178.8	178.4	177.8	178.0	178.2	178.6	178.3	179.1	177.6	177.4	179.4	179.9	179.9
New York	1,373.2	1,375.1	1,374.7	1,379.8	1,374.7	1,373.3	1,368.3	1,370.6	1,371.4	1,368.0	1,372.8	1,369.6	1,361.2
North Carolina	578.9	599.2	586.9	588.4	589.0	589.0	587.5	593.0	592.3	594.5	595.2	590.7	582.8
North Dakota	69.4	69.7	71.1	70.3	70.4	70.5	70.9	71.1	70.9	70.9	70.7	72.4	71.9
Ohio	764.3	764.2	763.0	760.5	761.4	760.9	763.4	760.6	761.7	762.7	766.3	765.0	773.2
Oklahoma	270.7	272.6	278.7	276.8	277.6	277.3	277.6	278.7	280.4	280.1	282.0	279.3	277.9
Oregon	248.7	251.2	251.7	252.1	248.9	253.9	254.7	255.6	256.3	256.3	257.7	258.2	257.1
Pennsylvania	711.6	713.5	715.2	713.7	712.7	713.8	717.8	712.2	711.2	712.6	712.4	697.2	700.3
Rhode Island	63.5	64.1	64.4	64.1	63.8	64.8	65.1	65.3	64.7	65.8	66.2	65.8	65.2
South Carolina	299.7	300.0	299.8	299.9	290.9	300.0	303.4	303.7	304.2	304.1	303.9	314.9	298.8
South Dakota	69.9	70.1	70.5	70.4	70.1	70.1	69.9	69.8	70.7	70.5	70.7	70.1	71.3
Tennessee	385.4	384.8	384.7	384.0	383.9	383.6	385.6	385.6	385.4	385.1	385.0	394.5	390.4
Texas	1,477.0	1,486.5	1,492.6	1,493.9	1,495.8	1,496.7	1,490.8	1,495.1	1,502.0	1,507.7	1,507.2	1,500.3	1,505.4
Utah	171.8	172.0	172.7	172.7	174.3	174.8	175.0	175.7	177.5	178.2	178.1	178.1	177.0
Vermont	45.6	45.4	45.4	45.5	45.4	45.7	45.4	45.6	45.4	45.4	44.8	45.5	44.6
Virginia	591.0	594.0	594.4	597.8	598.6	598.5	595.7	596.7	597.2	597.8	597.9	599.7	602.8
Washington	462.0	459.3	459.1	459.0	456.3	460.3	456.3	457.5	457.0	459.5	457.7	460.3	465.0
West Virginia	138.9	139.2	139.6	140.5	140.9	140.8	139.3	140.2	139.9	139.8	150.8	138.5	136.1
Wisconsin	383.2	385.2	385.8	387.9	387.7	388.7	390.0	391.3	390.0	392.5	391.8	391.1	391.2
Wyoming	59.9	60.3	57.3	57.0	56.9	57.1	56.9	57.0	57.3	57.5	57.8	57.4	59.7

¹ Includes mining, not shown separately.
² Mining is combined with construction.
P = preliminary.

NOTE: All data have been adjusted to March 1997 benchmarks and incorporate updated seasonal adjustment factors.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

B-8. Average weekly hours of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total private	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6	34.6
Goods-producing	41.3	41.3	41.3	41.2	41.4	41.6	41.4	41.0	40.8	41.1	41.0	41.1	41.1
Mining	45.6	45.1	45.2	45.2	44.9	45.4	44.4	43.8	44.1	44.6	43.8	44.9	44.0
Construction	38.8	39.1	38.9	38.2	39.0	39.8	39.2	38.5	38.7	38.6	38.4	39.2	39.1
Manufacturing	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7	41.7
<i>Overtime hours</i>	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.7	4.4
Durable goods	42.8	42.7	42.8	42.9	43.0	42.8	42.8	42.5	41.9	42.4	42.3	42.2	42.2
<i>Overtime hours</i>	5.1	5.0	5.1	5.2	5.2	5.2	5.1	5.0	4.6	4.8	4.8	4.8	4.6
Lumber and wood products	41.0	40.9	41.0	41.1	41.0	41.2	41.1	41.2	41.2	41.2	41.3	41.2	41.3
Furniture and fixtures	40.2	40.4	40.4	40.6	40.7	41.0	41.0	40.7	40.7	40.7	41.0	40.6	40.7
Stone, clay, and glass products	43.1	43.2	43.2	42.9	43.6	43.7	43.6	43.2	43.3	43.5	43.2	43.5	43.7
Primary metal industries	45.0	45.0	45.2	45.2	45.2	45.2	44.8	44.6	43.9	44.5	44.4	43.7	43.8
Blast furnaces and basic steel products	45.1	45.0	45.4	45.3	45.4	46.0	45.4	45.3	44.9	45.6	45.1	43.8	44.1
Fabricated metal products	42.5	42.5	42.6	42.7	42.9	42.7	42.7	42.4	41.8	42.6	42.5	42.3	42.3
Industrial machinery and equipment	43.5	43.5	43.6	43.7	43.7	43.6	43.4	43.3	42.6	43.0	43.2	42.9	43.0
Electronic and other electrical equipment	41.9	41.8	41.9	42.0	42.0	41.8	41.9	41.4	41.1	41.4	41.4	41.4	41.7
Transportation equipment	44.4	44.0	44.3	44.1	44.5	43.9	43.8	43.4	42.1	43.3	42.7	42.6	42.4
Motor vehicles and equipment	44.9	44.3	44.6	44.5	44.9	43.9	43.8	43.5	42.0	43.3	42.4	41.9	41.8
Instruments and related products	42.2	42.0	42.0	42.2	41.9	41.9	42.0	41.5	41.3	41.4	41.3	41.5	41.4
Miscellaneous manufacturing	40.2	40.3	40.4	40.5	40.6	40.4	40.4	40.5	40.1	40.0	40.0	40.0	39.9
Nondurable goods	40.7	40.8	40.9	41.0	41.0	41.1	40.9	40.8	40.7	41.0	40.9	41.0	40.9
<i>Overtime hours</i>	4.3	4.3	4.4	4.5	4.4	4.4	4.4	4.4	4.2	4.4	4.4	4.4	4.3
Food and kindred products	41.2	41.2	41.3	41.5	41.6	41.8	41.5	41.5	41.3	41.8	41.7	42.1	41.8
Tobacco products	38.0	38.2	39.1	39.0	38.8	38.3	38.5	37.7	38.2	39.3	39.0	40.5	39.7
Textile mill products	41.3	41.5	41.5	41.5	41.7	41.8	41.5	41.2	41.0	41.3	41.1	41.0	40.9
Apparel and other textile products	37.1	37.3	37.3	37.2	37.5	37.4	37.4	37.2	37.7	37.4	37.4	37.3	37.4
Paper and allied products	43.5	43.6	43.7	44.0	43.7	43.6	43.4	43.4	43.0	43.5	43.6	43.4	43.2
Printing and publishing	38.3	38.6	38.6	38.8	38.6	38.5	38.5	38.4	38.2	38.4	38.2	38.4	38.5
Chemicals and allied products	43.3	43.3	43.4	43.4	43.2	43.5	43.4	43.4	43.1	43.1	43.2	43.0	43.3
Petroleum and coal products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products	41.8	41.7	42.1	42.0	42.1	42.0	41.8	41.5	41.7	42.1	42.0	42.1	41.6
Leather and leather products	38.1	38.4	38.3	38.2	38.4	38.3	38.8	37.9	37.3	37.3	37.6	36.6	37.8
Service-producing	32.9	32.8	32.9	32.9	32.9	33.0	33.0	32.8	32.9	33.0	32.9	33.0	32.9
Transportation and public utilities	40.1	39.9	39.8	39.9	39.9	40.0	39.9	39.8	39.6	39.8	39.5	39.6	39.6
Wholesale trade	38.4	38.4	38.4	38.5	38.3	38.5	38.5	38.3	38.3	38.5	38.2	38.4	38.4
Retail trade	29.0	28.9	29.0	29.0	28.9	29.0	29.0	28.9	29.0	29.1	29.0	29.1	29.0
Finance, insurance, and real estate	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Services	32.7	32.6	32.6	32.7	32.7	32.8	32.7	32.6	32.6	32.7	32.7	32.7	32.7

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, which are small relative to the trend-cycle and irregular

components, cannot be separated with sufficient precision.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

B-9. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted

(1982=100)

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total private	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2	145.3
Goods-producing	114.4	114.6	114.9	114.9	116.0	117.1	116.4	115.1	114.9	115.3	114.9	114.2	114.6
Mining	58.1	57.6	57.8	57.9	57.5	58.3	57.0	55.6	55.4	56.0	54.7	55.6	54.0
Construction	155.7	157.1	156.3	154.4	159.3	165.0	162.4	158.7	161.5	160.5	160.5	164.4	164.1
Manufacturing	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.7	109.4	109.0	107.3	107.9
Durable goods	113.0	112.8	113.5	113.9	114.6	114.6	114.5	113.7	112.2	113.1	112.7	110.0	111.7
Lumber and wood products	141.6	141.2	141.8	142.3	142.6	143.8	143.4	143.6	143.8	143.8	143.7	143.8	144.3
Furniture and fixtures	128.0	128.6	128.9	130.2	131.1	132.8	133.1	132.7	133.7	134.0	134.4	134.0	133.4
Stone, clay, and glass products	112.3	112.6	113.1	112.6	114.9	116.5	116.2	113.9	114.1	114.7	114.4	115.4	116.2
Primary metal industries	95.2	95.4	95.8	95.9	96.3	96.6	95.8	95.5	93.7	94.6	94.4	91.1	93.1
Blast furnaces and basic steel products	73.3	73.5	73.8	74.0	73.8	75.6	74.6	74.4	73.4	74.5	73.7	71.6	72.0
Fabricated metal products	117.8	117.9	118.5	119.0	119.9	119.8	120.1	119.1	117.5	119.2	118.4	116.9	117.2
Industrial machinery and equipment	109.8	109.9	110.9	111.4	111.7	111.7	111.3	111.1	109.1	110.1	110.9	109.4	109.7
Electronic and other electrical equipment	111.3	111.3	111.9	112.4	113.0	112.8	112.8	111.3	110.1	110.7	110.3	108.8	109.3
Transportation equipment	130.5	128.7	130.2	131.0	131.8	130.0	130.1	128.7	124.6	127.0	124.7	113.2	122.2
Motor vehicles and equipment	171.6	167.6	169.2	169.9	171.2	166.8	166.6	164.6	158.9	161.8	157.2	131.7	151.7
Instruments and related products	76.7	76.7	76.7	77.0	76.9	77.4	77.6	76.8	76.6	76.6	76.1	76.5	76.1
Miscellaneous manufacturing	103.7	103.2	103.4	102.9	103.9	103.8	103.8	104.1	103.4	102.0	101.6	102.0	101.0
Nondurable goods	103.9	104.3	104.6	104.9	105.1	105.2	104.6	104.3	104.0	104.4	104.0	103.5	102.6
Food and kindred products	115.9	116.4	116.8	117.8	118.4	119.2	118.5	118.5	118.3	119.9	119.3	119.1	117.6
Tobacco products	56.5	58.6	62.0	63.7	61.5	60.7	61.0	59.7	62.5	62.3	59.9	60.2	59.0
Textile mill products	88.9	89.5	89.7	89.3	89.9	89.6	88.6	87.8	87.4	87.7	86.9	85.5	84.5
Apparel and other textile products	73.0	72.8	72.6	72.0	72.2	71.6	70.8	70.2	70.0	68.8	68.5	68.1	66.3
Paper and allied products	110.3	110.8	111.2	112.2	111.6	111.6	111.1	111.1	109.9	110.7	110.5	109.2	109.1
Printing and publishing	125.5	126.2	126.5	127.2	126.7	126.3	126.0	125.3	124.7	125.6	125.0	125.3	125.4
Chemicals and allied products	100.8	101.4	102.0	102.1	102.0	103.1	103.2	103.4	102.7	102.8	103.1	102.8	102.6
Petroleum and coal products	75.6	75.0	74.0	74.4	74.2	75.0	71.9	73.6	73.1	73.9	73.1	75.1	72.2
Rubber and misc. plastics products	146.0	146.0	147.4	147.2	148.2	148.4	147.9	147.2	148.1	148.9	148.4	147.0	146.8
Leather and leather products	39.2	39.5	39.4	38.7	38.9	38.3	38.7	37.3	36.7	36.1	35.8	34.9	35.4
Service-producing	154.0	154.5	155.0	155.9	156.0	156.9	157.0	156.7	157.0	158.2	158.2	159.1	159.1
Transportation and public utilities	127.5	131.2	130.9	131.1	131.0	131.5	131.1	130.9	130.2	131.5	130.5	131.4	132.4
Wholesale trade	126.4	126.4	126.7	127.2	126.9	128.0	128.2	127.6	127.9	128.8	127.9	128.8	128.6
Retail trade	138.4	138.1	138.9	139.4	139.2	139.8	139.9	139.3	139.8	141.1	140.7	141.9	141.3
Finance, insurance, and real estate	129.8	129.3	130.2	131.5	130.9	132.5	133.4	133.6	134.2	134.9	134.8	136.0	136.2
Services	187.9	188.4	189.0	190.3	191.0	192.1	192.0	191.9	192.3	193.7	194.5	195.0	195.3

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 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
ALL-EMPLOYEE HOURS
SEASONALLY ADJUSTED**

B-10. Hours of wage and salary workers on nonfarm payrolls by major industry, seasonally adjusted

Industry	Millions of hours (annual rate) ¹			Percent change		
	June 1998 ^r	July 1998 ^r	Aug. 1998 ^P	Aug. 1997 to Aug. 1998 ^P	June 1998 to July 1998 ^r	July 1998 To Aug. 1998 ^P
Total	230,093	230,968	232,076	2.5	0.4	0.5
Private sector	192,996	193,737	194,145	2.7	.4	.2
Mining	1,313	1,327	1,300	-7.1	1.1	-2.0
Construction	11,873	12,163	12,165	5.8	2.4	.0
Manufacturing	40,780	40,305	40,505	-.4	-1.2	.5
Durable goods	24,489	24,060	24,341	-.3	-1.8	1.2
Nondurable goods	16,291	16,245	16,165	-.7	-.3	-.5
Transportation and public utilities	13,503	13,516	13,611	3.4	.1	.7
Wholesale trade	13,549	13,628	13,650	2.5	.6	.2
Retail trade	33,852	34,115	34,022	2.3	.8	-.3
Finance, insurance, and real estate	13,796	13,950	13,989	4.3	1.1	.3
Services	64,330	64,733	64,903	4.1	.6	.3
Government	37,098	37,231	37,931	1.6	.4	1.9

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

^P = preliminary.

^r = revised.

NOTE: Data refer to hours of all employees—production workers, nonsupervisory workers, and salaried workers—and are based

largely on establishment data. See *BLS Handbook of Methods*, BLS Bulletin 2490, chapter 10, "Productivity Measures: Business Sector and Major Subsectors".

SOURCE: Office of Productivity and Technology (202—606-5606). Historical data for this series also are available on the Internet at the following address: <ftp://ftp.bls.gov/pub/special.requests/opt/tableb10>

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

B-11. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry, seasonally adjusted

Industry	1997					1998							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Average hourly earnings													
Total private (in current dollars)	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79	\$12.86
Goods-producing	13.95	13.98	14.05	14.10	14.15	14.16	14.21	14.25	14.25	14.27	14.28	14.31	14.41
Mining	16.16	16.24	16.37	16.48	16.46	16.47	16.76	16.82	16.72	16.77	16.73	16.84	17.09
Construction	16.06	16.10	16.17	16.24	16.34	16.27	16.34	16.40	16.45	16.46	16.51	16.64	16.69
Manufacturing	13.20	13.22	13.30	13.34	13.37	13.38	13.42	13.46	13.44	13.47	13.46	13.43	13.54
Excluding overtime²	12.49	12.50	12.58	12.61	12.63	12.66	12.69	12.73	12.76	12.78	12.76	12.72	12.84
Service-producing	11.80	11.83	11.88	11.93	11.95	12.00	12.06	12.10	12.19	12.23	12.26	12.30	12.36
Transportation and public utilities	15.02	15.01	15.05	15.10	15.16	15.21	15.25	15.27	15.32	15.31	15.29	15.36	15.34
Wholesale trade	13.56	13.54	13.63	13.72	13.71	13.75	13.81	13.84	13.88	14.00	13.98	14.07	14.15
Retail trade	8.37	8.42	8.46	8.49	8.51	8.56	8.59	8.64	8.70	8.72	8.73	8.78	8.82
Finance, insurance, and real estate	13.51	13.53	13.60	13.65	13.66	13.72	13.83	13.85	14.00	14.03	14.07	14.09	14.19
Services	12.35	12.38	12.43	12.48	12.50	12.54	12.60	12.65	12.76	12.81	12.87	12.90	12.96
Total private (in constant (1982) dollars) ³	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.74	7.73	7.75	7.75	(4)
Goods-producing	8.56	8.56	8.59	8.61	8.64	8.64	8.68	8.70	8.68	8.67	8.67	8.67	(4)
Service-producing	7.24	7.24	7.26	7.29	7.30	7.33	7.36	7.39	7.43	7.43	7.44	7.45	(4)
Average weekly earnings													
Total private (in current dollars)	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53	444.96
Goods-producing	576.14	577.37	580.27	580.92	585.81	589.06	588.29	584.25	581.40	586.50	585.48	588.14	592.25
Mining	736.90	732.42	739.92	744.90	739.05	747.74	744.14	736.72	737.35	747.94	732.77	756.12	751.96
Construction	623.13	629.51	629.01	620.37	637.26	647.55	640.53	631.40	636.62	635.36	633.98	652.29	652.58
Manufacturing	553.08	553.92	558.60	561.61	564.21	563.30	563.64	562.63	556.42	563.05	562.63	560.03	564.62
Service-producing	388.22	388.02	390.85	392.50	393.16	396.00	397.98	396.88	401.05	403.59	403.35	405.90	406.64
Transportation and public utilities	602.30	598.90	598.99	602.49	604.88	608.40	608.48	607.75	606.67	609.34	603.96	608.26	607.46
Wholesale trade	520.70	519.94	523.39	528.22	525.09	529.38	531.69	530.07	531.60	539.00	534.04	540.29	543.36
Retail trade	242.73	243.34	245.34	246.21	245.94	248.24	249.11	249.70	252.30	253.75	253.17	255.50	255.78
Finance, insurance, and real estate	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Services	403.85	403.59	405.22	408.10	408.75	411.31	412.02	412.39	415.98	418.89	420.85	421.83	423.79
Total private (in constant (1982) dollars) ³	262.86	262.09	262.89	264.33	264.80	266.42	266.71	266.95	267.00	268.37	268.06	268.20	(4)
Goods-producing	353.68	353.56	354.69	354.87	357.64	359.62	359.15	356.90	354.30	356.32	355.48	356.45	(4)
Service-producing	238.32	237.61	238.91	239.77	240.02	241.76	242.97	242.44	244.39	245.19	244.90	246.00	(4)

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

² Derived by assuming that overtime hours are paid at the rate of time and one-half.

³ The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

⁴ Not available.

⁵ This series is not computed because the average weekly hours component is not available on a seasonally adjusted basis.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Total		122,660	122,711	126,873	125,795	125,998	-	-	-	-	-
Total private		104,125	104,292	106,982	106,994	107,308	85,480	85,568	87,669	87,659	87,882
Mining		603	602	585	583	581	457	456	445	444	441
Metal mining	10	55.1	54.8	51.7	51.4	51.4	42.3	41.9	39.4	39.2	-
Iron ores	101	8.5	8.7	8.7	8.6	-	7.0	7.2	7.2	7.1	-
Copper ores	102	16.2	16.1	15.1	15.1	-	12.2	12.1	11.3	11.2	-
Coal mining	12	96.0	95.5	91.2	89.4	88.5	78.7	78.1	74.4	73.6	-
Bituminous coal and lignite mining	122	90.2	89.9	85.5	83.7	-	73.8	73.3	69.5	68.6	-
Oil and gas extraction	13	339.9	340.0	331.0	330.6	328.5	250.3	250.8	245.7	245.5	-
Crude petroleum and natural gas	131	143.7	143.2	136.8	136.7	-	82.9	83.0	81.0	80.9	-
Oil and gas field services	138	191.0	191.6	189.1	189.0	-	163.2	163.6	160.3	160.2	-
Nonmetallic minerals, except fuels	14	112.1	112.0	111.4	111.8	112.1	85.5	85.6	85.0	85.3	-
Crushed and broken stone	142	43.1	42.9	42.6	42.8	-	33.8	33.8	33.3	33.5	-
Sand and gravel	144	38.2	38.3	37.9	38.5	-	-	-	-	-	-
Chemical and fertilizer minerals	147	11.7	11.7	11.7	11.5	-	-	-	-	-	-
Construction		6,005	6,039	6,175	6,301	6,335	4,706	4,740	4,812	4,929	4,956
General building contractors	15	1,377.7	1,379.9	1,442.2	1,471.3	1,473.9	983.5	986.8	1,018.4	1,043.2	-
Residential building construction	152	715.6	716.5	762.5	774.1	-	492.8	495.1	522.1	531.5	-
Operative builders	153	28.0	28.0	29.0	29.9	-	11.6	11.5	11.6	12.0	-
Nonresidential building construction	154	634.1	635.4	650.7	667.3	-	479.1	480.2	484.7	499.7	-
Heavy construction, except building	16	855.6	865.8	878.3	895.3	904.5	721.1	731.1	742.3	757.4	-
Highway and street construction	161	286.0	289.2	285.8	296.0	-	240.2	243.2	238.6	248.7	-
Heavy construction, except highway	162	569.6	576.6	592.5	599.3	-	480.9	487.9	503.7	508.7	-
Special trade contractors	17	3,771.5	3,793.4	3,854.0	3,934.7	3,956.1	3,001.0	3,022.2	3,051.6	3,128.8	-
Plumbing, heating, and air conditioning	171	818.9	818.0	826.4	841.5	-	609.9	608.8	607.5	622.8	-
Painting and paper hanging	172	220.1	221.8	218.4	224.1	-	185.5	186.7	183.3	188.8	-
Electrical work	173	700.1	705.7	726.4	742.1	-	555.7	561.1	574.4	588.4	-
Masonry, stonework, and plastering	174	489.4	494.3	515.5	526.9	-	423.3	427.9	447.2	458.3	-
Carpentry and floor work	175	267.6	268.3	272.5	283.6	-	207.7	208.6	207.0	217.3	-
Roofing, siding, and sheet metal work	176	259.4	261.3	257.7	267.9	-	209.4	211.7	206.1	216.1	-
Manufacturing		18,596	18,796	18,872	18,552	18,780	12,810	13,005	13,014	12,698	12,916
Durable goods		10,934	11,046	11,205	10,931	11,105	7,472	7,579	7,681	7,417	7,579
Lumber and wood products	24	802.8	809.5	811.3	814.1	818.6	660.9	667.2	667.7	670.8	674.6
Logging	241	84.6	86.0	79.6	81.5	-	67.6	69.2	62.7	65.2	-
Sawmills and planing mills	242	183.3	184.8	181.8	181.2	-	160.2	161.1	158.6	158.1	-
Sawmills and planing mills, general	2421	146.2	146.2	143.0	143.0	-	127.3	127.0	124.2	124.3	-
Hardwood dimension and flooring mills	2426	35.3	36.7	36.8	36.2	-	31.3	32.5	32.7	32.1	-
Millwork, plywood, and structural members	243	298.4	299.1	308.7	310.9	-	239.6	240.3	249.0	250.7	-
Millwork	2431	119.7	119.1	122.7	124.2	-	92.1	91.4	95.5	96.8	-
Wood kitchen cabinets	2434	82.0	82.2	86.1	86.4	-	66.3	66.6	69.9	70.2	-
Hardwood veneer and plywood	2435	27.8	28.6	29.2	28.3	-	23.5	24.4	24.8	23.9	-
Softwood veneer and plywood	2436	29.7	29.5	29.1	29.2	-	27.5	27.2	26.5	26.8	-
Wood containers	244	54.3	54.4	53.2	53.1	-	46.5	46.7	45.5	45.3	-
Wood buildings and mobile homes	245	93.5	95.6	97.7	97.9	-	75.0	76.9	78.2	78.5	-
Mobile homes	2451	69.9	72.1	74.2	74.5	-	58.7	60.8	62.2	62.6	-
Miscellaneous wood products	249	88.7	89.6	90.3	89.5	-	72.0	73.0	73.7	73.0	-
Furniture and fixtures	25	502.2	508.1	526.3	519.2	522.4	397.5	404.0	418.8	412.4	415.6
Household furniture	251	269.2	272.3	282.6	276.7	-	226.8	229.5	238.8	233.5	-
Wood household furniture	2511	123.0	123.5	126.6	124.6	-	106.8	107.2	109.3	107.8	-
Upholstered household furniture	2512	84.6	85.9	89.2	87.7	-	71.3	72.3	75.7	74.5	-
Metal household furniture	2514	16.8	17.4	19.8	17.4	-	13.5	14.1	16.5	14.1	-
Mattresses and bedsprings	2515	33.2	33.7	35.2	35.3	-	25.5	26.0	27.3	27.2	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Furniture and fixtures—Continued											
Office furniture	252	63.7	64.1	66.8	66.5	—	47.1	47.4	49.0	48.7	—
Public building and related furniture	253	41.4	43.6	45.8	44.3	—	32.3	34.5	35.9	34.5	—
Partitions and fixtures	254	87.9	88.4	89.9	90.2	—	65.1	66.4	67.2	67.4	—
Miscellaneous furniture and fixtures	259	40.0	39.7	41.2	41.5	—	26.2	26.2	27.9	28.3	—
Stone, clay, and glass products	32	561.0	564.0	573.2	570.0	575.2	438.4	441.5	448.2	445.0	450.5
Flat glass	321	16.6	16.8	16.7	15.8	—	13.2	13.5	13.4	12.2	—
Glass and glassware, pressed or blown	322	71.0	72.1	71.7	70.5	—	58.9	60.0	58.8	57.9	—
Glass containers	3221	26.1	25.9	25.9	25.7	—	23.4	23.3	22.9	22.8	—
Pressed and blown glass, nec	3229	44.9	46.2	45.8	44.8	—	35.5	36.7	35.9	35.1	—
Products of purchased glass	323	61.7	63.8	63.8	62.7	—	47.8	50.0	49.2	47.9	—
Cement, hydraulic	324	17.9	17.7	18.1	18.2	—	13.8	13.6	13.7	13.8	—
Structural clay products	325	34.2	34.5	33.5	33.3	—	26.8	26.7	26.0	25.8	—
Pottery and related products	326	39.5	39.1	38.3	37.4	—	31.2	30.8	29.9	29.1	—
Concrete, gypsum, and plaster products	327	226.2	226.1	230.7	232.4	—	174.8	175.0	178.9	180.5	—
Concrete block and brick	3271	19.1	19.0	18.7	19.2	—	12.3	12.4	11.9	12.3	—
Concrete products, nec	3272	74.6	74.9	76.0	76.7	—	56.8	57.1	58.5	59.4	—
Ready-mixed concrete	3273	114.6	114.3	117.9	118.2	—	91.5	91.4	94.2	94.4	—
Misc. nonmetallic mineral products	329	79.1	78.9	81.0	80.5	—	61.0	60.8	62.9	62.6	—
Abrasive products	3291	20.1	20.1	20.8	20.6	—	16.1	16.0	16.6	16.5	—
Asbestos products	3292	2.5	2.5	2.6	2.6	—	2.1	2.1	2.2	2.2	—
Mineral wool	3296	24.4	24.3	24.9	24.9	—	—	—	—	—	—
Primary metal industries	33	702.4	710.5	718.9	696.9	713.2	547.1	555.6	563.6	543.0	558.2
Blast furnaces and basic steel products	331	234.8	234.8	236.0	234.1	234.0	180.9	181.0	182.9	181.3	181.3
Blast furnaces and steel mills	3312	163.0	162.7	162.4	160.9	—	126.7	126.5	126.9	125.7	—
Steel pipe and tubes	3317	27.8	27.9	29.1	29.2	—	20.9	21.0	22.0	22.0	—
Iron and steel foundries	332	127.7	130.8	133.1	126.7	—	104.4	107.4	109.0	102.9	—
Gray and ductile iron foundries	3321	77.8	81.0	81.0	76.1	—	64.3	67.4	66.8	62.4	—
Malleable iron foundries	3322	4.7	4.7	4.8	4.2	—	3.6	3.6	3.7	3.0	—
Steel foundries, nec	3325	27.1	26.9	28.7	27.7	—	22.1	22.0	23.6	22.6	—
Primary nonferrous metals	333	39.4	39.5	38.9	38.8	—	30.2	30.3	30.3	30.3	—
Primary aluminum	3334	22.2	22.3	22.4	22.4	—	17.8	17.9	18.3	18.3	—
Nonferrous rolling and drawing	335	166.9	168.3	169.4	164.4	—	127.5	128.9	129.9	124.7	—
Copper rolling and drawing	3351	22.0	22.3	22.2	22.0	—	17.2	17.5	18.0	17.8	—
Aluminum sheet, plate, and foil	3353	21.5	21.2	21.1	21.0	—	15.9	15.7	15.7	15.7	—
Nonferrous wire drawing and insulating	3357	71.6	72.5	72.8	68.2	—	54.3	55.2	54.9	50.0	—
Nonferrous foundries (castings)	336	87.8	91.2	93.5	85.3	—	70.6	74.3	75.6	68.3	—
Aluminum foundries	3365	24.1	25.2	26.3	23.9	—	19.5	20.7	21.5	19.3	—
Fabricated metal products	34	1,457.4	1,478.2	1,497.0	1,463.3	1,483.0	1,094.6	1,115.0	1,128.6	1,097.3	1,115.6
Metal cans and shipping containers	341	38.0	38.0	37.1	36.6	—	32.6	32.3	31.3	31.1	—
Metal cans	3411	30.5	30.4	29.7	29.4	—	26.5	26.2	25.6	25.5	—
Cutlery, handtools, and hardware	342	123.0	125.4	126.9	123.9	—	93.2	95.6	97.5	94.5	—
Hand and edge tools, and blades and handsaws	3423,5	42.2	43.0	43.5	42.4	—	32.5	33.3	33.8	32.7	—
Hardware, nec	3429	68.1	69.3	70.3	68.5	—	51.4	52.6	53.8	51.9	—
Plumbing and heating, except electric	343	57.7	57.9	59.3	59.1	—	41.0	41.3	41.9	41.8	—
Plumbing fixture fittings and trim	3432	23.4	23.3	24.6	24.3	—	16.7	16.8	17.9	17.6	—
Heating equipment, except electric	3433	20.3	20.8	20.3	20.5	—	13.7	14.2	13.2	13.3	—
Fabricated structural metal products	344	452.0	453.8	458.2	457.1	—	331.3	332.9	335.3	334.8	—
Fabricated structural metal	3441	77.9	78.5	80.1	80.6	—	57.3	57.6	58.5	58.8	—
Metal doors, sash, and trim	3442	79.4	79.5	79.9	80.0	—	59.0	59.1	58.6	59.4	—
Fabricated plate work (boiler shops)	3443	100.4	100.7	100.0	98.2	—	72.2	72.4	72.2	71.1	—
Sheet metal work	3444	121.1	121.7	122.9	123.0	—	92.9	93.5	94.4	94.3	—
Architectural metal work	3446	30.6	30.5	31.8	31.9	—	22.0	22.1	23.3	23.4	—
Screw machine products, bolts, etc	345	102.4	104.3	108.5	105.8	—	80.2	81.7	85.0	82.6	—
Screw machine products	3451	52.8	54.2	56.8	55.0	—	42.9	43.9	46.3	44.7	—
Bolts, nuts, rivets, and washers	3452	49.6	50.1	51.7	50.8	—	37.3	37.8	38.7	37.9	—
Metal forgings and stampings	346	244.3	254.5	256.2	238.2	—	192.8	202.9	201.8	184.7	—
Iron and steel forgings	3462	31.6	32.3	33.8	33.4	—	24.1	24.7	25.9	25.5	—
Automotive stampings	3465	105.3	112.4	112.1	95.6	—	85.5	92.9	91.5	75.7	—
Metal stampings, nec	3469	94.6	96.8	96.8	95.8	—	73.7	75.6	74.1	73.3	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Fabricated metal products—Continued											
Metal services, nec	347	136.8	139.0	142.4	136.3	—	109.9	112.2	115.4	109.7	—
Plating and polishing	3471	83.7	85.0	86.2	83.4	—	68.0	69.5	70.5	68.2	—
Metal coating and allied services	3479	53.1	54.0	56.2	52.9	—	41.9	42.7	44.9	41.5	—
Ordnance and accessories, nec	348	42.6	42.5	40.5	40.0	—	22.5	22.9	23.1	22.8	—
Ammunition, except for small arms, nec	3483	22.7	22.7	21.4	21.3	—	9.6	9.9	9.8	9.7	—
Miscellaneous fabricated metal products	349	260.6	262.8	267.9	266.3	—	191.1	193.2	197.3	195.3	—
Valves and pipe fittings, nec	3494	25.8	25.7	25.2	25.1	—	19.0	19.2	18.4	18.3	—
Misc. fabricated wire products	3496	56.0	57.2	57.5	56.9	—	42.3	43.0	43.3	42.8	—
Industrial machinery and equipment	35	2,159.5	2,166.1	2,213.5	2,185.1	2,179.6	1,353.4	1,359.5	1,399.6	1,370.8	1,368.6
Engines and turbines	351	80.2	82.7	83.2	79.8	—	50.5	52.2	52.5	49.8	—
Turbines and turbine generator sets	3511	24.2	24.3	23.3	23.0	—	13.4	13.4	13.0	12.9	—
Internal combustion engines, nec	3519	56.0	58.4	59.9	56.8	—	37.1	38.8	39.5	36.9	—
Farm and garden machinery	352	102.6	102.0	105.6	98.7	—	73.9	73.5	76.2	69.4	—
Farm machinery and equipment	3523	77.6	77.5	79.4	77.1	—	55.9	55.9	57.4	54.8	—
Construction and related machinery	353	244.9	244.0	256.2	255.9	—	159.2	158.7	167.2	166.5	—
Construction machinery	3531	90.0	88.3	93.4	93.1	—	61.6	60.2	63.9	63.6	—
Mining machinery	3532	17.2	17.1	16.8	16.8	—	10.2	10.2	9.9	9.8	—
Oil and gas field machinery	3533	47.1	47.8	51.9	51.5	—	31.6	32.4	35.1	34.7	—
Conveyors and conveying equipment	3535	40.6	40.8	42.3	42.2	—	22.8	22.9	23.1	22.9	—
Industrial trucks and tractors	3537	31.2	31.3	32.2	32.6	—	21.5	21.6	22.4	22.6	—
Metalworking machinery	354	346.2	347.7	352.0	348.5	—	245.4	247.9	251.2	247.7	—
Machine tools, metal cutting types	3541	42.2	41.8	42.7	42.5	—	26.3	26.2	26.8	26.8	—
Machine tools, metal forming types	3542	17.9	17.9	18.3	17.9	—	11.3	11.3	11.4	11.2	—
Special dies, tools, jigs, and fixtures	3544	164.5	166.1	168.7	166.6	—	125.3	127.2	128.8	126.2	—
Machine tool accessories	3545	52.9	53.1	54.4	53.9	—	37.1	37.4	38.9	38.6	—
Power driven handtools	3546	21.5	21.4	20.7	20.7	—	15.0	15.0	14.7	14.7	—
Special industry machinery	355	179.1	180.2	184.5	182.6	—	99.0	99.3	99.2	97.8	—
Textile machinery	3552	14.6	14.7	15.4	15.0	—	9.8	9.8	10.0	9.7	—
Printing trades machinery	3555	22.6	22.5	23.6	23.4	—	12.8	12.8	13.3	13.2	—
Food products machinery	3556	25.2	25.0	24.8	24.7	—	14.8	14.6	14.8	14.7	—
General industrial machinery	356	260.8	263.0	267.6	265.7	—	165.1	167.6	170.9	168.1	—
Pumps and pumping equipment	3561	30.5	30.9	30.7	30.3	—	17.2	17.7	18.0	17.5	—
Ball and roller bearings	3562	39.0	39.9	41.3	40.6	—	30.1	31.1	31.9	31.0	—
Air and gas compressors	3563	26.2	26.4	27.0	26.9	—	15.2	15.3	15.3	15.1	—
Blowers and fans	3564	35.1	35.3	35.8	36.0	—	23.6	23.8	24.5	24.6	—
Speed changers, drives, and gears	3566	17.7	17.9	18.5	18.4	—	12.6	12.9	13.4	13.3	—
Power transmission equipment, nec	3568	21.8	21.8	22.5	22.2	—	15.1	15.2	15.8	15.6	—
Computer and office equipment	357	379.3	380.6	377.2	375.7	372.8	142.3	143.0	146.2	144.2	—
Electronic computers	3571	197.1	197.5	196.7	195.9	—	65.0	65.5	70.8	70.7	—
Computer terminals, calculators, and office machines, nec	3575,8,9	61.5	61.8	62.5	61.8	—	24.9	25.3	24.7	23.4	—
Refrigeration and service machinery	358	201.1	199.3	207.1	202.4	—	144.6	142.4	150.2	145.9	—
Refrigeration and heating equipment	3585	139.1	137.3	143.1	138.4	—	106.1	103.5	109.7	105.2	—
Misc. industrial and commercial machinery	359	365.3	366.6	380.1	375.8	—	273.4	274.9	286.0	281.4	—
Carburetors, pistons, rings, valves	3592	23.1	22.8	23.6	23.1	—	18.2	18.2	19.0	18.5	—
Scales, balances, and industrial machinery, nec	3596,9	295.1	296.5	307.3	303.4	—	226.0	227.4	236.2	232.2	—
Electronic and other electrical equipment	36	1,683.6	1,693.2	1,716.3	1,694.8	1,692.9	1,058.0	1,069.4	1,075.6	1,053.1	1,055.4
Electric distribution equipment	361	82.0	82.2	83.5	83.3	—	55.9	55.8	55.7	54.9	—
Transformers, except electronic	3612	38.5	38.7	39.1	38.8	—	27.1	26.8	25.8	25.1	—
Switchgear and switchboard apparatus	3613	43.5	43.5	44.4	44.5	—	28.8	29.0	29.9	29.8	—
Electrical industrial apparatus	362	153.6	151.8	154.9	151.8	—	106.6	105.5	107.9	105.1	—
Motors and generators	3621	75.6	74.7	77.0	74.6	—	58.5	57.9	59.7	57.5	—
Relays and industrial controls	3625	57.9	56.9	57.0	56.5	—	33.6	32.9	33.2	32.7	—
Household appliances	363	112.6	113.7	115.0	111.7	—	87.4	88.7	91.1	87.7	—
Household refrigerators and freezers	3632	22.7	22.5	23.5	23.5	—	16.8	17.1	18.6	18.7	—
Household laundry equipment	3633	16.4	17.1	17.7	17.5	—	12.8	13.5	14.2	14.1	—
Electric housewares and fans	3634	25.9	26.7	25.8	24.5	—	19.6	20.3	19.2	17.7	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Electronic and other electrical equipment—Continued											
Electric lighting and wiring equipment	364	178.5	180.2	183.6	181.9	—	127.2	128.9	130.5	129.0	—
Electric lamps	3641	21.6	21.8	21.0	21.2	—	16.7	16.9	16.1	16.4	—
Current-carrying wiring devices	3643	61.8	62.0	64.6	64.1	—	40.6	40.9	42.1	41.7	—
Noncurrent-carrying wiring devices	3644	17.9	18.0	18.0	17.8	—	13.5	13.6	13.4	13.4	—
Residential lighting fixtures	3645	20.4	21.1	21.3	20.2	—	14.8	15.6	16.1	15.0	—
Household audio and video equipment	365	77.5	78.1	77.8	77.3	—	49.6	50.3	50.2	49.2	—
Household audio and video equipment	3651	51.7	52.3	52.5	51.9	—	30.0	30.7	31.1	30.2	—
Communications equipment	366	278.1	277.6	281.2	279.4	—	131.5	131.3	129.5	126.5	—
Telephone and telegraph apparatus	3661	119.9	120.3	128.2	127.4	—	58.8	58.9	59.1	57.5	—
Electronic components and accessories	367	656.5	661.1	674.4	667.8	662.3	397.0	402.2	406.7	399.5	—
Electron tubes	3671	22.2	22.5	22.6	22.1	—	15.9	16.3	16.4	15.9	—
Semiconductors and related devices	3674	282.3	284.5	291.7	290.1	—	129.6	131.8	131.3	129.9	—
Electronic components, nec	3679	146.1	146.8	147.9	145.2	—	99.3	100.2	102.0	99.1	—
Misc. electrical equipment and supplies	369	144.8	148.5	145.9	141.6	—	102.8	106.7	104.0	101.2	—
Storage batteries	3691	26.0	26.9	25.3	25.0	—	19.8	20.7	19.5	19.2	—
Engine electrical equipment	3694	61.9	64.8	65.6	62.0	—	48.1	50.9	50.0	48.2	—
Transportation equipment	37	1,814.9	1,858.5	1,892.0	1,741.9	1,873.3	1,228.2	1,265.7	1,273.8	1,127.0	1,241.4
Motor vehicles and equipment	371	957.5	997.1	1,002.0	852.4	988.2	754.6	789.7	777.3	632.4	750.3
Motor vehicles and car bodies	3711	333.1	361.3	354.7	274.1	—	256.8	281.3	263.2	189.3	—
Truck and bus bodies	3713	41.6	41.4	42.9	40.9	—	32.9	33.0	34.0	32.2	—
Motor vehicle parts and accessories	3714	530.2	540.9	545.1	479.6	—	422.1	431.8	431.9	363.7	—
Truck trailers	3715	32.9	33.8	38.5	37.4	—	26.4	27.4	31.0	30.1	—
Aircraft and parts	372	503.0	506.7	523.7	524.0	522.7	252.1	255.6	264.6	263.5	—
Aircraft	3721	264.2	266.1	273.9	273.1	—	110.7	112.4	115.6	115.2	—
Aircraft engines and engine parts	3724	100.4	100.6	103.9	104.8	—	53.7	54.1	54.4	53.8	—
Aircraft parts and equipment, nec	3728	138.4	140.0	145.9	146.1	—	87.7	89.1	94.6	94.5	—
Ship and boat building and repairing	373	155.6	154.5	163.4	163.3	—	117.2	115.9	124.3	124.3	—
Ship building and repairing	3731	98.5	97.6	101.6	101.0	—	69.6	68.5	72.8	72.8	—
Boat building and repairing	3732	57.1	56.9	61.8	62.3	—	47.6	47.4	51.5	51.5	—
Railroad equipment	374	32.9	32.9	34.4	34.3	—	24.7	24.5	25.7	25.0	—
Guided missiles, space vehicles, and parts	376	90.8	90.8	90.4	89.8	—	24.3	24.2	24.4	24.1	—
Guided missiles and space vehicles	3761	62.8	62.9	62.8	62.6	—	15.3	15.3	15.4	15.3	—
Miscellaneous transportation equipment	379	52.3	53.2	55.4	55.2	—	38.3	38.6	41.2	41.0	—
Travel trailers and campers	3792	21.7	22.0	23.5	23.6	—	18.2	18.4	19.9	20.0	—
Instruments and related products	38	865.0	865.9	866.6	861.5	860.2	424.3	425.4	433.1	430.0	430.2
Search and navigation equipment	381	161.7	161.3	161.4	160.4	—	43.7	43.2	43.5	43.6	—
Measuring and controlling devices	382	299.3	300.1	302.6	301.8	—	152.5	153.4	155.1	153.9	—
Environmental controls	3822	40.8	41.8	40.7	40.2	—	27.3	28.2	27.8	27.4	—
Process control instruments	3823	65.9	65.7	66.3	65.7	—	33.6	33.6	33.9	33.6	—
Instruments to measure electricity	3825	76.2	75.9	77.7	77.8	—	32.3	32.2	32.4	31.9	—
Medical instruments and supplies	384	276.3	276.9	280.4	279.4	—	160.6	160.3	166.5	166.2	—
Surgical and medical instruments	3841	108.5	108.9	109.7	109.2	—	68.2	68.6	70.9	70.7	—
Surgical appliances and supplies	3842	94.5	94.5	97.6	96.9	—	58.1	57.8	60.8	60.1	—
Ophthalmic goods	385	34.9	35.5	37.1	36.8	—	21.0	21.9	25.6	25.6	—
Photographic equipment and supplies	386	85.0	84.2	77.5	76.7	—	40.1	40.0	36.1	35.5	—
Watches, clocks, watchcases, and parts	387	7.8	7.9	7.6	6.4	—	6.4	6.6	6.3	5.2	—
Miscellaneous manufacturing industries	39	385.2	391.8	389.4	384.6	386.8	269.1	275.2	272.1	267.4	269.2
Jewelry, silverware, and plated ware	391	47.5	48.7	48.6	48.2	—	32.5	33.5	33.5	32.9	—
Jewelry, precious metal	3911	35.7	36.4	36.5	36.4	—	24.0	24.7	24.7	24.3	—
Musical instruments	393	15.5	16.0	16.6	16.5	—	11.8	12.7	13.1	13.0	—
Toys and sporting goods	394	107.7	108.7	104.2	101.2	—	74.3	74.5	71.0	68.0	—
Dolls, games, toys, and children's vehicles	3942,4	36.1	37.5	33.8	33.2	—	23.7	24.9	21.3	20.7	—
Sporting and athletic goods, nec	3949	71.6	71.2	70.4	68.0	—	50.6	49.6	49.7	47.3	—
Pens, pencils, office, and art supplies	395	31.1	31.0	31.3	31.0	—	21.0	21.1	21.8	21.8	—
Costume jewelry and notions	396	23.0	24.1	23.3	22.6	—	15.8	16.9	16.6	16.0	—
Costume jewelry	3961	12.9	13.9	13.1	12.6	—	8.7	9.7	9.6	9.1	—
Miscellaneous manufactures	399	160.4	163.3	165.4	165.1	—	113.7	116.5	116.1	115.7	—
Signs and advertising specialties	3993	69.3	69.4	73.3	73.7	—	45.5	45.6	47.8	48.0	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods		7,662	7,750	7,667	7,621	7,675	5,338	5,426	5,333	5,281	5,337
Food and kindred products	20	1,715.5	1,758.4	1,703.9	1,728.0	1,766.2	1,275.1	1,318.7	1,262.9	1,280.9	1,318.3
Meat products	201	489.8	490.6	499.4	501.7	-	415.6	416.2	423.9	423.7	-
Meat packing plants	2011	148.7	149.3	153.8	154.0	-	123.5	124.5	127.6	127.6	-
Sausages and other prepared meats	2013	96.2	96.8	99.7	100.3	-	74.4	74.9	78.1	78.4	-
Poultry slaughtering and processing	2015	244.9	244.5	245.9	247.4	-	217.7	216.8	218.2	217.7	-
Dairy products	202	144.2	144.1	145.0	144.6	-	95.7	95.9	98.8	98.7	-
Cheese, natural and processed	2022	40.8	40.6	40.6	40.7	-	33.4	33.2	32.8	33.1	-
Fluid milk	2026	61.7	62.0	62.1	61.7	-	35.1	35.3	36.4	36.1	-
Preserved fruits and vegetables	203	252.8	286.8	227.6	246.0	-	214.8	249.5	191.3	207.9	-
Canned specialties	2032	17.9	19.7	18.1	17.7	-	13.9	15.9	14.2	13.8	-
Canned fruits and vegetables	2033	89.4	115.5	64.5	78.4	-	76.7	102.9	53.1	65.7	-
Frozen fruits and vegetables	2037	52.1	57.1	52.1	53.9	-	45.5	50.9	45.5	47.0	-
Grain mill products	204	124.4	125.3	124.8	123.9	-	88.8	89.4	88.0	87.1	-
Flour and other grain mill products	2041	19.0	19.1	19.2	19.4	-	11.7	11.8	11.6	11.7	-
Prepared feeds, nec	2048	38.9	39.8	39.9	39.9	-	25.0	25.7	25.4	25.5	-
Bakery products	205	206.4	206.7	208.7	208.0	-	138.6	139.4	141.4	140.3	-
Bread, cake, and related products	2051	147.1	147.2	151.5	152.1	-	89.4	89.6	92.9	93.0	-
Cookies, crackers, and frozen bakery products, except bread	2052.3	59.3	59.5	57.2	55.9	-	49.2	49.8	48.5	47.3	-
Sugar and confectionery products	206	89.0	95.7	93.0	92.7	-	68.9	75.3	71.6	71.2	-
Raw cane sugar	2061	2.5	4.3	4.6	3.4	-	1.8	3.1	3.3	2.3	-
Cane sugar refining	2062	4.4	4.3	4.1	4.1	-	3.3	3.2	3.0	3.1	-
Beet sugar	2063	6.7	6.7	7.1	7.1	-	5.7	5.7	6.0	6.0	-
Candy and other confectionery products	2064	50.0	54.4	51.8	52.3	-	39.4	44.0	40.3	40.4	-
Fats and oils	207	33.3	33.9	34.6	35.1	-	22.7	23.4	23.0	23.6	-
Beverages	208	184.6	184.7	185.5	186.6	-	89.2	89.9	90.6	89.9	-
Malt beverages	2082	34.3	34.3	34.0	34.0	-	21.9	21.9	21.4	21.3	-
Bottled and canned soft drinks	2086	97.1	96.3	97.9	98.4	-	40.3	39.9	40.9	40.1	-
Misc. food and kindred products	209	191.0	190.6	185.3	189.4	-	140.8	139.7	134.3	138.5	-
Tobacco products	21	38.0	40.7	36.7	36.5	39.7	28.1	30.9	27.3	27.0	30.8
Cigarettes	211	28.3	28.0	26.9	27.1	-	21.0	20.6	20.0	20.1	-
Textile mill products	22	611.6	616.2	603.0	590.3	590.3	517.5	521.4	512.4	498.7	498.5
Broadwoven fabric mills, cotton	221	71.7	71.8	69.8	67.1	-	63.8	64.0	62.4	59.9	-
Broadwoven fabric mills, synthetics	222	63.1	64.3	64.8	63.2	-	52.9	53.8	55.1	53.6	-
Broadwoven fabric mills, wool	223	14.3	14.0	13.3	12.8	-	12.1	11.8	11.2	10.3	-
Narrow fabric mills	224	20.6	21.6	20.9	20.0	-	17.0	17.9	17.2	16.3	-
Knitting mills	225	173.3	173.6	164.1	162.1	-	148.6	148.4	140.3	138.1	-
Women's hosiery, except socks	2251	19.7	19.6	17.4	17.2	-	17.3	17.2	15.2	14.9	-
Hosiery, nec	2252	38.4	38.6	37.0	36.8	-	33.5	33.6	32.3	32.2	-
Knit outerwear mills	2253	52.1	51.7	49.3	49.1	-	44.6	44.2	42.3	41.9	-
Knit underwear mills	2254	16.7	16.4	13.0	12.6	-	14.9	14.3	11.5	11.2	-
Welf knit fabric mills	2257	24.8	25.3	25.7	25.0	-	20.6	21.1	21.9	21.2	-
Textile finishing, except wool	226	65.6	66.4	63.5	61.1	-	53.2	53.9	52.1	50.2	-
Finishing plants, cotton	2261	30.9	31.0	28.7	27.7	-	25.0	25.0	23.5	22.7	-
Finishing plants, synthetics	2262	20.3	20.9	20.1	18.9	-	16.1	16.7	16.1	15.3	-
Carpets and rugs	227	63.2	63.9	66.5	65.2	-	52.1	52.9	55.7	53.5	-
Yarn and thread mills	228	85.7	85.9	85.4	84.8	-	75.6	75.9	75.8	75.0	-
Yarn spinning mills	2281	62.2	62.7	62.3	61.9	-	55.2	55.7	56.0	55.3	-
Throwing and winding mills	2282	16.5	16.2	16.4	16.4	-	14.1	13.9	13.9	13.9	-
Miscellaneous textile goods	229	54.1	54.7	54.7	54.0	-	42.2	42.8	42.6	41.8	-
Apparel and other textile products	23	806.4	824.5	783.1	759.1	760.1	655.8	671.4	630.1	607.9	607.8
Men's and boys' suits and coats	231	27.7	28.9	28.4	27.6	-	22.4	23.3	22.9	22.3	-
Men's and boys' furnishings	232	203.1	206.5	190.5	183.5	-	172.2	174.1	161.1	154.8	-
Men's and boys' shirts	2321	42.6	42.9	39.0	38.3	-	37.0	36.5	33.9	33.2	-
Men's and boys' trousers and slacks	2325	69.2	69.6	65.6	64.0	-	59.4	59.9	57.0	55.4	-
Men's and boys' work clothing	2326	28.8	30.5	28.9	28.2	-	24.4	26.2	25.0	24.2	-
Women's and misses' outerwear	233	243.9	252.2	235.1	230.4	-	196.0	204.2	185.2	181.4	-
Women's and misses' blouses and shirts	2331	22.9	23.0	20.4	20.1	-	17.8	17.8	15.7	15.4	-
Women's, juniors', and misses' dresses	2335	39.1	39.7	37.9	36.9	-	30.5	31.5	29.5	28.7	-
Women's and misses' suits and coats	2337	25.1	26.7	24.4	24.6	-	19.5	20.8	18.7	18.8	-
Women's and misses' outerwear, nec	2339	156.8	162.8	152.4	148.8	-	128.2	134.1	121.3	118.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	34.5	35.0	32.3	31.2	—	27.1	27.7	25.1	24.0	—
Women's and children's underwear	2341	25.0	25.4	23.4	22.4	—	20.2	20.6	18.5	17.3	—
Brassieres, girdles, and allied garments	2342	9.5	9.6	8.9	8.8	—	6.9	7.1	6.6	6.7	—
Girls' and children's outerwear	236	30.3	30.5	26.8	26.3	—	24.8	25.0	22.0	21.3	—
Girls' and children's dresses and blouses	2361	12.4	12.4	10.0	10.0	—	10.5	10.5	8.7	8.6	—
Misc. apparel and accessories	238	32.6	34.5	33.1	32.2	—	25.8	27.8	26.5	25.6	—
Misc. fabricated textile products	239	216.9	219.5	220.1	211.7	—	173.7	175.7	174.0	165.7	—
Curtains and draperies	2391	19.9	20.0	18.8	17.8	—	15.6	15.7	14.6	13.7	—
House furnishings, nec	2392	54.5	55.7	55.9	55.0	—	46.3	47.4	46.8	46.1	—
Automotive and apparel trimmings	2396	60.6	60.7	61.4	56.5	—	48.0	47.7	47.6	42.7	—
Paper and allied products	26	687.1	688.6	687.4	682.7	682.7	524.0	525.3	523.8	519.3	520.7
Paper mills	262	161.2	160.5	157.2	156.5	—	125.8	125.2	123.2	122.6	—
Paperboard mills	263	50.5	50.4	50.3	50.2	—	38.7	38.9	38.7	38.5	—
Paperboard containers and boxes	265	218.9	220.8	219.2	216.6	—	169.3	171.1	169.9	167.6	—
Corrugated and solid fiber boxes	2653	132.7	133.1	132.8	131.3	—	99.2	99.7	99.4	98.0	—
Sanitary food containers	2656	17.5	17.4	17.0	17.0	—	15.6	15.6	15.3	15.3	—
Folding paperboard boxes	2657	46.9	47.6	46.9	46.1	—	37.9	38.3	37.9	37.2	—
Misc. converted paper products	267	244.7	245.1	249.0	247.5	—	180.7	180.7	182.6	181.1	—
Paper, coated and laminated, nec	2672	47.6	47.7	48.9	48.7	—	24.9	24.6	25.2	25.0	—
Bags: plastics, laminated, and coated	2673	39.8	40.4	40.1	39.8	—	31.3	31.8	31.5	31.2	—
Envelopes	2677	25.0	25.2	25.3	25.2	—	19.5	19.7	19.5	19.4	—
Printing and publishing	27	1,555.9	1,554.7	1,572.2	1,570.8	1,567.7	849.2	848.3	847.5	844.9	843.9
Newspapers	271	442.5	442.5	444.8	444.4	—	147.7	147.7	147.6	146.5	—
Periodicals	272	137.2	136.9	139.9	140.8	—	46.7	47.3	44.5	44.8	—
Books	273	128.7	127.2	128.7	129.1	—	68.1	65.4	64.0	63.3	—
Book publishing	2731	90.5	88.9	89.9	89.8	—	37.9	35.1	33.4	32.3	—
Book printing	2732	38.2	38.3	38.8	39.3	—	30.2	30.3	30.6	31.0	—
Miscellaneous publishing	274	89.2	88.8	91.6	92.2	—	41.5	40.9	43.2	44.1	—
Commercial printing	275	570.4	571.4	579.5	576.5	—	407.8	409.5	412.7	410.1	—
Commercial printing, lithographic	2752	369.9	371.0	378.3	376.4	—	263.3	265.1	269.3	267.5	—
Commercial printing, nec	2759	180.9	180.8	182.2	181.0	—	129.1	128.7	128.8	127.8	—
Manifold business forms	276	42.7	42.7	42.6	42.5	—	29.9	30.1	29.7	29.5	—
Blankbooks and bookbinding	278	67.0	67.1	66.6	66.6	—	51.6	51.6	50.8	51.0	—
Printing trade services	279	49.7	49.6	49.7	49.3	—	33.9	33.8	33.4	33.3	—
Chemicals and allied products	28	1,035.8	1,037.0	1,043.7	1,043.3	1,042.6	570.2	573.2	586.8	584.5	583.6
Industrial inorganic chemicals	281	117.3	117.0	117.0	116.6	—	56.5	57.6	62.4	62.6	—
Industrial inorganic chemicals, nec	2819	71.0	70.7	70.4	70.3	—	35.3	35.4	35.8	36.0	—
Plastics materials and synthetics	282	158.1	158.5	155.6	154.4	—	105.2	105.3	103.0	101.9	—
Plastics materials and resins	2821	80.6	80.7	81.1	81.2	—	50.3	50.2	49.8	49.7	—
Organic fibers, noncellulosic	2824	44.8	45.1	44.1	42.9	—	34.7	35.0	34.9	33.7	—
Drugs	283	268.7	268.3	275.4	276.3	—	119.8	119.6	125.8	125.5	—
Pharmaceutical preparations	2834	211.6	211.5	218.5	219.4	—	96.5	96.3	101.9	101.7	—
Soap, cleaners, and toilet goods	284	155.7	157.8	157.3	158.6	—	95.5	97.2	97.7	98.4	—
Soap and other detergents	2841	42.1	42.2	41.7	41.7	—	22.5	22.6	22.7	22.5	—
Polishing, sanitation, and finishing preparations	2842,3	39.1	39.1	41.3	41.6	—	21.8	21.6	23.4	23.8	—
Toilet preparations	2844	74.5	76.5	74.3	75.3	—	51.2	53.0	51.6	52.1	—
Paints and allied products	285	52.4	52.3	52.8	53.1	—	28.0	27.9	27.9	28.0	—
Industrial organic chemicals	286	138.8	138.3	138.5	138.9	—	78.0	78.1	80.8	80.5	—
Cyclic crudes and intermediates	2865	23.2	23.1	23.4	23.3	—	13.9	14.0	14.2	14.1	—
Industrial organic chemicals, nec	2869	113.1	112.7	112.6	113.1	—	62.2	62.2	64.8	64.6	—
Agricultural chemicals	287	50.9	50.4	51.7	51.0	—	30.8	30.4	31.2	30.7	—
Miscellaneous chemical products	289	93.9	94.4	95.4	94.4	—	56.4	57.1	58.0	56.9	—
Petroleum and coal products	29	142.7	142.8	139.2	138.9	138.6	94.8	95.0	92.0	92.2	92.4
Petroleum refining	291	97.4	97.5	94.7	93.9	—	63.5	63.9	61.6	61.2	—
Asphalt paving and roofing materials	295	31.1	31.0	29.8	30.4	—	23.7	23.5	22.4	23.1	—
Rubber and misc. plastics products	30	982.5	997.7	1,014.0	992.0	1,006.5	758.6	773.5	786.8	765.4	779.8
Tires and inner tubes	301	76.9	77.2	81.0	81.3	—	56.5	57.4	59.8	59.8	—
Rubber and plastics footwear	302	6.6	6.3	6.7	5.5	—	5.1	4.7	5.2	3.7	—
Hose, belting, gaskets, and packing	305	69.4	69.8	72.5	71.6	—	53.2	53.4	55.8	54.5	—
Rubber and plastics hose and belting	3052	28.0	28.0	29.7	29.3	—	21.7	21.8	23.1	22.7	—
Fabricated rubber products, nec	306	109.2	111.3	112.2	108.8	—	83.0	84.8	85.9	82.6	—
Miscellaneous plastics products, nec	308	720.4	733.1	741.6	724.8	—	560.8	573.2	580.1	564.8	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods—Continued											
Leather and leather products	31	86.0	89.5	83.3	79.5	80.8	64.3	67.9	63.2	59.7	61.4
Leather tanning and finishing	311	11.5	12.5	12.9	11.9	—	9.2	10.3	10.7	9.7	—
Footwear, except rubber	314	38.7	40.4	35.6	33.8	—	30.8	32.4	28.3	26.9	—
Men's footwear, except athletic	3143	21.2	21.4	19.3	18.4	—	16.7	16.9	14.9	14.2	—
Women's footwear, except athletic	3144	10.9	11.3	9.3	8.6	—	8.5	8.8	7.3	6.7	—
Luggage	316	10.1	10.4	9.9	9.4	—	7.2	7.6	7.0	6.6	—
Handbags and personal leather goods	317	9.4	9.4	9.2	9.0	—	5.4	5.5	5.5	5.2	—
Transportation and public utilities		6,395	6,255	6,572	6,545	6,564	5,366	5,189	5,438	5,420	5,445
Transportation		4,090	3,946	4,218	4,187	4,205	—	—	—	—	—
Railroad transportation	40	230.0	226.7	233.2	234.4	235.6	—	—	—	—	—
Class I railroads plus Amtrak ²	4011	204.9	201.6	206.1	207.1	—	—	—	—	—	—
Local and interurban passenger transit	41	390.3	391.8	459.0	403.9	401.3	352.3	353.0	418.5	363.5	—
Local and suburban transportation	411	230.5	230.2	238.6	237.8	—	209.2	209.1	215.3	215.0	—
Taxicabs	412	30.2	30.1	31.2	31.3	—	—	—	—	—	—
Intercity and rural bus transportation	413	20.9	21.1	22.7	22.6	—	19.0	19.1	20.5	20.4	—
School buses	415	76.5	78.4	131.2	78.6	—	—	—	—	—	—
Trucking and warehousing	42	1,685.5	1,702.1	1,722.9	1,733.9	1,749.7	1,477.2	1,493.8	1,509.1	1,520.7	—
Trucking and courier services, except air	421	1,526.2	1,541.6	1,561.2	1,571.8	—	1,344.7	1,359.9	1,374.9	1,386.2	—
Public warehousing and storage	422	154.1	155.2	156.7	157.1	—	127.9	129.2	129.7	130.0	—
Water transportation	44	190.9	190.2	190.3	197.5	197.7	—	—	—	—	—
Water transportation of freight, nec	444	14.0	14.2	14.2	14.7	—	—	—	—	—	—
Water transportation services	449	128.7	128.1	129.7	135.7	—	114.6	114.0	114.5	120.5	—
Transportation by air	45	1,137.2	976.9	1,150.2	1,154.5	1,156.0	—	—	—	—	—
Air transportation, scheduled	451	973.6	813.6	973.4	976.0	—	—	—	—	—	—
Air transportation, scheduled	4512	513.2	515.2	527.3	530.6	—	—	—	—	—	—
Airports, flying fields, and services	458	120	119	131	133	—	—	—	—	—	—
Pipelines, except natural gas	46	14.6	14.6	14.5	14.6	14.5	12.0	12.0	11.8	11.9	—
Transportation services	47	441.8	443.9	447.7	447.9	450.6	360.7	361.4	364.5	365.8	—
Passenger transportation arrangement	472	218.1	218.1	217.2	217.9	—	182.5	183.0	182.6	183.4	—
Travel agencies	4724	171.9	172.0	173.0	173.5	—	144.3	144.6	145.7	146.3	—
Freight transportation arrangement	473	175.9	176.9	181.2	181.9	—	138.5	137.3	140.8	142.4	—
Communications and public utilities		2,305	2,309	2,354	2,358	2,359	—	—	—	—	—
Communications	48	1,431.3	1,439.9	1,493.6	1,495.5	1,499.3	1,103.9	1,103.9	1,081.6	1,089.6	—
Telephone communications	481	983.9	990.5	1,029.5	1,029.5	—	742.5	740.9	714.0	721.4	—
Telephone communications, except radio	4813	832.3	835.1	867.2	867.3	—	619.3	614.3	594.2	600.5	—
Radio and television broadcasting	483	241.6	241.2	246.8	245.0	—	201.1	200.6	202.8	201.0	—
Radio broadcasting stations	4832	113.8	113.9	117.7	116.9	—	—	—	—	—	—
Television broadcasting stations	4833	127.8	127.3	129.1	128.1	—	—	—	—	—	—
Cable and other pay television services	484	174.3	176.0	184.3	187.5	—	146.0	147.3	150.9	153.6	—
Electric, gas, and sanitary services	49	874.0	869.0	860.8	862.6	859.9	695.8	692.8	690.1	692.1	—
Electric services	491	372.1	369.7	367.1	368.2	—	297.4	296.2	297.2	297.5	—
Gas production and distribution	492	144.2	143.1	141.2	142.0	—	111.8	110.8	110.0	110.4	—
Combination utility services	493	160.8	160.2	156.4	155.8	—	125.0	124.6	122.3	122.8	—
Sanitary services	495	163.5	162.7	162.9	163.2	—	135.2	134.8	134.4	134.7	—
Wholesale trade		6,698	6,700	6,864	6,875	6,868	5,403	5,403	5,505	5,515	5,500
Durable goods	50	3,966	3,975	4,093	4,101	4,096	3,157	3,164	3,229	3,234	—
Motor vehicles, parts, and supplies	501	517.9	519.1	522.6	524.5	—	423.4	423.5	415.8	417.1	—
Automobiles and other motor vehicles	5012	144.5	146.0	148.7	150.5	—	—	—	—	—	—
Motor vehicle supplies and new parts	5013	294.4	294.1	293.6	293.7	—	—	—	—	—	—
Furniture and home furnishings	502	156.6	158.2	163.5	164.0	—	124.7	126.0	130.0	130.2	—
Furniture	5021	75.1	75.6	80.0	80.1	—	—	—	—	—	—
Home furnishings	5023	81.5	82.6	83.5	83.9	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Wholesale trade—Continued											
Durable goods—Continued											
Lumber and other construction materials	503	261.4	262.2	271.1	273.0	—	216.5	216.3	225.5	227.3	—
Lumber, plywood, and millwork	5031	132.4	132.9	137.9	138.5	—	—	—	—	—	—
Construction materials, nec	5039	38.8	39.0	39.9	40.2	—	—	—	—	—	—
Professional and commercial equipment	504	867.9	871.6	909.2	912.1	—	681.6	686.4	707.2	709.3	—
Office equipment	5044	198.9	200.3	212.7	212.7	—	—	—	—	—	—
Computers, peripherals and software	5045	348.8	350.7	363.6	363.0	—	—	—	—	—	—
Medical and hospital equipment	5047	181.6	181.5	188.7	190.6	—	147.0	147.1	151.3	153.7	—
Metals and minerals, except petroleum	505	147.2	148.0	152.2	151.7	—	118.8	119.5	122.8	122.1	—
Electrical goods	506	540.7	542.4	555.0	557.5	—	403.6	404.8	403.0	405.4	—
Electrical apparatus and equipment	5063	225.4	226.4	234.1	234.7	—	—	—	—	—	—
Electrical appliances, television and radio sets	5064	49.8	49.7	49.4	49.9	—	—	—	—	—	—
Electronic parts and equipment	5065	265.5	266.3	271.5	272.9	—	—	—	—	—	—
Hardware, plumbing, and heating equipment	507	302.5	302.2	305.1	304.4	—	246.6	245.4	249.5	249.1	—
Hardware	5072	107.4	106.9	109.8	109.9	—	—	—	—	—	—
Plumbing and hydronic heating supplies	5074	119.6	119.6	118.9	119.1	—	—	—	—	—	—
Machinery, equipment, and supplies	508	825.7	825.3	850.2	851.2	—	661.3	660.9	678.6	679.2	—
Construction and mining machinery	5082	89.0	88.8	92.9	93.5	—	—	—	—	—	—
Farm and garden machinery	5083	125.0	124.3	127.4	128.6	—	—	—	—	—	—
Industrial machinery and equipment	5084	332.2	333.0	341.3	339.9	—	—	—	—	—	—
Industrial supplies	5085	153.5	153.8	160.2	160.5	—	—	—	—	—	—
Misc. wholesale trade durable goods	509	346.2	346.3	364.0	362.2	—	280.9	281.0	296.2	294.2	—
Scrap and waste materials	5093	130.0	132.2	132.4	132.2	—	—	—	—	—	—
Nondurable goods	51	2,732	2,725	2,771	2,774	2,772	2,246	2,239	2,276	2,281	—
Paper and paper products	511	266.6	265.6	269.0	269.3	—	224.8	223.5	225.7	225.8	—
Stationery and office supplies	5112	154.4	153.8	156.1	157.2	—	—	—	—	—	—
Drugs, proprietaries, and sundries	512	212.4	212.4	216.2	216.4	—	177.0	176.6	181.5	181.7	—
Apparel, piece goods, and notions	513	223.8	222.4	223.4	227.6	—	181.8	180.5	180.8	186.0	—
Groceries and related products	514	910.8	909.2	911.9	910.9	—	765.8	765.1	767.5	766.6	—
Groceries, general line	5141	286.8	289.5	288.6	288.3	—	—	—	—	—	—
Meats and meat products	5147	55.5	54.9	55.0	55.4	—	—	—	—	—	—
Fresh fruits and vegetables	5148	105.5	101.8	101.6	100.6	—	—	—	—	—	—
Farm-product raw materials	515	106.0	107.5	106.8	106.1	—	85.2	86.9	86.2	85.6	—
Chemicals and allied products	516	151.4	151.6	152.0	152.2	—	111.2	111.3	111.5	111.5	—
Petroleum and petroleum products	517	158.1	157.7	159.6	160.0	—	131.2	130.7	131.7	132.5	—
Petroleum bulk stations and terminals	5171	65.1	64.5	66.8	67.5	—	—	—	—	—	—
Petroleum products, nec	5172	93.0	93.2	92.8	92.5	—	—	—	—	—	—
Beer, wine, and distilled beverages	518	156.4	155.4	156.3	157.2	—	127.3	126.2	127.1	128.2	—
Beer and ale	5181	100.7	100.7	101.3	101.7	—	—	—	—	—	—
Wine and distilled beverages	5182	55.7	54.7	55.0	55.5	—	—	—	—	—	—
Misc. wholesale trade nondurable goods	519	546.6	543.4	575.6	574.1	—	441.5	438.1	464.4	462.9	—
Farm supplies	5191	168.8	166.7	177.6	176.1	—	—	—	—	—	—
Retail trade		22,104	22,209	22,643	22,662	22,715	19,463	19,557	19,912	19,920	19,946
Building materials and garden supplies	52	975.9	961.8	1,023.7	1,013.6	1,000.1	817.7	802.6	859.3	849.8	—
Lumber and other building materials	521	593.7	587.3	616.5	615.8	—	505.4	498.0	524.8	524.1	—
Paint, glass, and wallpaper stores	523	68.5	69.3	70.6	70.8	—	53.3	54.1	55.0	55.4	—
Hardware stores	525	165.6	163.2	169.6	169.1	—	136.8	134.6	139.9	139.9	—
Retail nurseries and garden stores	526	103.4	96.3	117.4	107.8	—	86.9	79.9	100.0	90.6	—
General merchandise stores	53	2,658.7	2,688.3	2,724.2	2,735.3	2,760.1	2,469.4	2,496.4	2,525.2	2,538.5	—
Department stores	531	2,337.5	2,361.6	2,401.6	2,411.7	2,433.7	2,193.7	2,216.2	2,249.5	2,262.0	—
Variety stores	533	136.1	138.9	137.1	137.1	—	115.8	117.7	116.3	116.7	—
Miscellaneous general merchandise stores	539	185.1	187.8	185.5	186.5	—	159.9	162.5	159.4	159.8	—
Food stores	54	3,523.5	3,520.8	3,558.0	3,571.8	3,572.3	3,193.8	3,192.7	3,227.4	3,240.1	—
Grocery stores	541	3,097.3	3,090.7	3,105.4	3,118.2	—	2,829.5	2,824.5	2,839.6	2,851.4	—
Meat and fish markets	542	48.2	48.0	48.9	49.1	—	—	—	—	—	—
Dairy products stores	545	15.0	15.7	14.1	15.0	—	—	—	—	—	—
Retail bakeries	546	209.6	211.5	228.4	226.2	—	182.7	184.2	198.1	196.2	—
Automotive dealers and service stations	55	2,339.7	2,343.2	2,371.9	2,383.5	2,385.2	1,958.2	1,960.9	1,970.0	1,978.3	—
New and used car dealers	551	1,054.8	1,056.2	1,065.4	1,069.7	1,069.3	885.4	887.1	893.9	898.3	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Retail trade—Continued											
Automotive dealers and service stations—Continued											
Auto and home supply stores	553	400.8	402.6	411.9	414.1	—	319.8	319.4	315.0	314.6	—
Gasoline service stations	554	678.6	680.1	681.0	685.9	—	588.6	591.1	589.3	593.8	—
Automotive dealers, nec	559	10.0	10.0	9.8	9.9	—	8.3	8.3	8.1	8.1	—
Apparel and accessory stores	56	1,082.9	1,095.8	1,095.8	1,104.4	1,112.3	902.2	913.0	914.9	923.6	—
Men's and boys' clothing stores	561	79.7	79.0	79.7	79.1	—	63.1	62.2	64.5	64.4	—
Women's clothing stores	562	278.2	277.0	269.9	270.3	—	231.7	229.8	224.8	224.7	—
Family clothing stores	565	340.5	347.4	351.7	358.1	—	301.3	308.1	313.9	319.7	—
Shoe stores	566	197.0	202.9	202.4	202.6	—	155.4	160.7	159.1	159.7	—
Furniture and home furnishings stores	57	1,000.2	1,003.5	1,047.4	1,055.5	1,060.6	819.0	822.9	860.1	867.9	—
Furniture and home furnishings stores	571	514.7	514.6	537.8	540.2	—	418.5	419.3	437.3	439.9	—
Furniture stores	5712	301.5	300.7	318.1	319.9	—	—	—	—	—	—
Household appliance stores	572	71.2	71.1	69.1	69.1	—	57.7	57.6	55.9	56.0	—
Radio, television, and computer stores	573	414.3	417.8	440.5	446.2	—	342.8	346.0	366.9	372.0	—
Radio, television, and electronic stores	5731	181.9	183.5	190.8	194.2	—	151.0	152.3	158.4	162.0	—
Record and prerecorded tape stores	5735	77.4	77.1	83.1	84.2	—	63.1	63.1	70.3	71.3	—
Eating and drinking places	58	7,775.1	7,825.3	7,962.7	7,939.9	7,959.4	7,014.3	7,059.5	7,177.8	7,146.6	—
Miscellaneous retail establishments	59	2,747.5	2,770.1	2,859.5	2,857.9	2,864.8	2,287.9	2,309.0	2,377.6	2,375.3	—
Drug stores and proprietary stores	591	624.4	626.1	647.7	645.5	—	518.9	520.6	541.1	540.1	—
Liquor stores	592	111.6	112.1	115.2	113.2	—	—	—	—	—	—
Used merchandise stores	593	114.7	116.8	121.4	122.8	—	95.4	97.5	101.1	102.6	—
Miscellaneous shopping goods stores	594	956.8	967.8	985.9	988.5	—	798.8	809.9	818.8	822.1	—
Sporting goods and bicycle shops	5941	188.6	190.5	193.5	197.2	—	—	—	—	—	—
Book stores	5942	115.7	120.0	117.0	117.7	—	—	—	—	—	—
Stationery stores	5943	86.9	88.9	91.9	93.0	—	—	—	—	—	—
Jewelry stores	5944	140.6	141.4	141.9	142.6	—	—	—	—	—	—
Gift, novelty, and souvenir shops	5947	232.0	232.2	236.8	241.4	—	—	—	—	—	—
Sewing, needlework, and piece goods	5949	49.8	48.9	49.6	48.1	—	—	—	—	—	—
Nonstore retailers	596	327.6	334.1	343.3	341.7	—	277.1	281.9	290.1	287.6	—
Catalog and mail-order houses	5961	205.2	211.9	219.5	218.7	—	—	—	—	—	—
Merchandising machine operators	5962	67.3	67.7	68.5	68.0	—	—	—	—	—	—
Fuel dealers	598	94.9	95.5	95.1	94.7	—	78.1	78.7	78.4	78.1	—
Retail stores, nec	599	517.5	517.7	550.9	551.5	—	428.8	428.6	454.2	453.3	—
Florists, tobacco stores, and newsstands	5992,3,4	145.7	146.3	158.5	155.2	—	—	—	—	—	—
Optical goods stores	5995	67.4	68.4	74.9	75.5	—	56.6	57.2	60.5	60.2	—
Miscellaneous retail stores, nec	5999	304.4	303.0	317.5	320.8	—	248.4	247.2	259.6	261.7	—
Finance, insurance, and real estate³		7,188	7,192	7,402	7,457	7,464	5,270	5,269	5,457	5,501	5,495
Finance		3,439	3,446	3,567	3,592	3,598	—	—	—	—	—
Depository institutions	60	2,044.1	2,043.7	2,054.6	2,060.6	2,057.9	1,473.5	1,472.2	1,481.6	1,488.9	—
Commercial banks	602	1,472.8	1,472.2	1,468.9	1,472.8	1,470.8	1,047.1	1,046.0	1,044.9	1,050.2	—
State commercial banks	6022	595.6	596.2	606.1	609.1	—	426.5	426.9	435.2	438.6	—
National and commercial banks, nec	6021,9	877.2	876.0	862.8	863.7	—	620.6	619.1	609.7	611.6	—
Savings institutions	603	263.9	263.1	266.1	267.0	265.6	—	—	—	—	—
Federal savings institutions	6035	146.5	146.1	147.5	148.0	—	—	—	—	—	—
Savings institutions, except federal	6036	117.4	117.0	118.6	119.0	—	—	—	—	—	—
Credit unions	606	173.3	173.8	179.4	180.2	—	137.9	137.9	142.7	143.5	—
Nondepository institutions	61	569.2	572.8	619.4	626.0	630.5	405.8	406.3	428.2	429.1	—
Personal credit institutions	614	180.4	181.7	186.9	187.8	—	125.9	125.3	111.5	109.1	—
Business credit institutions	615	115.6	116.4	122.6	123.4	—	—	—	—	—	—
Mortgage bankers and brokers	616	252.4	253.9	287.8	292.2	297.0	—	—	—	—	—
Security and commodity brokers	62	603.2	606.5	651.1	660.6	663.4	—	—	—	—	—
Security brokers and dealers	621	449.7	452.4	478.5	484.6	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges	622,3	25.6	25.3	25.9	26.1	—	—	—	—	—	—
Security and commodity services	628	127.9	128.8	146.7	149.9	—	85.4	86.0	98.7	101.6	—
Holding and other investment offices	67	222.5	222.7	242.2	245.1	245.8	—	—	—	—	—
Holding offices	671	106.3	106.8	111.0	111.7	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Finance, insurance, and real estate—Continued											
Insurance	63,64	2,272	2,271	2,336	2,347	2,347	—	—	—	—	—
Insurance carriers	63	1,543.5	1,543.5	1,591.1	1,600.8	1,601.7	1,123.5	1,125.5	1,204.8	1,212.6	—
Life insurance	631	521.8	522.0	530.8	532.2	—	338.9	339.3	354.9	354.5	—
Medical service and health insurance	632	339.7	341.0	355.1	356.6	—	278.1	277.6	286.7	287.7	—
Hospital and medical service plans	6324	277.3	278.1	291.2	292.7	—	230.0	230.1	239.2	240.1	—
Fire, marine, and casualty insurance	633	540.7	538.7	549.3	553.9	—	392.8	394.4	437.5	442.5	—
Title insurance	636	72.0	72.5	82.3	83.9	—	—	—	—	—	—
Insurance agents, brokers, and service	64	728.5	727.9	745.0	745.9	745.0	—	—	—	—	—
Real estate	65	1,477	1,475	1,499	1,518	1,519	—	—	—	—	—
Real estate operators and lessors	651	598.8	599.3	595.9	599.9	—	—	—	—	—	—
Real estate agents and managers	653	719.4	718.7	736.4	750.4	—	—	—	—	—	—
Subdividers and developers	655	125.2	123.6	128.0	127.9	—	—	—	—	—	—
Services		36,536	36,499	37,869	38,019	38,001	32,005	31,949	33,086	33,232	33,183
Agricultural services	07	758.3	749.7	788.4	792.3	786.7	647.4	639.2	674.2	677.7	—
Veterinary services	074	185.7	185.7	193.6	196.1	—	156.5	156.6	163.6	165.9	—
Landscape and horticultural services	078	519.2	510.2	542.9	543.8	—	446.6	438.1	467.4	467.9	—
Hotels and other lodging places	70	1,878.4	1,877.5	1,874.6	1,921.5	1,914.7	—	—	—	—	—
Hotels and motels	701	1,799.7	1,801.0	1,802.8	1,837.4	—	1,593.6	1,594.5	1,588.0	1,621.6	—
Personal services	72	1,137.8	1,138.3	1,158.2	1,142.0	1,142.0	—	—	—	—	—
Laundry, cleaning, and garment services	721	439.9	440.4	444.9	442.5	—	387.3	387.1	392.0	390.0	—
Photographic studios, portrait	722	65.8	67.8	56.0	53.9	—	—	—	—	—	—
Beauty shops	723	392.2	392.5	402.7	400.3	—	349.1	348.6	356.0	353.6	—
Funeral service and crematories	726	97.8	97.9	100.9	101.1	—	—	—	—	—	—
Miscellaneous personal services	729	126.8	124.3	138.4	129.1	—	104.4	102.1	114.6	106.9	—
Business services	73	8,074.2	8,129.1	8,592.7	8,602.9	8,712.2	7,185.6	7,228.2	7,626.3	7,630.4	—
Advertising	731	256.8	257.3	269.1	270.2	—	186.6	186.7	193.4	194.5	—
Advertising agencies	7311	169.0	169.3	175.9	176.7	—	—	—	—	—	—
Credit reporting and collection	732	135.5	135.7	139.3	139.1	—	—	—	—	—	—
Mailing, reproduction, and stenographic services	733	304.3	305.8	314.8	313.3	—	—	—	—	—	—
Photocopying and duplicating services	7334	76.5	76.4	79.3	78.5	—	64.9	64.7	67.5	66.9	—
Services to buildings	734	944.9	944.3	985.9	986.8	987.3	845.3	843.8	882.9	883.7	—
Disinfecting and pest control services	7342	91.4	90.6	98.9	99.4	—	73.6	73.0	80.9	81.5	—
Building maintenance services, nec	7349	853.5	853.7	887.0	887.4	—	771.7	770.8	802.0	802.2	—
Miscellaneous equipment rental and leasing	735	257.6	258.3	269.9	270.8	—	208.2	208.4	215.6	216.5	—
Medical equipment rental	7352	40.8	41.0	40.6	40.7	—	31.2	31.3	29.4	29.9	—
Heavy construction equipment rental	7353	44.9	44.8	47.5	48.1	—	38.0	38.1	40.2	40.8	—
Equipment rental and leasing, nec	7359	171.9	172.5	181.8	182.0	—	139.0	139.0	146.0	145.8	—
Personnel supply services	736	3,018.7	3,055.6	3,197.4	3,168.9	3,268.0	—	—	—	—	—
Employment agencies	7361	327.0	328.1	340.8	334.8	—	—	—	—	—	—
Help supply services	7363	2,691.7	2,727.5	2,856.6	2,834.1	2,925.2	2,620.7	2,654.8	2,774.5	2,748.4	—
Computer and data processing services	737	1,417.7	1,434.6	1,598.9	1,617.9	1,628.7	1,133.1	1,145.0	1,280.0	1,297.5	—
Computer programming services	7371	322.9	331.1	369.6	372.6	—	275.2	281.3	315.0	318.2	—
Prepackaged software	7372	231.9	232.9	269.6	276.3	—	—	—	—	—	—
Computer integrated systems design	7373	164.1	164.9	183.1	181.5	—	115.7	116.5	128.7	128.6	—
Data processing and preparation	7374	249.3	249.2	272.8	272.9	—	—	—	—	—	—
Information retrieval services	7375	82.0	82.9	91.8	93.4	—	59.5	60.3	66.9	68.3	—
Computer maintenance and repair	7378	57.6	58.1	57.6	58.4	—	40.9	40.1	41.1	41.9	—
Miscellaneous business services	738	1,738.7	1,737.5	1,817.4	1,835.9	—	1,516.9	1,513.1	1,582.2	1,600.2	—
Detective and armored car services	7381	573.4	584.2	604.0	606.9	—	530.2	540.2	556.0	559.0	—
Security systems services	7382	57.2	58.5	59.7	60.0	—	49.1	50.2	48.4	48.5	—
Photofinishing laboratories	7384	75.4	76.4	80.9	81.2	—	—	—	—	—	—
Auto repair, services, and parking	75	1,133.6	1,132.9	1,166.5	1,169.4	1,172.5	934.1	933.3	948.4	949.9	—
Automotive rentals, without drivers	751	201.9	202.8	209.5	210.3	—	166.2	167.2	172.0	172.7	—
Passenger car rental	7514	133.8	134.1	140.4	141.4	—	111.7	112.0	116.6	117.3	—
Automobile parking	752	72.1	72.9	77.5	76.8	—	63.6	63.8	67.3	66.8	—
Automotive repair shops	753	626.3	625.0	638.0	639.8	—	504.3	503.7	503.1	503.5	—
Automotive and tire repair shops	7532,4	216.9	216.4	222.5	222.8	—	177.8	177.6	181.6	181.3	—
General automotive repair shops	7538	265.7	266.0	271.1	271.4	—	213.9	214.4	207.8	207.6	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Services—Continued											
Auto repair, services, and parking—Continued											
Automotive services, except repair	754	233.3	232.2	241.5	242.5	—	200.0	198.6	206.0	206.9	—
Carwashes	7542	123.1	120.5	127.4	127.8	—	108.8	106.1	112.9	113.3	—
Miscellaneous repair services	76	381.5	381.8	390.5	390.8	390.4	312.0	312.4	320.3	319.2	—
Electrical repair shops	762	118.1	117.5	119.6	120.2	—	—	—	—	—	—
Motion pictures	78	555.7	567.2	558.7	562.4	568.3	468.8	483.3	463.5	468.3	—
Motion picture production and services	781	228.7	242.6	224.8	228.7	—	191.4	209.0	184.2	189.8	—
Motion picture theaters	783	146.8	142.2	142.9	144.6	—	—	—	—	—	—
Video tape rental	784	160.3	162.8	171.3	169.6	—	130.0	131.5	136.5	135.0	—
Amusement and recreation services	79	1,873.9	1,839.7	1,935.8	2,011.5	1,961.6	1,673.3	1,641.3	1,719.9	1,797.5	—
Bowling centers	793	69.4	71.6	69.0	66.9	—	60.8	62.8	60.5	58.5	—
Misc. amusement and recreation services	799	1,422.2	1,396.3	1,453.6	1,506.9	—	1,274.7	1,252.0	1,296.1	1,349.2	—
Physical fitness facilities	7991	165.2	165.8	182.3	182.7	—	147.2	147.8	162.5	162.5	—
Membership sports and recreation clubs	7997	427.8	415.2	451.4	470.9	—	385.5	373.2	406.7	424.9	—
Health services	80	9,759.8	9,769.1	9,926.8	9,943.1	9,946.2	8,652.9	8,660.1	8,799.4	8,814.4	—
Offices and clinics of medical doctors	801	1,751.4	1,753.4	1,818.1	1,827.2	1,832.3	1,439.3	1,439.8	1,497.9	1,507.8	—
Offices and clinics of dentists	802	629.2	631.9	644.7	645.8	—	550.8	551.9	562.1	562.6	—
Offices and clinics of other health practitioners	804	439.2	444.4	467.0	466.3	—	365.5	371.4	389.0	389.2	—
Offices and clinics of chiropractors and optometrists	8041,2	166.5	167.9	171.3	170.9	—	—	—	—	—	—
Nursing and personal care facilities	805	1,761.9	1,765.0	1,762.3	1,762.9	1,764.7	1,585.2	1,587.8	1,585.5	1,586.3	—
Skilled nursing care facilities	8051	1,334.7	1,337.7	1,336.0	1,337.5	—	—	—	—	—	—
Intermediate care facilities	8052	208.4	208.8	209.2	209.4	—	186.9	187.5	188.3	188.5	—
Nursing and personal care, nec	8059	218.8	218.5	217.1	216.0	—	—	—	—	—	—
Hospitals	806	3,883.9	3,882.0	3,959.5	3,977.0	3,973.5	3,559.0	3,558.6	3,630.0	3,645.1	—
General medical and surgical hospitals	8062	3,581.4	3,579.5	3,648.6	3,664.2	—	—	—	—	—	—
Psychiatric hospitals	8063	84.2	83.9	85.2	85.5	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric	8069	218.3	218.6	225.7	227.3	—	—	—	—	—	—
Medical and dental laboratories	807	200.9	200.5	202.7	204.2	—	—	—	—	—	—
Home health care services	808	716.5	715.4	684.7	672.0	668.6	660.7	658.7	630.5	617.8	—
Legal services	81	963.7	955.8	994.9	999.6	992.6	771.6	764.4	796.6	802.1	—
Educational services	82	1,853.5	1,831.6	2,004.5	1,912.8	1,892.8	—	—	—	—	—
Elementary and secondary schools	821	581.8	576.1	643.4	604.0	—	—	—	—	—	—
Colleges and universities	822	1,005.7	989.0	1,083.3	1,032.0	—	—	—	—	—	—
Vocational schools	824	78.8	80.9	84.5	82.2	—	—	—	—	—	—
Social services	83	2,516.1	2,497.2	2,622.8	2,651.6	2,642.7	2,192.7	2,170.8	2,269.0	2,303.9	—
Individual and family services	832	679.5	680.9	708.9	717.6	—	589.8	590.6	614.6	622.6	—
Job training and related services	833	392.1	359.8	392.8	443.0	—	343.0	311.4	340.5	395.4	—
Child day care services	835	518.1	528.0	567.0	532.1	533.8	456.1	464.0	499.8	466.8	—
Residential care	836	727.0	727.7	753.9	757.2	758.0	632.3	632.4	653.0	656.7	—
Social services, nec	839	199.4	200.8	200.2	201.7	—	171.5	172.4	161.1	162.4	—
Museums and botanical and zoological gardens	84	98.4	96.7	98.4	99.8	98.9	—	—	—	—	—
Membership organizations	86	2,322.1	2,291.0	2,306.3	2,344.6	2,310.0	—	—	—	—	—
Business associations	861	109.9	109.7	110.3	112.2	—	—	—	—	—	—
Professional organizations	862	58.8	59.2	61.8	61.5	—	42.4	42.6	44.7	44.5	—
Labor organizations	863	137.3	139.0	143.0	137.0	—	—	—	—	—	—
Civic and social associations	864	511.9	477.3	487.6	527.6	—	—	—	—	—	—
Engineering and management services	87	3,035.0	3,046.9	3,253.8	3,278.4	3,273.7	2,326.2	2,332.3	2,496.8	2,516.6	—
Engineering and architectural services	871	882.6	886.7	932.6	939.2	940.5	728.0	730.9	768.7	775.4	—
Engineering services	8711	675.4	680.0	712.6	716.2	—	562.8	566.6	593.5	597.6	—
Architectural services	8712	148.9	148.6	158.6	160.9	—	117.2	116.6	124.6	126.6	—
Surveying services	8713	58.3	58.1	61.4	62.1	—	48.0	47.7	50.6	51.2	—
Accounting, auditing, and bookkeeping	872	588.8	590.2	636.4	634.9	—	411.2	412.5	454.4	451.0	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry—Continued

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Services—Continued											
Engineering and management services—Continued											
Research and testing services	873	605.0	605.2	638.3	645.6	—	463.7	462.5	491.9	499.2	—
Commercial physical research	8731	228.4	229.3	238.3	239.5	—	159.2	159.5	165.6	167.2	—
Commercial nonphysical research	8732	137.9	136.5	150.1	153.0	—	114.5	112.8	126.1	129.1	—
Noncommercial research organizations	8733	144.4	144.7	151.6	154.2	—	113.1	113.1	119.5	121.6	—
Management and public relations	874	958.6	964.8	1,046.5	1,058.7	1,058.0	723.3	726.4	781.8	791.0	—
Management services	8741	316.4	319.9	346.9	350.4	—	235.6	237.5	259.5	261.8	—
Management consulting services	8742	339.7	342.6	378.3	385.0	—	257.7	259.7	279.3	285.4	—
Public relations services	8743	39.5	39.1	42.8	43.5	—	26.0	26.0	29.1	29.2	—
Services, nec	89	50.5	50.4	52.6	52.8	52.1	40.3	40.1	41.7	41.7	—
Government		18,535	18,419	19,891	18,801	18,690	—	—	—	—	—
Federal Government⁴		2,713	2,705	2,695	2,693	2,683	—	—	—	—	—
Executive, by agency ⁴		2,650.4	2,643.8	2,633.0	—	—	—	—	—	—	—
Department of Defense		705.6	699.4	673.0	—	—	—	—	—	—	—
Postal Service ⁵		845.2	853.3	855.7	—	—	—	—	—	—	—
Other executive agencies		1,099.6	1,091.1	1,104.3	—	—	—	—	—	—	—
Legislative		32.4	31.3	31.3	—	—	—	—	—	—	—
Judicial		29.9	29.9	31.0	—	—	—	—	—	—	—
Federal Government, except Postal Service		1,867.5	1,851.7	1,839.6	1,834.7	1,821.6	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities		49.9	49.5	47.6	47.5	—	—	—	—	—	—
Ship building and repairing	3731	22.2	22.0	22.2	22.2	—	—	—	—	—	—
Transportation and public utilities, except Postal Service		14.0	13.9	12.3	12.3	—	—	—	—	—	—
Services		366.4	366.6	361.0	362.6	—	—	—	—	—	—
Hospitals	806	224.4	223.5	221.9	222.2	—	—	—	—	—	—
State government		4,382	4,361	4,493	4,431	4,412	—	—	—	—	—
Construction		91.2	91.0	90.3	90.6	—	—	—	—	—	—
Transportation and public utilities		53.2	53.2	46.9	52.3	—	—	—	—	—	—
Services		2,371.7	2,368.8	2,482.6	2,392.6	—	—	—	—	—	—
Hospitals	806	365.1	365.3	364.5	365.6	—	—	—	—	—	—
Education	82	1,645.5	1,640.4	1,759.0	1,661.1	1,656.6	—	—	—	—	—
Social services		211.3	210.2	208.6	211.3	—	—	—	—	—	—
Services, except hospitals, education, and social services		149.8	152.9	150.5	154.6	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		1,865.4	1,848.1	1,872.9	1,895.4	—	—	—	—	—	—
State government, except education		2,736.0	2,720.7	2,733.7	2,769.8	2,755.0	—	—	—	—	—
Local government		11,440	11,353	12,703	11,677	11,595	—	—	—	—	—
Transportation and public utilities		458.3	457.5	459.6	459.6	—	—	—	—	—	—
Services		6,973.9	6,943.2	8,275.1	7,149.0	—	—	—	—	—	—
Hospitals	806	638.5	639.6	652.1	654.8	—	—	—	—	—	—
Education	82	5,770.7	5,763.4	7,078.6	5,928.0	5,918.9	—	—	—	—	—
Social services		154.7	142.1	143.2	148.2	—	—	—	—	—	—
Services, except hospitals, education, and social services		410.0	398.1	401.2	418.0	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		4,007.9	3,952.1	3,967.9	4,068.8	—	—	—	—	—	—
Local government, except education		5,669.4	5,589.4	5,624.0	5,749.4	5,676.1	—	—	—	—	—

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

² Data relate to line-haul railroads with operating revenues of \$253.7 million or more in 1993 and to Amtrak.

³ Excludes nonoffice commissioned real estate sales agents.

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 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
NOT SEASONALLY ADJUSTED**

B-13. Women employees on nonfarm payrolls by major industry and manufacturing group

(In thousands)

Industry	May 1997	June 1997	Apr. 1998	May 1998	June 1998
Total	59,519	59,593	60,558	60,971	61,055
Total private	48,410	48,734	49,249	49,623	49,979
Goods-producing	6,676	6,739	6,716	6,744	6,794
Mining	81	83	82	82	83
Construction	630	641	648	661	678
Manufacturing	5,965	6,015	5,986	6,001	6,033
Durable goods	2,901	2,924	2,975	2,978	2,989
Lumber and wood products	138	139	140	141	144
Furniture and fixtures	161	161	166	167	168
Stone, clay, and glass products	104	105	106	107	108
Primary metal industries	102	104	104	104	106
Fabricated metal products	326	329	333	334	336
Industrial machinery and equipment	473	476	486	485	485
Electronic and other electrical equipment	691	696	710	709	708
Transportation equipment	383	388	404	406	408
Instruments and related products	351	353	356	355	356
Miscellaneous manufacturing	172	173	170	171	170
Nondurable goods	3,064	3,091	3,011	3,023	3,044
Food and kindred products	538	551	536	544	554
Tobacco products	11	11	12	11	11
Textile mill products	289	289	279	279	279
Apparel and other textile products	619	617	575	573	572
Paper and allied products	166	168	165	166	168
Printing and publishing	700	705	705	707	712
Chemicals and allied products	329	333	328	331	334
Petroleum and coal products	24	25	24	24	24
Rubber and misc. plastics products	339	342	343	343	346
Leather and leather products	49	49	44	44	44
Service-producing	52,843	52,854	53,842	54,227	54,261
Transportation and public utilities	1,949	1,949	1,946	1,964	1,968
Wholesale trade	2,051	2,059	2,071	2,083	2,095
Retail trade	11,524	11,645	11,536	11,746	11,890
Finance, insurance, and real estate	4,448	4,491	4,570	4,589	4,638
Services	21,762	21,851	22,410	22,497	22,594
Government	11,109	10,859	11,309	11,348	11,076
Federal	1,148	1,154	1,136	1,141	1,151
State	2,365	2,263	2,438	2,410	2,300
Local	7,596	7,442	7,735	7,797	7,625

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1997 forward are subject to revision.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Alabama	1,860.6	1,883.2	1,879.5	10.1	9.5	9.4	98.2	101.6	101.7
Birmingham	464.5	472.8	473.4	3.1	2.6	2.6	27.7	29.2	29.6
Huntsville	170.9	175.0	173.7	(1)	(1)	(1)	6.2	6.4	6.5
Mobile	221.5	225.5	226.8	(1)	(1)	(1)	16.6	17.2	16.6
Montgomery	156.6	156.9	156.8	(1)	(1)	(1)	8.5	8.3	8.2
Tuscaloosa	77.5	80.2	80.6	2.7	2.7	2.6	6.1	6.5	6.4
Alaska	289.0	287.2	294.2	10.4	10.5	10.8	15.7	15.3	16.4
Anchorage	127.4	130.6	131.2	2.5	2.6	2.7	7.9	7.8	8.4
Arizona	1,932.2	2,051.1	2,020.1	14.3	13.4	13.4	133.2	137.2	137.7
Phoenix-Mesa	1,358.7	1,449.8	1,429.9	6.7	6.0	6.0	94.8	99.7	99.8
Tucson	299.6	320.2	312.2	2.5	2.3	2.3	19.8	20.9	21.0
Arkansas	1,096.8	1,131.0	1,115.9	3.6	3.6	3.6	49.9	50.8	51.4
Fayetteville-Springdale-Rogers	137.3	139.6	138.7	(1)	(1)	(1)	6.0	5.6	5.7
Fort Smith	95.8	96.6	95.7	.9	.8	.8	4.1	4.3	4.4
Little Rock-North Little Rock	301.8	307.4	304.6	(1)	(1)	(1)	15.0	15.2	15.4
Pine Bluff	35.3	35.6	34.9	(1)	(1)	(1)	.9	1.0	1.0
California	13,165.6	13,632.7	13,559.3	29.8	29.0	28.7	570.1	609.6	624.1
Bakersfield	178.5	183.9	179.8	10.8	10.8	10.7	8.9	8.2	8.3
Fresno	280.6	281.1	281.0	.6	.5	.5	13.9	14.9	15.2
Los Angeles-Long Beach	3,851.2	3,976.3	3,950.5	5.8	5.7	5.6	110.9	114.0	114.9
Modesto	138.1	136.1	138.7	(2)	(2)	(2)	7.5	7.3	7.4
Oakland	950.1	979.2	970.9	2.3	2.3	2.3	51.7	56.0	58.3
Orange County	1,230.9	1,283.6	1,277.0	.9	.9	.9	58.9	64.3	64.9
Riverside-San Bernardino	836.0	883.3	873.8	1.2	1.1	1.1	52.9	58.3	58.8
Sacramento	626.0	640.5	639.1	.2	.2	.2	34.5	36.6	37.0
Salinas	119.5	121.1	121.2	.1	.1	.1	4.6	5.0	5.1
San Diego	1,047.5	1,086.7	1,078.0	.4	.4	.4	54.0	55.3	56.1
San Francisco	991.9	1,005.3	1,006.6	.6	.5	.5	35.8	37.9	38.7
San Jose	937.6	960.3	960.4	.1	.2	.2	38.8	41.5	42.1
Santa Barbara-Santa Maria-Lompoc	150.7	155.0	153.0	1.1	1.0	1.0	6.7	6.5	6.6
Santa Rosa	163.1	171.5	167.2	.5	.4	.5	10.0	9.6	9.6
Stockton-Lodi	169.8	169.3	170.2	.1	.1	.1	8.3	8.3	8.7
Vallejo-Fairfield-Napa	151.6	157.6	157.0	.5	.5	.5	10.5	11.1	11.1
Ventura	240.4	252.6	251.4	1.7	1.4	1.4	11.5	11.3	11.5
Colorado	1,985.8	2,055.4	2,047.3	14.1	13.9	14.0	125.3	131.3	133.4
Boulder-Longmont	157.6	161.9	161.1	(1)	(1)	(1)	6.8	7.0	7.1
Colorado Springs	216.5	223.9	223.8	(1)	(1)	(1)	12.7	13.7	13.9
Denver	1,061.0	1,100.8	1,094.6	7.0	6.5	6.6	64.0	67.8	68.6
Connecticut	1,605.8	1,658.9	1,637.7	.8	.8	.8	60.9	62.4	63.4
Bridgeport	181.7	185.7	182.7	(2)	(2)	(2)	6.9	7.0	7.1
Danbury	85.4	87.6	86.7	(1)	(1)	(1)	3.7	4.0	4.0
Hartford	592.1	601.6	595.1	(1)	(1)	(1)	21.2	20.7	20.7
New Haven-Meriden	248.3	250.5	247.7	(1)	(1)	(1)	9.9	9.6	9.9
New London-Norwich	139.2	141.3	141.3	(1)	(1)	(1)	4.7	4.8	4.9
Stamford-Norwalk	205.6	211.1	210.8	(1)	(1)	(1)	6.1	5.9	6.0
Waterbury	86.2	89.5	88.2	(2)	(2)	(2)	3.4	3.6	3.6
Delaware	391.8	406.6	403.3	.1	.1	.1	22.0	22.8	23.2
Dover	50.9	54.8	54.7	.1	.1	.1	2.4	2.5	2.6
Wilmington-Newark	301.4	315.5	311.9	.2	.2	.2	16.6	17.1	17.3
District of Columbia	630.2	612.7	619.9	.1	.1	.1	9.2	8.9	8.9
Washington PMSA	2,501.4	2,561.6	2,558.3	1.0	1.1	1.1	129.4	134.6	137.2
Florida	6,335.3	6,666.9	6,584.8	6.7	6.7	6.8	335.1	348.8	349.4
Daytona Beach	147.4	154.0	151.8	(2)	(2)	(2)	7.8	7.9	8.0
Fort Lauderdale	617.6	647.8	638.2	.1	.1	.1	33.2	34.9	34.8
Fort Myers-Cape Coral	147.0	153.0	150.4	(2)	(2)	(2)	12.5	12.9	13.1
Gainesville	108.0	112.6	112.2	(2)	(2)	(2)	4.4	4.7	4.8
Jacksonville	515.7	542.2	538.0	(2)	(2)	(2)	28.1	28.8	28.7
Lakeland-Winter Haven	164.9	172.6	169.5	3.1	3.1	3.1	8.5	8.3	8.3
Melbourne-Titusville-Palm Bay	176.7	181.2	180.8	(2)	(2)	(2)	9.2	9.7	9.7
Miami	950.6	977.6	969.0	.3	.3	.3	34.0	34.1	34.3
Orlando	787.2	835.9	825.6	(2)	(2)	(2)	42.8	46.0	45.9
Pensacola	148.4	155.6	154.3	(2)	(2)	(2)	10.6	11.1	11.1
Sarasota-Bradenton	245.9	268.7	265.9	(2)	(2)	(2)	12.6	12.9	13.0
Tallahassee	143.5	146.6	146.5	(2)	(2)	(2)	6.1	5.8	5.8
Tampa-St. Petersburg-Clearwater	1,053.9	1,112.4	1,102.3	.4	.4	.4	51.8	55.0	54.8
West Palm Beach-Boca Raton	425.6	453.6	445.3	(2)	(2)	(2)	25.6	26.2	26.6

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Alabama	377.1	375.8	372.1	91.5	91.8	91.7	428.2	435.5	436.0
Birmingham	51.3	50.3	49.9	30.1	30.3	30.6	112.2	116.2	116.3
Huntsville	37.7	39.5	38.4	3.8	3.4	3.4	34.6	35.3	35.2
Mobile	27.4	27.8	27.7	13.3	13.5	13.5	59.0	60.0	60.1
Montgomery	17.7	17.7	17.7	6.6	6.6	6.7	37.0	36.7	36.6
Tuscaloosa	11.7	12.4	12.5	2.4	2.6	2.6	18.1	18.5	18.6
Alaska	24.0	17.1	23.2	26.0	27.0	27.4	60.6	60.9	61.4
Anchorage	2.1	2.2	2.2	12.6	13.2	13.2	31.7	32.1	32.1
Arizona	207.3	216.3	216.0	95.6	99.3	99.0	471.6	496.0	491.1
Phoenix-Mesa	161.3	169.8	169.7	70.1	74.3	73.8	331.5	352.3	348.7
Tucson	28.2	29.5	29.4	13.2	13.5	13.3	66.7	69.2	68.5
Arkansas	253.4	256.5	254.3	66.0	67.7	67.8	252.8	258.5	256.5
Fayetteville-Springdale-Rogers	33.9	33.6	33.5	9.4	9.5	9.6	38.9	39.7	39.8
Fort Smith	27.2	26.9	26.7	6.7	6.5	6.5	20.0	20.0	19.7
Little Rock-North Little Rock	33.9	33.7	33.4	21.1	21.1	21.2	70.0	71.2	71.0
Pine Bluff	8.2	8.1	7.9	1.8	1.8	1.8	7.2	7.2	7.2
California	1,937.8	1,944.1	1,951.6	671.7	680.9	684.9	3,065.5	3,126.4	3,129.2
Bakersfield	10.2	10.5	10.7	10.3	10.6	10.8	42.8	42.8	42.6
Fresno	32.6	29.3	29.6	14.4	14.6	14.7	68.2	68.8	68.6
Los Angeles-Long Beach	663.7	680.4	678.1	210.4	217.2	217.8	856.2	875.9	875.0
Modesto	30.8	25.9	29.6	5.5	5.6	5.6	34.4	34.7	34.8
Oakland	120.7	121.3	121.2	61.1	60.9	61.1	215.9	218.0	217.9
Orange County	222.6	233.1	233.9	45.4	47.9	48.2	308.8	319.6	320.0
Riverside-San Bernardino	105.4	111.9	112.5	43.4	45.6	45.7	216.5	225.7	225.2
Sacramento	46.1	46.7	47.2	25.3	25.8	25.8	138.6	139.4	139.9
Salinas	9.3	8.7	9.1	5.7	5.7	5.7	31.6	32.1	31.9
San Diego	123.2	124.8	125.0	41.5	41.8	41.9	241.6	246.0	246.8
San Francisco	76.9	76.4	76.8	80.2	80.1	80.6	209.4	207.9	208.6
San Jose	258.8	259.7	260.0	27.8	28.8	29.0	184.9	189.0	189.9
Santa Barbara-Santa Maria-Lompoc	16.9	17.5	17.4	5.8	6.0	6.0	36.7	36.5	36.6
Santa Rosa	25.6	26.1	26.0	6.2	6.8	6.8	41.9	43.3	43.0
Stockton-Lodi	26.7	22.8	24.8	11.4	10.8	11.4	40.6	40.4	40.7
Vallejo-Fairfield-Napa	18.5	18.6	19.1	6.2	6.3	6.5	39.6	40.1	40.3
Ventura	32.8	34.6	34.6	9.6	10.2	10.3	60.4	61.2	61.0
Colorado	204.5	208.5	208.2	121.6	124.6	125.0	484.6	499.1	501.6
Boulder-Longmont	31.8	33.0	33.0	3.7	4.0	4.0	35.1	34.8	35.2
Colorado Springs	25.8	27.2	27.3	11.8	11.7	11.7	48.5	50.0	50.5
Denver	93.2	94.0	93.9	85.0	87.4	87.7	258.6	268.8	266.8
Connecticut	274.6	278.0	274.5	72.9	77.5	75.0	353.0	361.8	359.7
Bridgeport	38.9	39.9	39.2	7.0	7.2	7.1	40.7	41.5	40.8
Danbury	18.7	18.8	18.5	2.6	2.5	2.5	22.0	22.0	21.8
Hartford	91.6	95.1	93.7	25.9	27.3	26.4	123.7	124.0	123.3
New Haven-Meriden	38.7	39.3	38.5	15.7	16.4	16.1	52.7	53.4	52.7
New London-Norwich	24.8	24.4	24.1	6.4	6.8	6.7	28.8	28.9	29.0
Stamford-Norwalk	28.2	27.3	26.7	10.1	10.0	10.0	46.0	47.1	47.0
Waterbury	18.6	19.3	18.8	3.5	3.7	3.7	17.3	18.9	18.6
Delaware	56.9	59.6	57.4	15.8	15.8	15.7	87.8	89.3	90.0
Dover	6.0	6.2	6.2	1.7	2.0	1.9	12.5	13.0	12.9
Wilmington-Newark	42.3	45.8	43.4	13.6	13.8	14.0	61.4	63.1	63.2
District of Columbia	12.5	12.9	12.9	17.9	17.1	17.2	48.7	48.9	48.8
Washington PMSA	100.0	102.5	102.1	113.3	113.6	114.5	473.2	478.2	479.7
Florida	488.5	490.7	488.0	327.5	339.9	340.1	1,621.8	1,688.8	1,670.3
Daytona Beach	14.1	14.5	14.4	4.3	4.5	4.6	42.2	43.5	43.5
Fort Lauderdale	40.2	40.6	40.2	30.9	31.6	31.5	174.2	181.5	179.5
Fort Myers-Cape Coral	6.7	6.9	6.9	7.0	7.1	7.1	41.2	42.8	42.2
Gainesville	5.4	5.3	5.2	2.4	2.6	2.7	22.9	24.1	23.8
Jacksonville	37.4	38.9	39.0	35.7	37.5	36.9	129.0	132.4	133.0
Lakeland-Winter Haven	20.5	20.3	20.1	8.8	9.1	9.0	46.7	49.7	49.4
Melbourne-Titusville-Palm Bay	27.6	28.3	28.4	5.2	5.7	5.8	40.9	42.4	42.1
Miami	75.2	72.6	72.4	83.5	85.3	85.9	251.3	259.1	257.3
Orlando	52.0	53.2	53.0	41.2	43.3	43.3	196.6	205.4	205.2
Pensacola	10.9	10.8	10.8	7.2	7.7	7.8	38.7	40.8	40.9
Sarasota-Bradenton	20.5	21.7	21.7	5.4	5.5	5.5	57.5	60.8	60.0
Tallahassee	5.2	5.1	5.2	4.0	4.2	4.2	28.8	29.7	29.5
Tampa-St. Petersburg-Clearwater	88.0	87.4	86.9	48.4	49.6	49.6	254.6	262.1	259.7
West Palm Beach-Boca Raton	29.5	30.8	30.2	15.9	16.9	16.9	107.5	115.8	112.1

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Alabama	85.4	86.9	87.3	432.0	438.7	439.6	338.1	343.4	341.7
Birmingham	34.8	35.5	36.2	138.3	140.7	141.6	67.0	68.0	68.6
Huntsville	4.8	4.8	4.8	46.4	47.6	47.5	37.4	38.0	37.9
Mobile	10.1	10.2	10.2	61.0	61.3	62.0	34.1	35.5	36.7
Montgomery	9.3	9.5	9.5	41.0	41.6	41.8	36.5	36.5	36.3
Tuscaloosa	2.5	2.6	2.7	13.6	14.2	14.3	20.4	20.7	20.9
Alaska	12.7	12.8	12.9	69.9	71.1	72.4	69.7	72.5	69.7
Anchorage	7.4	7.4	7.5	36.1	37.2	37.3	27.1	28.1	27.8
Arizona	127.1	134.7	135.1	596.6	632.4	629.3	286.5	321.8	298.5
Phoenix-Mesa	107.0	115.6	116.2	434.2	462.0	459.7	153.1	170.1	156.0
Tucson	11.8	12.6	12.6	97.8	100.6	99.9	59.6	71.6	65.2
Arkansas	44.6	45.1	45.0	254.8	264.5	263.0	171.7	184.3	174.3
Fayetteville-Springdale-Rogers	4.9	5.0	5.0	28.4	27.3	26.9	17.8	18.9	18.2
Fort Smith	3.2	3.1	3.1	25.0	25.8	25.9	8.7	9.2	8.6
Little Rock-North Little Rock	17.5	17.4	17.2	88.3	90.3	90.1	56.0	58.5	58.3
Pine Bluff	1.3	1.3	1.3	8.7	8.6	8.7	7.2	7.6	7.0
California	761.2	784.2	786.9	4,079.3	4,239.6	4,252.7	2,050.2	2,218.9	2,101.2
Bakersfield	6.7	7.3	7.3	43.2	43.3	43.3	45.6	50.4	46.1
Fresno	13.8	13.7	13.6	74.1	72.1	74.4	63.0	67.2	64.4
Los Angeles-Long Beach	220.1	225.0	225.0	1,263.0	1,303.2	1,300.9	521.1	554.9	533.2
Modesto	4.5	4.4	4.4	32.5	33.1	33.3	22.9	25.1	23.6
Oakland	55.0	55.9	56.1	283.4	291.9	292.3	160.0	172.9	161.7
Orange County	92.6	95.0	95.3	375.7	383.6	384.6	126.0	139.2	129.2
Riverside-San Bernardino	30.3	31.6	31.7	220.8	231.4	230.7	165.5	177.7	168.1
Sacramento	42.0	43.7	44.0	174.5	176.5	177.9	164.8	171.6	167.1
Salinas	6.0	5.9	5.9	33.7	34.0	34.2	28.5	29.6	29.2
San Diego	61.7	62.7	63.1	342.6	356.4	359.3	182.5	199.3	185.4
San Francisco	103.1	105.4	105.7	363.6	372.7	374.7	122.3	124.4	121.0
San Jose	31.1	31.4	31.5	308.3	319.4	318.7	87.8	90.3	89.0
Santa Barbara-Santa Maria-Lompoc	7.3	7.4	7.6	47.0	47.8	48.0	29.2	32.3	29.8
Santa Rosa	9.4	9.8	9.9	48.5	50.0	49.5	21.0	25.5	21.9
Stockton-Lodi	8.7	8.6	8.8	41.8	42.7	42.8	32.2	35.6	33.1
Vallejo-Fairfield-Napa	6.2	6.4	6.4	40.0	42.6	42.3	30.1	32.0	30.8
Ventura	12.9	14.0	14.2	72.8	75.8	75.7	38.7	44.1	42.7
Colorado	128.8	133.0	134.5	609.0	626.2	627.1	297.9	318.8	303.5
Boulder-Longmont	5.7	5.6	5.6	50.7	51.9	52.0	23.8	25.6	24.2
Colorado Springs	11.9	12.1	12.2	72.4	73.9	74.3	33.4	35.3	33.9
Denver	85.0	88.7	89.3	330.8	340.9	342.0	137.4	146.7	139.7
Connecticut	132.0	136.4	136.7	500.3	517.0	515.5	211.3	225.0	212.1
Bridgeport	10.4	10.3	10.3	58.1	58.8	58.1	19.7	21.0	20.1
Danbury	4.5	4.9	4.9	24.8	25.7	25.9	9.1	9.7	9.1
Hartford	69.0	68.5	69.1	172.1	173.5	172.9	88.6	92.5	89.0
New Haven-Meriden	13.1	13.0	13.0	87.8	87.7	87.5	30.4	31.1	30.0
New London-Norwich	3.8	3.9	4.0	35.1	36.0	36.0	35.6	36.5	36.6
Stamford-Norwalk	23.6	26.7	26.7	74.2	76.1	76.8	17.4	18.0	17.6
Waterbury	4.4	4.3	4.2	26.8	27.2	27.1	12.2	12.5	12.2
Delaware	47.8	49.9	49.9	109.6	114.1	113.6	51.8	55.0	53.4
Dover	2.0	2.5	2.5	11.6	12.6	12.5	14.7	16.0	16.1
Wilmington-Newark	41.9	43.3	43.4	88.9	93.5	93.1	36.5	38.7	37.3
District of Columbia	28.6	28.6	28.8	266.8	268.4	268.5	246.4	227.8	234.7
Washington PMSA	134.9	135.3	136.0	962.1	999.4	1,001.6	587.5	596.9	586.1
Florida	411.0	427.7	428.2	2,265.7	2,408.1	2,405.6	879.0	956.2	896.4
Daytona Beach	6.4	6.5	6.5	51.8	53.6	53.5	20.8	23.5	21.3
Fort Lauderdale	45.0	46.2	46.5	215.7	227.0	226.3	78.3	85.9	79.3
Fort Myers-Cape Coral	9.0	9.3	9.2	47.4	48.3	48.1	23.1	25.6	23.7
Gainesville	5.1	5.3	5.3	32.3	34.1	34.0	35.5	36.5	36.4
Jacksonville	53.2	54.0	54.3	171.4	184.0	184.6	60.5	66.2	61.1
Lakeland-Winter Haven	7.7	8.1	8.1	46.2	47.9	47.9	23.4	26.1	23.6
Melbourne-Titusville-Palm Bay	5.8	6.0	6.1	63.5	63.7	63.8	24.5	25.4	24.9
Miami	67.8	67.7	68.0	309.3	322.3	319.6	129.2	136.2	131.2
Orlando	46.4	48.4	48.8	332.0	353.0	350.6	75.8	86.2	78.4
Pensacola	6.1	6.4	6.5	48.5	50.3	51.0	26.1	28.3	26.0
Sarasota-Bradenton	11.5	11.7	11.7	117.0	132.9	132.9	21.3	23.1	21.0
Tallahassee	5.7	5.9	5.9	38.3	39.2	39.0	55.2	56.5	56.7
Tampa-St. Petersburg-Clearwater	76.1	80.2	80.4	411.3	444.2	444.7	123.3	133.5	125.8
West Palm Beach-Boca Raton	30.6	31.4	31.4	166.8	177.9	177.8	49.7	54.6	50.3

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Georgia	3,611.1	3,739.4	3,720.8	8.2	8.6	8.6	172.1	181.3	182.7
Albany	60.0	59.8	59.9	(2)	(2)	(2)	3.6	3.9	3.7
Athens	70.0	75.0	72.4	(1)	(1)	(1)	2.7	2.6	2.7
Atlanta	1,962.2	2,033.3	2,023.5	1.6	1.8	1.7	96.1	101.6	102.4
Augusta-Aiken	192.2	195.5	194.9	.4	.4	.4	11.7	11.2	11.2
Columbus	114.6	117.4	116.4	(1)	(1)	(1)	5.5	5.5	5.5
Macon	148.2	151.6	150.8	1.2	1.3	1.3	6.4	6.9	6.8
Savannah	130.7	133.6	132.1	(1)	(1)	(1)	7.9	7.5	7.7
Hawaii	528.8	527.5	521.7	(1)	(1)	(1)	22.3	21.3	21.3
Honolulu	399.3	398.7	392.0	(1)	(1)	(1)	17.4	16.4	16.4
Idaho	514.5	523.1	520.3	3.3	3.3	3.3	34.6	34.1	35.0
Boise City	194.2	199.9	199.3	(1)	(1)	(1)	14.3	13.0	13.6
Illinois	5,788.8	5,911.6	5,879.7	11.8	11.8	11.8	251.6	250.2	253.9
Bloomington-Normal	76.8	79.9	79.5	(1)	(1)	(1)	2.8	2.9	3.0
Champaign-Urbana	94.5	95.9	95.7	(1)	(1)	(1)	3.5	3.4	3.5
Chicago	4,069.9	4,130.0	4,118.6	1.7	1.8	1.8	170.4	167.0	169.7
Davenport-Moline-Rock Island	179.4	184.6	181.7	(1)	(1)	(1)	10.2	10.4	10.4
Decatur	57.2	57.5	57.5	(1)	(1)	(1)	4.1	4.1	4.2
Kankakee	43.8	44.6	44.1	(1)	(1)	(1)	2.2	2.0	2.1
Peoria-Pekin	172.4	175.3	174.3	(1)	(1)	(1)	8.7	8.2	8.6
Rockford	175.8	180.0	178.8	(1)	(1)	(1)	7.2	7.2	7.2
Springfield	112.7	114.2	113.2	(1)	(1)	(1)	5.3	5.0	5.1
Indiana	2,833.6	2,890.9	2,840.5	6.9	6.7	6.5	151.3	147.6	150.5
Bloomington	60.8	62.1	61.4	(1)	(1)	(1)	3.4	3.4	3.6
Elkhart-Goshen	116.2	117.4	116.2	(1)	(1)	(1)	5.0	5.0	5.0
Evansville-Henderson	153.1	153.2	153.4	1.3	1.3	1.3	10.2	10.3	10.5
Fort Wayne	267.1	275.2	265.8	(1)	(1)	(1)	13.8	14.5	14.7
Gary	262.6	268.2	264.2	(1)	(1)	(1)	18.2	18.0	17.9
Indianapolis	824.9	851.6	842.8	.9	.8	.9	48.3	50.0	51.3
Kokomo	50.7	53.3	51.0	(1)	(1)	(1)	2.4	2.6	2.8
Lafayette	87.5	91.2	90.7	(1)	(1)	(1)	4.2	4.4	4.5
Muncie	55.7	58.5	56.2	(1)	(1)	(1)	2.6	2.6	2.5
South Bend	134.0	136.8	135.0	(1)	(1)	(1)	8.2	7.6	7.6
Terre Haute	65.7	66.0	65.3	.2	.3	.3	3.3	3.4	3.5
Iowa	1,400.1	1,459.7	1,433.0	2.2	2.1	2.2	68.1	68.2	69.4
Cedar Rapids	110.2	114.6	113.0	(1)	(1)	(1)	5.7	6.5	6.6
Des Moines	270.5	274.9	272.2	(1)	(1)	(1)	13.3	12.4	12.9
Dubuque	50.6	51.9	51.3	(1)	(1)	(1)	2.1	2.1	2.2
Iowa City	61.9	67.1	63.8	(1)	(1)	(1)	2.4	2.8	2.8
Sioux City	65.0	66.4	65.7	(1)	(1)	(1)	4.2	4.2	4.4
Waterloo-Cedar Falls	69.9	71.6	70.9	(1)	(1)	(1)	3.0	3.0	3.0
Kansas	1,261.3	1,312.7	1,292.4	8.3	8.2	8.3	63.5	65.0	65.8
Lawrence	44.1	45.8	45.3	(1)	(1)	(1)	2.2	2.3	2.2
Topeka	99.2	102.0	100.8	(1)	(1)	(1)	4.8	5.1	5.2
Wichita	273.1	283.4	279.7	1.4	1.4	1.4	14.8	15.0	15.0
Kentucky	1,712.9	1,761.0	1,746.4	23.2	22.4	22.6	85.9	88.1	90.3
Lexington	265.0	276.7	272.5	.3	.3	.3	13.7	14.5	14.6
Louisville	555.2	575.3	573.3	.6	.6	.6	30.7	31.3	32.3
Owensboro	42.9	44.1	44.1	.3	.3	.3	3.3	3.6	3.6
Louisiana	1,845.4	1,890.5	1,882.5	54.6	55.9	56.0	117.7	122.4	123.1
Alexandria	53.6	54.8	54.6	.1	.1	.1	3.3	3.5	3.5
Baton Rouge	280.4	289.6	289.0	.9	1.0	1.0	30.6	33.8	34.4
Houma	74.9	78.6	78.1	7.4	7.4	7.3	3.6	3.9	3.9
Lafayette	161.2	164.3	164.8	15.4	15.8	15.7	9.4	10.7	10.7
Lake Charles	84.9	86.0	86.2	1.3	1.4	1.4	10.1	11.0	11.0
Monroe	67.5	68.3	67.9	.2	.2	.2	3.6	3.7	3.7
New Orleans	617.2	620.2	623.5	15.2	15.3	15.5	31.0	31.2	31.3
Shreveport-Bossier City	171.8	173.9	173.1	2.5	2.6	2.7	10.0	10.6	10.8
Maine	560.2	574.7	569.9	.1	.1	.1	26.1	25.7	26.8
Lewiston-Auburn	40.6	42.5	41.2	(2)	(2)	(2)	1.9	1.8	1.8
Portland	140.2	141.3	141.2	(2)	(2)	(2)	6.8	7.1	7.1

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Georgia	587.1	591.7	585.0	232.1	240.2	241.6	914.7	935.0	938.7
Albany	9.0	8.6	8.6	3.0	3.2	3.2	13.8	14.1	14.1
Athens	11.7	11.8	11.9	1.8	1.9	1.9	17.8	18.5	18.5
Atlanta	218.6	221.2	217.4	165.2	171.0	171.1	522.3	533.1	533.8
Augusta-Aiken	41.0	41.6	41.6	6.7	6.7	6.7	41.7	43.1	43.2
Columbus	21.2	21.2	20.5	4.0	4.2	4.1	26.4	27.0	27.2
Macon	20.8	20.3	20.5	5.3	5.4	5.4	33.9	33.9	33.8
Savannah	17.3	18.3	17.5	9.6	9.7	9.8	33.0	34.2	34.1
Hawaii	17.1	16.2	16.3	41.8	40.6	40.6	134.6	131.7	131.2
Honolulu	12.9	12.2	12.3	33.7	32.6	32.6	99.8	97.2	96.7
Idaho	75.3	76.3	76.7	24.0	24.3	24.3	130.2	132.2	132.3
Boise City	34.4	37.0	37.1	9.3	9.9	10.0	46.9	46.9	46.9
Illinois	973.6	982.7	978.9	334.3	344.9	341.5	1,325.7	1,347.3	1,340.4
Bloomington-Normal	8.6	8.9	8.8	3.0	2.9	2.9	16.9	17.4	17.4
Champaign-Urbana	11.9	11.8	11.7	2.7	2.7	2.7	20.3	20.7	20.9
Chicago	655.5	662.2	659.2	248.4	254.2	253.5	918.5	934.4	928.1
Davenport-Moline-Rock Island	30.7	31.7	31.7	9.9	10.0	10.0	47.8	47.9	47.8
Decatur	13.6	13.4	13.5	5.0	4.9	4.9	12.3	12.4	12.3
Kankakee	8.3	8.3	8.3	2.0	2.1	2.0	11.1	11.0	11.0
Peoria-Pekin	32.5	33.1	33.0	9.6	9.9	9.8	41.5	42.4	42.4
Rockford	50.6	53.7	53.4	9.0	9.2	9.2	37.1	37.7	37.6
Springfield	4.5	4.7	4.7	4.8	4.9	4.7	24.1	24.6	24.4
Indiana	676.2	686.8	666.8	140.0	142.4	140.9	685.4	688.1	686.1
Bloomington	9.8	10.4	10.3	1.9	1.8	1.8	14.1	15.0	14.9
Elkhart-Goshen	58.8	59.7	58.7	3.0	2.7	2.8	22.5	22.5	22.3
Evansville-Henderson	32.1	31.9	31.8	6.9	7.1	7.1	38.1	38.0	38.1
Fort Wayne	74.8	76.2	72.1	12.9	12.8	12.7	64.3	65.3	64.6
Gary	50.2	49.6	49.4	15.5	15.5	15.4	64.2	65.3	65.4
Indianapolis	127.2	130.0	126.9	51.1	52.3	52.5	216.0	219.7	219.4
Kokomo	19.9	21.1	18.7	1.2	1.2	1.2	11.3	11.2	11.3
Lafayette	22.2	22.1	22.0	2.2	2.3	2.2	18.4	18.8	18.6
Muncie	10.7	9.6	9.3	3.2	3.3	3.4	13.4	13.8	13.4
South Bend	22.2	23.0	22.8	5.5	5.7	5.9	34.9	34.6	34.7
Terre Haute	12.0	12.1	12.1	2.9	2.8	2.7	19.0	19.2	19.2
Iowa	255.3	260.8	261.3	65.7	68.5	68.6	348.6	353.9	352.5
Cedar Rapids	21.8	22.9	23.1	8.2	7.9	7.8	25.2	25.6	25.5
Des Moines	25.3	25.2	25.2	13.7	13.7	13.7	70.6	71.1	70.5
Dubuque	12.1	12.0	12.2	2.1	2.1	2.1	12.3	12.7	12.7
Iowa City	4.8	4.8	5.0	2.1	2.2	2.3	12.7	12.9	12.8
Sioux City	12.6	13.3	13.3	3.9	3.9	3.9	16.0	15.6	15.5
Waterloo-Cedar Falls	15.1	15.1	15.2	2.4	2.4	2.4	16.5	16.8	16.9
Kansas	206.8	211.6	209.9	71.6	74.4	73.7	311.6	320.5	320.5
Lawrence	5.4	5.5	5.5	1.2	1.2	1.3	11.3	11.8	11.6
Topeka	10.0	10.0	9.9	6.2	6.2	6.1	21.4	21.4	21.4
Wichita	69.7	73.9	74.1	10.6	10.7	10.6	61.9	63.3	63.0
Kentucky	318.3	317.2	315.4	97.7	102.6	102.7	410.2	420.5	418.2
Lexington	47.2	48.7	48.6	10.6	10.9	10.7	60.7	63.0	62.4
Louisville	88.8	89.0	89.4	40.5	44.4	44.3	135.6	140.9	139.7
Owensboro	6.9	7.1	7.1	2.2	2.4	2.4	10.8	11.0	11.0
Louisiana	191.8	189.7	188.5	111.5	114.5	114.5	429.3	437.6	438.2
Alexandria	3.4	3.5	3.6	2.7	2.7	2.7	12.2	12.4	12.4
Baton Rouge	24.7	25.3	25.1	12.5	12.6	12.6	65.5	68.1	68.3
Houma	7.2	7.9	7.8	8.0	9.0	8.9	17.3	17.7	17.6
Lafayette	16.5	14.7	14.6	9.9	10.3	10.4	41.4	42.2	42.1
Lake Charles	11.8	12.1	12.0	4.4	4.1	4.3	18.2	18.5	18.5
Monroe	7.9	8.0	7.6	3.7	3.6	3.6	16.8	17.0	17.1
New Orleans	49.2	49.9	49.6	42.6	42.8	42.6	150.2	150.7	150.6
Shreveport-Bossier City	19.0	17.5	17.2	8.4	8.6	8.4	38.9	40.2	40.4
Maine	86.1	87.5	85.3	23.9	24.4	24.5	148.1	146.2	149.6
Lewiston-Auburn	7.7	7.9	7.7	1.7	1.7	1.7	10.5	10.6	10.9
Portland	14.8	14.7	14.6	6.5	6.7	6.6	41.7	41.0	41.7

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
Georgia	188.0	195.4	196.1	947.0	994.8	998.0	561.9	592.4	570.1
Albany	2.2	2.1	2.1	15.6	15.1	15.5	12.8	12.8	12.7
Athens	2.2	2.2	2.2	15.9	15.4	15.5	17.9	22.6	19.7
Atlanta	128.4	132.2	132.4	584.2	612.6	614.1	245.8	259.8	250.6
Augusta-Aiken	6.0	5.9	5.9	46.2	47.0	47.3	38.5	39.6	38.6
Columbus	8.1	8.4	8.5	29.9	30.5	30.8	19.5	20.6	19.8
Macon	8.4	9.4	9.7	40.0	40.9	40.8	32.2	33.5	32.5
Savannah	4.4	4.3	4.3	38.5	39.0	38.8	20.0	20.6	19.9
Hawaii	36.2	35.0	35.2	170.3	169.0	169.8	106.5	113.7	107.3
Honolulu	29.0	28.0	28.1	121.8	120.8	120.7	84.7	91.5	85.2
Idaho	25.7	26.7	27.0	127.1	123.6	124.6	94.3	102.6	97.1
Boise City	11.0	11.9	11.9	50.2	50.3	50.5	28.1	30.9	29.3
Illinois	402.9	413.6	415.4	1,716.8	1,759.1	1,765.8	772.1	802.0	772.0
Bloomington-Normal	14.1	15.2	15.5	20.2	20.8	20.7	11.2	11.8	11.2
Champaign-Urbana	3.7	3.7	3.8	21.4	21.8	21.8	31.0	31.8	31.3
Chicago	314.8	323.7	325.0	1,278.8	1,299.7	1,308.3	481.8	487.0	473.0
Davenport-Moline-Rock Island	8.2	8.4	8.4	47.9	48.9	47.9	24.7	27.3	25.5
Decatur	2.0	2.1	2.1	13.7	13.9	14.0	6.5	6.7	6.5
Kankakee	1.7	1.7	1.7	11.6	12.1	12.0	6.9	7.4	7.0
Peoria-Pekin	7.9	8.0	8.0	53.7	54.3	54.3	18.5	19.4	18.2
Rockford	7.5	7.6	7.6	47.2	46.8	46.8	17.2	17.8	17.0
Springfield	8.0	7.8	7.9	33.1	33.6	33.5	32.9	33.6	32.9
Indiana	141.0	142.8	143.2	680.3	696.1	692.7	352.5	380.4	353.8
Bloomington	2.5	2.3	2.2	12.5	12.7	12.8	16.6	16.5	15.8
Elkhart-Goshen	3.0	3.2	3.2	17.9	18.1	17.9	6.0	6.2	6.3
Evansville-Henderson	7.4	7.5	7.5	43.5	43.3	43.7	13.6	13.8	13.4
Fort Wayne	15.1	14.6	14.7	62.3	63.6	62.7	23.9	28.2	24.3
Gary	9.4	9.6	9.7	72.7	72.7	72.7	32.4	37.5	33.7
Indianapolis	63.2	66.8	67.2	223.1	229.9	229.8	95.1	102.1	94.8
Kokomo	1.5	1.5	1.5	8.3	9.1	9.2	6.1	6.6	6.3
Lafayette	3.9	4.4	4.4	17.2	19.6	19.2	19.4	19.6	19.8
Muncie	1.8	1.9	1.8	16.6	17.2	17.4	7.4	10.1	8.4
South Bend	6.7	6.6	6.5	43.9	45.4	45.3	12.6	13.9	12.2
Terre Haute	2.3	2.3	2.3	16.2	16.1	16.0	9.8	9.8	9.2
Iowa	80.5	82.7	82.9	363.6	380.4	376.9	216.1	243.1	219.2
Cedar Rapids	6.0	6.4	6.4	34.3	35.0	34.6	9.0	10.3	9.0
Des Moines	37.8	38.9	39.1	77.1	79.6	79.5	32.7	34.0	31.3
Dubuque	1.8	1.9	1.9	17.0	17.3	17.1	3.2	3.8	3.1
Iowa City	1.9	2.1	2.1	14.0	15.2	14.5	24.0	27.1	24.3
Sioux City	2.6	2.6	2.6	18.7	19.0	19.0	7.0	7.8	7.0
Waterloo-Cedar Falls	3.3	3.2	3.2	19.3	20.0	19.6	10.3	11.1	10.6
Kansas	61.3	61.7	61.8	321.3	332.2	332.9	216.9	239.1	219.5
Lawrence	2.1	2.1	2.1	10.6	11.4	11.2	11.3	11.5	11.4
Topeka	6.8	6.8	6.8	28.9	29.7	29.7	21.1	22.8	21.7
Wichita	11.1	11.3	11.4	73.9	75.2	74.9	29.7	32.6	29.3
Kentucky	70.5	71.5	71.3	429.3	447.2	445.9	277.8	291.5	280.0
Lexington	10.2	10.4	10.3	72.6	75.5	75.5	49.7	53.4	50.1
Louisville	29.5	29.7	30.0	162.0	169.2	169.4	67.5	70.2	67.6
Owensboro	1.7	1.8	1.8	10.9	10.9	11.1	6.8	7.0	6.8
Louisiana	86.1	87.2	87.2	500.7	514.2	516.5	353.7	369.0	358.5
Alexandria	2.3	2.3	2.3	16.7	16.9	16.9	12.9	13.4	13.1
Baton Rouge	17.6	17.8	17.8	73.1	74.8	75.0	55.5	56.2	54.8
Houma	2.3	2.3	2.3	16.2	16.5	16.5	12.9	13.9	13.8
Lafayette	6.2	6.3	6.3	40.1	41.1	41.3	22.3	23.2	23.7
Lake Charles	2.6	2.6	2.6	23.4	23.4	23.3	13.1	12.9	13.1
Monroe	4.9	4.9	4.9	18.1	18.1	18.0	12.3	12.8	12.8
New Orleans	31.8	31.5	31.4	190.8	190.3	193.2	106.4	108.5	109.3
Shreveport-Bossier City	6.7	6.6	6.7	53.4	54.2	54.3	32.9	33.6	32.6
Maine	29.1	30.6	31.1	165.2	166.4	171.5	81.6	93.8	81.0
Lewiston-Auburn	2.2	2.3	2.3	12.7	12.9	12.8	3.9	5.3	4.0
Portland	12.5	12.9	13.1	41.7	41.0	41.2	16.2	17.9	16.9

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
Maryland	2,271.6	2,303.9	2,288.2	1.3	1.3	1.3	142.7	139.0	141.7
Baltimore PMSA	1,167.5	1,189.7	1,182.4	.2	.2	.2	66.7	66.0	66.9
Baltimore City	408.5	411.6	408.4	(1)	(1)	(1)	13.1	13.2	13.6
Suburban Maryland-D.C.	835.1	851.6	844.6	(1)	(1)	(1)	61.5	60.9	62.3
Massachusetts	3,113.4	3,239.7	3,205.1	1.4	1.5	1.5	107.4	113.4	117.9
Barnstable-Yarmouth	65.4	63.5	67.0	(1)	(1)	(1)	2.7	2.8	2.8
Boston	1,911.2	1,981.8	1,966.0	.4	.5	.5	60.0	64.7	67.6
Brockton	93.6	97.9	96.6	(2)	(2)	(2)	3.6	3.6	3.8
Fitchburg-Leominster	52.7	54.5	53.2	(2)	(2)	(2)	1.9	1.9	2.1
Lawrence	148.0	153.0	148.9	(2)	(2)	(2)	6.0	6.2	6.3
Lowell	114.8	121.4	118.1	(1)	(1)	(1)	5.3	5.4	5.4
New Bedford	63.2	65.8	64.8	(2)	(2)	(2)	2.4	2.3	2.4
Pittsfield	42.8	44.0	43.8	.1	.1	.1	1.8	1.9	2.0
Springfield	247.3	259.2	252.9	.1	.1	.2	8.4	8.2	8.4
Worcester	220.9	229.3	224.7	.2	.2	.2	7.8	7.4	7.5
Michigan	4,401.9	4,576.7	4,434.6	7.6	8.1	7.9	197.1	200.2	203.8
Ann Arbor	260.4	272.3	263.3	(1)	(1)	(1)	11.1	11.5	11.7
Benton Harbor	71.1	72.6	71.1	(1)	(1)	(1)	2.7	2.6	2.8
Detroit	2,055.5	2,151.0	2,068.1	.8	.9	.8	84.3	88.3	90.0
Flint	175.6	178.7	158.4	(1)	(1)	(1)	7.6	8.2	8.8
Grand Rapids-Muskegon-Holland	549.1	574.3	560.0	(1)	(1)	(1)	27.8	28.0	28.5
Jackson	60.6	62.7	61.4	(1)	(1)	(1)	2.7	2.7	2.8
Kalamazoo-Battle Creek	206.6	212.1	206.9	(1)	(1)	(1)	9.1	9.4	9.8
Lansing-East Lansing	225.3	231.4	218.2	(1)	(1)	(1)	9.5	9.9	10.2
Saginaw-Bay City-Midland	178.9	184.8	175.2	(1)	(1)	(1)	10.4	9.6	9.8
Minnesota	2,491.8	2,585.8	2,557.5	8.5	8.4	8.4	107.0	110.8	113.8
Duluth-Superior	111.2	114.6	113.5	5.2	5.1	5.1	4.5	4.6	4.9
Minneapolis-St. Paul	1,613.6	1,671.1	1,658.6	(2)	(2)	(2)	66.3	68.2	70.0
Rochester	73.9	77.4	77.1	(1)	(1)	(1)	3.2	3.4	3.4
St. Cloud	82.5	86.6	84.3	(1)	(1)	(1)	4.5	4.8	4.9
Mississippi	1,099.4	1,123.3	1,112.5	6.0	6.0	6.1	52.9	55.2	55.8
Jackson	219.2	229.2	225.8	(2)	(2)	(2)	11.4	12.4	12.7
Missouri	2,627.8	2,697.0	2,662.6	4.9	5.0	5.0	128.8	126.2	134.0
Kansas City	919.3	951.6	943.0	(1)	(1)	(1)	49.2	50.3	51.6
St. Louis	1,286.7	1,313.7	1,301.8	(1)	(1)	(1)	70.7	68.4	72.5
Springfield	156.1	163.4	159.8	(1)	(1)	(1)	6.8	6.8	6.9
Montana	369.2	374.9	372.2	6.0	5.5	5.5	20.4	19.0	19.9
Nebraska	856.5	883.3	874.8	1.3	1.4	1.4	41.8	42.2	43.1
Lincoln	145.0	146.8	146.8	(1)	(1)	(1)	7.0	7.3	7.4
Omaha	399.0	415.8	413.2	(1)	(1)	(1)	20.1	20.8	21.5
Nevada	890.2	930.3	929.3	15.0	14.1	14.2	83.1	90.8	90.9
Las Vegas	627.3	661.5	658.8	2.2	2.1	2.1	64.9	70.9	70.3
Reno	178.6	182.0	183.4	.7	.6	.6	12.5	13.9	14.3
New Hampshire	573.8	580.4	573.7	.5	.5	.5	22.5	23.0	23.4
Manchester	95.1	96.8	94.1	(1)	(1)	(1)	4.5	4.7	4.7
Nashua	91.9	94.9	91.9	(1)	(1)	(1)	3.0	3.1	3.2
Portsmouth-Rochester	115.2	114.0	112.6	(1)	(1)	(1)	3.4	3.1	3.2
New Jersey	3,751.7	3,855.9	3,823.3	2.0	1.9	1.9	138.8	141.9	143.9
Atlantic-Cape May	198.1	194.5	200.5	(1)	(1)	(1)	7.6	7.5	7.3
Bergen-Passaic	636.2	657.5	644.0	(1)	(1)	(1)	23.4	23.9	23.3
Camden	466.2	487.7	481.8	(1)	(1)	(1)	22.5	22.9	23.8
Jersey City	240.4	244.4	242.2	(1)	(1)	(1)	4.7	5.1	5.0
Middlesex-Somerset-Hunterdon	606.3	631.6	626.8	.5	.5	.5	20.1	20.4	21.0
Monmouth-Ocean	377.0	381.9	379.9	(1)	(1)	(1)	19.1	19.4	19.7
Newark	952.5	975.7	962.1	.8	.9	.9	33.8	34.7	34.8
Trenton	195.4	199.3	195.4	(1)	(1)	(1)	4.8	5.0	5.0
Vineland-Millville-Bridgeton	58.1	60.9	59.3	.3	.3	.2	2.3	2.2	2.4
New Mexico	707.2	723.0	718.0	15.7	15.7	15.6	43.7	44.4	44.5
Albuquerque	333.2	341.5	338.8	(1)	(1)	(1)	22.5	22.1	22.4
Las Cruces	49.1	51.6	50.5	(1)	(1)	(1)	3.2	3.3	3.3
Santa Fe	72.8	74.4	74.4	(1)	(1)	(1)	3.8	4.0	4.1

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
Maryland	176.3	177.1	173.3	106.7	107.0	105.5	541.1	546.8	546.4
Baltimore PMSA	99.8	100.0	97.0	58.2	60.2	60.1	268.8	275.9	274.2
Baltimore City	31.2	31.2	28.2	20.3	21.0	21.1	65.3	64.8	64.6
Suburban Maryland-D.C.	38.8	39.5	38.9	34.1	34.5	34.2	198.0	198.5	197.2
Massachusetts	444.9	456.0	449.9	131.7	140.1	135.4	716.1	739.9	736.5
Barnstable-Yarmouth	2.0	2.1	2.1	3.2	3.0	3.1	24.5	22.5	25.0
Boston	221.9	227.3	224.8	82.2	85.9	84.0	412.9	428.0	423.4
Brockton	10.2	10.7	10.1	4.8	4.9	4.6	31.4	31.9	32.3
Fitchburg-Leominster	13.6	14.0	13.7	2.0	2.1	2.0	12.3	12.5	12.4
Lawrence	38.2	38.4	37.8	4.5	5.0	4.5	34.7	35.0	34.8
Lowell	28.7	30.3	29.8	6.4	7.1	6.8	24.6	25.6	25.3
New Bedford	12.9	13.7	13.1	3.3	3.8	3.6	16.3	16.5	16.5
Pittsfield	7.5	7.5	7.5	1.2	1.3	1.2	10.4	10.6	10.6
Springfield	38.9	39.4	39.4	9.6	10.3	10.4	57.9	58.7	58.1
Worcester	41.1	42.7	41.7	9.1	9.5	9.1	49.2	51.5	50.9
Michigan	945.8	977.3	893.9	174.5	177.4	176.2	1,057.8	1,071.4	1,072.0
Ann Arbor	52.3	53.6	49.8	6.5	6.6	6.6	53.3	54.7	54.5
Benton Harbor	19.7	20.2	18.9	3.0	3.0	2.9	16.5	16.5	16.7
Detroit	430.4	443.5	393.8	93.6	96.0	96.1	486.3	498.7	497.8
Flint	40.6	35.1	20.1	5.5	5.5	5.2	45.1	46.5	46.0
Grand Rapids-Muskegon-Holland ..	154.7	160.2	151.4	18.9	19.0	19.2	137.4	142.1	141.7
Jackson	12.9	13.0	12.6	3.5	3.5	3.5	15.6	16.2	16.0
Kalamazoo-Battle Creek	49.1	50.3	47.7	7.1	7.2	7.3	46.8	47.3	47.2
Lansing-East Lansing	30.0	29.6	19.6	6.1	6.1	6.2	50.7	52.1	51.9
Saginaw-Bay City-Midland	39.6	40.7	33.8	7.3	7.3	6.8	45.7	46.8	46.7
Minnesota	439.3	447.2	449.7	122.5	126.7	125.3	604.2	616.3	616.2
Duluth-Superior	8.3	8.8	8.6	7.3	7.5	7.5	28.1	28.7	28.6
Minneapolis-St. Paul	276.5	278.3	279.0	87.3	90.5	89.2	387.4	395.0	395.7
Rochester	12.0	13.5	13.7	2.1	2.1	2.1	14.7	15.0	15.1
St. Cloud	15.5	16.1	15.9	2.9	3.1	3.0	25.2	25.7	25.5
Mississippi	241.2	242.0	238.5	53.3	53.4	53.4	237.5	239.4	239.6
Jackson	20.9	21.2	20.6	15.4	15.7	15.5	53.3	54.5	54.4
Missouri	411.8	423.9	415.0	164.4	166.6	164.7	625.8	637.3	635.2
Kansas City	108.0	108.7	107.1	74.0	79.2	78.3	226.4	231.9	232.1
St. Louis	190.7	197.2	189.7	82.6	83.9	82.5	308.5	312.4	313.7
Springfield	23.6	23.7	23.6	10.5	10.5	10.4	44.1	45.8	45.5
Montana	24.6	24.5	24.6	20.9	21.5	21.2	102.7	101.2	102.1
Nebraska	117.2	120.1	119.6	53.6	55.9	55.6	210.2	214.7	213.8
Lincoln	17.0	17.7	17.7	9.4	9.7	9.8	30.5	30.3	30.0
Omaha	39.6	41.9	42.1	27.9	29.4	29.2	95.5	98.3	98.3
Nevada	40.6	42.9	43.0	46.2	47.6	47.7	179.8	186.5	187.3
Las Vegas	22.0	23.1	23.0	33.1	34.2	34.3	128.2	134.7	135.1
Reno	13.3	14.1	14.3	11.5	11.3	11.3	41.0	41.0	41.1
New Hampshire	105.8	107.5	104.5	19.4	19.4	18.9	153.7	152.7	154.0
Manchester	14.1	13.7	13.4	5.7	5.8	5.6	23.5	23.7	23.4
Nashua	27.7	27.5	27.1	2.2	2.3	2.1	22.8	23.7	23.4
Portsmouth-Rochester	18.9	19.7	18.8	4.1	4.0	3.5	31.7	31.5	31.7
New Jersey	479.1	485.1	474.7	254.0	265.9	259.7	880.5	903.7	900.6
Atlantic-Cape May	6.0	6.6	6.4	7.2	7.3	7.1	46.4	44.1	47.5
Bergen-Passaic	104.3	107.2	103.8	34.7	36.4	36.2	174.2	180.3	178.2
Camden	54.9	55.7	55.8	21.1	22.3	19.5	123.6	127.6	127.4
Jersey City	28.7	29.4	28.2	28.0	28.5	28.2	55.2	55.7	55.0
Middlesex-Somerset-Hunterdon	92.5	93.6	92.6	49.3	51.8	50.7	141.5	147.3	145.6
Monmouth-Ocean	21.1	20.5	20.4	20.2	21.3	20.1	105.1	105.9	106.6
Newark	134.3	136.5	132.1	80.3	83.7	81.2	187.6	193.8	190.2
Trenton	19.8	18.7	18.3	7.1	7.4	7.1	32.1	33.2	32.5
Vineland-Millville-Bridgeton	13.2	13.5	13.3	2.9	3.0	2.8	11.1	11.8	11.8
New Mexico	46.2	45.2	44.8	30.9	32.7	32.4	168.9	172.9	173.3
Albuquerque	29.8	29.3	29.1	15.0	16.0	15.8	80.8	83.8	83.4
Las Cruces	2.6	2.7	2.7	1.6	1.6	1.7	10.8	11.4	11.2
Santa Fe	2.0	2.1	2.1	1.2	1.2	1.2	15.5	15.6	15.8

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Maryland	131.6	133.6	133.9	767.3	775.4	781.4	404.6	423.7	404.7
Baltimore PMSA	72.8	73.4	73.2	394.4	402.0	403.5	206.6	212.0	207.3
Baltimore City	33.6	34.4	34.5	156.1	155.0	156.4	88.9	92.0	90.0
Suburban Maryland-D.C.	49.3	50.5	50.3	292.1	295.7	296.4	161.3	172.0	165.3
Massachusetts	214.6	219.6	219.9	1,112.9	1,151.9	1,154.8	384.4	417.3	389.2
Barnstable-Yarmouth	3.7	3.5	3.7	22.1	21.8	22.8	7.2	7.8	7.5
Boston	159.1	163.3	163.9	755.0	779.2	781.0	219.7	232.7	220.8
Brockton	3.2	3.4	3.5	25.3	26.6	26.7	15.1	16.8	15.6
Fitchburg-Leominster	1.6	1.7	1.7	14.2	13.9	13.8	7.1	8.4	7.5
Lawrence	4.5	4.3	4.4	44.0	45.5	44.6	16.1	18.6	16.5
Lowell	3.8	3.8	3.8	32.7	33.6	33.3	13.3	15.6	13.7
New Bedford	1.8	1.8	1.8	17.0	17.7	18.0	9.5	10.0	9.4
Pittsfield	1.9	2.0	2.0	15.1	14.9	15.3	4.8	5.7	5.1
Springfield	12.7	13.3	13.2	78.6	82.2	81.1	41.1	47.0	42.1
Worcester	15.1	14.9	14.8	65.1	67.0	66.2	33.3	36.1	34.3
Michigan	209.1	210.5	211.8	1,225.5	1,278.5	1,270.1	584.5	653.3	598.9
Ann Arbor	10.1	10.3	10.4	65.5	67.7	67.5	61.5	67.9	62.8
Benton Harbor	2.6	2.4	2.4	19.0	19.3	19.4	7.7	8.6	8.0
Detroit	112.9	113.4	114.4	640.1	674.8	667.0	207.1	235.4	208.2
Flint	6.6	6.6	6.6	49.6	52.4	51.4	20.6	24.4	20.3
Grand Rapids-Muskegon-Holland	22.6	23.3	23.3	141.0	147.7	148.6	46.7	54.0	47.3
Jackson	1.9	1.9	1.9	14.8	15.3	15.1	9.2	10.1	9.5
Kalamazoo-Battle Creek	10.9	10.8	10.9	53.4	54.5	53.9	30.1	32.6	30.1
Lansing-East Lansing	13.8	14.3	14.3	56.8	58.7	57.7	58.4	60.7	58.3
Saginaw-Bay City-Midland	7.1	7.0	7.1	49.0	50.8	50.3	19.8	22.6	20.7
Minnesota	147.5	152.6	153.9	707.9	734.9	733.1	354.9	388.9	357.1
Duluth-Superior	3.5	3.6	3.6	32.2	33.1	33.3	22.1	23.2	21.9
Minneapolis-St. Paul	115.6	117.7	118.2	474.7	491.1	490.5	205.2	229.7	215.4
Rochester	2.3	2.4	2.4	33.1	33.9	34.0	6.5	7.1	6.4
St. Cloud	3.0	3.2	3.2	20.3	21.5	20.7	11.1	12.2	11.1
Mississippi	41.9	42.0	42.2	259.2	266.1	263.4	207.4	219.2	213.5
Jackson	15.8	16.5	16.5	59.7	62.0	60.9	41.8	45.9	44.2
Missouri	156.6	159.9	161.1	747.2	754.5	757.0	388.3	423.6	390.6
Kansas City	65.3	68.7	69.0	271.1	276.3	276.6	125.3	136.5	128.3
St. Louis	80.4	82.0	82.5	410.5	419.0	418.8	143.3	150.8	142.1
Springfield	6.8	7.2	7.2	47.3	48.8	48.7	17.0	20.6	17.5
Montana	16.7	16.9	17.1	109.0	110.6	111.7	68.9	75.7	70.1
Nebraska	55.0	57.8	58.0	230.6	238.4	238.5	146.8	152.8	144.8
Lincoln	9.4	10.0	10.2	37.1	37.6	37.4	34.6	34.2	34.3
Omaha	35.1	37.4	37.7	131.6	137.1	137.0	49.2	50.9	47.4
Nevada	40.4	42.7	42.8	384.4	395.3	396.6	100.7	110.4	106.8
Las Vegas	30.5	32.1	32.2	285.6	295.9	296.1	60.8	68.5	65.7
Reno	8.0	8.5	8.5	69.8	69.5	70.2	21.8	23.1	23.1
New Hampshire	30.2	29.6	30.0	170.2	169.2	170.6	71.5	78.5	71.8
Manchester	7.5	7.1	7.1	30.3	30.5	29.9	9.5	11.3	10.0
Nashua	4.6	4.5	4.7	24.5	24.9	23.8	7.1	8.9	7.6
Portsmouth-Rochester	6.3	6.4	6.4	30.2	29.5	30.1	20.6	19.8	18.9
New Jersey	242.1	247.4	249.0	1,198.9	1,235.6	1,240.8	556.3	574.4	552.7
Atlantic-Cape May	6.6	6.5	6.7	95.4	93.2	96.5	28.9	29.3	29.0
Bergen-Passaic	34.8	35.7	35.9	195.2	203.0	198.7	69.6	71.0	67.9
Camden	22.6	24.3	24.5	148.5	154.8	156.4	73.0	80.1	74.4
Jersey City	25.9	26.9	27.1	58.1	60.5	60.1	39.8	38.3	38.6
Middlesex-Somerset-Hunterdon	46.1	46.2	46.8	183.1	195.5	196.6	73.2	76.3	73.0
Monmouth-Ocean	18.4	18.2	18.3	129.2	130.7	132.5	63.9	65.9	62.3
Newark	72.4	73.7	74.2	302.1	307.9	310.1	141.2	144.5	138.8
Trenton	11.6	11.6	11.9	69.5	72.5	72.3	50.3	50.9	48.3
Vineland-Millville-Bridgeton	3.2	3.1	3.0	12.8	13.0	12.9	12.3	14.0	12.9
New Mexico	31.7	31.9	32.1	197.2	202.2	201.7	172.9	178.0	173.6
Albuquerque	16.9	17.1	17.1	105.5	107.5	107.3	62.7	65.7	63.7
Las Cruces	2.0	2.0	2.0	10.9	11.6	11.7	18.0	19.0	17.9
Santa Fe	3.3	3.4	3.4	21.8	22.7	22.3	25.2	25.4	25.5

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
New York	8,026.8	8,236.2	8,140.9	4.8	4.8	4.9	281.0	289.6	296.9
Albany-Schenectady-Troy	426.5	438.0	430.7	.6	.5	.5	16.3	16.3	17.0
Binghamton	111.6	115.8	113.3	(1)	(1)	(1)	4.5	4.3	4.5
Buffalo-Niagara Falls	543.2	551.9	535.0	(1)	(1)	(1)	22.6	22.2	23.0
Dutchess County	105.8	109.8	108.0	(1)	(1)	(1)	4.5	4.7	4.9
Elmira	42.0	43.3	42.5	(1)	(1)	(1)	1.9	1.8	1.9
Glens Falls	53.3	53.6	54.1	(1)	(1)	(1)	2.1	2.1	2.1
Nassau-Suffolk	1,117.2	1,161.7	1,141.7	(1)	(1)	(1)	50.6	53.9	54.6
New York PMSA	3,917.2	4,032.3	4,010.9	(1)	(1)	(1)	120.1	126.6	127.4
New York City	3,405.1	3,503.3	3,486.8	.3	.3	.3	94.9	101.2	101.2
Newburgh	121.8	123.5	122.5	(1)	(1)	(1)	4.6	4.6	4.8
Rochester	528.7	534.6	521.0	.5	.4	.4	19.3	17.9	18.7
Rockland County	100.8	106.9	106.0	(1)	(1)	(1)	3.9	3.9	4.0
Syracuse	334.4	339.7	334.4	(1)	(1)	(1)	14.6	13.9	14.6
Utica-Rome	128.4	130.0	130.7	(1)	(1)	(1)	4.2	4.1	4.4
Westchester County	390.6	400.7	396.4	(1)	(1)	(1)	19.4	19.3	19.9
North Carolina	3,629.7	3,758.8	3,690.0	4.0	4.0	4.0	208.6	213.5	214.3
Asheville	106.6	110.7	108.3	(1)	(1)	(1)	6.0	5.9	6.0
Charlotte-Gastonia-Rock Hill	748.6	767.3	756.5	(1)	(1)	(1)	47.4	47.3	47.4
Greensboro-Winston-Salem-High Point	622.5	638.4	623.7	(1)	(1)	(1)	31.9	32.3	32.5
Raleigh-Durham-Chapel Hill	607.7	637.9	629.8	(1)	(1)	(1)	35.2	35.9	36.0
North Dakota	313.1	322.5	318.4	4.4	4.3	4.3	17.9	18.0	18.4
Bismarck	49.0	50.4	49.8	(1)	(1)	(1)	2.9	2.8	2.8
Fargo-Moorhead	95.1	98.2	97.2	(1)	(1)	(1)	6.3	6.5	6.6
Grand Forks	46.4	48.1	47.9	(1)	(1)	(1)	3.4	3.1	3.2
Ohio	5,378.1	5,516.3	5,421.0	13.8	13.5	13.5	241.1	244.8	251.2
Akron	320.0	326.0	324.6	.5	.5	.5	13.9	14.0	14.2
Canton-Massillon	182.4	186.7	186.2	.5	.5	.5	9.2	9.3	9.6
Cincinnati	847.9	877.1	871.6	.7	.8	.8	41.2	43.0	43.8
Cleveland-Lorain-Elyria	1,143.7	1,177.5	1,164.9	.9	.7	.7	47.9	49.1	50.6
Columbus	820.1	846.3	838.9	.7	.7	.7	37.3	39.0	40.1
Dayton-Springfield	469.5	477.7	465.9	.4	.4	.4	18.3	18.6	18.9
Hamilton-Middletown	114.8	118.3	115.7	(1)	(1)	(1)	7.5	7.5	7.8
Lima	77.5	78.8	78.1	(1)	(1)	(1)	4.0	3.8	3.9
Mansfield	80.4	79.8	78.4	(1)	(1)	(1)	2.7	2.6	2.6
Staubenville-Weirton	48.2	52.0	51.1	.4	.4	.4	1.6	1.7	1.8
Toledo	307.4	314.8	304.1	.2	.1	.1	15.9	15.5	16.0
Youngstown-Warren	246.5	252.3	239.7	.5	.6	.5	10.9	10.8	11.0
Oklahoma	1,377.1	1,428.1	1,413.1	32.0	32.0	31.8	51.7	53.9	54.0
Enid	24.4	25.5	25.1	1.2	1.2	1.2	1.0	1.1	1.1
Lawton	36.2	37.7	36.7	.1	.1	.1	1.1	1.0	1.0
Oklahoma City	492.2	511.2	502.3	7.5	7.6	7.5	18.8	19.2	19.3
Tulsa	373.0	386.6	386.3	7.8	7.7	7.7	14.9	16.6	16.7
Oregon	1,523.6	1,576.4	1,561.0	1.9	1.9	1.9	86.3	83.9	87.8
Eugene-Springfield	135.0	141.6	137.6	.2	.2	.2	7.7	7.9	8.4
Medford-Ashland	67.4	70.1	69.2	.1	.1	.1	3.5	3.5	3.7
Portland-Vancouver	917.8	947.9	941.5	1.2	1.1	1.1	56.7	53.5	55.5
Salem	131.9	134.6	133.9	.3	.3	.3	8.0	8.0	8.4
Pennsylvania	5,377.2	5,479.8	5,440.5	21.0	20.4	20.4	228.1	232.0	235.8
Allentown Bethlehem-Easton	264.4	268.3	265.3	(1)	(1)	(1)	11.1	10.4	10.6
Altoona	58.1	59.3	59.1	(1)	(1)	(1)	2.7	2.7	2.7
Erie	128.5	130.1	129.9	(1)	(1)	(1)	5.0	4.8	5.2
Harrisburg-Lebanon-Carlisle	349.0	358.5	355.8	(1)	(1)	(1)	13.8	13.8	13.9
Johnstown	87.4	89.3	88.0	(1)	(1)	(1)	4.9	4.7	4.7
Lancaster	212.2	217.7	215.7	.4	.4	.4	12.5	13.0	13.2
Philadelphia PMSA	2,247.9	2,284.0	2,280.1	(1)	(1)	(1)	91.3	93.7	95.5
Philadelphia City	663.6	663.7	670.2	(1)	(1)	(1)	11.6	11.9	12.2
Pittsburgh	1,069.8	1,081.5	1,073.9	4.7	4.9	5.0	52.6	52.0	53.1
Reading	163.0	166.5	162.0	(1)	(1)	(1)	7.7	7.7	7.9
Scranton-Wilkes-Barre-Hazleton	273.9	279.3	277.2	.4	.4	.4	11.4	11.7	12.3
Sharon	46.7	48.4	48.0	(1)	(1)	(1)	1.7	1.7	1.7
State College	65.2	66.3	66.4	(1)	(1)	(1)	2.6	2.4	2.6
Williamsport	53.0	53.7	53.8	(1)	(1)	(1)	2.4	2.5	2.5
York	161.8	164.4	162.5	.4	.4	.4	8.9	9.0	9.3

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
New York	920.8	925.1	903.8	402.9	416.1	404.2	1,646.4	1,682.7	1,668.3
Albany-Schenectady-Troy	39.1	39.4	38.8	17.0	17.3	16.8	91.8	93.5	92.8
Binghamton	24.8	25.6	25.3	4.7	4.8	4.8	23.5	24.0	23.9
Buffalo-Niagara Falls	89.9	90.4	81.3	25.0	26.1	25.2	129.9	131.5	129.8
Dutchess County	17.7	18.6	18.6	3.7	3.6	3.6	20.2	20.8	20.5
Elmira	9.4	9.8	9.8	1.5	1.5	1.5	10.3	10.4	10.3
Glens Falls	8.4	8.6	8.6	1.8	1.8	1.9	12.7	12.4	13.0
Nassau-Suffolk	111.6	112.9	112.0	50.5	54.5	52.0	289.2	298.0	294.2
New York PMSA	315.7	319.5	315.4	229.1	238.0	233.2	684.5	715.5	706.8
New York City	263.3	266.9	263.2	203.7	210.8	207.4	573.9	598.3	591.0
Newburgh	11.9	11.9	11.8	6.4	6.9	6.5	33.8	33.9	34.1
Rochester	127.9	122.3	117.7	16.2	17.1	16.3	113.0	114.7	113.2
Rockland County	12.1	12.4	12.4	6.0	6.6	6.1	22.2	25.6	25.7
Syracuse	49.3	50.2	49.5	19.5	19.9	19.7	79.3	80.8	80.0
Utica-Rome	19.4	19.3	19.3	4.0	3.7	3.6	27.1	27.2	27.5
Westchester County	38.4	38.2	37.9	18.8	20.0	19.1	84.2	87.3	85.9
North Carolina	832.8	827.9	823.0	170.6	170.8	171.7	843.6	848.3	851.5
Asheville	19.7	19.7	19.6	4.6	4.7	4.7	27.5	27.9	27.8
Charlotte-Gastonia-Rock Hill	143.7	143.4	143.0	53.2	53.1	53.2	184.2	186.4	185.5
Greensboro-Winston-Salem-High Point	165.0	165.1	164.8	33.1	31.9	31.6	142.5	142.2	141.5
Raleigh-Durham-Chapel Hill	83.4	85.7	85.2	27.0	27.6	28.0	130.1	132.9	134.1
North Dakota	23.6	23.8	23.7	18.0	18.5	18.3	81.0	81.2	81.1
Bismarck	2.9	3.0	3.0	3.2	3.2	3.2	12.4	12.5	12.5
Fargo-Moorhead	8.0	8.2	8.2	5.2	5.5	5.5	27.1	27.6	27.4
Grand Forks	3.4	3.5	3.4	2.2	2.3	2.3	12.1	12.6	12.6
Ohio	1,077.1	1,094.7	1,053.0	235.2	235.4	234.3	1,315.7	1,332.4	1,324.5
Akron	62.7	64.1	62.7	14.7	14.9	14.8	80.5	82.4	82.7
Canton-Massillon	46.2	47.3	47.2	5.2	5.1	5.0	45.8	47.0	46.9
Cincinnati	140.3	142.6	141.5	44.2	44.5	44.3	219.5	221.1	222.1
Cleveland-Lorain-Elyria	223.8	224.8	221.4	46.0	46.3	46.3	273.8	279.4	279.6
Columbus	92.6	94.6	90.5	36.3	36.4	36.3	213.7	216.9	216.3
Dayton-Springfield	98.5	98.3	91.6	20.8	21.1	21.3	109.9	112.2	112.1
Hamilton-Middletown	20.9	20.9	20.7	4.8	5.0	5.0	31.9	31.5	31.5
Lima	19.4	19.7	19.3	3.0	3.2	3.2	18.3	18.6	18.6
Mansfield	22.7	22.7	21.6	3.5	3.2	3.3	18.6	18.6	18.7
Steubenville-Weirton	11.5	14.0	13.8	2.8	2.6	2.6	11.0	10.7	10.8
Toledo	55.8	61.2	54.0	13.8	14.6	14.7	78.8	77.6	77.8
Youngstown-Warren	59.4	59.0	49.0	10.2	10.5	10.3	62.8	63.9	64.4
Oklahoma	181.3	186.5	183.6	80.2	82.9	83.5	325.4	329.8	329.3
Enid	2.2	2.4	2.4	2.1	2.1	2.1	6.1	6.3	6.2
Lawton	3.6	3.6	3.6	1.8	1.8	1.8	9.1	9.0	9.1
Oklahoma City	54.6	56.5	54.4	24.4	25.6	25.6	118.8	120.6	120.7
Tulsa	56.6	57.5	57.1	29.7	31.0	31.4	87.8	88.2	88.4
Oregon	251.0	248.2	251.6	73.8	75.5	76.0	381.9	387.8	392.3
Eugene-Springfield	21.4	21.8	21.8	4.5	4.3	4.4	35.0	35.7	35.8
Medford-Ashland	9.6	9.1	9.2	3.3	3.4	3.4	19.5	19.8	19.9
Portland-Vancouver	149.6	152.1	152.3	52.1	54.4	54.3	229.9	235.7	237.9
Salem	19.7	18.3	20.0	3.5	3.5	3.8	28.2	28.5	28.6
Pennsylvania	937.0	941.8	936.2	271.8	282.0	273.6	1,215.2	1,238.2	1,231.6
Allentown Bethlehem-Easton	56.3	56.3	55.1	15.0	15.5	15.4	56.6	56.6	56.3
Altoona	9.9	10.1	10.1	4.3	4.2	4.4	15.8	16.2	16.3
Erie	34.1	34.3	34.3	5.0	4.9	4.9	28.9	29.5	29.9
Harrisburg-Lebanon-Carlisle	45.6	45.7	45.5	22.6	23.4	23.1	78.5	80.9	80.8
Johnstown	13.2	13.0	12.9	4.9	5.1	4.8	20.7	21.0	20.9
Lancaster	57.1	56.8	56.6	8.2	8.6	8.3	53.6	55.0	55.1
Philadelphia PMSA	304.3	303.7	302.7	105.0	110.9	108.9	493.3	504.8	498.8
Philadelphia City	58.2	57.4	57.2	33.8	34.9	34.7	109.5	111.6	111.5
Pittsburgh	138.4	139.2	139.9	64.8	65.1	64.3	256.2	259.7	259.1
Reading	43.2	42.7	41.0	7.8	8.4	7.9	38.5	39.1	39.0
Scranton-Wilkes-Barre-Hazleton	54.1	55.4	54.8	14.8	15.7	15.1	66.3	66.3	66.1
Sharon	10.9	11.2	11.2	1.9	2.0	1.9	12.3	12.6	12.5
State College	8.7	8.9	9.0	1.9	2.2	1.9	13.0	13.2	13.1
Williamsport	13.4	13.4	13.5	1.9	2.0	1.9	13.0	13.4	13.4
York	48.0	47.2	47.0	7.3	7.4	7.2	39.0	40.4	40.2

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
New York	728.8	735.9	738.1	2,702.0	2,797.3	2,788.1	1,340.3	1,384.7	1,336.7
Albany-Schenectady-Troy	25.9	25.9	25.9	131.3	135.6	134.0	104.6	109.5	105.0
Binghamton	3.8	3.8	3.9	31.1	31.4	31.4	19.0	21.8	19.6
Buffalo-Niagara Falls	29.8	29.8	29.8	162.9	165.1	163.3	83.2	86.7	82.6
Dutchess County	4.8	4.9	5.0	34.0	33.8	34.4	21.0	23.4	21.0
Elmira	1.3	1.3	1.3	10.6	10.7	10.6	7.0	7.9	7.1
Glens Falls	2.1	2.1	2.1	17.4	16.2	17.4	8.9	10.4	9.0
Nassau-Suffolk	79.4	80.8	81.3	367.2	378.5	378.8	168.6	183.0	168.7
New York PMSA	509.8	515.4	517.5	1,442.9	1,513.6	1,499.3	615.0	603.6	611.2
New York City	478.4	481.6	483.6	1,258.4	1,325.4	1,310.1	534.2	518.7	530.1
Newburgh	5.9	5.7	5.9	33.1	32.4	33.4	26.1	28.0	26.1
Rochester	21.9	21.8	21.9	159.5	161.5	161.9	70.3	78.8	70.6
Rockland County	5.1	5.2	5.2	33.0	32.9	34.0	18.6	20.3	18.6
Syracuse	18.4	18.1	18.1	95.9	95.8	95.8	57.5	61.1	56.8
Utica-Rome	7.8	7.7	7.8	39.2	40.1	41.0	26.8	27.8	27.1
Westchester County	26.9	27.1	27.1	144.8	148.7	148.1	58.1	60.1	58.4
North Carolina	169.7	176.4	177.5	885.7	923.1	917.1	514.7	594.8	530.9
Asheville	3.3	3.1	3.1	31.8	33.4	33.3	13.7	16.0	13.8
Charlotte-Gastonia-Rock Hill	53.8	55.3	55.7	188.1	190.5	191.0	78.2	91.3	80.7
Greensboro-Winston-Salem-High Point	32.9	33.0	33.1	162.0	166.2	165.3	55.1	67.7	54.9
Raleigh-Durham-Chapel Hill	29.5	30.7	30.6	191.1	198.1	198.2	111.4	127.0	117.7
North Dakota	15.0	15.7	15.8	88.1	90.1	89.5	65.1	70.9	67.3
Bismarck	2.3	2.4	2.4	15.7	15.8	15.8	9.6	10.7	10.1
Fargo-Moorhead	6.1	6.6	6.6	30.1	30.4	30.4	12.3	13.4	12.5
Grand Forks	1.6	1.6	1.6	12.7	12.8	12.9	11.0	12.2	11.9
Ohio	289.9	294.8	295.6	1,488.0	1,532.6	1,527.5	717.3	768.1	721.4
Akron	13.0	13.4	13.6	92.3	93.4	93.3	42.4	43.3	42.8
Canton-Massillon	6.1	6.1	6.2	50.5	52.1	52.5	18.9	19.3	18.3
Cincinnati	53.4	55.5	56.0	254.7	266.5	266.8	93.9	103.1	96.3
Cleveland-Lorain-Elyria	75.4	75.9	76.5	337.7	352.1	350.2	138.2	149.2	139.6
Columbus	71.8	73.8	73.8	233.5	245.1	246.6	134.2	139.8	134.6
Dayton-Springfield	18.0	17.8	17.9	136.6	137.5	137.3	67.0	71.8	66.4
Hamilton-Middletown	6.5	6.7	6.7	26.9	27.9	27.7	16.3	18.8	16.3
Lima	2.1	2.2	2.2	20.6	20.6	20.8	10.1	10.7	10.1
Mansfield	2.9	2.5	2.5	19.5	19.2	19.1	10.5	11.0	10.6
Steubenville-Weirton	1.5	1.6	1.6	13.1	14.3	13.8	6.3	6.7	6.3
Toledo	11.0	11.0	10.9	90.9	91.2	91.2	41.0	43.6	39.4
Youngstown-Warren	9.6	9.4	9.5	64.9	65.7	65.5	28.2	32.4	29.5
Oklahoma	69.9	71.7	71.7	380.9	396.2	394.6	255.7	275.1	264.6
Enid	1.0	1.0	1.0	6.9	7.3	7.2	3.9	4.1	3.9
Lawton	1.7	1.7	1.7	8.0	8.4	8.3	10.8	12.1	11.1
Oklahoma City	29.2	30.0	30.2	146.0	150.5	149.5	92.9	101.2	95.1
Tulsa	20.2	20.9	21.0	117.0	122.7	123.9	39.0	42.0	40.1
Oregon	96.3	97.8	98.4	404.4	415.6	415.7	228.0	265.7	237.3
Eugene-Springfield	7.4	7.6	7.6	37.2	38.1	37.9	21.6	26.0	21.5
Medford-Ashland	3.1	3.2	3.2	18.8	20.0	20.1	9.5	11.0	9.6
Portland-Vancouver	67.3	67.5	67.5	252.9	262.3	260.8	108.1	121.3	112.1
Salem	6.7	6.7	6.7	30.8	31.4	31.2	34.7	37.9	35.1
Pennsylvania	316.9	323.8	325.3	1,715.7	1,745.1	1,746.7	671.5	696.5	670.9
Allentown Bethlehem-Easton	13.4	13.4	13.6	83.7	84.5	84.9	28.3	31.6	29.4
Altoona	1.9	2.0	2.0	16.1	16.4	16.2	7.4	7.7	7.4
Erie	5.6	5.5	5.6	36.1	36.0	36.0	13.8	15.1	14.0
Harrisburg-Lebanon-Carlisle	26.0	26.1	26.1	97.2	102.0	102.5	65.3	66.6	63.9
Johnstown	4.3	4.2	4.2	26.3	27.2	27.1	13.1	14.1	13.4
Lancaster	9.5	10.0	10.0	54.8	56.1	55.6	16.1	17.8	16.5
Philadelphia PMSA	159.3	162.0	162.7	809.8	822.3	826.8	284.9	286.6	284.7
Philadelphia City	53.9	55.2	55.2	275.9	281.2	280.4	120.7	111.5	119.0
Pittsburgh	62.7	62.4	62.7	372.4	371.8	370.5	118.0	126.4	119.3
Reading	8.7	8.9	8.8	40.9	41.5	41.2	16.2	18.2	16.2
Scranton-Wilkes-Barre-Hazleton	14.2	14.6	14.6	79.1	80.9	80.8	33.6	34.3	33.1
Sharon	1.5	1.7	1.7	13.2	13.5	13.6	5.2	5.7	5.4
State College	2.0	2.0	2.0	14.6	14.7	14.7	22.4	22.9	23.1
Williamsport	2.2	2.2	2.2	14.3	14.2	14.4	5.8	6.0	5.9
York	5.2	5.3	5.3	38.7	39.0	38.5	14.3	15.7	14.6

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Rhode Island	443.8	459.2	449.0	.2	.2	.2	15.8	17.4	17.4
Providence-Fall River-Warwick	496.5	511.3	497.8	.2	.2	.2	18.2	19.5	19.5
South Carolina	1,720.2	1,821.2	1,789.1	1.9	1.9	1.9	101.1	110.6	111.4
Charleston-North Charleston	221.7	236.5	233.0	(1)	(1)	(1)	16.3	18.1	18.1
Columbia	279.4	293.3	290.2	(1)	(1)	(1)	15.6	16.5	16.6
Greenville-Spartanburg-Anderson	455.2	477.5	469.3	(1)	(1)	(1)	30.5	31.8	32.1
South Dakota	359.4	367.5	363.0	2.3	1.8	1.8	17.6	17.6	18.0
Rapid City	48.8	48.7	48.6	(1)	(1)	(1)	3.4	3.3	3.4
Sioux Falls	103.2	109.1	107.5	(1)	(1)	(1)	5.4	5.9	6.0
Tennessee	2,575.5	2,628.3	2,608.4	4.6	4.5	4.5	120.2	123.2	125.1
Chattanooga	220.6	222.0	222.5	(1)	(1)	(1)	9.9	10.5	10.5
Johnson City-Kingsport-Bristol	199.7	200.4	198.6	(1)	(1)	(1)	11.2	11.6	11.6
Knoxville	319.0	322.6	318.4	.6	.6	.6	15.8	15.8	16.1
Memphis	552.3	558.3	555.8	(1)	(1)	(1)	24.9	24.9	25.0
Nashville	623.7	638.9	633.4	(1)	(1)	(1)	32.2	34.5	34.9
Texas	8,608.6	8,892.1	8,878.6	167.5	168.4	168.1	465.0	490.1	492.1
Abilene	54.6	56.2	56.0	1.7	1.6	1.6	2.3	2.4	2.5
Amarillo	92.9	95.1	94.8	.7	.6	.6	4.9	5.0	5.1
Austin-San Marcos	560.7	587.8	586.9	1.2	1.3	1.3	30.3	33.5	34.0
Beaumont-Port Arthur	155.5	160.5	159.2	.8	.9	.9	14.7	15.7	15.6
Brazoria	72.6	74.5	73.9	1.4	1.3	1.3	9.2	8.6	8.7
Brownsville-Harlingen-San Benito	97.3	100.9	99.7	(1)	(1)	(1)	3.5	3.5	3.5
Bryan-College Station	65.8	65.9	66.8	.9	.8	.8	3.1	3.4	3.5
Corpus Christi	153.5	158.2	157.6	2.4	2.5	2.5	11.5	10.8	10.8
Dallas	1,764.6	1,841.5	1,840.9	11.7	11.5	11.4	83.9	86.9	87.6
El Paso	244.0	250.5	250.5	(1)	(1)	(1)	12.1	12.7	12.7
Ft. Worth-Arlington	706.4	734.4	730.2	4.4	4.3	4.3	36.0	37.1	37.3
Galveston-Texas City	88.0	90.6	90.0	.7	.7	.7	4.5	4.1	4.2
Houston	1,892.9	1,975.1	1,974.5	68.9	70.4	70.0	127.9	137.4	137.6
Killeen-Temple	97.2	101.4	100.0	(1)	(1)	(1)	4.2	4.5	4.4
Laredo	59.9	62.2	61.0	3.2	2.0	1.5	2.2	2.4	2.4
Longview-Marshall	88.3	90.4	89.8	3.4	3.3	3.3	4.5	4.7	4.7
Lubbock	112.1	116.4	115.6	.1	.1	.1	4.4	4.9	4.8
McAllen-Edinburg-Mission	132.3	140.6	138.2	1.1	1.2	1.2	7.1	7.4	7.4
Odessa Midland	102.7	106.4	106.1	13.6	12.9	12.8	5.8	7.0	7.2
San Angelo	42.6	43.4	43.2	.7	.7	.7	1.9	1.9	1.9
San Antonio	662.1	687.4	685.0	1.9	2.0	2.0	35.1	37.1	37.6
Sherman-Denison	43.3	43.9	43.4	(1)	(1)	(1)	2.1	2.3	2.3
Texarkana	51.0	52.1	51.8	(1)	(1)	(1)	2.2	2.1	2.3
Tyler	77.1	80.0	79.2	1.6	1.6	1.6	3.0	3.2	3.3
Victoria	35.4	36.7	36.5	1.7	1.8	1.8	2.4	2.6	2.6
Waco	94.6	97.4	96.7	(1)	(1)	(1)	4.6	5.0	5.0
Wichita Falls	58.6	60.4	59.9	1.2	1.1	1.1	2.3	2.5	2.5
Utah	989.6	1,031.5	1,016.2	8.6	8.2	8.1	68.5	70.4	71.1
Provo-Orem	130.9	136.6	134.7	(1)	(1)	(1)	10.0	9.3	9.6
Salt Lake City-Ogden	669.2	695.7	687.8	3.0	2.8	2.8	45.6	46.5	46.8
Vermont	274.9	282.9	279.2	.6	.6	.5	14.6	13.9	14.6
Barre-Montpelier	29.1	31.5	30.7	(1)	(1)	(1)	1.5	1.6	1.6
Burlington	96.5	100.1	100.0	(1)	(1)	(1)	5.4	4.5	4.5
Virginia	3,222.5	3,347.3	3,325.4	11.2	11.0	10.9	190.8	199.6	202.7
Bristol	36.5	36.7	36.1	(1)	(1)	(1)	1.5	1.4	1.5
Charlottesville	80.0	84.1	82.0	(1)	(1)	(1)	4.6	4.6	4.6
Danville	44.1	46.0	44.6	(1)	(1)	(1)	2.5	2.4	2.5
Lynchburg	95.6	96.9	95.8	(1)	(1)	(1)	6.1	5.9	6.1
Norfolk-Virginia Beach-Newport News	664.2	681.7	673.6	(1)	(1)	(1)	41.3	41.0	41.5
Northern Virginia	1,002.6	1,049.7	1,046.8	.7	.8	.7	57.3	59.5	60.8
Richmond-Petersburg	521.1	540.3	533.8	.7	.7	.7	34.0	35.1	35.4
Roanoke	138.6	141.8	140.4	(1)	(1)	(1)	8.4	8.9	8.9
Washington	2,524.6	2,620.0	2,601.1	3.6	3.5	3.5	143.7	144.9	149.7
Seattle-Bellevue-Everett	1,301.9	1,367.9	1,365.1	.7	.7	.7	69.3	69.9	72.2
Spokane	183.8	190.4	186.2	(1)	(1)	(1)	12.0	11.4	11.6
Tacoma	228.7	237.7	236.8	.2	.2	.2	13.3	14.6	15.3

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
Rhode Island	74.1	79.2	74.5	15.4	16.2	15.8	100.3	100.4	100.6
Providence-Fall River-Warwick	95.4	102.4	96.6	16.7	18.2	17.0	115.3	115.1	114.2
South Carolina	361.3	364.8	363.6	76.4	77.8	78.7	418.9	447.1	446.1
Charleston-North Charleston	21.3	22.0	22.0	12.1	13.0	13.1	56.2	58.0	57.9
Columbia	25.7	26.7	26.5	13.1	12.9	13.0	65.3	68.4	68.5
Greenville-Spartanburg-Anderson	123.4	123.9	123.2	20.6	21.1	21.2	116.7	121.7	121.4
South Dakota	50.9	49.8	50.4	16.3	15.8	15.6	90.4	91.4	91.0
Rapid City	4.5	4.7	4.8	2.0	1.8	1.8	15.1	15.1	15.3
Sioux Falls	14.1	14.6	14.8	6.4	6.2	6.2	26.2	27.2	27.1
Tennessee	512.8	516.3	508.4	151.1	152.4	152.7	608.7	620.0	620.2
Chattanooga	42.8	41.7	43.0	11.9	12.1	12.1	53.1	53.4	53.4
Johnson City-Kingsport-Bristol	52.5	50.7	50.3	7.9	7.5	7.5	45.4	45.4	45.4
Knoxville	48.3	49.5	47.4	14.6	14.4	14.4	84.3	85.2	85.7
Memphis	63.7	63.1	63.3	60.6	62.8	62.9	140.4	142.0	141.7
Nashville	96.0	95.6	94.7	31.2	31.7	31.7	151.0	156.1	155.6
Texas	1,086.0	1,101.2	1,097.1	518.1	541.2	543.1	2,056.1	2,102.8	2,106.2
Abilene	3.2	3.4	3.4	2.4	2.4	2.4	14.4	14.8	14.7
Amarillo	9.3	9.4	9.4	5.8	5.6	5.7	26.3	26.8	26.6
Austin-San Marcos	76.4	78.0	77.6	18.8	19.8	19.9	121.2	127.3	127.5
Beaumont-Port Arthur	25.0	25.5	25.5	8.2	8.0	7.9	35.8	36.5	36.7
Brazoria	16.6	16.9	16.7	2.7	2.7	2.8	14.7	15.2	15.2
Brownsville-Harlingen-San Benito	11.8	12.0	12.0	4.4	4.7	4.6	23.8	24.3	24.4
Bryan-College Station	4.1	4.4	4.5	1.5	1.5	1.5	14.3	14.6	14.6
Corpus Christi	13.2	13.5	13.5	6.5	6.5	6.5	36.5	36.8	36.9
Dallas	246.0	249.8	250.8	122.2	129.4	129.6	430.7	442.6	442.7
El Paso	43.5	41.1	41.1	13.6	14.4	14.5	58.0	59.2	59.2
Ft. Worth-Arlington	110.0	111.0	109.5	65.0	68.2	68.4	179.0	187.9	187.9
Galveston-Texas City	8.0	8.0	8.0	4.2	4.3	4.3	19.7	20.4	20.3
Houston	210.8	216.5	217.1	134.4	138.9	139.9	435.5	451.7	454.4
Killeen-Temple	9.2	9.5	9.5	3.6	3.7	3.7	22.9	23.5	23.4
Laredo	1.5	1.5	1.5	10.2	11.2	11.1	16.3	17.0	16.9
Longview-Marshall	18.9	19.2	19.3	4.1	4.2	4.2	22.4	23.0	23.0
Lubbock	7.6	8.0	8.0	5.6	5.5	5.5	31.9	32.8	32.6
McAllen-Edinburg-Mission	13.0	13.3	13.1	4.6	4.8	4.7	36.6	39.2	38.4
Odessa Midland	7.6	7.5	7.5	4.2	4.2	4.1	27.6	27.7	27.8
San Angelo	5.0	4.7	4.7	2.3	2.3	2.3	10.1	10.4	10.4
San Antonio	50.3	50.5	50.2	30.8	31.0	31.2	161.8	165.5	166.6
Sherman-Denison	10.6	10.3	10.0	1.7	1.7	1.7	9.7	9.8	9.8
Texarkana	6.0	5.9	5.9	2.2	2.3	2.3	13.3	13.5	13.6
Tyler	11.3	10.9	10.0	3.7	3.9	4.0	19.6	20.4	20.6
Victoria	3.3	3.3	3.3	1.5	1.6	1.6	9.4	9.6	9.7
Waco	16.5	16.5	16.4	3.6	3.9	3.9	21.9	22.6	22.6
Wichita Falls	8.0	8.5	8.3	2.9	2.8	2.8	13.8	13.6	13.7
Utah	133.0	134.9	134.4	56.7	58.0	58.1	239.8	244.1	244.2
Provo-Orem	19.8	20.5	20.3	2.3	2.3	2.3	30.3	31.0	31.1
Salt Lake City-Ogden	82.1	83.1	82.5	44.7	46.3	46.2	163.4	167.1	167.8
Vermont	46.4	48.4	48.3	12.3	12.7	12.4	66.1	66.2	66.5
Barre-Montpelier	3.2	3.5	3.3	1.0	1.1	1.0	7.0	6.9	6.9
Burlington	18.0	19.0	19.1	4.9	4.7	4.8	22.3	22.3	22.4
Virginia	403.9	406.1	402.8	168.6	172.2	172.7	723.3	742.8	743.5
Bristol	9.6	9.0	8.8	1.3	1.3	1.3	10.2	10.3	10.3
Charlottesville	8.2	8.4	8.4	2.4	2.4	2.4	16.2	16.7	16.5
Danville	14.9	15.1	14.7	1.0	1.0	1.0	9.7	9.9	9.9
Lynchburg	25.3	25.1	25.1	3.6	3.6	3.6	20.0	19.9	19.6
Norfolk-Virginia Beach-Newport News	68.0	68.9	66.8	32.4	32.8	33.0	156.7	158.7	159.4
Northern Virginia	43.8	45.3	45.5	61.0	61.8	62.2	214.4	219.2	218.9
Richmond-Petersburg	61.2	61.1	61.0	26.9	27.9	28.0	123.4	123.3	126.8
Roanoke	18.5	19.0	18.8	8.6	8.4	8.4	36.2	36.2	36.2
Washington	374.5	380.3	380.2	134.5	137.8	138.8	617.1	631.5	635.4
Seattle-Bellevue-Everett	220.1	228.4	229.0	78.3	81.8	82.3	308.6	317.3	320.5
Spokane	23.2	22.8	22.5	7.9	8.1	8.2	46.9	48.4	48.3
Tacoma	25.9	25.9	25.8	9.5	10.2	10.5	57.8	61.5	61.4

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
Rhode Island	26.9	27.8	27.7	151.2	151.9	151.9	59.9	66.1	60.9
Providence-Fall River-Warwick	29.4	29.4	29.5	160.0	160.2	159.7	61.3	66.3	61.1
South Carolina	76.2	79.5	80.0	401.6	425.8	424.7	282.8	313.7	282.7
Charleston-North Charleston	8.5	8.7	8.7	60.3	65.7	65.2	47.0	51.0	48.0
Columbia	20.1	20.7	20.8	69.9	72.2	72.4	69.7	75.9	72.4
Greenville-Spartanburg-Anderson	15.6	15.9	16.0	97.1	101.9	100.9	51.3	61.2	54.5
South Dakota	21.4	22.5	22.5	95.6	97.1	97.8	64.9	71.5	65.9
Rapid City	1.9	1.9	1.9	15.4	14.6	14.9	6.5	7.3	6.5
Sioux Falls	11.7	12.7	12.8	30.7	31.6	31.4	8.7	10.9	9.2
Tennessee	121.6	123.7	123.8	693.9	705.0	707.7	362.6	383.2	366.0
Chattanooga	15.8	15.5	15.5	55.0	55.6	55.4	32.3	33.2	32.6
Johnson City-Kingsport-Bristol	6.1	6.2	6.2	49.7	50.5	50.5	26.8	28.5	27.1
Knoxville	14.0	14.2	14.2	89.4	89.7	89.8	52.0	53.2	50.2
Memphis	27.6	28.0	28.1	161.3	160.6	160.9	73.8	76.9	73.9
Nashville	39.3	39.8	39.7	199.7	200.7	200.8	74.3	60.5	76.0
Texas	467.7	484.1	486.4	2,424.4	2,527.6	2,535.7	1,423.8	1,476.7	1,449.9
Abilene	2.4	2.5	2.5	18.7	19.1	19.2	9.5	10.0	9.7
Amarillo	4.8	5.1	5.1	25.9	26.9	27.0	15.2	15.7	15.3
Austin-San Marcos	30.1	30.7	30.8	163.0	171.4	172.9	119.7	125.8	122.9
Beaumont-Port Arthur	5.1	5.4	5.4	41.6	42.5	42.4	24.3	26.0	24.8
Brazoria	1.8	1.8	1.8	13.6	14.0	14.1	12.6	14.0	13.3
Brownsville-Harlingen-San Benito	3.7	3.8	3.9	28.9	30.1	29.7	21.2	22.5	21.6
Bryan-College Station	2.4	2.3	2.3	14.8	15.3	15.2	24.7	23.6	24.4
Corpus Christi	6.7	6.6	6.6	47.4	50.4	50.2	29.3	31.1	30.1
Dallas	140.1	145.9	146.8	542.5	575.4	577.7	187.5	200.0	194.3
El Paso	9.6	10.3	10.3	55.6	58.9	58.9	51.6	53.9	53.8
Ft. Worth-Arlington	31.9	33.2	33.4	194.9	201.8	203.0	85.2	90.9	86.4
Galveston-Texas City	5.5	5.5	5.6	19.3	20.0	20.0	26.1	27.6	26.9
Houston	101.0	104.2	105.1	577.7	606.7	609.6	236.7	249.3	240.8
Killeen-Temple	4.0	4.3	4.3	27.2	28.2	28.1	26.1	27.7	26.6
Laredo	2.3	2.4	2.5	10.8	11.5	11.5	13.4	14.2	13.6
Longview-Marshall	3.2	3.3	3.3	21.1	21.3	21.4	10.7	11.4	10.6
Lubbock	5.5	5.7	5.7	34.0	35.8	35.9	23.0	23.6	23.0
McAllen-Edinburg-Mission	4.9	5.0	5.0	31.2	31.9	31.9	33.8	37.8	36.5
Odessa Midland	3.6	3.6	3.5	24.8	25.8	25.9	15.7	17.7	17.3
San Angelo	1.7	1.6	1.6	12.7	13.1	13.1	8.2	8.7	8.5
San Antonio	44.2	45.3	45.6	211.9	224.3	226.3	126.1	131.7	125.5
Sherman-Denison	2.2	2.1	2.1	11.8	12.2	12.2	5.2	5.5	5.3
Texarkana	1.7	1.8	1.8	14.3	15.0	14.9	11.3	11.5	11.0
Tyler	4.0	4.1	4.1	23.6	24.8	25.1	10.3	11.1	10.5
Victoria	1.6	1.3	1.3	9.7	10.1	10.1	5.8	6.4	6.1
Waco	5.7	5.9	6.0	27.8	28.2	28.1	14.5	15.3	14.7
Wichita Falls	2.1	2.3	2.2	16.3	16.9	16.9	12.0	12.7	12.4
Utah	52.6	54.2	54.1	270.6	280.6	280.5	159.8	181.1	185.7
Provo-Orem	4.0	4.2	4.2	49.7	50.3	50.7	14.8	19.0	16.5
Salt Lake City-Ogden	43.4	44.3	44.2	181.5	189.4	189.9	105.5	116.2	107.6
Vermont	12.6	12.3	12.5	84.3	83.4	86.5	38.0	45.4	37.9
Barre-Montpelier	2.7	2.5	2.6	7.8	8.5	8.6	5.9	7.4	6.7
Burlington	5.0	5.1	5.1	29.2	30.1	30.9	11.7	14.4	13.2
Virginia	170.0	173.0	174.2	987.1	1,042.9	1,040.5	567.6	599.7	578.1
Bristol	1.2	1.3	1.3	7.5	7.8	7.7	5.2	5.6	5.2
Charlottesville	4.3	4.3	4.4	19.9	20.6	20.0	24.4	27.1	25.7
Danville	1.4	1.5	1.5	9.4	10.2	9.8	5.2	5.9	5.2
Lynchburg	4.4	4.2	4.2	23.5	25.5	24.9	12.7	12.7	12.3
Norfolk-Virginia Beach-Newport News	31.3	32.8	33.3	197.8	203.8	201.7	136.7	143.7	137.9
Northern Virginia	55.5	56.9	57.4	394.6	424.3	425.1	175.3	181.9	176.2
Richmond-Petersburg	44.3	44.5	44.8	139.7	147.1	144.7	90.9	95.6	92.4
Roanoke	9.3	9.3	9.2	40.7	42.1	41.7	16.9	17.9	17.2
Washington	130.3	135.2	136.8	681.1	715.9	714.0	439.8	470.9	442.7
Seattle-Bellevue-Everett	78.9	82.4	83.1	373.0	401.3	400.0	173.0	186.1	177.3
Spokane	10.9	11.1	11.2	55.8	56.3	56.3	27.1	32.3	28.1
Tacoma	11.8	12.3	12.3	63.3	64.2	64.6	46.9	48.8	46.7

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Total			Mining			Construction		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
West Virginia	712.8	721.0	721.6	24.5	23.1	22.9	36.7	37.0	38.0
Charleston	132.4	134.5	135.1	1.9	1.8	1.8	7.5	7.4	7.8
Huntington-Ashland	120.0	122.0	120.3	1.5	1.3	1.3	6.3	5.9	5.9
Parkersburg-Marietta	70.0	70.4	69.1	.3	.3	.3	4.9	3.9	4.0
Wheeling	66.8	67.1	68.3	1.6	1.5	1.5	2.7	2.8	3.0
Wisconsin	2,667.5	2,751.0	2,719.9	2.9	2.5	2.6	120.0	121.8	125.0
Appleton-Oshkosh-Neenah	194.2	201.9	199.8	(1)	(1)	(1)	11.4	11.7	12.2
Eau Claire	71.9	74.0	73.4	(1)	(1)	(1)	3.5	3.6	3.7
Green Bay	133.8	136.5	135.8	(1)	(1)	(1)	7.2	6.9	7.1
Janesville-Beloit	69.6	70.3	64.8	(1)	(1)	(1)	2.9	3.0	3.0
Kenosha	49.1	52.0	50.3	(1)	(1)	(1)	2.3	2.2	2.3
La Crosse	67.0	69.0	68.1	(1)	(1)	(1)	3.2	3.2	3.3
Madison	267.2	274.8	273.9	(1)	(1)	(1)	13.5	13.8	14.1
Milwaukee-Waukesha	826.5	856.4	846.4	(1)	(1)	(1)	32.5	33.0	33.8
Racine	81.4	84.8	83.6	(1)	(1)	(1)	3.5	3.8	3.8
Sheboygan	59.2	59.8	58.8	(1)	(1)	(1)	2.5	2.6	2.6
Wausau	65.1	66.6	66.3	(1)	(1)	(1)	3.2	3.2	3.3
Wyoming	231.2	235.3	232.8	17.4	17.4	17.8	17.4	17.0	17.7
Casper	30.1	31.2	30.7	2.1	2.2	2.3	1.9	2.0	2.1
Puerto Rico	987.5	(2)	(2)	1.1	(2)	(2)	55.9	(2)	(2)
Caguas	64.9	(2)	(2)	(1)	(1)	(1)	3.1	(2)	(2)
Mayaguez	69.6	(2)	(2)	(1)	(1)	(1)	4.1	(2)	(2)
Ponce	77.5	(2)	(2)	(1)	(1)	(1)	4.6	(2)	(2)
San Juan-Bayamon	615.2	(2)	(2)	.6	(2)	(2)	38.6	(2)	(2)
Virgin Islands	42.4	(2)	(2)	(1)	(1)	(1)	1.9	(2)	(2)

See footnotes at end of table.

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

B-14. Employees on nonfarm 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 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
West Virginia	81.3	83.1	82.7	39.1	39.0	39.1	162.1	165.1	164.5
Charleston	10.1	10.3	10.3	9.6	9.0	9.0	31.2	32.5	32.3
Huntington-Ashland	17.0	16.6	16.4	6.9	6.7	6.7	31.7	31.2	31.1
Parkersburg-Marietta	13.4	13.4	13.4	2.6	2.6	2.6	17.7	17.6	17.7
Wheeling	5.8	6.1	6.2	2.7	2.8	2.7	17.3	16.9	17.2
Wisconsin	618.6	627.2	622.1	121.0	125.3	121.1	612.0	623.4	623.7
Appleton-Oshkosh-Neenah	60.4	60.1	58.8	7.2	7.5	7.4	40.5	43.6	43.3
Eau Claire	12.5	13.1	13.3	3.4	3.4	3.4	19.9	20.1	20.0
Green Bay	29.2	29.4	29.9	9.7	10.1	10.0	31.5	31.6	31.4
Janesville-Beloit	21.9	22.0	17.7	2.4	2.6	2.4	16.5	16.0	15.8
Kenosha	10.2	11.6	10.5	1.9	2.2	2.1	12.3	12.3	12.3
La Crosse	11.3	11.9	11.4	2.9	2.9	2.9	18.0	18.4	18.1
Madison	30.6	30.6	30.7	9.2	9.7	9.7	56.9	56.6	56.6
Milwaukee-Waukesha	175.3	180.1	179.2	38.6	40.4	39.3	181.0	185.2	185.2
Racine	25.4	26.3	25.4	2.4	2.4	2.2	16.6	16.9	16.7
Sheboygan	24.7	24.2	24.0	1.7	1.8	1.8	11.1	11.1	11.0
Wausau	19.0	19.2	19.4	3.2	3.5	3.5	16.0	16.3	16.5
Wyoming	10.9	11.0	11.1	14.1	14.1	14.1	55.6	55.0	55.6
Casper	1.5	1.5	1.5	1.7	1.6	1.6	8.5	8.5	8.6
Puerto Rico	147.8	(²)	(²)	25.9	(²)	(²)	194.3	(²)	(²)
Caguas	15.5	(²)	(²)	.7	(²)	(²)	14.3	(²)	(²)
Mayaguez	16.2	(²)	(²)	.7	(²)	(²)	11.8	(²)	(²)
Ponce	10.4	(²)	(²)	2.4	(²)	(²)	13.2	(²)	(²)
San Juan-Bayamon	68.5	(²)	(²)	19.5	(²)	(²)	128.4	(²)	(²)
Virgin Islands	2.3	(²)	(²)	2.3	(²)	(²)	9.2	(²)	(²)

See footnotes at end of table.

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

B-14. Employees on nonfarm payrolls in States and selected areas by major industry — Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P	July 1997	June 1998	July 1998 ^P
West Virginia	28.5	28.4	28.3	201.2	206.6	206.5	139.4	138.7	139.6
Charleston	7.6	7.9	8.0	40.6	41.4	41.5	23.9	24.2	24.4
Huntington-Ashland	3.8	3.9	4.0	33.5	35.7	35.5	19.3	20.7	19.4
Parkersburg-Marietta	2.6	2.6	2.6	19.5	19.2	19.5	9.0	10.8	9.0
Wheeling	2.9	2.9	2.9	23.3	23.1	23.7	10.5	11.0	11.1
Wisconsin	142.0	145.5	146.4	691.1	711.4	712.8	359.9	393.8	366.2
Appleton-Oshkosh-Neenah	9.7	10.1	10.2	44.4	45.7	45.6	20.5	23.2	22.4
Eau Claire	2.5	2.6	2.7	19.6	20.1	20.0	10.6	11.2	10.3
Green Bay	9.2	9.5	9.5	32.5	32.8	33.0	14.5	16.2	14.9
Janesville-Beloit	1.9	1.9	1.9	15.7	16.0	15.5	8.2	8.8	8.5
Kenosha	1.7	1.8	1.8	13.1	13.5	13.8	7.7	8.4	7.5
La Crosse	2.4	2.6	2.7	20.2	21.0	20.8	9.0	8.9	8.9
Madison	21.5	22.4	22.5	68.5	71.0	71.5	67.0	70.8	68.9
Milwaukee-Waukesha	58.2	59.3	60.0	258.2	265.3	265.3	82.7	93.1	83.7
Racine	2.2	2.3	2.3	22.0	23.6	23.6	9.2	9.6	9.6
Sheboygan	2.1	2.2	2.3	11.4	11.4	11.4	5.7	6.5	5.7
Wausau	4.7	4.9	4.9	12.2	12.3	12.3	6.7	7.3	6.5
Wyoming	8.4	8.4	8.5	55.3	53.7	55.6	52.1	58.7	52.4
Casper	1.2	1.2	1.2	8.4	8.7	8.8	4.8	5.5	4.6
Puerto Rico	47.0	(²)	(²)	186.0	(²)	(²)	329.5	(²)	(²)
Caguas	1.6	(²)	(²)	11.4	(²)	(²)	18.3	(²)	(²)
Mayaguez	2.0	(²)	(²)	11.3	(²)	(²)	23.5	(²)	(²)
Ponce	2.3	(²)	(²)	16.0	(²)	(²)	28.6	(²)	(²)
San Juan-Bayamon	37.1	(²)	(²)	125.9	(²)	(²)	196.6	(²)	(²)
Virgin Islands	1.9	(²)	(²)	9.9	(²)	(²)	14.9	(²)	(²)

¹ Combined with construction.
² 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 1997 benchmarks.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Total private		34.8	35.0	34.7	34.8	35.2	-	-	-	-	-
Goods-producing		41.0	41.5	41.2	40.9	41.3	-	-	-	-	-
Mining		45.1	45.6	44.0	44.1	44.2	-	-	-	-	-
Metal mining	10	44.3	43.8	44.2	45.3	-	-	-	-	-	
Iron ores	101	44.0	44.7	44.3	44.1	-	-	-	-	-	
Copper ores	102	47.1	44.9	46.6	48.2	-	-	-	-	-	
Coal mining	12	44.0	45.0	45.0	42.7	-	-	-	-	-	
Bituminous coal and lignite mining	122	44.1	45.0	45.0	42.5	-	-	-	-	-	
Oil and gas extraction	13	44.4	45.1	42.5	43.0	-	-	-	-	-	
Crude petroleum and natural gas	131	41.4	40.7	40.5	42.5	-	-	-	-	-	
Oil and gas field services	138	45.9	47.4	43.3	43.2	-	-	-	-	-	
Nonmetallic minerals, except fuels	14	48.8	48.5	47.5	48.1	-	-	-	-	-	
Crushed and broken stone	142	50.9	50.6	49.3	50.2	-	-	-	-	-	
Construction		40.1	39.7	39.1	40.1	40.1	-	-	-	-	
General building contractors	15	38.8	38.6	38.0	38.6	-	-	-	-	-	
Residential building construction	152	37.2	37.3	36.7	37.2	-	-	-	-	-	
Operative builders	153	38.8	38.7	38.1	38.7	-	-	-	-	-	
Nonresidential building construction	154	40.4	39.9	39.5	40.1	-	-	-	-	-	
Heavy construction, except building	16	44.6	44.1	42.8	44.6	-	-	-	-	-	
Highway and street construction	161	47.0	46.2	43.9	46.7	-	-	-	-	-	
Heavy construction, except highway	162	43.4	43.0	42.3	43.5	-	-	-	-	-	
Special trade contractors	17	39.5	39.1	38.6	39.4	-	-	-	-	-	
Plumbing, heating, and air conditioning	171	40.2	40.0	39.8	40.3	-	-	-	-	-	
Painting and paper hanging	172	38.2	38.5	36.8	38.2	-	-	-	-	-	
Electrical work	173	40.4	40.4	40.2	40.4	-	-	-	-	-	
Masonry, stonework, and plastering	174	36.9	36.5	36.1	37.0	-	-	-	-	-	
Carpentry and floor work	175	36.1	36.0	36.7	36.8	-	-	-	-	-	
Roofing, siding, and sheet metal work	176	37.2	35.9	34.4	36.8	-	-	-	-	-	
Manufacturing		41.2	42.0	41.8	41.1	41.7	4.5	4.9	4.6	4.4	4.6
Durable goods		41.9	42.7	42.4	41.5	42.2	4.7	5.2	4.8	4.4	4.6
Lumber and wood products	24	40.8	41.3	41.6	41.2	41.7	4.4	4.6	4.8	4.7	-
Logging	241	41.2	41.6	42.0	41.7	-	6.0	6.5	6.0	5.6	-
Sawmills and planing mills	242	41.8	42.7	42.4	42.1	-	5.1	5.4	5.0	5.0	-
Sawmills and planing mills, general	2421	42.5	43.2	42.7	42.4	-	5.7	6.0	5.4	5.5	-
Hardwood dimension and flooring mills	2426	39.5	40.9	41.3	41.0	-	3.0	3.2	3.6	3.3	-
Millwork, plywood, and structural members	243	41.1	41.5	42.0	41.5	-	4.4	4.3	5.2	5.2	-
Millwork	2431	41.0	40.8	41.7	41.2	-	3.7	3.4	4.2	4.1	-
Wood kitchen cabinets	2434	40.0	40.9	41.6	41.4	-	4.4	4.2	6.1	6.1	-
Hardwood veneer and plywood	2435	40.5	41.6	42.2	39.6	-	4.7	4.3	5.4	5.0	-
Softwood veneer and plywood	2436	43.2	43.8	42.5	42.0	-	5.9	5.9	5.6	5.5	-
Wood containers	244	38.9	39.4	39.3	38.7	-	3.3	3.7	3.9	3.1	-
Wood buildings and mobile homes	245	39.0	39.3	41.1	41.0	-	3.0	3.3	3.8	4.2	-
Mobile homes	2451	39.4	39.3	41.3	41.2	-	2.9	3.2	3.8	4.2	-
Miscellaneous wood products	249	40.5	40.6	40.3	39.6	-	3.6	3.8	3.6	3.2	-
Furniture and fixtures	25	39.5	40.5	40.8	40.2	41.0	3.4	3.8	3.6	3.8	-
Household furniture	251	37.7	39.4	39.7	38.9	-	2.5	3.0	2.9	2.9	-
Wood household furniture	2511	37.6	40.2	40.1	38.6	-	2.4	3.0	3.0	2.6	-
Upholstered household furniture	2512	36.8	37.9	38.6	38.7	-	1.7	2.1	2.2	2.5	-
Metal household furniture	2514	39.0	38.7	41.0	37.8	-	3.3	3.5	4.0	2.7	-
Mattresses and bedsprings	2515	39.7	40.7	39.8	40.9	-	4.9	4.9	3.4	4.9	-
Office furniture	252	41.7	41.9	41.9	41.4	-	4.4	4.6	4.2	4.4	-
Public building and related furniture	253	40.6	42.1	42.6	41.3	-	4.7	5.5	5.1	5.5	-
Partitions and fixtures	254	43.5	42.7	43.1	43.7	-	5.3	4.9	4.9	5.5	-
Miscellaneous furniture and fixtures	259	39.4	40.4	40.4	39.8	-	3.3	3.6	4.2	4.1	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Total private		\$12.17	\$12.22	\$12.66	\$12.66	\$12.75	\$423.52	\$427.70	\$439.30	\$440.57	\$448.80
Goods-producing		13.93	13.96	14.27	14.34	14.42	571.13	579.34	587.92	586.51	595.55
Mining		16.07	15.98	16.73	16.77	16.93	724.76	728.69	736.12	739.56	748.31
Metal mining	10	17.70	17.70	18.22	18.03	-	784.11	775.26	805.32	816.76	-
Iron ores	101	19.19	18.93	19.61	19.78	-	844.36	846.17	868.72	872.30	-
Copper ores	102	16.10	16.41	16.25	15.94	-	758.31	736.81	757.25	768.31	-
Coal mining	12	18.97	18.84	19.14	18.96	-	834.68	847.80	861.30	809.59	-
Bituminous coal and lignite mining	122	19.29	19.12	19.39	19.25	-	850.69	860.40	872.55	818.13	-
Oil and gas extraction	13	15.54	15.42	16.47	16.63	-	689.98	695.44	699.98	715.09	-
Crude petroleum and natural gas	131	21.03	20.73	22.30	22.34	-	870.64	843.71	903.15	949.45	-
Oil and gas field services	138	12.98	13.05	13.63	13.72	-	595.78	618.57	590.18	592.70	-
Nonmetallic minerals, except fuels	14	14.31	14.30	14.75	14.88	-	698.33	693.55	700.63	715.73	-
Crushed and broken stone	142	13.66	13.72	14.19	14.15	-	695.29	694.23	699.57	710.33	-
Construction		16.03	16.12	16.44	16.63	16.76	642.80	639.96	642.80	666.86	672.08
General building contractors	15	15.03	15.15	15.63	15.79	-	583.16	584.79	593.94	609.49	-
Residential building construction	152	13.86	14.04	14.57	14.65	-	515.59	523.69	534.72	544.98	-
Operative builders	153	15.00	14.95	15.25	14.69	-	582.00	578.57	581.03	568.50	-
Nonresidential building construction	154	16.14	16.22	16.69	16.94	-	652.06	647.18	659.26	679.29	-
Heavy construction, except building	16	15.78	15.81	16.09	16.48	-	703.79	697.22	688.65	735.01	-
Highway and street construction	161	16.07	16.20	16.29	16.81	-	755.29	748.44	715.13	785.03	-
Heavy construction, except highway	162	15.63	15.61	15.99	16.31	-	678.34	671.23	676.38	709.49	-
Special trade contractors	17	16.41	16.51	16.80	16.95	-	648.20	645.54	648.48	667.83	-
Plumbing, heating, and air conditioning	171	16.83	16.84	17.10	17.21	-	676.57	673.60	680.58	693.56	-
Painting and paper hanging	172	14.55	14.77	15.01	15.00	-	555.81	568.65	552.37	573.00	-
Electrical work	173	17.82	17.95	18.37	18.52	-	719.93	725.18	738.47	748.21	-
Masonry, stonework, and plastering	174	16.22	16.40	16.73	16.83	-	598.52	598.60	603.95	622.71	-
Carpentry and floor work	175	15.95	16.33	16.32	16.44	-	575.80	587.88	598.94	604.99	-
Roofing, siding, and sheet metal work	176	14.36	14.30	14.51	14.98	-	534.19	513.37	499.14	551.26	-
Manufacturing		13.10	13.14	13.43	13.38	13.46	539.72	551.88	561.37	549.92	561.28
Durable goods		13.61	13.70	13.94	13.79	13.95	570.26	584.99	591.06	572.29	588.69
Lumber and wood products	24	10.83	10.81	11.10	11.20	11.24	441.86	446.45	461.76	461.44	468.71
Logging	241	12.36	12.34	12.58	12.63	-	509.23	513.34	528.36	526.67	-
Sawmills and planing mills	242	10.86	10.86	11.03	11.11	-	453.95	463.72	467.67	467.73	-
Sawmills and planing mills, general	2421	11.27	11.31	11.48	11.58	-	478.98	488.59	490.20	490.99	-
Hardwood dimension and flooring mills	2426	9.12	9.07	9.38	9.35	-	360.24	370.96	387.39	383.35	-
Millwork, plywood, and structural members	243	10.94	10.90	11.25	11.41	-	449.63	452.35	472.50	473.52	-
Millwork	2431	11.01	11.01	11.23	11.39	-	451.41	449.21	468.29	469.27	-
Wood kitchen cabinets	2434	10.72	10.57	11.33	11.46	-	428.80	432.31	471.33	474.44	-
Hardwood veneer and plywood	2435	9.52	9.53	9.95	10.13	-	385.56	396.45	419.89	401.15	-
Softwood veneer and plywood	2436	13.20	13.26	13.40	13.50	-	570.24	580.79	569.50	567.00	-
Wood containers	244	8.24	8.37	8.83	8.83	-	320.54	329.78	347.02	341.72	-
Wood buildings and mobile homes	245	11.02	10.95	11.38	11.43	-	429.78	430.34	467.72	468.63	-
Mobile homes	2451	11.23	11.13	11.55	11.58	-	442.46	437.41	477.02	477.10	-
Miscellaneous wood products	249	10.34	10.25	10.47	10.52	-	418.77	416.15	421.94	416.59	-
Furniture and fixtures	25	10.53	10.59	10.81	10.93	10.98	415.94	428.90	441.05	439.39	450.18
Household furniture	251	9.94	9.99	10.19	10.35	-	374.74	393.61	404.54	402.62	-
Wood household furniture	2511	9.49	9.54	9.78	9.92	-	356.82	383.51	392.18	382.91	-
Upholstered household furniture	2512	10.48	10.58	10.90	10.98	-	385.66	400.98	420.74	424.93	-
Metal household furniture	2514	9.58	9.61	9.69	9.86	-	373.62	371.91	397.29	372.71	-
Mattresses and bedsprings	2515	10.79	10.73	10.54	10.96	-	428.36	436.71	419.49	448.26	-
Office furniture	252	11.59	11.71	11.68	11.78	-	483.30	490.65	489.39	487.69	-
Public building and related furniture	253	11.20	11.31	11.82	11.76	-	454.72	476.15	503.53	485.69	-
Partitions and fixtures	254	11.31	11.39	11.60	11.71	-	491.99	486.35	499.96	511.73	-
Miscellaneous furniture and fixtures	259	10.42	10.57	11.13	11.03	-	410.55	427.03	449.65	438.99	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Durable goods—Continued											
Stone, clay, and glass products	32	43.3	43.8	43.8	43.7	44.2	6.2	6.5	6.5	6.6	—
Flat glass	321	43.2	46.8	45.8	42.8	—	6.1	8.1	7.4	6.1	—
Glass and glassware, pressed or blown	322	42.1	42.2	42.6	41.9	—	4.7	4.9	4.8	4.7	—
Glass containers	3221	44.4	45.0	44.9	44.4	—	6.4	7.0	6.7	6.9	—
Pressed and blown glass, nec	3229	40.6	40.4	41.2	40.3	—	3.5	3.6	3.6	3.3	—
Products of purchased glass	323	39.9	41.7	41.5	40.5	—	3.2	4.4	4.7	3.8	—
Cement, hydraulic	324	44.8	44.3	45.1	45.5	—	5.2	5.2	5.7	6.2	—
Structural clay products	325	42.1	42.4	41.9	42.0	—	5.1	4.9	4.8	4.9	—
Pottery and related products	326	38.7	40.2	40.6	40.3	—	4.2	4.6	4.9	5.2	—
Concrete, gypsum, and plaster products	327	46.3	46.0	46.0	46.9	—	8.6	8.6	8.6	9.3	—
Concrete block and brick	3271	47.2	47.8	47.7	48.2	—	9.5	10.1	9.9	9.8	—
Concrete products, nec	3272	44.4	44.6	45.0	45.5	—	6.9	7.2	7.4	7.9	—
Ready-mixed concrete	3273	47.0	46.4	46.0	47.5	—	9.6	9.2	9.1	10.1	—
Misc. nonmetallic mineral products	329	41.7	42.5	43.0	42.1	—	5.0	5.2	5.2	5.1	—
Abrasive products	3291	41.1	42.6	42.1	40.4	—	3.7	3.7	3.3	2.5	—
Asbestos products	3292	44.9	45.6	46.8	49.5	—	6.8	7.8	8.1	11.1	—
Primary metal industries	33	43.9	44.7	44.4	43.2	43.5	6.3	6.9	6.3	6.0	—
Blast furnaces and basic steel products	331	44.3	44.8	45.0	43.9	43.8	6.2	7.1	6.3	6.2	—
Blast furnaces and steel mills	3312	45.1	45.5	45.4	44.7	—	6.6	7.6	6.5	6.7	—
Steel pipe and tubes	3317	41.4	44.4	45.0	42.0	—	5.7	6.5	6.5	5.6	—
Iron and steel foundries	332	44.7	45.6	45.0	43.0	—	6.7	6.8	6.1	5.5	—
Gray and ductile iron foundries	3321	44.9	46.1	45.9	43.3	—	7.4	7.8	6.8	6.2	—
Malleable iron foundries	3322	50.7	54.9	50.3	44.4	—	8.7	9.8	7.0	3.1	—
Steel foundries, nec	3325	42.9	43.6	42.6	41.7	—	5.1	4.7	5.0	4.9	—
Primary nonferrous metals	333	43.7	43.8	43.8	42.9	—	5.9	6.3	5.8	5.8	—
Primary aluminum	3334	43.4	43.9	44.7	43.7	—	5.8	6.3	6.2	6.1	—
Nonferrous rolling and drawing	335	44.2	45.1	44.6	43.9	—	7.3	7.9	7.5	7.3	—
Copper rolling and drawing	3351	41.9	43.2	43.5	42.7	—	7.4	7.1	7.4	7.0	—
Aluminum sheet, plate, and foil	3353	45.8	45.8	44.9	44.7	—	8.1	9.6	10.0	9.9	—
Nonferrous wire drawing and insulating	3357	44.3	45.8	44.4	42.9	—	7.2	8.0	6.8	6.3	—
Nonferrous foundries (castings)	336	42.0	43.3	42.8	40.3	—	4.5	5.2	4.9	4.1	—
Aluminum foundries	3365	41.5	43.6	42.8	40.4	—	4.6	5.4	5.6	4.7	—
Fabricated metal products	34	41.6	42.5	42.6	41.5	42.2	4.6	5.1	4.9	4.5	—
Metal cans and shipping containers	341	43.5	44.2	45.2	43.5	—	7.1	7.2	7.3	7.1	—
Metal cans	3411	43.7	44.5	45.1	43.1	—	7.1	7.2	6.9	6.6	—
Cutlery, handtools, and hardware	342	41.2	42.3	42.9	41.1	—	3.9	4.7	4.3	3.9	—
Hand and edge tools, and blades and handsaws	3423,5	41.0	42.3	43.6	41.7	—	3.8	4.9	4.7	4.1	—
Hardware, nec	3429	41.3	42.3	43.0	41.3	—	4.1	4.5	4.4	4.0	—
Plumbing and heating, except electric	343	39.7	41.1	41.8	40.8	—	4.1	4.3	3.5	3.6	—
Plumbing fixture fittings and trim	3432	40.9	40.5	41.5	40.9	—	3.9	3.2	3.7	3.4	—
Heating equipment, except electric	3433	39.5	41.9	40.9	41.4	—	3.4	4.8	3.5	3.9	—
Fabricated structural metal products	344	41.9	42.5	42.7	42.5	—	4.7	5.0	5.1	5.2	—
Fabricated structural metal	3441	42.1	42.5	43.8	43.6	—	5.6	5.6	6.5	6.6	—
Metal doors, sash, and trim	3442	41.4	41.7	42.6	41.6	—	4.1	4.1	4.4	4.5	—
Fabricated plate work (boiler shops)	3443	42.7	43.4	43.3	43.0	—	5.2	5.6	5.4	5.5	—
Sheet metal work	3444	41.1	42.0	41.2	41.7	—	3.8	4.4	4.2	4.4	—
Architectural metal work	3446	41.4	42.2	42.5	42.1	—	4.4	4.9	4.9	4.7	—
Screw machine products, bolts, etc	345	42.7	43.9	43.9	41.5	—	5.2	6.0	5.6	4.4	—
Screw machine products	3451	41.8	42.5	42.4	41.5	—	4.5	5.0	5.0	4.3	—
Bolts, nuts, rivets, and washers	3452	43.7	45.6	45.7	41.6	—	6.0	7.1	6.3	4.6	—
Metal forgings and stampings	346	41.7	43.0	42.9	40.2	—	4.6	5.6	5.3	3.7	—
Iron and steel forgings	3462	43.5	43.9	44.0	41.6	—	6.7	6.4	6.4	5.7	—
Automotive stampings	3465	41.1	43.6	43.0	38.8	—	3.8	5.9	5.0	2.0	—
Metal stampings, nec	3469	40.7	41.4	41.8	40.2	—	4.2	4.4	4.5	4.0	—
Metal services, nec	347	40.8	41.4	41.4	41.3	—	4.5	5.0	5.1	4.8	—
Plating and polishing	3471	39.8	40.4	40.7	40.9	—	4.1	4.5	5.1	4.7	—
Metal coating and allied services	3479	42.4	43.0	42.6	41.9	—	5.2	5.7	5.0	4.9	—
Ordnance and accessories, nec	348	39.2	40.3	40.6	39.8	—	2.6	3.6	3.5	3.4	—
Ammunition, except for small arms, nec	3483	39.8	41.1	41.4	41.9	—	2.5	3.4	3.2	3.6	—
Misc. fabricated metal products	349	41.4	42.4	42.1	41.3	—	4.3	4.6	4.1	3.9	—
Valves and pipe fittings, nec	3494	41.6	42.3	42.1	41.5	—	4.4	4.4	4.3	4.4	—
Misc. fabricated wire products	3496	39.6	40.6	40.5	39.9	—	3.5	3.8	3.6	3.6	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Stone, clay, and glass products	32	\$13.20	\$13.21	\$13.58	\$13.62	\$13.63	\$571.56	\$578.60	\$594.80	\$595.19	\$602.45
Flat glass	321	18.57	19.03	18.27	17.85	—	802.22	890.60	836.77	763.98	—
Glass and glassware, pressed or blown	322	15.02	15.07	15.59	15.68	—	632.34	635.95	664.13	656.99	—
Glass containers	3221	15.69	15.75	16.42	16.57	—	696.64	708.75	737.26	735.71	—
Pressed and blown glass, nec	3229	14.54	14.59	15.01	15.05	—	590.32	589.44	618.41	606.52	—
Products of purchased glass	323	11.71	11.78	11.97	11.70	—	467.23	491.23	496.76	473.85	—
Cement, hydraulic	324	17.18	17.32	18.09	18.25	—	769.66	767.28	815.86	830.38	—
Structural clay products	325	11.60	11.51	11.88	11.89	—	488.36	488.02	497.77	499.38	—
Pottery and related products	326	11.43	11.51	12.00	12.07	—	442.34	462.70	487.20	486.42	—
Concrete, gypsum, and plaster products	327	12.71	12.71	13.16	13.27	—	588.47	584.66	605.36	622.36	—
Concrete block and brick	3271	12.49	12.37	12.68	12.67	—	589.53	591.29	604.84	610.69	—
Concrete products, nec	3272	11.29	11.30	11.73	11.79	—	501.28	503.98	527.85	536.45	—
Ready-mixed concrete	3273	13.46	13.48	13.97	14.15	—	632.62	625.47	642.62	672.13	—
Misc. nonmetallic mineral products	329	13.73	13.51	13.66	13.81	—	572.54	574.18	587.38	581.40	—
Abrasive products	3291	11.91	11.77	12.15	12.25	—	489.50	501.40	511.52	494.90	—
Asbestos products	3292	15.63	15.75	15.74	15.80	—	701.79	718.20	736.63	782.10	—
Primary metal industries	33	15.28	15.16	15.53	15.58	15.46	670.79	677.65	689.53	673.06	672.51
Blast furnaces and basic steel products	331	18.13	18.00	18.53	18.54	18.35	803.16	806.40	833.85	813.91	803.73
Blast furnaces and steel mills	3312	19.71	19.60	20.22	20.18	—	888.92	891.80	917.99	902.05	—
Steel pipe and tubes	3317	14.10	13.92	14.33	14.26	—	583.74	618.05	644.85	598.92	—
Iron and steel foundries	332	13.79	13.76	13.93	13.78	—	616.41	627.46	626.85	592.54	—
Gray and ductile iron foundries	3321	14.72	14.65	14.60	14.40	—	660.93	675.37	670.14	623.52	—
Malleable iron foundries	3322	15.66	15.07	15.76	15.80	—	793.96	827.34	792.73	701.52	—
Steel foundries, nec	3325	12.57	12.62	13.07	13.34	—	539.25	550.23	556.78	556.28	—
Primary nonferrous metals	333	16.79	16.71	17.02	17.19	—	733.72	731.90	745.48	737.45	—
Primary aluminum	3334	16.74	16.70	16.95	17.13	—	726.52	733.13	757.67	748.58	—
Nonferrous rolling and drawing	335	14.42	14.40	14.68	14.61	—	637.36	649.44	654.73	641.38	—
Copper rolling and drawing	3351	14.73	14.52	15.19	15.04	—	617.19	627.26	660.77	642.21	—
Aluminum sheet, plate, and foil	3353	16.65	16.70	16.87	17.09	—	762.57	764.86	757.46	763.92	—
Nonferrous wire drawing and insulating	3357	14.38	14.40	14.85	14.75	—	637.03	659.52	659.34	632.78	—
Nonferrous foundries (castings)	336	11.88	11.86	12.34	12.28	—	498.96	513.54	528.15	494.88	—
Aluminum foundries	3365	11.69	11.51	11.95	11.79	—	485.14	501.84	511.46	476.32	—
Fabricated metal products	34	12.66	12.75	13.00	12.88	13.05	526.66	541.88	553.80	534.52	550.71
Metal cans and shipping containers	341	16.40	16.55	16.73	16.79	—	713.40	731.51	756.20	730.37	—
Metal cans	3411	17.46	17.65	17.85	17.97	—	763.00	785.43	805.04	774.51	—
Cutlery, handtools, and hardware	342	12.40	12.35	12.25	12.30	—	510.88	522.41	525.53	505.53	—
Hand and edge tools, and blades and handsaws	3423,5	11.87	12.04	12.13	12.26	—	486.67	509.29	528.87	511.24	—
Hardware, nec	3429	12.61	12.45	12.46	12.50	—	520.79	526.64	535.78	516.25	—
Plumbing and heating, except electric	343	11.82	11.78	11.82	11.86	—	469.25	484.16	494.08	483.89	—
Plumbing fixture fittings and trim	3432	11.49	11.41	11.50	11.49	—	469.94	462.11	477.25	469.94	—
Heating equipment, except electric	3433	11.66	12.07	12.14	12.21	—	460.57	505.73	496.53	505.49	—
Fabricated structural metal products	344	12.04	12.10	12.47	12.49	—	504.48	514.25	532.47	530.83	—
Fabricated structural metal	3441	12.09	12.20	12.76	12.84	—	508.99	518.50	558.89	559.82	—
Metal doors, sash, and trim	3442	10.35	10.40	10.59	10.67	—	428.49	433.68	451.13	443.87	—
Fabricated plate work (boiler shops)	3443	13.37	13.45	13.70	13.72	—	570.90	583.73	593.21	589.96	—
Sheet metal work	3444	12.33	12.34	12.85	12.81	—	506.76	518.28	529.42	534.18	—
Architectural metal work	3446	11.51	11.52	11.73	11.69	—	476.51	486.14	498.53	492.15	—
Screw machine products, bolts, etc	345	12.79	12.86	13.27	13.21	—	546.13	564.55	582.55	548.22	—
Screw machine products	3451	12.23	12.24	12.62	12.60	—	511.21	520.20	535.09	522.90	—
Bolts, nuts, rivets, and washers	3452	13.41	13.53	13.99	13.94	—	586.02	616.97	639.34	579.90	—
Metal forgings and stampings	346	14.50	14.79	15.11	14.49	—	604.65	635.97	648.22	582.50	—
Iron and steel forgings	3462	14.42	14.34	14.53	14.48	—	627.27	629.53	639.32	602.37	—
Automotive stampings	3465	16.43	16.86	17.25	16.31	—	675.27	735.10	741.75	632.83	—
Metal stampings, nec	3469	12.21	12.24	12.64	12.62	—	496.95	506.74	528.35	507.32	—
Metal services, nec	347	10.74	10.81	11.16	11.15	—	438.19	447.53	462.02	460.50	—
Plating and polishing	3471	10.58	10.62	11.08	10.92	—	421.08	429.05	450.96	446.63	—
Metal coating and allied services	3479	10.98	11.09	11.28	11.52	—	465.55	476.87	480.53	482.69	—
Ordnance and accessories, nec	348	15.38	15.33	14.48	14.76	—	602.90	617.80	587.89	587.45	—
Ammunition, except for small arms, nec	3483	16.25	16.08	14.02	14.52	—	646.75	660.89	580.43	608.39	—
Misc. fabricated metal products	349	12.22	12.22	12.47	12.53	—	505.91	518.13	524.99	517.49	—
Valves and pipe fittings, nec	3494	12.50	12.46	12.84	12.91	—	520.00	527.06	540.56	535.77	—
Misc. fabricated wire products	3496	10.94	10.88	11.17	11.24	—	433.22	441.73	452.39	448.48	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Industrial machinery and equipment	35	42.8	43.1	43.2	42.2	42.5	5.1	5.5	5.2	4.8	—
Engines and turbines	351	44.7	43.4	45.0	42.2	—	5.4	5.7	6.3	4.8	—
Turbines and turbine generator sets	3511	43.9	41.7	42.9	42.0	—	4.0	4.3	4.6	3.3	—
Internal combustion engines, nec	3519	45.0	44.0	45.7	42.3	—	5.9	6.2	6.9	5.3	—
Farm and garden machinery	352	41.7	42.2	41.2	39.0	—	4.5	5.0	3.4	2.8	—
Farm machinery and equipment	3523	42.0	42.7	41.7	40.4	—	5.4	5.8	3.7	3.2	—
Construction and related machinery	353	44.2	44.4	44.3	43.6	—	5.8	6.2	6.2	5.7	—
Construction machinery	3531	43.1	42.9	43.9	42.6	—	4.8	5.2	5.7	4.8	—
Mining machinery	3532	41.5	42.3	41.2	41.0	—	3.7	4.6	4.2	3.9	—
Oil and gas field machinery	3533	50.0	50.2	48.1	47.8	—	9.6	9.9	9.3	8.9	—
Conveyors and conveying equipment	3535	42.5	42.5	42.9	42.1	—	5.1	5.3	5.5	5.0	—
Industrial trucks and tractors	3537	40.8	41.6	41.9	41.4	—	4.2	4.4	4.4	4.2	—
Metalworking machinery	354	43.1	43.6	43.2	42.6	—	5.9	6.1	5.7	5.3	—
Machine tools, metal cutting types	3541	43.6	44.2	43.7	43.4	—	5.7	6.1	5.5	4.9	—
Machine tools, metal forming types	3542	44.1	44.5	44.2	43.5	—	6.0	5.8	5.6	5.4	—
Special dies, tools, jigs, and fixtures	3544	43.3	43.7	43.5	42.7	—	6.4	6.6	6.2	5.8	—
Machine tool accessories	3545	42.5	42.7	42.1	41.9	—	4.7	4.8	4.5	4.1	—
Power driven handtools	3546	41.6	41.7	42.2	42.7	—	4.1	3.9	4.2	5.1	—
Special industry machinery	355	42.3	42.9	42.4	41.4	—	4.8	5.2	4.8	4.2	—
Textile machinery	3552	41.1	41.7	41.0	40.1	—	3.9	4.0	3.8	3.2	—
Printing trades machinery	3555	41.4	41.6	42.4	40.8	—	4.6	4.9	5.2	4.2	—
Food products machinery	3556	41.1	42.3	42.1	41.3	—	4.2	5.0	4.5	4.1	—
General industrial machinery	356	42.4	42.9	43.0	41.6	—	4.7	5.0	5.1	4.4	—
Pumps and pumping equipment	3561	40.8	42.4	42.1	40.4	—	4.0	4.9	5.1	4.0	—
Ball and roller bearings	3562	42.7	44.1	44.2	41.8	—	6.1	6.3	6.9	5.4	—
Air and gas compressors	3563	42.2	42.4	43.1	42.1	—	4.2	4.7	4.7	3.9	—
Blowers and fans	3564	43.5	43.6	43.4	42.8	—	4.5	4.6	4.4	4.3	—
Speed changers, drives, and gears	3566	43.5	44.4	42.6	41.1	—	5.6	6.1	5.6	4.6	—
Power transmission equipment, nec	3568	41.5	41.4	42.3	41.7	—	4.5	4.4	4.9	4.8	—
Computer and office equipment	357	41.8	41.3	40.7	40.8	—	3.3	3.8	3.4	3.6	—
Electronic computers	3571	41.8	41.3	40.7	41.4	—	2.2	3.6	3.7	4.4	—
Computer terminals, calculators, and office machines, nec	3575,8,9	42.5	41.6	41.6	41.1	—	4.8	4.6	3.5	3.3	—
Refrigeration and service machinery	358	43.0	43.7	45.8	45.2	—	5.0	5.3	5.9	6.1	—
Refrigeration and heating equipment	3585	43.6	44.0	47.2	46.7	—	5.5	5.8	6.6	6.9	—
Misc. industrial and commercial machinery	359	42.4	43.1	42.8	41.7	—	5.4	5.8	5.5	4.8	—
Carburetors, pistons, rings, valves	3592	38.4	40.1	41.2	38.7	—	3.6	4.3	5.4	3.9	—
Scales, balances, and industrial machinery, nec	3596,9	42.5	43.1	42.9	41.8	—	5.5	5.9	5.5	4.9	—
Electronic and other electrical equipment	36	41.2	41.7	41.4	40.7	41.5	3.9	4.2	3.8	3.4	—
Electric distribution equipment	361	41.0	41.1	40.8	39.9	—	4.1	4.1	4.2	3.6	—
Transformers, except electronic	3612	41.8	42.1	41.5	40.7	—	3.8	4.4	3.6	2.9	—
Switchgear and switchboard apparatus	3613	40.2	40.1	40.1	39.3	—	4.3	3.9	4.8	4.2	—
Electrical industrial apparatus	362	40.8	41.3	41.9	41.2	—	3.4	3.5	3.8	3.6	—
Motors and generators	3621	40.6	41.4	42.0	41.6	—	3.3	3.6	3.7	3.8	—
Relays and industrial controls	3625	40.3	40.6	40.8	39.8	—	3.2	3.2	3.6	2.9	—
Household appliances	363	38.8	38.9	40.3	40.3	—	3.0	2.7	2.2	2.6	—
Household refrigerators and freezers	3632	40.4	38.7	42.0	42.9	—	3.1	2.2	1.9	3.3	—
Household laundry equipment	3633	38.2	34.1	38.5	37.4	—	1.9	1.2	1.2	1.3	—
Electric housewares and fans	3634	40.1	41.0	40.9	40.2	—	2.4	3.4	2.2	2.3	—
Electric lighting and wiring equipment	364	40.8	41.9	41.4	40.2	—	3.9	4.5	3.9	3.4	—
Electric lamps	3641	42.8	42.4	41.3	38.5	—	4.4	4.9	3.7	3.0	—
Current-carrying wiring devices	3643	40.6	41.1	40.8	40.4	—	4.3	4.4	3.7	3.5	—
Noncurrent-carrying wiring devices	3644	40.3	42.2	43.0	41.9	—	3.0	3.5	4.0	3.3	—
Residential lighting fixtures	3645	38.3	39.5	39.7	39.2	—	1.6	2.9	4.0	2.6	—
Household audio and video equipment	365	41.3	42.0	40.5	39.2	—	4.5	5.3	4.6	4.0	—
Household audio and video equipment	3651	41.1	41.2	39.7	38.2	—	3.2	3.4	3.4	3.1	—
Communications equipment	366	42.2	42.1	42.6	42.7	—	3.8	3.9	3.4	3.5	—
Telephone and telegraph apparatus	3661	44.6	43.5	45.4	45.5	—	4.6	4.6	4.7	4.7	—
Electronic components and accessories	367	41.9	42.1	41.0	40.5	—	4.4	4.5	3.9	3.6	—
Electron tubes	3671	39.6	39.5	44.0	41.6	—	4.4	4.5	3.8	3.5	—
Semiconductors and related devices	3674	43.9	43.4	41.8	42.0	—	5.6	5.3	4.6	4.6	—
Electronic components, nec	3679	40.7	41.2	41.4	40.9	—	3.1	3.5	3.8	3.4	—
Misc. electrical equipment and supplies	369	40.7	42.9	42.3	40.5	—	3.5	4.7	4.3	2.9	—
Storage batteries	3691	39.9	43.0	43.4	41.8	—	4.4	4.7	5.0	4.5	—
Engine electrical equipment	3694	40.9	43.6	42.8	40.6	—	3.1	5.3	4.6	2.4	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Industrial machinery and equipment	35	\$14.02	\$14.03	\$14.40	\$14.42	\$14.39	\$600.06	\$604.69	\$622.08	\$608.52	\$611.58
Engines and turbines	351	17.27	16.59	17.16	17.56	—	771.97	720.01	772.20	741.03	—
Turbines and turbine generator sets	3511	19.16	19.45	20.16	19.28	—	841.12	811.07	864.86	809.76	—
Internal combustion engines, nec	3519	16.60	15.65	16.23	16.96	—	747.00	688.60	741.71	717.41	—
Farm and garden machinery	352	13.98	13.90	13.76	13.88	—	582.97	586.58	566.91	541.32	—
Farm machinery and equipment	3523	14.91	14.68	14.52	14.22	—	626.22	626.84	605.48	574.49	—
Construction and related machinery	353	13.60	13.54	13.72	13.62	—	601.12	601.18	607.80	593.83	—
Construction machinery	3531	13.96	13.88	14.07	13.90	—	601.68	595.45	617.67	592.14	—
Mining machinery	3532	14.38	14.71	14.65	14.53	—	596.77	622.23	603.58	595.73	—
Oil and gas field machinery	3533	13.34	13.30	13.62	13.64	—	667.00	667.66	655.12	651.99	—
Conveyors and conveying equipment	3535	13.68	13.68	13.72	13.60	—	581.40	588.59	572.56	—	—
Industrial trucks and tractors	3537	12.47	12.36	12.66	12.67	—	508.78	514.18	530.45	524.54	—
Metalworking machinery	354	14.79	14.82	15.27	15.32	—	637.45	646.15	659.66	652.63	—
Machine tools, metal cutting types	3541	14.54	14.58	15.12	15.09	—	633.94	644.44	660.74	654.91	—
Machine tools, metal forming types	3542	15.23	15.15	15.63	15.70	—	671.64	674.18	690.85	682.95	—
Special dies, tools, jigs, and fixtures	3544	15.51	15.55	15.96	16.07	—	671.58	679.54	694.26	686.19	—
Machine tool accessories	3545	13.05	13.08	13.36	13.38	—	554.63	558.52	562.46	560.62	—
Power driven handtools	3546	12.16	12.10	12.43	12.61	—	505.86	504.57	524.55	538.45	—
Special industry machinery	355	14.68	14.74	15.07	15.02	—	620.96	632.35	638.97	621.83	—
Textile machinery	3552	12.80	12.78	13.15	13.04	—	526.08	532.93	539.15	522.90	—
Printing trades machinery	3555	15.50	15.93	16.27	16.19	—	641.70	662.69	689.85	660.55	—
Food products machinery	3556	14.55	14.59	14.63	14.75	—	598.01	617.16	615.92	609.18	—
General industrial machinery	356	13.65	13.72	14.07	13.99	—	578.76	588.59	605.01	581.98	—
Pumps and pumping equipment	3561	14.37	14.47	14.67	14.57	—	586.30	613.53	617.61	588.63	—
Ball and roller bearings	3562	14.84	14.77	15.35	14.96	—	633.67	651.36	678.47	625.33	—
Air and gas compressors	3563	14.55	14.53	14.70	14.81	—	614.01	616.07	633.57	623.50	—
Blowers and fans	3564	11.45	11.52	11.73	11.77	—	498.08	502.27	509.08	503.76	—
Speed changers, drives, and gears	3566	14.59	14.64	15.07	14.85	—	634.67	650.02	641.98	610.34	—
Power transmission equipment, nec	3568	12.93	13.03	13.57	13.60	—	536.60	539.44	574.01	567.12	—
Computer and office equipment	357	14.18	14.25	15.10	15.40	—	592.72	598.53	614.57	628.32	—
Electronic computers	3571	15.47	15.65	16.35	16.79	—	646.65	646.35	665.45	695.11	—
Computer terminals, calculators, and office machines, nec	3575,8,9	13.33	13.27	13.88	13.87	—	566.53	552.03	577.41	570.06	—
Refrigeration and service machinery	358	12.75	12.81	13.08	12.89	—	548.25	559.80	599.06	582.63	—
Refrigeration and heating equipment	3585	13.08	13.15	13.40	13.19	—	570.29	578.60	632.48	615.97	—
Misc. industrial and commercial machinery	359	13.56	13.60	14.06	14.07	—	574.94	586.16	601.77	586.72	—
Carburetors, pistons, rings, valves	3592	14.05	14.22	14.65	14.41	—	539.52	570.22	603.58	557.67	—
Scales, balances, and industrial machinery, nec ..	3596,9	13.39	13.41	13.91	13.94	—	569.08	577.97	596.74	582.69	—
Electronic and other electrical equipment	36	12.69	12.75	13.08	13.16	13.23	522.83	531.68	541.51	535.61	549.05
Electric distribution equipment	361	12.70	12.75	13.09	13.10	—	520.70	524.03	534.07	522.69	—
Transformers, except electronic	3612	11.77	11.95	12.10	12.14	—	491.99	503.10	502.15	494.10	—
Switchgear and switchboard apparatus	3613	13.61	13.53	13.97	13.93	—	547.12	542.55	560.20	547.45	—
Electrical industrial apparatus	362	12.15	12.10	12.39	12.40	—	495.72	499.73	519.14	510.88	—
Motors and generators	3621	11.31	11.25	11.50	11.49	—	459.19	465.75	483.00	477.98	—
Relays and industrial controls	3625	13.67	13.69	14.13	14.16	—	550.90	555.81	576.50	563.57	—
Household appliances	363	12.30	12.03	12.31	12.49	—	477.24	467.97	496.09	503.35	—
Household refrigerators and freezers	3632	13.14	13.12	13.24	13.49	—	530.86	507.74	556.08	578.72	—
Household laundry equipment	3633	14.88	13.85	14.02	14.21	—	568.42	472.29	539.77	531.45	—
Electric housewares and fans	3634	10.40	10.59	10.57	11.12	—	417.04	434.19	432.31	447.02	—
Electric lighting and wiring equipment	364	12.60	12.65	12.72	12.75	—	514.08	530.04	526.61	512.55	—
Electric lamps	3641	15.61	15.84	16.49	17.01	—	668.11	671.62	681.04	654.89	—
Current-carrying wiring devices	3643	13.13	12.93	13.09	13.04	—	533.08	531.42	534.07	526.82	—
Noncurrent-carrying wiring devices	3644	11.22	11.31	11.74	11.73	—	452.17	477.28	504.82	491.49	—
Residential lighting fixtures	3645	9.04	9.07	9.36	9.41	—	346.23	358.27	371.59	368.87	—
Household audio and video equipment	365	11.25	11.52	12.13	12.31	—	464.63	483.84	491.27	482.55	—
Household audio and video equipment	3651	10.79	10.84	11.63	11.59	—	443.47	446.61	461.71	442.74	—
Communications equipment	366	14.15	13.95	13.87	13.95	—	597.13	587.30	590.86	595.67	—
Telephone and telegraph apparatus	3661	15.50	15.17	14.59	14.57	—	691.30	659.90	662.39	662.94	—
Electronic components and accessories	367	12.51	12.62	13.22	13.41	—	524.17	531.30	542.02	543.11	—
Electron tubes	3671	14.77	15.03	14.62	14.89	—	584.89	593.69	643.28	619.42	—
Semiconductors and related devices	3674	15.88	16.11	17.49	17.68	—	697.13	699.17	731.08	742.56	—
Electronic components, nec	3679	10.41	10.43	10.69	10.76	—	423.69	429.72	442.57	440.08	—
Misc. electrical equipment and supplies	369	13.13	13.60	13.74	13.44	—	534.39	583.44	581.20	544.32	—
Storage batteries	3691	14.59	14.83	15.14	14.97	—	582.14	637.69	657.08	625.75	—
Engine electrical equipment	3694	12.81	13.69	14.02	13.41	—	523.93	596.88	600.06	544.45	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Transportation equipment	37	42.4	44.3	42.9	41.0	42.5	5.0	6.1	5.2	4.0	—
Motor vehicles and equipment	371	42.1	44.7	42.7	39.7	42.0	4.8	6.4	5.1	3.3	—
Motor vehicles and car bodies	3711	43.4	45.1	41.4	39.0	—	4.7	6.4	4.9	2.7	—
Truck and bus bodies	3713	44.2	43.5	44.7	41.8	—	5.4	5.2	5.8	4.8	—
Motor vehicle parts and accessories	3714	41.2	44.8	43.3	39.7	—	4.8	6.7	5.2	3.4	—
Truck trailers	3715	43.9	43.1	43.6	41.4	—	4.3	3.8	5.3	3.4	—
Aircraft and parts	372	43.4	44.4	44.3	43.5	—	6.6	7.0	6.1	5.9	—
Aircraft	3721	41.4	44.4	44.2	43.4	—	6.6	7.1	6.1	6.0	—
Aircraft engines and engine parts	3724	46.3	44.2	44.6	44.0	—	6.3	6.3	6.0	5.9	—
Aircraft parts and equipment, nec	3728	44.1	44.7	44.3	43.3	—	6.9	7.3	6.2	5.8	—
Ship and boat building and repairing	373	42.1	42.4	41.7	42.3	—	3.8	4.3	4.6	4.3	—
Ship building and repairing	3731	43.8	44.4	41.8	43.7	—	4.7	5.2	5.0	5.0	—
Boat building and repairing	3732	39.6	39.5	41.5	40.3	—	2.6	3.0	4.1	3.3	—
Railroad equipment	374	44.3	45.5	43.3	42.2	—	3.9	5.2	4.1	3.9	—
Guided missiles, space vehicles, and parts	376	42.5	43.3	42.2	41.7	—	4.1	4.8	3.8	3.4	—
Guided missiles and space vehicles	3761	42.7	43.5	41.4	40.9	—	4.3	5.0	3.7	3.4	—
Misc. transportation equipment	379	38.8	40.1	41.2	41.0	—	3.5	3.6	3.7	3.7	—
Travel trailers and campers	3792	36.7	38.5	39.5	40.2	—	1.9	2.2	2.3	2.5	—
Instruments and related products	38	41.2	42.1	41.3	40.7	41.1	3.5	4.0	3.3	2.9	—
Search and navigation equipment	381	42.6	43.2	42.0	41.5	—	3.5	3.8	3.4	3.2	—
Measuring and controlling devices	382	41.0	41.6	41.1	40.4	—	3.0	3.4	3.0	2.6	—
Environmental controls	3822	39.2	40.9	40.6	38.1	—	3.0	3.7	3.9	3.2	—
Process control instruments	3823	41.5	42.2	41.2	40.7	—	2.9	3.3	2.9	2.8	—
Instruments to measure electricity	3825	41.0	41.2	41.4	41.0	—	2.8	3.0	1.6	1.4	—
Medical instruments and supplies	384	40.7	42.1	41.2	40.5	—	3.0	3.8	3.4	3.1	—
Surgical and medical instrument	3841	41.3	42.9	41.1	41.0	—	3.2	4.2	3.3	3.1	—
Surgical appliances and supplies	3842	40.0	41.3	41.1	39.9	—	2.9	3.7	3.6	3.2	—
Ophthalmic goods	385	39.6	41.2	40.5	39.5	—	2.4	3.2	2.3	1.9	—
Photographic equipment and supplies	386	43.0	43.1	42.9	42.4	—	7.4	7.6	4.5	4.1	—
Watches, clocks, watchcases, and parts	387	39.5	41.1	39.4	39.6	—	3.0	3.2	2.1	2.3	—
Miscellaneous manufacturing industries	39	39.5	40.3	39.9	39.2	39.7	2.8	3.3	2.9	2.6	—
Jewelry, silverware, and plated ware	391	38.9	40.0	39.6	37.8	—	1.4	2.3	2.2	1.5	—
Jewelry, precious metal	3911	38.3	39.7	38.7	37.1	—	1.3	2.0	2.0	1.5	—
Musical instruments	393	38.8	40.8	41.0	40.4	—	2.2	2.9	2.8	3.3	—
Toys and sporting goods	394	39.2	39.9	39.6	39.5	—	2.5	2.9	2.3	2.0	—
Dolls, games, toys, and children's vehicles	3942,4	38.1	39.8	38.8	39.0	—	2.0	2.9	1.5	1.6	—
Sporting and athletic goods, nec	3949	39.7	39.9	40.0	39.7	—	2.7	2.9	2.6	2.2	—
Pens, pencils, office, and art supplies	395	40.5	39.8	39.1	37.8	—	3.4	3.3	3.4	3.4	—
Costume jewelry and notions	396	38.5	38.7	38.6	36.8	—	2.3	2.9	1.9	1.6	—
Costume jewelry	3961	38.8	38.4	37.7	36.6	—	2.1	3.1	1.1	1.1	—
Miscellaneous manufactures	399	39.9	40.9	40.5	39.9	—	3.3	3.9	3.5	3.2	—
Signs and advertising specialties	3993	41.2	41.5	41.3	40.7	—	4.2	4.7	4.2	3.9	—
Nondurable goods		40.3	40.9	40.9	40.6	41.0	4.3	4.6	4.3	4.3	4.5
Food and kindred products	20	41.1	41.8	41.5	41.7	42.2	5.3	5.7	5.0	5.4	—
Meat products	201	40.1	40.6	41.0	40.9	—	4.5	4.5	4.6	4.8	—
Meat packing plants	2011	40.9	41.9	42.3	43.3	—	5.2	5.0	4.7	5.7	—
Sausages and other prepared meats	2013	42.1	42.2	42.2	42.7	—	6.0	6.0	6.1	6.4	—
Poultry slaughtering and processing	2015	38.9	39.3	39.9	38.9	—	3.6	3.6	3.9	3.7	—
Dairy products	202	42.8	42.1	42.6	42.2	—	5.4	5.3	5.5	5.3	—
Cheese, natural and processed	2022	41.9	41.9	42.1	41.5	—	4.4	4.8	4.9	4.5	—
Fluid milk	2026	42.6	42.5	41.3	41.4	—	4.9	5.1	4.7	4.8	—
Preserved fruits and vegetables	203	40.8	43.0	41.0	41.5	—	6.1	7.6	5.1	5.9	—
Canned specialties	2032	40.5	42.6	43.1	42.2	—	4.6	7.2	6.0	5.6	—
Canned fruits and vegetables	2033	41.8	45.0	39.1	41.2	—	7.5	9.7	4.6	7.1	—
Frozen fruits and vegetables	2037	38.7	41.0	39.5	39.9	—	5.2	6.4	4.4	4.8	—
Grain mill products	204	45.6	45.6	45.1	46.7	—	7.3	7.4	6.6	8.3	—
Flour and other grain mill products	2041	46.8	46.0	45.6	46.6	—	7.9	7.5	6.7	8.2	—
Prepared feeds, nec	2048	43.7	43.7	44.2	44.9	—	6.3	6.3	6.1	7.5	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Durable goods—Continued											
Transportation equipment	37	\$17.20	\$17.43	\$17.45	\$16.92	\$17.39	\$729.28	\$772.15	\$748.61	\$693.72	\$739.08
Motor vehicles and equipment	371	17.52	17.83	17.84	16.96	17.72	737.59	797.00	761.77	673.31	744.24
Motor vehicles and car bodies	3711	21.02	21.14	21.90	21.57	—	912.27	953.41	906.66	841.23	—
Truck and bus bodies	3713	14.63	14.67	15.13	15.17	—	646.65	638.15	676.31	634.11	—
Motor vehicle parts and accessories	3714	16.17	16.50	16.36	15.47	—	666.20	739.20	708.39	614.16	—
Truck trailers	3715	11.04	11.17	11.49	11.20	—	484.66	481.43	500.96	463.68	—
Aircraft and parts	372	18.86	18.84	18.98	19.08	—	818.52	836.50	840.81	829.98	—
Aircraft	3721	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Aircraft engines and engine parts	3724	18.44	18.64	18.90	18.99	—	853.77	823.89	842.94	835.56	—
Aircraft parts and equipment, nec	3728	16.69	16.72	16.72	16.81	—	736.03	747.38	740.70	727.87	—
Ship and boat building and repairing	373	13.20	13.16	13.24	13.32	—	555.72	557.98	552.11	563.44	—
Ship building and repairing	3731	14.60	14.50	14.60	14.59	—	639.48	643.80	610.28	637.58	—
Boat building and repairing	3732	10.93	10.99	11.29	11.37	—	432.83	434.11	468.54	458.21	—
Railroad equipment	374	16.72	16.94	16.98	17.01	—	740.70	770.77	735.23	717.82	—
Guided missiles, space vehicles, and parts	376	19.60	19.67	20.07	19.88	—	833.00	851.71	846.95	829.00	—
Guided missiles and space vehicles	3761	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Misc. transportation equipment	379	11.25	11.54	11.78	11.77	—	436.50	462.75	485.34	482.57	—
Travel trailers and campers	3792	10.91	11.49	11.92	11.74	—	400.40	442.37	470.84	471.95	—
Instruments and related products	38	13.50	13.48	13.71	13.74	13.77	556.20	567.51	566.22	559.22	565.95
Search and navigation equipment	381	16.89	16.85	17.13	17.36	—	719.51	727.92	719.46	720.44	—
Measuring and controlling devices	382	13.50	13.50	13.74	13.81	—	553.50	561.60	564.71	557.92	—
Environmental controls	3822	11.70	11.62	11.81	12.10	—	458.64	475.26	479.49	461.01	—
Process control instruments	3823	13.06	13.13	13.68	13.75	—	541.99	554.09	563.62	559.63	—
Instruments to measure electricity	3825	15.45	15.52	15.90	16.00	—	633.45	639.42	658.26	656.00	—
Medical instruments and supplies	384	12.46	12.50	12.81	12.72	—	507.12	526.25	527.77	515.16	—
Surgical and medical instrument	3841	11.79	11.81	12.04	11.94	—	486.93	506.65	494.84	489.54	—
Surgical appliances and supplies	3842	11.55	11.57	11.90	11.85	—	462.00	477.84	489.09	472.82	—
Ophthalmic goods	385	10.10	10.00	10.19	10.19	—	399.96	412.00	412.70	402.51	—
Photographic equipment and supplies	386	15.90	15.95	16.45	16.47	—	683.70	687.45	705.71	698.33	—
Watches, clocks, watchcases, and parts	387	10.02	9.95	10.41	10.80	—	395.79	408.95	410.15	427.68	—
Miscellaneous manufacturing industries	39	10.51	10.57	10.82	10.84	10.84	415.15	425.97	431.72	424.93	430.35
Jewelry, silverware, and plated ware	391	10.84	10.96	11.38	11.29	—	421.68	438.40	450.65	426.76	—
Jewelry, precious metal	3911	10.91	11.04	11.49	11.35	—	417.85	438.29	444.66	421.09	—
Musical instruments	393	10.72	10.67	10.91	11.06	—	415.94	435.34	447.31	446.82	—
Toys and sporting goods	394	9.93	10.04	10.36	10.51	—	389.26	400.60	410.26	415.15	—
Dolls, games, toys, and children's vehicles	3942,4	9.49	9.54	10.07	10.18	—	361.57	379.69	390.72	397.02	—
Sporting and athletic goods, nec	3949	10.13	10.29	10.47	10.65	—	402.16	410.57	418.80	422.81	—
Pens, pencils, office, and art supplies	395	11.15	11.16	11.34	11.48	—	451.58	444.17	443.39	433.94	—
Costume jewelry and notions	396	9.47	9.38	9.70	9.66	—	364.60	363.01	374.42	355.49	—
Costume jewelry	3961	8.41	8.31	8.87	8.68	—	326.31	319.10	334.40	317.69	—
Miscellaneous manufactures	399	10.79	10.84	10.98	10.92	—	430.52	443.36	444.69	435.71	—
Signs and advertising specialties	3993	11.28	11.47	11.58	11.52	—	464.74	476.01	478.25	468.86	—
Nondurable goods		12.36	12.33	12.69	12.79	12.75	498.11	504.30	519.02	519.27	522.75
Food and kindred products	20	11.52	11.51	11.76	11.77	11.76	473.47	481.12	488.04	490.81	496.27
Meat products	201	9.38	9.35	9.61	9.71	—	376.14	379.61	394.01	397.14	—
Meat packing plants	2011	10.08	9.95	10.20	10.26	—	412.27	416.91	431.46	444.26	—
Sausages and other prepared meats	2013	10.82	10.71	10.92	10.99	—	455.52	451.96	460.82	469.27	—
Poultry slaughtering and processing	2015	8.44	8.47	8.74	8.85	—	328.32	332.87	348.73	344.27	—
Dairy products	202	13.20	13.29	13.46	13.52	—	564.96	559.51	573.40	570.54	—
Cheese, natural and processed	2022	12.11	12.04	12.35	12.43	—	507.41	504.48	519.94	515.85	—
Fluid milk	2026	13.90	13.91	14.16	14.12	—	592.14	591.18	584.81	584.57	—
Preserved fruits and vegetables	203	11.12	11.02	11.25	11.06	—	453.70	473.86	461.25	458.99	—
Canned specialties	2032	14.60	14.52	15.10	14.65	—	591.30	618.55	650.81	618.23	—
Canned fruits and vegetables	2033	12.15	11.58	12.31	11.62	—	507.87	521.10	481.32	478.74	—
Frozen fruits and vegetables	2037	10.23	10.33	10.35	10.48	—	395.90	423.53	408.83	418.15	—
Grain mill products	204	14.32	14.37	14.80	15.06	—	652.99	655.27	667.48	703.30	—
Flour and other grain mill products	2041	12.48	12.74	13.01	13.04	—	584.06	586.04	593.26	607.66	—
Prepared feeds, nec	2048	11.24	11.35	11.65	11.73	—	491.19	496.00	514.93	526.68	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	40.1	40.6	41.0	41.0	—	4.7	5.0	5.1	5.4	—
Bread, cake, and related products	2051	40.1	40.1	40.9	40.6	—	4.9	5.1	5.6	5.4	—
Cookies, crackers, and frozen bakery products, except bread	2052,3	40.1	41.5	41.1	41.8	—	4.4	4.8	4.1	5.4	—
Sugar and confectionery products	206	39.1	40.7	40.6	40.1	—	3.7	4.2	3.7	3.8	—
Raw cane sugar	2061	41.5	41.1	45.8	50.9	—	4.0	3.9	6.0	7.7	—
Cane sugar refining	2062	46.2	48.6	49.7	48.1	—	9.5	10.8	9.6	9.2	—
Beet sugar	2063	41.7	42.9	41.3	42.0	—	3.0	3.9	2.3	3.0	—
Candy and other confectionery products	2064	37.8	39.7	40.3	39.3	—	3.3	3.8	3.7	3.7	—
Fats and oils	207	42.4	42.1	43.0	42.5	—	6.2	6.7	5.8	6.1	—
Beverages	208	44.3	44.2	44.9	44.2	—	6.6	6.4	6.3	6.2	—
Malt beverages	2082	47.1	47.3	48.2	47.3	—	8.2	8.2	8.4	8.0	—
Bottled and canned soft drinks	2086	45.0	43.7	45.8	45.2	—	7.6	6.6	7.2	7.0	—
Misc. food and kindred products	209	40.7	40.4	39.0	40.6	—	5.4	5.7	4.1	5.4	—
Tobacco products	21	35.3	37.8	39.9	39.2	39.4	2.8	2.9	2.7	3.0	—
Cigarettes	211	35.0	38.5	39.6	38.9	—	3.1	3.5	2.7	3.0	—
Textile mill products	22	40.6	41.6	41.5	40.4	41.1	4.4	4.8	4.7	4.4	—
Broadwoven fabric mills, cotton	221	41.8	42.5	41.9	40.8	—	5.8	5.9	5.5	5.3	—
Broadwoven fabric mills, synthetics	222	40.6	41.5	41.6	40.9	—	4.6	5.2	5.1	4.9	—
Broadwoven fabric mills, wool	223	41.1	42.2	39.4	39.6	—	5.8	6.0	4.2	3.9	—
Narrow fabric mills	224	39.8	40.1	40.6	40.5	—	2.8	2.6	2.9	2.9	—
Knitting mills	225	39.5	40.4	40.9	39.9	—	3.5	3.7	3.9	3.6	—
Women's hosiery, except socks	2251	37.6	39.2	38.6	38.5	—	2.6	2.8	2.5	2.5	—
Hosiery, nec	2252	37.7	38.3	38.8	38.9	—	3.2	3.2	3.3	3.6	—
Knit outerwear mills	2253	40.4	40.9	42.4	42.0	—	3.2	3.6	3.8	3.6	—
Knit underwear mills	2254	38.4	39.0	39.3	36.7	—	2.8	2.5	2.0	1.5	—
Weft knit fabric mills	2257	39.8	41.2	41.3	38.1	—	4.9	5.3	5.4	4.7	—
Textile finishing, except wool	226	41.9	42.4	41.9	41.0	—	5.2	5.6	5.3	5.2	—
Finishing plants, cotton	2261	42.3	42.9	41.7	43.0	—	5.7	6.2	5.1	5.6	—
Finishing plants, synthetics	2262	41.2	42.4	42.5	38.9	—	4.2	5.0	5.6	4.9	—
Carpets and rugs	227	40.8	42.0	42.8	40.6	—	4.5	5.2	5.6	5.3	—
Yarn and thread mills	228	40.6	42.3	41.1	40.5	—	4.4	5.0	4.4	4.4	—
Yarn spinning mills	2281	41.7	42.8	42.3	41.8	—	4.7	5.4	4.7	4.8	—
Throwing and winding mills	2282	35.8	39.3	36.6	35.6	—	2.6	3.2	3.2	3.1	—
Miscellaneous textile goods	229	41.4	42.6	42.5	40.2	—	4.5	5.0	5.0	4.2	—
Apparel and other textile products	23	36.6	37.4	37.8	36.9	37.5	2.0	2.2	2.2	1.9	—
Men's and boys' suits and coats	231	37.6	36.7	38.3	38.2	—	1.3	1.3	1.1	1.0	—
Men's and boys' furnishings	232	35.5	37.0	37.5	36.9	—	1.4	1.6	1.8	1.7	—
Men's and boys' shirts	2321	34.1	36.4	36.7	35.5	—	1.3	1.7	1.4	1.1	—
Men's and boys' trousers and slacks	2325	35.1	36.3	36.9	36.5	—	1.4	1.5	1.8	1.8	—
Men's and boys' work clothing	2326	36.7	37.4	37.6	36.0	—	1.6	1.4	1.8	1.5	—
Women's and misses' outerwear	233	35.6	36.0	36.6	35.7	—	1.7	1.8	1.6	1.5	—
Women's and misses' blouses and shirts	2331	35.5	36.3	35.6	35.4	—	1.7	1.7	1.5	1.6	—
Women's, juniors', and misses' dresses	2335	37.1	37.8	36.8	36.4	—	1.9	2.8	2.1	2.1	—
Women's and misses' suits and coats	2337	36.7	39.0	38.3	37.0	—	1.7	2.5	1.7	1.2	—
Women's and misses' outerwear, nec	2339	35.1	35.1	36.3	35.4	—	1.6	1.5	1.4	1.4	—
Women's and children's undergarments	234	36.5	37.6	37.5	36.3	—	2.0	1.9	1.7	1.6	—
Women's and children's underwear	2341	36.7	37.4	37.3	36.7	—	1.7	1.7	1.5	1.4	—
Brassieres, girdles, and allied garments	2342	36.1	38.1	37.9	35.1	—	3.0	2.6	2.3	2.2	—
Girls' and children's outerwear	236	36.8	37.4	37.6	36.5	—	2.7	3.4	3.5	2.8	—
Girls' and children's dresses and blouses	2361	36.7	37.9	38.7	39.2	—	2.8	3.3	4.3	4.4	—
Misc. apparel and accessories	238	36.8	37.7	36.6	36.1	—	1.2	1.7	0.8	0.9	—
Misc. fabricated textile products	239	38.5	39.2	39.5	38.2	—	3.0	3.5	3.5	2.8	—
Curtains and draperies	2391	36.6	35.1	36.0	34.0	—	1.0	1.0	1.2	1.0	—
House furnishings, nec	2392	39.6	39.9	40.1	39.8	—	4.0	4.0	4.1	4.1	—
Automotive and apparel trimmings	2396	37.5	40.3	39.9	37.0	—	2.2	3.8	3.6	1.7	—
Paper and allied products	26	43.3	43.4	43.5	42.9	43.0	5.9	5.8	5.5	5.6	—
Paper mills	262	44.7	44.2	44.4	43.3	—	6.7	6.3	6.1	6.4	—
Paperboard mills	263	44.3	43.3	45.4	44.3	—	7.4	7.0	7.0	7.4	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	\$12.48	\$12.67	\$12.81	\$12.77	—	\$500.45	\$514.40	\$525.21	\$523.57	—
Bread, cake, and related products	2051	12.69	12.77	12.90	12.83	—	508.87	512.08	527.61	520.90	—
Cookies, crackers, and frozen bakery products, except bread	2052,3	12.09	12.51	12.64	12.64	—	484.81	519.17	519.50	528.35	—
Sugar and confectionery products	206	13.27	13.06	13.37	13.39	—	518.86	531.54	542.82	536.94	—
Raw cane sugar	2061	11.54	11.92	11.05	9.98	—	478.91	489.91	506.09	507.98	—
Cane sugar refining	2062	17.63	17.86	17.88	18.38	—	814.51	868.00	888.64	884.08	—
Beet sugar	2063	14.04	14.39	14.27	14.59	—	585.47	617.33	589.35	612.78	—
Candy and other confectionery products	2064	12.42	12.04	12.64	12.53	—	469.48	477.99	509.39	492.43	—
Fats and oils	207	12.90	12.68	12.78	12.88	—	546.96	533.83	549.54	547.40	—
Beverages	208	16.01	15.88	15.85	15.90	—	709.24	701.90	711.67	702.78	—
Malt beverages	2082	22.12	22.01	21.99	22.13	—	1,041.85	1,041.07	1,059.92	1,046.75	—
Bottled and canned soft drinks	2086	13.40	13.33	13.31	13.36	—	603.00	582.52	609.60	603.87	—
Misc. food and kindred products	209	10.12	10.29	10.60	10.58	—	411.88	415.72	413.40	429.55	—
Tobacco products	21	20.96	19.86	20.89	20.69	\$18.98	739.89	750.71	833.51	811.05	\$747.81
Cigarettes	211	24.78	24.83	24.76	24.22	—	867.30	955.96	980.50	942.16	—
Textile mill products	22	10.02	10.02	10.36	10.36	10.41	406.81	416.83	429.94	418.54	427.85
Broadwoven fabric mills, cotton	221	10.51	10.46	10.87	10.92	—	439.32	444.55	455.45	445.54	—
Broadwoven fabric mills, synthetics	222	10.95	10.96	11.27	11.29	—	444.57	454.84	468.83	461.76	—
Broadwoven fabric mills, wool	223	10.64	10.53	10.96	11.00	—	437.30	444.37	431.82	435.60	—
Narrow fabric mills	224	9.06	9.12	9.48	9.64	—	360.59	365.71	384.89	390.42	—
Knitting mills	225	9.11	9.10	9.45	9.47	—	359.85	367.64	386.51	377.85	—
Women's hosiery, except socks	2251	8.51	8.48	8.90	8.86	—	319.98	332.42	343.54	341.11	—
Hosiery, nec	2252	9.11	9.12	9.53	9.55	—	343.45	349.30	369.76	371.50	—
Knit outerwear mills	2253	8.50	8.54	8.74	8.77	—	343.40	349.29	370.58	368.34	—
Knit underwear mills	2254	9.30	9.18	9.86	10.06	—	357.12	358.02	387.50	369.20	—
Weft knit fabric mills	2257	9.84	9.81	10.24	10.15	—	391.63	404.17	422.91	386.72	—
Textile finishing, except wool	226	10.27	10.29	10.57	10.63	—	430.31	436.30	442.88	435.83	—
Finishing plants, cotton	2261	10.21	10.21	10.34	10.49	—	431.88	438.01	431.18	451.07	—
Finishing plants, synthetics	2262	10.72	10.84	11.18	11.20	—	441.66	459.62	475.15	435.68	—
Carpets and rugs	227	10.03	10.07	10.30	10.17	—	409.22	422.94	440.84	412.90	—
Yarn and thread mills	228	9.75	9.77	10.03	10.05	—	395.85	413.27	412.23	407.03	—
Yarn spinning mills	2281	9.74	9.79	10.02	10.03	—	406.16	419.01	423.85	419.25	—
Throwing and winding mills	2282	9.78	9.92	10.08	10.18	—	350.12	389.86	368.93	362.41	—
Miscellaneous textile goods	229	11.59	11.51	11.88	11.87	—	479.83	490.33	504.90	477.17	—
Apparel and other textile products	23	8.19	8.23	8.50	8.48	8.54	299.75	307.80	321.30	312.91	320.25
Men's and boys' suits and coats	231	8.41	8.31	8.67	8.69	—	316.22	304.98	332.06	331.96	—
Men's and boys' furnishings	232	7.71	7.73	7.96	7.95	—	273.71	286.01	298.50	293.36	—
Men's and boys' shirts	2321	7.57	7.59	7.81	7.77	—	258.14	276.28	286.63	275.84	—
Men's and boys' trousers and slacks	2325	7.92	7.91	8.17	8.19	—	277.99	287.13	301.47	298.94	—
Men's and boys' work clothing	2326	7.43	7.54	7.81	7.72	—	272.68	282.00	293.66	277.92	—
Women's and misses' outerwear	233	7.79	7.92	8.18	8.24	—	277.32	285.12	299.39	294.17	—
Women's and misses' blouses and shirts	2331	6.96	7.02	7.38	7.48	—	247.08	254.83	262.73	264.79	—
Women's, juniors', and misses' dresses	2335	8.68	8.89	9.39	9.48	—	322.03	336.04	345.55	345.07	—
Women's and misses' suits and coats	2337	7.98	8.02	8.14	8.08	—	292.87	312.78	311.76	298.96	—
Women's and misses' outerwear, nec	2339	7.66	7.78	7.99	8.05	—	268.87	273.08	290.04	284.97	—
Women's and children's undergarments	234	7.89	7.79	8.15	8.16	—	287.99	292.90	305.63	296.21	—
Women's and children's underwear	2341	7.77	7.59	8.02	7.92	—	285.16	283.87	299.15	290.66	—
Brassieres, girdles, and allied garments	2342	8.24	8.36	8.50	8.80	—	297.46	318.52	322.15	308.88	—
Girls' and children's outerwear	236	7.56	7.54	8.23	8.25	—	278.21	282.00	309.45	301.13	—
Girls' and children's dresses and blouses	2361	7.34	7.12	8.12	8.07	—	269.38	269.85	314.24	316.34	—
Misc. apparel and accessories	238	7.74	7.78	8.13	8.13	—	284.83	293.31	297.56	293.49	—
Misc. fabricated textile products	239	9.16	9.17	9.33	9.24	—	352.66	359.46	368.54	352.97	—
Curtains and draperies	2391	8.12	8.16	8.24	8.22	—	297.19	286.42	296.64	279.48	—
House furnishings, nec	2392	8.80	8.78	8.98	9.02	—	348.48	350.32	360.10	359.00	—
Automotive and apparel trimmings	2396	10.75	10.63	10.74	10.63	—	403.13	428.39	428.53	393.31	—
Paper and allied products	26	15.16	15.11	15.45	15.62	15.57	656.43	655.77	672.08	670.10	669.51
Paper mills	262	19.27	19.20	19.77	20.10	—	861.37	848.64	877.79	870.33	—
Paperboard mills	263	18.54	18.77	19.26	19.53	—	821.32	812.74	874.40	865.18	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	43.1	43.8	43.2	42.7	—	5.9	6.2	5.5	5.6	—
Corrugated and solid fiber boxes	2653	43.4	44.2	43.9	43.3	—	6.3	6.6	5.9	5.8	—
Sanitary food containers	2656	43.2	42.6	43.0	42.4	—	5.6	4.9	5.7	5.7	—
Folding paperboard boxes	2657	42.8	43.6	42.5	42.3	—	5.7	6.2	5.5	5.9	—
Misc. converted paper products	267	42.2	42.4	42.6	42.5	—	4.9	4.9	4.7	4.8	—
Paper, coated and laminated, nec	2672	43.3	43.8	44.0	43.2	—	4.6	4.6	4.6	4.2	—
Bags: plastics, laminated, and coated	2673	42.5	42.1	43.0	42.6	—	5.4	5.1	5.6	5.4	—
Envelopes	2677	40.6	41.5	40.5	39.7	—	3.8	4.3	3.2	3.1	—
Printing and publishing	27	38.1	38.6	37.9	38.1	38.5	3.1	3.5	2.9	3.1	—
Newspapers	271	32.9	33.2	33.1	32.8	—	1.3	1.4	1.4	1.3	—
Periodicals	272	36.3	36.8	35.7	35.8	—	2.7	3.0	2.0	2.1	—
Books	273	39.1	40.6	38.3	38.9	—	3.8	4.6	2.9	3.9	—
Book publishing	2731	36.7	37.4	36.8	37.0	—	2.1	2.7	2.3	2.8	—
Book printing	2732	42.2	44.4	39.9	40.9	—	5.9	6.7	3.6	5.2	—
Miscellaneous publishing	274	36.2	36.9	36.6	36.8	—	2.1	2.7	2.0	2.1	—
Commercial printing	275	39.6	40.1	39.4	39.6	—	3.8	4.3	3.5	3.8	—
Commercial printing, lithographic	2752	39.4	40.0	39.1	39.4	—	3.8	4.1	3.5	3.8	—
Commercial printing, nec	2759	39.7	39.8	40.0	39.8	—	3.7	4.0	3.5	3.7	—
Manifold business forms	276	41.6	41.7	41.7	41.4	—	3.9	4.0	3.9	4.2	—
Blankbooks and bookbinding	278	39.6	39.6	39.6	39.9	—	2.7	3.0	3.1	3.2	—
Printing trade services	279	39.9	39.4	40.7	40.0	—	4.3	4.5	4.4	4.3	—
Chemicals and allied products	28	42.7	43.0	43.2	42.7	43.0	5.0	5.2	5.1	5.0	—
Industrial inorganic chemicals	281	46.0	46.3	45.0	45.1	—	6.1	6.1	5.5	6.1	—
Industrial inorganic chemicals, nec	2819	45.6	45.7	44.9	44.9	—	5.8	5.6	5.6	5.7	—
Plastics materials and synthetics	282	43.3	43.5	43.3	43.2	—	5.5	5.6	5.5	5.6	—
Plastics materials and resins	2821	44.4	44.7	44.0	44.0	—	5.5	5.7	5.1	5.3	—
Organic fibers, noncellulosic	2824	42.4	42.4	42.8	42.9	—	5.2	5.1	5.2	5.1	—
Drugs	283	40.6	41.1	42.1	41.4	—	4.2	4.6	4.7	4.1	—
Pharmaceutical preparations	2834	40.7	41.4	42.2	41.2	—	4.0	4.4	4.6	3.7	—
Soap, cleaners, and toilet goods	284	40.5	41.5	41.7	40.3	—	3.3	4.2	3.7	3.7	—
Soap and other detergents	2841	43.2	43.1	44.1	43.5	—	4.4	4.7	5.2	5.4	—
Polishing, sanitation, and finishing preparations	2842.3	41.8	41.8	42.1	40.1	—	3.8	4.3	4.2	3.7	—
Toilet preparations	2844	38.8	40.7	40.4	39.1	—	2.7	3.9	2.7	2.9	—
Paints and allied products	285	42.4	43.4	43.2	42.2	—	5.0	5.1	5.2	4.6	—
Industrial organic chemicals	286	44.1	43.9	44.6	44.6	—	6.2	6.1	6.2	6.2	—
Cyclic crudes and intermediates	2865	44.3	44.5	44.7	43.8	—	6.1	6.3	6.4	5.7	—
Industrial organic chemicals, nec	2869	44.1	43.8	44.5	44.8	—	6.2	6.0	6.1	6.3	—
Agricultural chemicals	287	44.6	43.9	44.5	44.8	—	6.0	5.8	6.4	6.5	—
Miscellaneous chemical products	289	43.1	43.3	43.2	42.3	—	4.8	5.1	4.8	4.6	—
Petroleum and coal products	29	42.8	43.0	43.2	44.6	42.5	6.4	6.9	6.5	7.1	—
Petroleum refining	291	42.0	42.2	42.2	44.3	—	5.1	5.9	5.5	6.0	—
Asphalt paving and roofing materials	295	45.5	45.6	45.8	46.0	—	10.3	10.1	9.6	10.6	—
Rubber and misc. plastics products	30	41.0	41.7	42.0	41.1	41.4	4.2	4.6	4.6	4.2	—
Tires and inner tubes	301	43.4	43.5	42.9	42.8	—	6.4	6.3	5.5	5.2	—
Rubber and plastics footwear	302	41.6	39.4	39.2	43.0	—	2.9	2.8	2.7	3.0	—
Hose, belting, gaskets, and packing	305	41.6	42.4	42.4	40.9	—	4.8	5.0	4.7	4.0	—
Rubber and plastics hose and belting	3052	42.3	43.2	45.2	43.2	—	5.6	6.1	6.5	5.9	—
Fabricated rubber products, nec	306	40.9	42.2	42.6	39.9	—	3.8	4.5	4.5	3.4	—
Miscellaneous plastics products, nec	308	40.7	41.4	41.8	41.2	—	4.0	4.4	4.5	4.3	—
Leather and leather products	31	37.8	38.4	38.1	36.5	38.0	1.9	1.9	2.2	1.7	—
Leather tanning and finishing	311	38.4	42.3	40.7	34.6	—	4.3	4.5	4.9	3.2	—
Footwear, except rubber	314	37.2	37.4	37.5	36.9	—	1.2	1.5	1.6	1.5	—
Men's footwear, except athletic	3143	37.6	37.7	37.5	36.7	—	1.0	1.5	1.5	1.2	—
Women's footwear, except athletic	3144	37.9	36.5	37.0	38.2	—	1.2	1.1	1.7	2.1	—
Luggage	316	40.8	38.8	36.6	36.1	—	3.3	2.1	1.1	1.4	—
Handbags and personal leather goods	317	37.2	38.5	37.3	37.3	—	0.9	1.8	1.8	1.3	—
Service-producing		33.1	33.3	33.0	33.2	33.5	—	—	—	—	—
Transportation and public utilities		39.5	40.5	39.6	39.7	40.2	—	—	—	—	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	\$12.98	\$12.94	\$13.12	\$13.21	—	\$559.44	\$566.77	\$566.78	\$564.07	—
Corrugated and solid fiber boxes	2653	12.96	12.95	13.07	13.18	—	562.46	572.39	573.77	570.69	—
Sanitary food containers	2656	12.98	12.81	13.62	13.43	—	560.74	545.71	585.66	569.43	—
Folding paperboard boxes	2657	13.73	13.79	13.87	14.07	—	587.64	601.24	589.48	595.16	—
Misc. converted paper products	267	13.18	13.21	13.49	13.61	—	556.20	560.10	574.67	578.43	—
Paper, coated and laminated, nec	2672	14.92	14.96	15.44	15.64	—	646.04	655.25	679.36	675.65	—
Bags: plastics, laminated, and coated	2673	11.88	11.94	12.33	12.35	—	504.90	502.67	530.19	526.11	—
Envelopes	2677	11.93	12.03	12.60	12.57	—	484.36	499.25	510.30	499.03	—
Printing and publishing	27	13.01	13.07	13.33	13.43	\$13.44	495.68	504.50	505.21	511.68	\$517.44
Newspapers	271	12.90	12.86	13.10	13.23	—	424.41	426.95	433.61	433.94	—
Periodicals	272	14.27	14.43	14.68	14.84	—	518.00	531.02	524.08	531.27	—
Books	273	12.23	12.35	12.59	12.75	—	478.19	501.41	482.20	495.98	—
Book publishing	2731	11.54	11.61	12.07	12.09	—	423.52	434.21	444.18	447.33	—
Book printing	2732	12.98	13.07	13.11	13.37	—	547.76	580.31	523.09	546.83	—
Miscellaneous publishing	274	12.91	12.79	12.81	12.73	—	467.34	471.95	468.85	468.46	—
Commercial printing	275	13.24	13.32	13.58	13.72	—	524.30	534.13	535.05	543.31	—
Commercial printing, lithographic	2752	13.52	13.56	13.86	13.98	—	532.69	542.40	541.93	550.81	—
Commercial printing, nec	2759	12.53	12.62	12.82	12.96	—	497.44	502.28	512.80	515.81	—
Manifold business forms	276	13.94	13.83	14.22	14.54	—	579.90	576.71	592.97	601.96	—
Blankbooks and bookbinding	278	10.12	10.17	10.48	10.48	—	400.75	402.73	415.01	418.15	—
Printing trade services	279	16.06	16.41	16.57	16.65	—	640.79	646.55	674.40	666.00	—
Chemicals and allied products	28	16.59	16.57	17.05	17.22	17.18	708.39	712.51	736.56	735.29	738.74
Industrial inorganic chemicals	281	18.64	18.60	19.04	19.12	—	857.44	861.18	856.80	862.31	—
Industrial inorganic chemicals, nec	2819	18.95	18.94	19.64	19.58	—	864.12	865.56	881.84	879.14	—
Plastics materials and synthetics	282	17.40	17.47	17.89	18.03	—	753.42	759.95	774.64	778.90	—
Plastics materials and resins	2821	19.31	19.46	19.80	19.79	—	857.36	869.86	871.20	870.76	—
Organic fibers, noncellulosic	2824	14.87	14.90	14.95	15.18	—	630.49	631.76	639.86	651.22	—
Drugs	283	16.30	16.45	16.99	17.11	—	661.78	676.10	715.28	708.35	—
Pharmaceutical preparations	2834	16.03	16.28	16.84	16.91	—	652.42	673.99	710.65	696.69	—
Soap, cleaners, and toilet goods	284	13.27	13.20	13.82	13.93	—	537.44	547.80	576.29	561.38	—
Soap and other detergents	2841	16.60	16.55	17.21	17.68	—	717.12	713.31	758.96	769.08	—
Polishing, sanitation, and finishing preparations	2842,3	12.63	12.84	13.58	13.47	—	527.93	536.71	571.72	540.15	—
Toilet preparations	2844	11.94	11.83	12.31	12.34	—	463.27	481.48	497.32	482.49	—
Paints and allied products	285	14.04	14.13	14.41	14.46	—	595.30	613.24	622.51	610.21	—
Industrial organic chemicals	286	19.88	19.70	20.37	20.63	—	876.71	864.83	908.50	920.10	—
Cyclic crudes and intermediates	2865	20.57	19.99	20.30	20.34	—	911.25	889.56	907.41	890.89	—
Industrial organic chemicals, nec	2869	19.85	19.75	20.52	20.83	—	875.39	865.05	913.14	933.18	—
Agricultural chemicals	287	16.75	16.93	16.88	17.16	—	747.05	743.23	751.16	768.77	—
Miscellaneous chemical products	289	15.20	15.14	15.26	15.52	—	655.12	655.56	659.23	656.50	—
Petroleum and coal products	29	20.00	19.97	20.71	20.84	20.71	856.00	858.71	894.67	929.46	880.18
Petroleum refining	291	22.55	22.46	23.43	23.47	—	947.10	947.81	988.75	1,039.72	—
Asphalt paving and roofing materials	295	15.09	15.10	15.61	15.84	—	686.60	688.56	714.94	728.64	—
Rubber and misc. plastics products	30	11.57	11.57	11.81	11.91	11.83	474.37	482.47	496.02	489.50	489.76
Tires and inner tubes	301	18.46	18.59	18.56	18.55	—	801.16	808.67	796.22	793.94	—
Rubber and plastics footwear	302	9.43	9.90	10.16	10.13	—	392.29	390.06	398.27	435.59	—
Hose, belting, gaskets, and packing	305	11.68	11.73	11.85	11.89	—	485.89	497.35	502.44	486.30	—
Rubber and plastics hose and belting	3052	11.95	11.89	11.98	12.19	—	505.49	513.65	541.50	526.61	—
Fabricated rubber products, nec	306	11.26	11.28	11.63	11.54	—	460.53	476.02	495.44	460.45	—
Miscellaneous plastics products, nec	308	10.88	10.87	11.14	11.25	—	442.82	450.02	465.65	463.50	—
Leather and leather products	31	8.78	8.90	9.35	9.25	9.43	331.88	341.76	356.24	337.63	358.34
Leather tanning and finishing	311	11.90	11.71	12.22	12.15	—	456.96	495.33	497.35	420.39	—
Footwear, except rubber	314	8.25	8.36	8.87	8.81	—	306.90	312.66	332.63	325.09	—
Men's footwear, except athletic	3143	8.89	8.99	9.51	9.49	—	334.26	338.92	356.63	348.28	—
Women's footwear, except athletic	3144	7.35	7.43	7.74	7.72	—	278.57	271.20	286.38	294.90	—
Luggage	316	8.97	8.83	9.27	9.33	—	365.98	342.60	339.28	336.81	—
Handbags and personal leather goods	317	7.77	7.87	8.24	8.23	—	289.04	303.00	307.35	306.98	—
Service-producing		11.58	11.64	12.13	12.13	12.21	383.30	387.61	400.29	402.72	409.04
Transportation and public utilities		14.99	15.04	15.22	15.34	15.32	592.11	609.12	602.71	609.00	615.86

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Transportation and public utilities—Continued											
Railroad transportation:											
Class I railroads plus Amtrak ³	4011	48.5	48.8	46.7	46.2	-	-	-	-	-	-
Local and interurban passenger transit	41	35.4	35.2	34.6	35.7	-	-	-	-	-	-
Local and suburban transportation	411	38.3	38.5	39.0	39.0	-	-	-	-	-	-
Intercity and rural bus transportation	413	38.2	38.3	37.7	38.9	-	-	-	-	-	-
Trucking and warehousing	42	40.3	41.2	40.4	40.4	-	-	-	-	-	-
Trucking and courier services, except air	421	40.3	41.2	40.4	40.4	-	-	-	-	-	-
Public warehousing and storage	422	39.8	40.3	40.1	40.2	-	-	-	-	-	-
Water transportation:											
Water transportation services	449	38.1	37.8	37.2	37.0	-	-	-	-	-	-
Pipelines, except natural gas	46	43.2	42.7	43.2	43.7	-	-	-	-	-	-
Transportation services	47	37.4	37.9	37.8	37.5	-	-	-	-	-	-
Passenger transportation arrangement	472	36.9	36.9	37.3	37.1	-	-	-	-	-	-
Travel agencies	4724	36.8	36.9	37.6	37.3	-	-	-	-	-	-
Freight transportation arrangement	473	37.7	38.9	37.8	37.6	-	-	-	-	-	-
Communications	48	40.5	40.5	41.0	41.3	-	-	-	-	-	-
Telephone communications	481	42.2	42.2	42.7	43.3	-	-	-	-	-	-
Telephone communications, except radio	4813	42.8	42.7	43.3	43.9	-	-	-	-	-	-
Radio and television broadcasting	483	35.2	35.5	35.6	35.7	-	-	-	-	-	-
Cable and other pay television services	484	39.3	39.3	40.6	39.3	-	-	-	-	-	-
Electric, gas, and sanitary services	49	42.0	42.1	42.2	42.2	-	-	-	-	-	-
Electric services	491	42.0	41.9	42.3	41.8	-	-	-	-	-	-
Gas production and distribution	492	41.9	42.6	41.7	42.3	-	-	-	-	-	-
Combination utility services	493	42.5	42.6	42.3	42.7	-	-	-	-	-	-
Sanitary services	495	42.0	41.9	42.6	42.7	-	-	-	-	-	-
Wholesale trade		38.3	38.5	38.3	38.4	38.7	-	-	-	-	-
Durable goods	50	39.0	39.2	38.9	38.9	-	-	-	-	-	-
Motor vehicles, parts, and supplies	501	37.7	38.0	37.4	37.8	-	-	-	-	-	-
Furniture and home furnishings	502	37.4	37.9	37.0	37.6	-	-	-	-	-	-
Lumber and other construction materials	503	40.4	40.4	40.0	40.1	-	-	-	-	-	-
Professional and commercial equipment	504	39.4	39.8	39.4	39.4	-	-	-	-	-	-
Medical and hospital equipment	5047	39.1	39.6	39.0	39.1	-	-	-	-	-	-
Metals and minerals, except petroleum	505	41.4	41.9	41.0	40.9	-	-	-	-	-	-
Electrical goods	506	38.7	38.8	39.0	38.9	-	-	-	-	-	-
Hardware, plumbing, and heating equipment	507	39.3	39.4	39.2	38.9	-	-	-	-	-	-
Machinery, equipment, and supplies	508	39.1	39.4	39.6	39.5	-	-	-	-	-	-
Misc. wholesale trade durable goods	509	37.9	37.9	37.3	37.0	-	-	-	-	-	-
Nondurable goods	51	37.5	37.4	37.5	37.5	-	-	-	-	-	-
Paper and paper products	511	36.3	36.3	36.6	36.7	-	-	-	-	-	-
Drugs, proprietaries, and sundries	512	35.7	35.9	36.3	36.3	-	-	-	-	-	-
Apparel, piece goods, and notions	513	36.4	37.3	36.9	36.7	-	-	-	-	-	-
Groceries and related products	514	38.8	38.5	38.7	38.6	-	-	-	-	-	-
Farm-product raw materials	515	35.1	35.1	34.3	34.2	-	-	-	-	-	-
Chemicals and allied products	516	39.8	40.2	40.4	39.9	-	-	-	-	-	-
Petroleum and petroleum products	517	37.9	37.9	37.5	38.1	-	-	-	-	-	-
Beer, wine, and distilled beverages	518	38.1	37.9	37.7	38.2	-	-	-	-	-	-
Misc. wholesale trade nondurable goods	519	36.4	36.3	36.5	36.7	-	-	-	-	-	-
Retail trade		29.6	29.7	29.3	29.8	29.9	-	-	-	-	-
Building materials and garden supplies	52	35.6	35.4	35.1	35.7	-	-	-	-	-	-
Lumber and other building materials	521	37.1	36.9	36.4	37.2	-	-	-	-	-	-
Paint, glass, and wallpaper stores	523	36.2	36.0	35.7	35.8	-	-	-	-	-	-
Hardware stores	525	32.0	31.7	31.6	31.9	-	-	-	-	-	-
Retail nurseries and garden stores	526	32.1	31.6	32.3	32.4	-	-	-	-	-	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Transportation and public utilities—Continued											
Railroad transportation:											
Class I railroads plus Amtrak ³	4011	\$18.05	\$18.06	\$17.89	\$17.91	—	\$875.43	\$881.33	\$835.46	\$827.44	—
Local and interurban passenger transit	41	11.02	11.06	11.13	11.35	—	390.11	389.31	385.10	405.20	—
Local and suburban transportation	411	11.44	11.40	11.52	11.76	—	438.15	438.90	449.28	458.64	—
Intercity and rural bus transportation	413	13.46	13.58	12.83	13.06	—	514.17	520.11	483.69	508.03	—
Trucking and warehousing	42	13.16	13.30	13.59	13.59	—	530.35	547.96	549.04	549.04	—
Trucking and courier services, except air	421	13.34	13.52	13.82	13.81	—	537.60	557.02	558.33	557.92	—
Public warehousing and storage	422	11.07	10.77	11.10	11.13	—	440.59	434.03	445.11	447.43	—
Water transportation:											
Water transportation services	449	19.24	19.22	19.70	20.37	—	733.04	726.52	732.84	753.69	—
Pipelines, except natural gas	46	20.05	20.44	20.62	20.28	—	866.16	872.79	890.78	886.24	—
Transportation services	47	13.26	13.27	13.38	13.56	—	495.92	502.93	505.76	508.50	—
Passenger transportation arrangement	472	13.49	13.62	13.68	13.94	—	497.78	502.58	510.26	517.17	—
Travel agencies	4724	13.81	13.85	13.92	14.22	—	508.21	511.07	523.39	530.41	—
Freight transportation arrangement	473	13.31	13.23	13.39	13.44	—	501.79	514.65	506.14	505.34	—
Communications	48	17.04	17.14	17.14	17.19	—	690.12	694.17	702.74	709.95	—
Telephone communications	481	17.57	17.83	17.55	17.54	—	741.45	752.43	749.39	759.48	—
Telephone communications, except radio	4813	18.09	18.40	18.01	18.00	—	774.25	785.68	779.83	790.20	—
Radio and television broadcasting	483	17.25	16.88	17.90	17.83	—	607.20	599.24	637.24	636.53	—
Cable and other pay television services	484	13.72	13.57	14.07	14.45	—	539.20	533.30	571.24	567.89	—
Electric, gas, and sanitary services	49	19.03	19.06	19.76	19.83	—	799.26	802.43	833.87	836.83	—
Electric services	491	19.95	19.96	20.68	20.92	—	837.90	836.32	874.76	874.46	—
Gas production and distribution	492	17.62	17.70	18.35	18.26	—	738.28	754.02	765.20	772.40	—
Combination utility services	493	23.43	23.30	24.26	24.03	—	995.78	992.58	1,026.20	1,026.08	—
Sanitary services	495	14.79	15.01	15.62	15.73	—	621.18	628.92	665.41	671.67	—
Wholesale trade		13.38	13.48	13.89	13.99	\$14.12	512.45	518.98	531.99	537.22	\$546.44
Durable goods	50	13.95	14.05	14.48	14.61	—	544.05	550.76	563.27	568.33	—
Motor vehicles, parts, and supplies	501	12.11	12.13	12.94	13.05	—	456.55	460.94	483.96	493.29	—
Furniture and home furnishings	502	12.45	12.48	12.91	13.09	—	465.63	472.99	477.67	492.18	—
Lumber and other construction materials	503	12.74	12.85	13.09	13.21	—	514.70	519.14	523.60	529.72	—
Professional and commercial equipment	504	16.53	16.70	17.07	17.22	—	651.28	664.66	672.56	678.47	—
Medical and hospital equipment	5047	16.07	16.37	16.97	17.13	—	628.34	648.25	661.83	669.78	—
Metals and minerals, except petroleum	505	13.35	13.41	14.06	13.95	—	552.69	561.88	576.46	570.56	—
Electrical goods	506	15.10	15.27	15.55	15.66	—	584.37	592.48	606.45	609.17	—
Hardware, plumbing, and heating equipment	507	13.22	13.43	13.60	13.85	—	519.55	529.14	533.12	538.77	—
Machinery, equipment, and supplies	508	14.02	14.08	14.48	14.68	—	548.18	554.75	573.41	579.86	—
Misc. wholesale trade durable goods	509	10.87	10.89	11.36	11.34	—	411.97	412.73	423.73	419.58	—
Nondurable goods	51	12.55	12.62	13.03	13.07	—	470.63	471.99	488.63	490.13	—
Paper and paper products	511	12.62	12.86	13.58	13.65	—	458.11	466.82	497.03	500.96	—
Drugs, proprietaries, and sundries	512	16.19	16.68	17.14	17.01	—	577.98	598.81	622.18	617.46	—
Apparel, piece goods, and notions	513	12.45	12.35	12.71	12.72	—	453.18	460.66	469.00	466.82	—
Groceries and related products	514	12.87	12.95	13.19	13.24	—	499.36	498.58	510.45	511.06	—
Farm-product raw materials	515	9.54	9.43	10.00	10.01	—	334.85	330.99	343.00	342.34	—
Chemicals and allied products	516	14.22	14.26	14.89	15.09	—	565.96	573.25	601.56	602.09	—
Petroleum and petroleum products	517	11.44	11.48	11.93	11.94	—	433.58	435.09	447.38	454.91	—
Beer, wine, and distilled beverages	518	14.80	14.73	15.30	15.31	—	563.88	558.27	576.81	584.84	—
Misc. wholesale trade nondurable goods	519	10.32	10.27	10.73	10.81	—	375.65	372.80	391.65	396.73	—
Retail trade		8.27	8.30	8.70	8.71	8.73	244.79	246.51	254.91	259.56	261.03
Building materials and garden supplies	52	9.77	9.85	10.12	10.25	—	347.81	348.69	355.21	365.93	—
Lumber and other building materials	521	10.18	10.25	10.56	10.71	—	377.68	378.23	384.38	398.41	—
Paint, glass, and wallpaper stores	523	10.33	10.33	10.57	10.57	—	373.95	371.88	377.35	378.41	—
Hardware stores	525	8.15	8.20	8.51	8.49	—	260.80	259.94	268.92	270.83	—
Retail nurseries and garden stores	526	8.66	8.83	8.88	9.00	—	277.99	279.03	286.82	291.60	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Retail trade—Continued											
General merchandise stores	53	30.2	30.2	30.2	31.3	-	-	-	-	-	-
Department stores	531	30.2	30.3	30.3	31.4	-	-	-	-	-	-
Variety stores	533	28.4	28.5	27.6	28.9	-	-	-	-	-	-
Misc. general merchandise stores	539	30.9	30.7	30.9	31.0	-	-	-	-	-	-
Food stores	54	30.9	30.6	30.5	30.8	-	-	-	-	-	-
Grocery stores	541	31.0	30.7	30.7	31.0	-	-	-	-	-	-
Retail bakeries	546	29.3	29.7	29.2	29.5	-	-	-	-	-	-
Automotive dealers and service stations	55	36.0	36.2	35.7	35.9	-	-	-	-	-	-
New and used car dealers	551	37.0	37.3	37.1	37.1	-	-	-	-	-	-
Auto and home supply stores	553	38.4	38.5	38.4	38.7	-	-	-	-	-	-
Gasoline service stations	554	32.9	33.0	32.1	32.5	-	-	-	-	-	-
Automotive dealers, nec	559	35.3	35.3	36.0	35.8	-	-	-	-	-	-
Apparel and accessory stores	56	27.5	28.0	26.8	27.4	-	-	-	-	-	-
Men's and boys' clothing stores	561	29.3	29.9	28.5	28.7	-	-	-	-	-	-
Women's clothing stores	562	25.9	26.0	24.4	24.9	-	-	-	-	-	-
Family clothing stores	565	28.3	28.8	27.7	28.3	-	-	-	-	-	-
Shoe stores	566	27.4	27.6	26.7	27.5	-	-	-	-	-	-
Furniture and home furnishings stores	57	33.3	33.4	33.3	33.6	-	-	-	-	-	-
Furniture and home furnishings stores	571	33.2	33.2	33.1	33.3	-	-	-	-	-	-
Household appliance stores	572	34.7	34.7	34.5	34.7	-	-	-	-	-	-
Radio, television, and computer stores	573	33.1	33.4	33.4	33.8	-	-	-	-	-	-
Radio, television, and electronic stores	5731	33.4	33.8	33.1	33.4	-	-	-	-	-	-
Record and prerecorded tape stores	5735	26.5	26.7	26.7	27.3	-	-	-	-	-	-
Eating and drinking places ⁴	58	26.0	26.3	25.7	26.3	-	-	-	-	-	-
Miscellaneous retail establishments	59	30.0	30.1	29.8	30.2	-	-	-	-	-	-
Drug stores and proprietary stores	591	29.4	29.4	29.1	29.6	-	-	-	-	-	-
Used merchandise stores	593	30.3	30.7	30.1	30.2	-	-	-	-	-	-
Miscellaneous shopping goods stores	594	28.9	29.1	28.3	28.9	-	-	-	-	-	-
Nonstore retailers	596	32.0	32.1	33.0	32.7	-	-	-	-	-	-
Fuel dealers	598	36.6	36.7	36.7	36.9	-	-	-	-	-	-
Retail stores, nec	599	30.7	30.7	30.7	31.1	-	-	-	-	-	-
Optical goods stores	5995	33.3	33.4	33.6	33.9	-	-	-	-	-	-
Miscellaneous retail stores, nec	5999	31.4	31.2	31.3	31.8	-	-	-	-	-	-
Finance, insurance, and real estate⁵		35.9	36.1	36.0	36.1	36.9	-	-	-	-	-
Depository institutions	60	35.2	35.3	35.3	35.4	-	-	-	-	-	-
Commercial banks	602	34.8	34.9	35.1	35.1	-	-	-	-	-	-
State commercial banks	6022	35.2	35.4	35.2	35.4	-	-	-	-	-	-
National and commercial banks, nec	6021,9	34.6	34.6	35.1	35.0	-	-	-	-	-	-
Credit unions	606	35.9	36.1	35.8	35.9	-	-	-	-	-	-
Nondepository institutions	61	37.9	37.7	37.9	38.1	-	-	-	-	-	-
Personal credit institutions	614	38.5	38.2	37.9	38.2	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services	628	37.4	38.0	37.9	37.9	-	-	-	-	-	-
Insurance carriers	63	38.0	38.5	38.6	38.6	-	-	-	-	-	-
Life insurance	631	37.6	37.7	38.6	38.5	-	-	-	-	-	-
Medical service and health insurance	632	38.5	38.7	38.7	38.7	-	-	-	-	-	-
Hospital and medical service plans	6324	38.8	39.1	39.3	39.2	-	-	-	-	-	-
Fire, marine, and casualty insurance	633	38.0	39.2	38.6	38.8	-	-	-	-	-	-
Services		32.8	32.9	32.7	32.9	33.2	-	-	-	-	-
Agricultural services	07	35.9	35.3	35.7	35.9	-	-	-	-	-	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Retail trade—Continued											
General merchandise stores	53	\$8.10	\$8.10	\$8.59	\$8.53	—	\$244.62	\$244.62	\$259.42	\$266.99	—
Department stores	531	8.15	8.14	8.65	8.58	—	246.13	246.64	262.10	269.41	—
Variety stores	533	7.35	7.38	7.70	7.66	—	208.74	210.33	212.52	221.37	—
Misc. general merchandise stores	539	7.93	7.97	8.28	8.35	—	245.04	244.68	255.85	258.85	—
Food stores	54	8.61	8.59	8.97	8.98	—	266.05	262.85	273.59	276.58	—
Grocery stores	541	8.73	8.71	9.05	9.07	—	270.63	267.40	277.84	281.17	—
Retail bakeries	546	7.65	7.58	8.05	8.05	—	224.15	225.13	235.06	237.48	—
Automotive dealers and service stations	55	11.45	11.56	12.20	12.23	—	412.20	418.47	435.54	439.06	—
New and used car dealers	551	14.59	14.74	15.47	15.50	—	539.83	549.80	573.94	575.05	—
Auto and home supply stores	553	9.45	9.55	9.95	10.07	—	362.88	367.68	382.08	389.71	—
Gasoline service stations	554	7.38	7.41	7.81	7.87	—	242.80	244.53	250.70	255.78	—
Automotive dealers, nec	559	12.62	13.78	13.53	13.84	—	445.49	486.43	487.08	495.47	—
Apparel and accessory stores	56	7.97	7.94	8.47	8.36	—	219.18	222.32	227.00	229.06	—
Men's and boys' clothing stores	561	9.87	9.69	10.51	10.28	—	289.19	289.73	299.54	295.04	—
Women's clothing stores	562	7.79	7.90	8.27	8.24	—	201.76	205.40	201.79	205.18	—
Family clothing stores	565	7.70	7.64	8.31	8.18	—	217.91	220.03	230.19	231.49	—
Shoe stores	566	7.89	7.80	8.23	8.12	—	216.19	215.28	219.74	223.30	—
Furniture and home furnishings stores	57	11.25	11.36	11.66	11.79	—	374.63	379.42	388.28	396.14	—
Furniture and home furnishings stores	571	10.44	10.60	11.05	11.20	—	346.61	351.92	365.76	372.96	—
Household appliance stores	572	10.60	10.74	11.16	11.32	—	367.82	372.68	385.02	392.80	—
Radio, television, and computer stores	573	12.36	12.40	12.45	12.55	—	409.12	414.16	415.83	424.19	—
Radio, television, and electronic stores	5731	11.16	11.33	11.58	11.51	—	372.74	382.95	383.30	384.43	—
Record and prerecorded tape stores	5735	6.90	6.86	7.20	7.19	—	182.85	183.16	192.24	196.29	—
Eating and drinking places ⁴	58	5.98	6.04	6.33	6.34	—	155.48	158.85	162.68	166.74	—
Miscellaneous retail establishments	59	9.07	9.07	9.42	9.43	—	272.10	273.01	280.72	284.79	—
Drug stores and proprietary stores	591	9.68	9.68	9.99	10.00	—	284.59	284.59	290.71	296.00	—
Used merchandise stores	593	7.59	7.53	7.89	7.92	—	229.98	231.17	237.49	239.18	—
Miscellaneous shopping goods stores	594	8.33	8.36	8.73	8.72	—	240.74	243.28	247.06	252.01	—
Nonstore retailers	596	9.75	9.68	9.97	10.06	—	312.00	310.73	329.01	328.96	—
Fuel dealers	598	12.19	12.25	12.43	12.54	—	446.15	449.58	456.18	462.73	—
Retail stores, nec	599	9.19	9.21	9.55	9.60	—	282.13	282.75	293.19	298.56	—
Optical goods stores	5995	11.35	11.44	10.90	11.16	—	377.96	382.10	366.24	378.32	—
Miscellaneous retail stores, nec	5999	9.42	9.41	9.93	9.92	—	295.79	293.59	310.81	315.46	—
Finance, insurance, and real estate⁵		13.21	13.38	13.93	13.93	\$14.14	474.24	483.02	501.48	502.87	\$521.77
Depository institutions	60	10.18	10.32	10.74	10.73	—	358.34	364.30	379.12	379.84	—
Commercial banks	602	9.69	9.84	10.32	10.33	—	337.21	343.42	362.23	362.58	—
State commercial banks	6022	9.64	9.67	10.05	10.06	—	339.33	342.32	353.76	356.12	—
National and commercial banks, nec	6021,9	9.73	9.96	10.51	10.52	—	336.66	344.62	368.90	368.20	—
Credit unions	606	10.11	10.13	10.54	10.52	—	362.95	365.69	377.33	377.67	—
Nondepository institutions	61	13.79	13.90	14.42	14.52	—	522.64	524.03	546.52	553.21	—
Personal credit institutions	614	11.76	11.76	12.28	12.29	—	452.76	449.23	465.41	469.48	—
Security and commodity brokers:											
Security and commodity services	628	19.10	19.21	20.78	20.98	—	714.34	729.98	787.56	795.14	—
Insurance carriers	63	15.75	16.02	16.61	16.60	—	598.50	616.77	641.15	640.76	—
Life insurance	631	14.31	14.47	15.04	15.04	—	538.06	545.52	580.54	579.04	—
Medical service and health insurance	632	14.74	14.85	15.68	15.61	—	567.49	574.70	606.82	604.11	—
Hospital and medical service plans	6324	15.01	15.15	16.00	15.95	—	582.39	592.37	628.80	625.24	—
Fire, marine, and casualty insurance	633	17.31	17.76	18.06	18.06	—	657.78	696.19	697.12	700.73	—
Services		12.06	12.12	12.70	12.67	12.76	395.57	398.75	415.29	416.84	423.63
Agricultural services	07	9.34	9.40	9.82	9.87	—	335.31	331.82	350.57	354.33	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	29.8	29.8	29.4	29.5	-	-	-	-	-	-
Landscape and horticultural services	078	38.4	37.6	38.3	38.4	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels ⁴	701	31.3	31.8	31.4	32.0	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services	721	34.2	34.4	34.5	34.1	-	-	-	-	-	-
Beauty shops ⁴	723	27.5	27.9	28.1	27.9	-	-	-	-	-	-
Miscellaneous personal services	729	27.1	28.0	27.4	27.3	-	-	-	-	-	-
Business services											
Advertising	731	36.3	36.4	36.7	36.3	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	35.5	36.1	36.5	37.1	-	-	-	-	-	-
Services to buildings	734	28.5	28.7	28.6	28.4	-	-	-	-	-	-
Disinfecting and pest control services	7342	36.6	37.3	37.6	37.4	-	-	-	-	-	-
Building maintenance services, nec	7349	27.7	27.9	27.7	27.5	-	-	-	-	-	-
Miscellaneous equipment rental and leasing	735	39.4	39.3	39.2	38.7	-	-	-	-	-	-
Medical equipment rental	7352	36.3	36.4	36.5	34.7	-	-	-	-	-	-
Heavy construction equipment rental	7353	41.1	41.2	41.3	41.8	-	-	-	-	-	-
Equipment rental and leasing, nec	7359	39.6	39.5	39.1	38.6	-	-	-	-	-	-
Personnel supply services:											
Help supply services	7363	32.4	32.9	32.8	32.6	-	-	-	-	-	-
Computer and data processing services	737	37.9	38.3	38.5	38.3	-	-	-	-	-	-
Computer programming services	7371	37.9	38.6	38.0	37.9	-	-	-	-	-	-
Computer integrated systems design	7373	38.5	38.7	39.6	39.6	-	-	-	-	-	-
Information retrieval services	7375	38.2	38.3	37.9	38.4	-	-	-	-	-	-
Computer maintenance and repair	7378	38.5	38.3	39.5	39.5	-	-	-	-	-	-
Miscellaneous business services	738	32.8	33.1	33.1	33.2	-	-	-	-	-	-
Detective and armored car services	7381	34.2	34.3	34.6	34.8	-	-	-	-	-	-
Security systems services	7382	35.9	36.7	36.5	37.1	-	-	-	-	-	-
Auto repair, services, and parking											
Automotive rentals, without drivers	751	36.8	36.7	36.9	37.6	-	-	-	-	-	-
Passenger car rental	7514	37.0	37.0	37.1	37.7	-	-	-	-	-	-
Automobile parking	752	33.7	33.7	32.4	32.5	-	-	-	-	-	-
Automotive repair shops	753	38.4	38.6	38.0	38.3	-	-	-	-	-	-
Automotive and tire repair shops	7532.4	37.9	38.2	38.0	38.3	-	-	-	-	-	-
General automotive repair shops	7538	38.0	38.2	38.0	38.2	-	-	-	-	-	-
Automotive services, except repair	754	33.1	32.9	31.1	32.7	-	-	-	-	-	-
Carwashes	7542	31.5	30.7	27.8	30.1	-	-	-	-	-	-
Miscellaneous repair services											
Miscellaneous repair services	76	38.6	38.9	38.5	38.7	-	-	-	-	-	-
Motion pictures											
Motion picture production and services	781	38.9	39.4	39.1	38.7	-	-	-	-	-	-
Video tape rental	784	24.7	24.5	24.0	25.0	-	-	-	-	-	-
Amusement and recreation services											
Bowling centers	793	24.5	25.1	24.5	24.9	-	-	-	-	-	-
Misc. amusement and recreation services	799	28.7	28.4	26.8	28.9	-	-	-	-	-	-
Physical fitness facilities	7991	19.1	19.4	19.6	19.8	-	-	-	-	-	-
Membership sports and recreation clubs	7997	30.0	29.1	28.0	29.6	-	-	-	-	-	-
Health services											
Offices and clinics of medical doctors	801	33.1	33.2	32.9	32.5	-	-	-	-	-	-
Offices and clinics of dentists	802	28.3	28.0	28.2	28.3	-	-	-	-	-	-
Offices and clinics of other health practitioners	804	30.2	30.2	30.1	30.0	-	-	-	-	-	-
Nursing and personal care facilities	805	32.9	32.5	32.5	32.9	-	-	-	-	-	-
Intermediate care facilities	8052	32.5	32.1	31.8	32.0	-	-	-	-	-	-
Hospitals	806	34.9	35.0	34.9	34.9	-	-	-	-	-	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	\$9.55	\$9.53	\$9.79	\$9.89	—	\$284.59	\$283.99	\$287.83	\$291.76	—
Landscape and horticultural services	078	9.34	9.41	9.86	9.92	—	358.66	353.82	377.64	380.93	—
Hotels and other lodging places:											
Hotels and motels ⁴	701	8.40	8.38	8.85	8.71	—	262.92	266.48	277.89	278.72	—
Personal services:											
Laundry, cleaning, and garment services	721	8.12	8.06	8.36	8.45	—	277.70	277.26	288.42	288.15	—
Beauty shops ⁴	723	9.27	9.23	9.55	9.56	—	254.93	257.52	268.36	266.72	—
Miscellaneous personal services	729	8.60	8.52	9.17	9.18	—	233.06	238.56	251.26	250.61	—
Business services											
Advertising	731	16.65	16.86	17.40	17.45	—	604.40	613.70	638.58	633.44	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	10.97	11.02	11.13	11.16	—	389.44	397.82	406.25	414.04	—
Services to buildings	734	7.95	7.91	8.24	8.33	—	226.58	227.02	235.66	236.57	—
Disinfecting and pest control services	7342	10.80	10.74	11.35	11.49	—	395.28	400.60	426.76	429.73	—
Building maintenance services, nec	7349	7.59	7.55	7.81	7.90	—	210.24	210.65	216.34	217.25	—
Miscellaneous equipment rental and leasing	735	11.77	11.95	12.49	12.60	—	463.74	469.64	489.61	487.62	—
Medical equipment rental	7352	11.05	11.53	12.27	12.43	—	401.12	419.69	447.86	431.32	—
Heavy construction equipment rental	7353	15.86	15.94	16.35	16.60	—	651.85	656.73	675.26	693.88	—
Equipment rental and leasing, nec	7359	10.76	10.89	11.41	11.42	—	426.10	430.16	446.13	440.81	—
Personnel supply services:											
Help supply services	7363	9.55	9.56	10.16	10.20	—	309.42	314.52	333.25	332.52	—
Computer and data processing services	737	19.93	20.11	21.06	21.06	—	755.35	770.21	810.81	806.60	—
Computer programming services	7371	22.84	22.94	24.42	24.37	—	865.64	885.48	927.96	923.62	—
Computer integrated systems design	7373	20.52	20.60	20.70	20.77	—	790.02	797.22	819.72	822.49	—
Information retrieval services	7375	15.38	15.30	15.58	15.75	—	587.52	585.99	590.48	604.80	—
Computer maintenance and repair	7378	14.89	14.99	16.51	16.40	—	573.27	574.12	652.15	647.80	—
Miscellaneous business services	738	9.69	9.70	10.16	10.15	—	317.83	321.07	336.30	336.98	—
Detective and armored car services	7381	7.90	7.83	8.21	8.29	—	270.18	268.57	284.07	288.49	—
Security systems services	7382	12.34	12.29	13.13	13.45	—	443.01	451.04	479.25	499.00	—
Auto repair, services, and parking											
Automotive rentals, without drivers	751	10.03	10.09	10.44	10.49	—	369.10	370.30	385.24	394.42	—
Passenger car rental	7514	9.04	9.08	9.51	9.54	—	334.48	335.96	352.82	359.66	—
Automobile parking	752	7.67	7.86	8.12	8.23	—	258.48	264.88	263.09	267.48	—
Automotive repair shops	753	11.82	11.93	12.42	12.51	—	453.89	460.50	471.96	479.13	—
Automotive and tire repair shops	7532,4	12.40	12.54	13.00	13.05	—	469.96	479.03	494.00	499.82	—
General automotive repair shops	7538	11.81	11.93	12.38	12.47	—	448.78	455.73	470.44	476.35	—
Automotive services, except repair	754	7.93	8.01	8.41	8.39	—	262.48	263.53	261.55	274.35	—
Carwashes	7542	6.92	6.95	7.36	7.44	—	217.98	213.37	204.61	223.94	—
Miscellaneous repair services											
Motion pictures	78	13.03	13.97	14.12	13.81	—	397.42	427.48	417.95	422.59	—
Motion picture production and services	781	18.76	19.62	20.02	19.81	—	729.76	773.03	782.78	766.65	—
Video tape rental	784	6.46	6.43	7.28	7.23	—	159.56	157.54	174.72	180.75	—
Amusement and recreation services											
Bowling centers	793	7.62	7.43	7.77	7.84	—	186.69	186.49	190.37	195.22	—
Misc. amusement and recreation services	799	7.98	8.10	8.54	8.36	—	229.03	230.04	228.87	241.60	—
Physical fitness facilities	7991	8.36	8.28	8.68	8.68	—	159.68	160.63	170.13	171.86	—
Membership sports and recreation clubs	7997	8.44	8.47	9.06	8.92	—	253.20	246.48	253.68	264.03	—
Health services											
Offices and clinics of medical doctors	801	13.73	13.79	14.21	14.18	—	454.46	457.83	467.51	460.85	—
Offices and clinics of dentists	802	13.60	13.59	14.09	14.07	—	384.88	380.52	397.34	398.18	—
Offices and clinics of other health practitioners	804	12.41	12.53	13.20	13.22	—	374.78	378.41	397.32	396.80	—
Nursing and personal care facilities	805	9.38	9.36	9.72	9.77	—	308.60	304.20	315.90	321.43	—
Intermediate care facilities	8052	8.90	8.84	9.23	9.33	—	289.25	283.76	293.51	298.56	—
Hospitals	806	15.03	15.00	15.36	15.45	—	524.55	525.00	536.06	539.21	—

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P	July 1997	Aug. 1997	June 1998	July 1998P	Aug. 1998P
Services—Continued											
Health services—Continued											
Home health care services	808	28.9	29.1	28.9	29.1	-	-	-	-	-	-
Legal services	81	34.6	34.9	34.8	34.7	-	-	-	-	-	-
Social services	83	31.3	31.4	31.2	31.3	-	-	-	-	-	-
Individual and family services	832	31.2	31.3	31.1	31.2	-	-	-	-	-	-
Job training and related services	833	30.8	31.3	30.6	30.5	-	-	-	-	-	-
Child day care services	835	30.5	30.5	30.3	30.7	-	-	-	-	-	-
Residential care	836	32.4	32.2	32.1	32.4	-	-	-	-	-	-
Social services, nec	839	30.9	31.5	31.5	31.6	-	-	-	-	-	-
Membership organizations:											
Professional organizations	862	34.8	35.1	35.0	35.0	-	-	-	-	-	-
Engineering and management services	87	37.1	37.3	37.2	37.1	-	-	-	-	-	-
Engineering and architectural services	871	39.2	39.5	39.5	39.3	-	-	-	-	-	-
Engineering services	8711	39.5	39.7	39.8	39.5	-	-	-	-	-	-
Architectural services	8712	38.5	38.8	38.4	38.2	-	-	-	-	-	-
Surveying services	8713	38.4	39.0	38.8	38.7	-	-	-	-	-	-
Accounting, auditing, and bookkeeping	872	35.6	35.9	35.7	35.7	-	-	-	-	-	-
Research and testing services	873	36.9	37.1	36.6	36.4	-	-	-	-	-	-
Commercial physical research	8731	40.1	40.1	40.1	39.9	-	-	-	-	-	-
Commercial nonphysical research	8732	31.0	31.6	30.6	30.5	-	-	-	-	-	-
Noncommercial research organizations	8733	36.8	37.0	36.2	36.0	-	-	-	-	-	-
Management and public relations	874	35.9	36.2	36.3	36.4	-	-	-	-	-	-
Management services	8741	35.1	35.3	35.6	35.9	-	-	-	-	-	-
Management consulting services	8742	36.2	36.6	36.8	36.4	-	-	-	-	-	-
Public relations services	8743	35.5	34.6	35.8	35.1	-	-	-	-	-	-
Services, nec	89	34.7	35.1	34.3	34.4	-	-	-	-	-	-

See footnotes at end of table.

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

B-15. Average hours and earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by detailed industry—Continued

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Services—Continued											
Health services—Continued											
Home health care services	808	\$11.33	\$11.31	\$11.48	\$11.53	—	\$327.44	\$329.12	\$331.77	\$335.52	—
Legal services	81	17.24	17.16	18.02	18.02	—	596.50	598.88	627.10	625.29	—
Social services	83	8.73	8.79	9.13	9.14	—	273.25	276.01	284.86	286.08	—
Individual and family services	832	9.29	9.29	9.65	9.67	—	289.85	290.78	300.12	301.70	—
Job training and related services	833	8.30	8.56	8.87	8.88	—	255.64	267.93	271.42	270.84	—
Child day care services	835	7.32	7.31	7.76	7.65	—	223.26	222.96	235.13	234.86	—
Residential care	836	8.90	8.93	9.25	9.33	—	288.36	287.55	296.93	302.29	—
Social services, nec	839	10.65	10.76	11.27	11.15	—	329.09	338.94	355.01	352.34	—
Membership organizations:											
Professional organizations	862	17.52	17.74	18.01	18.23	—	609.70	622.67	630.35	638.05	—
Engineering and management services	87	16.96	17.01	17.66	17.71	—	629.22	634.47	656.95	657.04	—
Engineering and architectural services	871	18.66	18.76	19.31	19.26	—	731.47	741.02	762.75	756.92	—
Engineering services	8711	19.55	19.64	20.18	20.15	—	772.23	779.71	803.16	795.93	—
Architectural services	8712	16.53	16.64	17.34	17.17	—	636.41	645.63	665.86	655.89	—
Surveying services	8713	13.19	13.27	13.69	13.66	—	506.50	517.53	531.17	528.64	—
Accounting, auditing, and bookkeeping	872	14.66	14.65	15.20	15.34	—	521.90	525.94	542.64	547.64	—
Research and testing services	873	17.35	17.50	18.22	18.14	—	640.22	649.25	666.85	660.30	—
Commercial physical research	8731	19.26	19.57	20.09	19.92	—	772.33	784.76	805.61	794.81	—
Commercial nonphysical research	8732	13.56	13.54	14.91	14.99	—	420.36	427.86	456.25	457.20	—
Noncommercial research organizations	8733	20.50	20.57	21.42	21.40	—	754.40	761.09	775.40	770.40	—
Management and public relations	874	16.12	16.09	16.94	17.11	—	578.71	582.46	614.92	622.80	—
Management services	8741	14.67	14.65	15.17	15.54	—	514.92	517.15	540.05	557.89	—
Management consulting services	8742	18.09	17.92	19.08	19.26	—	654.86	655.87	702.14	701.06	—
Public relations services	8743	14.75	14.90	15.88	15.96	—	523.63	515.54	568.50	560.20	—
Services, nec	89	16.57	16.78	17.65	17.79	—	574.98	588.98	605.40	611.98	—

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

² See table B-15a for average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing.

³ Data relate to line-haul railroads with operating revenues of \$253.7 million or more in 1993 and to Amtrak.

⁴ Money payments only; tips, not included.

⁵ Excludes nonoffice commissioned real estate sales agents.

— Data not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

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

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

Because of special circumstances in the aerospace industry, BLS has calculated average hourly earnings series for SIC 3721 and SIC 3761 which include lump-sum payments. These series, beginning in October 1983, the effective date of the first aerospace bargaining agreement using lump-sum payments, were published in the June 1988 issue of *Employment and Earnings*. Current and year earlier data are presented in table B-15a along with the average hourly earnings series produced as part of the Current Employment Statistics program. An explanation of the methodology used to derive these series appears in the Explanatory Notes of this publication.

B-15a. Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing

Series	Aircraft (SIC 3721)				Guided missiles and space vehicles (SIC 3761)			
	June 1997	July 1997	June 1998	July 1998P	June 1997	July 1997	June 1998	July 1998P
Average hourly earnings, excluding lump-sum payments	\$20.68	\$20.92	\$20.88	\$20.97	\$20.51	\$20.87	\$21.66	\$21.31
Average hourly earnings, including lump-sum payments	20.98	21.24	20.95	21.06	20.51	20.87	21.86	21.49

P = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

B-16. Average hourly earnings, excluding overtime¹, of production workers on manufacturing payrolls

Industry	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Manufacturing	\$12.42	\$12.41	\$12.74	\$12.71	\$12.76
Durable goods	12.89	12.91	13.19	13.10	13.22
Lumber and wood products	10.27	10.24	10.50	10.60	(2)
Furniture and fixtures	10.09	10.13	10.35	10.44	(2)
Stone, clay, and glass products	12.32	12.30	12.65	12.67	(2)
Primary metal industries	14.25	14.08	14.51	14.57	(2)
Fabricated metal products	11.99	12.03	12.29	12.22	(2)
Industrial machinery and equipment	13.23	13.19	13.58	13.64	(2)
Electronic and other electrical equipment	12.11	12.13	12.51	12.62	(2)
Transportation equipment	16.24	16.30	16.46	16.13	(2)
Instruments and related products	12.95	12.87	13.19	13.27	(2)
Miscellaneous manufacturing	10.15	10.15	10.44	10.49	(2)
Nondurable goods	11.74	11.68	12.06	12.14	\$12.08
Food and kindred products	10.83	10.78	11.10	11.05	(2)
Tobacco products	20.15	19.11	20.22	19.92	(2)
Textile mill products	9.51	9.48	9.80	9.82	(2)
Apparel and other textile products	7.97	7.99	8.26	8.27	(2)
Paper and allied products	14.20	14.16	14.54	14.66	(2)
Printing and publishing	12.49	12.49	12.83	12.90	(2)
Chemicals and allied products	15.67	15.63	16.10	16.27	(2)
Petroleum and coal products	18.62	18.49	19.26	19.30	(2)
Rubber and misc. plastics products	11.00	10.96	11.20	11.33	(2)
Leather and leather products	8.57	8.68	9.09	9.04	(2)

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

² Not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

B-17. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by major industry, in current and constant (1982) dollars

Industry	Average hourly earnings					Average weekly earnings				
	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P	July 1997	Aug. 1997	June 1998	July 1998 ^P	Aug. 1998 ^P
Total private:										
Current dollars	\$12.17	\$12.22	\$12.66	\$12.66	\$12.75	\$423.52	\$427.70	\$439.30	\$440.57	\$448.80
Constant (1982) dollars	7.49	7.51	7.68	7.68	(2)	260.63	262.71	266.57	267.17	(2)
Mining:										
Current dollars	16.07	15.98	16.73	16.77	\$16.93	724.76	728.69	736.12	739.56	\$748.31
Constant (1982) dollars	9.89	9.82	10.15	10.17	(2)	446.01	447.60	446.67	448.49	(2)
Construction:										
Current dollars	16.03	16.12	16.44	16.63	\$16.76	642.80	639.96	642.80	666.86	\$672.08
Constant (1982) dollars	9.86	9.90	9.98	10.08	(2)	395.57	393.10	390.05	404.40	(2)
Manufacturing:										
Current dollars	13.10	13.14	13.43	13.38	\$13.46	539.72	551.88	561.37	549.92	\$561.28
Constant (1982) dollars	8.06	8.07	8.15	8.11	(2)	332.14	338.99	340.64	333.49	(2)
Transportation and public utilities:										
Current dollars	14.99	15.04	15.22	15.34	\$15.32	592.11	609.12	602.71	609.00	\$615.86
Constant (1982) dollars	9.22	9.24	9.24	9.30	(2)	364.38	374.15	365.72	369.31	(2)
Wholesale trade:										
Current dollars	13.38	13.48	13.89	13.99	\$14.12	512.45	518.98	531.99	537.22	\$546.44
Constant (1982) dollars	8.23	8.28	8.43	8.48	(2)	315.35	318.78	322.81	325.79	(2)
Retail trade										
Current dollars	8.27	8.30	8.70	8.71	\$8.73	244.79	246.51	254.91	259.56	\$261.03
Constant (1982) dollars	5.09	5.10	5.28	5.28	(2)	150.64	151.42	154.68	157.40	(2)
Finance, insurance, and real estate:										
Current dollars	13.21	13.38	13.93	13.93	\$14.14	474.24	483.02	501.48	502.87	\$521.77
Constant (1982) dollars	8.13	8.22	8.45	8.45	(2)	291.84	296.70	304.30	304.95	(2)
Services:										
Current dollars	12.06	12.12	12.70	12.67	\$12.76	395.57	398.75	415.29	416.84	\$423.63
Constant (1982) dollars	7.42	7.44	7.71	7.68	(2)	243.43	244.93	252.00	252.78	(2)

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

² Not available.
P = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

B-18. 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Alabama	41.2	42.5	41.7	\$11.84	\$12.09	\$12.11	\$487.81	\$513.83	\$504.99
Birmingham	42.0	43.1	42.0	12.63	12.80	13.05	530.46	551.68	548.10
Mobile	42.6	43.1	43.4	14.17	13.99	14.04	603.64	602.97	609.34
Alaska	50.6	45.7	49.5	10.74	11.64	10.31	543.44	531.95	510.35
Arizona	40.7	40.0	40.0	11.79	12.40	12.37	479.85	496.00	494.80
Arkansas	41.5	41.7	41.4	10.81	11.01	11.16	448.62	459.12	462.02
Fayetteville-Springdale-Rogers	40.1	41.2	40.6	10.26	10.93	11.01	411.43	450.32	447.01
Fort Smith	42.7	43.9	44.1	10.68	11.10	11.22	456.04	487.29	494.80
Little Rock-North Little Rock	42.2	42.5	41.2	11.75	11.68	11.54	495.85	496.40	475.45
Pine Bluff	41.5	40.1	39.8	12.58	13.40	13.22	522.07	537.34	526.16
California	41.5	41.9	41.5	13.26	13.55	13.60	550.29	567.75	564.40
Bakersfield	42.0	41.6	41.6	13.63	14.03	13.95	572.46	583.65	580.32
Fresno	41.3	40.3	40.1	11.75	12.06	12.13	485.28	486.02	486.41
Los Angeles-Long Beach	42.2	42.4	42.1	12.42	12.69	12.80	524.12	538.06	538.88
Modesto	40.6	41.4	40.7	14.04	13.84	14.00	570.02	572.98	569.80
Oakland	42.3	41.3	41.3	15.59	15.61	15.61	659.46	644.69	644.69
Orange County	41.8	44.0	43.8	12.81	13.01	12.92	535.46	572.44	565.90
Riverside-San Bernardino	41.7	42.6	42.8	11.85	12.08	12.11	494.15	514.61	518.31
Sacramento	41.5	40.8	41.0	14.22	14.62	14.71	590.13	596.50	603.11
Salinas	38.2	41.5	42.9	13.84	14.08	13.78	528.69	584.32	591.16
San Diego	40.0	40.2	39.9	13.37	13.51	13.52	534.80	543.10	539.45
San Francisco	40.7	41.6	41.1	14.44	14.62	14.67	587.71	608.19	602.94
San Jose	41.7	42.2	42.3	16.47	16.71	16.70	686.80	705.16	706.41
Santa Barbara-Santa Maria-Lompoc	41.0	42.5	42.8	13.60	13.91	13.76	557.60	591.18	588.93
Santa Rosa	39.4	39.9	39.5	14.94	15.13	15.13	588.64	603.69	597.64
Stockton-Lodi	42.6	41.6	42.3	13.32	13.39	13.50	567.43	557.02	571.05
Vallejo-Fairfield-Napa	41.2	42.4	41.6	15.16	15.51	15.42	624.59	657.62	641.47
Ventura	41.8	43.1	42.5	12.50	12.47	12.48	522.50	537.46	530.40
Colorado	41.8	42.0	41.3	13.40	13.73	13.80	560.12	576.66	569.94
Denver	42.2	43.3	43.2	13.07	12.89	12.87	551.55	558.14	555.98
Connecticut	41.9	43.0	42.4	14.58	14.79	14.87	610.90	635.97	630.49
Bridgeport	41.5	42.6	40.9	15.26	15.34	15.52	633.29	653.48	634.77
Danbury	42.8	43.3	43.8	14.92	14.90	14.77	638.58	645.17	646.93
Hartford	42.3	43.3	43.2	15.46	15.52	15.68	653.96	672.02	677.38
New Haven-Meriden	42.5	42.7	42.0	14.32	14.71	14.70	608.60	628.12	617.40
New London-Norwich	42.1	42.2	41.9	15.03	15.34	15.57	632.76	647.35	652.38
Stamford-Norwalk	39.8	40.3	40.0	13.78	13.69	13.88	548.44	551.71	555.20
Waterbury	42.6	43.8	42.3	13.61	13.99	14.08	579.79	612.76	595.58
Delaware	41.9	42.1	41.5	14.71	15.28	15.06	616.35	643.29	624.99
Dover	40.5	41.1	41.6	13.44	13.75	13.85	544.32	565.13	576.16
Wilmington-Newark	42.2	43.2	42.9	17.63	18.62	18.48	743.99	804.38	792.79
District of Columbia:									
Washington PMSA	39.8	39.6	40.3	13.99	14.05	14.33	556.80	556.38	577.50
Florida	41.2	42.0	41.4	11.01	11.31	11.47	453.61	475.02	474.86
Georgia	42.0	42.1	42.1	11.55	12.01	11.91	485.10	505.62	501.41
Atlanta	42.5	41.6	42.3	12.47	12.83	12.44	529.98	533.73	526.21
Savannah	46.9	48.4	47.7	13.96	14.88	15.09	654.72	720.19	719.79
Hawaii	36.6	36.6	36.6	12.69	13.26	12.76	464.45	485.32	467.02
Honolulu	38.2	39.8	40.1	12.77	13.27	12.86	487.81	528.15	515.69
Idaho	41.4	38.2	38.3	12.26	12.75	13.07	507.56	487.05	500.58
Illinois	42.1	42.0	41.8	13.30	13.71	13.74	559.93	575.82	574.33
Bloomington-Normal	41.3	41.4	41.0	17.59	17.96	17.99	726.47	743.54	737.59
Champaign-Urbana	41.8	42.1	40.5	11.04	11.40	11.42	461.47	479.94	462.51
Chicago	41.9	41.9	41.7	13.26	13.55	13.57	555.59	567.75	565.87
Davenport-Moline-Rock Island	42.8	43.3	43.3	15.41	15.64	15.72	659.55	677.21	680.68
Decatur	42.5	42.2	42.6	16.65	16.83	16.81	707.63	710.23	716.11
Kankakee	41.4	42.4	41.2	14.69	14.94	15.01	608.17	633.46	618.41
Peoria-Pekin	42.1	43.0	42.1	16.50	16.45	16.43	694.65	707.35	691.70
Rockford	42.6	43.1	42.9	14.52	15.73	15.66	618.55	677.96	671.81
Springfield	40.3	40.1	40.1	12.02	12.38	12.55	484.41	496.44	503.26

See footnotes at end of table.

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

B-18. 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Indiana	42.3	42.9	41.8	\$14.68	\$14.88	\$14.71	\$620.96	\$638.35	\$614.88
Bloomington	41.5	40.2	40.4	12.43	12.01	11.99	515.85	482.80	484.40
Elkhart-Goshen	38.4	40.5	40.0	12.35	12.39	12.32	474.24	501.80	492.80
Evansville-Henderson	43.1	42.9	42.7	14.44	14.51	14.31	622.36	622.48	611.04
Fort Wayne	41.4	41.8	41.6	14.87	14.67	14.03	615.62	613.21	583.65
Gary	41.4	43.7	42.3	18.42	18.84	19.08	762.59	823.31	807.08
Indianapolis	44.3	44.2	43.4	15.61	15.51	15.11	691.52	685.54	655.77
Kokomo	51.3	49.8	51.3	19.67	21.42	20.03	1,069.07	1,066.72	1,027.54
Lafayette	43.0	44.3	45.4	15.58	16.05	16.34	669.94	711.02	741.84
Muncie	44.7	45.0	44.8	15.08	14.34	14.12	674.08	645.30	632.58
South Bend	41.4	40.5	40.5	13.03	12.72	12.61	539.44	515.16	510.71
Terre Haute	43.2	46.9	46.8	14.59	14.66	14.27	630.29	687.55	667.84
Iowa	42.1	42.1	41.6	13.65	13.79	13.82	574.67	580.56	574.91
Cedar Rapids	43.5	41.9	41.6	16.66	17.44	17.71	724.71	730.74	736.74
Des Moines	42.0	41.0	41.6	13.63	14.07	14.27	572.46	576.87	593.63
Dubuque	41.7	41.6	41.3	15.09	15.24	15.28	629.25	633.98	631.06
Sioux City	39.5	38.2	39.4	11.78	11.69	11.93	465.31	446.56	470.04
Kansas	40.5	41.8	41.4	13.44	13.56	13.45	544.32	566.81	556.83
Topeka	39.9	42.7	40.8	14.90	16.03	16.19	594.51	684.48	660.55
Wichita	40.5	43.2	42.0	15.70	15.92	15.71	635.85	687.74	659.82
Kentucky	40.7	41.3	41.0	12.92	13.81	13.76	525.84	570.35	564.16
Lexington	40.9	42.2	41.9	13.80	13.95	13.99	564.42	588.69	586.18
Louisville	40.2	41.5	41.6	14.53	15.17	15.18	584.11	629.56	631.49
Louisiana	43.7	44.3	44.3	14.24	14.55	14.57	622.29	644.57	645.45
Baton Rouge	42.5	43.4	43.0	16.99	17.67	17.71	722.08	766.88	761.53
New Orleans	43.9	42.8	43.1	14.14	14.41	14.34	620.75	616.75	618.05
Shreveport-Bossier City	42.8	41.6	40.9	13.71	13.27	12.93	586.79	552.03	528.84
Maine	39.8	41.1	39.3	13.22	13.24	13.76	526.16	544.16	540.77
Lewiston-Auburn	42.4	41.1	39.1	11.27	11.62	12.18	477.85	477.58	476.24
Portland	37.3	42.7	40.7	10.90	11.47	11.41	406.57	489.77	464.39
Maryland	40.9	41.7	41.5	14.29	14.45	14.31	584.46	602.57	593.87
Baltimore PMSA	41.0	42.2	41.2	14.98	14.93	15.00	614.18	630.05	618.00
Massachusetts	42.2	42.3	41.7	13.48	13.75	13.76	568.86	581.63	573.79
Boston	41.2	41.9	41.0	14.53	14.94	14.96	598.64	625.99	613.36
Springfield	40.2	41.8	41.2	13.06	13.41	13.48	525.01	560.54	555.38
Worcester	43.3	41.7	41.3	13.45	13.93	13.93	582.39	580.88	575.31
Michigan	42.6	42.9	41.1	16.78	17.21	16.44	714.83	738.31	675.68
Ann Arbor	43.1	43.9	43.4	17.13	18.94	18.17	738.30	831.47	788.58
Detroit	42.9	43.8	41.4	18.15	19.31	18.62	778.63	845.78	770.87
Flint	46.4	33.6	40.3	22.73	23.16	20.58	1,054.67	778.18	829.37
Grand Rapids-Muskegon-Holland	41.1	42.1	41.4	14.70	14.37	14.28	604.17	604.98	591.19
Jackson	41.1	43.9	38.4	13.04	12.67	12.61	535.94	556.21	484.22
Kalamazoo-Battle Creek	43.7	44.7	42.7	14.98	15.70	15.24	654.63	701.79	650.75
Lansing East Lansing	43.4	41.6	40.8	18.54	19.12	15.56	804.64	795.39	634.85
Saginaw-Bay City-Midland	47.5	43.7	43.3	20.55	20.95	19.77	976.12	915.52	856.04
Minnesota	41.5	41.6	41.3	13.51	13.86	13.82	560.67	576.58	570.77
Duluth-Superior	39.0	40.3	40.3	12.68	12.78	12.68	494.52	515.03	511.00
Minneapolis-St. Paul	41.2	42.4	42.0	14.45	14.79	14.72	595.34	627.10	618.24
St. Cloud	41.6	43.0	42.2	12.58	13.11	13.23	523.33	563.73	558.31
Mississippi	40.5	41.5	41.0	10.41	10.68	10.69	421.61	443.22	438.29
Jackson	41.1	41.5	40.4	11.98	11.86	11.76	492.38	492.19	475.10
Missouri	40.8	42.0	41.2	12.82	13.22	13.15	523.06	555.24	541.78
Kansas City	43.0	43.3	42.7	14.25	14.06	13.89	612.75	608.80	593.10
St. Louis	42.3	41.6	41.7	14.82	15.44	15.19	626.89	642.30	633.42
Springfield	41.2	41.1	39.9	11.00	11.48	11.60	453.20	471.83	462.84
Montana	37.9	40.1	38.4	13.43	13.58	13.89	509.00	544.56	533.38
Nebraska	40.7	41.9	41.8	12.20	12.03	12.24	496.54	504.06	511.63
Lincoln	45.7	44.6	42.9	13.60	14.03	14.02	621.52	625.74	601.46
Omaha	40.9	42.9	43.1	13.53	13.23	13.83	553.38	567.57	596.07
Nevada	42.6	43.3	42.9	14.23	14.81	14.74	606.20	641.27	632.35
Las Vegas	41.3	41.5	41.0	15.27	17.09	16.97	630.65	709.24	695.77

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

B-18. 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
New Hampshire	40.5	41.3	40.2	\$12.78	\$12.79	\$12.88	\$517.59	\$528.23	\$517.78
Manchester.....	40.3	40.9	39.8	13.75	13.91	13.26	554.13	568.92	527.75
Nashua.....	39.3	42.3	41.9	14.81	14.40	14.44	582.03	609.12	605.04
Portsmouth-Rochester.....	37.9	40.0	37.5	11.73	12.14	12.75	444.57	485.60	478.13
New Jersey	41.4	41.6	41.2	14.25	14.53	14.58	589.95	604.45	600.70
New Mexico	39.7	38.0	38.9	12.17	12.77	12.72	483.15	485.26	494.81
Albuquerque.....	39.0	37.9	40.4	14.88	13.86	14.64	580.32	525.29	591.46
New York	40.3	41.3	40.6	13.17	13.49	13.29	530.75	557.14	539.57
Albany-Schenectady-Troy.....	42.2	42.2	42.1	14.61	14.63	14.45	616.54	613.17	608.35
Binghamton.....	40.1	41.3	39.9	10.56	10.57	10.70	423.46	436.54	426.93
Buffalo-Niagara Falls.....	41.6	43.0	42.7	16.38	17.32	16.09	681.41	744.76	687.04
Dutchess County.....	38.4	41.0	40.3	12.29	12.08	12.03	471.94	495.28	484.81
Elmira.....	41.7	40.6	42.2	12.27	12.56	12.35	511.66	509.94	521.17
Nassau-Suffolk.....	39.1	40.6	39.7	12.44	12.48	12.56	486.40	506.69	498.63
New York PMSA.....	38.4	39.6	39.1	11.81	12.31	12.29	453.50	487.48	480.54
New York City.....	38.0	39.4	38.9	11.53	12.07	12.03	438.14	475.56	467.97
Newburgh.....	41.2	40.1	39.9	11.46	11.13	11.47	472.15	446.31	457.65
Rochester.....	42.0	42.4	41.9	14.94	15.02	14.93	627.48	636.85	625.57
Rockland County.....	41.1	42.9	42.3	16.17	15.59	15.82	664.59	668.81	669.19
Syracuse.....	41.8	43.5	42.0	14.29	14.45	14.29	597.32	628.58	600.18
Utica-Rome.....	39.5	40.0	38.8	11.42	11.73	11.75	451.09	489.20	455.90
Westchester County.....	40.6	40.7	40.1	12.44	13.07	13.02	505.06	531.95	522.10
North Carolina	40.6	41.2	40.7	11.43	11.80	11.84	464.06	486.16	481.89
Asheville.....	40.9	42.1	42.1	11.03	11.34	11.38	451.13	477.41	479.10
Charlotte-Gastonia-Rock Hill.....	40.5	41.7	40.8	12.41	12.80	12.74	502.61	533.76	519.79
Greensboro-Winston-Salem-High Point.....	40.2	40.4	39.6	11.72	11.93	12.03	471.14	481.97	476.39
Raleigh-Durham-Chapel Hill.....	41.9	41.4	41.6	12.45	12.88	12.96	521.66	533.23	539.14
North Dakota	40.3	40.4	39.9	11.16	11.32	11.22	449.75	457.33	447.68
Fargo-Moorhead.....	42.3	40.9	41.1	11.27	10.77	10.73	476.72	440.49	441.00
Ohio	41.5	42.8	41.9	15.11	15.65	15.29	627.07	669.82	640.65
Akron.....	42.1	43.0	42.4	12.67	13.08	13.18	533.41	562.44	558.83
Canton-Massillon.....	40.5	41.7	40.8	13.54	13.94	13.85	548.37	581.30	565.08
Cincinnati.....	42.6	42.9	43.1	14.50	15.23	15.24	617.70	653.37	656.84
Cleveland-Lorain-Elyna.....	42.5	43.1	42.3	14.91	15.26	14.98	633.68	657.71	633.65
Columbus.....	42.2	42.3	41.0	14.33	14.77	14.59	604.73	624.77	598.19
Dayton-Springfield.....	43.7	41.8	41.7	16.36	16.41	15.97	714.93	685.94	665.95
Hamilton-Middletown.....	45.5	45.3	46.1	17.16	17.53	17.55	780.78	794.11	809.06
Lima.....	42.1	43.6	42.7	16.19	16.25	16.16	681.60	708.50	690.03
Mansfield.....	41.8	41.8	41.1	15.32	16.33	16.35	640.38	682.59	671.99
Steubenville-Weirton.....	40.4	40.9	40.1	16.47	18.41	18.20	665.39	752.97	729.82
Toledo.....	42.6	43.6	42.7	15.67	16.59	16.43	667.54	723.32	701.56
Youngstown-Warren.....	41.3	41.2	41.7	16.73	17.36	15.76	690.95	715.23	657.19
Oklahoma	42.5	41.3	41.2	12.55	12.64	12.37	533.38	522.03	509.64
Oklahoma City.....	44.7	42.7	41.5	14.34	13.56	12.92	641.00	579.01	536.18
Tulsa.....	41.1	42.9	41.9	12.63	13.14	13.28	519.09	563.71	556.43
Oregon	40.4	40.4	40.3	13.32	14.01	13.92	538.13	566.00	560.98
Eugene-Springfield.....	37.3	40.2	39.1	12.71	13.46	13.26	474.08	541.09	518.47
Medford-Ashland.....	38.9	39.4	39.5	12.61	12.81	13.40	490.53	504.71	529.30
Portland-Vancouver.....	41.7	40.7	40.2	13.25	14.30	14.41	552.53	582.01	579.28
Salem.....	39.0	38.5	39.4	11.70	12.08	11.61	456.30	465.08	457.43
Pennsylvania	41.4	41.8	41.4	13.82	13.98	14.04	572.15	584.38	581.26
Allentown-Bethlem-Easton.....	41.5	41.8	42.2	13.99	14.16	14.34	580.59	592.72	605.15
Altoona.....	39.8	40.1	39.7	11.68	12.14	12.12	464.86	486.81	481.16
Erie.....	43.1	43.6	42.6	14.13	13.91	13.92	609.00	606.48	592.99
Harrisburg-Lebanon-Carlisle.....	39.3	40.1	39.4	13.49	13.60	13.74	530.16	545.36	541.36
Johnstown.....	39.2	41.1	39.8	10.29	10.23	10.22	403.37	420.45	406.76
Lancaster.....	39.4	40.7	40.4	12.89	12.85	12.83	507.87	523.00	518.33
Philadelphia PMSA.....	41.2	41.2	41.3	14.89	15.32	15.36	613.47	631.18	634.37
Pittsburgh.....	42.6	42.2	41.3	14.73	14.89	14.98	627.50	628.36	618.67
Reading.....	41.4	42.3	42.8	14.96	14.97	14.86	619.34	633.23	636.01
Scranton-Wilkes-Barre-Hazleton.....	41.0	41.0	40.4	12.44	12.65	12.84	510.04	518.65	518.74
Sharon.....	41.2	43.5	41.6	14.71	14.92	14.76	606.05	649.02	614.02
State College.....	42.8	41.3	41.7	11.87	12.03	12.22	508.04	496.84	509.57
Williamsport.....	40.1	40.1	40.3	11.32	11.52	11.56	453.93	461.95	465.87
York.....	41.7	43.1	42.5	14.14	14.27	14.13	589.84	615.04	600.53

See footnotes at end of table.

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

B-18. 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 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P	July 1997	June 1998	July 1998P
Rhode Island	39.3	41.5	40.9	\$11.30	\$11.60	\$11.63	\$444.09	\$481.40	\$475.67
Providence-Fall River-Warwick	39.9	41.9	40.8	11.60	11.82	11.90	462.84	495.26	485.52
South Carolina	42.0	42.5	42.4	10.34	10.51	10.52	434.28	446.68	446.05
South Dakota	41.9	42.6	42.6	9.99	10.19	10.25	418.58	434.09	436.65
Rapid City	40.6	41.0	40.9	9.81	10.44	10.45	398.29	428.04	427.41
Sioux Falls	41.8	43.9	44.0	10.37	10.63	10.68	433.47	466.66	469.92
Tennessee	40.3	41.1	40.2	11.73	11.98	12.09	472.72	492.38	486.02
Chattanooga	41.6	42.9	41.5	10.72	11.12	11.23	445.95	477.05	486.05
Johnson City-Kingsport-Bristol	38.3	39.4	38.3	12.72	12.75	12.67	487.18	502.35	485.26
Knoxville	40.0	40.5	40.4	11.27	11.87	12.03	450.80	480.74	486.01
Memphis	41.3	41.8	41.5	12.44	12.71	13.52	513.77	531.28	561.08
Nashville	40.6	41.8	41.1	12.90	13.05	13.08	523.74	545.49	537.59
Texas	43.1	44.0	43.5	12.02	12.14	12.13	518.06	534.16	527.66
Dallas	42.8	42.8	42.4	12.13	12.31	12.30	519.16	526.87	521.52
Ft. Worth-Arlington	43.1	43.9	43.5	12.80	12.96	12.71	551.68	568.94	552.89
Houston	45.5	45.5	45.2	14.06	14.30	14.11	639.73	650.65	637.77
San Antonio	41.0	42.7	42.2	9.70	9.73	9.73	397.70	415.47	410.61
Utah	40.0	40.2	40.5	12.77	13.02	13.08	510.80	523.40	529.74
Salt Lake City-Ogden	39.4	40.1	40.1	12.74	12.99	13.07	501.96	520.90	524.11
Vermont	39.8	40.0	39.4	12.64	13.02	12.86	503.07	520.80	506.68
Burlington	43.5	43.4	45.8	13.09	13.86	13.47	569.42	601.52	616.93
Virginia	41.8	42.8	42.2	12.50	12.85	12.96	522.50	549.98	546.91
Bristol	39.0	39.4	37.4	10.79	10.39	10.62	420.81	409.37	404.67
Charlottesville	45.8	46.5	44.8	10.32	10.56	10.05	472.66	491.04	450.24
Danville	43.7	42.9	40.2	13.27	12.76	13.15	579.90	547.40	528.63
Lynchburg	41.2	47.1	40.6	12.12	12.54	12.60	499.34	590.63	511.56
Northern Virginia	41.3	41.0	40.4	12.72	13.20	13.40	525.34	541.20	541.36
Richmond-Petersburg	42.2	42.2	41.7	15.54	16.14	16.40	655.79	681.11	683.88
Roanoke	39.7	40.6	37.6	12.90	13.97	13.34	512.13	567.18	501.58
Washington	40.3	41.2	40.4	15.17	15.67	15.91	611.35	645.60	642.76
West Virginia	41.1	41.7	40.6	13.13	13.70	13.65	539.64	571.29	554.19
Charleston	44.9	47.2	45.1	14.45	15.64	15.55	648.81	738.21	701.31
Huntington-Ashland	42.5	43.6	43.8	14.59	15.36	15.54	620.08	669.70	680.65
Parkersburg-Manetta	43.3	41.4	42.8	16.71	17.25	16.99	723.54	714.15	727.17
Wheeling	38.8	40.3	38.6	15.31	16.94	16.90	594.03	682.68	652.34
Wisconsin	41.7	41.6	40.8	13.56	13.95	13.71	565.45	580.32	559.37
Appleton-Oshkosh-Neenah	43.6	43.7	42.7	14.91	15.16	15.61	650.08	662.49	666.55
Eau Claire	40.8	41.8	41.6	12.80	12.86	12.73	522.24	537.55	529.57
Green Bay	40.8	40.7	40.6	15.17	15.47	15.63	618.94	629.63	634.58
Janesville-Beloit	45.0	42.6	45.3	16.67	17.50	15.50	750.15	745.50	702.15
Kenosha	37.1	38.7	37.9	13.02	15.14	13.59	483.04	585.92	515.06
La Crosse	41.0	43.1	41.6	11.80	12.07	12.51	483.80	520.22	520.42
Madison	40.8	39.8	38.9	12.69	13.02	13.16	517.75	518.20	511.92
Milwaukee-Waukesha	40.6	40.7	40.1	14.90	14.81	14.77	604.94	602.77	592.28
Racine	42.1	41.6	36.1	14.39	14.60	13.79	605.82	607.36	497.82
Sheboygan	39.6	43.8	41.2	13.08	13.60	13.96	517.97	595.68	575.15
Wausau	42.3	43.3	43.4	13.42	13.53	13.59	567.67	585.85	589.81
Wyoming	40.2	41.5	40.6	14.55	12.47	16.99	584.91	517.51	689.79
Puerto Rico	39.7	(¹)	(¹)	8.03	(¹)	(¹)	318.79	(¹)	(¹)
Virgin Islands	42.4	(¹)	(¹)	17.91	(¹)	(¹)	759.38	(¹)	(¹)

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 1997 benchmarks.

**LABOR FORCE DATA
REGIONS AND DIVISIONS
SEASONALLY ADJUSTED**

C-1. Labor force status by census region and division, seasonally adjusted¹

(Numbers in thousands)

Census region and division	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
NORTHEAST													
Civilian labor force	26,159.5	26,153.9	26,142.6	26,140.0	26,114.2	26,078.5	26,077.0	26,097.5	26,105.9	26,045.2	26,062.1	26,044.0	26,034.0
Employed	24,744.0	24,748.0	24,749.8	24,771.1	24,769.1	24,758.5	24,799.0	24,806.3	24,797.5	24,826.0	24,832.4	24,848.1	24,843.6
Unemployed	1,415.5	1,405.9	1,392.8	1,368.8	1,345.1	1,320.0	1,278.0	1,291.1	1,308.4	1,219.2	1,229.7	1,196.0	1,190.4
Unemployment rate	5.4	5.4	5.3	5.2	5.2	5.1	4.9	4.9	5.0	4.7	4.7	4.6	4.6
New England													
Civilian labor force	7,128.7	7,130.7	7,131.3	7,140.9	7,137.9	7,132.8	7,130.7	7,123.0	7,139.0	7,103.1	7,125.0	7,106.9	7,100.4
Employed	6,815.2	6,819.0	6,822.6	6,837.6	6,839.4	6,840.1	6,861.1	6,864.6	6,862.8	6,860.0	6,860.7	6,854.4	6,862.4
Unemployed	313.5	311.7	308.7	303.3	298.5	292.7	269.7	258.4	276.2	243.1	264.3	252.4	238.0
Unemployment rate	4.4	4.4	4.3	4.2	4.2	4.1	3.8	3.6	3.9	3.4	3.7	3.6	3.4
Middle Atlantic													
Civilian labor force	19,030.8	19,023.2	19,011.3	18,999.1	18,976.3	18,945.7	18,946.3	18,974.5	18,966.9	18,942.1	18,937.2	18,937.2	18,933.6
Employed	17,928.8	17,929.0	17,927.2	17,933.5	17,929.8	17,918.4	17,937.9	17,941.7	17,934.7	17,966.0	17,971.7	17,993.6	17,981.2
Unemployed	1,102.0	1,094.2	1,084.1	1,065.5	1,046.5	1,027.3	1,008.3	1,032.7	1,032.2	976.1	965.5	943.5	952.4
Unemployment rate	5.8	5.8	5.7	5.6	5.5	5.4	5.3	5.4	5.4	5.2	5.1	5.0	5.0
SOUTH													
Civilian labor force	47,215.1	47,278.9	47,364.2	47,490.8	47,600.5	47,694.8	47,816.2	47,818.3	47,879.6	47,935.3	47,977.2	47,985.4	48,064.3
Employed	44,861.3	44,961.2	45,063.7	45,245.0	45,387.7	45,523.3	45,689.9	45,752.0	45,761.0	45,865.9	45,924.5	45,916.9	45,989.4
Unemployed	2,353.9	2,317.7	2,300.6	2,245.9	2,212.8	2,171.5	2,126.3	2,066.4	2,118.6	2,069.5	2,052.7	2,068.5	2,074.9
Unemployment rate	5.0	4.9	4.9	4.7	4.6	4.6	4.4	4.3	4.4	4.3	4.3	4.3	4.3
South Atlantic													
Civilian labor force	24,413.3	24,456.8	24,502.9	24,569.1	24,635.4	24,677.1	24,738.2	24,765.7	24,763.1	24,800.5	24,788.8	24,783.2	24,828.2
Employed	23,301.7	23,355.7	23,410.1	23,503.8	23,575.5	23,630.4	23,695.5	23,724.7	23,720.6	23,786.9	23,785.3	23,784.1	23,831.2
Unemployed	1,111.6	1,101.1	1,092.8	1,065.2	1,060.0	1,046.7	1,042.6	1,041.0	1,042.5	1,013.6	1,003.4	999.0	997.0
Unemployment rate	4.6	4.5	4.5	4.3	4.3	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0
East South Central													
Civilian labor force	8,092.5	8,085.8	8,097.1	8,118.6	8,135.3	8,145.8	8,144.8	8,136.3	8,167.0	8,148.8	8,146.5	8,127.4	8,137.3
Employed	7,646.7	7,654.0	7,663.0	7,700.9	7,725.7	7,748.2	7,775.6	7,785.3	7,784.1	7,791.0	7,791.4	7,794.2	7,809.1
Unemployed	445.8	431.7	434.1	417.7	409.7	397.5	369.1	351.0	382.8	357.7	355.0	333.2	328.2
Unemployment rate	5.5	5.3	5.4	5.1	5.0	4.9	4.5	4.3	4.7	4.4	4.4	4.1	4.0
West South Central													
Civilian labor force	14,709.3	14,736.4	14,764.3	14,803.2	14,829.8	14,871.9	14,933.3	14,916.3	14,949.5	14,986.1	15,041.9	15,074.9	15,098.8
Employed	13,912.9	13,951.5	13,990.6	14,040.3	14,086.6	14,144.7	14,218.8	14,241.9	14,256.2	14,288.0	14,347.7	14,338.6	14,349.1
Unemployed	796.4	784.9	773.7	762.9	743.2	727.2	714.5	674.4	693.3	698.1	694.2	736.3	749.7
Unemployment rate	5.4	5.3	5.2	5.2	5.0	4.9	4.8	4.5	4.6	4.7	4.6	4.9	5.0

See footnotes at end of table.

**LABOR FORCE DATA
REGIONS AND DIVISIONS
SEASONALLY ADJUSTED**

C-1. Labor force status by census region and division, seasonally adjusted¹ — Continued

(Numbers in thousands)

Census region and division	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
MIDWEST													
Civilian labor force	32,923.9	32,955.3	33,007.1	33,106.2	33,170.2	33,246.3	33,363.0	33,376.7	33,383.1	33,299.7	33,302.6	33,302.1	33,334.4
Employed	31,608.1	31,651.0	31,697.0	31,803.8	31,877.5	31,959.7	32,117.0	32,147.6	32,126.5	32,167.9	32,129.1	32,090.8	32,087.2
Unemployed	1,315.7	1,304.3	1,310.2	1,302.5	1,292.6	1,286.6	1,246.0	1,229.1	1,256.6	1,131.8	1,173.4	1,211.3	1,247.2
Unemployment rate	4.0	4.0	4.0	3.9	3.9	3.9	3.7	3.7	3.8	3.4	3.5	3.6	3.7
East North Central													
Civilian labor force	22,843.0	22,859.6	22,885.1	22,949.1	22,987.8	23,027.2	23,113.2	23,114.8	23,134.0	23,025.2	23,014.4	23,031.4	23,059.0
Employed	21,872.6	21,898.4	21,918.7	21,982.3	22,024.9	22,068.0	22,182.4	22,197.5	22,209.7	22,214.2	22,170.8	22,135.9	22,124.4
Unemployed	970.5	961.2	966.4	966.8	962.9	959.3	930.8	917.3	924.3	811.1	843.6	895.4	934.6
Unemployment rate	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	3.5	3.7	3.9	4.1
West North Central													
Civilian labor force	10,080.8	10,095.7	10,122.0	10,157.1	10,182.3	10,219.1	10,249.8	10,262.0	10,249.1	10,274.4	10,288.1	10,270.8	10,275.4
Employed	9,735.6	9,752.6	9,778.2	9,821.4	9,852.6	9,891.7	9,934.6	9,950.1	9,916.8	9,953.7	9,958.4	9,954.9	9,962.8
Unemployed	345.3	343.1	343.8	335.7	329.7	327.4	315.2	311.8	332.3	320.7	329.8	315.9	312.5
Unemployment rate	3.4	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.2	3.1	3.2	3.1	3.0
WEST													
Civilian labor force	30,058.3	30,127.4	30,185.9	30,265.7	30,323.8	30,425.5	30,478.9	30,513.8	30,617.8	30,604.4	30,693.6	30,674.8	30,750.7
Employed	28,404.9	28,478.0	28,532.5	28,634.1	28,713.7	28,819.0	28,893.5	28,944.5	29,004.2	29,000.4	29,091.3	29,072.9	29,188.1
Unemployed	1,653.4	1,649.4	1,653.4	1,631.6	1,610.2	1,606.5	1,585.4	1,569.3	1,613.7	1,604.0	1,602.3	1,601.9	1,562.5
Unemployment rate	5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.3	5.2	5.2	5.2	5.1
Mountain													
Civilian labor force	8,400.4	8,420.9	8,458.2	8,507.1	8,550.2	8,599.7	8,633.8	8,672.2	8,685.1	8,711.3	8,714.1	8,717.9	8,740.9
Employed	8,046.1	8,069.8	8,107.6	8,159.7	8,201.2	8,250.1	8,298.2	8,323.7	8,317.0	8,336.5	8,351.7	8,350.0	8,383.4
Unemployed	354.3	351.1	350.6	347.5	349.0	349.7	335.6	348.5	368.1	374.8	362.3	367.9	357.5
Unemployment rate	4.2	4.2	4.1	4.1	4.1	4.1	3.9	4.0	4.2	4.3	4.2	4.2	4.1
Pacific													
Civilian labor force	21,657.9	21,706.5	21,727.7	21,758.6	21,773.6	21,825.8	21,845.1	21,841.6	21,932.8	21,893.1	21,979.6	21,956.9	22,009.8
Employed	20,358.8	20,408.2	20,424.9	20,474.5	20,512.5	20,569.0	20,595.3	20,620.8	20,687.2	20,663.9	20,739.6	20,722.9	20,804.7
Unemployed	1,299.1	1,298.3	1,302.8	1,284.2	1,261.1	1,256.8	1,249.8	1,220.8	1,245.6	1,229.2	1,240.0	1,234.0	1,205.0
Unemployment rate	6.0	6.0	6.0	5.9	5.8	5.8	5.7	5.6	5.7	5.6	5.6	5.6	5.5

^P = preliminary.

¹ These estimates are obtained from summing official State estimates produced and published through the Local Area Unemployment Statistics (LAUS) program.

NOTE: The States (including the District of Columbia) that compose the various census divisions are: New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Middle Atlantic: New Jersey, New York, and Pennsylvania; South Atlantic: Delaware, District of Columbia, Florida, Georgia,

Maryland, North Carolina, South Carolina, Virginia, and West Virginia; East South Central: Alabama, Kentucky, Mississippi, and Tennessee; West South Central: Arkansas, Louisiana, Oklahoma, and Texas; East North Central: Illinois, Indiana, Michigan, Ohio, and Wisconsin; West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota; Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and Pacific: Alaska, California, Hawaii, Oregon, and Washington.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

C-2. Labor force status by State, seasonally adjusted

(Numbers in thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
Alabama													
Civilian labor force	2,189.7	2,182.2	2,178.1	2,172.7	2,164.6	2,154.1	2,146.3	2,141.6	2,149.9	2,137.4	2,144.7	2,142.5	2,146.9
Employed	2,074.4	2,070.3	2,067.4	2,067.0	2,061.9	2,055.0	2,057.3	2,059.8	2,060.0	2,058.8	2,057.9	2,060.7	2,068.8
Unemployed	115.3	111.9	110.7	105.7	102.7	99.1	89.1	81.8	89.9	78.7	86.7	81.8	78.1
Unemployment rate	5.3	5.1	5.1	4.9	4.7	4.6	4.1	3.8	4.2	3.7	4.0	3.8	3.6
Alaska													
Civilian labor force	315.6	316.1	316.7	317.0	317.4	318.5	317.6	318.0	317.4	316.3	318.5	319.6	317.8
Employed	290.5	291.0	292.1	293.0	294.4	295.9	297.8	297.9	298.5	298.3	299.6	299.3	298.0
Unemployed	25.1	25.1	24.5	24.0	23.1	22.6	19.8	20.1	19.0	18.1	18.9	20.3	19.8
Unemployment rate	8.0	7.9	7.7	7.6	7.3	7.1	6.2	6.3	6.0	5.7	5.9	6.4	6.2
Arizona													
Civilian labor force	2,147.8	2,157.2	2,170.8	2,188.9	2,211.5	2,237.7	2,243.0	2,252.4	2,263.3	2,269.5	2,262.2	2,254.4	2,265.3
Employed	2,050.2	2,061.6	2,076.2	2,095.7	2,116.8	2,144.7	2,159.2	2,163.0	2,164.4	2,169.8	2,169.8	2,164.1	2,180.7
Unemployed	97.6	95.5	94.6	93.3	94.7	93.0	83.8	89.3	99.0	99.6	92.5	90.3	84.6
Unemployment rate	4.5	4.4	4.4	4.3	4.3	4.2	3.7	4.0	4.4	4.4	4.1	4.0	3.7
Arkansas													
Civilian labor force	1,205.2	1,210.2	1,213.3	1,219.8	1,229.7	1,240.6	1,245.8	1,243.9	1,248.9	1,249.5	1,247.1	1,243.1	1,240.8
Employed	1,139.6	1,145.8	1,150.3	1,158.2	1,167.9	1,178.5	1,180.2	1,178.5	1,178.8	1,184.4	1,182.3	1,182.9	1,183.0
Unemployed	65.6	64.4	63.0	61.6	61.7	62.1	65.6	65.4	70.1	65.1	64.8	60.2	57.7
Unemployment rate	5.4	5.3	5.2	5.0	5.0	5.0	5.3	5.3	5.6	5.2	5.2	4.8	4.7
California													
Civilian labor force	16,014.3	16,050.6	16,058.0	16,073.4	16,086.1	16,122.8	16,114.0	16,147.0	16,218.2	16,215.1	16,247.1	16,262.2	16,307.9
Employed	15,019.5	15,054.3	15,058.7	15,084.1	15,112.5	15,151.8	15,145.7	15,189.0	15,238.2	15,251.1	15,286.6	15,319.7	15,394.2
Unemployed	994.8	996.3	999.4	989.3	973.6	971.0	968.3	958.0	980.0	964.0	960.4	942.5	913.7
Unemployment rate	6.2	6.2	6.2	6.2	6.1	6.0	6.0	5.9	6.0	5.9	5.9	5.8	5.6
Colorado													
Civilian labor force	2,166.3	2,166.9	2,177.5	2,189.1	2,196.4	2,199.7	2,216.2	2,232.9	2,231.4	2,240.5	2,245.3	2,246.9	2,248.9
Employed	2,097.7	2,098.1	2,108.9	2,122.6	2,129.0	2,132.8	2,153.1	2,165.7	2,161.5	2,165.1	2,173.9	2,170.4	2,174.2
Unemployed	68.6	68.8	68.6	66.5	67.4	66.9	63.1	67.2	69.9	75.3	71.4	76.5	74.7
Unemployment rate	3.2	3.2	3.1	3.0	3.1	3.0	2.8	3.0	3.1	3.4	3.2	3.4	3.3
Connecticut													
Civilian labor force	1,722.0	1,722.9	1,723.9	1,725.7	1,726.6	1,728.2	1,720.0	1,716.8	1,722.4	1,714.9	1,721.1	1,718.0	1,709.1
Employed	1,634.9	1,637.8	1,639.7	1,643.1	1,646.6	1,650.7	1,654.7	1,651.8	1,653.0	1,647.7	1,655.8	1,652.7	1,650.3
Unemployed	87.1	85.1	84.2	82.6	80.0	77.5	65.3	65.0	69.4	67.1	65.3	65.3	58.8
Unemployment rate	5.1	4.9	4.9	4.8	4.6	4.5	3.8	3.8	4.0	3.9	3.8	3.8	3.4
Delaware													
Civilian labor force	378.6	379.7	380.5	381.9	383.9	387.0	387.9	388.7	393.2	393.2	393.9	394.4	395.5
Employed	363.3	365.1	366.7	368.7	371.2	374.0	374.6	375.0	379.6	378.3	377.7	378.5	379.4
Unemployed	15.3	14.6	13.8	13.3	12.7	13.0	13.3	13.6	13.6	14.9	16.2	15.9	16.1
Unemployment rate	4.0	3.8	3.6	3.5	3.3	3.4	3.4	3.5	3.5	3.8	4.1	4.0	4.1
District of Columbia													
Civilian labor force	255.0	256.2	256.1	255.7	255.6	255.7	258.5	260.6	260.6	268.4	267.1	265.3	261.4
Employed	234.9	235.6	235.0	234.6	234.8	234.9	236.7	237.0	236.3	244.6	245.3	243.6	239.8
Unemployed	20.1	20.6	21.1	21.1	20.8	20.8	21.8	23.6	24.2	23.8	21.8	21.7	21.6
Unemployment rate	7.9	8.0	8.2	8.3	8.1	8.1	8.4	9.1	9.3	8.9	8.2	8.2	8.3
Florida													
Civilian labor force	7,106.1	7,129.9	7,152.5	7,189.9	7,221.2	7,253.6	7,265.1	7,258.3	7,269.7	7,302.6	7,299.6	7,316.7	7,325.2
Employed	6,774.0	6,796.1	6,817.0	6,856.0	6,884.3	6,916.0	6,927.2	6,922.1	6,923.3	6,959.8	6,970.9	6,985.5	7,013.3
Unemployed	332.1	333.8	335.5	333.9	337.0	337.7	337.8	336.1	346.4	342.9	328.7	331.1	312.0
Unemployment rate	4.7	4.7	4.7	4.6	4.7	4.7	4.7	4.6	4.8	4.7	4.5	4.5	4.3

See footnotes at end of table.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

C-2. Labor force status by State, seasonally adjusted — Continued

(Numbers in thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
Georgia													
Civilian labor force	3,915.2	3,928.8	3,930.3	3,932.2	3,928.5	3,918.0	3,928.7	3,950.0	3,931.6	3,960.4	3,951.7	3,963.4	3,966.8
Employed	3,734.3	3,751.6	3,757.2	3,765.3	3,764.4	3,759.1	3,771.7	3,786.3	3,772.5	3,802.7	3,791.2	3,801.1	3,807.7
Unemployed	180.9	177.2	173.0	166.9	164.2	158.9	157.0	163.6	159.1	157.7	160.5	162.2	159.1
Unemployment rate	4.6	4.5	4.4	4.2	4.2	4.1	4.0	4.1	4.0	4.0	4.1	4.1	4.0
Hawaii													
Civilian labor force	592.4	592.1	592.8	592.4	592.5	593.1	593.4	592.8	592.9	592.3	593.4	592.4	596.2
Employed	553.6	554.4	555.2	556.3	557.1	557.7	560.4	558.7	558.6	561.0	559.0	556.9	561.4
Unemployed	38.8	37.7	37.6	36.1	35.4	35.4	33.0	34.1	34.4	31.3	34.5	35.5	34.8
Unemployment rate	6.5	6.4	6.3	6.1	6.0	6.0	5.6	5.7	5.8	5.3	5.8	6.0	5.8
Idaho													
Civilian labor force	634.8	634.9	636.2	638.0	638.4	641.0	640.1	641.7	644.8	646.7	647.2	645.1	646.4
Employed	601.4	600.8	602.5	604.2	605.8	607.4	608.1	609.5	611.2	613.5	616.4	612.8	614.9
Unemployed	33.4	34.1	33.7	33.7	32.6	33.6	32.0	32.2	33.5	33.2	30.9	32.3	31.5
Unemployment rate	5.3	5.4	5.3	5.3	5.1	5.2	5.0	5.0	5.2	5.1	4.8	5.0	4.9
Illinois													
Civilian labor force	6,132.1	6,135.3	6,133.2	6,149.5	6,156.7	6,162.1	6,190.5	6,186.3	6,189.1	6,142.1	6,131.4	6,156.8	6,175.2
Employed	5,847.1	5,852.1	5,849.2	5,862.0	5,861.9	5,867.0	5,887.8	5,902.8	5,909.1	5,886.2	5,889.7	5,878.7	5,900.6
Unemployed	284.9	283.2	284.0	287.6	294.8	295.1	302.7	283.6	280.0	255.9	241.8	278.1	274.6
Unemployment rate	4.6	4.6	4.6	4.7	4.8	4.8	4.9	4.6	4.5	4.2	3.9	4.5	4.4
Indiana													
Civilian labor force	3,098.4	3,104.6	3,103.6	3,111.2	3,113.8	3,113.0	3,115.4	3,111.1	3,133.9	3,117.3	3,092.6	3,081.6	3,080.2
Employed	2,989.6	2,991.5	2,990.9	2,997.7	3,004.6	3,003.9	3,013.6	3,010.6	3,027.0	3,030.1	3,003.7	2,993.9	3,000.5
Unemployed	108.9	113.0	112.7	113.5	109.2	109.1	101.8	100.5	106.9	87.2	88.9	87.7	79.6
Unemployment rate	3.5	3.6	3.6	3.6	3.5	3.5	3.3	3.2	3.4	2.8	2.9	2.8	2.6
Iowa													
Civilian labor force	1,572.2	1,568.3	1,571.5	1,574.0	1,573.9	1,581.7	1,589.9	1,594.3	1,588.6	1,582.9	1,581.9	1,574.5	1,566.5
Employed	1,522.7	1,519.1	1,523.4	1,528.4	1,528.6	1,535.7	1,545.4	1,552.9	1,547.1	1,544.7	1,545.3	1,534.7	1,526.9
Unemployed	49.5	49.2	48.1	45.7	45.3	46.0	44.5	41.4	41.5	38.2	36.7	39.8	39.6
Unemployment rate	3.1	3.1	3.1	2.9	2.9	2.9	2.8	2.6	2.6	2.4	2.3	2.5	2.5
Kansas													
Civilian labor force	1,365.8	1,372.2	1,377.5	1,386.2	1,394.0	1,404.4	1,407.7	1,409.7	1,409.8	1,414.6	1,418.9	1,413.2	1,418.7
Employed	1,315.9	1,322.6	1,326.9	1,335.9	1,343.4	1,351.6	1,358.9	1,362.0	1,360.3	1,366.9	1,368.6	1,363.2	1,366.6
Unemployed	49.9	49.7	50.6	50.4	50.6	52.7	48.8	47.7	49.5	47.7	50.3	50.0	52.1
Unemployment rate	3.7	3.6	3.7	3.6	3.6	3.8	3.5	3.4	3.5	3.4	3.5	3.5	3.7
Kentucky													
Civilian labor force	1,935.3	1,936.5	1,934.4	1,936.8	1,938.7	1,937.2	1,931.3	1,936.3	1,945.8	1,938.9	1,938.9	1,944.6	1,936.8
Employed	1,831.0	1,834.8	1,834.4	1,839.8	1,843.8	1,844.9	1,842.9	1,856.5	1,858.9	1,861.0	1,857.3	1,858.7	1,856.0
Unemployed	104.3	101.7	100.0	97.0	94.9	92.3	88.4	79.9	86.9	77.8	81.6	85.8	80.8
Unemployment rate	5.4	5.2	5.2	5.0	4.9	4.8	4.6	4.1	4.5	4.0	4.2	4.4	4.2
Louisiana													
Civilian labor force	2,021.3	2,024.5	2,024.5	2,034.1	2,037.2	2,043.8	2,067.6	2,038.0	2,033.2	2,054.4	2,080.2	2,083.7	2,073.8
Employed	1,895.9	1,901.8	1,904.3	1,914.4	1,917.8	1,926.5	1,962.3	1,949.8	1,937.4	1,940.7	1,970.5	1,975.0	1,951.5
Unemployed	125.4	122.7	120.2	119.7	119.4	117.3	105.3	88.2	95.8	113.8	109.7	108.7	122.2
Unemployment rate	6.2	6.1	5.9	5.9	5.9	5.7	5.1	4.3	4.7	5.5	5.3	5.2	5.9
Maine													
Civilian labor force	655.1	655.6	656.4	657.8	659.0	661.1	660.9	657.9	655.0	653.3	654.1	650.6	651.3
Employed	620.0	620.6	621.1	622.5	624.0	626.3	627.7	627.6	626.6	627.1	629.0	624.4	622.0
Unemployed	35.1	35.0	35.3	35.3	35.0	34.9	33.1	30.3	28.4	26.2	25.1	26.1	29.3
Unemployment rate	5.4	5.3	5.4	5.4	5.3	5.3	5.0	4.6	4.3	4.0	3.8	4.0	4.5

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

C-2. Labor force status by State, seasonally adjusted — Continued

(Numbers in thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P
Maryland													
Civilian labor force	2,787.0	2,781.4	2,783.8	2,784.1	2,789.1	2,790.8	2,803.7	2,802.1	2,796.9	2,793.0	2,783.7	2,776.5	2,785.4
Employed	2,641.7	2,638.5	2,637.7	2,644.5	2,651.8	2,657.1	2,668.8	2,667.2	2,666.5	2,668.0	2,657.0	2,652.8	2,655.1
Unemployed	145.3	142.9	146.1	139.6	137.4	133.7	134.9	134.9	130.4	125.0	126.7	123.7	130.3
Unemployment rate	5.2	5.1	5.2	5.0	4.9	4.8	4.8	4.8	4.7	4.5	4.6	4.5	4.7
Massachusetts													
Civilian labor force	3,269.7	3,271.2	3,269.1	3,268.5	3,263.2	3,254.5	3,258.8	3,258.3	3,268.4	3,244.7	3,263.7	3,255.7	3,253.6
Employed	3,138.4	3,138.3	3,138.0	3,141.2	3,136.8	3,130.3	3,141.8	3,149.4	3,146.5	3,148.8	3,144.1	3,144.5	3,152.8
Unemployed	131.4	132.9	131.2	127.3	126.4	124.3	116.9	108.9	121.9	95.8	119.6	111.2	100.8
Unemployment rate	4.0	4.1	4.0	3.9	3.9	3.8	3.6	3.3	3.7	3.0	3.7	3.4	3.1
Michigan													
Civilian labor force	4,987.3	4,971.2	4,982.3	4,999.9	5,003.4	5,013.0	5,047.2	5,051.1	5,047.6	5,033.7	5,038.8	5,033.4	5,020.5
Employed	4,774.1	4,770.5	4,779.0	4,798.9	4,804.4	4,815.7	4,849.4	4,846.1	4,848.8	4,857.2	4,850.9	4,852.3	4,811.3
Unemployed	213.2	200.7	203.2	200.9	199.0	197.3	197.7	205.0	198.8	176.6	187.9	181.2	209.2
Unemployment rate	4.3	4.0	4.1	4.0	4.0	3.9	3.9	4.1	3.9	3.5	3.7	3.6	4.2
Minnesota													
Civilian labor force	2,623.3	2,632.5	2,640.3	2,650.1	2,660.8	2,670.8	2,672.5	2,675.4	2,684.1	2,693.6	2,698.3	2,699.5	2,698.9
Employed	2,538.9	2,548.6	2,557.0	2,568.8	2,581.2	2,593.5	2,600.0	2,606.3	2,607.0	2,624.2	2,623.8	2,630.0	2,637.7
Unemployed	84.4	83.9	83.2	81.3	79.6	77.3	72.6	69.1	77.1	69.4	74.5	69.5	61.2
Unemployment rate	3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.9	2.6	2.8	2.6	2.3
Mississippi													
Civilian labor force	1,266.1	1,267.7	1,272.6	1,277.6	1,278.4	1,279.3	1,284.8	1,281.5	1,289.9	1,282.4	1,283.5	1,273.6	1,279.8
Employed	1,193.6	1,193.8	1,196.1	1,204.4	1,208.8	1,213.7	1,214.9	1,212.4	1,214.5	1,214.1	1,217.4	1,215.0	1,217.0
Unemployed	72.5	74.0	76.5	73.2	69.6	65.6	69.8	69.1	75.4	68.3	66.0	58.7	62.8
Unemployment rate	5.7	5.8	6.0	5.7	5.4	5.1	5.4	5.4	5.8	5.3	5.1	4.6	4.9
Missouri													
Civilian labor force	2,876.6	2,877.2	2,883.0	2,892.3	2,892.5	2,895.0	2,911.3	2,911.7	2,894.8	2,911.4	2,915.7	2,908.5	2,911.1
Employed	2,759.1	2,759.9	2,762.8	2,772.5	2,775.6	2,779.2	2,796.3	2,793.0	2,770.2	2,781.9	2,783.9	2,786.0	2,790.2
Unemployed	117.5	117.3	120.3	119.9	116.9	115.7	115.0	118.7	124.7	129.6	131.8	122.5	120.9
Unemployment rate	4.1	4.1	4.2	4.1	4.0	4.0	4.0	4.1	4.3	4.4	4.5	4.2	4.2
Montana													
Civilian labor force	454.2	455.2	455.7	458.0	459.0	460.6	462.2	462.5	461.8	462.6	464.4	464.4	464.9
Employed	429.6	430.8	431.4	433.3	434.2	435.9	437.1	438.2	436.8	437.2	438.5	439.5	441.1
Unemployed	24.6	24.4	24.3	24.7	24.8	24.7	25.1	24.3	25.0	25.4	25.8	24.9	23.7
Unemployment rate	5.4	5.4	5.3	5.4	5.4	5.4	5.4	5.3	5.4	5.5	5.6	5.4	5.1
Nebraska													
Civilian labor force	903.9	906.5	910.6	913.9	919.0	923.6	924.2	926.2	926.8	928.7	927.2	927.2	932.1
Employed	880.2	883.2	888.3	893.4	899.9	905.9	907.6	908.4	906.3	910.5	908.8	911.6	912.1
Unemployed	23.7	23.3	22.3	20.5	19.1	17.7	16.6	17.9	20.5	18.2	18.4	15.6	20.0
Unemployment rate	2.6	2.6	2.5	2.2	2.1	1.9	1.8	1.9	2.2	2.0	2.0	1.7	2.1
Nevada													
Civilian labor force	885.9	888.3	892.1	895.1	897.1	900.6	905.7	911.4	909.6	914.5	915.8	920.6	925.0
Employed	850.5	853.5	856.6	859.7	861.7	864.8	866.7	869.7	867.2	870.4	872.9	880.4	886.0
Unemployed	35.4	34.8	35.6	35.4	35.4	35.8	39.0	41.8	42.4	44.1	42.9	40.2	39.0
Unemployment rate	4.0	3.9	4.0	4.0	3.9	4.0	4.3	4.6	4.7	4.8	4.7	4.4	4.2
New Hampshire													
Civilian labor force	650.9	649.1	648.3	652.8	653.2	651.2	653.3	652.7	652.0	653.5	655.2	653.8	653.6
Employed	630.8	629.5	629.1	633.3	633.7	632.1	635.4	634.6	632.7	634.9	635.5	636.0	638.2
Unemployed	20.1	19.5	19.2	19.5	19.5	19.1	17.9	18.1	19.3	18.6	19.6	17.8	15.4
Unemployment rate	3.1	3.0	3.0	3.0	3.0	2.9	2.7	2.8	3.0	2.8	3.0	2.7	2.4

See footnotes at end of table.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

C-2. Labor force status by State, seasonally adjusted — Continued

(Numbers in thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
New Jersey													
Civilian labor force	4,203.0	4,200.5	4,197.0	4,194.1	4,186.2	4,178.1	4,181.8	4,185.9	4,192.5	4,188.9	4,185.0	4,193.9	4,185.4
Employed	3,990.4	3,988.7	3,984.2	3,983.9	3,979.3	3,971.6	3,977.1	3,975.3	3,978.5	3,974.9	3,975.7	3,991.8	3,982.8
Unemployed	212.6	211.8	212.8	210.1	206.9	206.6	204.7	210.6	214.0	214.1	209.3	202.1	202.7
Unemployment rate	5.1	5.0	5.1	5.0	4.9	4.9	4.9	5.0	5.1	5.1	5.0	4.8	4.8
New Mexico													
Civilian labor force	823.1	824.1	825.7	829.8	832.8	835.5	836.1	837.7	841.7	842.7	842.7	846.9	847.2
Employed	773.5	775.8	776.2	779.8	781.3	782.2	784.9	785.1	787.7	790.7	788.1	790.2	793.4
Unemployed	49.5	48.4	49.8	50.0	51.5	53.3	51.2	52.5	54.0	52.1	54.5	56.7	53.8
Unemployment rate	6.0	5.9	6.0	6.0	6.2	6.4	6.1	6.3	6.4	6.2	6.5	6.7	6.4
New York													
Civilian labor force	8,841.6	8,834.9	8,825.2	8,818.5	8,799.5	8,775.9	8,786.7	8,810.2	8,795.3	8,773.0	8,788.3	8,781.1	8,769.2
Employed	8,269.8	8,266.2	8,261.8	8,261.5	8,252.7	8,241.8	8,259.4	8,267.9	8,261.8	8,267.5	8,287.8	8,301.5	8,289.6
Unemployed	571.8	568.7	563.4	557.0	546.7	534.0	527.2	542.3	533.5	505.4	500.5	479.7	479.6
Unemployment rate	6.5	6.4	6.4	6.3	6.2	6.1	6.0	6.2	6.1	5.8	5.7	5.5	5.5
North Carolina													
Civilian labor force	3,850.6	3,842.2	3,844.3	3,842.4	3,843.3	3,828.0	3,842.0	3,847.8	3,846.9	3,823.1	3,807.1	3,776.3	3,790.1
Employed	3,710.2	3,702.1	3,706.3	3,705.7	3,704.0	3,688.2	3,703.7	3,706.5	3,698.0	3,683.1	3,680.8	3,661.0	3,667.0
Unemployed	140.4	140.1	138.0	136.7	139.4	139.8	138.4	141.3	148.8	140.1	126.3	115.3	123.2
Unemployment rate	3.6	3.6	3.6	3.6	3.6	3.7	3.6	3.7	3.9	3.7	3.3	3.1	3.2
North Dakota													
Civilian labor force	347.6	346.9	346.7	346.1	346.3	346.1	346.2	346.0	346.4	344.9	346.4	347.3	346.9
Employed	339.1	339.0	338.9	339.5	339.2	339.1	339.8	339.4	338.0	338.2	339.1	339.5	339.4
Unemployed	8.5	7.9	7.7	6.6	7.1	7.0	6.4	6.6	8.4	6.7	7.3	7.8	7.5
Unemployment rate	2.5	2.3	2.2	1.9	2.0	2.0	1.8	1.9	2.4	1.9	2.1	2.2	2.2
Ohio													
Civilian labor force	5,697.4	5,718.4	5,732.3	5,746.7	5,767.0	5,786.2	5,796.7	5,803.6	5,805.8	5,784.3	5,802.3	5,805.1	5,810.1
Employed	5,444.0	5,463.1	5,473.2	5,487.0	5,510.9	5,531.5	5,561.9	5,562.7	5,558.4	5,562.3	5,555.7	5,544.0	5,539.9
Unemployed	253.4	255.3	259.0	259.7	256.1	254.6	234.7	240.9	247.5	222.0	246.7	261.1	270.1
Unemployment rate	4.4	4.5	4.5	4.5	4.4	4.4	4.0	4.2	4.3	3.8	4.3	4.5	4.6
Oklahoma													
Civilian labor force	1,598.9	1,600.0	1,603.9	1,605.0	1,607.7	1,607.5	1,608.2	1,612.4	1,616.2	1,611.6	1,614.2	1,614.8	1,622.3
Employed	1,531.6	1,534.0	1,538.4	1,542.2	1,546.9	1,550.2	1,555.4	1,555.6	1,558.7	1,551.0	1,554.8	1,550.0	1,551.6
Unemployed	67.3	66.0	65.6	62.8	60.8	57.3	52.7	56.9	57.5	60.5	59.5	64.8	70.6
Unemployment rate	4.2	4.1	4.1	3.9	3.8	3.6	3.3	3.5	3.6	3.8	3.7	4.0	4.4
Oregon													
Civilian labor force	1,720.4	1,738.1	1,751.3	1,764.7	1,767.3	1,775.4	1,807.9	1,774.4	1,778.5	1,769.2	1,775.0	1,755.1	1,765.6
Employed	1,620.2	1,638.6	1,651.3	1,665.7	1,670.8	1,681.2	1,713.8	1,690.5	1,691.3	1,679.3	1,682.7	1,660.2	1,670.0
Unemployed	100.2	99.5	99.9	99.0	96.5	94.2	94.1	83.9	87.2	89.9	92.2	94.9	95.6
Unemployment rate	5.8	5.7	5.7	5.6	5.5	5.3	5.2	4.7	4.9	5.1	5.2	5.4	5.4
Pennsylvania													
Civilian labor force	5,986.2	5,987.8	5,989.1	5,986.5	5,990.7	5,991.7	5,977.8	5,978.3	5,979.1	5,980.2	5,963.8	5,962.1	5,979.0
Employed	5,668.6	5,674.1	5,681.3	5,688.1	5,697.7	5,705.0	5,701.4	5,698.5	5,694.3	5,723.6	5,708.3	5,700.4	5,708.8
Unemployed	317.6	313.8	307.8	298.4	292.9	286.7	276.4	279.8	284.8	256.6	255.6	261.7	270.1
Unemployment rate	5.3	5.2	5.1	5.0	4.9	4.8	4.6	4.7	4.8	4.3	4.3	4.4	4.5
Rhode Island													
Civilian labor force	505.5	506.0	507.1	507.7	506.7	507.5	508.6	506.5	509.5	506.6	501.8	498.4	499.8
Employed	478.4	479.5	480.9	481.6	481.4	482.9	484.1	481.9	483.7	481.9	478.4	477.9	477.7
Unemployed	27.1	26.5	26.2	26.0	25.2	24.6	24.5	24.6	25.8	24.7	23.4	20.5	22.1
Unemployment rate	5.4	5.2	5.2	5.1	5.0	4.9	4.8	4.9	5.1	4.9	4.7	4.1	4.4

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

C-2. Labor force status by State, seasonally adjusted — Continued

(Numbers in thousands)

State	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
South Carolina													
Civilian labor force	1,928.0	1,925.4	1,918.6	1,912.2	1,907.7	1,902.9	1,908.4	1,910.4	1,902.6	1,913.3	1,919.4	1,929.2	1,941.5
Employed	1,842.5	1,842.9	1,839.6	1,839.4	1,836.9	1,832.9	1,834.5	1,844.5	1,856.3	1,856.8	1,854.3	1,867.3	1,868.0
Unemployed	85.5	82.5	79.0	72.8	70.8	70.0	73.8	65.8	46.2	56.6	65.0	61.9	73.5
Unemployment rate	4.4	4.3	4.1	3.8	3.7	3.7	3.9	3.4	2.4	3.0	3.4	3.2	3.8
South Dakota													
Civilian labor force	391.5	392.1	392.5	394.4	395.9	397.5	398.0	398.7	398.6	398.4	399.8	400.6	401.2
Employed	379.8	380.3	380.9	383.0	384.8	386.7	386.7	388.2	387.8	387.4	388.9	390.0	389.9
Unemployed	11.7	11.8	11.6	11.3	11.2	10.8	11.3	10.5	10.8	11.0	10.9	10.7	11.3
Unemployment rate	3.0	3.0	2.9	2.9	2.8	2.7	2.8	2.6	2.7	2.8	2.7	2.7	2.8
Tennessee													
Civilian labor force	2,701.5	2,699.4	2,712.0	2,731.5	2,753.6	2,775.2	2,782.4	2,776.9	2,781.4	2,790.0	2,779.4	2,766.6	2,773.8
Employed	2,547.8	2,555.2	2,565.0	2,589.6	2,611.2	2,634.7	2,660.5	2,656.6	2,650.8	2,657.2	2,658.8	2,659.7	2,667.4
Unemployed	153.7	144.2	146.9	141.9	142.5	140.6	121.9	120.3	130.7	132.9	120.7	106.9	106.5
Unemployment rate	5.7	5.3	5.4	5.2	5.2	5.1	4.4	4.3	4.7	4.8	4.3	3.9	3.8
Texas													
Civilian labor force	9,883.9	9,901.6	9,922.5	9,944.2	9,955.2	9,979.9	10,011.7	10,022.0	10,051.2	10,070.5	10,100.4	10,133.4	10,162.0
Employed	9,345.7	9,369.9	9,397.6	9,425.5	9,454.0	9,489.4	9,520.9	9,558.1	9,581.3	9,611.9	9,640.1	9,630.8	9,662.9
Unemployed	538.2	531.7	524.9	518.8	501.3	490.5	490.9	463.9	469.9	458.7	460.3	502.6	499.1
Unemployment rate	5.4	5.4	5.3	5.2	5.0	4.9	4.9	4.6	4.7	4.6	4.6	5.0	4.9
Utah													
Civilian labor force	1,038.7	1,044.2	1,049.7	1,056.1	1,061.9	1,069.7	1,076.5	1,079.5	1,077.5	1,080.1	1,080.2	1,081.4	1,084.5
Employed	1,006.4	1,011.7	1,017.6	1,024.2	1,030.9	1,038.8	1,045.6	1,048.4	1,043.9	1,045.5	1,047.2	1,046.6	1,046.2
Unemployed	32.3	32.5	32.1	31.9	31.1	30.9	30.9	31.1	33.6	34.6	33.0	34.8	38.3
Unemployment rate	3.1	3.1	3.1	3.0	2.9	2.9	2.9	2.9	3.1	3.2	3.1	3.2	3.5
Vermont													
Civilian labor force	325.4	325.9	326.4	328.5	329.3	330.3	329.2	330.8	331.8	330.2	329.1	330.4	333.1
Employed	312.7	313.3	313.8	315.9	316.9	318.0	317.2	319.3	320.4	319.6	317.9	318.9	321.3
Unemployed	12.7	12.7	12.6	12.6	12.4	12.3	12.0	11.5	11.4	10.6	11.2	11.5	11.8
Unemployment rate	3.9	3.9	3.9	3.8	3.8	3.7	3.6	3.5	3.4	3.2	3.4	3.5	3.5
Virginia													
Civilian labor force	3,389.4	3,411.1	3,435.0	3,465.9	3,500.9	3,538.4	3,541.0	3,547.6	3,554.8	3,540.2	3,555.0	3,554.9	3,555.7
Employed	3,252.9	3,276.3	3,302.9	3,338.8	3,376.1	3,417.2	3,424.7	3,431.8	3,436.2	3,440.8	3,448.8	3,443.8	3,449.5
Unemployed	136.6	134.7	132.1	127.1	124.8	121.2	116.4	115.8	118.6	99.4	106.2	111.2	106.1
Unemployment rate	4.0	4.0	3.8	3.7	3.6	3.4	3.3	3.3	3.3	2.8	3.0	3.1	3.0
Washington													
Civilian labor force	3,015.2	3,009.7	3,008.9	3,011.2	3,010.2	3,016.0	3,012.2	3,009.4	3,025.7	3,000.0	3,045.6	3,027.6	3,022.3
Employed	2,875.0	2,869.9	2,867.6	2,875.3	2,877.7	2,882.4	2,877.6	2,884.7	2,900.7	2,874.2	2,911.6	2,886.8	2,881.1
Unemployed	140.2	139.7	141.3	135.8	132.6	133.6	134.6	124.6	125.0	125.9	134.0	140.8	141.2
Unemployment rate	4.7	4.6	4.7	4.5	4.4	4.4	4.5	4.1	4.1	4.2	4.4	4.7	4.7
West Virginia													
Civilian labor force	803.4	802.2	801.7	804.6	805.0	802.7	802.9	800.4	807.0	806.2	811.3	806.4	806.7
Employed	747.9	747.4	747.6	750.8	752.1	751.0	753.7	754.2	752.0	752.9	759.3	750.5	751.5
Unemployed	55.5	54.7	54.1	53.8	52.9	51.6	49.2	46.2	55.1	53.4	52.0	55.9	55.2
Unemployment rate	6.9	6.8	6.7	6.7	6.6	6.4	6.1	5.8	6.8	6.6	6.4	6.9	6.8
Wisconsin													
Civilian labor force	2,927.8	2,930.1	2,933.8	2,941.9	2,947.0	2,953.0	2,963.4	2,962.7	2,957.6	2,947.9	2,949.3	2,954.5	2,973.0
Employed	2,817.8	2,821.2	2,826.4	2,836.7	2,843.1	2,849.8	2,869.6	2,875.3	2,866.5	2,878.4	2,870.9	2,867.2	2,872.1
Unemployed	110.1	108.9	107.4	105.1	103.8	103.2	93.8	87.3	91.1	69.4	78.4	87.3	100.9
Unemployment rate	3.8	3.7	3.7	3.6	3.5	3.5	3.2	2.9	3.1	2.4	2.7	3.0	3.4
Wyoming													
Civilian labor force	249.7	250.1	250.5	252.1	253.0	254.9	254.0	254.2	255.0	254.8	256.3	258.1	258.7
Employed	236.9	237.5	238.2	240.1	241.4	243.5	243.5	244.0	244.3	244.2	245.0	245.9	246.8
Unemployed	12.8	12.6	12.3	12.1	11.6	11.4	10.6	10.2	10.7	10.5	11.3	12.1	11.8
Unemployment rate	5.1	5.0	4.9	4.8	4.6	4.5	4.2	4.0	4.2	4.1	4.4	4.7	4.6

P = preliminary.

revised when new benchmark and population information becomes available.

NOTE: Data refer to place of residence. All estimates are provisional and will be

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

C-3. Labor force status by State and metropolitan area

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Alabama	2,218.4	2,173.2	2,202.9	2,161.2	138.2	104.1	127.7	90.3	6.2	4.8	5.8	4.2
Anniston	56.8	54.2	56.2	54.2	3.9	2.8	3.8	2.5	6.9	5.2	6.8	4.6
Birmingham	478.4	475.7	477.1	473.9	20.1	15.3	17.7	13.4	4.2	3.2	3.7	2.8
Decatur	73.6	72.8	73.4	73.5	4.7	3.2	4.7	3.9	6.4	4.4	6.4	5.3
Dothan	68.5	67.6	68.1	67.3	4.1	2.5	3.6	2.2	6.0	3.8	5.3	3.2
Florence	73.5	71.7	72.9	70.8	6.1	5.5	5.1	4.6	8.3	7.6	7.0	6.6
Gadsden	51.6	51.5	51.2	50.6	3.2	2.7	2.8	2.3	6.2	5.1	5.5	4.5
Huntsville	172.5	171.7	173.2	170.5	6.2	5.6	8.5	5.4	3.6	3.2	4.9	3.2
Mobile	278.2	273.5	275.0	272.9	17.0	12.3	14.5	10.2	6.1	4.5	5.3	3.7
Montgomery	164.5	160.2	163.9	159.1	8.8	6.1	7.7	5.0	5.3	3.8	4.7	3.1
Tuscaloosa	83.3	84.2	83.3	84.0	3.7	2.8	3.2	2.5	4.4	3.3	3.8	3.0
Alaska	322.3	327.5	328.9	332.0	24.5	19.8	21.9	17.3	7.6	6.0	6.7	5.2
Anchorage	137.8	141.9	138.3	142.2	7.9	6.4	7.2	5.8	5.7	4.5	5.2	4.1
Arizona	2,163.7	2,277.1	2,170.6	2,286.4	108.1	100.0	114.2	101.3	5.0	4.4	5.3	4.4
Flagstaff	58.7	57.7	60.2	61.9	5.7	4.7	5.8	4.8	9.8	8.1	9.7	7.7
Phoenix-Mesa	1,416.1	1,505.0	1,425.2	1,510.3	43.9	40.6	45.7	41.3	3.1	2.7	3.2	2.7
Tucson	357.8	368.6	350.0	365.8	12.4	10.4	12.6	10.2	3.5	2.8	3.6	2.8
Yuma	64.6	70.4	66.4	69.7	20.9	22.5	24.1	23.0	32.4	32.0	36.3	33.0
Arkansas	1,221.4	1,264.6	1,230.3	1,263.6	66.8	62.3	72.8	64.2	5.5	4.9	5.9	5.1
Fayetteville-Springdale-Rogers	137.5	143.6	139.2	144.1	4.7	4.5	5.0	4.7	3.4	3.1	3.6	3.3
Fort Smith	95.3	98.1	97.2	98.3	5.0	4.5	5.4	4.5	5.2	4.6	5.6	4.6
Jonesboro	40.4	42.2	40.7	42.5	1.8	1.7	2.0	1.7	4.5	4.1	4.9	3.9
Little Rock-North Little Rock	297.2	308.2	299.0	308.2	12.8	11.7	13.3	11.5	4.3	3.8	4.5	3.7
Pine Bluff	36.5	37.4	36.8	37.3	3.2	3.1	3.4	3.1	8.7	8.3	9.3	8.2
California	15,976.3	16,274.6	16,185.3	16,481.1	1,005.7	942.9	1,076.3	992.9	6.3	5.8	6.6	6.0
Bakersfield	288.1	286.4	296.2	296.5	34.3	31.4	32.6	35.0	11.9	10.9	11.0	11.8
Chico-Paradise	84.8	86.0	86.5	87.8	8.0	7.6	7.8	7.3	9.4	8.8	9.0	8.3
Fresno	432.0	444.8	443.7	452.2	54.3	58.9	53.6	57.1	12.6	13.2	12.1	12.6
Los Angeles-Long Beach	4,454.0	4,539.9	4,548.8	4,654.5	304.8	293.0	339.0	320.5	6.8	6.5	7.5	6.9
Merced	85.4	86.6	86.9	85.1	12.5	12.8	11.8	11.9	14.6	14.8	13.6	14.0
Modesto	206.4	207.4	212.4	211.7	27.7	26.7	25.7	24.5	13.4	12.9	12.1	11.8
Oakland	1,176.5	1,195.6	1,188.8	1,202.1	53.7	47.8	57.7	49.8	4.6	4.0	4.9	4.1
Orange County	1,381.9	1,423.0	1,394.2	1,434.3	47.2	42.7	51.3	44.5	3.4	3.0	3.7	3.1
Redding	74.6	73.7	73.3	72.7	6.5	6.5	6.5	6.0	8.7	8.8	8.8	8.2
Riverside-San Bernardino	1,363.1	1,403.4	1,366.0	1,401.9	96.7	86.0	111.0	94.0	7.1	6.1	8.1	6.7
Sacramento	740.8	750.4	750.3	758.7	42.1	38.0	43.1	38.3	5.7	5.1	5.7	5.0
Salinas	184.4	183.7	187.2	185.6	13.6	13.9	13.5	12.7	7.4	7.6	7.2	6.9
San Diego	1,284.6	1,304.0	1,292.7	1,312.0	57.6	47.4	60.4	49.9	4.5	3.6	4.7	3.8
San Francisco	930.7	943.0	944.8	960.3	33.3	29.4	36.1	30.8	3.6	3.1	3.8	3.2
San Jose	938.3	964.2	957.2	979.0	29.6	30.1	31.8	32.5	3.2	3.1	3.3	3.3
San Luis Obispo-Atascadero-Paso Robles	107.4	111.3	105.8	109.3	4.9	4.5	5.2	4.5	4.6	4.1	4.9	4.1
Santa Barbara-Santa Maria-Lompoc	197.5	198.0	197.3	196.1	8.3	7.3	9.0	7.1	4.2	3.7	4.6	3.6
Santa Cruz-Watsonville	148.0	151.9	146.2	149.9	8.6	7.9	8.8	7.7	5.8	5.2	6.1	5.1
Santa Rosa	239.3	246.6	237.9	244.2	9.2	8.3	9.9	8.2	3.9	3.4	4.1	3.4
Stockton-Lodi	249.4	249.0	249.2	250.1	27.3	26.2	25.5	26.2	10.9	10.5	10.2	10.5
Vallejo-Fairfield-Napa	241.9	247.7	244.8	249.4	14.9	12.8	15.8	12.5	6.1	5.2	6.4	5.0
Ventura	382.4	389.5	383.3	392.4	23.2	19.1	29.4	22.1	6.1	4.9	7.7	5.8
Visalia-Tulare-Porterville	162.1	164.1	162.9	167.0	22.9	22.1	23.5	26.9	14.1	13.5	14.4	16.1
Yolo	87.2	89.0	86.8	88.4	4.4	4.1	4.4	4.0	5.0	4.6	5.1	4.6
Yuba City	57.3	58.1	57.8	59.2	8.1	8.5	7.1	7.6	14.2	14.6	12.3	12.8
Colorado	2,188.1	2,281.3	2,195.1	2,277.7	83.2	90.3	69.0	75.8	3.8	4.0	3.1	3.3
Boulder-Longmont	167.7	173.8	169.2	173.2	5.7	6.2	4.9	5.3	3.4	3.6	2.9	3.1
Colorado Springs	250.5	258.6	249.4	258.2	11.0	12.2	9.4	10.3	4.4	4.7	3.8	4.0
Denver	1,101.2	1,150.5	1,106.4	1,151.8	35.7	36.7	29.8	32.1	3.2	3.2	2.7	2.8
Fort Collins-Loveland	136.3	140.9	136.8	139.9	5.1	5.4	4.1	4.5	3.7	3.8	3.0	3.3
Grand Junction	57.1	60.4	57.3	60.4	2.8	3.1	2.4	2.6	4.9	5.1	4.1	4.2
Greeley	82.1	85.8	82.4	85.5	3.8	4.0	3.1	3.4	4.6	4.6	3.8	4.0
Pueblo	60.8	65.7	61.1	64.5	3.2	5.6	2.8	4.1	5.2	8.6	4.6	6.4
Connecticut	1,750.1	1,746.2	1,774.8	1,762.8	94.7	70.4	97.6	69.6	5.4	4.0	5.5	4.0
Bridgeport	223.6	221.6	224.4	222.5	14.3	10.8	14.5	10.7	6.4	4.9	6.5	4.8
Danbury	109.5	111.0	111.6	112.3	3.9	3.0	4.5	3.2	3.5	2.7	4.0	2.9
Hartford	594.6	589.8	601.1	594.6	33.8	24.6	34.6	24.0	5.7	4.2	5.8	4.0
New Haven-Meriden	276.5	271.6	280.6	274.0	15.5	10.7	16.0	11.0	5.6	4.0	5.7	4.0
New London-Norwich	158.0	158.7	162.6	161.5	9.3	7.1	9.3	7.1	5.9	4.5	5.7	4.4
Stamford-Norwalk	197.6	201.0	202.4	204.3	6.6	5.3	6.8	5.2	3.4	2.6	3.3	2.5
Waterbury	120.3	122.0	121.8	122.6	7.3	5.6	7.6	5.6	6.1	4.6	6.3	4.6
Delaware	381.2	398.0	384.0	400.8	16.2	16.1	15.6	16.4	4.2	4.1	4.1	4.1
Dover	66.1	70.0	66.0	70.7	3.2	3.3	3.1	2.8	4.9	4.7	4.7	4.0
Wilmington-Newark	287.1	297.2	287.6	297.7	14.4	14.3	13.5	15.7	5.0	4.8	4.7	5.3

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

C-3. Labor force status by State and metropolitan area—Continued

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
District of Columbia	258.9	269.7	266.4	272.7	22.3	24.3	22.9	24.3	8.6	9.0	8.6	8.9
Washington	2,538.4	2,621.2	2,579.6	2,654.4	102.8	90.1	95.4	82.5	4.0	3.4	3.7	3.1
Florida	7,145.0	7,382.8	7,198.8	7,413.6	364.2	355.3	359.6	337.2	5.1	4.8	5.0	4.5
Daytona Beach	188.0	192.8	189.9	193.4	7.4	7.1	7.2	6.3	3.9	3.7	3.8	3.3
Fort Lauderdale	753.6	777.8	758.2	778.5	38.5	38.6	36.0	34.5	5.1	5.0	4.7	4.4
Fort Myers-Cape Coral	169.7	172.9	170.1	173.4	6.0	5.7	5.9	5.4	3.5	3.3	3.4	3.1
Fort Pierce-Port St. Lucie	120.9	125.5	121.7	126.4	11.7	12.6	13.7	14.7	9.7	10.1	11.3	11.7
Fort Walton Beach	81.9	85.0	81.5	84.5	2.8	2.9	2.6	2.4	3.5	3.4	3.2	2.8
Gainesville	100.2	103.4	101.5	104.6	3.3	3.2	3.0	2.8	3.3	3.1	3.0	2.6
Jacksonville	536.4	556.4	543.1	562.1	20.8	19.6	19.7	17.9	3.9	3.5	3.6	3.2
Lakeland-Winter Haven	198.0	200.5	197.7	201.6	14.5	13.2	16.7	15.7	7.3	6.6	8.5	7.8
Melbourne-Titusville-Palm Bay	203.9	208.8	207.5	211.0	9.4	10.1	9.1	8.5	4.6	4.8	4.4	4.0
Miami	1,049.9	1,060.9	1,059.3	1,066.4	81.1	76.6	75.8	67.8	7.7	7.2	7.2	6.4
Naples	85.4	88.5	85.1	88.6	4.9	4.4	5.6	5.4	5.8	5.0	6.6	6.1
Ocala	93.8	97.1	94.4	96.9	4.5	4.7	4.3	4.4	4.8	4.8	4.6	4.6
Orlando	819.6	856.7	827.9	861.3	29.6	29.1	29.7	26.9	3.6	3.4	3.6	3.1
Panama City	68.7	70.0	69.4	69.6	3.9	3.7	3.7	3.2	5.6	5.3	5.4	4.6
Pensacola	170.5	177.3	172.2	178.6	7.6	8.2	7.0	7.1	4.4	4.6	4.1	3.9
Punta Gorda	45.6	46.6	45.4	45.6	1.7	1.6	1.8	1.6	3.8	3.4	3.9	3.4
Sarasota-Bradenton	262.5	283.1	266.1	285.2	6.9	7.2	7.6	7.1	2.6	2.5	2.9	2.5
Tallahassee	141.8	144.4	143.4	146.1	5.1	5.4	4.6	4.7	3.6	3.7	3.2	3.2
Tampa-St. Petersburg-Clearwater	1,135.2	1,181.0	1,146.5	1,190.3	41.8	39.9	40.3	37.1	3.7	3.4	3.5	3.1
West Palm Beach-Boca Raton	481.5	500.7	484.3	503.4	32.7	32.0	33.9	33.5	6.8	6.4	7.0	6.6
Georgia	3,950.0	3,996.4	3,948.5	3,996.9	205.4	183.9	198.5	177.8	5.2	4.6	5.0	4.4
Albany	58.6	58.8	58.7	58.7	4.4	5.3	4.1	4.7	7.5	9.0	7.0	8.0
Athens	73.8	75.3	71.9	73.2	2.3	2.3	2.5	2.2	3.1	3.1	3.5	3.0
Atlanta	2,084.0	2,106.1	2,082.8	2,107.0	88.8	78.0	84.1	77.7	4.3	3.6	4.0	3.7
Augusta-Aiken	208.8	206.3	209.1	206.8	15.2	12.8	14.6	11.9	7.3	6.2	7.0	5.8
Columbus	123.9	124.0	123.6	123.2	6.7	6.4	6.8	6.3	5.4	5.2	5.5	5.1
Macon	154.0	155.4	153.5	154.1	8.5	8.9	7.8	7.8	5.5	5.7	5.1	5.0
Savannah	134.7	134.2	133.9	132.3	7.9	6.7	7.2	6.0	5.9	5.0	5.3	4.5
Hawaii	595.3	596.2	599.7	603.2	42.9	39.3	41.8	37.9	7.2	6.6	7.0	6.3
Honolulu	428.4	426.8	428.5	429.1	24.7	23.5	24.3	23.0	5.8	5.5	5.7	5.3
Idaho	645.8	657.2	647.0	658.5	30.5	28.8	30.2	28.1	4.7	4.4	4.7	4.3
Boise City	213.3	218.6	213.1	219.3	7.8	7.7	7.9	7.5	3.6	3.5	3.7	3.4
Pocatello	38.6	39.1	38.3	39.0	2.2	1.7	2.1	1.7	5.7	4.4	5.5	4.3
Illinois	6,207.6	6,248.9	6,217.2	6,258.4	291.2	287.9	284.5	275.2	4.7	4.6	4.6	4.4
Bloomington-Normal	80.1	82.4	80.0	82.3	2.1	2.1	1.9	1.9	2.6	2.6	2.4	2.3
Champaign-Urbana	91.8	92.3	92.1	92.8	2.7	2.8	3.1	3.0	3.0	3.1	3.3	3.2
Chicago	4,130.3	4,165.1	4,147.7	4,184.4	182.1	182.3	178.3	174.4	4.4	4.4	4.3	4.2
Davenport-Moline-Rock Island	186.9	189.6	187.4	187.6	6.7	6.1	6.4	5.3	3.6	3.2	3.4	2.8
Decatur	60.0	59.0	59.8	58.9	4.6	3.7	4.3	3.4	7.6	6.3	7.3	5.8
Kankakee	52.7	53.7	52.6	53.3	2.9	3.2	2.7	3.0	5.5	6.0	5.2	5.6
Peoria-Pekin	184.2	184.9	184.7	185.2	7.9	6.7	7.3	6.4	4.3	3.6	4.0	3.4
Rockford	199.5	198.2	199.1	198.8	12.2	8.3	11.7	11.4	6.1	4.2	5.9	5.7
Springfield	108.0	107.7	107.3	107.1	4.7	4.4	4.4	4.0	4.3	4.1	4.1	3.7
Indiana	3,142.3	3,130.5	3,153.2	3,129.1	106.1	86.9	113.3	83.6	3.4	2.8	3.6	2.7
Bloomington	59.9	59.8	59.8	59.6	1.5	1.7	1.4	1.3	2.6	2.9	2.4	2.2
Elkhart-Goshen	95.6	93.9	96.4	93.8	2.8	2.1	3.1	1.6	2.9	2.2	3.2	1.7
Evansville-Henderson	160.7	157.1	163.0	158.0	6.8	6.0	8.3	4.7	4.3	3.8	5.1	3.0
Fort Wayne	271.0	270.5	272.1	267.1	7.7	6.3	8.4	7.8	2.8	2.3	3.1	2.9
Gary	308.7	305.3	308.5	303.0	12.2	10.3	12.7	7.9	4.0	3.4	4.1	2.6
Indianapolis	838.9	844.3	846.6	849.6	22.9	19.3	23.6	20.6	2.7	2.3	2.8	2.4
Kokomo	51.8	52.8	52.0	53.1	1.7	1.5	1.7	3.3	3.3	2.8	3.4	6.1
Lafayette	87.0	88.5	87.4	88.7	2.1	2.0	2.0	1.4	2.5	2.2	2.3	1.5
Muncie	60.9	61.5	60.5	60.2	2.3	2.4	2.5	2.4	3.8	4.0	4.2	4.0
South Bend	139.2	138.0	140.0	138.2	4.3	3.3	4.4	3.2	3.1	2.4	3.1	2.3
Terre Haute	71.3	69.4	71.6	68.7	4.2	3.2	4.1	2.2	5.8	4.6	5.7	3.3
Iowa	1,598.3	1,598.1	1,590.4	1,584.1	51.1	39.6	44.0	35.2	3.2	2.5	2.8	2.2
Cedar Rapids	109.1	110.1	108.2	109.8	2.8	1.9	2.3	1.7	2.6	1.8	2.1	1.5
Des Moines	256.0	254.8	256.8	254.6	6.7	4.8	5.6	4.0	2.6	1.9	2.2	1.6
Dubuque	49.5	49.6	49.9	49.3	1.9	1.4	1.5	1.2	3.8	2.8	3.0	2.3
Iowa City	64.8	66.6	62.5	63.6	1.9	1.5	1.6	1.6	2.9	2.3	2.6	2.5
Sioux City	66.1	66.1	66.3	65.9	2.5	1.9	2.2	1.7	3.8	2.9	3.3	2.5
Waterloo-Cedar Falls	67.5	68.5	68.2	68.3	2.7	2.2	2.4	1.9	4.0	3.2	3.5	2.8

See footnotes at end of table.

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

C-3. Labor force status by State and metropolitan area—Continued

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Kansas	1,379.0	1,439.6	1,388.9	1,441.4	53.2	53.3	48.2	50.3	3.9	3.7	3.5	3.5
Lawrence	51.0	53.6	51.4	54.1	2.5	2.7	2.2	2.4	4.8	5.0	4.2	4.5
Topeka	89.9	92.1	90.3	92.7	4.3	3.5	3.8	3.3	4.8	3.8	4.2	3.5
Wichita	277.2	288.6	279.8	290.3	9.7	8.9	9.2	8.0	3.5	3.1	3.3	2.8
Kentucky	1,970.9	1,983.0	1,974.3	1,976.1	110.7	89.6	105.7	82.4	5.6	4.5	5.4	4.2
Lexington	255.8	262.5	255.8	260.2	7.4	5.6	6.4	5.0	2.9	2.1	2.5	1.9
Louisville	559.1	571.9	567.8	573.0	24.0	18.9	25.3	16.2	4.3	3.3	4.5	2.8
Owensboro	51.0	51.1	51.5	51.3	3.4	2.3	3.4	2.1	6.7	4.5	6.6	4.1
Louisiana	2,063.7	2,127.6	2,066.2	2,119.7	151.5	131.7	137.6	135.7	7.3	6.2	6.7	6.4
Alexandria	60.1	61.9	60.0	61.5	4.4	3.8	4.4	4.0	7.3	6.2	7.4	6.6
Baton Rouge	294.2	306.0	294.4	302.8	19.8	15.5	18.3	15.3	6.7	5.1	6.2	5.0
Houma	90.3	97.5	91.7	96.5	3.8	3.3	3.5	3.3	4.2	3.4	3.8	3.4
Lafayette	176.7	185.3	177.7	184.8	10.7	10.7	9.6	10.4	6.1	5.8	5.4	5.6
Lake Charles	90.8	93.5	91.7	93.2	7.1	5.1	6.4	5.3	7.8	5.4	6.9	5.7
Monroe	70.8	72.1	70.7	72.3	5.6	4.4	5.0	5.1	7.9	6.1	7.0	7.0
New Orleans	628.4	640.2	632.2	640.3	41.8	34.0	38.7	34.1	6.6	5.3	6.1	5.3
Shreveport-Bossier City	190.0	199.4	190.0	198.7	15.0	17.7	13.5	18.7	7.9	8.9	7.1	9.4
Maine	671.7	665.9	675.2	670.5	35.4	25.8	29.2	22.9	5.3	3.9	4.3	3.4
Bangor	49.6	50.6	49.9	50.3	2.0	1.4	1.6	1.2	4.1	2.7	3.3	2.4
Lewiston-Auburn	51.4	51.4	51.4	51.3	2.9	2.2	2.8	2.1	5.7	4.3	5.4	4.2
Portland	132.0	131.4	133.9	133.1	3.8	3.0	3.2	2.4	2.9	2.3	2.4	1.8
Maryland	2,835.7	2,824.3	2,858.1	2,856.3	158.3	135.9	146.2	131.0	5.6	4.8	5.1	4.6
Baltimore	1,342.2	1,332.9	1,348.8	1,349.9	84.1	73.3	79.6	76.0	6.3	5.5	5.9	5.6
Cumberland	46.6	47.0	46.6	46.5	4.2	3.4	4.0	3.8	8.9	7.3	8.6	8.1
Hagerstown	70.9	72.9	71.7	72.3	3.7	2.9	3.2	2.6	5.2	4.0	4.5	3.6
Massachusetts	3,316.0	3,305.3	3,323.7	3,308.1	138.2	116.8	134.8	104.8	4.2	3.5	4.1	3.2
Barnstable-Yarmouth	79.1	78.0	83.8	82.7	3.2	2.7	2.9	2.2	4.1	3.4	3.4	2.6
Boston	1,829.8	1,830.6	1,838.0	1,840.0	67.3	55.4	64.6	49.5	3.7	3.0	3.5	2.7
Brockton	133.6	132.4	132.9	131.9	7.0	5.6	6.7	5.1	5.2	4.2	5.0	3.9
Fitchburg-Leominster	71.6	70.9	71.9	70.4	3.8	2.9	3.9	2.8	5.4	4.0	5.4	4.0
Lawrence	201.3	200.3	199.7	197.1	11.1	9.8	10.3	8.4	5.5	4.9	5.2	4.3
Lowell	164.4	167.2	164.7	165.2	6.6	5.9	6.7	5.5	4.0	3.5	4.0	3.4
New Bedford	83.2	81.7	83.4	81.9	6.1	5.1	6.5	5.0	7.3	6.2	7.8	6.1
Pittsfield	41.3	41.1	41.8	41.2	2.1	1.8	1.9	1.6	5.1	4.4	4.5	3.8
Springfield	286.9	286.5	283.8	282.6	12.3	11.8	12.0	10.3	4.3	4.1	4.2	3.6
Worcester	252.4	251.4	251.6	249.8	9.8	9.1	9.5	8.3	3.9	3.6	3.8	3.3
Michigan	5,053.5	5,112.4	5,072.6	5,098.9	222.3	197.1	250.1	244.3	4.4	3.9	4.9	4.8
Ann Arbor	289.8	294.8	292.0	295.0	7.4	6.0	9.5	9.2	2.6	2.0	3.2	3.1
Benton Harbor	85.7	84.4	84.8	84.2	5.4	4.1	4.2	3.4	6.3	4.9	5.0	4.1
Detroit	2,265.3	2,297.4	2,283.0	2,274.7	92.4	84.9	121.3	103.7	4.1	3.7	5.3	4.8
Flint	207.1	210.0	206.3	209.9	12.2	14.8	14.8	25.9	5.9	7.1	7.2	12.3
Grand Rapids-Muskegon-Holland	591.4	604.7	594.2	604.7	21.9	18.8	22.5	21.0	3.7	3.1	3.8	3.5
Jackson	78.0	78.0	77.5	78.3	3.9	2.9	3.4	2.8	5.0	3.7	4.4	3.6
Kalamazoo-Battle Creek	234.5	232.0	233.2	232.1	11.5	8.1	10.1	8.5	4.9	3.5	4.3	3.7
Lansing-East Lansing	240.1	240.6	240.5	240.3	7.3	6.6	7.6	14.6	3.0	2.7	3.2	6.1
Saginaw-Bay City-Midland	204.6	205.3	203.9	204.0	9.3	7.9	8.6	12.5	4.5	3.8	4.2	6.1
Minnesota	2,654.9	2,740.2	2,657.0	2,732.2	97.5	81.9	79.7	56.6	3.7	3.0	3.0	2.1
Duluth-Superior	125.3	128.9	125.5	128.6	7.1	6.1	5.7	4.4	5.7	4.8	4.5	3.4
Minneapolis-St. Paul	1,647.3	1,707.2	1,663.7	1,717.7	48.3	41.2	40.5	28.7	2.9	2.4	2.4	1.7
Rochester	67.0	70.4	67.9	71.3	1.7	1.5	1.4	1.0	2.5	2.2	2.0	1.4
St. Cloud	91.0	94.1	91.4	93.3	3.9	3.1	3.0	2.2	4.3	3.3	3.3	2.4
Mississippi	1,276.6	1,291.6	1,280.3	1,292.2	87.7	74.1	77.7	66.9	6.9	5.7	6.1	5.2
Biloxi-Gulfport-Pascagoula	160.2	164.0	161.7	163.7	9.5	7.3	7.8	6.3	5.9	4.4	4.8	3.8
Hattiesburg	50.7	51.7	51.7	51.9	2.0	1.8	1.9	1.8	4.0	3.5	3.7	3.5
Jackson	225.1	233.6	225.5	231.9	9.7	8.6	8.6	7.7	4.3	3.7	3.8	3.3
Missouri	2,928.6	2,956.6	2,925.7	2,959.0	123.4	127.5	126.6	130.3	4.2	4.3	4.3	4.4
Columbia	82.1	82.3	79.3	79.5	1.4	1.4	1.2	1.3	1.7	1.8	1.5	1.7
Joplin	81.2	82.2	79.5	80.4	3.1	3.6	3.0	3.3	3.8	4.4	3.8	4.2
Kansas City	971.1	1,004.5	983.8	1,019.4	35.9	40.0	35.3	43.4	3.7	4.0	3.6	4.3
St. Joseph	49.2	49.7	48.4	49.1	2.5	2.2	2.1	2.0	5.2	4.4	4.3	4.0
St. Louis LMA	1,360.5	1,372.4	1,373.3	1,385.3	56.4	62.9	63.5	65.9	4.1	4.6	4.6	4.8
Springfield	169.5	171.1	167.8	170.0	5.8	5.4	5.0	4.6	3.4	3.2	3.0	2.7
Montana	458.3	470.5	466.5	477.1	24.2	24.7	23.2	22.3	5.3	5.2	5.0	4.7
Billings	68.5	70.2	70.5	72.3	3.3	3.2	3.3	3.0	4.8	4.6	4.7	4.1
Great Falls	38.1	38.2	38.7	38.7	2.1	2.0	1.9	1.9	5.5	5.3	4.9	4.8

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

C-3. Labor force status by State and metropolitan area—Continued

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Nebraska	914.7	941.4	922.2	949.6	29.7	20.5	26.7	23.0	3.2	2.2	2.9	2.4
Lincoln	140.5	142.9	142.0	144.7	4.0	2.3	3.7	2.4	2.9	1.6	2.6	1.7
Omaha	384.5	402.3	388.8	404.7	12.8	8.5	11.5	8.7	3.3	2.1	2.9	2.1
Nevada	889.6	927.9	899.0	937.7	40.3	44.9	39.4	42.8	4.5	4.8	4.4	4.6
Las Vegas	669.1	702.8	675.3	709.7	30.5	33.1	30.5	32.7	4.6	4.7	4.5	4.6
Reno	172.4	176.1	174.2	178.9	6.6	7.2	6.1	6.3	3.8	4.1	3.5	3.5
New Hampshire	656.0	662.9	664.5	667.1	21.5	18.4	19.2	14.4	3.3	2.8	2.9	2.2
Manchester	102.1	102.3	102.4	101.6	3.1	2.6	2.7	2.0	3.0	2.5	2.6	2.0
Nashua	103.1	106.3	107.0	104.9	3.2	2.8	2.9	2.1	3.1	2.6	2.7	2.0
Portsmouth-Rochester	123.7	123.5	127.9	125.6	3.5	2.9	3.8	2.7	2.8	2.3	3.0	2.2
New Jersey	4,264.3	4,252.7	4,274.7	4,257.5	224.1	208.4	235.5	225.3	5.3	4.9	5.5	5.3
Atlantic-Cape May	184.5	185.9	191.5	192.0	13.4	14.6	13.3	14.5	7.2	7.9	7.0	7.6
Bergen-Passaic	689.6	684.0	685.0	677.5	37.7	32.1	39.1	34.9	5.5	4.7	5.7	5.2
Jersey City	288.4	287.4	288.9	287.2	24.4	23.6	24.4	23.9	8.5	8.2	8.4	8.3
Middlesex-Somerset-Hunterdon	644.0	651.6	645.0	654.2	23.9	22.3	26.8	25.7	3.7	3.4	4.2	3.9
Monmouth-Ocean	543.1	539.0	547.4	541.7	25.2	23.2	27.0	25.9	4.6	4.3	4.9	4.8
Newark	1,036.0	1,031.2	1,039.7	1,028.5	56.1	49.4	58.5	54.1	5.4	4.8	5.6	5.3
Trenton	172.1	169.5	170.8	168.0	7.8	7.5	8.6	8.3	4.5	4.4	5.1	4.9
Vineland-Millville-Bridgeton	66.5	68.2	65.8	67.3	5.7	6.4	5.5	6.6	8.6	9.3	8.4	9.8
New Mexico	829.3	857.1	830.5	855.2	58.2	65.9	53.2	57.8	7.0	7.7	6.4	6.8
Albuquerque	361.3	373.7	363.6	373.2	18.1	22.0	17.0	19.8	5.0	5.9	4.7	5.3
Las Cruces	66.6	70.1	66.1	68.7	6.1	7.3	5.5	6.0	9.2	10.4	8.3	8.8
Santa Fe	74.8	78.2	76.3	78.9	3.1	3.2	2.9	2.8	4.2	4.1	3.7	3.5
New York	8,909.3	8,865.5	9,032.0	8,958.2	562.8	470.9	597.1	501.9	6.3	5.3	6.6	5.6
Albany-Schenectady-Troy	458.2	456.0	460.7	455.7	17.3	16.0	18.7	14.5	3.8	3.5	4.1	3.2
Binghamton	126.1	126.8	126.7	126.4	4.9	4.7	5.0	4.3	3.9	3.7	4.0	3.4
Buffalo-Niagara Falls	588.7	589.0	599.3	593.0	29.8	31.1	33.8	42.2	5.1	5.3	5.6	7.1
Dutchess County	120.5	121.2	121.3	121.2	4.7	4.0	4.9	3.7	3.9	3.3	4.0	3.0
Elmira	45.3	45.1	45.4	44.8	2.0	2.0	2.3	1.7	4.5	4.4	5.0	3.9
Glens Falls	65.7	65.2	67.6	66.7	3.4	2.9	3.3	2.4	5.1	4.5	4.9	3.6
Jamestown	69.1	66.8	70.0	67.4	3.8	3.5	3.8	3.2	5.5	5.3	5.4	4.8
Nassau-Suffolk	1,415.7	1,432.3	1,435.1	1,432.1	55.1	47.5	63.9	47.1	3.9	3.3	4.5	3.3
New York	4,036.9	4,002.2	4,095.8	4,072.6	348.8	270.5	364.6	297.3	8.6	6.8	8.9	7.3
New York City	3,385.4	3,339.2	3,431.3	3,405.1	324.2	247.2	337.0	275.2	9.6	7.4	9.8	8.1
Newburgh	177.7	176.5	181.3	177.8	7.8	6.8	8.5	6.2	4.4	3.9	4.7	3.5
Rochester	587.6	578.6	592.9	579.4	22.4	22.7	24.6	25.8	3.8	3.9	4.1	4.5
Syracuse	372.2	367.6	375.9	368.5	16.1	14.5	16.7	13.5	4.3	3.9	4.4	3.7
Utica-Rome	145.7	144.9	148.6	147.6	7.2	6.5	7.2	5.5	4.9	4.5	4.9	3.7
North Carolina	3,907.1	3,836.2	3,937.4	3,871.6	156.2	131.3	154.0	135.0	4.0	3.4	3.9	3.5
Asheville	113.6	111.8	113.7	112.5	3.5	2.9	2.9	3.0	3.1	2.6	2.6	2.6
Charlotte-Gastonia-Rock Hill	762.3	745.5	769.9	754.2	27.2	20.9	26.1	21.7	3.6	2.8	3.4	2.9
Fayetteville	117.7	115.5	117.8	114.9	5.6	5.0	5.3	4.8	4.7	4.4	4.5	4.2
Goldsboro	49.2	49.3	49.8	49.0	2.1	2.1	3.0	2.2	4.3	4.2	5.9	4.5
Greensboro—Winston-Salem—High Point	650.1	632.2	653.0	634.2	20.2	16.7	20.1	17.1	3.1	2.6	3.1	2.7
Greenville	65.5	62.7	65.6	64.0	4.0	3.3	3.5	3.5	6.1	5.2	5.3	5.4
Hickory-Morganton-Lenoir	177.9	171.4	181.6	173.2	7.5	4.5	10.0	4.3	4.2	2.6	5.5	2.5
Jacksonville	45.0	45.9	45.7	46.7	1.5	1.5	1.4	1.5	3.3	3.3	3.2	3.3
Raleigh-Durham-Chapel Hill	614.5	617.7	621.9	626.2	13.7	11.1	12.4	11.6	2.2	1.8	2.0	1.9
Rocky Mount	73.9	68.1	75.1	68.9	6.1	5.1	5.8	5.0	8.2	7.5	7.7	7.3
Wilmington	112.2	109.3	113.0	109.7	5.1	4.2	5.0	4.3	4.5	3.8	4.5	3.9
North Dakota	361.5	360.4	359.2	358.8	11.0	9.3	8.2	7.4	3.0	2.6	2.3	2.1
Bismarck	56.4	56.0	55.5	55.7	1.5	1.3	1.1	1.0	2.6	2.3	2.0	1.7
Fargo-Moorhead	103.0	104.7	103.5	104.9	2.1	1.6	1.8	1.2	2.1	1.6	1.7	1.1
Grand Forks	54.6	54.9	54.3	55.0	3.1	1.6	2.2	1.3	5.7	3.0	4.0	2.3
Ohio	5,758.4	5,878.2	5,798.7	5,911.0	254.1	262.1	253.2	271.4	4.4	4.5	4.4	4.6
Akron	361.7	368.6	365.0	373.1	14.9	14.7	14.3	13.2	4.1	4.0	3.9	3.5
Canton-Massillon	203.6	209.6	206.3	211.6	9.2	9.0	8.6	7.5	4.5	4.3	4.2	3.5
Cincinnati	847.2	875.5	854.4	876.7	32.0	33.1	29.1	25.9	3.8	3.8	3.4	3.0
Cleveland-Lorain-Elyria	1,123.8	1,153.9	1,133.7	1,162.2	49.9	50.0	48.6	50.0	4.4	4.3	4.3	4.3
Columbus	813.1	841.2	822.5	846.8	23.2	24.6	21.2	20.1	2.9	2.9	2.6	2.4
Dayton-Springfield	478.6	485.5	480.0	489.0	19.4	22.2	19.1	28.9	4.1	4.6	4.0	5.9
Hamilton-Middletown	172.5	176.1	172.0	175.1	6.0	6.3	5.5	5.6	3.5	3.6	3.2	3.2
Lima	76.5	76.8	77.0	77.5	3.9	3.4	4.0	3.5	5.1	4.4	5.2	4.5
Mansfield	84.8	84.7	85.9	87.1	4.7	5.1	4.8	7.4	5.5	6.0	5.6	8.5
Steubenville-Weirton	59.3	59.2	57.9	58.3	7.3	4.0	6.2	3.1	12.3	6.8	10.7	5.4
Toledo	316.8	319.3	317.7	316.3	14.8	17.4	19.8	19.8	4.7	5.4	6.2	6.3
Youngstown-Warren	289.6	295.4	290.6	300.2	16.0	17.2	16.4	30.5	5.5	5.8	5.6	10.1

See footnotes at end of table.

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

C-3. Labor force status by State and metropolitan area—Continued

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Oklahoma	1,608.8	1,627.1	1,620.8	1,644.9	70.1	66.3	65.7	70.0	4.4	4.1	4.1	4.3
Enid	28.5	29.1	28.9	29.3	1.1	1.1	1.0	0.9	3.7	3.7	3.3	3.2
Lawton	41.3	40.6	41.0	40.5	2.3	1.8	2.1	1.7	5.5	4.5	5.2	4.1
Oklahoma City	529.5	532.1	532.3	547.5	18.5	17.9	17.2	24.8	3.5	3.4	3.2	4.5
Tulsa	402.9	408.9	411.1	419.0	14.9	13.3	13.9	11.9	3.7	3.2	3.4	2.8
Oregon	1,739.6	1,782.8	1,748.0	1,791.0	100.6	96.7	95.7	91.0	5.8	5.4	5.5	5.1
Eugene-Springfield	157.4	160.0	155.4	158.8	8.7	8.3	8.3	8.0	5.5	5.2	5.4	5.0
Medford-Ashland	86.2	87.0	85.8	87.5	6.9	6.1	6.6	5.7	8.0	7.0	7.7	6.5
Portland-Vancouver	1,024.4	1,053.9	1,038.5	1,064.3	44.6	44.5	43.5	44.0	4.3	4.2	4.2	4.1
Salem	171.0	172.5	168.0	170.2	10.1	9.3	9.3	8.4	5.9	5.4	5.5	4.9
Pennsylvania	6,048.7	6,028.3	6,093.1	6,084.8	322.0	263.9	332.0	285.1	5.3	4.4	5.4	4.7
Allentown-Bethlehem-Easton	314.1	310.8	316.2	312.2	16.2	13.5	17.0	15.1	5.2	4.3	5.4	4.8
Altoona	63.9	64.3	64.6	65.1	3.5	3.1	3.6	3.2	5.5	4.9	5.6	5.0
Erie	141.2	140.1	142.8	142.3	8.5	6.9	8.4	7.4	6.0	4.9	5.9	5.2
Harrisburg-Lebanon-Carlisle	354.0	358.1	357.0	360.6	12.3	10.6	12.8	10.6	3.5	2.9	3.6	3.0
Johnstown	109.0	107.2	108.9	107.5	8.4	6.7	8.3	6.8	7.7	6.3	7.7	6.3
Lancaster	244.2	250.2	248.3	251.9	7.7	7.4	7.8	7.3	3.2	2.9	3.2	2.9
Philadelphia	2,520.6	2,506.8	2,536.7	2,538.5	125.1	108.4	133.7	118.6	5.0	4.3	5.3	4.7
Pittsburgh	1,175.6	1,160.6	1,179.9	1,170.7	60.9	49.9	60.7	52.5	5.2	4.3	5.1	4.5
Reading	187.3	187.4	187.8	186.7	8.6	7.9	9.0	9.2	4.6	4.2	4.8	4.9
Scranton—Wilkes-Barre—Hazleton	317.1	314.8	321.3	318.3	23.1	17.8	24.8	19.2	7.3	5.7	7.7	6.0
Sharon	57.8	57.3	57.6	58.2	3.4	2.4	3.4	2.7	5.9	4.2	5.9	4.7
State College	63.3	65.2	65.8	66.4	1.8	1.6	2.2	1.8	2.9	2.5	3.3	2.6
Williamsport	58.2	57.9	58.9	58.6	3.8	3.1	3.6	3.0	6.5	5.3	6.1	5.1
York	196.2	196.1	197.6	196.5	8.9	7.5	8.7	7.4	4.5	3.8	4.4	3.8
Rhode Island	507.5	500.6	508.7	502.6	26.3	18.8	25.8	20.6	5.2	3.8	5.1	4.1
Providence-Fall River-Warwick	578.6	569.2	578.0	568.0	31.7	23.0	32.2	24.2	5.5	4.0	5.6	4.3
South Carolina	1,961.0	1,967.4	1,970.2	1,983.9	96.4	69.0	98.1	87.0	4.9	3.5	5.0	4.4
Charleston-North Charleston	261.6	267.3	263.1	271.3	12.9	7.8	11.4	10.1	4.9	2.9	4.3	3.7
Columbia	274.1	280.0	277.3	283.4	8.1	5.8	7.7	6.7	2.9	2.1	2.8	2.4
Florence	64.9	63.7	64.3	63.1	4.1	2.9	4.1	3.3	6.4	4.6	6.4	5.2
Greenville-Spartanburg-Anderson	493.2	500.3	498.0	504.9	17.1	12.9	18.1	16.5	3.5	2.6	3.6	3.3
Myrtle Beach	105.6	105.3	105.6	106.5	3.3	2.5	3.1	2.8	3.2	2.4	3.0	2.7
Sumter	48.0	47.8	46.9	46.9	2.9	2.1	3.0	2.5	6.0	4.5	6.4	5.3
South Dakota	401.9	411.7	404.2	413.9	12.7	11.3	10.9	10.4	3.2	2.7	2.7	2.5
Rapid City	47.7	47.9	48.4	48.7	1.4	1.1	1.2	0.9	2.8	2.2	2.4	1.9
Sioux Falls	98.1	103.5	98.5	103.8	1.9	1.6	1.6	1.3	1.9	1.5	1.6	1.3
Tennessee	2,723.1	2,800.1	2,736.7	2,808.1	169.4	125.7	168.8	121.9	6.2	4.5	6.2	4.3
Chattanooga	224.4	227.5	224.5	228.2	14.1	10.1	11.9	8.6	6.3	4.5	5.3	3.8
Clarksville-Hopkinsville	81.4	84.5	83.2	85.4	4.1	3.5	4.9	3.4	5.1	4.1	5.9	3.9
Jackson	54.7	57.1	55.2	57.9	3.1	2.4	2.7	2.1	5.6	4.2	4.9	3.6
Johnson City-Kingsport-Bristol	228.0	234.9	232.4	235.6	13.7	11.1	14.3	10.6	4.7	6.1	4.5	4.5
Knoxville	340.4	348.9	341.3	351.2	16.3	11.5	14.8	12.1	4.8	3.3	4.3	3.4
Memphis	529.3	546.9	532.7	550.2	28.9	23.1	25.3	20.8	5.5	4.2	4.8	3.8
Nashville	619.4	648.9	622.3	652.1	26.0	20.4	24.0	18.0	4.2	3.1	3.8	2.8
Texas	10,007.2	10,269.6	10,035.6	10,310.7	625.6	581.0	582.6	541.5	6.3	5.7	5.8	5.3
Abilene	60.2	61.5	60.2	61.8	2.9	2.6	2.7	2.4	4.9	4.3	4.4	3.9
Amarillo	111.4	113.7	111.6	114.6	5.2	5.0	4.6	4.8	4.7	4.4	4.2	4.2
Austin-San Marcos	652.7	674.7	655.2	679.8	23.1	21.2	21.4	19.4	3.5	3.1	3.3	2.9
Beaumont-Port Arthur	184.1	186.2	183.2	185.4	17.0	15.6	15.3	14.3	9.3	8.4	8.4	7.7
Brazoria	106.7	107.3	106.3	106.9	9.6	8.1	8.6	7.4	9.0	7.5	8.1	6.9
Brownsville-Harlingen-San Benito	129.7	133.3	130.5	131.9	18.7	19.1	18.7	18.0	14.4	14.3	14.3	13.7
Bryan-College Station	67.6	68.8	69.7	70.3	1.8	1.6	1.7	1.4	2.7	2.3	2.5	2.1
Corpus Christi	180.9	182.5	180.3	182.5	17.1	15.0	15.3	13.6	9.4	8.2	8.5	7.5
Dallas	1,834.5	1,896.6	1,849.4	1,911.6	79.9	74.1	74.7	67.7	4.4	3.9	4.0	3.5
El Paso	294.7	299.2	296.3	302.5	36.0	33.2	35.0	33.3	12.2	11.1	11.8	11.0
Fort Worth-Arlington	859.3	883.5	861.9	889.3	36.7	34.5	34.1	36.4	4.3	3.9	4.0	4.1
Galveston-Texas City	128.3	129.0	128.1	128.2	12.3	10.2	11.4	9.1	9.6	7.9	8.9	7.1
Houston	2,079.4	2,144.1	2,086.3	2,161.6	125.6	106.3	113.3	97.4	6.0	5.0	5.4	4.5
Killeen-Temple	115.9	118.4	115.7	117.5	7.0	6.1	6.4	5.3	6.0	5.2	5.6	4.5
Laredo	71.9	72.9	71.2	71.4	8.7	7.8	7.9	7.0	12.1	10.7	11.1	9.8
Longview-Marshall	106.0	106.7	105.8	106.7	9.1	8.4	8.5	8.0	8.6	7.9	8.0	7.5
Lubbock	123.7	127.1	124.0	126.6	6.9	6.2	6.3	5.6	5.6	4.9	5.1	4.4
McAllen-Edinburg-Mission	192.7	199.5	190.1	193.8	36.2	36.4	35.0	32.6	18.8	18.2	18.4	16.8
Odessa-Midland	125.1	128.7	125.1	129.9	7.9	7.9	6.9	7.5	6.3	6.2	5.6	5.8
San Angelo	52.4	51.4	52.4	52.8	2.2	2.1	3.1	2.8	4.1	4.0	5.9	5.4
San Antonio	754.6	776.1	755.6	780.5	38.1	35.6	34.8	32.4	5.0	4.6	4.6	4.1
Sherman-Denison	50.7	50.6	50.7	51.1	2.8	2.6	2.6	3.2	5.5	5.2	5.2	6.2

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

C-3. Labor force status by State and metropolitan area—Continued

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Texas—Continued												
Texarkana	58.0	58.9	57.8	58.8	4.9	4.8	4.3	4.4	8.4	8.2	7.5	7.4
Tyler	89.9	91.8	90.9	92.1	5.8	5.4	5.8	5.1	6.4	5.9	6.4	5.6
Victoria	43.7	45.0	44.0	45.0	2.7	2.6	2.4	2.3	6.2	5.8	5.5	5.1
Waco	101.1	103.3	101.5	102.9	5.6	5.7	5.6	5.0	5.6	5.5	5.5	4.9
Wichita Falls	66.6	67.4	66.2	67.2	3.4	3.8	3.6	3.5	5.1	5.6	5.4	5.3
Utah	1,046.5	1,094.8	1,051.4	1,096.5	37.5	39.8	31.5	37.7	3.6	3.6	3.0	3.4
Provo-Orem	151.3	157.9	151.6	156.8	4.7	4.9	3.9	4.4	3.1	3.1	2.5	2.8
Salt Lake City-Ogden	674.2	705.1	680.7	714.2	23.0	24.4	19.5	23.6	3.4	3.5	2.9	3.3
Vermont	327.2	333.0	326.8	334.3	11.7	10.5	11.4	10.6	3.6	3.1	3.5	3.2
Burlington	97.3	100.4	97.3	100.2	2.4	2.2	2.4	2.3	2.4	2.2	2.5	2.3
Virginia	3,435.8	3,613.3	3,463.6	3,627.9	159.8	128.2	144.4	112.8	4.7	3.5	4.2	3.1
Charlottesville	72.1	77.5	72.5	76.6	1.9	1.4	1.5	1.1	2.7	1.8	2.0	1.4
Danville	57.2	59.7	56.9	58.4	4.8	4.4	4.9	4.0	8.4	7.4	8.6	6.8
Lynchburg	100.2	103.8	101.0	104.4	4.7	3.3	3.7	3.4	4.6	3.2	3.7	3.2
Norfolk-Virginia Beach-Newport News	734.6	760.4	736.2	760.5	44.2	33.2	38.3	28.1	6.0	4.4	5.2	3.7
Richmond-Petersburg	498.5	526.5	500.8	527.8	20.7	17.2	17.4	14.9	4.2	3.3	3.5	2.8
Roanoke	126.9	130.6	126.3	131.5	5.0	3.6	4.3	3.3	3.9	2.8	3.4	2.5
Washington	3,017.3	3,049.6	3,065.1	3,084.1	134.4	133.6	135.0	136.9	4.5	4.4	4.4	4.4
Bellingham	79.2	79.4	82.3	82.4	4.5	4.2	4.4	4.4	5.6	5.3	5.3	5.3
Bremerton	93.2	90.0	94.4	91.3	5.0	4.6	4.9	4.6	5.4	5.1	5.2	5.0
Olympia	97.5	99.7	98.4	100.1	4.8	4.6	5.0	4.9	4.9	4.6	5.0	4.9
Richland-Kennewick-Pasco	102.5	101.2	97.5	97.0	6.4	6.7	6.2	6.5	6.3	6.6	6.4	6.7
Seattle-Bellevue-Everett	1,343.6	1,375.3	1,368.8	1,396.9	43.8	40.4	44.4	42.0	3.3	2.9	3.2	3.0
Spokane	206.2	206.0	207.2	204.5	8.6	8.6	8.5	8.8	4.2	4.2	4.1	4.3
Tacoma	328.2	329.6	332.4	332.2	14.6	14.6	14.7	14.8	4.4	4.4	4.4	4.5
Yakima	126.9	124.2	124.9	123.2	10.2	10.4	9.9	10.6	8.0	8.4	7.9	8.6
West Virginia	816.2	818.9	818.9	822.4	53.3	53.7	53.9	54.0	6.5	6.6	6.6	6.6
Charleston	132.6	135.4	134.2	136.9	6.2	6.2	6.1	6.0	4.6	4.6	4.5	4.4
Huntington-Ashland	140.4	140.0	139.3	137.5	10.3	9.3	9.1	7.5	7.3	6.6	6.5	5.5
Parkersburg-Marietta	78.7	79.0	78.7	78.1	4.1	4.8	3.8	4.4	5.2	6.1	4.9	5.6
Wheeling	75.4	75.5	76.2	77.0	5.4	4.1	4.5	3.5	7.2	5.5	5.9	4.6
Wisconsin	2,991.0	3,023.6	2,995.2	3,039.6	118.7	96.3	110.3	101.5	4.0	3.2	3.7	3.3
Appleton-Oshkosh-Neenah	226.2	231.5	226.8	232.4	7.4	6.3	6.6	5.3	3.3	2.7	2.9	2.3
Eau Claire	83.3	83.6	83.4	83.9	3.2	2.5	2.7	2.2	3.8	3.0	3.2	2.6
Green Bay	134.3	133.7	133.7	134.1	5.0	3.8	4.3	3.4	3.7	2.8	3.2	2.5
Janesville-Beloit	82.9	81.3	83.1	88.3	4.8	3.1	4.3	10.9	5.8	3.9	5.2	12.3
Kenosha	78.9	80.3	78.9	80.1	3.4	2.8	4.8	4.1	4.4	3.5	6.1	5.2
La Crosse	70.6	71.5	70.7	71.3	2.1	2.0	2.0	1.7	3.0	2.8	2.9	2.4
Madison	260.8	265.2	262.4	267.2	4.9	4.0	4.4	4.0	1.9	1.5	1.7	1.5
Milwaukee-Waukesha	821.6	833.1	821.9	834.5	34.1	27.5	33.1	28.6	4.2	3.3	4.0	3.4
Racine	95.9	98.4	97.4	98.8	4.5	3.7	5.4	4.6	4.7	3.7	5.5	4.7
Sheboygan	62.7	62.1	62.8	62.4	2.0	1.4	1.8	1.9	3.2	2.3	2.9	3.0
Wausau	74.0	74.6	74.5	75.1	2.7	2.5	2.4	2.2	3.6	3.3	3.2	2.9
Wyoming	253.4	263.0	254.8	263.8	11.8	11.1	11.5	10.6	4.7	4.2	4.5	4.0
Casper	31.9	33.4	32.3	33.7	1.9	1.6	1.9	1.6	5.8	4.7	5.8	4.7
Cheyenne	38.0	39.8	38.8	40.7	1.3	1.2	1.3	1.2	3.4	3.1	3.4	3.0
Puerto Rico	1,324.8	1,341.0	1,322.5	1,316.9	194.0	183.5	192.2	178.3	14.6	13.7	14.5	13.5
Aguadilla	51.1	51.5	52.7	51.2	10.3	9.9	11.5	9.7	20.1	19.2	21.8	18.9
Arecibo	54.3	52.8	54.3	51.7	9.5	8.9	9.0	8.8	17.5	16.8	16.6	17.0
Caguas	117.6	136.4	114.8	115.9	16.2	15.4	15.6	15.1	13.8	11.3	13.6	13.0
Mayaguez	95.1	94.5	96.4	92.8	15.5	14.8	18.8	14.0	16.3	15.6	19.5	15.1
Ponce	115.7	114.9	113.0	113.5	21.9	19.5	20.9	19.4	19.0	17.0	18.5	17.1
San Juan-Bayamon	712.2	721.4	713.8	724.2	83.9	81.7	80.9	78.2	11.8	11.3	11.3	10.8

P = preliminary.

when new benchmark and population information becomes available.

NOTE: Data refer to place of residence. All estimates are provisional and will be revised

Explanatory Notes and Estimates of Error

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 the Current Population Survey (CPS), 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, classified by 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 50,000 households (beginning with January 1996 data) located in 754 sample areas. These areas are chosen to represent all counties and independent cities in the U.S., 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 and telephone interviews by the Bureau of Labor Statistics, in cooperation with State agencies. The Current Employment Statistics (CES) survey is designed to provide industry information on nonfarm 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 based on payroll reports from a sample of about 390,000 establishments employing about 48 million nonfarm wage and salary workers. The data relate to all workers, full or part time, who receive pay during the payroll period which includes the 12th of the month.

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

Data from these two sources differ from each other because of variations in definitions and coverage, source 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 data 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, and unpaid workers who worked 15 hours or more during the reference week in family-operated enterprises. Employment in both agricultural and nonagricultural industries is included. The payroll survey covers only wage and salary employees on the payrolls of nonfarm 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. 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 reference week—that is, were not working but had jobs from which they were temporarily absent because of illness, vacation, bad weather, childcare problems, 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 those on leave without pay for the entire payroll period are not.

Hours of work

The household survey measures hours worked for all workers whereas the payroll survey measures hours for private production and nonsupervisory workers paid for by employers. In the household survey, all persons with a job but not at work are excluded from the hours distributions and the computations of average hours at work. In the pay-

roll 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 the 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 various earnings series available from the household and establishment surveys, see *BLS Measures of Compensation*, BLS Bulletin 2239 (1986).

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 during the reference week, were currently available for a job, 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 U.S. Department of Labor, exclude, in addition to otherwise ineligible persons who do not file claims for benefits, 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).

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 Unemploy-

ment" by Gloria P. Green in the June 1971 issue of the *Monthly Labor Review*.

Agricultural employment estimates of the U.S. Department of Agriculture. The principal differences in coverage are the inclusion of persons under 16 in the National Agricultural 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 data 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 manufacturers and business, Bureau of the Census. BLS establishment statistics on employment differ from employment counts derived by the Bureau of the 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, Bureau of the Census. Data in *County Business Patterns* (CBP) 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 most of government, and coverage is incomplete for some of the nonprofit agencies.

Employment covered by State unemployment insurance programs. Most nonfarm wage and salary workers are covered by the unemployment insurance programs. However, some employees, such as those working in parochial schools and churches, are not covered by unemployment insurance, whereas they are included in the BLS establishment statistics.

Household Data

("A" tables, monthly; "D" tables, quarterly)

COLLECTION AND COVERAGE

Statistics on the employment status of the population and related data are compiled by BLS using data from the Current Population Survey (CPS). This monthly survey of households is conducted for BLS by the Bureau of the Census 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 day of the month. This is known as the "reference week." Actual field interviewing is conducted in the following week, referred to as the "survey week."

Each month about 50,000 occupied units are eligible for interview. Some 3,200 of these households are contacted 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 that ranges between 6 and 7 percent. In addition to the 50,000 occupied units, there are about 9,000 sample units in an average month which are visited but found to be vacant or otherwise not eligible for enumeration. Part of the sample is changed each month. The rotation plan, as will be explained later, 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 in use as of January 1994 are as follows:

Civilian noninstitutional population. Included are persons 16 years of age and older residing in the 50 States and the District of Columbia who are not inmates of institutions (e.g., penal and mental facilities, homes for the aged), and who are not on active duty in the Armed Forces.

Employed persons. All persons who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees, worked 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 vacation, illness, bad weather, child-care problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

Each employed person is counted only once, even if he or she holds more than one job. For purposes of occupation and industry classification, multiple jobholders are counted in the job at which they worked the greatest number of hours during the reference 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 their own house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and other organizations.

Unemployed persons. All persons who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the 4-week-period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

Duration of unemployment. This represents the length of time (through the current reference week) that persons classified as unemployed had been looking for work. For persons on layoff, duration of unemployment represents the number of full weeks they had been on layoff. Mean duration is the arithmetic average computed from single weeks of unemployment; median duration is the midpoint of a distribution of weeks of unemployment.

Reason for 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 five major groups: (1) *Job losers*, comprised of (a) persons *on temporary layoff*, who have been given a date to return to work or who expect to return within 6 months (persons on layoff need not be looking for work to qualify as unemployed), and (b) *permanent job losers*, whose employment ended involuntarily and who began looking for work; (2) *Job leavers*, persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work; (3) *Persons who completed temporary jobs*, who began looking for work after the jobs ended; (4) *Reentrants*, persons who previously worked but were out of the labor force prior to beginning their job search; and (5) *New entrants*, persons who never worked. Each of these five categories of the unemployed can be expressed as a proportion of the entire civilian labor force; the sum of the four rates thus equals the unemployment rate for all civilian workers. (For statistical presentation purposes, "job losers" and "persons who completed temporary jobs" are combined into a single category until seasonal adjustments can be developed for the separate categories.)

Jobseekers. All unemployed persons who made specific efforts to find a job sometime during the 4-week period preceding the survey week are classified as jobseekers. Jobseekers do not include persons classified as on temporary layoff, who although often looking for work, are not required to do so to be classified as unemployed. Jobseekers are grouped by the methods used to seek work. Only active methods—which have the potential to result in a job offer without further action on the part of the jobseeker—qualify as job search. Examples include going to an employer directly or to a public or private employment agency, seeking assistance from friends or relatives, placing or answering ads, or using some other active 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. Passive methods, which do not qualify as job search, include reading (as opposed to answering or placing) “help wanted” ads and taking a job training course.

Labor force. This group comprises all persons classified as employed or unemployed in accordance with the criteria described above.

Unemployment rate. The unemployment rate represents the number unemployed as a percent of the labor force.

Participation rate. This represents the proportion of the population that is in the labor force.

Employment-population ratio. This represents the proportion of the population that is employed.

Not in the labor force. Included in this group are all persons in the civilian noninstitutional population who are neither employed nor unemployed. Information is collected on their desire for and availability to take a job at the time of the CPS interview, job search activity in the prior year, and reason for not looking in the 4-week period prior to the survey week. This group includes discouraged workers, defined as persons not in the labor force who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify.

Persons classified as not in the labor force who are in the sample for either their fourth or eighth month are asked additional questions relating to job history and workseeking intentions. These latter data are available on a quarterly basis.

Occupation, industry, and class of worker. This information for the employed applies to the job held in the reference week. Persons with two or more jobs are classified in the job at which they worked the greatest number of hours. The unemployed are classified according to their last job. The occupational and industrial classification of CPS data is based on the coding systems used in the 1990 census.

The class-of-worker breakdown assigns workers to the following categories: Private and government wage and salary workers, self-employed workers, and unpaid family workers. Wage and salary workers receive wages, salary, commissions, 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, trade, or farm. Only the unincorporated self-employed are included in the self-employed category in the class of worker typology. Self-employed persons who respond that their businesses are incorporated are included among wage and salary workers, because technically, they are paid employees of a corporation. 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.

Multiple jobholders. These are employed persons who, during the reference week, had either two or more jobs as a wage and salary worker, were self-employed and also held a wage and salary job, or worked as an unpaid family worker and also held a wage and salary job. Excluded are self-employed persons with multiple businesses and persons with multiple jobs as unpaid family workers.

Hours of work. These statistics relate to the actual number of hours worked during the reference 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 published figures relate to the number of hours worked in all jobs during the week; all the hours are credited to the major job. Unpublished data are available for the hours worked in each job and for usual hours.

At work part time for economic reasons. Sometimes referred to as involuntary part time, this category refers to individuals who gave an economic reason for working 1 to 34 hours during the reference week. Economic reasons include slack work or unfavorable business conditions, inability to find full-time work, and seasonal declines in demand. Those who usually work part time must also indicate that they want and are available to work full time to be classified as on part time for economic reasons.

At work part time for noneconomic reasons. This group includes those persons who usually work part time and were at work 1 to 34 hours during the reference week for a noneconomic reason. Noneconomic reasons include, for example: Illness or other medical limitations, child-care problems or other family or personal obligations, school or training, retirement or Social Security limits on earnings, and being in a job where full-time work is less than 35 hours. The group also includes those who gave an economic reason for usually working 1 to 34 hours but said they do not want to work full time or were unavailable for such work.

Usual full- or part-time status. Data on persons “at work” exclude persons who were temporarily absent from a job and therefore classified 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. In order to differentiate a person’s normal schedule from their activity during the reference week, persons are also classified according to their usual full- or part-time status. In this context, *full-time workers* are those who usually worked 35 hours or more (at all jobs combined). This group will include some individuals who worked less than 35 hours in the reference week for either economic or noneconomic reasons and those who are temporarily absent from work. Similarly, *part-time workers* are those who usually work less than 35 hours per week (at all jobs), regardless of the number of hours worked in the reference week. This may include some individuals who actually worked more than 34 hours in the reference week, as well as those who are temporarily absent from work. The *full-time labor force* includes all employed persons who usually work full time and unemployed persons who are either looking for full-time work or are on layoff from full-time jobs. The *part-time labor force* consists of employed persons who usually work part time and unemployed persons who are seeking or are on layoff from part-time jobs. Unemployment rates for full- and part-time workers are calculated using the concepts of the *full- and part-time labor force*.

White, black, and other. These are terms used to describe the race of persons. Included in the “other” group are American Indians, Alaskan Natives, and Asians and Pacific Islanders. Because of the relatively small sample size, data for “other” races are not published. In the enumeration process, race is determined by the household respondent.

Hispanic origin. This refers to persons who identified themselves in the enumeration process as Mexican, Puerto Rican, Cuban, Central or South American, or of other Hispanic origin or descent. Persons of Hispanic origin may be of any race; thus they are included in both the white and black population groups.

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

Usual weekly earnings. Data represent earnings before taxes and other deductions, and include any overtime pay, commissions, or tips usually received (at the main job in the case of multiple jobholders.) Earnings reported on a basis other than weekly (e.g., annual, monthly, hourly) are converted to weekly. 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 all self-employed persons regardless of whether or not their business’s were incorporated) who usually work full time on their sole or primary job.

Median earnings. These figures 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. These are the 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 living in 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 relates to persons who are separated due to marital problems, as well as husbands and wives who are living apart because one or the other was employed elsewhere, on duty with the Armed Forces, or any other reasons.

Household. A household consists of all persons—related family members and all unrelated persons—who occupy a housing unit and have no other usual address. 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. A family is defined as 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. 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.

HISTORICAL COMPARABILITY

Changes in concepts and methods

While current survey concepts and methods are very similar to those introduced at the inception of the survey in 1940, a number of changes have been made over the years to improve the accuracy and usefulness of the data. Some of the most important changes include:

- In 1945, the questionnaire was radically changed with

the introduction of four basic employment questions. Prior to that time, the survey did not contain specific question wording, but rather relied on a complicated scheme of activity prioritization.

- In 1953, the current 4-8-4 rotation system was adopted, whereby households are interviewed for 4 consecutive months, leave the sample for 8 months, and then return to the sample for the same 4 months of the following year. Before this system was introduced, households were interviewed for 6 consecutive months and then replaced. The new system provided some year-to-year overlap in the sample, thereby improving measurement over time.

- In 1955, the survey reference week was changed to the calendar week including the 12th day of the month, for greater consistency with the reference period used for other labor-related statistics. Previously, the calendar week containing the 8th day of the month had been used as the reference week.

- In 1957, the employment definition was modified slightly as a result of a comprehensive interagency review of labor force concepts and methods. Two relatively small groups of persons classified as employed, under “with a job but not at work,” were assigned to different classifications. Persons on layoff with definite instructions to return to work within 30 days of the layoff date, and persons volunteering that they were waiting to start a new wage and salary job within 30 days of interview, were, for the most part, reassigned to the unemployed classification. The only exception was the small subgroup in school during the reference week but waiting to start new jobs, which was transferred to not in the labor force.

- In 1967, more substantive changes were made as a result of the recommendations of the President’s Committee to Appraise Employment and Unemployment Statistics (the Gordon Committee). The principal improvements were as follows:

- a) A 4-week job search period and specific questions on jobseeking activity were introduced. Previously, the questionnaire was ambiguous as to the time period for jobseeking and there were no specific questions concerning job search methods.

- b) An availability test was introduced whereby a person must be currently available for work in order to be classified as unemployed. Previously, there was no such requirement. This revision to the concept mainly affected students, who, for example, may begin to look for summer jobs in the spring although they will not be available until June or July. Such persons, until 1967, had been classified as unemployed but since have been assigned to the “not in the labor force” category.

- c) Persons “with a job but not at work” because of strikes, bad weather, etc., who volunteered that they were looking for work, were shifted from unemployed status to employed.

- d) The lower age limit for official statistics on employment, unemployment, and other labor force concepts was raised from 14 to 16 years. Historical data for most major series have been revised to provide consistent information based on the new minimum age limit.

- e) New questions were added to obtain additional information on persons not in the labor force, including those referred to as “discouraged workers,” defined as persons who indicate that they want a job but are not currently looking because they believe there are no jobs available or none for which they would qualify.

- f) New “probing” questions were added to the questionnaire in order to increase the reliability of information on hours of work, duration of unemployment, and self-employment.

- In 1994, major changes to the Current Population Survey (CPS) were introduced, which included a complete redesign of the questionnaire and the use of computer-assisted interviewing for the entire survey. In addition, there were revisions to some of the labor force concepts and definitions, including the implementation of some changes recommended in 1979 by the National Commission on Employment and Unemployment Statistics (NCEUS, also known as the Levitan Commission). Some of the major changes to the survey were:

- a) The introduction of a redesigned and automated questionnaire. The CPS questionnaire was totally redesigned in order to obtain more accurate, comprehensive, and relevant information, and to take advantage of state-of-the-art computer interviewing techniques.

- b) The addition of two, more objective, criteria to the definition of discouraged workers. Prior to 1994, to be classified as a discouraged worker, a person must have wanted a job and be reported as not currently looking because of a belief that no jobs were available or that there were none for which he or she would qualify. Beginning in 1994, persons classified as discouraged must also have looked for a job within the past year (or since their last job, if they worked during the year), and must have been available for work during the reference week (a direct question on availability was added in 1994; prior to 1994, availability had been inferred from responses to other questions). These changes were made because the NCEUS and others felt that the previous definition of discouraged workers was too subjective, relying mainly on an individual’s stated desire for a job and not on prior testing of the labor market.

- c) Similarly, the identification of persons employed part time for economic reasons (working less than 35 hours in the reference week because of poor business conditions or because of an inability to find full-time work) was tightened by adding two new criteria for persons who usually work part time: They must want and be available for full-time work. Previously, such information was inferred. (Per-

sons who usually work full time but worked part time for an economic reason during the reference week are assumed to meet these criteria.)

d) Specific questions were added about the expectation of recall for persons who indicate that they are on layoff. To be classified as “on temporary layoff,” persons must expect to be recalled to their jobs. Previously, the questionnaire did not include explicit questions about the expectation of recall.

e) Persons volunteering that they were waiting to start a new job within 30 days must have looked for work in the 4 weeks prior to the survey in order to be classified as unemployed. Previously, such persons did not have to meet the job search requirement in order to be included among the unemployed.

For additional information on changes in CPS concepts and methods, see *Concepts and Methods used in Labor Force Statistics Derived from the Current Population Survey*, BLS Report 463, October 1976 and “Overhauling the Current Population Survey—Why is it Necessary to Change?,” “Redesigning the Questionnaire,” and “Evaluating Changes in the Estimates,” *Monthly Labor Review*, September 1993, and “Revisions in the Current Population Survey Effective January 1994,” in the February 1994 issue of this publication.

Noncomparability of labor force levels

In addition to the refinements in concepts, definitions, and methods made over the years, other changes have also affected the comparability of the labor force data.

- 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.

- 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.

- 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.

- 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; unemployment levels and rates were essentially unchanged.

- In March 1973, a subsequent population adjustment based on the 1970 census was introduced. 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.

- Beginning in January 1974, the method 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 this publication.

- Effective in July 1975, as a result of the large inflow 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, with all of the changes being confined to the “other” component of the 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 this publication.

- 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 adjustment 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 this publication.

- Beginning in January 1982, the second-stage ratio adjustment method was changed. 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 this publication. 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 the total population and in the 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 also is described in the February 1982 article cited above. The revisions did not, however, smooth out the breaks in series occurring between 1972 and 1979 (described above), and data users should consider them when comparing estimates from different periods.

- Beginning in January 1983, the first-stage ratio adjustment method was updated to incorporate data 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 this publication. 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 method 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 population and labor

force estimates were raised by about 425,000 and 305,000, respectively, and Hispanic 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 were 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.

- Beginning in August 1989, the second-stage ratio estimate cells were changed slightly to decrease the chance of very small cells occurring and to be more consistent with published age, sex, race cells. This change had virtually no effect on national estimates.

- Beginning in January 1994, 1990 census-based population controls, adjusted for the estimated undercount, were introduced into the second stage estimation procedure. This change resulted in substantial increases in total population and in all major labor force categories. Effective February 1996, these controls were introduced into the estimates for 1990-93. Under the new population controls, the civilian noninstitutional population for 1990 increased by about 1.1 million, employment by about 880,000, and unemployment by approximately 175,000. The overall unemployment rate rose by about 0.1 percentage point. For further information, see "Revisions in the Current Population Survey Effective January 1994," and "Revisions in Household Survey Data Effective February 1996" in the February 1994 and March 1996 issues, respectively, of this publication.

Additionally, for the period January through May 1994, the composite estimation procedure was suspended due to technical and logistical reasons.

- Beginning in January 1997, the population controls used in the second-stage ratio adjustment method were revised to reflect updated information on the demographic characteristics of immigrants to, and emigrants from, the United States. As a result, the civilian noninstitutional population 16 years and over was raised by about 470,000. The labor force and employment levels were increased by about 320,000, and 290,000, respectively. The Hispanic-origin population and labor force estimates were raised by about 450,000 and 250,000 respectively, and Hispanic employment by 325,000. Overall and subgroup unemployment rates and other percentages of labor market participation were not affected. An explanation of the changes and their effect on national labor force estimates appear in "Revisions in the Current Population Survey Effective January 1997" in the February 1997 issue of this publication.

Effective with data for January 1998, new composite estimation procedures and minor revisions in the population controls were introduced into the household survey. The new composite estimation procedures simplify processing of the monthly labor force data at BLS, allow users of the

survey microdata to replicate more easily the official estimates released by BLS, and increase the reliability of the employment and labor force estimates. The new procedures also produce somewhat lower estimates of the civilian labor force and employment and slightly higher estimates of unemployment. For example, based on 1997 annual average data, using old and new composite weights, the differences were as follows: Civilian labor force (-229,000), total employed (-256,000), and total unemployed (+27,000). Unemployment rates were not significantly affected.

The population controls used in the survey were revised to reflect new estimates of legal immigration to the U.S. and a change in the method for projecting the emigration of foreign-born legal residents. As a result, the Hispanic-origin population was raised by about 57,000; however, the total civilian noninstitutional population 16 years and over was essentially unchanged. More detailed information on these changes and their effect on the estimates of labor force change and composition appear in "Revisions in the Current Population Survey Effective January 1998," in the February 1998 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 this publication.

Beginning in January 1983, the occupational and industrial classification systems used in the 1980 census were introduced into the CPS. The 1980 census occupational classification system evolved from the Standard Occupational Classification (SOC) system and was 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 was based on the 1972 Standard Industrial Classification (SIC) system, as modified in 1977. The adoption of the new system had much less of an 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 this publication.

Beginning in January 1992, the occupational and industrial classification systems used in the 1990 census were introduced into the CPS. (These systems were largely based on the 1980 Standard Occupational Classification (SOC) and 1987 Standard Industrial Classification (SIC) systems, respectively.) There were a few breaks in comparability between the 1980 and 1990 census-based systems, particularly within the "technical, sales, and administrative support" categories. The most notable changes in industry classification were the shift of several industries from "business services" to "professional services" and the splitting of some industries into smaller, more detailed categories. A number of industry titles were changed as well, with no change in content.

Sampling

Since the inception of the survey, there have been various changes in the design of the CPS sample. The sample is traditionally redesigned and a new sample selected after each decennial census. Also, the number of sample areas and the number of sample persons are changed occasionally. Most of these changes are made in order to improve the efficiency of the sample design, increase the reliability of the sample estimates, or control cost.

Changes in this regard since 1960 are as follows: When Alaska and Hawaii received statehood in 1959 and 1960, respectively, three sample areas were added to the existing sample to account for the population of these States. In January 1978, a supplemental sample of 9,000 housing units, selected in 24 States and the District of Columbia, was designed to provide more reliable annual average estimates for States. In October 1978, a coverage improvement sample of approximately 450 sample household units representing 237,000 occupied mobile homes and 600,000 new construction housing units was added. In January 1980, another supplemental sample of 9,000 households selected in 32 States and the District of Columbia was added. A sample reduction of about 6,000 units was implemented in May 1981. In January 1982, the sample was expanded by 100 households to provide additional coverage in counties added to the Standard Metropolitan Statistical Areas (SMSA's), which were redefined in 1973. In January 1985, a new State-based CPS sample was selected based on 1980 census information. A sample reduction of about 4,000 households was implemented in April 1988; they were reinstated during the 8-month period, April-November 1989. A redesigned CPS sample based on the 1990 decennial census was selected for use during the 1990's. Households from this new sample

were phased into the CPS between April 1994 and July 1995. The July 1995 sample was the first monthly sample based entirely on the 1990 census. For further information on the 1990 sample redesign, see "Redesign of the Sample for the Current Population Survey" in the May 1994 issue of this publication.

The original 1990 census-based sample design included about 66,000 housing units per month located in 792 selected geographic areas called primary sampling units (PSU's). The sample was initially selected to meet specific reliability criteria for the Nation, for each of the 50 States and the District of Columbia, and for the sub-State areas of New York City and the Los Angeles-Long Beach metropolitan area. In 1996, the original sample design reliability criteria were modified to reduce costs. The current criteria, given below, are based on the coefficient of variation (CV) of the unemployment level, where the CV is defined as the standard error of the estimate divided by the estimate, expressed as a percentage. These CV controls assume a 6-percent unemployment rate to establish a consistent specification of sampling error.

The current sample design, introduced in January 1996, includes about 59,000 households from 754 sample areas and maintains a 1.9-percent CV on national monthly estimates of unemployment level. This translates into a change of 0.2 percentage point in the unemployment rate being significant at a 90-percent confidence level. For each of the fifty States and for the District of Columbia, the design maintains a CV of at most 8-percent on the annual average estimate of unemployment level, assuming a 6-percent unemployment rate. Due to the national reliability criterion, estimates for several large States are substantially more reliable than the State design criterion requires. Annual average unemployment estimates for California, Florida, New York, and Texas, for example, carry a CV of less than 4 percent.

In the first stage of sampling, the 754 sample areas are chosen. In the second stage, ultimate sampling unit clusters composed of about four housing units each are selected. Each month, about 59,000 housing units are assigned for data collection, of which about 50,000 are occupied and thus eligible for interview. The remainder are units found to be destroyed, vacant, converted to nonresidential use, containing persons whose usual place of residence is elsewhere, or ineligible for other reasons. Of the 50,000 housing units, about 6.5 percent are not interviewed in a given month due to temporary absence (vacation, etc.), other failures to make contact after repeated attempts, inability of persons contacted to respond, unavailability for other reasons, and refusals to cooperate (about half of the noninterviews). Information is obtained each month for about 94,000 persons 16 years of age or older.

Selection of sample areas. The entire area of the United States, consisting of 3,141 counties and independent cities, is divided into 2,007 sample units (PSU's). In most States, a PSU consists of a county or a number of contiguous coun-

ties. In New England and Hawaii, minor civil divisions are used instead of counties.

Metropolitan areas within a State are used as a basis for forming PSU's. Outside of metropolitan areas, counties normally are combined except when the geographic area of an individual county is too large. Combining counties to form PSU's provides greater heterogeneity; a typical PSU includes urban and rural residents of both high and low economic levels and encompasses, to the extent feasible, diverse occupations and industries. Another important consideration is that the PSU be sufficiently compact so that, with a small sample spread throughout, it can be efficiently canvassed without undue travel cost.

The 2,007 PSU's are grouped into strata within each State. Then one PSU is selected from each stratum with the probability of selection proportional to the population of the PSU. Nationally, there are a total of 428 PSU's in strata by themselves. These strata are self-representing and are generally the most populous PSU's in each State. The 326 remaining strata are formed by combining PSU's that are similar in such characteristics as unemployment, proportion of housing units with three or more persons, number of persons employed in various industries, and average monthly wages for various industries. The single PSU randomly selected from each of these strata is non-self-representing because it represents not only itself but the entire stratum. The probability of selecting a particular PSU in a non-self-representing stratum is proportional to its 1990 population. For example, within a stratum, the chance that a PSU with a population of 50,000 would be selected for the sample is twice that for a PSU having a population of 25,000.

Selection of sample households. Because the sample design is State based, the sampling ratio differs by State and depends on State population size as well as both national and State reliability requirements. The State sampling ratios range roughly from 1 in every 100 households to 1 in every 3,000 households. The sampling ratio occasionally is modified slightly to hold the size of the sample relatively constant given the overall growth of the population. The sampling ratio used within a sample PSU depends on the probability of selection of the PSU and the sampling ratio for the State. In a sample PSU with a probability of selection of 1 in 10 and a State sampling ratio of 3,000, a within-PSU sampling ratio of 1 in 300 achieves the desired ratio of 1 in 3,000 for the stratum.

The 1990 within-PSU sample design was developed using block-level data from the 1990 census. (The 1990 census was the first decennial census that produced data at the block level for the entire country.) Normally, census blocks are bounded by streets and other prominent physical features such as rivers or railroad tracks. County, Minor Civil Division, and census place limits also serve as block boundaries. In cities, blocks can be bounded by four streets and be quite small in land area. In rural areas, blocks can be several square miles in size.

For the purpose of sample selection, census blocks were grouped into three strata: Unit, group quarters, and area. (Occasionally, units within a block were split between the unit and group quarters strata.) The unit stratum contained regular housing units with addresses that were easy to locate (e.g. most single family homes, townhouses, condominiums, apartment units, and mobil homes). The group quarters stratum contained housing units where residents shared common facilities or received formal or authorized care or custody. Unit and group quarters blocks exist primarily in urban areas. The area stratum contains blocks with addresses that are more difficult to locate. Area blocks exist primarily in rural areas.

To reduce the variability of the survey estimates and to ensure that the within-PSU sample would reflect the demographic and socioeconomic characteristics of the PSU, blocks within the unit, group quarters, and area strata were sorted using geographic and block-level data from the census. Examples of the census variables used for sorting include proportion of minority renter-occupied housing units, proportion of housing units with female householders, and proportion of owner-occupied housing units. The specific sorting variables used differed by type of PSU (urban or rural) and stratum.

Within each block, housing units were sorted geographically and grouped into clusters of approximately four units. A systematic sample of these clusters was then selected independently from each stratum using the appropriate within-PSU sampling ratio. The geographic clustering of the sample units reduces field representative travel costs. Prior to interviewing, special listing procedures are used to locate the particular sample addresses in the group quarters and area blocks.

Units in the three strata described above all existed at the time of the 1990 decennial census. Through a series of additional procedures, a sample of building permits is included

in the CPS to represent housing units built after the decennial census. Adding these newly built units keeps the sample up-to-date and representative of the population. It also helps to keep the sample size stable: over the life of the sample, the addition of newly built housing units compensates for the loss of "old" units which may be abandoned, demolished, or converted to nonresidential use.

Rotation of sample. Part of the sample is changed each month. Each monthly sample is divided into eight representative subsamples or rotation groups. A given rotation group is interviewed for a total of 8 months, divided into two equal periods. It is in the sample for 4 consecutive months, leaves the sample during the following 8 months, and then returns for another 4 consecutive months. In each monthly sample, one of the eight rotation groups is in the first month of enumeration, another rotation group is in the second month, and so on. Under this system, 75 percent of the sample is common from month to month and 50 percent from year to year for the same month. This procedure provides a substantial amount of month-to-month and year-to-year overlap in the sample, thus providing better estimates of change and reducing discontinuities in the series of data without burdening any specific group of households with an unduly long period of inquiry.

CPS sample, 1947 to present. Table 1-A provides a description of some aspects of the CPS sample designs in use since 1947. 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. A description of the 1990 census-based sample design appears in "Redesign of the Sample for the Current Population Survey," in the May 1994 issue of this publication.

Table 1-A. Characteristics of the CPS sample, 1947 to present

Time period	Number of sample areas	Households eligible		Households visited but not eligible
		Interviewed	Not interviewed	
Aug. 1947 to Jan. 1954	68	21,000	500-1,000	3,000-3,500
Feb. 1954 to Apr. 1956	230	21,000	500-1,000	3,000-3,500
May 1956 to Dec. 1959	1330	33,500	1,500	6,000
Jan. 1960 to Feb. 1963	2333	33,500	1,500	6,000
Mar. 1963 to Dec. 1966	357	33,500	1,500	6,000
Jan. 1967 to July 1971	449	48,000	2,000	8,500
Aug. 1971 to July 1972	449	45,000	2,000	8,000
Aug. 1972 to Dec. 1977	461	45,000	2,000	8,000
Jan. 1978 to Dec. 1979	614	53,500	2,500	10,000
Jan. 1980 to Apr. 1981	629	62,200	2,800	12,000
May 1981 to Dec. 1984	629	57,800	2,500	11,000
Jan. 1985 to Mar. 1988	729	57,000	2,500	11,000
Apr. 1988 to Mar. 1989	729	53,200	2,600	11,500
April 1989 to Oct. 1994 ³	729	57,400	2,600	11,800
Nov. 1994 to Aug. 1995 ⁴	792	54,500	3,500	10,000
Sept. 1995 to Dec. 1995	792	52,900	3,400	9,700
Jan. 1996 to present	754	46,800	3,200	9,000

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.

³ The sample was increased incrementally during the 8-month period, April-November 1989.

⁴ Includes 2,000 additional assigned housing units from Georgia and Virginia that were gradually phased in during the 10-month period, October 1994-August 1995.

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. Since 1985, most sample persons within the same State have had the same probability of selection. Some selection probabilities may differ within a State due to the sample design or for operational reasons. Field subsampling, for example, which is carried out when areas selected for the sample are found to contain many more households than expected, may cause probabilities of selection to differ for some sample areas within a State. Through a series of estimation steps (outlined below), the selection probabilities are adjusted for noninterviews and survey undercoverage; data from previous months are incorporated into the estimates through the composite estimation procedure.

1. *Noninterview adjustment.* The weights for all interviewed households are adjusted 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 for clusters of similar sample areas that are usually, but not necessarily, contained within a State. Similarity of sample areas is based on Metropolitan Statistical Area (MSA) status and size. Within each cluster, there is a further breakdown by residence. Each MSA cluster is split by "central city" and "balance of the MSA." Each non-MSA cluster is split by "urban" and "rural" residence categories. The proportion of sample households not interviewed varies from 6 to 7 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 State of residence. Because 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 adjustment, as follows:

a. *First-stage ratio estimation.* The purpose of the first-stage ratio adjustment is to reduce the contribution to variance that results from selecting a sample of PSU's rather than drawing sample households from every PSU in the Nation. This adjustment is made to the CPS weights in two race cells: Black and nonblack; it is applied only to PSU's

that are not self-representing and for those States that have a substantial number of black households. The procedure corrects for differences that existed in each State cell at the time of the 1990 census between 1) the race distribution of the population in sample PSU's and 2) the race distribution of all PSU's (both 1 and 2 exclude self-representing PSU's).

b. *Second-stage ratio estimation.* This procedure substantially reduces the variability of estimates and corrects, to some extent, for CPS undercoverage. The CPS sample weights are adjusted to ensure that sample-based estimates of population match independent population controls. Three sets of controls are used:

1) 51 State controls of the civilian noninstitutional population 16 years of age and older,

2) National civilian noninstitutional population controls for 14 Hispanic and 5 non-Hispanic age-sex categories,

3) National civilian noninstitutional population controls for 66 white, 42 black, and 10 "other" age-sex categories.

The independent population controls are prepared by projecting forward the resident population as enumerated on April 1, 1990. The projections are derived by updating demographic census data with information from a variety of other data sources that account for births, deaths, and net migration. Estimated numbers of resident Armed Forces personnel and institutionalized persons reduce the resident population to the civilian noninstitutional population. Estimates of net census undercount, determined from the Post Enumeration Survey, are added to the population projections. Prior to January 1994, the projections were based on earlier censuses, and there was no correction for census undercount. A summary of the current procedures used to make population projections is given in "Revisions in the Current Population Survey Effective January 1994," appearing in the February 1994 issue of this publication.

3. *Composite estimation procedure.* The last step in the preparation of most CPS estimates makes use of a composite estimation procedure. The composite estimate consists of a weighted average of two factors: The two-stage ratio estimate based on the entire sample from the current month and the composite estimate for the previous month, plus an estimate of the month-to-month change based on the six rotation groups common to both months. In addition, a bias adjustment term is added to the weighted average to account for relative bias associated with month-in-sample estimates. This month-in-sample bias is exhibited by unemployment estimates for persons in their first and fifth months in the CPS being generally higher than estimates obtained for the other months.

The composite estimate results in a reduction in the sampling error beyond that which is achieved after the two stages of ratio adjustment. For some items, the reduction is substantial. The resultant gains in reliability are greatest in estimates of month-to-month change, although gains are also usually obtained for estimates of level in a given month, change from year to year, and change over other intervals of time.

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 indicate primarily the magnitude of the sampling error. They also incorporate the effect of some nonsampling errors in response and enumeration but do not account for 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., the inability to obtain information about all persons in the sample; differences in the interpretation of questions; inability or unwillingness of respondents to provide correct information; inability to recall information; errors made in collecting and 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 are 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. The CPS covers about 92 percent of the decennial census population (adjusted for census undercount). 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 than for whites. Ratio adjustment to independent age-sex-race-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-origin group.

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 errors and describes attempts to measure them in the CPS.

Sampling error. When a sample rather than the entire population is surveyed, estimates differ from the true population values that they represent. This difference, or sampling error, occurs by chance, and its variability is measured by the standard error of the estimate. Sample estimates from a given survey design are unbiased when an average of the estimates from all possible samples would yield, hypothetically, the true population value. In this case, the sample estimate and its standard error can be used to construct approximate confidence intervals, or ranges of values, that include the true population value with known probabilities. If the process of selecting a sample from the population were repeated many times and an estimate and its standard error calculated for 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 true population value.
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 true population value
3. Approximately 95 percent of the intervals from two

standard errors below the estimate to two standard errors above the estimate would include the true population value.

Although the estimating methods used in the CPS do not produce unbiased estimates, biases for most estimates are believed to be small enough so that these confidence interval statements are approximately true.

Since it would be too costly to develop standard errors for all CPS estimates, generalized variance function techniques are used to calculate sets of standard errors for various types of labor force characteristics. It is important to keep in mind that standard errors computed from these methods reflect contributions from sampling errors and some kinds of nonsampling errors and indicate the general magnitude of an estimate's standard error rather than its precise value.

The generalized variance functions and standard errors provided here are based on the sample design and estimation procedures as of 1987 and have been adjusted to reflect the population levels and sample size as of 1996. Standard errors for years prior to 1996 may be roughly approximated by adjusting, as follows, the standard errors presented here.

1. For the years 1967 through 1995, multiply the standard errors by 0.96.
2. For the years 1956 through 1966, multiply the standard errors by 1.17.
3. For years prior to 1956, multiply the standard errors by 1.44.

More accurate standard error estimates for historical CPS data may be found in previous issues of this publication.

Tables 1-B through 1-H are provided so that approximate standard errors of estimates can be easily obtained. These tables are briefly summarized here; details illustrating the proper use of each table follow.

Tables 1-B and 1-C show standard errors for estimated monthly levels and rates for selected employment status characteristics; these tables also provide standard errors for consecutive month-to-month changes in the estimates. These standard errors are based on levels of recent estimates and can be determined directly by finding the characteristic of interest.

Tables 1-D and 1-E show standard errors for monthly levels and consecutive monthly changes in levels for general employment status characteristics. The standard errors are calculated using linear interpolation based on the size of the monthly estimates.

Tables 1-F and 1-G give parameters that can be used with formulas to calculate a standard error on nearly any specified level, unemployment rate, percentage, or consecutive month-to-month change. For monthly levels and consecutive month-to-month changes in levels, tables 1-F and 1-G are preferred to tables 1-D and 1-E, since the formulas provide more accurate results than linear interpolation.

Table 1-B. Standard errors for major employment status categories
(In thousands)

Category	Monthly level	Consecutive-month change
Total, 16 years and over:		
Civilian labor force	293	216
Employed	312	235
Unemployed	145	161
Men, 20 years and over:		
Civilian labor force	194	164
Employed	206	174
Unemployed	97	113
Women, 20 years and over:		
Civilian labor force	219	165
Employed	224	171
Unemployed	91	105
Both sexes, 16 to 19 years:		
Civilian labor force	97	95
Employed	96	95
Unemployed	62	81
Black, 16 years and over:		
Civilian labor force	138	101
Employed	140	105
Unemployed	66	76
Men, 20 years and over:		
Civilian labor force	78	69
Employed	71	72
Unemployed	43	50
Women, 20 years and over:		
Civilian labor force	98	73
Employed	97	74
Unemployed	44	51
Both sexes, 16 to 19 years:		
Civilian labor force	40	42
Employed	35	37
Unemployed	32	37
Hispanic origin, 16 years and over:		
Civilian labor force	130	91
Employed	134	107
Unemployed	63	73

Table 1-H presents factors used to convert standard errors of monthly levels and rates determined from tables 1-B, 1-C, 1-D, and 1-F to standard errors pertaining to quarterly and yearly averages, consecutive year-to-year changes of monthly estimates, and changes in quarterly and yearly averages.

The standard errors for estimated changes from 1 month to the next, 1 year to the next, etc., depend more on the monthly levels for characteristics than on the size of the changes. Accordingly, tables 1-E, 1-G, and 1-H use monthly levels (not the magnitude of the changes) for approximating standard errors of change. Standard errors for estimated change between nonconsecutive months are not provided (except for year-to-year change); however, these may be assumed to be higher than the standard errors for consecutive monthly change.

Table 1-C. Standard errors for unemployment rates by major characteristics

Characteristic	Monthly level	Consecutive-month change
Total, 16 years and over	0.11	0.13
Men, 16 years and over .....	.15	.18
Men, 20 years and over .....	.14	.17
Women, 16 years and over .....	.16	.19
Women, 20 years and over .....	.16	.19
Both sexes, 16 to 19 years .....	.74	.97
White workers .....	.11	.13
Black workers .....	.45	.53
Hispanic-origin workers .....	.50	.59
Married men, spouse present .....	.15	.18
Married women, spouse present .....	.18	.22
Women who maintain families .....	.54	.64
Occupation		
Executive, administrative, and managerial ..	.20	.24
Professional specialty .....	.20	.23
Technicians and related support .....	.45	.54
Sales .....	.30	.36
Administrative support, including clerical .....	.25	.30
Private household	1.75	2.08
Protective service .....	.67	.80
Service, except private household and protective service .....	.38	.45
Precision production, craft, and repair .....	.34	.40
Machine operators, assemblers, and inspectors .....	.49	.58
Transportation and material moving .....	.55	.66
Handlers, equipment cleaners, helpers, and laborers .....	.73	.87
Farming, forestry, and fishing .....	.73	.87
Industry		
Nonagricultural private wage and salary workers .....	.13	.15
Goods-producing industries .....	.25	.30
Mining	1.39	1.65
Construction .....	.68	.81
Manufacturing .....	.26	.31
Durable goods .....	.32	.38
Nondurable goods .....	.42	.50
Service-producing industries .....	.15	.18
Transportation, communications, and public utilities .....	.42	.50
Wholesale and retail trade .....	.27	.32
Finance and services .....	.19	.23
Government workers .....	.21	.25
Agricultural wage and salary workers	1.18	1.40

Use of tables 1-B and 1-C. These tables provide a quick reference for standard errors of major characteristics. Table 1-B gives approximate standard errors for estimates of monthly levels and consecutive month-to-month changes in levels for major employment status categories. Table 1-C gives approximate standard errors for estimates of monthly unemployment rates and consecutive month-to-month changes in unemployment rates for some demographic, industrial, and occupational categories. For characteristics not given in tables 1-B and 1-C, refer to either tables 1-D and 1-E or tables 1-F and 1-G.

Illustration. Suppose that for a given month the number of women 20 years and over in the civilian labor force is estimated to be 54,000,000. For this characteristic, the approximate standard error of 219,000 is given in table 1-B in the row, "Total, 16 years and over: Women, 20 years and over: Civilian labor force." A 90-percent confidence interval, as shown by these data, would then be the interval from 53,650,000 to 54,350,000. Concluding that the true labor force level lies within this interval would be correct for roughly 90 percent of all possible samples.

Use of tables 1-D and 1-E. From these tables, approximate standard errors can be calculated for estimates of monthly levels and month-to-month changes in levels for major labor force characteristics by race and Hispanic origin. For major categories not shown, such as male or female, tables 1-F and 1-G can be used. Standard errors for intermediate values not shown in the tables may be approximated by linear interpolation. For table 1-E, which applies to estimates of consecutive month-to-month change, the average of the two monthly levels (not the change) is used to select the appropriate row in the table.

Illustration. Assume that between 2 consecutive months the estimated number of employed persons changed from 115,600,000 to 116,700,000, an apparent increase of 1,100,000. The approximate standard error on this month-to-month change estimate is based on the average level of the estimate for the 2 months, 116,150,000. Using the table 1-E column titled "Labor force data other than agricultural employment and unemployment, Total," it is necessary to find the standard errors corresponding to the two monthly level entries between which the value 116,150,000 lies. The standard error corresponding to 100,000,000 is given as 274,000, and the standard error corresponding to 120,000,000 is given as 246,000. Use linear interpolation to find the approximate standard error on month-to-month change corresponding to the level 116,150,000; one method of calculation is given below.

$$246,000 + \left(\frac{120,000,000 - 116,150,000}{120,000,000 - 100,000,000} \right) (274,000 - 246,000) \doteq 251,000$$

Thus, a 90-percent confidence interval for the true month-to-month change would be approximately the interval from 698,000 to 1,502,000.

Use of tables 1-F and 1-G. These tables can be used to find approximate standard errors for a wide range of estimated monthly levels, proportions, rates, and estimates of consecutive monthly change. Instead of displaying standard errors, these tables provide parameters to be used with the formulas given below that allow the user to calculate standard errors.

Table 1-D. Standard errors for estimates of monthly levels
(In thousands)

Estimated monthly level	Characteristic									
	Agricultural employment		Unemployment			Labor force data other than agricultural employment and unemployment				
	Total or white	Black	Total or white	Black	Hispanic origin	Total	White	Black	Hispanic origin	
									Employed	Civilian labor force or not in labor force
50	12	13	12	13	13	12	12	13	14	14
100	18	18	17	18	19	17	17	18	20	20
500	41	39	38	39	42	39	39	39	44	44
1,000	62	55	54	54	59	54	54	55	61	61
2,000	96	76	76	74	82	77	77	76	83	83
4,000	157		107	96	113	108	108	103	111	111
6,000	216		131	106		131	131	120	126	126
8,000	273		150	108		151	150	131	134	134
10,000	330		167	101		168	167	137	135	135
15,000			201			202	201	137	110	110
20,000			228			229	227	113		
30,000						271	267			
40,000						302	296			
50,000						324	315			
60,000						340	327			
70,000						350	333			
80,000						354	333			
100,000						349	313			
120,000						322	264			
140,000						267	159			
160,000										
180,000										

Table 1-E. Standard errors for estimates of month-to-month change in levels
(In thousands)

Estimated monthly level	Characteristic									
	Agricultural employment		Unemployment			Labor force data other than agricultural employment and unemployment				
	Total or white	Black	Total or white	Black	Hispanic origin	Total	White	Black	Hispanic origin	
									Employed	Civilian labor force or not in labor force
50	14	12	14	15	16	10	10	10	12	10
100	19	17	20	21	22	14	14	15	17	14
500	43	37	46	46	50	32	32	33	37	31
1,000	59	52	64	63	69	45	45	45	51	43
2,000	78	72	89	84	95	63	63	62	70	59
4,000	95		124	104	127	88	88	84	93	78
6,000	94		148	106		108	108	97	105	89
8,000	73		166	92		123	123	104	110	94
10,000			180	47		137	137	108	110	95
15,000			204			165	165	100	79	76
20,000			215			187	187	58		
30,000						221	221			
40,000						245	245			
50,000						262	262			
60,000						274	274			
70,000						281	281			
80,000						283	283			
100,000						274	274			
120,000						246	246			
140,000						188	188			
160,000										
180,000										

Table 1-G, which applies to estimates of consecutive monthly change, lists parameters for some characteristics classified by a measure of correlation between monthly estimates. Estimates of the number of persons employed full time, for example, change relatively little from one month to the next, and the two monthly estimates are said to be highly correlated. Consecutive monthly estimates of part-time employment, by contrast, have low correlation, since these estimates are relatively volatile.

Major characteristics for which consecutive monthly estimates are known to have high or low correlation are indicated in table 1-G. Not all categories in table 1-G, however, are broken down into low or high correlation characteristics. When high or low correlation is not specified in table 1-G, the parameters in table 1-G should be selected from the rows labeled "Most characteristics" or from rows not specifying correlation.

Standard errors of estimated levels. The approximate standard error, s_x , of an estimated monthly level, x , can be obtained using the formula below, where a and b are the parameters from table 1-F associated with the particular characteristic. The same formula can be used to approximate the standard error of an estimated month-to-month change in level; simply average the levels for the 2 consecutive months and use the parameters from table 1-G.

$$s_x = \sqrt{ax^2 + bx}$$

Illustration. Assume that in a given month there are an estimated 6 million unemployed men in the civilian labor force ($x = 6,000,000$). Obtain the appropriate a and b parameters from table 1-F ("Unemployment: Total or white"). Use the formula to compute an approximate standard error on the estimate of 6,000,000.

$$a = -0.000017962 \quad b = 2957.13$$

$$s_x = \sqrt{(-0.000017962)(6,000,000)^2 + (2957.13)(6,000,000)} \doteq 131,000$$

Suppose that in the next month the estimated number of unemployed men increases by 200,000 to 6,200,000. The average of the monthly levels is $x = 6,100,000$. Obtain the appropriate a and b parameters from table 1-G ("Unemployment: Total or white, Total, men, women"). Use the formula to compute an approximate standard error on the estimated change of 200,000.

$$a = -0.000093662 \quad b = 4191.84$$

$$s_x = \sqrt{(-0.000093662)(6,100,000)^2 + (4191.84)(6,100,000)} \doteq 149,000$$

An approximate 90-percent confidence interval for the true month-to-month change would be the interval from

-38,000 to 438,000. Because this interval covers zero, one cannot assert at this level of confidence that any real change has occurred in the unemployment level. This result can also be expressed by saying that the apparent change of 200,000 is not significant at a 90-percent confidence level.

Standard errors of estimated percentages and rates. Generally, percentages and rates are not published unless the monthly base (denominator) is greater than 75,000 persons, the quarterly average base is greater than 60,000 persons, or the annual average base is greater than 35,000 persons.

The reliability of an estimated percentage or rate depends upon the magnitude of the percentage or rate and its base. When the numerator and base are in different categories, use the parameters from table 1-F or 1-G relevant to the numerator. The approximate standard error, $s_{y,p}$, of an estimated percentage or rate, p , can be obtained using the following formula, where y is the estimated number of persons in the base.

$$s_{y,p} = \sqrt{\frac{b}{y} p(100-p)}$$

Illustration. For a given month, suppose that 5,600,000 women, 20 to 24 years of age, are estimated to be employed. Of this total, 1,800,000 or 32 percent are classified as part-time workers. To estimate the standard error on this percentage, proceed as follows. Obtain the parameter $b = 2529.99$ from table 1-F ("Labor force and not-in-labor-force data other than agricultural employment and unemployment: Total, Women"). Apply the formula to obtain:

$$s_{y,p} = \sqrt{\frac{2529.99}{5,600,000} (32)(100-32)} \doteq 1.0 \text{ percent}$$

Suppose that in the next month 5,700,000 women in this same age group are reported employed and that 1,950,000 or 34 percent are part-time workers. To estimate the standard error on the observed month-to-month change of 2 percentage points, first average the values for p and y over the 2 months to get $p = 33$ percent and $y = 5,650,000$. Next, obtain the parameter $b = 2690.59$ from table 1-G ("Labor force and not-in-labor-force data other than agricultural employment and unemployment: Total or white, Women: Low correlation characteristics") and apply the formula as follows.

$$s_{y,p} = \sqrt{\frac{2690.59}{5,650,000} (33)(100-33)} \doteq 1.0 \text{ percent}$$

It should be noted that the numerator of the percentage (part-time employed) determined the choice of correlation.

Table 1-F. Parameters for computation of standard errors for estimates of monthly levels

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total ¹	-0.00017682	2985.26
Men ¹	-0.00032770	2764.05
Women	-0.00029553	2529.99
Both sexes, 16 to 19 years	-0.00171805	2544.62
White ¹	-0.00020028	2984.72
Men	-0.00036840	2766.67
Women	-0.00033710	2526.82
Both sexes, 16 to 19 years	-0.00204195	2549.88
Black	-0.00125300	3139.26
Men	-0.00302096	2930.79
Women	-0.00182509	2637.41
Both sexes, 16 to 19 years	-0.01294516	2949.48
Hispanic origin	-0.00206380	3895.71
Not in labor force, total or white, excluding women and 16-to-19 year olds .....	.000005931	828.79
Agricultural employment:		
Total or white .....	.000782035	3048.57
Men .....	.000858136	2825.09
Women or both sexes, 16 to 19 years	-0.00024885	2582.39
Black	-0.00134884	3154.76
Hispanic origin:		
Total or women .....	.011857446	2894.85
Men or both sexes, 16 to 19 years .....	.015736341	1702.50
Unemployment:		
Total or white	-0.00017962	2957.13
Black	-0.00212109	3149.77
Hispanic origin	-0.00101820	3576.47

¹ Excludes not-in-labor-force data.

If the example had illustrated percentages of women employed full time, the numerator would have been a high correlation characteristic. Table 1-G, however, does not explicitly list high correlation parameters for employed women; thus, the row labeled "Women, Most characteristics" would have been used.

Had the example dealt with teenage women employed part time, either of two rows in table 1-G could have been applied ("Women: Low correlation characteristics" or "Both sexes, 16 to 19 years"). In situations like this, where it is not clear which row applies, a general rule to follow is to choose the row with the largest b parameter. This gives a more conservative estimate of standard error.

Use of table 1-H. Use this table with table 1-B, 1-C, 1-D, or 1-F to calculate approximate standard errors for quarterly

or yearly averages, changes in consecutive quarterly or yearly averages, and consecutive year-to-year changes in monthly estimates. Table 1-H gives factors that can be used to convert standard errors for monthly levels into standard errors for other time periods and changes over time. Follow these three basic steps:

Step 1. Average estimates appropriately. For quarterly estimates, average the 3 monthly estimates. For yearly estimates, average the 12 monthly estimates. For changes in consecutive averages, average over the 2 quarters or 2 years. For consecutive year-to-year changes in monthly estimates, average the 2 months involved.

Step 2. Obtain a standard error on a monthly estimate using table 1-B or 1-C, or apply the procedures for table 1-D or 1-F to the average calculated in step 1, as if the average were an estimate for a single month.

Step 3. Determine the standard error on the average or on the estimate of change. Multiply the result from step 2 by the appropriate factor from table 1-H.

Illustration. Suppose that standard errors are desired for a quarterly average of black employment levels and for the change in averages from 1 quarter to the next. For each successive month of the first quarter, suppose the levels are observed to be 11,500,000, 11,600,000, and 11,700,000.

Step 1. The quarterly average is 11,600,000.

Step 2. Obtain the a and b parameters from table 1-F ("Labor force and not-in-labor-force data other than agricultural employment and unemployment: Black"). Use the formula for s_x to compute an approximate standard error for a monthly estimate of 11,600,000.

$$a = -0.000125300 \quad b = 3139.26$$

$$s_x = \sqrt{(-0.000125300)(11,600,000)^2 + (3139.26)(11,600,000)} \doteq 140,000$$

Step 3. Multiply this result by the factor .87 from table 1-H (column labeled "Quarterly averages" and row labeled "Labor force and not-in-labor-force data other than agricultural employment and unemployment, Black"). This gives an approximate standard error of 122,000 on the quarterly average of 11,600,000.

Proceed to obtain the approximate standard error on the change in consecutive quarterly average estimates of black employment. Assume that black employment estimates for the months in the second quarter are observed to be 11,100,000, 11,200,000, and 11,300,000.

Step 1. The average for the second quarter is 11,200,000.

Table 1-G. Parameters for computation of standard errors for estimates of month-to-month change in levels

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total or white:		
Most characteristics	-0.000012482	2001.12
High correlation characteristics ¹	-0.00009288	1564.84
Low correlation characteristics ¹	-0.00016162	2550.56
Men:		
Most characteristics	-0.00022599	1921.13
High correlation characteristics	-0.00016814	1500.99
Low correlation characteristics	-0.00058387	2668.56
Women:		
Most characteristics	-0.00021229	1689.99
Low correlation characteristics	-0.00059785	2690.59
Both sexes, 16 to 19 years	-0.00186555	2616.54
Black:		
Most characteristics	-0.00098960	2147.36
Low correlation characteristics	-0.01928030	6513.82
Men:		
Most characteristics	-0.00234427	2280.03
Low correlation characteristics	-0.02881467	5829.60
Women:		
Most characteristics	-0.00156363	1860.78
Low correlation characteristics	-0.02311407	5420.13
Both sexes, 16 to 19 years	-0.01288452	3131.77
Hispanic origin:		
Total	-0.00157201	2774.53
Civilian labor force and not in labor force	-0.00102898	1930.51
Low correlation characteristics	-0.02624078	8620.43
Men, civilian labor force and not in labor force	-0.00248038	2347.42
Men, 16 years and over; 20 years and over; and both sexes, 16 to 19 years	-0.00398909	3615.62
Women, 16 years and over and 20 years and over	-0.00338741	2569.69
Agricultural employment:		
Total or white:		
Total	-0.000395757	3838.04
Men	-0.000672985	3959.25
Women or both sexes, 16 to 19 years .....	.000130289	2367.00
Black:		
Total or women	-0.00122355	2861.72
Men or both sexes, 16 to 19 years	-0.19110769	5876.77
Hispanic origin:		
Total or women .....	.002872129	4640.81
Men or both sexes, 16 to 19 years .....	.002884390	4028.10
Self-employed	-0.00245791	2091.57
Unemployment: ²		
Total or white:		
Total, men, women	-0.00093662	4191.84
Both sexes, 16 to 19 years and low correlation characteristics	-0.00071624	5121.75
Black:		
Total, men, women, and both sexes, 16 to 19 years	-0.000414217	4361.16
High correlation characteristics .....	.000048170	3088.91
Hispanic origin:		
Total, men, women	-0.000252897	5054.25
Both sexes, 16 to 19 years and low correlation characteristics	-0.000996431	7037.75

¹ High correlation characteristics include employed full-time, manufacturing, service workers, and not in the labor force. Low correlation characteristics include all part-time workers; employed, with a job, but not at work; unpaid family workers; and precision production, craft, and repair occupations.

² High correlation characteristics include full-time jobseekers; job losers; manufacturing workers; and operators, fabricators, and laborers. Low correlation characteristics include part-time jobseekers, reentrants, persons unemployed for less than 5 weeks and from 5 to 14 weeks.

The average of the 2 quarters is 11,400,000.

Step 2. Obtain the a and b parameters as above and use the formula for s_x to compute an approximate standard error for the estimate of 11,400,000, treating it as an estimate for a single month.

$$S_x = \sqrt{(-0.000125300)(11,400,000)^2 + (3139.26)(11,400,000)} = 140,000$$

Step 3. Multiply this result by the factor .84 from table

1-H (column labeled "Change in quarterly averages" and row labeled "Labor force and not-in-labor-force data other than agricultural employment and unemployment, Black"). This gives an approximate standard error of 118,000 on the estimated change of 400,000 from one quarter to the next.

The estimated change clearly exceeds 2 standard errors; therefore, one could conclude from these data that the change in quarterly averages is significant.

Table 1-H. Factors to be used with tables 1-B, 1-C, 1-D, and 1-F 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	0.92	0.70	0.79	0.70
Women	1.30	.82	.84	.57	.70
Both sexes, 16 to 19 years	1.30	.78	.88	.49	.70
Part time	1.40	.80	.80	.59	.70
Unemployment:					
Total	1.40	.74	.88	.46	.65
Part time	1.40	.67	.88	.42	.54
Labor force and not-in-labor-force data other than agricultural employment and unemployment:					
Total or white	1.30	.87	.85	.65	.70
Black	1.30	.87	.84	.65	.70
Hispanic origin	1.30	.87	.80	.65	.70
Both sexes, 16 to 19 years	1.30	.79	.88	.54	.70
Part time	1.40	.82	.90	.51	.60

Establishment Data ("B" tables)

COLLECTION

BLS cooperates with State employment security agencies in the Current Employment Statistics (CES) or establishment survey to collect data each month on employment, hours, and earnings from a sample of nonfarm establishments (including government). This sample includes about 390,000 reporting units. From these data, a large number of employment, hours, and earnings series in considerable industry and geographic detail are prepared and published each month. Historical statistics are available on the Internet at: <http://stats.bls.gov>

Each month, the State agencies collect data on employment, payrolls, and paid hours from a sample of establishments. Data are collected by mail from most respondents; phone collection is used to obtain higher response rates from selected respondents through computer-assisted interviews, touch-tone self-response, and voice recognition technology.

The respondents extract the requested data from their payroll records, which must be maintained for a variety of tax and accounting purposes. All firms with 250 employees or more are asked to participate in the survey, as well as a sample of smaller firms.

A "shuttle" schedule (BLS form 790 series) is used for mail respondents. It is submitted each month by the respondents, edited by the State agency, and returned to the respondent for use again the following month.

The technical characteristics of the shuttle schedule are particularly important in maintaining continuity and consistency in reporting from month to month. The shuttle design automatically exhibits the trends of the reported data covered by the schedule during the year; therefore, the relationship of the current data to the data for the previous months is shown. The schedule also has operational advantages. For example, accuracy and economy are achieved by entering the identification codes and the address of the reporter only once a year.

All schedules are edited by the State agencies each month to make sure that the data are correctly reported and that they are consistent with the data reported by the establishment in earlier months and with the data reported by other establishments in the industry. The State agencies forward the data, either on the schedules themselves or in machine-readable form, to BLS-Washington. They also use the information provided on the forms to develop State and area estimates of employment, hours, and earnings. At BLS, the data are edited again by computer to detect processing and reporting errors which may have been missed in the initial State editing; the edited data are used to prepare national estimates.

It should be noted that for employment, the sum of the State figures will differ from the official U.S. national totals because of the effects of differing industrial and geo-

graphic stratification and differences in the timing of benchmark adjustments.

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 (beginning with August 1990 data) and for States and areas (beginning with January 1990 data) are classified in accordance with the *1987 Standard Industrial Classification Manual* (SIC), Office of Management and Budget.

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 day 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 are also excluded.

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

Indexes of diffusion of employment change (table B-6). These indexes measure the dispersion among industries of the change in employment over the specified time span.

Beginning with August 1990 data, the overall indexes are calculated from 356 seasonally adjusted employment series (3-digit industries) covering all nonfarm payroll employment in the private sector. The manufacturing diffusion indexes are based on 139 3-digit industries.

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

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

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

Industry hours and earnings

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

Production and related workers. This category includes 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. This group includes 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. These are 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. This refers to 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 day 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. Employee benefits (such as health and other types of insurance, contributions to retirement, etc., paid by the employer) are also excluded.

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

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

Indexes of aggregate weekly hours. The indexes of aggregate weekly hours are prepared by dividing the current month's aggregate by the average of the 12 monthly fig-

ures for 1982. 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.

Because overtime hours are premium hours by definition, weekly hours and overtime hours do not necessarily move in the same direction from month to month. Such factors as work stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on average hours. 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.

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

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

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

For each sample establishment in SIC 3721 and SIC 3761

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

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

Railroad hours and earnings. The figures for Class I railroads plus Amtrak (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. 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-term 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. These earnings are in constant dollars and 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). The reference year for these series is 1982.

ESTIMATING METHODS

The Current Employment Statistics (CES) or establishment survey estimates of employment are generated through an annual benchmark and monthly sample link procedure. Annual universe counts or benchmark levels are generated primarily from administrative records on employees covered by unemployment insurance (UI) tax laws. These annual benchmarks, established for March of each year, are projected forward for each subsequent month based on the trend of the sample employment, using an estimation procedure called the link relative. Benchmarks and sample link relatives are computed for each of 1,698 basic estimation cells defined by industry, size, and geography for the CES national estimates, and summed to create aggregate level employment estimates.

Benchmarks

The establishment survey constructs annual benchmarks in order to realign the sample-based employment totals for March of each year with the UI-based population counts for March. These population counts are much less timely than sample-based estimates; however, they provide an annual point-in-time census for employment.

Population counts are derived from the administrative file of employees covered by UI. All employers covered by UI laws are required to report employment and wage information to the appropriate State employment security agency four times a year. Approximately 98 percent of in-scope private employment is covered by UI. A benchmark for the remaining 2 percent is constructed from alternate sources, primarily records from the Interstate Commerce Commission and the Social Security Administration. The full benchmark developed for March replaces the March sample-based estimate for each basic cell. The monthly sample-based estimates for the year preceding and the year following the benchmark are also then subject to revision.

Monthly estimates for the year preceding the March benchmark are readjusted using a “wedge back” procedure. The difference between the final benchmark level and the previously published March sample estimate is calculated and spread back across the previous 11 months. The wedge is linear; eleven-twelfths of the March difference is added to the February estimates, ten-twelfths to the January estimates, and so on, back to the previous April estimates which receive one-twelfth of the March difference. This assumes that the total estimation error since the last benchmark accumulated at a steady rate throughout the current benchmark year.

Estimates for the 11 months following the March benchmark are also recalculated each year. These post-benchmark estimates reflect the application of sample-based monthly changes to new benchmark levels for March, and the recomputation of bias adjustment factors for each month. Bias factors are updated to take into account the most recent experience of the estimates generated by the monthly

sample versus the full universe counts derived from the UI.

Following the revision of basic employment estimates, all other derivative series (e.g., production workers, average hourly earnings) are also recalculated. New seasonal adjustment factors are calculated and all data series, usually for the previous 5 years, are reseasonally adjusted, prior to full publication of all revised data in June of each year.

Monthly estimation

Estimates are derived from a sample of approximately 390,000 business establishments nationwide. A current month's estimate is derived as the product of the previous month's estimate and a sample link relative for the current month. A bias adjustment factor is then applied to this result primarily to help account for new business births during the month.

Stratification. The sample is stratified into 1,698 basic estimation cells for purposes of computing national employment, hours, and earnings estimates. Cells are defined primarily by detailed industry, and secondarily by size for a majority of cells. In a few industries, mostly within the construction division, geographic stratification is also used. Industry classification is in accordance with the 1987 *Standard Industrial Classification Manual* (SIC); most estimation cells are defined at the 4-digit SIC level.

This detailed stratification pattern allows for the production and publication of estimates in considerable industry detail. Sub-industry stratification by size is important because major statistics which the survey measures, particularly employment change and average earnings, often vary significantly between establishments of different size. Stratification reduces the variance of the published industry level estimates.

Link relative technique. A ratio of the previous to the current month's employment is computed from a sample of establishments reporting for both months—this ratio is called a “link relative.” For each basic cell, a link relative is computed and applied to the previous month's employment estimate to derive the current month's estimate. Thus a March benchmark is moved forward to the next March benchmark through application of monthly link relatives. Basic cell estimates created through the link relative technique are aggregated to form published industry level estimates, for employment, as described in table 2-A. Basic estimation and aggregation methods for the hours and earnings data are also shown in table 2-A.

Bias adjustment. Bias adjustment factors are computed at the 3-digit SIC level, and applied each month at the basic cell level, as part of the standard estimation procedures. The main purpose of bias adjustment is to reduce a primary source of nonsampling error in the survey, the inability to capture, on a timely basis, employment generated by new firm births. There is a several month lag between an

Table 2-A. 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 adjustments 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.

establishment opening for business and its appearing on the UI universe frame and being available for sampling. Because new firms generate a portion of employment growth each month of the year, nonsampling methods must be used to capture this growth, otherwise substantial underestimation of total employment levels would occur. Formal bias adjustment procedures have been used by the establishment survey since the late 1960's. Prior to the 1983 benchmark, bias adjustments were derived from a simple mean error model, which averaged undercount errors for the previous 3 years to arrive at bias projections for the coming year. The undercount errors were measured as the difference between sample-based estimate results and benchmark levels.

This procedure eventually proved inadequate during periods of rapidly changing employment trends, and the bias adjustment methodology was revised. Research done in the early 1980's indicated that bias requirements were strongly correlated with current employment growth or decline. Based on this research, a revised method was developed which incorporated the sample data on employment growth over the most recent two quarters, and a regression-derived coefficient for the significance of that change, to adjust the mean error model results. This change in methodology provided a more cyclically sensitive bias model. The regression-adjusted mean error model has been in use since 1983, for the production of national estimates.

The current model still has limitations in its ability to react to changing economic conditions or changing error structure relationships between the sample-based estimates and the UI universe counts. A principal limitation is the inability to incorporate UI universe counts as they become available on an ongoing basis, with a 6- to 9-month lag from the reference period. Thus, the current quarterly outputs from the model are subject to intervention analysis, and adjustments can be made to its results, prior to the establishment of final bias levels for a quarter. Review is done primarily in terms of detection of outlier (i.e. abnormally high or low) values, and by comparison of CES sample and bias trends with the most recent quarterly observations of UI universe counts. The BLS currently has under study improved bias models utilizing a Kalman filter technique, which would allow a more formal, structured incorporation of each quarter's UI universe counts in the bias modeling process.

Although the primary function of bias adjustment is to account for employment resulting from new business formations, it also adjusts for other elements of nonsampling error in the survey, because the primary input to the modeling procedure is total estimation error. Significant among these nonsampling error sources is a business death bias. When a sampled firm closes down, most often it simply does not respond to the survey that month, rather than reporting zero employment. Followup with nonrespondents may reveal an out-of-business firm, but this information is often received too late to incorporate into monthly esti-

mates, and the firm is simply treated as a nonrespondent for that month.

Because the bias adjustments incorporated into the estimates represent a composite of a birth bias, death bias, and a number of other differences between the sample-based estimates and the population counts, the monthly bias adjustment levels have no specific economic meaning in and of themselves.

Table 2-B summarizes bias adjustments for the 1987-97 period. The table displays the average monthly "bias added" and the average monthly "bias required" with the benchmark revisions for each year. Bias added shows the average amount of bias which was added each month over the course of an interbenchmark period. For example, the bias added for 1997 is listed as 130,000; this represents the average of bias adjustments made each month over the period April 1996 through March 1997. Bias required is computed retrospectively, after the March benchmark for a given year is known. Bias required figures are calculated by taking the difference between a March estimate derived purely from the sample (i.e. a series calculated without bias adjustment) and the March benchmark. Dividing this figure by 12 gives the average monthly bias required figure. The bias required is thus defined as the amount of bias adjustment which would have achieved a zero benchmark error. The difference between the total bias required and the total bias added is then, by definition, approximately the benchmark revision amount, for any given year. Also provided in the table for illustration, are the March-to-March changes. As discussed above, the over-the-year changes indicate correlation with the bias added and bias required figures.

THE SAMPLE

Design

The emphasis in the establishment survey is on producing timely data at minimum cost. Therefore, the primary goal of its design is to sample a sufficiently large segment of the universe to provide reliable estimates that can be published both promptly and regularly. The present sample allows BLS to produce preliminary total nonfarm employment estimates for each month, including some limited industry detail, within 3 weeks after the reference period, and data in considerably more detail with an additional 1-month lag.

The CES survey, which began over 50 years ago, predates the introduction of probability sampling methods and has operated as a quota sample since its inception.

The sampling plan used is a form of sampling with probability proportionate to size, known as "sampling proportionate to average size of establishment". This is an optimum allocation design among strata because sampling variance is proportional to the average size of establishments. The universe of establishment employment is highly skewed, with a large percentage of total employment concentrated in relatively few establishments. Because vari-

ance on a population total estimate is a function of percentage universe coverage achieved by the sample, it is efficient to sample larger establishments at a higher rate than smaller establishments, assuming the cost per sample unit is fairly constant across size classes.

Under the survey design, large establishments fall into a certainty strata for sample selection. The size of the sample for the various industries is determined empirically on the basis of experience and cost considerations. For example, in a manufacturing industry with a high proportion of total employment concentrated in a small number of 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 a relatively few chosen from among the smaller establishments. For an industry in which a large proportion of total employment is concentrated in small establishments, the sample design again calls for inclusion of all large establishments but also for a more substantial number of smaller 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 have a sample design for these industries with a smaller proportion of total universe coverage than is the case for most manufacturing industries.

Coverage

The establishment survey is the largest monthly sampling operation in the field of social statistics. Table 2-C shows the latest benchmark employment levels and the approximate proportion of total universe employment coverage, at the total nonfarm and major industry division levels. The coverage for individual industries within the divisions may vary from the proportions shown.

Reliability

The establishment survey, like other sample surveys, is subject to two types of error, sampling and nonsampling error. The magnitude of sampling error, or variance, is directly related to the size of the sample and the percentage of universe coverage achieved by the sample. The establishment survey sample covers over one-third of total universe employment; this yields a very small variance on the total nonfarm estimates. Measurements of error associated with sample estimates are provided in tables 2-D through 2-G.

Benchmark revision as a measure of survey error. The sum of sampling and nonsampling error can be considered total survey error. Unlike most sample surveys which publish sampling error as their only measure of error, the CES can derive an annual approximation of total error, on a lagged basis, because of the availability of the independently derived universe data. While the benchmark error is used as a measure of total error for the CES survey estimate, technically, it actually represents the difference between two independent estimates derived from separate survey processes (i.e., the CES sample process and the UI universe process) and thus reflects the errors present in each program. Historically, the benchmark revision has been very small for total nonfarm employment. Over the past decade, percentage benchmark error has averaged 0.3 percent, with a range from zero to 0.7 percent. Table 2-D shows the most current benchmark revisions, along with 10-year mean revisions and mean absolute revisions for major industries. Mean revisions give an indication of bias in the estimates; unbiased estimates have a mean revision close to zero, as over and under estimations cancel out over time. Mean absolute revisions give an overall indicator as to the accuracy of the

Table 2-B. March employment benchmarks and bias adjustments for total private industries, March 1987-97
(In thousands)

Year	Benchmark		Average monthly bias		Over-the-year employment change ⁵
	Employment ¹	Revision ²	Added ³	Required ⁴	
1987	83,173	21	98	99	1,969
1988	86,180	-310	114	88	3,007
1989	89,015	-93	131	123	2,835
1990	90,546	-261	85	63	1,531
1991	88,790	-583	61	12	-1,756
1992	88,347	-130	33	22	-443
1993	89,790	288	83	107	1,443
1994	92,730	688	115	171	2,940
1995	96,175	511	144	187	3,445
1996	98,158	72	129	135	1,983
1997	101,040	518	130	173	2,882

¹ Universe counts for March of each year are used to make annual benchmark adjustments to the employment estimates. About 98 percent of the benchmark employment is from unemployment insurance administrative records, and the remaining 2 percent is from alternate sources. Data represent benchmark levels as originally computed.

² Difference between the final March sample-based estimate and the benchmark level for total private employment.

³ The average amount of bias adjustment each month over the

course of an inter-benchmark period, i.e., from April of the prior year through March of the given year.

⁴ The difference between the March benchmark and the March estimate derived solely from the sample without bias adjustment, converted to a monthly amount by dividing by 12.

⁵ March-to-March changes in the benchmark employment level.

NOTE: Data in this table exclude government employment because there is no bias adjustment for this sector.

estimates; the larger the value, the further the estimate was from the final benchmark level.

Estimated standard errors for employment, hours, and earnings. The hours and earnings estimates for the basic estimating cells do not have universe data sources available and therefore are not subject to benchmark revisions, although the broader groupings may be affected slightly by changes in employment weights. Like the employment estimates, the hours and earnings estimates are also subject to sampling and nonsampling errors. Estimates of the sampling error for employment, hours, and earnings were computed using the method of random groups and are expressed as relative standard errors (standard error divided by the estimate). Relative standard errors for individual industries with the specified number of employees are presented in table 2-E and for major industries in table 2-F. Multiplying the relative standard error by its estimated value gives the estimate of the standard error. The errors presented here are based on averages observed from sample data over the March 1994 through March 1995 period.

Standard errors for differences between industries and times. The standard error of a difference is required to test for significant differences between estimates from two different industries. Since the estimates for the two industries are independent, the standard error of a difference is the square root of the sum of the estimated variance of each estimate, S_1^2 and S_2^2 .

$$S \text{ difference} = \sqrt{s_1^2 + s_2^2}$$

The CES sample overlaps almost entirely from month to month, so monthly estimates are not independent. The covariance between these estimates must be accounted for when testing the significance of the change in estimates over time. The standard error of the change can be estimated as follows.

$$S \text{ change} = \sqrt{s_1^2 + s_2^2 - 2\rho s_1 s_2}$$

If $S_1 = S_2$, then:

$$S \text{ change} = \sqrt{2s_1^2(1 - \rho)}$$

Conservative estimates of ρ after one month are 0.8 for employment, 0.6 for average weekly hours, and 0.8 for average hourly earnings.

If the bias is small, then the standard error can be used to construct approximate confidence intervals or range of values that include the true population value. If the process

of selecting a sample from the population were repeated many times and an estimate and its standard error calculated for each sample, then approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the true population value.

Noneconomic code changes. A major source of benchmark revision at the major industry division level and below are noneconomic code changes, which are introduced into the universe data in the first quarter of each calendar year.

Approximately one-third of all establishments in the universe are included in the universe program's annual Standard Industrial Classification (SIC) refiling survey. Corrections to individual establishments' SIC and ownership codes are made through this process. The refiling cycle is such that every third year entire division(s) are subject to refiling. The volume of these adjustments is generally quite large and has a substantial impact on universe employment counts at the industry levels, although the total nonfarm employment level remains unaffected. For example, in a year when the services division is refiled, a substantial

Table 2-C. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1997

Industry	Bench- marks (thou- sands)	Sample coverage ¹		
		Number of establish- ments	Employees	
			Number (thou- sands)	Percent of bench- marks
Total	120,903	316,992	44,036	36
Mining	580	3,057	225	39
Construction	5,260	25,915	1,010	19
Manufacturing	18,519	56,104	8,654	47
Transportation and public utilities	6,331	² 16,398	2,263	36
Wholesale trade ..	6,567	25,215	1,148	17
Retail trade	21,467	60,605	5,086	24
Finance, insurance, and real estate ...	6,988	21,824	2,005	29
Services	35,328	75,482	8,333	24
Government:				
Federal	2,700	³ 5,145	2,700	100
State	4,692	6,880	3,848	82
Local	12,471	20,367	8,764	70

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

² The Interstate Commerce Commission provides a complete count of employment for Class I railroads plus Amtrak. A small sample is used to estimate hours and earnings data.

³ Total Federal employment counts by agency for use in national estimates are provided to BLS by the Office of Personnel Management. Detailed industry estimates for the Executive Branch, as well as State and area estimates of Federal employment, are based on a sample of reports covering about 51 percent of employment in Federal establishments.

Table 2-D. Current (March 1997) and historical benchmark revisions
(Numbers in thousands)

Industry	March 1997 benchmark revision		10-year average mean percent revision ¹	
	Level	Percent	Actual	Absolute
Total	431	0.4	0.1	0.3
Total private	518	.5	.1	.4
Goods-producing	196	.8	.1	.8
Mining	18	3.1	-.6	1.7
Metal mining	-1	-1.9	-1.7	3.3
Coal mining	4	4.2	-1.0	2.6
Oil and gas extraction	14	4.3	-.4	2.4
Nonmetallic minerals, except fuels	0	0	-.4	1.6
Construction	56	1.1	-.4	1.3
General building contractors	10	.8	-.6	2.3
Heavy construction, except building	24	3.4	.6	2.1
Special trade contractors	22	.7	-.6	1.2
Manufacturing	122	.7	.2	.7
Durable goods	73	.7	.3	.8
Lumber and wood products	-4	-.5	.2	1.7
Furniture and fixtures	2	.4	.3	1.1
Stone, clay, and glass products	10	1.9	.5	.9
Primary metal industries	0	0	-.1	.8
Blast furnaces and basic steel products	-1	-.4	.6	1.2
Fabricated metal products	3	.2	.2	.7
Industrial machinery and equipment	9	.4	(²)	1.2
Computer and office equipment	-4	-1.1	-.6	2.0
Electronic and other electrical equipment	30	1.8	-.2	.9
Electronic components and accessories	22	3.5	.1	1.9
Transportation equipment	14	.8	.9	1.0
Motor vehicles and equipment	14	1.4	1.3	1.3
Aircraft and parts	-5	-1.0	.8	1.4
Instruments and related products	6	.7	.3	1.9
Miscellaneous manufacturing	3	.8	.3	1.4
Nondurable goods	49	.6	.2	.7
Food and kindred products	-2	-.1	.2	.9
Tobacco products	0	0	.4	4.0
Textile mill products	8	1.3	.1	.9
Apparel and other textile products	12	1.4	.3	1.3
Paper and allied products	9	1.3	.5	.7
Printing and publishing	9	.6	-.2	.8
Chemicals and allied products	6	.6	(²)	.9
Petroleum and coal products	0	0	-.5	1.7
Rubber and miscellaneous plastics products	6	.6	.5	1.5
Leather and leather products	0	0	-.1	2.1
Service-producing	235	.2	.1	.3
Transportation and public utilities	-22	-.3	-.3	1
Transportation	-61	-1.5	-.6	1.4
Railroad transportation	-1	-.4	-1.1	1.1
Local and interurban passenger transit	-7	-1.5	-.5	2.1
Trucking and warehousing	-13	-.8	-1.7	2.9
Water transportation	3	1.7	.4	3.5
Transportation by air	-46	-4.1	2.0	5.3
Pipelines, except natural gas	0	0	.6	5.2
Transportation services	2	.5	-1.3	3.0
Communications and public utilities	39	1.7	.1	1.2
Communications	42	3.0	.2	1.9
Electric, gas, and sanitary services	-3	-.3	-.1	.7
Wholesale trade	-4	-.1	-.5	1.2
Durable goods	5	1	-.5	1.5
Nondurable goods	-9	-.3	-.5	1.0

See footnotes at end of table.

Table 2-D. Current (March 1997) and historical benchmark revisions—Continued
(Numbers in thousands)

Industry	March 1997 benchmark revision		10-year average mean percent revision ¹	
	Level	Percent	Actual	Absolute
Retail trade	-27	-.1	.4	.6
Building materials and garden supplies	6	.7	.1	1.5
General merchandise stores	-76	-2.9	1.8	2.9
Department stores	-65	-2.8	2.4	3.7
Food stores	2	.1	-.2	.7
Automotive dealers and service stations	-9	-.4	-1.1	1.1
New and used car dealers	-6	-.6	-.7	1.0
Apparel and accessory stores	-7	-.7	1.1	1.6
Furniture and home furnishings stores	-32	-3.3	-.7	1.4
Eating and drinking places	118	1.6	.8	1.2
Miscellaneous retail establishments	-27	-1.0	.1	.9
Finance, insurance, and real estate	37	.5	-.3	1.2
Finance	9	.3	-.7	1.3
Depository institutions	-15	-.7	-1.1	1.4
Commercial banks	-24	-1.7	-.6	.9
Savings institutions ³	8	3.1	-3.6	6.1
Nondepository institutions	20	3.6	1.2	2.5
Mortgage bankers and brokers	6	2.4	1.1	5.0
Security and commodity brokers	4	.7	.1	1.2
Holding and other investment offices	1	.5	-3.7	5.0
Insurance	27	1.2	.4	1.3
Insurance carriers	23	1.5	.3	1.6
Insurance agents, brokers, and service	4	.6	.5	1.2
Real estate	1	.1	-.4	1.5
Services ⁴	338	1.0	.2	.6
Agricultural services	8	1.4	2.0	2.2
Hotels and other lodging places	-4	-.2	.5	1.3
Personal services	-13	-1.0	.5	1.5
Business services	218	2.8	.7	2.0
Services to buildings	31	3.4	1.3	1.7
Personnel supply services	118	4.2	1.7	3.8
Help supply services ³	130	5.2	2.0	3.1
Computer and data processing services	64	4.7	(²)	3.3
Auto repair, services, and parking	-12	-1.1	-1.2	1.5
Miscellaneous repair services	-9	-2.4	-.8	4.8
Motion pictures	7	1.3	-1.8	4.0
Amusement and recreation services	33	2.3	.8	2.8
Health services	29	.3	-.7	.8
Offices and clinics of medical doctors	-1	-.1	-.9	1.6
Nursing and personal care facilities	-5	-.3	-.6	.8
Hospitals	-6	-.2	-.8	.8
Home health care services ³	29	4.1	1.5	2.8
Legal services	-8	-.9	-.5	1.2
Educational services	31	1.4	1.2	2.8
Social services	31	1.2	-.3	1.6
Child day care services	-15	-2.6	-2.8	4.8
Residential care	16	2.3	.1	1.6
Museums and botanical and zoological gardens	3	3.6	1.9	2.5
Membership organizations	53	2.4	2.6	3.3
Engineering and management services ³	-7	-.2	.1	1.4
Engineering and architectural services	-9	-1.1	-.8	1.3
Management and public relations ³	-12	-1.3	-.9	3.3
Services, nec	0	0	.3	.7
Government	-87	-.4	(²)	.2
Federal	0	0	0	0
Federal, except Postal Service	0	0	0	0
State	-56	-1.2	.2	.6
Education	-41	-2.0	.3	1.2
Other State government	-15	-.6	.2	.5
Local	-31	-.2	(²)	.3
Education	1	0	-.1	.3
Other local government	-33	-.6	0	.4

¹ Data relate to the 1988-97 benchmarks, as originally published, unless otherwise noted.

² Less than 0.05 percent.

³ Data relate to 1989-97.

⁴ Includes other industries, not shown separately.

Table 2-E. Relative standard errors¹ for estimates of employment, hours, and earnings

(In percent)

Size of employment estimate	Employment	Average weekly hours	Average hourly earnings
50,000	1.4	1.9	3.2
100,000	1.1	1.5	2.6
200,000 .....	.8	1.2	2.2
500,000 .....	.6	.9	1.7
1,000,000 .....	.4	.7	1.3
2,000,000 .....	.3	.6	1.1

¹ Relative errors were estimated with sample data from March 1994-March 1995.

Table 2-F. Relative standard errors¹ for estimates of employment, hours, and earnings by industry

(In percent)

Industry	Employment	Average weekly hours	Average hourly earnings
Total private	0.1	0.1	0.2
Mining .....	.8	.6	1.1
Construction .....	.4	.1	.3
Manufacturing .....	.1	.1	.4
Durable goods .....	.1	.1	.5
Nondurable goods .....	.1	.1	.5
Transportation and public utilities .....	.3	.5	1.0
Wholesale trade .....	.2	.2	.4
Retail trade .....	.1	.1	.3
Finance, insurance, and real estate .....	.2	.2	.7
Services .....	.2	.2	.4

¹ Relative errors were estimated with sample data from March 1994-March 1995.

amount of employment is usually reclassified out of services to other major divisions, thus, lowering the benchmark level for services, and potentially causing a significant downward revision in the services employment totals previously published.

Revisions between preliminary and final data. First preliminary estimates of employment, hours, and earnings, based on less than the total sample, are published immediately following the reference month. Final revised sample-

based estimates are published 2 months later when nearly all the reports in the sample have been received. Table 2-G presents the root-mean-square error, the mean percent, and the mean absolute percent revision that may be expected between the preliminary and final employment estimates.

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, at the total private nonfarm level, and may be slightly larger for the more detailed industry groupings.

STATISTICS FOR STATES AND AREAS

(Tables B-7, B-14, and B-18)

As explained earlier, State agencies in cooperation with BLS collect and prepare State and area employment, hours, and earnings data. These statistics are based on the same establishment reports used by BLS, however, BLS uses the full CES sample to produce monthly national employment estimates, while each State agency uses its portion of the sample to independently develop a State employment estimate.

The CES area statistics relate to metropolitan areas. 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.

Caution in aggregating State data. The national estimation procedures used by BLS are designed to produce accurate national data by detailed industry; correspondingly the State estimation procedures are designed to produce accurate data for each individual State. State estimates are not forced to sum to national totals nor vice versa. Because each State series is subject to larger sampling and nonsampling errors than the national series, summing them cumulates individual State level errors and can cause distortions at an aggregate level. This has been a particular problem at turning points in the U.S. economy, when the majority of the individual State errors tend to be in the same direction. Due to these statistical limitations, the Bureau does not compile or publish a "sum-of-States" employment series. Additionally, BLS cautions users that such a series is subject to a relatively large and volatile error structure, particularly at turning points.

Table 2-G. Errors of preliminary employment estimates

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Total	57,900	0	0
Total private	49,000	0	0
Goods-producing	13,200	0	0
Mining	1,800	0	.2
Metal mining	300	-.1	.4
Coal mining	800	.1	.6
Oil and gas extraction	1,800	0	.4
Nonmetallic minerals, except fuels	300	0	.2
Construction	8,000	.1	.1
General building contractors	4,000	.1	.3
Heavy construction, except building	3,500	0	.4
Special trade contractors	4,800	.1	.1
Manufacturing	9,000	0	0
Durable goods	6,400	0	0
Lumber and wood products	1,300	.1	.1
Furniture and fixtures	1,200	0	.2
Stone, clay, and glass products	1,100	0	.2
Primary metal industries	1,700	0	.2
Blast furnaces and basic steel products	1,400	0	.4
Fabricated metal products	2,000	0	.1
Industrial machinery and equipment	2,500	0	.1
Computer and office equipment	1,500	.2	.3
Electronic and other electrical equipment	2,400	0	.1
Electronic components and accessories	1,400	0	.2
Transportation equipment	4,200	0	.2
Motor vehicles and equipment	3,700	.1	.3
Aircraft and parts	1,600	0	.2
Instruments and related products	1,600	0	.1
Miscellaneous manufacturing	1,100	.1	.2
Nondurable goods	4,700	0	.1
Food and kindred products	2,800	-.1	.1
Tobacco products	500	.5	.9
Textile mill products	1,100	0	.1
Apparel and other textile products	2,500	.1	.2
Paper and allied products	1,200	0	.1
Printing and publishing	1,600	.1	.1
Chemicals and allied products	1,700	-.1	.1
Petroleum and coal products	900	0	.4
Rubber and miscellaneous plastics products	1,500	0	.1
Leather and leather products	600	0	.4
Service-producing	53,500	0	0
Transportation and public utilities	10,000	-.1	.1
Transportation	9,000	-.1	.2
Railroad transportation	2,200	-.1	.7
Local and interurban passenger transit	3,700	-.2	.6
Trucking and warehousing	5,800	-.1	.2
Water transportation	1,500	-.3	.8
Transportation by air	4,700	-.1	.4
Pipelines, except natural gas	200	-.3	.7
Transportation services	1,200	-.1	.2
Communications and public utilities	4,300	0	.1
Communications	3,800	.1	.2
Electric, gas, and sanitary services	1,700	0	.1
Wholesale trade	7,300	.1	.1
Durable goods	4,200	.1	.1
Nondurable goods	4,800	.1	.1

See footnotes at end of table.

Table 2-G. Errors of preliminary employment estimates—Continued

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Retail trade	33,100	.1	.1
Building materials and garden supplies	2,500	0	.2
General merchandise stores	18,700	.1	.5
Department stores	17,300	.1	.5
Food stores	6,100	.1	.1
Automotive dealers and service stations	2,900	-.1	.1
New and used car dealers	1,200	-.1	.1
Apparel and accessory stores	5,900	.2	.4
Furniture and home furnishings stores	3,500	.1	.3
Eating and drinking places	11,700	.1	.1
Miscellaneous retail establishments	8,600	.2	.3
Finance, insurance, and real estate	5,900	0	.1
Finance	3,400	0	.1
Depository institutions	2,400	0	.1
Commercial banks	1,800	0	.1
Savings institutions	1,200	-.1	.3
Nondepository institutions	1,400	.1	.2
Mortgage bankers and brokers	1,000	0	.3
Security and commodity brokers	1,000	0	.2
Holding and other investment offices	1,600	0	.5
Insurance	2,800	0	.1
Insurance carriers	2,600	0	.1
Insurance agents, brokers, and service	1,100	.1	.1
Real estate	2,600	0	.2
Services ²	29,600	0	.1
Agricultural services	2,800	.1	.4
Hotels and other lodging places	6,200	.1	.3
Personal services	7,900	-.1	.4
Business services	12,600	.1	.1
Services to buildings	2,600	0	.2
Personnel supply services	11,100	.1	.3
Help supply services	10,700	.1	.3
Computer and data processing services	2,500	.1	.2
Auto repair, services, and parking	2,100	0	.2
Miscellaneous repair services	1,100	0	.2
Motion pictures	5,700	0	.7
Amusement and recreation services	9,000	.2	.5
Health services	5,300	0	0
Offices and clinics of medical doctors	2,600	0	.1
Nursing and personal care facilities	1,700	0	.1
Hospitals	3,100	0	.1
Home health care services	2,000	.1	.3
Legal services	1,400	0	.1
Educational services	13,200	.1	.6
Social services	8,300	.1	.3
Child day care services	4,600	.2	.6
Residential care	1,400	0	.2
Museums and botanical and zoological gardens	700	.2	.6
Membership organizations	3,400	0	.1
Engineering and management services	4,900	0	.1
Engineering and architectural services	2,300	0	.2
Management and public relations	3,300	.1	.3
Services, nec	400	0	.7
Government	19,700	0	.1
Federal	9,400	0	.2
Federal, except Postal Service	8,500	0	.3
State	11,200	0	.2
Education	10,100	0	.4
Other State government	5,200	0	.2
Local	16,200	0	.1
Education	13,600	.1	.1
Other local government	11,000	0	.1

¹The root-mean-square error is the square root of the mean squared error. The mean squared error is the square of the difference between the final and preliminary estimates averaged across a series of monthly observations.

²Includes other industries, not shown separately.

NOTE: Errors are based on differences from January 1993 through December 1997.

Region, State, and Area Labor Force Data ("C" tables)

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 derive from standardized procedures developed by BLS are the basis for determining eligibility of an area for benefits under Federal programs such as the Job Training Partnership Act.

Annual average data for the States and 334 areas shown in table C-3 are published in *Employment and Earnings* (usually the May issue). For regions, States, selected metropolitan areas, and central cities, annual average data classified by selected demographic, social, and economic characteristics are published in the BLS bulletin, *Geographic Profile of Employment and Unemployment*.

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

ESTIMATING METHODS

Monthly labor force, employment, and unemployment estimates are prepared for the 50 States, the District of Columbia, and over 6,500 areas, including nearly 2,400 LMA's, counties, and cities with a population of 25,000 or more. Regional aggregations are derived by summing the State estimates. The estimation methods are described below for States (and the District of Columbia) and for sub-State areas. At the sub-LMA (county and city) level, estimates are prepared using disaggregation techniques based on decennial and annual population estimates and current unemployment insurance data. A more detailed description of the estimation procedure is contained in the BLS document, *Manual for Developing Local Area Unemployment Statistics*.

Estimates for States

Current monthly estimates. Effective January 1996, civilian labor force and unemployment estimates for all States and the District of Columbia are produced using models based on a "signal-plus-noise" approach. The model of the

signal is a time series model of the true labor force which consists of three components: A variable coefficient regression, a flexible trend, and a flexible seasonal component. The regression techniques are based on historical and current relationships found within each State's economy as reflected in the different sources of data that are available for each State—the Current Population Survey (CPS), the Current Employment Statistics (CES) survey, and the unemployment insurance (UI) system. The noise component of the models explicitly accounts for auto correlation in the CPS sampling error and changes in the average magnitude of the error. In addition, the models can identify and remove the effects of outliers in the historical CPS series. While all the State models have important components in common, they differ somewhat from one another to better reflect individual State characteristics.

Two models—one for the employment-to-population ratio and one for the unemployment rate—are used for each State. The employment-to-population ratio, rather than the employment level, and the unemployment rate, rather than the unemployment level, are estimated primarily because these ratios are usually more meaningful for economic analysis.

The employment-to-population ratio models use the relationship between the State's monthly employment from the CES and the CPS. The models also include trend and seasonal components to account for movements in the CPS not captured by the CES series. The seasonal component accounts for the seasonality in the CPS not explained by the CES, while the trend component adjusts for long-run systematic differences between the two series.

The unemployment rate models use the relationship between the State's monthly unemployment insurance (UI) claims data and the CPS unemployment rate, along with trend and seasonal components.

In both the employment-to-population ratio and unemployment rate models, an important feature is the use of a technique that allows the equations to adjust automatically to structural changes that occur. The regression portion of the model includes a built-in tuning mechanism, known as the Kalman Filter, which revises a model's coefficients when the new data that become available each month indicate that changes in the data relationships have taken place. Once the estimates are developed from the models, levels are calculated for employment, unemployment, and labor force.

Benchmark correction procedures. Once each year, monthly estimates for all States and the District of Columbia are adjusted, or benchmarked, by BLS to the annual average CPS estimates. The benchmarking technique employs a pro-

cedure (called the Denton method) which adjusts the annual average of the models to equal the CPS annual average, while preserving, as much as possible, the original monthly seasonal pattern of the model estimates.

Estimates for sub-State areas

Monthly labor force, employment, and unemployment estimates for two large sub-State areas—New York City and the Los Angeles-Long Beach metropolitan area—are obtained using the same modeling approach as for states. Estimates for the nearly 2,400 remaining LMA's, are prepared through indirect estimation techniques, described below.

Preliminary estimate—employment. The total civilian employment estimates are based largely on CES data. These “place-of-work” estimates must be adjusted to refer to place of residence as used in the CPS. Factors for adjusting from place of work to place of residence have been developed on the basis of employment relationships at the time of the 1990 decennial census. These factors are applied to the CES estimates for the current period to obtain adjusted employment estimates, to which are added estimates for employment not represented in the CES—agricultural employees, nonagricultural self-employed and unpaid family workers, and private household workers.

Preliminary estimate—unemployment. In the current month, the estimate of unemployment is an aggregate of the estimates for each of two categories: (1) Persons who were previously employed in industries covered by State UI laws; and (2) those who were entering the civilian labor force for the first time or reentering after a period of separation.

Sub-State adjustment for additivity. Estimates of employment and unemployment are prepared for the State and all LMA's within the State. The LMA estimates geographically exhaust the entire State. Thus, a proportional adjustment is applied to all sub-State preliminary LMA estimates to ensure that they add to the independently estimated State totals for employment and unemployment. For California and New York, the proportional adjustment is applied to all LMA's other than the two modeled areas, to ensure that the LMA estimates sum to an independent model-based estimate for the balance of State.

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

Seasonal Adjustment

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

Household data

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

BLS uses an extension of X-11 ARIMA to allow it to adjust more adequately for the effects of the presence or absence of religious holidays in the April survey reference period and of Labor Day in the September reference period. This extension was applied for the first time at the end of 1989 to three persons-at-work labor force series which tested as having significant and well-defined effects in their April data associated with the timing of Easter.

At the beginning of each calendar year, projected seasonal adjustment factors are calculated for use during the January-June period. In July of each year, BLS calculates and publishes in *Employment and Earnings* projected seasonal adjustment factors for use in the second half, based on the experience through June. Revisions of historical data, usually for the most recent 5 years, are made only at the beginning of each calendar year. However, as a result of the revisions to the estimates for 1970-81 based on 1980 census population counts, revisions to seasonally adjusted series in early 1982 were carried back to 1970. In 1994, data were revised only for that year because of the major redesign and 1990 census-based population controls, adjusted for the estimated undercount, introduced into the Current Population

Survey. In 1996, 1990-93 data also were revised to incorporate these 1990 census-based population controls, and seasonally adjusted series were revised back to 1990. Subsequent revisions are only carried back to 1994.

All labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, for each of the three major labor force components—agricultural employment, nonagricultural employment, and unemployment—data for four sex-age groups (men and women under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. The seasonally adjusted figure for the labor force is a sum of eight seasonally adjusted civilian employment components and four seasonally adjusted unemployment components. The total for unemployment is the sum of the four unemployment components, and the 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.

In each January issue (March issue in 1996), *Employment and Earnings* publishes 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 estimate for the first 6 months of the following year, and a description of the current seasonal adjustment procedure.

Establishment data

Beginning in June 1997, with the release of the March 1996 benchmark revisions, BLS began using an updated version of the X-12 ARIMA software developed by the Bureau of the Census to seasonally adjust national establishment-based employment, hours, and earnings series.

The conversion to X-12 ARIMA allows BLS to refine its seasonal adjustment procedures to control for survey interval variations, sometime referred to as the 4-vs.-5 week effect. While the CES survey is referenced to a consistent concept, the pay period including the 12th day of the month, inconsistencies arise because there are variations of 4 or 5 weeks between the week of the 12th in any given pair of months. In highly seasonal months and industries, this variation can be an important determinant of the magnitude of seasonal hires or layoffs that have occurred at the time the survey is taken, thereby complicating seasonal adjustment. The interval effect adjustment is accomplished through the REGARIMA (regression with auto-correlated errors) option in the X-12 software. This process combines standard regression analysis, which measures correlations between two or more variables, with ARIMA modeling, which describes

and predicts the behavior of a data series based on its own past history. In this application, the correlations of interest are those between employment levels in individual calendar months and the length of the survey intervals for those months. The REGARIMA models estimate and remove the variation in employment levels attributable to 11 separate survey intervals, one specified for each month, except March. March is excluded because there are always 4 weeks between the February and March surveys.

Effective with the release of the March 1997 benchmarks, seasonally adjusted series for employment, hours, indexes of aggregate hours, and earnings of production or nonsupervisory workers from 1989 forward incorporate refinements to the seasonal adjustment process to correct for distortions related to the method of accounting for the varying length of payroll periods across months—the calendar effect.

REGARIMA modeling also is used to identify, measure, and remove the calendar effect for the publication level seasonally adjusted hours and earnings series.

Projected seasonal factors for the establishment-based series are calculated and published twice a year, paralleling the procedure used for the household series. Revisions to historical data (usually the most recent 5 years) are made once a year, coincident with benchmark revisions. All series are seasonally adjusted using multiplicative models in X-12. Seasonal adjustment factors are computed and applied at component levels. For employment series, these are generally the 2-digit SIC levels. Seasonally adjusted totals are arithmetic aggregations for employment series and weighted averages of the seasonally adjusted data for hours and earnings series.

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing the average weekly earnings series 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 1982 annual average base. For total private, total goods-producing, total private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours for the appropriate component industries and dividing by the 1982 annual average 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 series, however, are used in the aggregation to broader level seasonally adjusted series.

Seasonal adjustment factors for Federal Government employment are derived from unadjusted data which include

Christmas temporary workers employed by the Postal Service. The number of temporary census workers for the decennial census, however, are removed prior to the calculation of seasonal adjustment factors.

BLS also makes special adjustments for floating holidays for the establishment-based series on average weekly hours and manufacturing overtime hours. From 1988 forward, these adjustments are now accomplished as part of the X-12 ARIMA/REGARIMA modeling process. The special adjustment made in November each year to adjust for the effect of poll workers in the local government employment series also is incorporated into the X-12 process from 1988 forward.

Revised seasonally adjusted national establishment-based series based on the experience through March 1998, new seasonal adjustment factors for March-October 1998, and a description of the current seasonal adjustment procedure appear in the June 1998 issue of *Employment and Earnings*. Revised factors for the September 1998-April 1999 period will appear in the December issue.

Beginning in 1993, BLS introduced publication of seasonally adjusted nonfarm payroll employment data by major industry for all States and the District of Columbia (table B-7). Seasonal adjustment factors are applied directly to the employment estimates at the division level (component series for manufacturing and trade) and then aggregated to the State totals. The recomputation of seasonal factors and historical revisions are made coincident with the annual benchmark adjustments. State estimation procedures are designed to produce accurate (unadjusted and seasonally adjusted) data for each individual State. BLS independently develops a national employment series; State estimates are not forced to sum to national totals. Because each State series is subject to larger sampling and nonsampling errors than the national series, summing them cumulates individual State level errors and can cause significant distortions at an aggregate level. Due to these statistical limitations, BLS does not compile a "sum-of-States" employment series, and cautions users that such a series is subject to a relatively large and volatile error structure.

Region and State labor force data

Beginning in 1992, BLS introduced publication of seasonally adjusted labor force data for the census regions and divisions, the 50 States, and the District of Columbia (tables C-1 and C-2). Beginning in 1998, regional aggregations are derived by summing the State estimates. Using the X-11 ARIMA procedure, seasonal adjustment factors are computed and applied independently to the component employment and unemployment levels and then aggregated to regional or State totals. Current seasonal adjustment factors are produced for 6-month periods twice a year. Historical revisions usually are made at the beginning of each calendar year. Because of the separate processing procedures, totals for the Nation, as a whole, differ from the results obtained by aggregating regional or State data.

INDEX TO STATISTICAL TABLES

TABLE KEY: A: Monthly household data; B: Monthly national and State and area establishment data; C: Monthly regional, State, and area labor force data; D: Quarterly, household data only, in the January, April, July, and October issues. Annual averages: Household data in the January issue; national establishment data in the January, March, and June issues; State and area establishment and labor force data in the May issue. For additional information see the listing on the inside front cover of this publication.

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	I MAINE Department of Labor, Division of Economic Analysis and Research, 20 Union St., Augusta 04330	VIII UTAH Department of Employment Security, Labor Market Information Services, P.O. Box 11249, Salt Lake City 84147
	III MARYLAND Department of Employment and Training, Research and Analysis Division, 1100 North Eutaw St., Baltimore 21201	I VERMONT Department of Employment and Training, Office of Policy and Public Information, P.O. Box 488, Montpelier 05602
	I MASSACHUSETTS Department of Employment and Training, Government Center, Charles F. Hurley Bldg., Boston 02114	III VIRGINIA Employment Commission, Economic Information Services, P.O. Box 1358, Richmond 23211
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	V MINNESOTA Department of Jobs and Training, Research and Statistics Division, 5th Fl., 390 North Robert St., St. Paul 55101	X WASHINGTON Employment Security Department, Labor Market and Economic Analysis Branch, 605 Woodview Dr., Olympia 98503
	IV MISSISSIPPI Employment Security Commission, Labor Market Information Division, P.O. Box 1699, Jackson 39215-1699	III WEST VIRGINIA Department of Employment Security, Division of Labor and Economic Security, 112 California Avenue, Charleston 25305
	VII MISSOURI Division of Employment Security, P.O. Box 59, Jefferson City 65104	V WISCONSIN Department of Industry, Labor, and Human Relations, Labor Market Information Bureau, 201 East Washington Avenue, Madison 53707
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