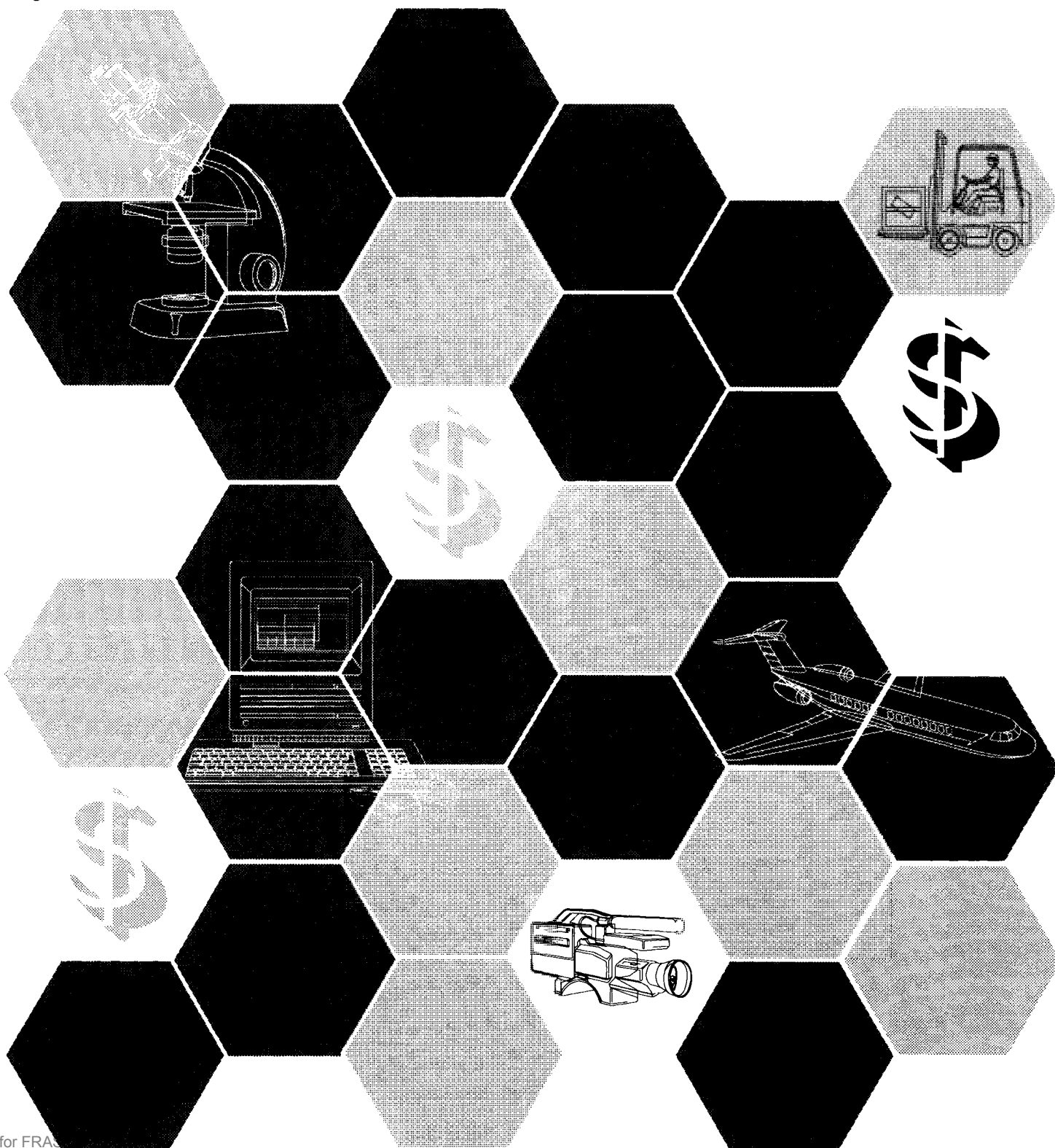




# EMPLOYMENT AND EARNINGS

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





**U.S. DEPARTMENT OF LABOR**  
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**Household data:**

Telephone: (202) 606-6373 x 255 or 6378  
E-mail: CPSInfo@bls.gov  
Internet: <http://stats.bls.gov/cpshome.htm>

**National establishment data:**

Telephone: (202) 606-6555  
E-mail: CESInfo@bls.gov  
Internet: <http://stats.bls.gov/ceshome.htm>

**State and area establishment data:**

Telephone: (202) 606-6559  
E-mail: Data\_SA@bls.gov  
Internet: <http://stats.bls.gov/790home.htm>

**Region, State, and area labor force data:**

Telephone: (202) 606-6392  
E-mail: LausInfo@bls.gov  
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**August 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.

**Establishment data**

National annual averages:	
Industry divisions (preliminary)	Jan.
Industry detail	March, June
Women employees	March, June
National data revised to reflect new benchmarks and new seasonal adjustment factors	June
State and area annual revisions	March
State and area annual averages	May
Area definitions	May

**Region, State, and area labor force data**

Annual revisions	March
Annual averages	May

# Employment and Earnings

Editors: Gloria Peterson Green, Eugene H. Becker

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# Employment and Unemployment Developments, July 1998

Payroll employment rose slightly, and unemployment was unchanged in July. Nonfarm payroll employment edged up by 66,000 to 125.8 million, as growth was curtailed by strikes and plant shutdowns in automobile-related manufacturing. The jobless rate remained at 4.5 percent.

## Unemployment

The number of unemployed persons, 6.2 million in July, was little changed over the month. The unemployment rate remained at 4.5 percent; it has been below 5.0 percent since July 1997. The jobless rate for whites edged down by 0.2 percentage point to 3.8 percent, about the same as in May. The jobless rate for blacks increased over the month to 9.7 percent. Unemployment rates for the other major demographic groups—adult men (3.9 percent), adult women (4.0 percent), teenagers (13.8 percent), and Hispanics (7.2 percent)—were essentially unchanged in July. (See tables A-3 and A-4.)

The number of unemployed persons on temporary layoff—those who have been given a date to return to work or expect to return within 6 months—increased by 125,000 over the month to 966,000, reflecting the plant shutdowns in automobile-related manufacturing. The unemployment rate in durable goods manufacturing rose from 2.9 to 4.3 percent. (See tables A-11 and A-12.)

## Total employment and the labor force

Total employment was essentially unchanged over the month at 131.1 million. The employment-population ratio—the proportion of the population age 16 and older with jobs—was 63.9 percent, little changed from the previous month's rate. (See table A-3.)

About 7.6 million persons (not seasonally adjusted) held more than one job in July. These multiple jobholders comprised 5.8 percent of total employment. In both June and July, the multiple jobholding rate was lower than it had been a year earlier. (See table A-37.)

The civilian labor force was about unchanged at 137.3 million in July. The labor force participation rate was 66.9 percent, down from its all-time high of 67.3 percent at the beginning of the year. (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 July. 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. (See table A-36.)

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 374,000 in July, slightly higher than a year earlier.

## Industry payroll employment

Nonfarm payroll employment edged up by 66,000 in July, after seasonal adjustment. A large strike-related decline in manufacturing partly offset a substantial increase in retail trade and gains in other service-producing industries and construction. (See table B-3.)

Manufacturing employment fell by 176,000, as two strikes and related parts shortages led to plant shutdowns in several auto-related industries. (Persons on strike or on layoff for the entire survey reference period are not on payrolls and, thus, are not counted as employed in the establishment survey.) Employment in motor vehicles and equipment was down by 111,000; other declines at least partly attributable to the strikes (which were settled after the survey reference period) occurred in primary metals (-14,000), industrial machinery (-13,000), fabricated metals (-10,000), rubber and miscellaneous plastics (-7,000), and apparel and other textiles (-4,000). Manufacturing industries that had job losses unrelated to the strikes included food products (-9,000), electronic components (-7,000), and textile mill products (-5,000).

Construction added 18,000 jobs in July and has added 238,000 jobs since October. Mining employment fell by 5,000, with the losses occurring in oil and gas extraction.

A large increase in retail trade employment (125,000) reflected unusual strength in eating and drinking places (up 69,000), where growth has accelerated after a weak first quarter. Also contributing to the increase in retail trade were food stores and miscellaneous retail establishments, with gains of 16,000 jobs each, and building materials and garden supply stores and furniture stores, which added 6,000 jobs each. In wholesale trade, employment was essentially flat for the second month in a row.

Finance, insurance, and real estate continued its strong growth trend, adding 32,000 jobs in July. All three components contributed to the gain. In finance, employment rose

by 18,000, with security and mortgage brokerages accounting for most of the growth. Insurance continued to add jobs (8,000), and real estate employment grew by 6,000, following little change in the prior 2 months.

Transportation and public utilities added 18,000 jobs in July. All of the gain was in transportation, which had experienced little growth in the prior month. The largest increases were in trucking, local and interurban passenger transit, and water transportation.

Employment in services grew by 65,000 in July, only about half the average gain for the previous 12 months. Help supply services had a decline of 33,000 jobs, some of which was attributable to the shutdowns in the auto industry. Health services, which typically adds jobs each month, did not grow in July. Job losses in home health care and nursing homes offset gains in doctors' offices and hospitals. Elsewhere in the services industry, robust growth continued in engineering and management services (26,000) and computer services (20,000). Amusement and recreation services and hotels and other lodging places also added jobs over the month.

Government employment was little changed overall in July. Local government except education showed a decline of 18,000, as summer hiring was lighter than usual, and Federal employment continued its long-term downward

trend. An increase in State government employment mainly reflected a return to payrolls of public transportation workers following the settlement of a strike.

### Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls was unchanged in July at 34.6 hours, seasonally adjusted. The manufacturing workweek edged down by 0.1 hour to 41.7 hours, while factory overtime rose by 0.2 hour to 4.8 hours. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls increased by 0.3 percent to 145.2 (1982=100), seasonally adjusted. The manufacturing index fell by 1.6 percent to 107.3, reflecting in large part the effects of the strikes and layoffs in the auto-related industries. (See table B-9.)

### Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls rose by 3 cents in July to \$12.79, seasonally adjusted. Average weekly earnings increased by 0.2 percent to \$442.53. Over the year, average hourly and weekly earnings have risen by 4.2 and 4.5 percent, respectively. (See table B-11.)

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



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

(Numbers in thousands)

Category	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>Labor force status</b>													
Civilian noninstitutional population .....	203,166	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899	205,085	205,270
Civilian labor force .....	136,294	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364	137,447	137,296
Percent of population .....	67.1	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0	67.0	66.9
Employed .....	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067
Percent of population .....	63.8	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2	64.0	63.9
Unemployed .....	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230
Not in labor force .....	66,872	66,960	67,131	67,361	67,077	66,929	66,745	66,844	67,024	67,489	67,535	67,639	67,973
<b>Unemployment rates</b>													
All workers .....	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5
Men, 20 years and over .....	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9
Women, 20 years and over .....	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0
Both sexes, 16 to 19 years .....	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8
White .....	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8
Black .....	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7
Hispanic origin .....	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Employment</b>													
Total .....	122,811	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,234	125,562	125,758	125,824
Total private .....	103,219	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,470	105,734	105,942	106,020
Goods-producing industries .....	24,923	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,339	25,301	25,297	25,134
Mining .....	593	592	594	592	591	592	592	590	587	582	579	579	574
Construction .....	5,682	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,830	5,917	5,942	5,960
Manufacturing .....	18,648	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,827	18,805	18,776	18,600
Service-producing industries .....	97,888	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,895	100,261	100,461	100,690
Transportation and public utilities .....	6,411	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,513	6,534	6,537	6,555
Wholesale trade .....	6,655	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,798	6,815	6,819	6,820
Retail trade .....	21,987	22,043	22,078	22,105	22,206	22,245	22,280	22,283	22,259	22,335	22,423	22,454	22,579
Finance, insurance, and real estate .....	7,095	7,110	7,125	7,151	7,172	7,194	7,213	7,232	7,258	7,289	7,311	7,334	7,366
Services .....	36,148	36,225	36,363	36,484	36,638	36,795	36,932	37,020	37,106	37,196	37,350	37,501	37,566
Government .....	19,592	19,609	19,607	19,646	19,662	19,680	19,686	19,720	19,728	19,764	19,828	19,816	19,804
<b>Over-the-month change</b>													
Total .....	277	83	386	288	376	345	351	192	82	320	328	196	66
Total private .....	228	66	388	249	360	327	345	158	74	284	264	208	78
Goods-producing industries .....	20	49	21	39	67	94	104	17	-38	63	-38	-4	-163
Mining .....	0	-1	2	-2	-1	1	0	-2	-3	-5	-3	0	-5
Construction .....	14	17	14	9	28	60	71	21	-42	70	-13	25	18
Manufacturing .....	6	33	5	32	40	33	33	-2	7	-2	-22	-29	-176
Service-producing industries .....	257	34	365	249	309	251	247	175	120	257	366	200	229
Transportation and public utilities .....	6	-147	171	18	3	-5	22	21	10	9	21	3	18
Wholesale trade .....	23	16	8	18	14	20	28	10	14	15	17	4	1
Retail trade .....	0	56	35	27	101	39	35	3	-24	76	88	31	125
Finance, insurance, and real estate .....	23	15	15	26	21	22	19	19	28	31	22	23	32
Services .....	156	77	139	121	154	157	137	88	86	90	154	151	65
Government .....	49	17	-2	39	16	18	6	34	8	36	64	-12	-12
<b>Hours of work<sup>1</sup></b>													
Total private .....	34.5	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6
Manufacturing .....	41.9	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7
Overtime .....	4.8	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.8
<b>Indexes of aggregate weekly hours (1982=100)<sup>1</sup></b>													
Total private .....	141.3	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2
Manufacturing .....	108.9	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.7	109.4	109.1	107.3
<b>Earnings<sup>1</sup></b>													
Average hourly earnings, total private:													
Current dollars .....	\$12.27	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79
Constant (1982) dollars <sup>2</sup> .....	7.55	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.74	7.73	7.75	N.A.
Average weekly earnings, total private .....	423.32	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53

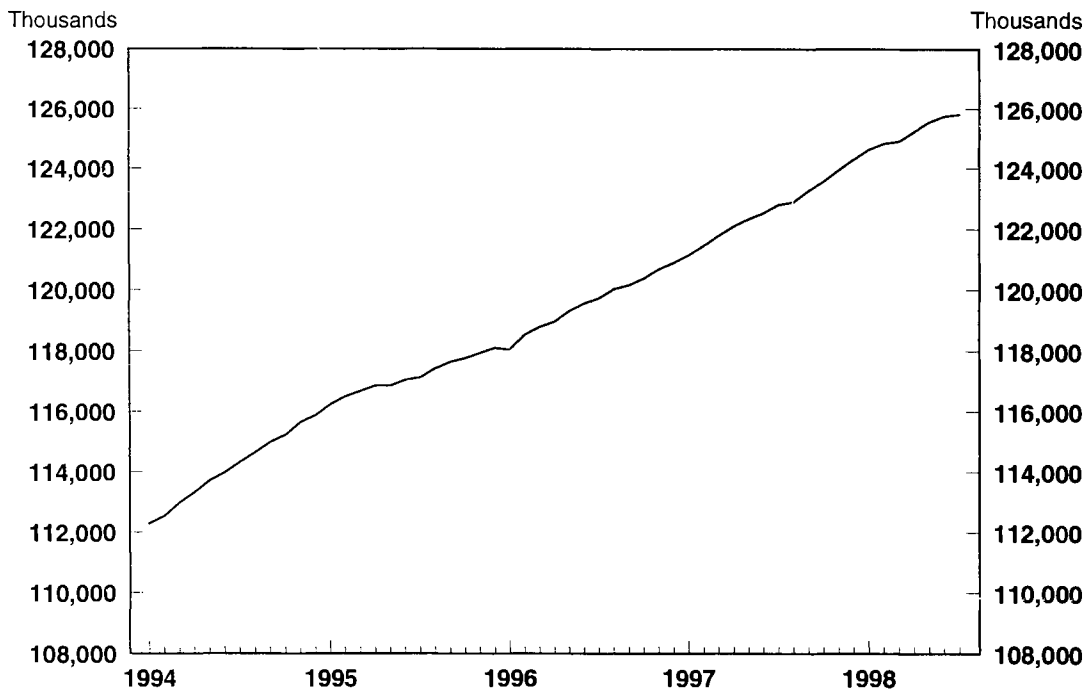
<sup>1</sup> Data relate to private production or nonsupervisory workers.

N.A. = not available.

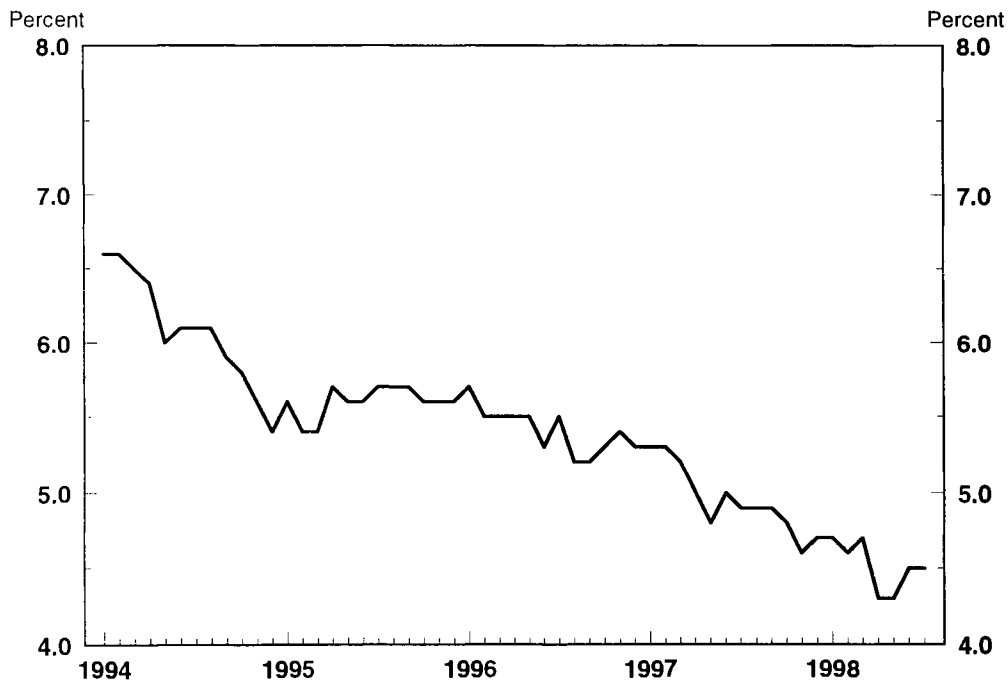
<sup>2</sup> The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

<sup>P</sup> = 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 <sup>1</sup> .....	144,126	87,034	60.4	82,153	57.0	3,484	78,669	4,882	5.6	57,091
1973 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	203,133	136,297	67.1	129,558	63.8	3,399	126,159	6,739	4.9	66,837
Monthly data, seasonally adjusted <sup>2</sup>										
<b>1997:</b>										
July .....	203,166	136,294	67.1	129,661	63.8	3,452	126,209	6,633	4.9	66,872
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
<b>1998:</b>										
January <sup>3</sup> .....	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

<sup>1</sup> 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.

<sup>2</sup> The population figures are not adjusted for seasonal variation.

<sup>3</sup> 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 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	
<b>Annual averages</b>										
<b>MEN</b>										
1986 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1997:</b>										
July .....	97,733	73,218	74.9	69,711	71.3	2,572	67,139	3,507	4.8	24,515
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	69,656	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
<b>1998:</b>										
January <sup>3</sup> .....	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
<b>Annual averages</b>										
<b>WOMEN</b>										
1986 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1997:</b>										
July .....	105,433	63,076	59.8	59,950	56.9	880	59,070	3,126	5.0	42,357
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
<b>1998:</b>										
January <sup>3</sup> .....	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

<sup>1</sup> 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.

<sup>2</sup> The population figures are not adjusted for seasonal variation.

<sup>3</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup> ..	203,166	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899	205,085	205,270
Civilian labor force .....	136,294	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364	137,447	137,296
Percent of population .....	67.1	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0	67.0	66.9
Employed .....	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067
Employment-population ratio .....	63.8	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2	64.0	63.9
Unemployed .....	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230
Unemployment rate .....	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5
<b>Men, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	97,733	97,838	97,946	98,050	98,141	98,225	98,241	98,331	98,405	98,503	98,591	98,691	98,785
Civilian labor force .....	73,218	73,265	73,192	73,311	73,682	73,662	73,852	73,780	73,695	73,799	73,783	73,818	74,027
Percent of population .....	74.9	74.9	74.7	74.8	75.1	75.0	75.2	75.0	74.9	74.9	74.8	74.8	74.9
Employed .....	69,711	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685	70,570	70,605
Employment-population ratio .....	71.3	71.3	71.1	71.2	71.7	71.5	71.8	71.7	71.4	71.9	71.7	71.5	71.5
Agriculture .....	2,572	2,504	2,552	2,468	2,503	2,497	2,463	2,458	2,356	2,584	2,492	2,535	2,596
Nonagricultural industries .....	67,139	67,244	67,104	67,317	67,849	67,698	68,056	68,001	67,941	68,246	68,193	68,035	68,009
Unemployed .....	3,507	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098	3,249	3,422
Unemployment rate .....	4.8	4.0	4.8	4.8	4.5	4.7	4.5	4.5	4.6	4.0	4.2	4.4	4.6
Not in labor force .....	24,515	24,573	24,754	24,739	24,459	24,563	24,389	24,551	24,710	24,704	24,808	24,873	24,759
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	89,888	89,982	90,068	90,140	90,251	90,339	90,391	90,476	90,502	90,580	90,622	90,700	90,802
Civilian labor force .....	69,171	69,198	69,136	69,193	69,500	69,561	69,652	69,601	69,451	69,697	69,624	69,545	69,790
Percent of population .....	77.0	76.9	76.8	76.8	77.0	77.0	77.1	76.9	76.7	76.9	76.8	76.7	76.9
Employed .....	66,361	66,386	66,298	66,337	66,824	66,676	67,008	66,990	66,753	67,301	67,190	66,950	67,040
Employment-population ratio .....	73.8	73.8	73.6	73.6	74.0	73.8	74.1	74.0	73.8	74.3	74.1	73.8	73.8
Agriculture .....	2,390	2,311	2,383	2,298	2,323	2,314	2,282	2,264	2,168	2,420	2,324	2,333	2,394
Nonagricultural industries .....	63,971	64,075	63,915	64,039	64,501	64,362	64,726	64,726	64,585	64,881	64,866	64,617	64,646
Unemployed .....	2,810	2,812	2,838	2,856	2,676	2,885	2,644	2,611	2,699	2,396	2,434	2,595	2,750
Unemployment rate .....	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9
Not in labor force .....	20,717	20,784	20,932	20,947	20,751	20,778	20,738	20,875	21,051	20,883	20,998	21,154	21,012
<b>Women, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	105,433	105,527	105,623	105,718	105,799	105,873	105,997	106,070	106,141	106,228	106,308	106,394	106,484
Civilian labor force .....	63,076	63,139	63,247	63,095	63,182	63,507	63,641	63,777	63,827	63,443	63,581	63,628	63,270
Percent of population .....	59.8	59.8	59.9	59.7	59.7	60.0	60.0	60.1	60.1	59.7	59.8	59.8	59.4
Employed .....	59,950	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768	60,640	60,462
Employment-population ratio .....	56.9	56.9	56.9	56.9	56.9	57.2	57.1	57.2	57.2	57.0	57.2	57.0	56.8
Agriculture .....	880	875	870	859	881	888	856	876	776	766	844	808	845
Nonagricultural industries .....	59,070	59,124	59,235	59,266	59,342	59,694	59,709	59,827	59,921	59,787	59,924	59,832	59,617
Unemployed .....	3,126	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813	2,989	2,808
Unemployment rate .....	5.0	5.0	5.0	4.7	4.7	4.6	4.8	4.8	4.9	4.6	4.4	4.7	4.4
Not in labor force .....	42,357	42,388	42,376	42,623	42,617	42,366	42,356	42,293	42,314	42,785	42,727	42,766	43,215
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	97,919	98,000	98,082	98,144	98,212	98,300	98,420	98,471	98,534	98,583	98,668	98,735	98,778
Civilian labor force .....	59,232	59,362	59,432	59,338	59,348	59,624	59,652	59,721	59,771	59,486	59,573	59,599	59,359
Percent of population .....	60.5	60.6	60.6	60.5	60.4	60.7	60.6	60.6	60.7	60.3	60.4	60.4	60.1
Employed .....	56,693	56,789	56,883	56,919	56,953	57,255	57,040	57,146	57,186	57,075	57,253	57,172	57,000
Employment-population ratio .....	57.9	57.9	58.0	58.0	58.0	58.2	58.0	58.0	58.0	57.9	58.0	57.9	57.7
Agriculture .....	831	824	826	814	833	845	811	801	717	705	755	747	793
Nonagricultural industries .....	55,862	55,965	56,057	56,105	56,120	56,410	56,229	56,345	56,470	56,370	56,499	56,424	56,207
Unemployed .....	2,539	2,573	2,549	2,419	2,395	2,369	2,612	2,575	2,585	2,411	2,320	2,427	2,359
Unemployment rate .....	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0
Not in labor force .....	38,687	38,638	38,650	38,806	38,864	38,676	38,768	38,750	38,762	39,097	39,095	39,136	39,419
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup> ..	15,359	15,382	15,420	15,483	15,478	15,459	15,427	15,453	15,511	15,569	15,609	15,651	15,690
Civilian labor force .....	7,891	7,844	7,871	7,875	8,016	7,984	8,189	8,235	8,300	8,059	8,166	8,302	8,147
Percent of population .....	51.4	51.0	51.0	50.9	51.8	51.6	53.1	53.3	53.5	51.8	52.3	53.0	51.9
Employed .....	6,607	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010	7,088	7,027
Employment-population ratio .....	43.0	42.7	42.7	43.0	43.9	44.3	45.6	45.5	45.5	45.0	44.9	45.3	44.8
Agriculture .....	231	244	213	215	228	226	227	270	247	225	256	262	254
Nonagricultural industries .....	6,376	6,328	6,367	6,439	6,570	6,620	6,809	6,758	6,808	6,782	6,754	6,826	6,773
Unemployed .....	1,284	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156	1,215	1,120
Unemployment rate .....	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8
Not in labor force .....	7,468	7,538	7,549	7,608	7,462	7,475	7,238	7,218	7,210	7,510	7,442	7,349	7,542

<sup>1</sup> 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.

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> ..	170,010	170,148	170,290	170,427	170,545	170,649	170,810	170,917	171,016	171,141	171,257	171,387	171,513
Civilian labor force .....	114,622	114,669	114,758	114,784	115,073	115,263	115,253	115,392	115,297	115,057	115,309	115,137	114,975
Percent of population .....	67.4	67.4	67.4	67.4	67.5	67.5	67.5	67.5	67.4	67.2	67.3	67.2	67.0
Employed .....	109,851	109,832	109,904	110,063	110,604	110,729	110,698	110,842	110,605	110,859	111,025	110,535	110,630
Employment-population ratio .....	64.6	64.6	64.5	64.6	64.9	64.9	64.8	64.9	64.7	64.8	64.8	64.5	64.5
Unemployed .....	4,771	4,837	4,854	4,721	4,469	4,534	4,555	4,550	4,692	4,198	4,284	4,602	4,346
Unemployment rate .....	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8
<b>Men, 20 years and over</b>													
Civilian labor force .....	59,096	59,118	59,110	59,098	59,355	59,389	59,262	59,372	59,201	59,307	59,366	59,257	59,403
Percent of population .....	77.4	77.4	77.3	77.2	77.5	77.5	77.3	77.4	77.1	77.2	77.2	77.0	77.2
Employed .....	57,011	57,011	56,989	56,966	57,363	57,272	57,336	57,456	57,209	57,562	57,516	57,302	57,436
Employment-population ratio .....	74.7	74.6	74.5	74.4	74.9	74.7	74.8	74.9	74.5	74.9	74.8	74.5	74.6
Unemployed .....	2,085	2,107	2,121	2,132	1,992	2,117	1,926	1,916	1,992	1,745	1,850	1,955	1,967
Unemployment rate .....	3.5	3.6	3.6	3.6	3.4	3.6	3.3	3.2	3.4	2.9	3.1	3.3	3.3
<b>Women, 20 years and over</b>													
Civilian labor force .....	48,790	48,910	48,955	48,976	48,906	49,134	49,077	49,057	49,077	48,955	49,019	48,886	48,705
Percent of population .....	59.9	60.0	60.0	60.0	59.9	60.1	60.0	59.9	59.9	59.7	59.8	59.6	59.3
Employed .....	47,072	47,122	47,165	47,284	47,265	47,474	47,250	47,279	47,276	47,300	47,416	47,197	47,087
Employment-population ratio .....	57.8	57.8	57.8	57.9	57.8	58.1	57.7	57.7	57.7	57.7	57.8	57.5	57.4
Unemployed .....	1,718	1,788	1,790	1,692	1,641	1,660	1,827	1,778	1,801	1,654	1,603	1,688	1,618
Unemployment rate .....	3.5	3.7	3.7	3.5	3.4	3.4	3.7	3.6	3.7	3.4	3.3	3.5	3.3
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,736	6,641	6,693	6,710	6,812	6,740	6,914	6,963	7,019	6,795	6,924	6,994	6,867
Percent of population .....	55.3	54.4	54.8	54.9	55.6	55.0	56.3	56.6	56.9	54.9	55.8	56.2	55.1
Employed .....	5,768	5,699	5,750	5,813	5,976	5,983	6,113	6,107	6,120	5,996	6,093	6,036	6,107
Employment-population ratio .....	47.3	46.7	47.0	47.5	48.8	48.8	49.8	49.6	49.6	48.5	49.1	48.5	49.0
Unemployed .....	968	942	943	897	836	757	802	857	899	799	831	958	760
Unemployment rate .....	14.4	14.2	14.1	13.4	12.3	11.2	11.6	12.3	12.8	11.8	12.0	13.7	11.1
Men .....	15.0	15.1	14.4	14.3	12.8	11.3	14.2	14.7	14.9	12.7	14.0	14.7	13.1
Women .....	13.7	13.1	13.7	12.3	11.6	11.1	8.8	9.8	10.6	10.7	9.8	12.6	8.9
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> ..	24,006	24,043	24,081	24,117	24,149	24,180	24,196	24,229	24,257	24,289	24,317	24,349	24,381
Civilian labor force .....	15,524	15,728	15,691	15,555	15,638	15,709	15,788	15,885	15,971	15,907	15,756	16,013	16,059
Percent of population .....	64.7	65.4	65.2	64.5	64.8	65.0	65.3	65.6	65.8	65.5	64.8	65.8	65.9
Employed .....	14,040	14,237	14,180	14,067	14,128	14,149	14,316	14,349	14,498	14,499	14,344	14,700	14,508
Employment-population ratio .....	58.5	59.2	58.9	58.3	58.5	58.5	59.2	59.8	59.8	59.7	59.0	60.4	59.5
Unemployed .....	1,484	1,491	1,511	1,488	1,510	1,560	1,472	1,535	1,473	1,408	1,412	1,313	1,551
Unemployment rate .....	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,946	7,035	6,978	6,945	6,965	6,957	7,012	6,974	7,044	7,097	7,009	7,088	7,120
Percent of population .....	72.5	73.3	72.6	72.3	72.1	72.0	72.6	72.1	72.8	73.2	72.2	73.0	73.2
Employed .....	6,371	6,480	6,424	6,367	6,420	6,356	6,456	6,428	6,511	6,573	6,536	6,599	6,485
Employment-population ratio .....	66.5	67.5	66.8	66.3	66.5	65.8	66.9	66.5	67.3	67.8	67.4	67.9	66.7
Unemployed .....	575	555	554	578	545	601	556	546	533	524	473	489	635
Unemployment rate .....	8.3	7.9	7.9	8.3	7.8	8.6	7.9	7.8	7.6	7.4	6.7	6.9	8.9
<b>Women, 20 years and over</b>													
Civilian labor force .....	7,691	7,771	7,790	7,680	7,731	7,791	7,799	7,952	7,935	7,822	7,787	7,866	7,921
Percent of population .....	64.1	64.6	64.6	63.6	63.9	64.4	64.3	65.5	65.3	64.3	64.0	64.5	64.9
Employed .....	7,048	7,115	7,135	7,044	7,080	7,163	7,178	7,265	7,284	7,182	7,130	7,256	7,296
Employment-population ratio .....	58.7	59.1	59.2	58.3	58.6	59.2	59.2	59.8	60.0	59.0	58.6	59.5	59.8
Unemployed .....	643	656	655	636	651	628	621	687	651	640	657	609	625
Unemployment rate .....	8.4	8.4	8.4	8.3	8.4	8.1	8.0	8.6	8.2	8.2	8.4	7.7	7.9

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	887	922	923	930	942	961	977	959	992	988	960	1,060	1,018
Percent of population .....	36.7	38.3	38.3	38.2	39.2	39.8	40.5	39.6	40.9	40.6	39.4	43.4	41.6
Employed .....	621	642	621	656	628	630	683	656	703	744	678	846	727
Employment-population ratio .....	25.7	26.6	25.8	26.9	26.1	26.1	28.3	27.1	29.0	30.6	27.8	34.6	29.7
Unemployed .....	266	280	302	274	314	331	294	302	289	244	283	214	291
Unemployment rate .....	30.0	30.4	32.7	29.5	33.3	34.4	30.1	31.5	29.1	24.7	29.4	20.2	28.6
Men .....	34.6	33.9	37.6	30.1	35.0	36.2	31.8	34.7	27.8	23.9	30.2	20.4	30.6
Women .....	25.9	27.2	28.6	28.8	31.9	33.1	28.5	28.4	30.3	25.3	28.8	20.1	26.4
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> ..	20,351	20,407	20,464	20,519	20,575	20,629	20,741	20,798	20,851	20,915	20,975	21,036	21,097
Civilian labor force .....	13,861	13,886	13,861	13,896	13,880	13,973	13,954	14,149	14,298	14,369	14,458	14,420	14,240
Percent of population .....	68.1	68.0	67.7	67.7	67.5	67.7	67.3	68.0	68.6	68.7	68.9	68.5	67.5
Employed .....	12,772	12,867	12,807	12,806	12,921	12,921	12,988	13,181	13,305	13,434	13,480	13,328	13,219
Employment-population ratio .....	62.8	63.1	62.6	62.4	62.8	62.6	62.6	63.4	63.8	64.2	64.3	63.4	62.7
Unemployed .....	1,089	1,019	1,054	1,090	959	1,052	966	968	993	935	978	1,092	1,022
Unemployment rate .....	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2

<sup>1</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>Less than a high school diploma</b>													
Civilian noninstitutional population <sup>1</sup> .....	29,288	29,314	29,350	29,046	29,505	29,566	29,981	29,228	29,251	29,638	29,931	30,064	29,027
Civilian labor force .....	12,554	12,534	12,555	12,468	12,511	12,555	12,682	12,555	12,392	12,664	12,690	12,888	12,548
Percent of population .....	42.9	42.8	42.8	42.9	42.4	42.5	42.3	43.0	42.4	42.7	42.4	42.9	43.2
Employed .....	11,579	11,573	11,548	11,502	11,575	11,606	11,771	11,676	11,500	11,773	11,839	11,963	11,648
Employment-population ratio .....	39.5	39.5	39.3	39.6	39.2	39.3	39.3	39.9	39.3	39.7	39.6	39.8	40.1
Unemployed .....	975	961	1,007	966	936	949	911	879	891	891	851	925	901
Unemployment rate .....	7.8	7.7	8.0	7.7	7.5	7.6	7.2	7.0	7.2	7.0	6.7	7.2	7.2
<b>High school graduates, no college<sup>2</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	57,581	57,607	57,483	57,459	57,310	57,631	57,606	57,418	57,885	57,484	57,706	57,446	57,374
Civilian labor force .....	37,987	37,842	37,585	37,759	37,641	37,827	37,787	37,807	37,931	37,340	37,496	37,096	37,219
Percent of population .....	66.0	65.7	65.4	65.7	65.7	65.6	65.6	65.8	65.5	65.0	65.0	64.6	64.9
Employed .....	36,382	36,225	36,003	36,179	36,193	36,287	36,303	36,302	36,331	35,885	36,114	35,602	35,694
Employment-population ratio .....	63.2	62.9	62.6	63.0	63.2	63.0	63.0	63.2	62.8	62.4	62.6	62.0	62.2
Unemployed .....	1,605	1,617	1,582	1,580	1,448	1,540	1,485	1,505	1,600	1,454	1,383	1,494	1,525
Unemployment rate .....	4.2	4.3	4.2	4.2	3.8	4.1	3.9	4.0	4.2	3.9	3.7	4.0	4.1
<b>Less than a bachelor's degree<sup>3</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	42,322	42,401	42,075	42,613	42,417	42,085	41,718	42,527	42,313	42,303	42,024	41,880	42,293
Civilian labor force .....	31,227	31,445	31,401	31,328	31,544	31,506	31,440	31,505	31,515	31,517	31,408	31,227	31,174
Percent of population .....	73.8	74.2	74.6	73.5	74.4	74.9	75.4	74.1	74.5	74.5	74.7	74.6	73.7
Employed .....	30,239	30,438	30,382	30,410	30,574	30,484	30,429	30,538	30,471	30,669	30,437	30,333	30,224
Employment-population ratio .....	71.4	71.8	72.2	71.4	72.1	72.4	72.9	71.8	72.0	72.5	72.4	72.4	71.5
Unemployed .....	988	1,007	1,019	918	970	1,022	1,011	967	1,043	848	971	894	950
Unemployment rate .....	3.2	3.2	3.2	2.9	3.1	3.2	3.2	3.1	3.3	2.7	3.1	2.9	3.0
<b>College graduates</b>													
Civilian noninstitutional population <sup>1</sup> .....	41,171	41,232	41,769	41,696	41,739	41,822	41,974	42,238	42,085	42,197	42,090	42,464	43,309
Civilian labor force .....	33,159	33,290	33,577	33,510	33,505	33,678	33,685	33,672	33,777	33,989	33,920	34,274	34,721
Percent of population .....	80.5	80.7	80.4	80.4	80.3	80.5	80.3	79.7	80.3	80.5	80.6	80.7	80.2
Employed .....	32,474	32,592	32,891	32,868	32,916	33,083	33,040	33,029	33,145	33,419	33,364	33,674	34,146
Employment-population ratio .....	78.9	79.0	78.7	78.8	78.9	79.1	78.7	78.2	78.8	79.2	79.3	79.3	78.8
Unemployed .....	685	698	686	642	589	595	645	643	632	571	556	600	575
Unemployment rate .....	2.1	2.1	2.0	1.9	1.8	1.8	1.9	1.9	1.9	1.7	1.6	1.7	1.7

<sup>1</sup> The population figures are not adjusted for seasonal variation.

<sup>2</sup> Includes high school diploma or equivalent.

<sup>3</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>EMPLOYED</b>													
Full-time workers .....	106,548	106,672	106,926	106,824	107,491	107,452	107,777	107,788	107,696	108,107	108,155	107,607	107,737
Men, 16 years and over .....	62,332	62,376	62,487	62,439	63,014	62,829	62,909	62,810	62,740	63,092	63,098	63,098	63,117
Men, 20 years and over .....	61,038	61,101	61,197	61,142	61,672	61,505	61,652	61,534	61,434	61,810	61,742	61,680	61,682
Women, 16 years and over .....	44,304	44,375	44,436	44,369	44,452	44,589	44,741	44,869	44,855	44,957	44,983	44,599	44,794
Women, 20 years and over .....	43,364	43,468	43,518	43,479	43,546	43,691	43,856	43,898	43,810	43,997	44,017	43,694	43,749
Both sexes, 16 to 19 years .....	2,146	2,103	2,211	2,203	2,273	2,256	2,268	2,356	2,452	2,300	2,396	2,233	2,306
Part-time workers .....	23,016	23,061	23,004	23,163	23,244	23,422	23,373	23,249	23,428	23,201	23,222	23,494	23,187
Men, 16 years and over .....	7,375	7,436	7,348	7,401	7,432	7,459	7,469	7,547	7,550	7,641	7,424	7,466	7,488
Men, 20 years and over .....	5,323	5,355	5,278	5,255	5,226	5,257	5,273	5,319	5,305	5,404	5,296	5,236	5,337
Women, 16 years and over .....	15,628	15,623	15,652	15,766	15,802	16,014	15,833	15,704	15,901	15,580	15,770	16,045	15,699
Women, 20 years and over .....	13,290	13,291	13,366	13,432	13,447	13,559	13,258	13,175	13,382	13,099	13,232	13,468	13,257
Both sexes, 16 to 19 years .....	4,403	4,415	4,360	4,476	4,571	4,606	4,842	4,755	4,742	4,698	4,694	4,790	4,593
<b>UNEMPLOYED</b>													
Looking for full-time work .....	5,329	5,305	5,309	5,215	4,987	5,203	5,075	5,070	5,126	4,690	4,784	4,905	4,957
Men, 16 years and over .....	2,961	2,958	2,984	2,991	2,834	2,994	2,645	2,610	2,725	2,461	2,662	2,769	2,876
Men, 20 years and over .....	2,585	2,568	2,571	2,600	2,466	2,689	2,438	2,386	2,462	2,167	2,250	2,409	2,515
Women, 16 years and over .....	2,344	2,369	2,361	2,254	2,205	2,220	2,296	2,369	2,322	2,252	2,160	2,224	2,041
Women, 20 years and over .....	2,102	2,116	2,069	1,979	1,905	1,914	2,102	2,137	2,050	1,993	1,916	1,920	1,892
Both sexes, 16 to 19 years .....	642	621	669	636	616	600	536	547	613	530	617	576	550
Looking for part-time work .....	1,305	1,346	1,328	1,288	1,329	1,238	1,339	1,279	1,409	1,170	1,157	1,300	1,285
Men, 16 years and over .....	558	577	561	570	551	502	549	583	582	504	494	566	545
Men, 20 years and over .....	219	233	245	263	226	220	206	220	234	228	180	182	224
Women, 16 years and over .....	766	752	751	705	779	753	760	708	806	686	679	757	751
Women, 20 years and over .....	445	459	458	440	499	462	505	443	536	426	415	490	494
Both sexes, 16 to 19 years .....	641	654	625	585	604	556	627	615	640	516	562	628	568
<b>UNEMPLOYMENT RATES<sup>1</sup></b>													
Full-time workers .....	4.8	4.7	4.7	4.7	4.4	4.6	4.5	4.5	4.5	4.2	4.2	4.4	4.4
Men, 16 years and over .....	4.5	4.5	4.6	4.6	4.3	4.5	4.0	4.0	4.2	3.8	4.0	4.2	4.4
Men, 20 years and over .....	4.1	4.0	4.0	4.1	3.8	4.2	3.8	3.7	3.9	3.4	3.5	3.8	3.9
Women, 16 years and over .....	5.0	5.1	5.0	4.8	4.7	4.7	4.9	5.0	4.9	4.8	4.6	4.8	4.4
Women, 20 years and over .....	4.6	4.6	4.5	4.4	4.2	4.2	4.6	4.6	4.5	4.3	4.2	4.2	4.1
Both sexes, 16 to 19 years .....	23.0	22.8	23.2	22.4	21.3	21.0	19.1	18.8	20.0	18.7	20.5	20.5	19.3
Part-time workers .....	5.4	5.5	5.5	5.3	5.4	5.0	5.4	5.2	5.7	4.8	4.7	5.2	5.3
Men, 16 years and over .....	7.0	7.2	7.1	7.2	6.9	6.3	6.8	7.2	7.2	6.2	6.2	7.0	6.8
Men, 20 years and over .....	4.0	4.2	4.4	4.8	4.1	4.0	3.8	4.0	4.2	4.0	3.3	3.4	4.0
Women, 16 years and over .....	4.7	4.6	4.6	4.3	4.7	4.5	4.6	4.3	4.8	4.2	4.1	4.5	4.6
Women, 20 years and over .....	3.2	3.3	3.3	3.2	3.6	3.3	3.7	3.3	3.8	3.2	3.0	3.5	3.6
Both sexes, 16 to 19 years .....	12.7	12.9	12.5	11.6	11.7	10.8	11.5	11.5	11.9	9.9	10.7	11.6	11.0

<sup>1</sup> 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.

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

(In thousands)

Category	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>MARITAL STATUS</b>													
Total .....	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067
Married men, spouse present .....	42,582	42,680	42,648	42,771	42,967	42,952	42,977	42,915	42,779	42,865	42,471	42,539	42,837
Married women, spouse present .....	32,813	32,861	32,846	32,978	32,840	32,975	32,793	32,821	32,872	32,973	32,805	32,805	32,658
Women who maintain families .....	7,875	7,892	7,876	7,865	7,726	7,822	7,784	7,884	7,776	7,813	7,848	7,922	7,846
<b>OCCUPATION</b>													
Managerial and professional specialty .....	37,598	37,765	37,860	37,844	37,986	38,205	38,099	38,164	38,454	38,643	38,641	38,732	39,011
Technical, sales, and administrative support .....	38,240	38,334	38,535	38,537	38,540	38,562	38,382	38,491	38,693	38,585	38,401	38,567	38,500
Service occupations .....	17,550	17,713	17,746	17,723	17,827	17,890	18,162	17,950	17,752	17,478	17,749	17,873	17,584
Precision production, craft, and repair .....	14,234	14,038	13,859	14,051	14,191	14,299	14,285	14,456	14,656	14,673	14,853	14,509	14,312
Operators, fabricators, and laborers .....	18,476	18,452	18,302	18,385	18,467	18,394	18,622	18,632	18,179	18,447	18,322	18,120	18,145
Farming, forestry, and fishing .....	3,531	3,442	3,483	3,438	3,512	3,472	3,355	3,436	3,269	3,495	3,479	3,503	3,503
<b>CLASS OF WORKER</b>													
<b>Agriculture:</b>													
Wage and salary workers .....	1,897	1,853	1,889	1,815	1,855	1,844	1,949	1,928	1,866	1,987	1,871	1,841	2,018
Self-employed workers .....	1,478	1,477	1,495	1,475	1,493	1,496	1,348	1,324	1,242	1,324	1,395	1,470	1,383
Unpaid family workers .....	52	50	44	55	49	54	44	41	32	28	51	48	30
<b>Nonagricultural industries:</b>													
Wage and salary workers .....	117,146	117,372	117,303	117,635	118,083	118,403	118,529	118,961	119,131	118,774	119,013	118,654	118,543
Private industries .....	98,843	99,169	99,194	99,560	99,913	100,155	100,108	100,583	101,058	100,571	100,979	100,157	100,179
Private households .....	911	935	877	877	910	946	985	1,035	1,022	1,014	1,015	961	974
Other industries .....	97,932	98,234	98,317	98,683	99,003	99,209	99,123	99,547	100,037	99,557	99,964	99,195	99,205
Government .....	18,303	18,203	18,109	18,075	18,170	18,248	18,421	18,378	18,072	18,202	18,034	18,497	18,364
Self-employed workers .....	8,927	8,955	8,949	8,930	9,004	8,886	8,964	8,761	8,784	9,069	9,023	8,969	9,094
Unpaid family workers .....	129	126	83	92	97	99	131	117	102	124	97	100	91
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
<b>All industries:</b>													
Part time for economic reasons .....	4,019	3,988	3,928	3,913	3,890	3,855	4,082	3,882	3,902	3,735	3,772	3,837	3,783
Slack work or business conditions .....	2,236	2,164	2,187	2,211	2,221	2,230	2,282	2,123	2,188	2,074	2,104	2,230	2,372
Could only find part-time work .....	1,489	1,487	1,455	1,406	1,386	1,323	1,400	1,455	1,445	1,300	1,344	1,246	1,192
Part time for noneconomic reasons .....	18,055	18,096	17,901	18,113	18,083	18,386	18,515	18,407	18,448	18,084	18,662	18,665	18,584
<b>Nonagricultural industries:</b>													
Part time for economic reasons .....	3,858	3,832	3,739	3,732	3,689	3,654	3,865	3,743	3,726	3,608	3,630	3,676	3,632
Slack work or business conditions .....	2,121	2,066	2,067	2,103	2,100	2,113	2,162	2,025	2,057	1,998	2,024	2,151	2,261
Could only find part-time work .....	1,462	1,455	1,417	1,378	1,346	1,291	1,373	1,433	1,416	1,276	1,315	1,199	1,162
Part time for noneconomic reasons .....	17,452	17,521	17,381	17,537	17,486	17,791	17,898	17,786	17,929	17,470	18,067	18,019	17,972

<sup>1</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and over .....	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453	131,209	131,067
16 to 24 years .....	19,017	18,855	19,013	19,002	19,257	19,304	19,574	19,587	19,563	19,691	19,597	19,587	19,412
16 to 19 years .....	6,607	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010	7,088	7,027
16 to 17 years .....	2,622	2,567	2,640	2,680	2,680	2,676	2,843	2,803	2,840	2,823	2,741	2,685	2,755
18 to 19 years .....	3,982	3,976	3,936	3,976	4,118	4,176	4,193	4,224	4,215	4,173	4,287	4,421	4,293
20 to 24 years .....	12,410	12,283	12,433	12,348	12,459	12,458	12,539	12,560	12,508	12,684	12,587	12,499	12,385
25 years and over .....	110,610	110,858	110,831	110,964	111,251	111,445	111,463	111,505	111,398	111,755	111,855	111,635	111,680
25 to 54 years .....	94,717	94,910	94,772	94,707	94,859	94,941	95,125	95,099	95,055	95,148	95,217	95,124	95,087
55 years and over .....	15,934	16,063	16,104	16,220	16,417	16,523	16,367	16,401	16,388	16,475	16,562	16,442	16,620
Men, 16 years and over .....	69,711	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685	70,570	70,605
16 to 24 years .....	9,929	9,895	9,880	9,889	10,070	10,010	10,178	10,132	10,167	10,263	10,126	10,236	10,075
16 to 19 years .....	3,350	3,362	3,358	3,448	3,528	3,519	3,510	3,470	3,544	3,529	3,495	3,620	3,565
16 to 17 years .....	1,331	1,339	1,360	1,398	1,401	1,377	1,472	1,397	1,452	1,444	1,375	1,368	1,402
18 to 19 years .....	2,007	1,996	1,980	2,075	2,128	2,151	2,041	2,080	2,093	2,088	2,121	2,263	2,175
20 to 24 years .....	6,579	6,533	6,522	6,441	6,542	6,491	6,668	6,662	6,622	6,733	6,631	6,616	6,510
25 years and over .....	59,781	59,850	59,877	59,952	60,234	60,168	60,288	60,315	60,117	60,520	60,543	60,346	60,542
25 to 54 years .....	50,858	50,906	50,871	50,867	51,125	51,034	51,235	51,201	51,144	51,357	51,315	51,161	51,203
55 years and over .....	8,932	9,007	9,009	9,060	9,152	9,151	9,048	9,087	8,991	9,114	9,226	9,122	9,336
Women, 16 years and over .....	59,950	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768	60,640	60,462
16 to 24 years .....	9,088	8,960	9,133	9,113	9,187	9,294	9,396	9,455	9,397	9,429	9,471	9,351	9,337
16 to 19 years .....	3,257	3,210	3,222	3,206	3,270	3,327	3,525	3,558	3,511	3,478	3,515	3,468	3,462
16 to 17 years .....	1,291	1,228	1,280	1,282	1,279	1,299	1,371	1,406	1,388	1,380	1,366	1,317	1,353
18 to 19 years .....	1,975	1,980	1,956	1,901	1,990	2,025	2,152	2,144	2,122	2,086	2,166	2,158	2,119
20 to 24 years .....	5,831	5,750	5,911	5,907	5,917	5,967	5,871	5,898	5,886	5,951	5,956	5,883	5,875
25 years and over .....	50,829	51,008	50,954	51,012	51,017	51,277	51,175	51,190	51,281	51,235	51,311	51,289	51,138
25 to 54 years .....	43,859	44,004	43,901	43,840	43,734	43,907	43,890	43,898	43,910	43,791	43,902	43,963	43,884
55 years and over .....	7,002	7,056	7,095	7,160	7,265	7,372	7,319	7,314	7,397	7,361	7,336	7,320	7,284

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and over .....	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910	6,237	6,230
16 to 24 years .....	2,350	2,393	2,408	2,375	2,360	2,300	2,371	2,378	2,335	2,063	2,184	2,318	2,230
16 to 19 years .....	1,284	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156	1,215	1,120
16 to 17 years .....	571	559	631	568	574	576	596	638	579	506	514	597	494
18 to 19 years .....	729	722	669	654	646	555	549	538	670	546	650	618	637
20 to 24 years .....	1,066	1,121	1,117	1,154	1,142	1,162	1,218	1,171	1,090	1,011	1,028	1,103	1,109
25 years and over .....	4,245	4,296	4,304	4,122	3,923	4,149	4,019	4,018	4,184	3,751	3,758	3,901	3,940
25 to 54 years .....	3,750	3,778	3,791	3,636	3,461	3,659	3,588	3,571	3,712	3,293	3,372	3,480	3,460
55 years and over .....	488	504	512	472	472	480	459	450	486	426	407	427	479
Men, 16 years and over .....	3,507	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098	3,249	3,422
16 to 24 years .....	1,293	1,334	1,347	1,350	1,325	1,250	1,278	1,348	1,282	1,105	1,250	1,246	1,293
16 to 19 years .....	697	705	698	670	654	582	689	709	700	573	664	653	672
16 to 17 years .....	309	295	314	311	312	310	330	371	330	253	300	363	294
18 to 19 years .....	385	417	381	360	349	268	357	313	374	320	370	303	371
20 to 24 years .....	596	629	649	680	671	668	588	639	582	532	586	592	621
25 years and over .....	2,201	2,220	2,182	2,176	2,005	2,213	2,050	1,975	2,102	1,854	1,875	1,991	2,104
25 to 54 years .....	1,928	1,921	1,901	1,887	1,727	1,896	1,785	1,718	1,828	1,602	1,639	1,762	1,816
55 years and over .....	274	284	276	277	278	325	289	268	285	244	225	231	283
Women, 16 years and over .....	3,126	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813	2,989	2,808
16 to 24 years .....	1,057	1,059	1,061	1,025	1,035	1,050	1,094	1,030	1,053	958	935	1,073	937
16 to 19 years .....	587	567	593	551	564	556	464	498	545	479	493	562	448
16 to 17 years .....	262	264	317	257	262	266	266	267	249	253	214	235	200
18 to 19 years .....	344	305	288	294	297	287	191	225	296	226	280	315	266
20 to 24 years .....	470	492	468	474	471	494	629	532	508	479	442	511	489
25 years and over .....	2,044	2,076	2,122	1,946	1,918	1,936	1,969	2,043	2,082	1,897	1,883	1,910	1,836
25 to 54 years .....	1,822	1,857	1,890	1,749	1,734	1,763	1,802	1,853	1,884	1,692	1,733	1,718	1,644
55 years and over .....	214	220	236	195	194	155	170	181	201	182	182	196	196

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

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>CHARACTERISTIC</b>													
Total .....	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3	4.5	4.5
Men, 20 years and over .....	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5	3.7	3.9
Women, 20 years and over .....	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9	4.1	4.0
Both sexes, 16 to 19 years .....	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2	14.6	13.8
White .....	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7	4.0	3.8
Black and other .....	8.4	8.4	8.4	8.2	8.4	8.6	8.3	8.3	8.2	7.5	7.6	7.3	8.3
Black .....	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0	8.2	9.7
Hispanic origin .....	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8	7.6	7.2
Married men, spouse present .....	2.6	2.6	2.6	2.6	2.4	2.6	2.6	2.5	2.5	2.2	2.4	2.2	2.3
Married women, spouse present .....	3.1	3.0	3.1	2.8	2.8	2.8	3.1	3.1	3.3	2.8	2.8	2.9	2.8
Women who maintain families .....	7.6	8.0	7.8	7.8	8.1	7.7	7.6	7.6	7.6	7.6	7.7	6.9	6.8
<b>OCCUPATION<sup>1</sup></b>													
Managerial and professional specialty .....	2.0	2.0	2.0	1.8	1.7	1.9	2.0	2.0	1.8	1.9	1.7	1.7	1.7
Technical, sales, and administrative support .....	4.1	4.1	4.0	3.9	3.9	4.0	4.2	4.0	4.1	3.7	3.9	3.9	3.8
Precision production, craft, and repair .....	4.9	4.7	4.8	5.3	4.5	4.7	4.6	4.1	4.5	3.7	4.4	4.3	4.4
Operators, fabricators, and laborers .....	7.4	7.6	7.8	7.1	7.1	7.0	5.9	6.5	6.9	6.1	6.5	6.9	6.9
Farming, forestry, and fishing .....	6.5	7.2	6.7	7.3	6.6	7.2	6.8	6.3	7.1	5.8	6.4	6.5	7.0
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers ...	4.9	5.0	5.0	4.8	4.7	4.8	4.7	4.7	4.7	4.3	4.5	4.7	4.6
Goods-producing industries .....	5.3	5.3	5.2	5.0	4.6	5.0	4.8	4.7	5.0	4.4	4.6	4.7	4.9
Mining .....	4.1	4.9	3.4	4.5	3.3	3.3	4.0	2.6	3.7	2.3	1.3	3.9	3.7
Construction .....	8.7	9.0	8.7	8.7	7.9	8.9	7.9	7.8	8.6	6.3	8.0	8.0	6.7
Manufacturing .....	4.3	4.1	4.1	3.8	3.6	3.8	3.9	3.7	3.8	3.9	3.6	3.6	4.4
Durable goods .....	3.5	3.5	3.3	3.1	3.1	3.1	3.4	2.9	3.6	3.5	3.0	2.9	4.3
Nondurable goods .....	5.4	5.0	5.3	4.8	4.4	4.9	4.5	5.0	4.2	4.4	4.6	4.6	4.5
Service-producing industries .....	4.8	4.9	4.9	4.7	4.7	4.7	4.7	4.7	4.6	4.3	4.5	4.7	4.5
Transportation and public utilities .....	3.4	3.7	3.8	3.3	3.1	3.3	3.8	3.2	3.3	3.1	3.0	3.6	3.4
Wholesale and retail trade .....	6.1	6.2	6.2	6.1	6.2	5.8	5.9	5.8	5.4	5.2	5.1	5.7	5.6
Finance, insurance, and real estate .....	3.1	3.0	3.0	2.9	2.4	2.8	2.6	2.6	2.6	2.2	2.0	2.1	2.0
Services .....	4.4	4.5	4.6	4.3	4.4	4.5	4.3	4.7	4.7	4.3	4.8	4.7	4.5
Government workers .....	2.7	2.6	2.6	2.4	2.3	2.1	2.4	2.3	2.9	2.0	2.4	2.0	2.5
Agricultural wage and salary workers .....	8.4	8.9	9.0	9.6	8.6	9.7	10.6	8.6	9.7	8.0	7.9	8.1	8.2

<sup>1</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>NUMBER OF UNEMPLOYED</b>													
Job losers and persons who completed temporary jobs .....	2,954	3,010	3,007	2,934	2,886	2,991	2,807	2,795	2,980	2,631	2,772	2,819	2,908
On temporary layoff .....	894	891	893	963	815	961	860	821	890	696	786	841	966
Not on temporary layoff .....	2,060	2,119	2,114	1,971	2,071	2,030	1,947	1,975	2,000	1,935	1,986	1,978	1,941
Job leavers .....	812	894	853	732	655	692	808	786	744	625	748	766	799
Reentrants .....	2,263	2,173	2,263	2,247	2,229	2,170	2,229	2,266	2,215	2,096	2,033	2,096	2,042
New entrants .....	564	554	560	555	560	552	518	543	549	511	493	532	463
<b>PERCENT DISTRIBUTION</b>													
Job losers and persons who completed temporary jobs .....	44.8	45.4	45.0	45.4	45.6	46.7	44.1	43.7	45.9	44.9	45.8	45.4	46.8
On temporary layoff .....	13.6	13.4	13.4	14.9	12.9	15.0	13.5	12.8	15.1	11.9	13.0	13.5	15.6
Not on temporary layoff .....	31.2	32.0	31.6	30.5	32.7	31.7	30.6	30.9	30.8	33.0	32.8	31.8	31.3
Job leavers .....	12.3	13.5	12.8	11.3	10.3	10.8	12.7	12.3	11.5	10.7	12.4	12.3	12.9
Reentrants .....	34.3	32.8	33.9	34.7	35.2	33.9	35.0	35.5	34.1	35.7	33.6	33.7	32.9
New entrants .....	8.6	8.4	8.4	8.6	8.8	8.6	8.1	8.5	8.5	8.7	8.2	8.6	7.5
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers and persons who completed temporary jobs .....	2.2	2.2	2.2	2.2	2.1	2.2	2.0	2.0	2.2	1.9	2.0	2.1	2.1
Job leavers .....	.6	.7	.6	.5	.5	.5	.6	.6	.5	.5	.5	.6	.6
Reentrants .....	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5
New entrants .....	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.3

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>NUMBER OF UNEMPLOYED</b>													
Less than 5 weeks .....	2,446	2,564	2,484	2,558	2,423	2,531	2,488	2,622	2,858	2,632	2,634	2,519	2,625
5 to 14 weeks .....	2,097	2,121	2,115	1,912	2,048	1,922	1,971	1,909	1,979	1,901	1,954	2,084	1,983
15 weeks and over .....	2,128	2,027	2,109	1,990	1,865	1,964	1,811	1,830	1,731	1,417	1,462	1,621	1,600
15 to 26 weeks .....	1,061	950	1,031	919	899	936	773	855	841	584	656	852	793
27 weeks and over .....	1,067	1,077	1,078	1,071	966	1,028	1,038	974	891	833	806	769	807
Average (mean) duration, in weeks .....	16.5	15.8	15.9	16.3	15.6	16.3	15.6	15.6	14.3	14.3	14.6	13.8	14.3
Median duration, in weeks .....	8.2	7.9	8.1	7.7	7.8	7.7	7.4	7.2	6.8	6.4	5.9	6.6	6.6
<b>PERCENT DISTRIBUTION</b>													
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 .....	36.7	38.2	37.0	39.6	38.2	39.4	39.7	41.2	43.5	44.2	43.5	40.5	42.3
5 to 14 weeks .....	31.4	31.6	31.5	29.6	32.3	30.0	31.4	30.0	30.1	31.9	32.3	33.5	31.9
15 weeks and over .....	31.9	30.2	31.4	30.8	29.4	30.6	28.9	28.8	26.4	23.8	24.2	26.0	25.8
15 to 26 weeks .....	15.9	14.2	15.4	14.2	14.2	14.6	12.3	13.4	12.8	9.8	10.8	13.7	12.8
27 weeks and over .....	16.0	16.0	16.1	16.6	15.2	16.0	16.6	15.3	13.6	14.0	13.3	12.4	13.0

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	July 1998									
	Civilian noninstitutional 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	
<b>TOTAL</b>										
16 years and over .....	205,270	139,336	67.9	132,769	64.7	3,866	128,903	6,567	4.7	65,934
16 to 19 years .....	15,690	10,033	63.9	8,580	54.7	412	8,168	1,453	14.5	5,657
16 to 17 years .....	7,910	4,218	53.3	3,523	44.5	227	3,296	695	16.5	3,692
18 to 19 years .....	7,780	5,816	74.8	5,057	65.0	185	4,873	758	13.0	1,964
20 to 24 years .....	17,576	14,192	80.7	13,019	74.1	391	12,628	1,173	8.3	3,385
25 to 54 years .....	117,375	98,273	83.7	94,833	80.8	2,319	92,514	3,441	3.5	19,101
25 to 34 years .....	38,723	32,721	84.5	31,280	80.8	784	30,496	1,441	4.4	6,002
25 to 29 years .....	18,573	15,756	84.8	15,009	80.8	413	14,596	747	4.7	2,818
30 to 34 years .....	20,149	16,965	84.2	16,271	80.8	372	15,900	694	4.1	3,184
35 to 44 years .....	44,360	37,462	84.5	36,264	81.7	889	35,375	1,198	3.2	6,898
35 to 39 years .....	22,488	18,860	83.9	18,247	81.1	483	17,764	613	3.2	3,628
40 to 44 years .....	21,872	18,602	85.1	18,017	82.4	406	17,611	585	3.1	3,270
45 to 54 years .....	34,292	28,090	81.9	27,289	79.6	646	26,643	802	2.9	6,202
45 to 49 years .....	18,843	15,814	83.9	15,363	81.5	390	14,974	451	2.9	3,029
50 to 54 years .....	15,449	12,276	79.5	11,926	77.2	256	11,669	350	2.9	3,173
55 to 64 years .....	22,356	12,988	58.1	12,628	56.5	434	12,194	360	2.8	9,368
55 to 59 years .....	12,245	8,380	68.4	8,151	66.6	236	7,915	230	2.7	3,865
60 to 64 years .....	10,111	4,608	45.6	4,477	44.3	198	4,279	131	2.8	5,503
65 years and over .....	32,273	3,849	11.9	3,709	11.5	311	3,399	139	3.6	28,424
65 to 69 years .....	9,371	2,133	22.8	2,048	21.9	125	1,922	85	4.0	7,238
70 to 74 years .....	8,585	1,044	12.2	1,015	11.8	112	904	29	2.8	7,540
75 years and over .....	14,317	672	4.7	647	4.5	74	573	25	3.7	13,646
<b>Men</b>										
16 years and over .....	98,785	75,467	76.4	72,049	72.9	2,915	69,134	3,418	4.5	23,319
16 to 19 years .....	7,984	5,265	66.0	4,429	55.5	329	4,100	836	15.9	2,718
16 to 17 years .....	4,053	2,251	55.5	1,844	45.5	180	1,663	407	18.1	1,802
18 to 19 years .....	3,931	3,015	76.7	2,586	65.8	149	2,437	429	14.2	916
20 to 24 years .....	8,796	7,541	85.7	6,941	78.9	318	6,624	600	8.0	1,254
25 to 54 years .....	57,735	53,130	92.0	51,425	89.1	1,699	49,726	1,705	3.2	4,605
25 to 34 years .....	19,049	17,849	93.7	17,129	89.9	587	16,542	719	4.0	1,200
25 to 29 years .....	9,141	8,507	93.1	8,154	89.2	301	7,853	353	4.2	634
30 to 34 years .....	9,908	9,342	94.3	8,976	90.6	286	8,689	366	3.9	566
35 to 44 years .....	21,914	20,332	92.8	19,769	90.2	644	19,125	563	2.8	1,582
35 to 39 years .....	11,129	10,367	93.2	10,093	90.7	350	9,743	274	2.6	762
40 to 44 years .....	10,785	9,965	92.4	9,676	89.7	294	9,382	289	2.9	820
45 to 54 years .....	16,773	14,949	89.1	14,527	86.6	467	14,059	423	2.8	1,823
45 to 49 years .....	9,267	8,385	90.5	8,163	88.1	283	7,880	222	2.6	882
50 to 54 years .....	7,506	6,564	87.5	6,364	84.8	184	6,180	200	3.1	942
55 to 64 years .....	10,643	7,229	67.9	7,036	66.1	317	6,719	193	2.7	3,414
55 to 59 years .....	5,859	4,593	78.4	4,480	76.5	167	4,314	113	2.5	1,266
60 to 64 years .....	4,784	2,636	55.1	2,556	53.4	150	2,405	81	3.1	2,148
65 years and over .....	13,628	2,301	16.9	2,218	16.3	253	1,965	83	3.6	11,327
65 to 69 years .....	4,296	1,244	29.0	1,196	27.8	104	1,092	48	3.8	3,052
70 to 74 years .....	3,804	621	16.3	605	15.9	90	515	15	2.5	3,184
75 years and over .....	5,528	437	7.9	417	7.5	59	358	20	4.6	5,091
<b>Women</b>										
16 years and over .....	106,484	63,869	60.0	60,720	57.0	951	59,769	3,149	4.9	42,616
16 to 19 years .....	7,706	4,768	61.9	4,151	53.9	83	4,068	617	12.9	2,938
16 to 17 years .....	3,857	1,967	51.0	1,679	43.5	47	1,632	288	14.6	1,890
18 to 19 years .....	3,849	2,801	72.8	2,472	64.2	36	2,436	329	11.8	1,048
20 to 24 years .....	8,781	6,650	75.7	6,078	69.2	74	6,004	573	8.6	2,130
25 to 54 years .....	59,639	45,143	75.7	43,408	72.8	620	42,788	1,735	3.8	14,496
25 to 34 years .....	19,674	14,872	75.6	14,151	71.9	197	13,954	721	4.9	4,802
25 to 29 years .....	9,433	7,248	76.6	6,855	72.7	112	6,743	393	5.4	2,184
30 to 34 years .....	10,242	7,624	74.4	7,296	71.2	85	7,210	328	4.3	2,618
35 to 44 years .....	22,445	17,130	76.3	16,495	73.5	244	16,250	635	3.7	5,316
35 to 39 years .....	11,359	8,493	74.8	8,154	71.8	132	8,022	339	4.0	2,866
40 to 44 years .....	11,087	8,637	77.9	8,341	75.2	112	8,229	296	3.4	2,450
45 to 54 years .....	17,519	13,141	75.0	12,762	72.8	178	12,584	379	2.9	4,378
45 to 49 years .....	9,577	7,429	77.6	7,200	75.2	106	7,094	229	3.1	2,147
50 to 54 years .....	7,943	5,712	71.9	5,562	70.0	72	5,490	150	2.6	2,231
55 to 64 years .....	11,713	5,759	49.2	5,592	47.7	117	5,475	167	2.9	5,954
55 to 59 years .....	6,386	3,788	59.3	3,671	57.5	69	3,601	117	3.1	2,599
60 to 64 years .....	5,327	1,972	37.0	1,921	36.1	47	1,874	50	2.6	3,355
65 years and over .....	18,645	1,548	8.3	1,492	8.0	58	1,434	56	3.6	17,097
65 to 69 years .....	5,075	889	17.5	852	16.8	21	830	37	4.2	4,186
70 to 74 years .....	4,781	424	8.9	410	8.6	22	388	14	3.3	4,357
75 years and over .....	8,789	235	2.7	230	2.6	15	215	5	2.0	8,555

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	July 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>WHITE</b>										
16 years and over .....	171,513	116,570	68.0	112,047	65.3	3,566	108,481	4,523	3.9	54,943
16 to 19 years .....	12,472	8,356	67.0	7,384	59.2	390	6,994	972	11.6	4,116
16 to 17 years .....	6,275	3,559	56.7	3,082	49.1	210	2,872	476	13.4	2,717
18 to 19 years .....	6,197	4,798	77.4	4,302	69.4	180	4,122	496	10.3	1,399
20 to 24 years .....	14,134	11,671	82.6	10,959	77.5	367	10,592	712	6.1	2,462
25 to 54 years .....	97,022	81,744	84.3	79,303	81.7	2,106	77,196	2,441	3.0	15,279
25 to 34 years .....	31,263	26,649	85.2	25,679	82.1	724	24,954	971	3.6	4,614
25 to 29 years .....	14,988	12,905	86.1	12,388	82.7	368	12,019	518	4.0	2,083
30 to 34 years .....	16,275	13,744	84.4	13,291	81.7	356	12,935	453	3.3	2,531
35 to 44 years .....	36,632	31,035	84.7	30,204	82.5	790	29,414	831	2.7	5,597
35 to 39 years .....	18,511	15,576	84.1	15,169	81.9	424	14,745	407	2.6	2,935
40 to 44 years .....	18,121	15,459	85.3	15,034	83.0	366	14,669	425	2.7	2,662
45 to 54 years .....	29,128	24,060	82.6	23,420	80.4	592	22,829	639	2.7	5,068
45 to 49 years .....	15,798	13,365	84.6	13,015	82.4	355	12,660	350	2.6	2,433
50 to 54 years .....	13,329	10,694	60.2	10,405	78.1	237	10,168	290	2.7	2,635
55 to 64 years .....	19,231	11,349	59.0	11,074	57.6	398	10,675	276	2.4	7,882
55 to 59 years .....	10,541	7,351	69.7	7,182	68.1	208	6,974	169	2.3	3,190
60 to 64 years .....	8,690	3,998	46.0	3,891	44.8	190	3,701	107	2.7	4,692
65 years and over .....	28,653	3,449	12.0	3,328	11.6	305	3,023	121	3.5	25,204
65 to 69 years .....	8,159	1,890	23.2	1,815	22.2	124	1,690	76	4.0	6,269
70 to 74 years .....	7,608	955	12.5	930	12.2	108	822	25	2.6	6,653
75 years and over .....	12,886	604	4.7	583	4.5	72	511	21	3.4	12,282
<b>Men</b>										
16 years and over .....	83,373	64,136	76.9	61,755	74.1	2,664	59,091	2,381	3.7	19,237
16 to 19 years .....	6,407	4,368	68.2	3,803	59.4	307	3,496	565	12.9	2,039
16 to 17 years .....	3,239	1,889	58.3	1,606	49.6	163	1,443	283	15.0	1,350
18 to 19 years .....	3,168	2,478	78.2	2,196	69.3	144	2,053	282	11.4	689
20 to 24 years .....	7,166	6,329	88.3	5,965	83.2	296	5,670	364	5.8	836
25 to 54 years .....	48,350	44,955	93.0	43,723	90.4	1,525	42,198	1,232	2.7	3,396
25 to 34 years .....	15,632	14,807	94.7	14,291	91.4	539	13,753	515	3.5	826
25 to 29 years .....	7,490	7,092	94.7	6,823	91.1	268	6,555	269	3.8	398
30 to 34 years .....	8,143	7,715	94.7	7,469	91.7	271	7,198	246	3.2	428
35 to 44 years .....	18,320	17,167	93.7	16,793	91.7	562	16,231	374	2.2	1,153
35 to 39 years .....	9,265	8,727	94.2	8,553	92.3	301	8,253	174	2.0	538
40 to 44 years .....	9,055	8,439	93.2	8,240	91.0	261	7,978	200	2.4	615
45 to 54 years .....	14,398	12,982	90.2	12,639	87.8	424	12,214	343	2.6	1,416
45 to 49 years .....	7,841	7,176	91.5	7,005	89.3	260	6,745	171	2.4	665
50 to 54 years .....	6,557	5,806	88.5	5,634	85.9	165	5,469	172	3.0	751
55 to 64 years .....	9,290	6,411	69.0	6,288	67.5	288	5,980	143	2.2	2,879
55 to 59 years .....	5,124	4,087	79.8	4,009	78.2	145	3,863	78	1.9	1,037
60 to 64 years .....	4,165	2,324	55.8	2,259	54.2	143	2,116	65	2.8	1,841
65 years and over .....	12,160	2,073	17.1	1,997	16.4	249	1,748	77	3.7	10,087
65 to 69 years .....	3,785	1,098	29.0	1,050	27.7	103	947	48	4.4	2,687
70 to 74 years .....	3,381	582	17.2	569	16.8	89	480	13	2.2	2,799
75 years and over .....	4,994	393	7.9	377	7.6	57	320	16	4.1	4,600
<b>Women</b>										
16 years and over .....	88,140	52,434	59.5	50,292	57.1	902	49,390	2,142	4.1	35,706
16 to 19 years .....	6,065	3,989	65.8	3,581	59.0	83	3,498	407	10.2	2,077
16 to 17 years .....	3,036	1,669	55.0	1,476	48.6	47	1,429	194	11.6	1,367
18 to 19 years .....	3,029	2,319	76.6	2,105	69.5	36	2,069	214	9.2	710
20 to 24 years .....	6,968	5,342	76.7	4,994	71.7	71	4,922	348	6.5	1,626
25 to 54 years .....	48,672	36,789	75.6	35,580	73.1	581	34,998	1,210	3.3	11,883
25 to 34 years .....	15,631	11,843	75.8	11,387	72.9	186	11,201	456	3.8	3,788
25 to 29 years .....	7,498	5,813	77.5	5,565	74.2	100	5,465	248	4.3	1,885
30 to 34 years .....	8,132	6,029	74.1	5,822	71.6	85	5,737	207	3.4	2,103
35 to 44 years .....	18,312	13,869	75.7	13,411	73.2	228	13,183	458	3.3	4,443
35 to 39 years .....	9,246	6,849	74.1	6,616	71.6	124	6,492	233	3.4	2,397
40 to 44 years .....	9,066	7,020	77.4	6,795	74.9	105	6,690	225	3.2	2,046
45 to 54 years .....	14,730	11,078	75.2	10,781	73.2	167	10,614	296	2.7	3,652
45 to 49 years .....	7,957	6,189	77.8	6,010	75.5	95	5,915	179	2.9	1,768
50 to 54 years .....	6,773	4,889	72.2	4,771	70.4	72	4,699	118	2.4	1,884
55 to 64 years .....	9,942	4,938	49.7	4,806	48.3	110	4,695	133	2.7	5,003
55 to 59 years .....	5,417	3,264	60.3	3,174	58.6	63	3,111	90	2.8	2,153
60 to 64 years .....	4,525	1,674	37.0	1,632	36.1	47	1,585	42	2.5	2,851
65 years and over .....	16,493	1,376	8.3	1,331	8.1	56	1,275	44	3.2	15,118
65 to 69 years .....	4,374	792	18.1	764	17.5	21	743	28	3.5	3,582
70 to 74 years .....	4,226	372	8.8	361	8.5	20	341	11	3.1	3,854
75 years and over .....	7,893	211	2.7	206	2.6	15	191	5	2.3	7,682

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	July 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
<b>BLACK</b>										
16 years and over .....	24,381	16,413	67.3	14,708	60.3	199	14,509	1,706	10.4	7,967
16 to 19 years .....	2,450	1,330	54.3	933	38.1	16	917	397	29.9	1,120
16 to 17 years .....	1,242	513	41.3	335	27.0	11	325	177	34.6	729
18 to 19 years .....	1,208	818	67.7	598	49.5	5	593	220	26.9	391
20 to 24 years .....	2,543	1,885	74.1	1,486	58.4	14	1,472	400	21.2	657
25 to 54 years .....	14,464	11,777	81.4	10,947	75.7	141	10,807	829	7.0	2,688
25 to 34 years .....	5,220	4,332	83.0	3,935	75.4	43	3,892	397	9.2	888
25 to 29 years .....	2,545	2,039	80.1	1,849	72.6	28	1,821	190	9.3	506
30 to 34 years .....	2,675	2,293	85.7	2,086	78.0	14	2,071	207	9.0	381
35 to 44 years .....	5,514	4,592	83.3	4,293	77.9	68	4,225	298	6.5	922
35 to 39 years .....	2,841	2,365	83.3	2,193	77.2	44	2,149	172	7.3	476
40 to 44 years .....	2,673	2,226	83.3	2,100	78.6	24	2,076	126	5.7	446
45 to 54 years .....	3,731	2,853	76.5	2,719	72.9	30	2,690	134	4.7	878
45 to 49 years .....	2,175	1,726	79.3	1,638	75.3	18	1,620	88	5.1	449
50 to 54 years .....	1,556	1,127	72.5	1,081	69.5	11	1,070	46	4.1	428
55 to 64 years .....	2,254	1,140	50.6	1,076	47.8	27	1,049	64	5.6	1,114
55 to 59 years .....	1,247	733	58.7	686	55.0	19	667	47	6.4	515
60 to 64 years .....	1,007	408	40.5	390	38.8	8	383	17	4.2	599
65 years and over .....	2,669	281	10.5	265	9.9	2	263	16	5.5	2,389
65 to 69 years .....	842	158	18.8	150	17.8	-	150	8	5.3	684
70 to 74 years .....	720	64	9.0	60	8.3	-	60	5	(1)	655
75 years and over .....	1,107	58	5.2	55	5.0	2	53	2	(1)	1,050
<b>Men</b>										
16 years and over .....	10,931	7,884	72.1	7,023	64.2	179	6,843	862	10.9	3,047
16 to 19 years .....	1,205	711	59.0	485	40.3	16	470	226	31.8	493
16 to 17 years .....	623	277	44.5	181	29.1	11	170	96	34.6	346
18 to 19 years .....	582	434	74.7	304	52.3	5	299	130	29.9	147
20 to 24 years .....	1,164	888	76.3	680	58.4	14	665	209	23.5	276
25 to 54 years .....	6,534	5,581	85.4	5,195	79.5	123	5,072	386	6.9	953
25 to 34 years .....	2,334	2,061	88.3	1,889	80.9	37	1,851	173	8.4	273
25 to 29 years .....	1,125	946	84.1	878	78.0	23	855	88	7.2	179
30 to 34 years .....	1,209	1,115	92.3	1,011	83.6	14	996	105	9.4	94
35 to 44 years .....	2,521	2,167	86.0	2,022	80.2	60	1,961	146	6.7	354
35 to 39 years .....	1,293	1,108	85.7	1,032	79.8	36	995	77	6.9	185
40 to 44 years .....	1,228	1,059	86.3	990	80.6	24	966	69	6.5	169
45 to 54 years .....	1,679	1,352	80.5	1,285	76.5	26	1,259	68	5.0	327
45 to 49 years .....	987	816	82.7	771	78.1	14	757	45	5.6	171
50 to 54 years .....	692	536	77.5	514	74.2	60	502	22	4.2	156
55 to 64 years .....	961	555	57.7	519	54.0	25	494	36	6.5	407
55 to 59 years .....	536	363	67.6	337	62.8	17	320	26	7.0	174
60 to 64 years .....	425	192	45.2	182	42.7	8	174	10	5.4	233
65 years and over .....	1,067	149	14.0	144	13.5	2	142	5	3.2	918
65 to 69 years .....	351	83	23.6	83	23.6	-	83	-	-	269
70 to 74 years .....	315	28	8.8	25	8.0	-	25	2	(1)	287
75 years and over .....	400	38	9.6	36	9.0	2	34	2	(1)	362
<b>Women</b>										
16 years and over .....	13,450	8,529	63.4	7,685	57.1	19	7,666	844	9.9	4,920
16 to 19 years .....	1,246	619	49.7	447	35.9	-	447	172	27.7	627
16 to 17 years .....	619	236	38.1	154	24.9	-	154	81	34.6	383
18 to 19 years .....	627	383	61.2	293	46.8	-	293	90	23.5	243
20 to 24 years .....	1,378	997	72.3	806	58.5	-	806	191	19.1	381
25 to 54 years .....	7,930	6,196	78.1	5,752	72.5	17	5,735	443	7.2	1,735
25 to 34 years .....	2,886	2,271	78.7	2,046	70.9	5	2,041	224	9.9	615
25 to 29 years .....	1,420	1,093	76.9	971	68.4	5	966	122	11.1	327
30 to 34 years .....	1,466	1,178	80.4	1,075	73.4	-	1,075	103	8.7	288
35 to 44 years .....	2,993	2,424	81.0	2,271	75.9	8	2,264	153	6.3	568
35 to 39 years .....	1,548	1,257	81.2	1,162	75.0	8	1,154	95	7.6	291
40 to 44 years .....	1,445	1,167	80.8	1,110	76.8	-	1,110	57	4.9	277
45 to 54 years .....	2,052	1,501	73.1	1,435	69.9	4	1,430	66	4.4	551
45 to 49 years .....	1,188	909	76.5	867	73.0	4	863	42	4.6	279
50 to 54 years .....	864	591	68.5	567	65.7	-	567	24	4.1	272
55 to 64 years .....	1,293	586	45.3	558	43.1	2	555	28	4.8	707
55 to 59 years .....	711	370	52.1	349	49.1	2	346	21	5.7	341
60 to 64 years .....	582	216	37.1	209	35.9	-	209	7	3.2	366
65 years and over .....	1,603	132	8.2	121	7.6	-	121	11	8.2	1,471
65 to 69 years .....	491	76	15.4	67	13.7	-	67	8	11.1	415
70 to 74 years .....	405	37	9.1	35	8.5	-	35	2	(1)	368
75 years and over .....	707	19	2.7	19	2.7	-	19	-	(1)	688

<sup>1</sup> 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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	203,166	205,270	89,888	90,802	97,919	98,778	15,359	15,690
Civilian labor force .....	138,331	139,336	69,614	70,202	58,952	59,101	9,764	10,033
Percent of population .....	68.1	67.9	77.4	77.3	60.2	59.8	63.6	63.9
Employed .....	131,350	132,769	66,962	67,619	56,243	56,569	8,145	8,580
Agriculture .....	3,849	3,866	2,575	2,586	902	868	371	412
Nonagricultural industries .....	127,501	128,903	64,387	65,034	55,342	55,701	7,773	8,168
Unemployed .....	6,981	6,567	2,653	2,582	2,708	2,532	1,620	1,453
Unemployment rate .....	5.0	4.7	3.8	3.7	4.6	4.3	16.6	14.5
Not in labor force .....	64,835	65,934	20,274	20,600	38,967	39,677	5,594	5,657
<b>White</b>								
Civilian noninstitutional population .....	170,010	171,513	76,326	76,966	81,500	82,075	12,185	12,472
Civilian labor force .....	116,265	116,570	59,465	59,768	48,575	48,445	8,226	8,356
Percent of population .....	68.4	68.0	77.9	77.7	59.6	59.0	67.5	67.0
Employed .....	111,323	112,047	57,543	57,953	46,726	46,711	7,055	7,384
Agriculture .....	3,628	3,566	2,393	2,358	875	819	360	390
Nonagricultural industries .....	107,696	108,481	55,150	55,595	45,851	45,891	6,695	6,994
Unemployed .....	4,942	4,523	1,922	1,816	1,849	1,734	1,171	972
Unemployment rate .....	4.3	3.9	3.2	3.0	3.8	3.6	14.2	11.6
Not in labor force .....	53,745	54,943	16,861	17,197	32,925	33,630	3,959	4,116
<b>Black</b>								
Civilian noninstitutional population .....	24,006	24,381	9,582	9,726	12,007	12,204	2,418	2,450
Civilian labor force .....	15,877	16,413	6,992	7,173	7,688	7,910	1,197	1,330
Percent of population .....	66.1	67.3	73.0	73.7	64.0	64.8	49.5	54.3
Employed .....	14,218	14,708	6,411	6,537	6,989	7,238	817	933
Agriculture .....	152	199	135	164	11	19	6	16
Nonagricultural industries .....	14,066	14,509	6,276	6,373	6,979	7,218	811	917
Unemployed .....	1,659	1,706	580	636	699	673	379	397
Unemployment rate .....	10.4	10.4	8.3	8.9	9.1	8.5	31.7	29.9
Not in labor force .....	8,129	7,967	2,590	2,553	4,318	4,294	1,221	1,120

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	July 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	
<b>TOTAL ENROLLED</b>										
Total, 16 to 24 years .....	6,787	3,800	56.0	3,429	1,454	1,975	371	186	185	9.8
16 to 19 years .....	3,897	1,972	50.6	1,723	565	1,158	249	113	136	12.6
20 to 24 years .....	2,891	1,828	63.3	1,705	889	817	123	73	49	6.7
High school .....	2,590	1,080	41.7	908	259	649	172	83	90	15.9
College .....	4,197	2,720	64.8	2,521	1,195	1,326	199	104	95	7.3
Full-time students .....	3,040	1,791	58.9	1,667	707	960	123	63	61	6.9
Part-time students .....	1,157	929	80.3	853	488	366	76	41	35	8.1
Men, 16 to 24 years .....	3,267	1,812	55.5	1,615	727	888	197	118	79	10.9
16 to 19 years .....	1,928	1,001	51.9	851	296	554	151	85	66	15.0
20 to 24 years .....	1,339	810	60.5	764	430	333	46	33	13	5.7
High school .....	1,394	641	46.0	526	156	370	115	68	47	17.9
College .....	1,874	1,171	62.5	1,089	571	518	82	50	32	7.0
Full-time students .....	1,406	809	57.5	757	361	396	52	32	20	6.4
Part-time students .....	467	362	77.5	332	211	121	30	19	12	8.4
Women, 16 to 24 years .....	3,520	1,988	56.5	1,814	727	1,087	174	68	106	8.8
16 to 19 years .....	1,968	971	49.3	873	269	604	98	28	70	10.1
20 to 24 years .....	1,552	1,018	65.6	941	458	483	76	40	36	7.5
High school .....	1,197	440	36.7	382	103	279	57	15	42	13.0
College .....	2,323	1,549	66.7	1,432	624	808	117	53	64	7.6
Full-time students .....	1,634	982	60.1	910	347	563	72	31	41	7.3
Part-time students .....	689	567	82.3	522	277	244	45	22	23	8.0
<b>White</b>										
Total, 16 to 24 years .....	5,130	3,094	60.3	2,858	1,226	1,632	236	104	131	7.6
16 to 19 years .....	2,905	1,600	55.1	1,438	489	949	162	63	99	10.1
20 to 24 years .....	2,225	1,494	67.2	1,420	737	684	74	41	33	4.9
Men .....	2,488	1,467	59.0	1,350	608	742	117	59	58	8.0
Women .....	2,641	1,627	61.6	1,508	618	890	119	45	73	7.3
High school .....	1,892	859	45.4	756	225	531	103	43	61	12.0
College .....	3,238	2,235	69.0	2,102	1,001	1,101	132	62	71	5.9
Full-time students .....	2,304	1,452	63.0	1,376	587	790	76	35	40	5.2
Part-time students .....	933	783	83.9	726	415	312	57	26	31	7.3
<b>Black</b>										
Total, 16 to 24 years .....	1,154	516	44.7	410	165	244	106	68	38	20.6
16 to 19 years .....	741	297	40.1	232	63	169	65	40	25	21.9
20 to 24 years .....	413	219	53.1	178	103	75	41	29	13	18.9
Men .....	526	258	49.0	190	88	102	68	54	14	26.2
Women .....	627	258	41.1	219	77	142	39	14	24	15.0
High school .....	539	184	34.2	132	28	104	52	35	17	28.3
College .....	615	332	54.0	278	137	140	54	34	21	16.4
Full-time students .....	485	238	49.1	200	90	110	38	19	19	15.9
Part-time students .....	130	94	72.5	77	47	30	17	14	2	17.6
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	913	395	43.3	326	110	216	69	41	28	17.4
16 to 19 years .....	616	222	36.1	185	30	155	37	19	18	16.7
20 to 24 years .....	297	172	58.1	141	80	61	32	21	10	18.4
Men .....	444	214	48.2	180	65	115	34	24	10	16.1
Women .....	468	180	38.5	146	45	101	34	16	18	19.1
High school .....	478	128	26.8	97	16	81	32	25	7	24.6
College .....	435	267	61.4	230	95	135	37	16	21	14.0
Full-time students .....	320	177	55.3	147	40	106	30	13	17	17.0
Part-time students .....	115	90	78.5	83	54	29	7	3	4	8.1

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	July 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	
<b>TOTAL NOT ENROLLED</b>										
Total, 16 to 24 years .....	26,479	20,425	77.1	18,170	12,792	5,378	2,255	1,724	531	11.0
16 to 19 years .....	11,793	8,061	68.4	6,857	3,408	3,448	1,205	803	401	14.9
20 to 24 years .....	14,686	12,364	84.2	11,313	9,384	1,930	1,050	921	130	8.5
Less than a high school diploma .....	9,443	5,792	61.3	4,775	2,412	2,363	1,017	685	332	17.6
High school graduates, no college .....	8,728	7,244	83.0	6,458	4,912	1,546	786	675	111	10.8
Less than a bachelor's degree .....	6,634	5,868	88.5	5,523	4,219	1,304	346	267	79	5.9
College graduates .....	1,674	1,520	90.8	1,414	1,249	165	106	97	10	7.0
Men, 16 to 24 years .....	13,512	10,995	81.4	9,756	7,496	2,259	1,239	965	275	11.3
16 to 19 years .....	6,055	4,264	70.4	3,579	1,992	1,586	685	469	217	16.1
20 to 24 years .....	7,457	6,731	90.3	6,177	5,504	673	554	496	58	8.2
Less than a high school diploma .....	5,098	3,442	67.5	2,837	1,700	1,138	605	434	170	17.6
High school graduates, no college .....	4,592	4,064	88.5	3,664	3,036	628	401	346	55	9.9
Less than a bachelor's degree .....	3,137	2,857	91.1	2,670	2,211	459	187	140	47	6.5
College graduates .....	684	631	92.2	585	550	35	47	45	2	7.4
Women, 16 to 24 years .....	12,967	9,430	72.7	8,414	5,296	3,119	1,016	759	256	10.8
16 to 19 years .....	5,738	3,798	66.2	3,278	1,416	1,862	519	335	185	13.7
20 to 24 years .....	7,229	5,633	77.9	5,136	3,880	1,257	496	425	72	8.8
Less than a high school diploma .....	4,345	2,350	54.1	1,938	712	1,225	412	251	162	17.5
High school graduates, no college .....	4,136	3,180	76.9	2,795	1,876	918	385	329	56	12.1
Less than a bachelor's degree .....	3,497	3,011	86.1	2,853	2,008	845	159	127	32	5.3
College graduates .....	989	889	89.8	829	699	130	60	52	7	6.7
<b>White</b>										
Total, 16 to 24 years .....	21,476	16,934	78.8	15,485	10,886	4,599	1,449	1,073	376	8.6
16 to 19 years .....	9,567	6,757	70.6	5,946	2,969	2,977	811	518	292	12.0
20 to 24 years .....	11,909	10,177	85.5	9,539	7,917	1,622	638	555	83	6.3
Men .....	11,085	9,230	83.3	8,418	6,528	1,890	812	617	195	8.8
Women .....	10,392	7,704	74.1	7,067	4,358	2,709	637	457	180	8.3
Less than a high school diploma .....	7,509	4,754	63.3	4,083	2,067	2,016	671	432	239	14.1
High school graduates, no college .....	7,045	5,940	84.3	5,461	4,130	1,331	479	398	81	8.1
Less than a bachelor's degree .....	5,473	4,914	89.8	4,693	3,585	1,108	221	175	46	4.5
College graduates .....	1,449	1,325	91.5	1,247	1,104	143	78	68	10	5.9
<b>Black</b>										
Total, 16 to 24 years .....	3,839	2,700	70.3	2,009	1,418	591	691	568	123	25.6
16 to 19 years .....	1,710	1,033	60.4	701	332	369	332	245	87	32.2
20 to 24 years .....	2,130	1,666	78.2	1,308	1,086	222	358	322	36	21.5
Men .....	1,843	1,342	72.8	975	702	273	367	313	54	27.4
Women .....	1,996	1,358	68.0	1,034	716	318	323	255	68	23.8
Less than a high school diploma .....	1,540	843	54.7	525	248	277	317	236	81	37.6
High school graduates, no college .....	1,359	1,075	79.2	812	635	177	264	244	19	24.5
Less than a bachelor's degree .....	840	694	82.6	598	471	128	96	74	22	13.8
College graduates .....	100	87	87.4	74	64	9	14	14	-	15.8
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	4,059	2,814	69.3	2,443	1,861	582	371	269	101	13.2
16 to 19 years .....	1,591	864	54.3	680	407	274	183	117	66	21.2
20 to 24 years .....	2,468	1,951	79.0	1,763	1,455	309	188	153	35	9.6
Men .....	2,152	1,693	78.7	1,484	1,254	231	209	154	55	12.3
Women .....	1,907	1,121	58.8	959	608	352	162	115	47	14.4
Less than a high school diploma .....	2,023	1,147	56.7	954	747	207	193	137	57	16.8
High school graduates, no college .....	1,271	1,001	78.7	992	680	212	109	84	25	10.9
Less than a bachelor's degree .....	695	602	86.5	537	383	155	65	45	20	10.7
College graduates .....	69	64	( <sup>1</sup> )	60	52	8	4	4	-	( <sup>1</sup> )

<sup>1</sup> 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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
<b>TOTAL</b>												
Civilian noninstitutional population ...	170,363	172,003	81,185	82,006	89,178	89,997	143,852	144,907	19,048	19,388	15,532	16,125
Civilian labor force .....	114,399	115,110	62,021	62,660	52,378	52,450	96,364	96,542	12,847	13,198	10,905	11,229
Percent of population .....	67.2	66.9	76.4	76.4	58.7	58.3	67.0	66.6	67.4	68.1	70.2	69.6
Employed .....	110,153	111,170	59,950	60,678	50,203	50,491	93,331	93,704	11,871	12,289	10,237	10,581
Employment-population ratio .....	64.7	64.6	73.8	74.0	56.3	56.1	64.9	64.7	62.3	63.4	65.9	65.6
Unemployed .....	4,246	3,941	2,071	1,982	2,175	1,959	3,033	2,838	975	909	668	648
Unemployment rate .....	3.7	3.4	3.3	3.2	4.2	3.7	3.1	2.9	7.6	6.9	6.1	5.8
<b>Less than a high school diploma</b>												
Civilian noninstitutional population ...	29,288	29,027	13,870	13,854	15,419	15,173	23,288	23,278	4,594	4,271	6,883	7,156
Civilian labor force .....	12,281	12,269	7,625	7,659	4,656	4,610	9,896	9,982	1,778	1,608	4,117	4,199
Percent of population .....	41.9	42.3	55.0	55.3	30.2	30.4	42.5	42.9	38.7	37.6	59.8	58.7
Employed .....	11,369	11,426	7,179	7,208	4,190	4,219	9,239	9,359	1,561	1,435	3,764	3,870
Employment-population ratio .....	38.8	39.4	51.8	52.0	27.2	27.8	39.7	40.2	34.0	33.6	54.7	54.1
Unemployed .....	911	842	446	451	466	392	658	623	216	173	353	328
Unemployment rate .....	7.4	6.9	5.8	5.9	10.0	8.5	6.6	6.2	12.2	10.7	8.6	7.8
<b>High school graduates, no college</b>												
Civilian noninstitutional population ...	57,581	57,374	26,320	26,213	31,262	31,161	48,927	48,570	6,820	6,959	4,256	4,189
Civilian labor force .....	37,700	36,912	20,199	19,905	17,501	17,007	31,648	30,752	4,829	4,946	3,174	3,058
Percent of population .....	65.5	64.3	76.7	75.9	56.0	54.6	64.7	63.3	70.8	71.1	74.6	73.0
Employed .....	36,124	35,408	19,385	19,162	16,739	16,246	30,582	29,723	4,402	4,514	3,006	2,872
Employment-population ratio .....	62.7	61.7	73.7	73.1	53.5	52.1	62.5	61.2	64.5	64.9	70.6	68.5
Unemployed .....	1,576	1,504	814	743	762	761	1,066	1,029	427	432	168	186
Unemployment rate .....	4.2	4.1	4.0	3.7	4.4	4.5	3.4	3.3	8.8	8.7	5.3	6.1
<b>Less than a bachelor's degree<sup>1</sup></b>												
Civilian noninstitutional population ...	42,322	42,293	19,488	19,344	22,834	22,949	35,988	35,569	4,849	5,119	2,830	3,031
Civilian labor force .....	31,489	31,448	15,977	15,896	15,512	15,553	26,474	26,146	3,883	4,047	2,301	2,498
Percent of population .....	74.4	74.4	82.0	82.2	67.9	67.8	73.6	73.5	80.1	79.1	81.3	82.4
Employed .....	30,492	30,496	15,505	15,425	14,987	15,072	25,765	25,472	3,639	3,827	2,208	2,421
Employment-population ratio .....	72.0	72.1	79.6	79.7	65.6	65.7	71.6	71.6	75.0	74.8	78.0	79.9
Unemployed .....	998	952	473	471	525	481	709	674	245	220	93	77
Unemployment rate .....	3.2	3.0	3.0	3.0	3.4	3.1	2.7	2.6	6.3	5.4	4.0	3.1
<b>Some college, no degree</b>												
Civilian noninstitutional population ...	29,823	29,654	14,151	13,754	15,672	15,901	25,182	24,750	3,657	3,844	2,113	2,193
Civilian labor force .....	21,705	21,450	11,414	10,976	10,291	10,474	18,022	17,631	2,939	3,002	1,713	1,796
Percent of population .....	72.8	72.3	80.7	79.8	65.7	65.9	71.6	71.2	80.4	78.1	81.1	81.9
Employed .....	20,980	20,748	11,053	10,627	9,927	10,122	17,522	17,137	2,742	2,835	1,642	1,741
Employment-population ratio .....	70.3	70.0	78.1	77.3	63.3	63.7	69.6	69.2	75.0	73.8	77.7	79.4
Unemployed .....	725	702	361	349	364	352	499	494	197	167	71	56
Unemployment rate .....	3.3	3.3	3.2	3.2	3.5	3.4	2.8	2.8	6.7	5.6	4.1	3.1
<b>Associate degree</b>												
Civilian noninstitutional population ...	12,499	12,639	5,338	5,591	7,161	7,048	10,806	10,820	1,191	1,274	717	836
Civilian labor force .....	9,785	9,998	4,564	4,920	5,221	5,078	8,452	8,515	944	1,045	586	702
Percent of population .....	78.3	79.1	85.5	88.0	72.9	72.0	78.2	78.7	79.2	82.0	82.0	83.8
Employed .....	9,512	9,748	4,452	4,798	5,060	4,950	8,243	8,334	897	992	566	681
Employment-population ratio .....	76.1	77.1	83.4	85.8	70.7	70.2	76.3	77.0	75.3	77.8	78.9	81.2
Unemployed .....	273	250	112	122	161	128	209	180	47	53	22	21
Unemployment rate .....	2.8	2.5	2.5	2.5	3.1	2.5	2.5	2.1	5.0	5.0	3.8	3.0
<b>College graduates</b>												
Civilian noninstitutional population ...	41,171	43,309	21,508	22,595	19,664	20,714	35,648	37,490	2,786	3,039	1,564	1,748
Civilian labor force .....	32,930	34,481	18,221	19,201	14,709	15,280	28,346	29,663	2,357	2,597	1,313	1,475
Percent of population .....	80.0	79.6	84.7	85.0	74.8	73.8	79.5	79.1	84.6	85.4	83.9	84.3
Employed .....	32,168	33,839	17,881	18,884	14,287	14,955	27,745	29,150	2,270	2,512	1,259	1,418
Employment-population ratio .....	78.1	78.1	83.1	83.6	72.7	72.2	77.8	77.8	81.5	82.7	80.5	81.1
Unemployed .....	762	643	340	317	422	325	601	512	87	84	54	56
Unemployment rate .....	2.3	1.9	1.9	1.7	2.9	2.1	2.1	1.7	3.7	3.3	4.1	3.8

<sup>1</sup> 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	July 1998									
	Employed <sup>1</sup>							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 <sup>2</sup>		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				
<b>TOTAL</b>										
Total, 16 years and over .....	110,803	93,299	9,612	7,891	21,966	2,718	16,891	2,357	5,375	1,192
16 to 19 years .....	3,973	3,379	486	108	4,607	609	3,688	309	916	537
16 to 17 years .....	1,007	823	141	44	2,515	215	2,108	193	343	352
18 to 19 years .....	2,966	2,556	346	64	2,091	394	1,580	117	573	185
20 years and over .....	106,829	89,920	9,126	7,783	17,359	2,108	13,203	2,047	4,459	655
20 to 24 years .....	10,273	8,970	974	329	2,746	550	2,041	156	994	179
25 years and over .....	96,557	80,951	8,152	7,454	14,613	1,559	11,162	1,892	3,465	476
25 to 54 years .....	84,346	71,110	6,911	6,325	10,487	1,367	7,732	1,388	3,123	318
55 years and over .....	12,211	9,841	1,242	1,129	4,126	192	3,431	504	342	158
<b>Men, 16 years and over</b> .....	65,019	56,900	4,842	3,276	7,030	1,207	5,327	496	2,943	475
16 to 19 years .....	2,288	1,960	277	51	2,141	308	1,710	123	554	282
20 years and over .....	62,731	54,940	4,565	3,225	4,889	899	3,618	373	2,389	193
20 to 24 years .....	5,935	5,323	473	139	1,006	251	709	46	529	71
25 years and over .....	56,796	49,618	4,092	3,086	3,883	647	2,909	326	1,860	122
25 to 54 years .....	49,307	43,332	3,431	2,544	2,118	547	1,419	152	1,653	52
55 years and over .....	7,489	6,286	661	542	1,765	100	1,490	175	207	70
<b>Women, 16 years and over</b> .....	45,784	36,399	4,770	4,614	14,936	1,511	11,564	1,861	2,432	717
16 to 19 years .....	1,685	1,419	209	57	2,466	301	1,979	186	363	255
20 years and over .....	44,099	34,980	4,561	4,558	12,470	1,210	9,586	1,675	2,070	462
20 to 24 years .....	4,338	3,647	501	190	1,740	298	1,332	109	465	108
25 years and over .....	39,761	31,333	4,060	4,368	10,730	911	8,254	1,565	1,605	354
25 to 54 years .....	35,039	27,778	3,480	3,781	8,369	820	6,313	1,236	1,470	266
55 years and over .....	4,722	3,555	580	587	2,362	92	1,940	329	135	88
<b>White</b>										
<b>Men, 16 years and over</b> .....	55,824	48,760	4,180	2,883	5,932	976	4,521	435	2,028	353
16 to 19 years .....	2,016	1,734	233	49	1,787	256	1,412	119	355	210
20 years and over .....	53,808	47,027	3,947	2,834	4,145	720	3,109	316	1,673	143
20 to 24 years .....	5,120	4,603	394	122	845	198	606	41	320	44
25 years and over .....	48,688	42,423	3,553	2,712	3,300	522	2,503	275	1,352	99
25 to 54 years .....	42,040	36,867	2,954	2,219	1,683	430	1,131	122	1,193	39
55 years and over .....	6,648	5,556	599	493	1,617	92	1,371	153	159	61
<b>Women, 16 years and over</b> .....	37,158	29,317	3,936	3,905	13,134	1,159	10,308	1,667	1,596	546
16 to 19 years .....	1,442	1,211	181	51	2,139	264	1,723	152	226	181
20 years and over .....	35,715	28,107	3,754	3,855	10,995	895	8,585	1,515	1,370	365
20 to 24 years .....	3,533	2,978	409	147	1,460	236	1,131	94	276	72
25 years and over .....	32,182	25,129	3,345	3,708	9,535	659	7,454	1,421	1,094	293
25 to 54 years .....	28,158	22,095	2,837	3,225	7,422	598	5,694	1,130	994	216
55 years and over .....	4,024	3,033	508	482	2,113	61	1,760	292	100	77
<b>Black</b>										
<b>Men, 16 years and over</b> .....	6,288	5,497	475	316	735	168	532	35	772	89
16 to 19 years .....	208	175	31	3	277	45	230	2	176	50
20 years and over .....	6,080	5,323	444	313	458	122	302	33	597	39
20 to 24 years .....	582	503	63	16	98	36	56	5	191	18
25 years and over .....	5,498	4,820	380	298	360	86	246	27	406	21
25 to 54 years .....	4,938	4,341	343	254	258	83	156	19	374	12
55 years and over .....	560	479	38	44	102	3	90	9	32	9
<b>Women, 16 years and over</b> .....	6,393	5,148	644	601	1,292	283	870	139	708	136
16 to 19 years .....	187	153	28	6	261	32	196	33	109	62
20 years and over .....	6,206	4,995	616	595	1,031	251	674	106	599	74
20 to 24 years .....	607	499	72	36	200	49	137	14	160	31
25 years and over .....	5,600	4,497	544	559	831	202	537	92	438	44
25 to 54 years .....	5,102	4,144	483	475	651	182	404	64	410	33
55 years and over .....	498	353	62	84	181	20	132	28	29	10

<sup>1</sup> 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.

<sup>2</sup> 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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
Total .....	131,350	132,769	71,157	72,049	66,962	67,619	60,193	60,720	56,243	56,569
Managerial and professional specialty .....	37,209	38,620	19,128	19,927	18,969	19,725	18,082	18,693	17,893	18,415
Executive, administrative, and managerial .....	18,516	19,400	10,269	10,971	10,212	10,925	8,247	8,430	8,188	8,354
Officials and administrators, public administration .....	696	703	367	377	366	377	329	326	328	324
Other executive, administrative, and managerial .....	13,137	13,988	7,905	8,516	7,861	8,482	5,233	5,473	5,185	5,422
Management-related occupations .....	4,683	4,710	1,998	2,078	1,985	2,065	2,685	2,631	2,675	2,609
Professional specialty .....	18,693	19,220	8,858	8,957	8,756	8,800	9,835	10,263	9,705	10,061
Engineers .....	2,072	2,029	1,872	1,770	1,871	1,768	200	259	200	259
Mathematical and computer scientists .....	1,428	1,751	980	1,228	975	1,211	447	523	447	516
Natural scientists .....	590	528	415	368	416	367	175	160	170	160
Health diagnosing occupations .....	1,029	1,103	730	791	730	786	299	313	298	313
Health assessment and treating occupations .....	2,855	2,768	385	364	384	364	2,471	2,404	2,468	2,399
Teachers, college and university .....	769	818	481	497	477	487	288	321	282	315
Teachers, except college and university .....	4,302	4,416	1,046	1,047	1,009	1,008	3,256	3,369	3,220	3,275
Lawyers and judges .....	923	1,037	659	715	658	710	264	322	259	322
Other professional specialty occupations .....	4,725	4,770	2,289	2,177	2,235	2,099	2,436	2,593	2,363	2,503
Technical, sales, and administrative support .....	38,651	38,923	13,804	14,085	12,910	13,200	24,847	24,838	22,907	22,814
Technicians and related support .....	4,302	4,356	2,004	2,019	1,947	1,982	2,297	2,338	2,242	2,295
Health technologists and technicians .....	1,752	1,724	342	308	335	304	1,410	1,416	1,380	1,400
Engineering and science technicians .....	1,235	1,297	916	942	878	921	319	354	309	338
Technicians, except health, engineering, and science .....	1,314	1,336	746	768	734	757	568	568	553	556
Sales occupations .....	15,838	16,080	7,866	8,089	7,291	7,494	7,972	7,991	6,773	6,729
Supervisors and proprietors .....	4,713	4,695	2,908	2,870	2,885	2,855	1,805	1,825	1,776	1,782
Sales representatives, finance and business services .....	2,642	2,802	1,514	1,573	1,480	1,515	1,129	1,229	1,094	1,181
Sales representatives, commodities, except retail .....	1,459	1,599	1,046	1,170	1,037	1,164	412	429	408	417
Sales workers, retail and personal services .....	6,948	6,883	2,373	2,453	1,865	1,940	4,575	4,429	3,443	3,272
Sales-related occupations .....	77	101	25	23	25	20	52	78	51	78
Administrative support, including clerical .....	18,511	18,487	3,934	3,977	3,672	3,725	14,577	14,510	13,892	13,791
Supervisors .....	705	744	272	287	270	287	434	457	432	456
Computer equipment operators .....	399	366	167	177	159	171	231	189	223	188
Secretaries, stenographers, and typists .....	3,835	3,763	72	73	60	73	3,763	3,690	3,650	3,590
Financial records processing .....	2,274	2,191	143	162	136	150	2,131	2,029	2,093	1,984
Mail and message distributing .....	1,013	990	655	631	637	613	358	359	344	344
Other administrative support, including clerical .....	10,285	10,433	2,624	2,646	2,411	2,430	7,661	7,786	7,150	7,228
Service occupations .....	18,066	18,111	7,423	7,401	6,284	6,244	10,643	10,710	9,214	9,272
Private household .....	818	896	54	40	44	30	763	856	623	698
Protective service .....	2,550	2,532	2,081	2,063	1,976	2,003	469	469	365	368
Service, except private household and protective .....	14,698	14,684	5,288	5,299	4,263	4,211	9,410	9,385	8,227	8,206
Food service .....	6,126	6,066	2,556	2,639	1,817	1,911	3,570	3,427	2,758	2,638
Health service .....	2,367	2,560	277	302	261	279	2,091	2,259	2,002	2,173
Cleaning and building service .....	3,205	3,087	1,874	1,739	1,724	1,532	1,330	1,348	1,248	1,254
Personal service .....	3,000	2,971	580	619	463	490	2,420	2,352	2,218	2,140
Precision production, craft, and repair .....	14,539	14,584	13,248	13,355	12,857	12,950	1,291	1,229	1,248	1,186
Mechanics and repairers .....	4,817	4,887	4,631	4,674	4,514	4,539	185	212	185	210
Construction trades .....	5,542	5,636	5,401	5,506	5,216	5,282	141	129	123	116
Other precision production, craft, and repair .....	4,180	4,062	3,216	3,175	3,127	3,129	964	887	940	860
Operators, fabricators, and laborers .....	18,773	18,431	14,249	13,985	13,072	12,650	4,524	4,446	4,258	4,178
Machine operators, assemblers, and inspectors .....	7,971	7,667	5,011	4,832	4,827	4,603	2,960	2,835	2,859	2,747
Transportation and material moving occupations .....	5,394	5,306	4,909	4,813	4,788	4,683	485	493	459	472
Motor vehicle operators .....	4,075	3,951	3,639	3,542	3,528	3,459	436	409	412	393
Other transportation and material moving occupations .....	1,319	1,355	1,270	1,272	1,260	1,225	49	84	47	79
Handlers, equipment cleaners, helpers, and laborers .....	5,409	5,458	4,329	4,340	3,457	3,364	1,080	1,118	940	959
Construction laborers .....	926	928	873	879	734	746	54	50	51	44
Other handlers, equipment cleaners, helpers, and laborers .....	4,482	4,530	3,456	3,461	2,723	2,617	1,027	1,069	889	915
Farming, forestry, and fishing .....	4,111	4,098	3,305	3,295	2,870	2,850	806	803	724	704
Farm operators and managers .....	1,409	1,318	1,097	997	1,079	984	312	322	311	315
Other farming, forestry, and fishing occupations .....	2,703	2,780	2,208	2,298	1,791	1,866	494	481	413	389

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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	131,350	132,769	71,157	72,049	60,193	60,720
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	28.3	29.1	26.9	27.7	30.0	30.8
Executive, administrative, and managerial .....	14.1	14.6	14.4	15.2	13.7	13.9
Professional specialty .....	14.2	14.5	12.4	12.4	16.3	16.9
Technical, sales, and administrative support .....	29.4	29.3	19.4	19.5	41.3	40.9
Technicians and related support .....	3.3	3.3	2.8	2.8	3.8	3.8
Sales occupations .....	12.1	12.1	11.1	11.2	13.2	13.2
Administrative support, including clerical .....	14.1	13.9	5.5	5.5	24.2	23.9
Service occupations .....	13.8	13.6	10.4	10.3	17.7	17.6
Private household .....	.6	.7	( <sup>1</sup> )	.1	1.3	1.4
Protective service .....	1.9	1.9	2.9	2.9	.8	.8
Service, except private household and protective .....	11.2	11.1	7.4	7.4	15.6	15.5
Precision production, craft, and repair .....	11.1	11.0	18.6	18.5	2.1	2.0
Operators, fabricators, and laborers .....	14.3	13.9	20.0	19.4	7.5	7.3
Machine operators, assemblers, and inspectors .....	6.1	5.8	7.0	6.7	4.9	4.7
Transportation and material moving occupations .....	4.1	4.0	6.9	6.7	.8	.8
Handlers, equipment cleaners, helpers, and laborers .....	4.1	4.1	6.1	6.0	1.8	1.8
Farming, forestry, and fishing .....	3.1	3.1	4.6	4.6	1.3	1.3
<b>White</b>						
Total, 16 years and over (thousands) .....	111,323	112,047	61,216	61,755	50,108	50,292
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	29.3	30.3	27.7	28.8	31.2	32.1
Executive, administrative, and managerial .....	14.8	15.3	15.1	16.0	14.3	14.4
Professional specialty .....	14.5	15.0	12.6	12.8	16.8	17.7
Technical, sales, and administrative support .....	29.6	29.3	19.4	19.5	42.0	41.4
Technicians and related support .....	3.3	3.3	2.8	2.8	3.9	3.9
Sales occupations .....	12.4	12.4	11.5	11.6	13.5	13.4
Administrative support, including clerical .....	13.9	13.7	5.2	5.2	24.7	24.1
Service occupations .....	12.5	12.5	9.4	9.2	16.4	16.5
Private household .....	.6	.7	( <sup>1</sup> )	-	1.3	1.5
Protective service .....	1.8	1.8	2.7	2.7	.7	.6
Service, except private household and protective .....	10.1	10.0	6.6	6.5	14.5	14.4
Precision production, craft, and repair .....	11.6	11.5	19.4	19.3	2.0	2.0
Operators, fabricators, and laborers .....	13.6	13.1	19.1	18.4	6.8	6.6
Machine operators, assemblers, and inspectors .....	5.7	5.4	6.8	6.4	4.4	4.1
Transportation and material moving occupations .....	4.0	3.8	6.6	6.3	.8	.7
Handlers, equipment cleaners, helpers, and laborers .....	3.9	3.9	5.7	5.7	1.7	1.8
Farming, forestry, and fishing .....	3.4	3.3	5.0	4.8	1.6	1.5
<b>Black</b>						
Total, 16 years and over (thousands) .....	14,218	14,708	6,790	7,023	7,428	7,685
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	19.5	19.6	16.5	15.8	22.3	23.0
Executive, administrative, and managerial .....	9.3	9.9	8.6	8.6	9.9	11.1
Professional specialty .....	10.3	9.7	7.9	7.2	12.4	11.9
Technical, sales, and administrative support .....	28.1	28.6	17.1	17.5	38.2	38.7
Technicians and related support .....	3.0	2.9	2.4	2.3	3.6	3.4
Sales occupations .....	8.9	9.5	6.4	7.8	11.3	10.9
Administrative support, including clerical .....	16.2	16.2	8.3	7.3	23.3	24.3
Service occupations .....	22.9	22.5	19.1	19.0	26.4	25.6
Private household .....	.9	.7	.1	.1	1.6	1.3
Protective service .....	3.3	3.4	5.1	5.2	1.6	1.7
Service, except private household and protective .....	18.8	18.3	13.9	13.7	23.2	22.6
Precision production, craft, and repair .....	7.9	7.9	14.2	14.5	2.2	1.9
Operators, fabricators, and laborers .....	20.1	19.9	30.3	30.2	10.7	10.5
Machine operators, assemblers, and inspectors .....	8.1	8.0	9.1	9.2	7.2	6.9
Transportation and material moving occupations .....	5.8	6.3	10.9	11.6	1.1	1.5
Handlers, equipment cleaners, helpers, and laborers .....	6.2	5.6	10.3	9.4	2.4	2.1
Farming, forestry, and fishing .....	1.4	1.6	2.8	3.0	.1	.3

<sup>1</sup> 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	July 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 <sup>1</sup>		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture .....	3,866	87	146	67	30	127	-	25	59	16	50	28	3,231
Mining .....	639	104	61	21	25	61	-	9	200	25	105	27	-
Construction .....	8,733	1,411	167	41	49	420	-	36	4,923	86	553	1,013	32
Manufacturing .....	20,846	3,055	1,947	659	725	2,061	-	296	4,038	6,074	776	1,124	90
Durable goods .....	12,651	1,810	1,322	436	320	1,141	-	139	2,904	3,505	434	556	84
Nondurable goods .....	8,194	1,245	625	222	405	920	-	158	1,134	2,568	342	568	6
Transportation and public utilities .....	9,229	1,300	538	290	308	2,339	-	284	1,298	136	2,163	557	16
Wholesale and retail trade .....	27,548	2,635	640	217	11,496	2,186	-	5,238	1,521	352	1,135	2,004	125
Wholesale trade .....	5,227	653	178	41	2,071	742	-	57	339	139	548	360	99
Retail trade .....	22,321	1,982	462	176	9,425	1,444	-	5,181	1,182	213	587	1,643	26
Finance, insurance, and real estate .....	8,501	2,464	325	152	2,158	2,836	-	300	175	20	10	17	43
Services .....	47,398	7,016	14,363	2,649	1,270	7,178	896	9,307	2,158	938	459	647	518
Private households .....	1,029	10	3	2	6	21	896	39	8	-	4	7	33
Other service industries .....	46,370	7,006	14,361	2,647	1,264	7,157	-	9,267	2,150	938	455	640	485
Professional services .....	30,620	4,226	12,338	2,139	213	5,176	-	5,418	483	170	222	121	113
Public administration .....	6,010	1,329	1,033	260	20	1,278	-	1,719	213	20	54	39	43

<sup>1</sup> Includes protective service, not shown separately.

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

(In thousands)

Age and sex	July 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 .....	2,285	1,543	38	119,638	101,733	1,021	100,712	17,905	9,167	98
16 to 19 years .....	329	75	7	8,085	7,542	190	7,352	543	67	17
16 to 17 years .....	172	51	4	3,263	3,019	122	2,897	244	23	9
18 to 19 years .....	157	24	4	4,822	4,523	68	4,455	299	43	7
20 to 24 years .....	326	57	8	12,327	11,386	106	11,279	941	293	8
25 to 34 years .....	574	202	8	28,868	25,230	183	25,047	3,638	1,613	15
35 to 44 years .....	561	322	6	32,580	27,577	195	27,382	5,003	2,773	21
45 to 54 years .....	265	377	4	24,233	18,895	194	18,701	5,337	2,387	24
55 to 64 years .....	179	250	4	10,780	8,724	99	8,626	2,056	1,408	6
65 years and over .....	51	260	-	2,766	2,379	54	2,325	387	625	8
Men, 16 years and over .....	1,743	1,148	24	63,497	55,313	83	55,230	8,184	5,601	36
16 to 19 years .....	264	60	5	4,056	3,785	23	3,762	270	31	14
16 to 17 years .....	138	41	1	1,648	1,513	18	1,495	136	6	9
18 to 19 years .....	126	19	4	2,407	2,273	6	2,267	135	26	4
20 to 24 years .....	273	39	5	6,465	6,045	4	6,041	420	156	3
25 to 34 years .....	432	147	8	15,641	13,906	16	13,890	1,735	900	2
35 to 44 years .....	408	237	-	17,456	15,290	13	15,277	2,166	1,665	4
45 to 54 years .....	179	285	4	12,503	10,071	17	10,054	2,432	1,549	7
55 to 64 years .....	140	175	2	5,848	4,874	4	4,870	974	868	3
65 years and over .....	47	205	-	1,529	1,342	7	1,335	187	432	4
Women, 16 years and over .....	542	395	14	56,141	46,420	938	45,482	9,721	3,566	62
16 to 19 years .....	65	15	3	4,029	3,757	167	3,590	273	36	3
16 to 17 years .....	34	10	3	1,614	1,506	104	1,402	108	18	-
18 to 19 years .....	31	5	-	2,415	2,250	62	2,188	165	18	3
20 to 24 years .....	53	18	3	5,862	5,340	103	5,238	521	137	5
25 to 34 years .....	142	55	1	13,227	11,324	167	11,157	1,903	714	13
35 to 44 years .....	153	85	6	15,125	12,287	182	12,105	2,838	1,108	18
45 to 54 years .....	86	92	-	11,730	8,824	177	8,647	2,906	837	16
55 to 64 years .....	39	75	2	4,932	3,850	95	3,756	1,081	541	3
65 years and over .....	3	55	-	1,236	1,037	47	989	199	193	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	July 1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	122,521	3,670	118,850	100.0	100.0	100.0
1 to 34 hours .....	28,332	1,004	27,328	23.1	27.4	23.0
1 to 4 hours .....	1,589	91	1,497	1.3	2.5	1.3
5 to 14 hours .....	3,726	184	3,542	3.0	5.0	3.0
15 to 29 hours .....	14,380	500	13,880	11.7	13.6	11.7
30 to 34 hours .....	8,637	229	8,408	7.0	6.2	7.1
35 hours and over .....	94,189	2,666	91,522	76.9	72.6	77.0
35 to 39 hours .....	8,319	191	8,128	6.8	5.2	6.8
40 hours .....	46,303	863	45,439	37.8	23.5	38.2
41 hours and over .....	39,567	1,612	37,955	32.3	43.9	31.9
41 to 48 hours .....	14,289	262	14,027	11.7	7.1	11.8
49 to 59 hours .....	14,293	483	13,810	11.7	13.2	11.6
60 hours and over .....	10,985	867	10,118	9.0	23.6	8.5
Average hours, total at work .....	39.9	43.7	39.8	-	-	-
Average hours, persons who usually work full time .....	43.4	50.1	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	July 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 .....	28,332	9,612	18,720	27,328	9,341	17,987
Economic reasons .....	4,025	1,473	2,552	3,882	1,423	2,459
Slack work or business conditions .....	2,344	1,216	1,128	2,256	1,169	1,087
Could only find part-time work .....	1,383	-	1,383	1,339	-	1,339
Seasonal work .....	137	96	41	127	94	33
Job started or ended during week .....	161	161	-	161	161	-
Noneconomic reasons .....	24,307	8,139	16,168	23,446	7,918	15,528
Child-care problems .....	790	94	696	763	88	675
Other family or personal obligations .....	5,042	616	4,426	4,857	598	4,258
Health or medical limitations .....	707	-	707	669	-	669
In school or training .....	4,282	84	4,198	4,166	81	4,086
Retired or Social Security limit on earnings .....	1,710	-	1,710	1,587	-	1,587
Vacation or personal day .....	4,902	4,902	-	4,798	4,798	-
Holiday, legal or religious .....	48	48	-	48	48	-
Weather-related curtailment .....	143	143	-	107	107	-
All other reasons .....	6,682	2,252	4,431	6,452	2,198	4,254
Average hours:						
Economic reasons .....	23.1	23.9	22.7	23.2	24.0	22.7
Other reasons .....	21.4	23.3	20.4	21.5	23.4	20.6

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-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	July 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 .....	118,850	27,328	3,882	7,918	15,528	91,522	39.8	43.2
Wage and salary workers .....	110,257	24,527	3,505	7,376	13,647	85,730	39.8	43.0
Mining .....	583	48	3	17	28	536	47.9	49.5
Construction .....	6,895	1,016	218	448	350	5,879	42.0	43.4
Manufacturing .....	19,366	2,274	354	1,280	639	17,093	42.4	43.2
Durable goods .....	11,762	1,195	174	770	250	10,567	42.9	43.5
Nondurable goods .....	7,605	1,079	180	510	389	6,526	41.5	42.8
Transportation and public utilities .....	8,213	1,096	196	485	414	7,118	42.9	44.2
Wholesale and retail trade .....	24,574	7,686	1,270	1,273	5,143	16,887	38.0	43.4
Finance, insurance, and real estate .....	7,453	1,256	68	553	634	6,197	40.7	42.6
Service industries .....	37,534	10,388	1,357	2,841	6,189	27,146	38.1	42.2
Private households .....	946	556	81	54	421	391	29.4	42.1
All other industries .....	36,587	9,832	1,276	2,788	5,768	26,755	38.4	42.2
Public administration .....	5,640	765	39	478	249	4,874	41.0	42.1
Self-employed workers .....	8,495	2,740	376	538	1,826	5,755	40.0	46.7
Unpaid family workers .....	98	61	1	4	55	37	32.2	( <sup>1</sup> )

<sup>1</sup> 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	July 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			
<b>TOTAL</b>								
Total, 16 years and over .....	118,850	27,328	3,882	7,918	15,528	91,522	39.8	43.2
16 to 19 years .....	7,777	4,460	654	381	3,425	3,317	30.2	40.2
16 to 17 years .....	3,073	2,289	238	108	1,943	785	25.5	39.0
18 to 19 years .....	4,704	2,171	416	273	1,482	2,533	33.3	40.6
20 years and over .....	111,073	22,868	3,228	7,537	12,102	88,205	40.5	43.3
20 to 24 years .....	12,150	3,323	705	726	1,892	8,828	37.8	41.6
25 years and over .....	98,923	19,545	2,524	6,812	10,210	79,377	40.8	43.5
25 to 54 years .....	84,903	15,089	2,167	5,798	7,125	69,814	41.5	43.6
55 years and over .....	14,019	4,456	357	1,014	3,086	9,563	37.0	42.6
<b>Men, 16 years and over</b> .....	65,460	10,488	1,865	3,859	4,764	54,972	42.7	44.8
16 to 19 years .....	3,945	2,088	331	215	1,541	1,857	31.5	40.7
16 to 17 years .....	1,571	1,098	133	67	898	472	26.9	39.6
18 to 19 years .....	2,374	989	198	149	643	1,385	34.5	41.1
20 years and over .....	61,515	8,400	1,534	3,643	3,223	53,115	43.4	44.9
20 to 24 years .....	6,443	1,327	331	332	664	5,115	40.0	42.8
25 years and over .....	55,073	7,073	1,204	3,311	2,559	47,999	43.8	45.2
25 to 54 years .....	47,072	5,064	1,011	2,784	1,269	42,008	44.5	45.3
55 years and over .....	8,000	2,009	193	527	1,290	5,991	39.6	44.1
<b>Women, 16 years and over</b> .....	53,390	16,840	2,017	4,059	10,764	36,550	36.3	40.9
16 to 19 years .....	3,832	2,372	323	165	1,884	1,460	28.9	39.6
16 to 17 years .....	1,503	1,190	104	41	1,045	313	24.1	38.1
18 to 19 years .....	2,329	1,182	218	124	839	1,148	32.0	40.1
20 years and over .....	49,558	14,468	1,694	3,894	8,880	35,090	36.9	41.0
20 to 24 years .....	5,708	1,995	374	393	1,228	3,712	35.2	39.9
25 years and over .....	43,850	12,472	1,320	3,501	7,652	31,378	37.1	41.1
25 to 54 years .....	37,831	10,026	1,156	3,013	5,856	27,806	37.7	41.2
55 years and over .....	6,019	2,447	164	488	1,796	3,572	33.6	40.2
<b>Race</b>								
White, 16 years and over .....	99,780	23,364	3,072	6,705	13,588	76,416	39.9	43.4
Men .....	55,869	8,894	1,506	3,364	4,024	46,975	42.9	45.0
Women .....	43,912	14,471	1,567	3,341	9,563	29,441	36.0	40.9
Black, 16 years and over .....	13,421	2,858	595	931	1,332	10,562	39.1	41.7
Men .....	6,495	1,106	245	369	492	5,389	40.9	43.0
Women .....	6,926	1,753	350	563	840	5,173	37.4	40.3
<b>Marital status</b>								
Men, 16 years and over:								
Married, spouse present .....	38,657	4,576	652	2,291	1,633	34,081	44.3	45.6
Widowed, divorced, or separated .....	7,806	1,124	245	449	430	6,682	43.3	45.0
Single (never married) .....	18,997	4,789	969	1,119	2,701	14,209	39.0	42.8
Women, 16 years and over:								
Married, spouse present .....	27,360	8,632	680	2,119	5,832	18,728	36.0	40.7
Widowed, divorced, or separated .....	10,776	2,753	440	922	1,392	8,022	38.3	41.4
Single (never married) .....	15,254	5,455	897	1,018	3,540	9,800	35.4	40.8

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	July 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 <sup>1</sup>	118,627	27,298	3,852	7,909	15,537	91,330	39.8	43.2
Managerial and professional specialty	34,062	6,420	499	2,672	3,248	27,642	42.0	44.5
Executive, administrative, and managerial	18,247	2,567	153	1,275	1,138	15,681	43.9	45.7
Professional specialty	15,815	3,853	347	1,397	2,110	11,962	39.7	43.0
Technical, sales, and administrative support	36,441	9,664	1,144	2,369	6,150	26,778	38.2	42.3
Technicians and related support	4,091	815	85	273	457	3,276	40.1	42.3
Sales occupations	15,259	4,529	685	813	3,031	10,730	39.1	44.5
Administrative support, including clerical	17,091	4,320	375	1,284	2,661	12,772	37.0	40.5
Service occupations	16,807	6,079	1,030	946	4,103	10,727	35.7	41.8
Private household	835	500	71	47	383	335	29.2	41.9
Protective service	2,351	337	27	118	192	2,014	42.9	44.9
Service, except private household and protective	13,620	5,242	932	781	3,529	8,378	34.8	41.1
Precision production, craft, and repair	13,879	1,862	428	899	535	12,018	42.4	43.5
Operators, fabricators, and laborers	17,438	3,273	750	1,022	1,501	14,165	40.9	43.3
Machine operators, assemblers, and inspectors	7,237	1,088	256	454	378	6,149	41.0	42.3
Transportation and material moving occupations	4,979	743	189	261	293	4,236	44.2	46.1
Handlers, equipment cleaners, helpers, and laborers	5,222	1,442	305	308	830	3,780	37.7	41.7
Men, 16 years and over <sup>1</sup>	65,100	10,393	1,848	3,841	4,704	54,707	42.7	44.8
Managerial and professional specialty	18,508	2,391	190	1,248	952	16,117	44.9	46.5
Executive, administrative, and managerial	10,408	1,053	83	601	368	9,355	46.4	47.5
Professional specialty	8,100	1,338	107	647	584	6,762	43.0	45.1
Technical, sales, and administrative support	13,481	2,318	373	701	1,245	11,162	42.4	45.0
Technicians and related support	1,907	242	34	96	112	1,665	42.4	43.7
Sales occupations	7,780	1,430	238	362	829	6,349	43.3	46.6
Administrative support, including clerical	3,794	646	100	242	304	3,148	40.4	42.5
Service occupations	7,030	1,800	344	373	1,083	5,229	39.1	43.4
Private household	40	22	3	2	17	18	( <sup>2</sup> )	( <sup>2</sup> )
Protective service	1,928	235	21	97	117	1,693	44.2	45.8
Service, except private household and protective	5,062	1,543	320	274	949	3,518	37.2	42.3
Precision production, craft, and repair	12,715	1,634	405	788	440	11,081	42.7	43.7
Operators, fabricators, and laborers	13,366	2,249	536	730	983	11,117	42.0	44.0
Machine operators, assemblers, and inspectors	4,602	557	136	267	153	4,045	42.2	43.1
Transportation and material moving occupations	4,581	604	163	214	227	3,977	44.9	46.5
Handlers, equipment cleaners, helpers, and laborers	4,182	1,088	236	249	603	3,094	38.4	42.1
Women, 16 years and over <sup>1</sup>	53,528	16,905	2,003	4,068	10,833	36,623	36.3	40.9
Managerial and professional specialty	15,554	4,029	309	1,424	2,296	11,525	38.4	41.9
Executive, administrative, and managerial	7,839	1,514	69	674	770	6,326	40.6	43.0
Professional specialty	7,715	2,516	240	750	1,526	5,199	36.1	40.5
Technical, sales, and administrative support	22,960	7,345	771	1,669	4,905	15,615	35.8	40.5
Technicians and related support	2,184	573	50	177	345	1,611	38.0	40.9
Sales occupations	7,479	3,099	446	450	2,202	4,380	34.7	41.7
Administrative support, including clerical	13,297	3,674	275	1,041	2,358	9,624	36.1	39.9
Service occupations	9,777	4,279	686	573	3,020	5,498	33.3	40.3
Private household	795	478	68	45	366	317	29.2	42.1
Protective service	423	102	6	21	75	321	37.1	40.1
Service, except private household and protective	8,559	3,699	613	507	2,579	4,860	33.5	40.2
Precision production, craft, and repair	1,164	228	23	111	95	936	38.9	40.7
Operators, fabricators, and laborers	4,072	1,024	214	292	518	3,048	37.6	40.5
Machine operators, assemblers, and inspectors	2,634	531	119	186	225	2,104	38.9	40.7
Transportation and material moving occupations	398	139	25	47	67	259	35.8	40.2
Handlers, equipment cleaners, helpers, and laborers	1,040	354	69	59	226	686	35.0	40.0

<sup>1</sup> Excludes farming, forestry, and fishing occupations.  
<sup>2</sup> 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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
Total, 16 years and over .....	3,517	3,418	4.7	4.5	3,463	3,149	5.4	4.9
Married, spouse present .....	1,095	943	2.5	2.2	1,129	1,024	3.4	3.1
Widowed, divorced, or separated .....	472	472	5.3	5.2	643	602	5.1	4.8
Single (never married) .....	1,950	2,003	8.8	8.8	1,691	1,523	9.7	8.5
White, 16 years and over .....	2,544	2,381	4.0	3.7	2,398	2,142	4.6	4.1
Married, spouse present .....	855	742	2.2	1.9	909	847	3.1	2.9
Widowed, divorced, or separated .....	344	350	4.7	4.7	453	408	4.5	4.1
Single (never married) .....	1,345	1,288	7.4	7.0	1,037	888	7.9	6.6
Black, 16 years and over .....	788	862	10.4	10.9	871	844	10.5	9.9
Married, spouse present .....	163	150	4.9	4.4	154	121	6.0	4.6
Widowed, divorced, or separated .....	116	95	9.1	7.5	159	175	7.3	7.7
Single (never married) .....	509	616	17.2	19.1	558	548	15.7	15.1
Total, 25 years and over .....	2,071	1,982	3.3	3.2	2,175	1,959	4.2	3.7
Married, spouse present .....	1,024	894	2.4	2.1	1,000	923	3.1	2.9
Widowed, divorced, or separated .....	445	450	5.2	5.1	616	558	5.0	4.6
Single (never married) .....	602	637	5.4	5.6	559	478	6.8	5.6
White, 25 years and over .....	1,541	1,452	2.9	2.7	1,491	1,386	3.4	3.2
Married, spouse present .....	800	708	2.2	1.9	795	760	2.8	2.8
Widowed, divorced, or separated .....	319	331	4.5	4.6	431	371	4.4	3.9
Single (never married) .....	422	413	4.8	4.6	265	255	4.7	4.3
Black, 25 years and over .....	418	427	6.8	6.8	558	482	8.3	7.0
Married, spouse present .....	146	135	4.5	4.1	141	113	5.7	4.5
Widowed, divorced, or separated .....	117	95	9.4	7.6	154	168	7.2	7.5
Single (never married) .....	154	197	9.6	11.3	263	201	12.3	9.2

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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
Total, 16 years and over <sup>1</sup> .....	6,981	6,567	5.0	4.7	4.7	4.5	5.4	4.9
Managerial and professional specialty .....	849	773	2.2	2.0	2.0	1.7	2.5	2.3
Executive, administrative, and managerial .....	386	338	2.0	1.7	1.9	1.4	2.3	2.1
Professional specialty .....	463	435	2.4	2.2	2.1	1.9	2.7	2.5
Technical, sales, and administrative support .....	1,671	1,567	4.1	3.9	3.5	3.4	4.5	4.1
Technicians and related support .....	108	84	2.4	1.9	2.1	2.2	2.7	1.6
Sales occupations .....	827	757	5.0	4.5	4.0	3.1	5.9	5.9
Administrative support, including clerical .....	737	727	3.8	3.8	3.2	4.7	4.0	3.5
Service occupations .....	1,241	1,287	6.4	6.6	5.9	6.5	6.8	6.7
Private household .....	80	86	8.9	8.7	( <sup>2</sup> )	( <sup>2</sup> )	9.1	8.9
Protective service .....	67	70	2.5	2.7	2.2	2.3	4.0	4.4
Service, except private household and protective .....	1,094	1,131	6.9	7.2	7.3	8.1	6.7	6.6
Precision production, craft, and repair .....	679	613	4.5	4.0	4.3	4.0	6.2	4.4
Mechanics and repairers .....	152	181	3.1	3.6	2.8	3.6	8.4	1.8
Construction trades .....	364	297	6.2	5.0	6.2	4.8	4.5	13.6
Other precision production, craft, and repair .....	163	135	3.7	3.2	3.1	3.2	6.0	3.5
Operators, fabricators, and laborers .....	1,483	1,365	7.3	6.9	6.5	6.4	9.7	8.5
Machine operators, assemblers, and inspectors .....	623	603	7.2	7.3	5.2	6.2	10.5	9.1
Transportation and material moving occupations .....	259	260	4.6	4.7	4.4	4.3	6.6	8.5
Handlers, equipment cleaners, helpers, and laborers .....	601	503	10.0	8.4	10.3	8.8	9.0	7.0
Construction laborers .....	115	112	11.1	10.7	11.2	10.7	( <sup>2</sup> )	( <sup>2</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	486	391	9.8	8.0	10.0	8.3	8.9	6.8
Farming, forestry, and fishing .....	198	208	4.6	4.8	5.0	4.7	2.7	5.6
No previous work experience .....	833	731	-	-	-	-	-	-
16 to 19 years .....	622	508	-	-	-	-	-	-
20 to 24 years .....	96	117	-	-	-	-	-	-
25 years and over .....	114	106	-	-	-	-	-	-

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

<sup>2</sup> 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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
Total, 16 years and over .....	6,981	6,567	5.0	4.7	4.7	4.5	5.4	4.9
Nonagricultural private wage and salary workers .....	5,128	4,886	4.9	4.6	4.6	4.4	5.1	4.8
Mining .....	19	17	3.0	2.6	2.8	2.8	4.0	1.5
Construction .....	491	366	6.8	5.2	7.0	5.4	5.2	3.6
Manufacturing .....	938	952	4.4	4.5	3.7	3.9	5.8	5.6
Durable goods .....	436	551	3.5	4.3	3.4	3.9	3.7	5.3
Lumber and wood products .....	40	35	5.1	4.1	5.3	4.1	4.3	4.2
Furniture and fixtures .....	8	27	1.2	3.9	1.4	4.2	.6	3.3
Stone, clay, and glass products .....	20	15	3.3	2.3	2.7	.6	5.3	8.7
Primary metal industries .....	21	21	2.7	2.4	2.9	2.6	1.6	1.8
Fabricated metal products .....	53	61	4.1	4.2	4.4	4.3	3.1	3.8
Machinery and computing equipment .....	90	94	3.5	3.7	3.1	3.5	4.7	4.4
Electrical machinery, equipment, and supplies .....	44	46	2.3	2.5	1.9	1.8	2.7	3.6
Transportation equipment .....	119	197	5.0	8.2	5.0	7.7	5.1	9.8
Automobiles .....	92	165	6.8	12.8	6.8	12.5	6.8	13.7
Other transportation equipment .....	27	32	2.6	2.9	2.6	2.2	2.6	5.2
Professional and photographic equipment .....	18	18	2.6	2.2	2.8	.2	2.4	5.0
Other durable goods industries .....	23	36	3.2	5.1	2.0	3.9	5.1	6.5
Nondurable goods .....	501	401	5.6	4.8	4.2	4.0	7.7	5.9
Food and kindred products .....	168	82	9.3	4.8	6.3	4.3	14.6	5.8
Textile mill products .....	24	38	3.7	5.6	2.9	4.0	4.9	7.7
Apparel and other textile products .....	111	75	10.3	9.6	6.6	8.1	11.7	10.3
Paper and allied products .....	15	21	2.0	3.1	2.1	.9	1.6	9.0
Printing and publishing .....	84	78	4.4	4.4	4.2	4.4	4.8	4.5
Chemicals and allied products .....	28	34	1.9	2.4	2.1	2.8	1.5	1.7
Rubber and miscellaneous plastics products .....	54	48	5.6	4.5	5.1	3.8	6.7	6.1
Other nondurable goods industries .....	18	25	5.1	7.3	4.1	8.4	7.0	4.9
Transportation and public utilities .....	269	265	3.6	3.6	2.9	3.7	5.1	3.1
Transportation .....	192	205	4.1	4.5	3.4	4.3	6.2	5.0
Communications and other public utilities .....	78	60	2.7	2.1	2.0	2.6	4.0	1.2
Wholesale and retail trade .....	1,658	1,527	6.1	5.6	5.7	5.0	6.5	6.3
Wholesale trade .....	155	176	3.2	3.5	2.9	2.5	3.8	5.7
Retail trade .....	1,504	1,350	6.7	6.1	6.6	5.8	6.9	6.4
Finance, insurance, and real estate .....	261	164	3.3	2.1	3.0	1.6	3.5	2.4
Service industries .....	1,492	1,596	4.4	4.5	4.4	4.8	4.4	4.4
Professional services .....	590	565	3.0	2.8	2.7	2.9	3.1	2.7
Other service industries .....	902	1,031	6.5	7.0	5.8	6.2	7.1	7.8
Agricultural wage and salary workers .....	135	139	5.9	5.7	7.0	5.5	2.6	6.3
Government, self-employed, and unpaid family workers .....	884	811	3.0	2.7	2.4	2.5	3.6	3.0
No previous work experience .....	833	731	-	-	-	-	-	-

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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	6,981	6,567	2,653	2,582	2,708	2,532	1,620	1,453	4,942	4,523	1,659	1,706
Job losers and persons who completed temporary jobs .....	2,895	2,847	1,537	1,518	1,170	1,127	187	202	2,116	2,065	647	653
On temporary layoff .....	873	935	398	444	407	428	67	62	685	738	161	166
Not on temporary layoff .....	2,022	1,912	1,139	1,073	763	699	120	140	1,430	1,327	486	487
Permanent job losers .....	1,381	1,316	790	740	521	495	69	81	1,018	935	292	306
Persons who completed temporary jobs .....	642	596	349	334	242	204	51	59	413	392	193	181
Job leavers .....	836	817	391	351	321	353	125	113	660	597	116	185
Reentrants .....	2,417	2,173	669	617	1,062	925	685	630	1,617	1,400	665	655
New entrants .....	833	731	55	96	155	127	622	508	549	461	231	213
<b>PERCENT DISTRIBUTION</b>												
Job losers and persons who completed temporary jobs .....	41.5	43.3	58.0	58.8	43.2	44.5	11.6	13.9	42.8	45.7	39.0	38.3
On temporary layoff .....	12.5	14.2	15.0	17.2	15.0	16.9	4.2	4.3	13.9	16.3	9.7	9.7
Not on temporary layoff .....	29.0	29.1	42.9	41.6	28.2	27.6	7.4	9.6	28.9	29.3	29.3	28.6
Job leavers .....	12.0	12.4	14.7	13.6	11.8	13.9	7.7	7.8	13.4	13.2	7.0	10.8
Reentrants .....	34.6	33.1	25.2	23.9	39.2	36.5	42.3	43.4	32.7	31.0	40.1	38.4
New entrants .....	11.9	11.1	2.1	3.7	5.7	5.0	38.4	35.0	11.1	10.2	13.9	12.5
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers and persons who completed temporary jobs .....	2.1	2.0	2.2	2.2	2.0	1.9	1.9	2.0	1.8	1.8	4.1	4.0
Job leavers .....	.6	.6	.6	.5	.5	.6	1.3	1.1	.6	.5	.7	1.1
Reentrants .....	1.7	1.6	1.0	.9	1.8	1.6	7.0	6.3	1.4	1.2	4.2	4.0
New entrants .....	.6	.5	.1	.1	.3	.2	6.4	5.1	.5	.4	1.5	1.3

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	July 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 .....	6,567	100.0	43.3	33.2	23.5	10.4	13.1
Job losers and persons who completed temporary jobs .....	2,847	100.0	46.9	29.9	23.3	11.0	12.2
On temporary layoff .....	935	100.0	66.8	27.4	5.9	4.3	1.6
Not on temporary layoff .....	1,912	100.0	37.1	31.1	31.8	14.3	17.4
Permanent job losers .....	1,316	100.0	34.0	31.8	34.2	16.2	18.0
Persons who completed temporary jobs .....	596	100.0	44.1	29.5	26.4	10.2	16.3
Job leavers .....	817	100.0	52.3	30.6	17.2	9.9	7.3
Reentrants .....	2,173	100.0	36.7	36.6	26.7	9.6	17.0
New entrants .....	731	100.0	39.2	38.7	22.1	11.1	11.0
<b>Men, 20 years and over .....</b>	<b>2,582</b>	<b>100.0</b>	<b>41.3</b>	<b>29.6</b>	<b>29.1</b>	<b>12.7</b>	<b>16.4</b>
Job losers and persons who completed temporary jobs .....	1,518	100.0	45.9	27.6	26.5	12.4	14.1
On temporary layoff .....	444	100.0	72.6	22.1	5.3	3.6	1.7
Not on temporary layoff .....	1,073	100.0	34.8	29.9	35.3	16.1	19.2
Permanent job losers .....	740	100.0	33.7	31.5	34.8	16.9	17.9
Persons who completed temporary jobs .....	334	100.0	37.2	26.5	36.4	14.3	22.1
Job leavers .....	351	100.0	44.1	33.1	22.8	10.8	12.0
Reentrants .....	617	100.0	31.3	30.5	38.2	14.1	24.1
New entrants .....	96	100.0	23.0	41.7	35.2	14.5	20.7
<b>Women, 20 years and over .....</b>	<b>2,532</b>	<b>100.0</b>	<b>41.4</b>	<b>34.2</b>	<b>24.3</b>	<b>10.9</b>	<b>13.5</b>
Job losers and persons who completed temporary jobs .....	1,127	100.0	44.4	34.0	21.6	10.4	11.2
On temporary layoff .....	428	100.0	57.9	35.0	7.1	5.7	1.5
Not on temporary layoff .....	699	100.0	36.2	33.3	30.5	13.3	17.2
Permanent job losers .....	495	100.0	31.9	32.3	35.8	16.3	19.5
Persons who completed temporary jobs .....	204	100.0	46.5	35.9	17.5	6.1	11.4
Job leavers .....	353	100.0	57.0	26.3	16.7	11.7	5.0
Reentrants .....	925	100.0	33.9	36.4	29.7	10.4	19.3
New entrants .....	127	100.0	26.6	42.3	31.1	16.6	14.6
<b>Both sexes, 16 to 19 years .....</b>	<b>1,453</b>	<b>100.0</b>	<b>50.2</b>	<b>37.8</b>	<b>12.0</b>	<b>5.6</b>	<b>6.4</b>
Job losers and persons who completed temporary jobs .....	202	100.0	68.1	23.8	8.2	4.3	3.9
On temporary layoff .....	62	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Not on temporary layoff .....	140	100.0	60.0	28.9	11.1	6.1	5.0
Permanent job losers .....	81	100.0	49.0	32.6	18.5	9.8	8.6
Persons who completed temporary jobs .....	59	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Job leavers .....	113	100.0	63.0	35.8	1.2	1.2	-
Reentrants .....	630	100.0	46.2	43.0	10.9	4.0	6.8
New entrants .....	508	100.0	45.4	37.3	17.3	9.1	8.2

<sup>1</sup> Data not shown where base is less than 75,000

procedures and revised population controls used in the household survey.

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

**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	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
Total, 16 years and over .....	6,981	6,567	100.0	100.0	5,765	5,375	100.0	100.0
Less than 5 weeks .....	2,643	2,845	37.9	43.3	1,981	2,203	34.4	41.0
5 to 14 weeks .....	2,284	2,179	32.7	33.2	1,899	1,790	32.9	33.3
5 to 10 weeks .....	1,683	1,626	24.1	24.8	1,389	1,337	24.1	24.9
11 to 14 weeks .....	601	553	8.6	8.4	510	453	8.8	8.4
15 weeks and over .....	2,053	1,543	29.4	23.5	1,885	1,382	32.7	25.7
15 to 26 weeks .....	925	685	13.3	10.4	845	625	14.7	11.6
27 weeks and over .....	1,128	858	16.2	13.1	1,041	757	18.1	14.1
27 to 51 weeks .....	524	369	7.5	5.6	489	329	8.5	6.1
52 weeks and over .....	604	489	8.7	7.4	552	428	9.6	8.0
Average (mean) duration, in weeks .....	15.8	13.7	-	-	17.1	14.4	-	-
Median duration, in weeks .....	7.7	6.3	-	-	8.6	6.9	-	-

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	July 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			
<b>TOTAL</b>									
Total, 16 years and over .....	6,567	2,845	2,179	1,543	685	858	13.7	6.3	
16 to 19 years .....	1,453	730	549	174	82	93	8.4	4.5	
20 to 24 years .....	1,173	526	393	254	105	149	13.0	6.1	
25 to 34 years .....	1,441	610	453	378	188	189	14.0	6.7	
35 to 44 years .....	1,198	472	390	336	151	185	15.8	7.5	
45 to 54 years .....	802	308	260	234	105	128	16.1	7.7	
55 to 64 years .....	360	154	74	132	40	92	21.5	6.9	
65 years and over .....	139	44	60	35	13	22	18.6	8.6	
<b>Men, 16 years and over .....</b>									
16 to 19 years .....	836	410	315	111	55	57	8.6	4.6	
20 to 24 years .....	600	272	193	136	53	83	13.9	5.9	
25 to 34 years .....	719	319	207	194	103	90	14.7	6.2	
35 to 44 years .....	563	199	176	189	80	109	18.5	8.4	
45 to 54 years .....	423	157	126	140	53	87	18.1	8.9	
55 to 64 years .....	193	93	31	70	25	45	18.8	6.0	
65 years and over .....	83	27	32	24	13	11	18.2	9.5	
<b>Women, 16 years and over .....</b>									
16 to 19 years .....	617	320	234	63	27	36	8.1	4.4	
20 to 24 years .....	573	255	200	118	52	66	12.0	6.3	
25 to 34 years .....	721	291	246	184	85	99	13.3	7.1	
35 to 44 years .....	635	274	214	147	71	76	13.4	7.0	
45 to 54 years .....	379	151	135	93	52	41	14.0	7.0	
55 to 64 years .....	167	61	44	62	15	48	24.7	7.5	
65 years and over .....	56	17	27	11	-	11	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Race</b>									
<b>White, 16 years and over .....</b>									
Men .....	2,381	1,098	716	566	250	316	13.3	5.4	
Women .....	2,142	942	772	428	203	225	12.3	6.0	
<b>Black, 16 years and over .....</b>									
Men .....	862	320	308	234	94	141	16.5	7.5	
Women .....	844	328	286	231	88	143	15.3	7.8	
<b>Marital status</b>									
<b>Men, 16 years and over:</b>									
Married, spouse present .....	943	404	263	276	142	134	14.5	6.4	
Widowed, divorced, or separated .....	472	198	137	137	49	88	18.5	7.0	
Single (never married) .....	2,003	874	678	450	191	259	13.4	6.0	
<b>Women, 16 years and over:</b>									
Married, spouse present .....	1,024	414	352	258	140	118	13.1	6.6	
Widowed, divorced, or separated .....	602	236	200	166	61	105	17.0	7.8	
Single (never married) .....	1,523	719	548	255	102	153	11.0	5.3	

<sup>1</sup> 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	July 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				
<b>OCCUPATION</b>										
Managerial and professional specialty .....	773	360	233	180	70	110	13.9	5.4		
Technical, sales, and administrative support .....	1,567	678	505	385	178	207	13.5	6.7		
Service occupations .....	1,287	540	475	272	98	174	14.0	6.4		
Precision production, craft, and repair .....	613	283	160	170	81	89	14.2	6.2		
Operators, fabricators, and laborers .....	1,365	600	456	309	148	161	12.8	5.9		
Farming, forestry, and fishing .....	208	93	63	52	20	32	15.3	6.3		
<b>INDUSTRY<sup>1</sup></b>										
Agriculture .....	139	57	50	32	12	20	15.8	6.5		
Construction .....	384	179	119	86	35	51	13.6	5.5		
Manufacturing .....	952	462	261	228	118	110	12.2	5.0		
Durable goods .....	551	324	134	92	47	46	10.5	4.0		
Nondurable goods .....	402	138	127	136	71	65	14.5	8.6		
Transportation and public utilities .....	878	94	124	86	24	63	19.6	8.0		
Wholesale and retail trade .....	4,634	654	533	351	152	199	12.3	6.5		
Finance, insurance, and real estate .....	509	61	50	56	27	29	17.0	7.9		
Services .....	3,536	897	645	397	171	227	13.1	5.6		
Public administration .....	405	52	29	55	28	27	20.1	8.8		
No previous work experience .....	731	287	283	161	81	80	13.5	6.5		

<sup>1</sup> 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			
	July 1997	July 1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
	Total not in the labor force .....	64,835	65,934	8,872	9,041	18,671	19,101	37,293	37,792	23,059	23,319	41,777
Do not want a job now <sup>1</sup> .....	60,058	61,172	7,127	7,372	16,441	16,835	36,490	36,964	21,204	21,506	38,855	39,666
Want a job <sup>1</sup> .....	4,777	4,763	1,745	1,669	2,230	2,267	803	827	1,855	1,813	2,922	2,950
Did not search for work in previous year .....	2,891	2,835	980	894	1,305	1,307	606	635	1,091	974	1,800	1,861
Searched for work in previous year <sup>2</sup> .....	1,886	1,927	765	775	925	960	196	193	764	838	1,123	1,089
Not available to work now .....	605	600	246	240	321	316	38	44	180	203	425	397
Available to work now .....	1,281	1,328	519	535	604	644	158	149	584	635	697	692
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	311	374	133	167	146	161	32	46	170	225	140	149
Reasons other than discouragement .....	971	953	386	368	458	483	127	102	414	410	557	543
Family responsibilities .....	99	148	24	46	55	88	20	14	13	32	86	116
In school or training .....	116	114	80	84	36	31	1	-	56	46	60	69
Ill health or disability .....	109	115	19	22	64	84	26	9	47	75	62	41
Other <sup>4</sup> .....	646	575	263	216	303	279	80	79	297	258	349	317

<sup>1</sup> Includes some persons who are not asked if they want a job.

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

<sup>3</sup> 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.

<sup>4</sup> 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 <sup>1</sup>		Number		Rate <sup>1</sup>		Number		Rate <sup>1</sup>	
	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998	July 1997	July 1998
<b>AGE</b>												
Total, 16 years and over <sup>2</sup> .....	8,053	7,643	6.1	5.8	4,366	4,099	6.1	5.7	3,687	3,544	6.1	5.8
16 to 19 years .....	535	535	6.6	6.2	227	245	5.4	5.5	308	289	7.8	7.0
20 years and over .....	7,518	7,108	6.1	5.7	4,139	3,854	6.2	5.7	3,379	3,254	6.0	5.8
20 to 24 years .....	836	823	6.4	6.3	432	368	6.2	5.3	405	455	6.7	7.5
25 years and over .....	6,682	6,285	6.1	5.7	3,707	3,486	6.2	5.7	2,975	2,799	5.9	5.5
25 to 54 years .....	5,966	5,599	6.3	5.9	3,284	3,085	6.4	6.0	2,682	2,514	6.2	5.8
55 years and over .....	716	686	4.6	4.2	423	401	4.8	4.3	293	285	4.3	4.0
55 to 64 years .....	619	591	5.1	4.7	366	339	5.5	4.8	252	252	4.7	4.5
65 years and over .....	97	95	2.7	2.6	57	62	2.6	2.8	40	33	2.8	2.2
<b>RACE AND HISPANIC ORIGIN</b>												
White .....	7,035	6,595	6.3	5.9	3,842	3,580	6.3	5.8	3,194	3,015	6.4	6.0
Black .....	716	775	5.0	5.3	380	382	5.6	5.4	336	393	4.5	5.1
Hispanic origin .....	485	446	3.8	3.3	307	278	3.9	3.4	178	168	3.5	3.2
<b>MARITAL STATUS</b>												
Married, spouse present .....	4,359	4,190	5.8	5.6	2,637	2,596	6.2	6.1	1,722	1,594	5.3	4.9
Widowed, divorced, or separated .....	1,329	1,300	6.5	6.3	504	468	6.0	5.5	825	831	6.9	6.9
Single (never married) .....	2,365	2,154	6.6	5.8	1,225	1,035	6.1	5.0	1,140	1,119	7.2	6.8
<b>FULL- OR PART-TIME STATUS</b>												
Primary job full time, secondary job part time .....	4,514	4,253	-	-	2,703	2,485	-	-	1,810	1,769	-	-
Primary and secondary jobs both part time .....	1,608	1,563	-	-	534	539	-	-	1,075	1,024	-	-
Primary and secondary jobs both full time .....	258	308	-	-	185	223	-	-	72	86	-	-
Hours vary on primary or secondary job .....	1,625	1,456	-	-	920	821	-	-	705	636	-	-

<sup>1</sup> Multiple jobholders as a percent of all employed persons in specified group.

<sup>2</sup> 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							
	July 1997	July 1998	Total		Employed		Unemployed			
			July 1997	July 1998	July 1997	July 1998	Number		Percent of labor force	
							July 1997	July 1998	July 1997	July 1998
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,787	7,799	6,625	6,543	6,407	6,352	218	191	3.3	2.9
40 to 54 years .....	6,268	5,922	5,656	5,269	5,445	5,102	210	166	3.7	3.2
40 to 44 years .....	1,002	741	898	656	855	626	43	30	4.8	4.6
45 to 49 years .....	2,679	2,228	2,444	1,971	2,350	1,913	94	58	3.8	3.0
50 to 54 years .....	2,587	2,953	2,313	2,642	2,240	2,564	73	78	3.2	2.9
55 years and over .....	1,519	1,877	969	1,274	962	1,249	7	25	.8	2.0
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	19,496	20,365	17,785	18,474	17,238	17,953	547	522	3.1	2.8
40 to 44 years .....	8,980	9,220	8,328	8,533	8,041	8,285	288	248	3.5	2.9
45 to 49 years .....	6,191	6,852	5,657	6,234	5,494	6,077	163	157	2.9	2.5
50 to 54 years .....	4,325	4,294	3,800	3,708	3,703	3,591	97	117	2.5	3.1

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 HOURS AND EARNINGS**

**B-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry, 1964 to date**

Year and month	Total private <sup>1</sup>			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									
<b>1997:</b>									
July .....	34.8	\$12.17	\$423.52	45.1	\$16.07	\$724.76	40.1	\$16.03	\$642.80
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
<b>1998:</b>									
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 <sup>P</sup> .....	34.7	12.66	439.30	44.0	16.72	735.68	39.1	16.43	642.41
July <sup>P</sup> .....	34.8	12.67	440.92	43.6	16.75	730.30	40.0	16.64	665.60

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

**B-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> 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										
<b>1997:</b>										
July .....	41.2	\$13.10	\$12.42	\$539.72	39.5	\$14.99	\$592.11	38.3	\$13.38	\$512.45
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
<b>1998:</b>										
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 <sup>P</sup> .....	41.8	13.44	12.74	561.79	39.7	15.24	605.03	38.3	13.89	531.99
July <sup>P</sup> .....	41.1	13.40	12.72	550.74	39.7	15.35	609.40	38.4	13.98	536.83

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

**B-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> 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									
<b>1997:</b>									
July .....	29.6	\$8.27	\$244.79	35.9	\$13.21	\$474.24	32.8	\$12.06	\$395.57
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
<b>1998:</b>									
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
JuneP .....	29.3	8.69	254.62	36.0	13.94	501.84	32.7	12.70	415.29
JulyP .....	29.9	8.70	260.13	36.1	13.95	503.60	32.9	12.68	417.17

<sup>1</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Total</b> .....	122,811	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,234	125,562	125,758	125,824
<b>Total private</b> .....	103,219	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,470	105,734	105,942	106,020
<b>Goods-producing</b> .....	24,923	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,339	25,301	25,297	25,134
<b>Mining</b> .....	593	592	594	592	591	592	592	590	587	582	579	579	574
Metal mining .....	54	54	53	53	53	52	52	52	51	51	51	51	51
Coal mining .....	95	95	95	95	94	94	94	93	93	92	92	90	91
Oil and gas extraction .....	336	336	338	337	337	338	338	338	336	332	329	331	325
Nonmetallic minerals, except fuels .....	108	107	108	107	107	108	108	107	107	107	107	107	107
<b>Construction</b> .....	5,682	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,930	5,917	5,942	5,960
General building contractors .....	1,316	1,318	1,320	1,326	1,335	1,351	1,365	1,371	1,373	1,385	1,388	1,400	1,403
Heavy construction, except building .....	789	791	792	789	788	805	817	813	805	819	819	820	828
Special trade contractors .....	3,577	3,590	3,601	3,607	3,627	3,654	3,699	3,718	3,682	3,726	3,710	3,722	3,729
<b>Manufacturing</b> .....	18,648	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,827	18,805	18,776	18,600
<b>Durable goods</b> .....	10,988	11,028	11,030	11,060	11,094	11,118	11,154	11,159	11,166	11,170	11,156	11,144	10,993
Lumber and wood products .....	793	794	794	794	795	798	800	800	801	802	803	800	801
Furniture and fixtures .....	510	509	510	511	513	515	517	519	520	524	526	524	527
Stone, clay, and glass products .....	553	552	553	554	554	555	562	561	558	561	559	562	563
Primary metal industries .....	708	712	714	714	715	716	719	718	719	718	716	717	703
Fabricated metal products .....	1,472	1,478	1,480	1,485	1,488	1,491	1,496	1,497	1,497	1,498	1,495	1,490	1,480
Industrial machinery and equipment .....	2,165	2,172	2,175	2,185	2,191	2,196	2,200	2,202	2,205	2,201	2,201	2,201	2,188
Computer and office equipment .....	377	379	379	380	379	381	381	381	381	377	376	374	371
Electronic and other electrical equipment .....	1,690	1,694	1,698	1,702	1,707	1,712	1,719	1,720	1,722	1,720	1,716	1,715	1,703
Electronic components and accessories .....	655	660	664	669	672	676	680	680	681	678	677	673	666
Transportation equipment .....	1,840	1,862	1,852	1,861	1,878	1,878	1,882	1,886	1,887	1,890	1,886	1,883	1,777
Motor vehicles and equipment .....	980	998	986	990	1,005	1,001	1,002	1,004	1,002	1,004	998	993	882
Aircraft and parts .....	504	508	510	513	516	519	521	523	525	525	524	524	527
Instruments and related products .....	865	865	865	866	867	869	870	866	868	867	866	864	863
Miscellaneous manufacturing .....	392	390	389	388	386	388	389	390	389	389	388	388	388
<b>Nondurable goods</b> .....	7,660	7,653	7,656	7,658	7,664	7,673	7,670	7,683	7,663	7,657	7,649	7,632	7,607
Food and kindred products .....	1,687	1,682	1,688	1,689	1,696	1,702	1,702	1,703	1,704	1,708	1,710	1,706	1,697
Tobacco products .....	42	41	40	41	42	41	40	41	41	42	41	40	40
Textile mill products .....	616	613	613	612	611	611	608	606	604	605	603	598	593
Apparel and other textile products .....	824	822	817	814	810	808	805	796	796	787	780	774	770
Paper and allied products .....	684	684	685	685	686	686	688	688	688	686	685	682	681
Printing and publishing .....	1,556	1,556	1,556	1,558	1,560	1,561	1,564	1,564	1,564	1,565	1,566	1,570	1,573
Chemicals and allied products .....	1,031	1,032	1,033	1,034	1,035	1,036	1,035	1,036	1,036	1,035	1,039	1,037	1,037
Petroleum and coal products .....	139	139	139	139	138	139	136	136	136	137	136	136	136
Rubber and misc. plastics products .....	991	995	997	998	999	1,002	1,006	1,007	1,009	1,008	1,006	1,006	999
Leather and leather products .....	90	89	88	88	87	87	86	86	85	84	83	83	81
<b>Service-producing</b> .....	97,888	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,895	100,261	100,461	100,690
<b>Transportation and public utilities</b> .....	6,411	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,513	6,534	6,537	6,555
Transportation .....	4,120	3,973	4,141	4,149	4,147	4,135	4,148	4,164	4,170	4,173	4,191	4,194	4,213
Railroad transportation .....	228	225	227	227	228	230	231	231	231	231	232	232	232
Local and interurban passenger transit .....	451	455	451	452	453	455	456	459	460	453	459	458	464
Trucking and warehousing .....	1,670	1,675	1,680	1,680	1,678	1,676	1,684	1,688	1,690	1,702	1,703	1,708	1,715
Water transportation .....	180	181	180	180	180	179	177	181	183	181	185	183	187
Transportation by air .....	1,137	981	1,147	1,154	1,151	1,138	1,142	1,145	1,146	1,147	1,151	1,153	1,155
Pipelines, except natural gas .....	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services .....	440	442	442	442	443	443	444	446	446	445	447	446	446
Communications and public utilities .....	2,291	2,291	2,294	2,304	2,309	2,316	2,325	2,330	2,334	2,340	2,343	2,343	2,342
Communications .....	1,425	1,430	1,432	1,443	1,449	1,457	1,466	1,471	1,475	1,484	1,486	1,489	1,488
Electric, gas, and sanitary services .....	866	861	862	861	860	859	859	859	859	856	857	854	854
<b>Wholesale trade</b> .....	6,655	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,798	6,815	6,819	6,820
Durable goods .....	3,942	3,959	3,964	3,977	3,989	4,002	4,017	4,030	4,039	4,050	4,059	4,068	4,074
Nondurable goods .....	2,713	2,712	2,715	2,720	2,722	2,729	2,742	2,739	2,744	2,748	2,756	2,751	2,746

See footnotes at end of table.



**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				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Total</b> .....	59,228	59,335	59,506	59,564	59,663	59,810	59,974	60,114	60,220	60,308	60,380	60,460	60,689
<b>Total private</b> .....	48,398	48,485	48,621	48,614	48,763	48,884	49,026	49,142	49,239	49,306	49,369	49,446	49,626
<b>Goods-producing</b> .....	6,694	6,703	6,705	6,711	6,717	6,732	6,741	6,759	6,766	6,767	6,770	6,759	6,762
<b>Mining</b> .....	82	82	82	83	82	82	82	83	83	83	83	82	82
<b>Construction</b> .....	630	632	634	636	639	643	645	648	650	654	655	656	662
<b>Manufacturing</b> .....	5,982	5,989	5,989	5,992	5,996	6,007	6,014	6,028	6,033	6,030	6,032	6,021	6,018
<b>Durable goods</b> .....	2,900	2,909	2,915	2,926	2,932	2,945	2,952	2,962	2,973	2,979	2,982	2,980	2,976
Lumber and wood products .....	138	137	138	138	138	138	139	139	140	141	141	141	141
Furniture and fixtures .....	160	160	160	160	160	161	161	162	163	164	165	166	166
Stone, clay, and glass products .....	104	104	104	105	105	105	106	105	107	107	107	106	107
Primary metal industries .....	102	103	103	103	103	103	104	104	104	104	104	105	103
Fabricated metal products .....	326	327	326	328	329	330	330	331	333	334	334	334	334
Industrial machinery and equipment .....	472	473	475	477	478	481	482	484	485	486	485	485	482
Electronic and other electrical equipment .....	692	695	697	698	702	706	708	712	714	716	716	712	710
Transportation equipment .....	383	387	387	393	394	397	399	401	400	401	402	404	406
Instruments and related products .....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing .....	172	172	173	172	171	171	169	170	171	171	171	171	171
<b>Nondurable goods</b> .....	3,082	3,080	3,074	3,066	3,064	3,062	3,062	3,066	3,060	3,051	3,050	3,041	3,042
Food and kindred products .....	556	557	555	554	554	555	557	558	559	559	559	560	562
Tobacco products .....	13	13	13	12	13	13	13	13	13	13	13	14	13
Textile mill products .....	287	287	288	284	285	284	283	283	281	280	278	279	279
Apparel and other textile products .....	615	612	609	608	602	598	594	594	589	582	583	575	571
Paper and allied products .....	167	166	166	166	167	167	168	168	168	168	168	167	167
Printing and publishing .....	701	703	704	703	703	704	705	705	706	705	706	705	707
Chemicals and allied products .....	330	330	329	329	330	330	330	331	330	331	330	330	332
Petroleum and coal products .....	25	25	25	24	24	24	24	25	24	24	24	24	24
Rubber and misc. plastics products .....	339	339	337	339	340	341	342	343	345	344	344	343	343
Leather and leather products .....	49	48	48	47	46	46	46	46	45	45	45	44	44
<b>Service-producing</b> .....	52,534	52,632	52,801	52,853	52,946	53,078	53,233	53,355	53,454	53,541	53,610	53,701	53,927
<b>Transportation and public utilities</b> .....	1,945	1,945	1,943	1,900	1,943	1,944	1,944	1,939	1,946	1,948	1,949	1,951	1,960
<b>Wholesale trade</b> .....	2,055	2,054	2,059	2,060	2,058	2,066	2,066	2,067	2,078	2,077	2,078	2,082	2,089
<b>Retail trade</b> .....	11,560	11,576	11,580	11,602	11,614	11,632	11,677	11,700	11,713	11,712	11,707	11,720	11,786
<b>Finance, insurance, and real estate</b> .....	4,450	4,459	4,469	4,478	4,486	4,498	4,511	4,526	4,539	4,546	4,563	4,582	4,593
<b>Services</b> .....	21,694	21,748	21,865	21,863	21,945	22,012	22,087	22,151	22,197	22,256	22,302	22,352	22,436
<b>Government</b> .....	10,830	10,850	10,885	10,950	10,900	10,926	10,948	10,972	10,981	11,002	11,011	11,014	11,063
Federal .....	1,146	1,145	1,143	1,143	1,135	1,142	1,144	1,154	1,141	1,140	1,137	1,136	1,136
State .....	2,335	2,339	2,357	2,354	2,351	2,360	2,365	2,363	2,365	2,367	2,371	2,369	2,375
Local .....	7,349	7,366	7,385	7,453	7,414	7,424	7,439	7,455	7,475	7,495	7,503	7,509	7,552

<sup>1</sup> 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 workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(in thousands)

Industry	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Total private</b> .....	84,670	84,567	84,966	85,176	85,441	85,705	85,947	86,073	86,113	86,282	86,526	86,698	86,746
<b>Goods-producing</b> .....	17,744	17,773	17,787	17,818	17,870	17,947	18,039	18,037	17,996	18,043	17,989	17,983	17,818
<b>Mining</b> .....	447	447	448	448	449	449	450	450	445	440	440	438	433
<b>Construction</b> .....	4,408	4,418	4,424	4,425	4,451	4,497	4,566	4,563	4,538	4,596	4,578	4,601	4,612
<b>Manufacturing</b> .....	12,889	12,908	12,915	12,945	12,970	13,001	13,023	13,024	13,013	13,007	12,971	12,944	12,773
<b>Durable goods</b> .....	7,536	7,573	7,573	7,598	7,621	7,644	7,669	7,676	7,669	7,666	7,642	7,629	7,492
Lumber and wood products .....	653	653	653	654	655	658	660	660	659	660	660	658	660
Furniture and fixtures .....	407	405	405	406	408	410	412	413	415	418	419	417	420
Stone, clay, and glass products .....	431	431	431	433	434	436	441	441	436	436	436	437	440
Primary metal industries .....	554	558	559	559	560	562	564	564	565	563	561	562	549
Fabricated metal products .....	1,110	1,116	1,117	1,120	1,122	1,125	1,130	1,132	1,131	1,132	1,127	1,122	1,114
Industrial machinery and equipment .....	1,362	1,369	1,370	1,379	1,382	1,386	1,389	1,391	1,391	1,389	1,389	1,391	1,380
Electronic and other electrical equipment .....	1,068	1,072	1,075	1,078	1,080	1,086	1,089	1,087	1,085	1,081	1,079	1,076	1,068
Transportation equipment .....	1,251	1,270	1,264	1,270	1,283	1,280	1,279	1,283	1,281	1,279	1,267	1,263	1,155
Motor vehicles and equipment .....	777	792	784	786	791	790	787	788	784	784	774	768	657
Instruments and related products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing .....	274	274	272	272	270	272	273	273	273	274	271	271	271
<b>Nondurable goods</b> .....	5,353	5,335	5,342	5,347	5,349	5,357	5,354	5,348	5,344	5,341	5,329	5,315	5,281
Food and kindred products .....	1,252	1,248	1,254	1,255	1,260	1,263	1,265	1,267	1,267	1,271	1,273	1,270	1,257
Tobacco products .....	32	30	31	32	33	32	32	32	32	33	32	31	31
Textile mill products .....	523	518	519	520	518	519	516	514	513	513	511	508	503
Apparel and other textile products .....	674	670	665	663	659	656	652	645	643	633	627	622	620
Paper and allied products .....	522	520	521	522	523	524	525	525	525	524	522	520	517
Printing and publishing .....	851	849	847	849	849	850	850	848	845	846	847	848	846
Chemicals and allied products .....	570	570	573	575	576	578	580	582	583	583	584	584	583
Petroleum and coal products .....	92	92	92	91	91	92	89	89	89	90	89	89	89
Rubber and misc. plastics products .....	769	771	773	773	774	777	780	781	783	784	781	780	773
Leather and leather products .....	68	67	67	67	66	66	65	65	64	64	63	63	62
<b>Service-producing</b> .....	66,926	66,794	67,179	67,358	67,571	67,758	67,908	68,036	68,117	68,239	68,537	68,715	68,928
<b>Transportation and public utilities</b> .....	5,378	5,199	5,373	5,375	5,370	5,367	5,374	5,372	5,375	5,373	5,402	5,395	5,427
<b>Wholesale trade</b> .....	5,361	5,369	5,371	5,382	5,392	5,407	5,426	5,431	5,436	5,448	5,457	5,461	5,459
<b>Retail trade</b> .....	19,359	19,398	19,422	19,463	19,539	19,570	19,585	19,605	19,582	19,596	19,710	19,721	19,838
<b>Finance, insurance, and real estate</b> .....	5,182	5,191	5,202	5,223	5,245	5,264	5,287	5,307	5,329	5,353	5,367	5,395	5,409
<b>Services</b> .....	31,646	31,637	31,811	31,915	32,025	32,150	32,236	32,321	32,395	32,469	32,601	32,743	32,795

<sup>1</sup> 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.

<sup>2</sup> 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 <sup>1</sup>												
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	P 59.1	P 52.9					
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	P 60.4	P 57.6						
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	P 68.8	P 63.5								
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	P 72.1
1998 .....	P 71.3											
Manufacturing payrolls, 139 industries <sup>1</sup>												
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	P 46.8	P 41.4					
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	P 42.8	P 39.9						
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	P 51.4	P 41.0								
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	P 57.9
1998 .....	P 54.0											

<sup>1</sup> 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 — Continued**

(In thousands)

State	1997							1998					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
Construction													
Alabama .....	97.6	97.3	96.9	97.0	96.6	96.5	96.2	97.1	97.9	97.0	98.7	100.2	100.3
Alaska .....	12.9	12.9	12.8	12.5	12.4	12.7	12.8	12.8	12.8	12.8	13.0	13.0	13.1
Arizona .....	130.0	131.9	131.2	131.4	131.8	131.4	131.6	134.5	133.5	134.5	133.3	135.2	136.3
Arkansas .....	47.7	48.0	47.9	47.4	48.0	48.0	48.1	47.5	47.5	47.7	48.8	49.4	49.3
California .....	548.2	557.2	562.1	566.1	570.2	573.1	577.9	583.4	582.3	591.9	591.6	593.1	602.7
Colorado .....	119.3	119.6	120.0	121.2	121.6	118.0	122.1	127.3	128.0	127.9	126.5	127.1	126.7
Connecticut .....	56.3	56.3	56.3	57.2	57.7	58.1	58.9	60.1	60.1	59.8	59.6	59.0	58.3
Delaware .....	21.6	21.1	21.3	21.6	21.9	22.2	22.5	23.1	22.8	22.2	22.1	21.7	22.1
District of Columbia .....	8.9	9.0	8.9	8.8	8.8	8.4	8.8	8.7	8.8	8.9	8.7	8.6	8.6
Florida .....	330.3	335.4	335.7	335.4	337.6	339.3	339.9	340.5	340.6	342.6	344.5	347.0	347.6
Georgia .....	165.9	169.0	170.9	171.9	172.2	173.3	175.2	177.2	177.2	178.2	178.5	179.7	178.9
Hawaii <sup>2</sup> .....	22.1	22.2	22.0	22.0	22.0	21.9	21.8	21.9	21.9	22.1	21.8	21.9	21.5
Idaho .....	32.2	32.2	32.4	32.7	32.6	32.5	32.3	32.7	32.2	32.6	32.9	31.9	31.7
Illinois .....	233.0	234.8	237.2	238.2	238.2	239.3	239.1	239.8	240.8	235.9	241.4	238.8	239.4
Indiana .....	140.8	139.8	139.7	139.8	140.6	142.3	142.9	143.3	143.8	140.6	144.5	143.2	138.9
Iowa .....	60.5	61.0	60.6	60.3	60.2	60.5	61.0	60.1	60.3	60.6	62.3	62.6	62.5
Kansas .....	59.5	58.9	58.2	59.1	59.3	59.4	59.3	60.7	60.8	58.5	60.2	61.7	61.7
Kentucky .....	80.2	81.6	83.3	82.1	82.1	81.6	82.3	85.2	83.3	85.4	86.3	86.4	86.1
Louisiana .....	117.5	118.0	118.7	117.8	117.8	117.4	117.1	117.9	118.0	118.4	118.6	119.8	121.9
Maine .....	23.5	23.9	24.0	24.0	24.2	24.4	24.4	24.4	24.4	24.2	24.1	24.2	24.4
Maryland .....	138.1	137.6	137.6	137.2	138.5	139.7	140.3	140.6	140.1	137.4	136.6	134.4	133.8
Massachusetts .....	98.3	100.2	100.7	99.0	99.7	102.5	104.4	107.9	108.8	108.3	108.2	107.8	107.5
Michigan .....	181.0	181.2	182.7	182.5	183.7	184.1	186.1	184.8	187.3	184.6	190.3	188.0	189.5
Minnesota .....	93.3	93.4	93.9	94.2	94.5	95.7	96.3	97.6	99.4	99.2	99.7	100.4	99.9
Mississippi .....	50.0	51.5	51.6	51.7	52.4	51.6	51.5	52.7	52.6	51.9	52.4	52.2	53.7
Missouri .....	120.6	121.6	123.5	124.6	124.6	125.2	124.9	123.1	124.8	118.5	123.6	124.0	122.3
Montana .....	17.4	18.4	19.0	18.5	18.5	18.6	18.9	18.9	18.7	18.2	18.0	18.2	18.0
Nebraska .....	38.3	38.9	38.8	38.9	39.2	39.2	40.9	42.8	42.4	40.8	40.9	40.7	39.8
Nevada .....	81.8	82.0	82.5	82.8	83.4	83.7	84.0	85.1	85.2	86.1	87.0	87.6	89.3
New Hampshire .....	20.9	21.1	21.3	21.5	21.2	21.0	21.4	21.8	22.0	22.2	22.4	22.4	21.9
New Jersey .....	130.4	131.3	131.5	131.5	131.2	131.8	131.9	135.6	137.1	136.4	136.2	135.4	135.6
New Mexico .....	42.8	42.5	42.8	42.6	42.3	42.2	42.2	42.1	42.1	42.2	42.6	42.9	43.2
New York .....	262.3	262.1	264.1	265.3	267.9	267.8	268.1	265.6	268.5	270.6	271.8	273.5	274.7
North Carolina .....	201.7	204.4	205.5	206.7	207.2	207.9	208.7	211.7	208.7	209.5	210.3	210.6	210.9
North Dakota .....	15.0	15.5	14.9	14.7	14.7	14.8	14.9	15.1	15.2	15.1	15.3	15.5	16.2
Ohio .....	222.9	222.6	224.6	224.9	225.0	225.4	225.3	226.7	228.4	228.1	232.9	233.5	232.8
Oklahoma .....	49.9	50.5	50.5	50.8	50.6	50.9	50.8	51.8	52.1	52.3	52.5	53.0	52.8
Oregon .....	82.5	81.9	82.5	83.0	82.7	83.1	84.6	82.3	84.3	84.9	85.7	83.0	82.1
Pennsylvania .....	212.2	212.3	213.0	213.9	214.7	216.4	217.1	218.4	219.4	220.6	222.2	223.2	224.4
Rhode Island .....	14.3	14.4	14.6	14.9	14.9	14.9	15.1	15.4	15.5	16.1	16.9	16.6	16.3
South Carolina .....	98.6	99.7	100.4	100.7	101.1	101.6	103.3	104.9	106.0	106.7	107.9	108.8	109.6
South Dakota .....	15.2	15.5	15.6	15.5	15.6	15.7	15.9	15.9	16.0	15.6	15.9	15.9	15.8
Tennessee .....	115.1	116.0	116.6	116.9	117.4	117.8	118.1	117.0	117.7	119.2	120.3	120.7	119.5
Texas .....	457.9	459.6	462.5	463.2	462.4	464.5	467.0	468.1	476.7	477.8	480.3	484.7	484.6
Utah .....	65.3	65.5	65.4	65.1	64.7	65.8	66.5	65.7	66.5	67.3	67.7	68.6	68.1
Vermont .....	13.0	13.2	13.3	13.1	12.9	12.8	13.3	12.7	12.6	12.5	13.0	13.2	13.3
Virginia .....	184.7	185.1	185.7	185.1	187.3	188.3	189.0	190.2	191.5	192.9	193.4	194.9	195.1
Washington .....	136.4	136.9	137.0	136.3	136.1	136.8	136.6	137.7	138.2	138.9	140.1	141.5	142.5
West Virginia .....	34.6	34.3	34.5	34.6	35.4	35.6	35.5	36.2	35.4	34.3	35.5	33.9	35.2
Wisconsin .....	109.0	109.5	109.3	108.8	108.9	109.4	110.0	110.2	111.6	110.9	111.9	113.3	113.1
Wyoming .....	15.3	15.5	15.6	15.4	14.9	15.2	14.9	14.9	15.0	15.1	15.3	15.9	15.1

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
	Manufacturing												
Alabama .....	379.8	381.2	382.2	380.0	378.7	378.7	378.6	380.2	379.2	378.0	377.1	376.6	375.0
Alaska .....	15.5	15.4	14.8	14.7	15.0	15.5	13.9	15.5	16.4	16.3	15.5	14.1	15.1
Arizona .....	205.2	206.9	208.1	209.3	210.1	211.6	212.9	214.7	215.0	215.1	215.5	215.1	215.5
Arkansas .....	253.7	253.0	253.4	252.9	253.5	253.3	254.0	255.5	255.3	255.1	255.6	255.3	255.9
California .....	1,913.9	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	1,947.7
Colorado .....	202.8	204.0	204.6	205.1	205.8	206.6	207.7	206.9	208.4	208.8	208.4	208.0	207.8
Connecticut .....	276.2	276.2	277.2	276.6	276.5	276.0	276.3	277.1	276.9	277.0	277.6	276.7	276.6
Delaware .....	56.6	56.6	57.5	57.9	58.3	58.4	58.7	56.7	57.3	58.8	58.8	59.1	59.4
District of Columbia .....	12.5	12.5	12.6	12.5	12.6	12.6	12.6	12.8	12.7	12.8	12.8	12.8	12.7
Florida .....	490.2	492.3	492.3	491.9	491.7	491.5	491.9	491.8	491.7	491.3	491.9	492.1	490.5
Georgia .....	588.5	588.9	587.8	587.5	588.1	589.3	590.0	589.1	587.1	589.9	590.4	591.4	591.3
Hawaii .....	16.7	16.8	16.7	16.4	16.4	15.5	16.5	16.5	16.4	16.4	16.3	16.2	16.1
Idaho .....	74.4	74.1	74.5	74.8	75.2	75.5	75.8	76.4	76.7	76.3	76.3	76.2	76.6
Illinois .....	968.2	975.9	977.7	978.8	983.3	979.5	980.9	981.3	980.2	980.5	981.8	980.1	980.0
Indiana .....	675.9	676.8	677.5	675.2	678.0	678.4	679.6	678.6	680.1	682.9	681.4	682.0	681.1
Iowa .....	253.6	253.9	255.2	254.4	256.3	256.1	256.3	256.5	257.0	258.4	258.3	259.1	259.4
Kansas .....	205.9	206.3	206.9	207.3	207.1	208.4	208.9	209.7	210.2	210.4	210.8	211.8	210.6
Kentucky .....	317.4	318.6	319.5	320.2	315.6	315.9	316.7	318.6	317.9	314.9	315.7	316.1	316.1
Louisiana .....	190.8	191.3	191.0	190.7	190.0	190.7	190.8	190.8	190.4	190.5	189.9	190.2	189.3
Maine .....	87.7	87.3	87.9	87.6	87.5	87.8	88.1	88.1	88.2	87.4	87.3	87.0	86.7
Maryland .....	176.1	175.3	176.0	173.5	173.6	176.6	176.7	176.6	177.1	176.8	176.1	175.8	175.7
Massachusetts .....	447.7	448.9	448.7	448.2	450.2	451.6	452.9	455.8	456.9	456.3	454.5	453.3	452.6
Michigan .....	963.3	964.1	967.8	963.3	969.8	970.7	969.3	970.9	973.2	973.8	981.3	978.8	975.3
Minnesota .....	433.0	434.5	435.1	434.9	437.5	439.3	440.4	440.7	438.7	442.4	441.6	442.5	444.5
Mississippi .....	241.3	242.5	240.4	239.3	240.3	241.2	241.1	241.8	242.6	241.5	241.8	242.2	240.8
Missouri .....	418.9	416.4	422.1	418.6	420.8	419.8	420.2	426.7	420.0	421.6	421.4	421.7	421.9
Montana .....	24.0	24.1	24.3	24.3	24.4	24.5	24.3	24.4	24.6	24.5	24.7	24.9	24.2
Nebraska .....	115.9	118.0	116.0	116.2	116.5	116.8	117.0	117.7	118.7	118.2	119.8	119.8	119.4
Nevada .....	40.4	40.4	40.7	40.9	40.9	41.2	41.4	41.7	41.9	42.4	42.3	42.5	43.0
New Hampshire .....	106.8	107.4	107.3	107.7	107.7	107.7	108.1	108.8	108.5	108.7	108.2	108.0	106.6
New Jersey .....	480.8	481.9	482.4	482.0	481.6	483.5	484.4	486.0	485.5	485.2	483.3	482.0	481.1
New Mexico .....	45.9	46.4	46.9	46.9	47.1	47.3	47.3	46.9	46.3	45.6	45.2	45.1	45.3
New York .....	917.7	921.3	921.7	921.6	922.3	923.3	925.1	923.0	920.3	920.4	918.2	916.9	917.0
North Carolina .....	834.2	835.6	831.4	834.0	834.2	834.7	833.5	833.1	833.7	833.1	831.2	830.8	827.9
North Dakota .....	23.2	23.5	23.8	23.4	23.6	23.7	23.6	24.0	23.9	23.9	23.8	24.1	23.6
Ohio .....	1,090.5	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	1,087.4
Oklahoma .....	181.2	181.2	181.1	181.6	182.2	183.2	183.7	184.2	184.4	184.4	183.7	185.1	185.3
Oregon .....	244.1	244.3	242.1	243.7	245.6	246.2	246.7	247.0	247.5	247.7	246.7	247.4	245.7
Pennsylvania .....	936.5	936.4	935.4	938.7	939.3	938.6	938.6	943.0	941.6	939.7	938.5	937.3	934.0
Rhode Island .....	79.6	79.8	79.3	79.7	79.3	78.8	80.1	79.4	79.4	79.3	78.8	79.1	79.0
South Carolina .....	362.8	362.3	362.2	361.5	361.8	362.1	362.2	362.2	361.4	362.5	364.2	364.2	364.2
South Dakota .....	49.9	50.2	49.3	49.3	49.7	49.7	49.9	49.0	49.6	49.6	49.2	49.0	49.1
Tennessee .....	517.1	517.3	517.1	515.3	516.0	517.5	517.7	517.8	518.2	518.5	516.4	514.2	514.2
Texas .....	1,081.9	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	1,098.5
Utah .....	132.6	133.3	133.4	133.7	133.6	134.0	134.0	135.1	135.3	135.4	135.4	135.7	135.2
Vermont .....	46.2	46.5	46.5	46.7	46.9	46.9	47.2	47.3	47.4	47.3	47.9	48.0	48.0
Virginia .....	403.0	403.8	404.1	403.9	405.3	405.3	405.8	406.4	406.6	407.6	407.5	405.7	405.1
Washington .....	369.6	372.0	373.2	374.2	373.8	375.1	376.0	376.5	377.4	377.8	376.9	378.2	379.3
West Virginia .....	81.4	80.8	81.6	81.1	82.2	82.4	82.7	83.0	83.1	82.9	83.1	83.0	82.9
Wisconsin .....	609.3	610.3	612.3	612.6	614.4	615.8	617.4	620.8	619.4	620.0	620.1	619.3	619.8
Wyoming .....	10.8	10.8	10.8	11.0	10.9	10.9	10.9	10.9	10.8	11.0	11.0	11.0	11.1

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
Transportation and public utilities													
Alabama .....	91.3	91.3	89.6	91.5	91.4	90.7	91.0	91.6	91.7	91.8	91.5	91.7	91.1
Alaska .....	24.0	24.0	24.2	24.3	24.3	24.0	24.4	24.4	24.7	24.6	25.0	25.7	25.2
Arizona .....	96.8	95.4	92.5	96.4	96.0	97.0	97.8	98.2	97.0	97.5	97.7	98.5	98.7
Arkansas .....	65.3	65.9	64.7	66.1	66.6	66.9	67.2	67.1	67.5	67.7	67.7	68.0	67.6
California .....	664.4	665.5	642.8	669.1	672.7	675.4	675.1	675.6	676.5	679.0	680.1	680.1	680.8
Colorado .....	122.2	121.8	118.7	121.7	122.0	121.8	121.2	122.5	122.5	122.0	122.7	123.3	123.9
Connecticut .....	74.7	74.2	71.9	74.8	75.0	75.3	75.7	75.3	75.8	76.1	76.0	76.7	76.3
Delaware .....	15.7	16.0	15.9	15.7	15.8	15.7	15.8	15.5	15.6	15.6	15.6	15.7	15.6
District of Columbia .....	17.8	17.7	17.7	17.5	17.5	17.5	17.5	17.7	17.3	17.2	17.1	17.0	16.8
Florida .....	327.1	328.8	321.8	330.3	330.3	330.9	332.2	335.6	336.2	338.1	336.6	338.9	339.5
Georgia .....	229.9	231.3	226.5	233.6	234.8	235.7	236.4	236.3	237.5	238.4	238.4	238.6	238.7
Hawaii .....	41.2	41.7	41.5	41.4	41.4	41.5	41.0	41.1	41.2	40.9	40.2	40.4	40.7
Idaho .....	24.3	24.0	23.9	24.0	23.9	24.1	24.2	24.7	24.4	25.8	24.4	24.3	24.6
Illinois .....	338.8	336.1	323.3	338.9	340.3	340.8	342.0	342.0	341.3	342.1	343.7	345.7	345.4
Indiana .....	140.3	138.8	136.1	140.2	140.4	140.7	141.5	142.3	142.6	142.8	142.9	142.5	141.5
Iowa .....	65.8	65.3	62.9	65.4	66.2	66.5	66.7	66.9	67.0	67.2	68.1	68.2	68.3
Kansas .....	71.9	71.9	72.5	72.8	73.0	73.0	72.9	72.9	73.0	73.3	73.5	73.9	74.1
Kentucky .....	97.3	97.1	90.9	97.7	98.5	98.6	99.4	99.5	99.7	100.0	101.5	101.7	101.6
Louisiana .....	110.2	111.2	109.7	111.5	111.8	111.8	112.1	111.7	112.5	112.8	113.4	113.8	114.1
Maine .....	23.4	23.5	22.5	23.5	23.4	23.4	23.5	23.5	23.9	23.8	23.8	24.0	24.2
Maryland .....	107.2	106.7	102.5	106.6	105.7	105.9	106.3	105.3	106.2	105.5	105.4	105.9	106.2
Massachusetts .....	133.3	134.9	131.3	135.7	137.0	136.0	135.3	136.8	137.5	137.6	138.6	138.4	138.3
Michigan .....	173.5	173.8	169.6	174.4	174.7	175.1	175.3	175.4	175.0	174.0	174.4	176.3	176.5
Minnesota .....	123.8	123.8	120.8	124.8	125.2	125.3	126.0	125.9	125.4	125.6	125.6	126.0	126.3
Mississippi .....	52.9	52.9	51.5	53.0	53.4	53.6	53.5	54.1	53.9	53.7	53.9	53.8	53.4
Missouri .....	165.8	165.3	162.0	164.6	164.0	163.6	164.3	165.9	165.4	165.6	166.4	166.0	165.6
Montana .....	21.1	20.9	20.4	21.1	21.2	21.4	21.3	21.5	21.6	21.5	21.6	21.5	21.3
Nebraska .....	53.8	53.7	53.8	54.8	54.2	54.4	54.6	54.9	55.0	54.8	55.1	54.9	55.4
Nevada .....	45.8	46.0	44.9	46.4	46.6	46.7	46.7	46.7	46.9	46.9	47.0	47.3	47.6
New Hampshire .....	19.5	19.8	19.7	19.4	19.3	19.4	19.4	19.7	19.4	19.3	19.8	19.3	18.9
New Jersey .....	257.5	258.3	248.1	258.5	259.9	259.4	260.4	260.4	261.9	261.9	262.0	263.0	262.4
New Mexico .....	32.1	32.0	31.8	32.1	32.7	32.6	32.5	32.5	32.5	32.7	33.0	33.3	33.2
New York .....	409.0	408.2	395.2	410.5	411.3	410.6	410.7	411.7	410.6	411.1	409.8	409.8	409.8
North Carolina .....	170.9	170.3	164.1	169.8	170.8	171.0	170.9	171.0	171.3	170.7	169.8	169.2	169.6
North Dakota .....	18.2	18.1	18.1	18.0	18.0	18.0	18.0	18.3	18.2	18.3	18.4	18.6	18.4
Ohio .....	234.6	233.8	226.0	234.5	234.6	233.8	233.3	235.4	235.4	235.2	234.9	234.9	234.7
Oklahoma .....	79.0	79.5	78.6	79.9	80.3	80.7	80.9	80.7	81.1	81.6	81.7	82.3	82.2
Oregon .....	74.8	74.1	71.2	74.6	74.5	74.6	74.4	74.5	74.6	74.7	75.6	75.7	75.7
Pennsylvania .....	279.1	278.3	267.1	279.9	279.3	278.4	278.2	281.0	280.8	280.4	281.5	280.7	280.4
Rhode Island .....	15.5	15.6	14.3	15.5	15.5	15.7	15.9	15.4	15.9	16.0	15.8	15.8	15.8
South Carolina .....	74.8	75.9	73.8	76.0	76.2	76.5	76.9	75.8	76.3	77.2	77.5	77.3	77.5
South Dakota .....	16.4	16.4	15.7	16.2	16.1	15.9	15.8	16.1	16.0	15.9	16.1	16.1	16.2
Tennessee .....	150.7	150.7	146.4	150.6	150.6	150.4	150.1	153.1	153.0	152.4	153.3	152.6	151.8
Texas .....	514.6	517.2	510.0	519.9	522.4	524.7	526.0	527.8	531.2	532.4	538.0	540.1	540.3
Utah .....	55.7	56.5	54.4	56.8	56.9	57.3	57.7	57.4	57.5	57.8	58.2	58.1	58.2
Vermont .....	12.2	12.3	11.9	12.2	12.3	12.3	12.3	12.4	12.5	12.5	12.6	12.4	12.4
Virginia .....	167.7	168.2	164.8	168.8	170.4	170.7	171.3	170.9	171.6	172.0	173.1	172.3	172.4
Washington .....	134.2	133.9	131.0	133.6	133.7	133.9	133.9	135.6	136.3	136.7	136.9	137.5	137.5
West Virginia .....	38.8	38.8	38.1	39.0	39.0	39.2	38.8	39.2	38.7	38.5	38.6	38.6	38.8
Wisconsin .....	124.2	123.4	119.1	123.1	123.1	123.0	122.5	124.0	124.4	123.8	124.1	123.6	124.3
Wyoming .....	13.9	13.9	13.8	13.9	13.9	14.0	13.9	13.7	13.8	13.9	13.9	14.0	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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
	<b>Trade</b>												
Alabama .....	427.5	428.0	428.1	428.0	428.8	429.2	429.4	430.3	431.4	432.9	432.2	434.5	435.4
Alaska .....	56.1	56.5	56.4	55.7	55.0	54.9	55.4	55.9	56.4	56.9	56.6	57.2	57.2
Arizona .....	479.8	478.4	480.8	480.9	483.3	487.8	491.3	496.7	497.6	499.0	498.8	500.0	501.0
Arkansas .....	250.9	251.5	251.9	252.4	252.2	253.7	252.7	251.6	251.2	254.4	255.1	256.3	256.6
California .....	3,058.5	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	3,131.1
Colorado .....	481.4	483.8	484.4	483.0	484.3	486.6	486.5	489.5	490.7	491.9	492.2	496.3	499.1
Connecticut .....	352.7	352.7	353.9	355.0	356.6	359.6	362.3	360.2	359.9	359.0	357.9	358.8	358.2
Delaware .....	85.0	85.1	85.3	85.4	85.7	85.9	86.1	86.7	87.7	87.7	87.2	87.3	86.4
District of Columbia .....	47.5	48.5	48.4	48.4	48.6	48.6	48.8	48.6	48.2	48.7	48.1	48.1	48.3
Florida .....	1,645.1	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	1,696.9
Georgia .....	906.4	912.0	919.2	923.2	926.0	929.1	932.4	931.9	936.9	936.5	936.8	941.9	936.1
Hawaii .....	134.8	134.2	134.3	134.7	134.9	134.7	134.4	133.8	133.7	133.3	132.5	132.6	132.0
Idaho .....	128.8	128.9	128.1	128.4	128.7	129.4	129.7	129.6	130.1	129.2	130.1	131.1	130.9
Illinois .....	1,322.4	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	1,344.2
Indiana .....	681.4	683.7	684.7	682.7	682.7	682.9	681.9	676.9	682.5	683.8	684.6	684.7	683.0
Iowa .....	344.9	345.3	344.4	344.5	348.7	348.5	347.7	347.8	348.0	348.5	349.5	350.2	350.5
Kansas .....	309.2	310.8	311.8	311.3	313.3	313.6	314.4	314.7	316.1	316.4	317.3	318.6	318.9
Kentucky .....	409.7	409.0	411.8	409.7	410.2	414.4	416.1	416.2	416.4	415.6	417.4	419.0	417.5
Louisiana .....	426.2	430.1	430.6	429.6	433.1	434.7	436.2	434.7	436.8	436.7	436.0	438.1	437.7
Maine .....	139.6	140.2	140.6	141.2	141.7	142.8	142.4	140.4	139.9	140.8	141.0	146.0	141.2
Maryland .....	534.4	533.4	534.1	533.6	536.2	539.1	539.1	543.2	541.0	541.6	538.9	539.4	538.0
Massachusetts .....	705.6	709.9	713.4	715.6	717.4	722.0	723.6	727.4	729.4	729.2	728.6	732.1	729.7
Michigan .....	1,044.0	1,049.1	1,047.2	1,048.6	1,049.7	1,047.9	1,050.9	1,050.2	1,056.0	1,055.3	1,059.1	1,066.6	1,064.8
Minnesota .....	599.3	602.6	603.6	603.6	605.0	607.0	608.6	605.1	605.5	606.2	604.1	608.0	611.0
Mississippi .....	236.3	237.7	238.5	238.5	238.2	238.0	237.8	238.7	238.6	238.1	239.9	239.6	238.5
Missouri .....	623.4	623.4	623.3	624.2	625.0	625.4	626.4	625.4	626.5	628.4	631.5	632.8	633.8
Montana .....	99.0	100.0	99.9	99.7	99.2	99.3	99.4	98.8	99.4	99.4	99.2	99.7	98.9
Nebraska .....	209.7	210.9	210.8	211.4	211.5	212.0	211.7	214.5	214.2	213.2	214.8	214.3	213.4
Nevada .....	178.2	179.8	180.4	181.1	181.6	182.4	183.1	183.1	184.3	185.9	186.2	186.6	186.5
New Hampshire .....	148.2	149.5	149.1	149.3	150.9	150.1	150.2	149.8	149.3	148.8	149.5	149.7	151.3
New Jersey .....	871.6	871.5	873.5	875.6	876.1	877.8	880.1	879.5	885.9	886.6	884.3	890.7	891.9
New Mexico .....	168.0	167.4	167.3	166.9	168.1	168.8	169.1	168.7	169.2	169.9	169.7	170.8	171.4
New York .....	1,638.7	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	1,663.0
North Carolina .....	840.1	842.5	840.6	841.2	839.8	845.1	840.5	841.8	846.6	847.2	847.1	845.9	847.7
North Dakota .....	80.5	80.5	80.9	80.7	81.4	81.5	82.0	81.3	81.9	81.5	80.9	80.8	80.9
Ohio .....	1,310.3	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	1,320.8
Oklahoma .....	323.8	323.4	324.2	323.6	324.4	326.6	327.3	326.4	327.0	327.9	328.3	328.3	328.2
Oregon .....	377.4	378.7	378.8	378.0	380.9	381.9	384.8	383.0	384.5	387.0	386.5	388.1	386.2
Pennsylvania .....	1,213.5	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	1,230.9
Rhode Island .....	97.8	98.4	98.4	98.7	98.8	98.7	98.6	98.5	99.2	99.0	98.6	99.1	98.8
South Carolina .....	411.3	413.2	413.3	414.2	415.8	426.5	427.6	430.0	431.0	433.2	436.2	437.7	439.7
South Dakota .....	88.5	88.5	88.9	88.0	88.2	88.3	88.1	87.2	87.5	87.3	87.9	89.3	89.0
Tennessee .....	607.1	607.0	607.8	608.5	610.7	614.8	618.4	618.1	619.5	620.1	624.6	621.5	617.9
Texas .....	2,043.7	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	2,099.8
Utah .....	238.2	238.7	239.3	239.8	240.2	241.2	242.7	242.7	243.9	245.0	244.2	244.6	243.3
Vermont .....	65.1	65.4	65.0	65.0	65.0	65.1	65.3	64.8	65.0	65.4	65.2	65.5	66.0
Virginia .....	721.7	721.3	723.3	724.3	730.0	732.3	734.4	730.9	735.3	737.5	735.4	736.6	739.4
Washington .....	608.1	611.0	609.0	608.2	610.1	611.9	612.8	615.4	618.1	621.3	621.4	625.6	626.8
West Virginia .....	161.6	161.2	160.9	161.0	164.1	164.3	164.5	163.4	163.6	164.7	163.9	163.1	163.7
Wisconsin .....	602.7	605.2	608.9	607.4	607.8	608.5	609.5	608.6	611.7	613.4	613.0	615.3	614.8
Wyoming .....	52.5	52.3	52.1	51.9	52.5	52.3	52.3	52.5	51.9	52.3	52.4	52.3	51.9

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
	Finance, insurance, and real estate												
Alabama .....	84.2	84.7	84.7	84.7	84.9	84.9	85.1	85.1	85.3	85.6	85.8	86.2	85.8
Alaska .....	12.3	12.3	12.4	12.3	12.2	12.2	12.2	12.1	12.1	12.2	12.3	12.4	12.5
Arizona .....	126.5	127.3	127.6	128.0	129.2	130.0	130.3	130.5	131.4	132.4	132.9	133.4	134.8
Arkansas .....	43.9	44.1	44.2	44.2	44.3	44.4	44.5	44.3	44.4	44.8	44.8	44.8	44.8
California .....	756.7	759.3	760.0	761.2	763.5	764.7	765.1	765.8	769.9	772.7	776.1	780.0	782.3
Colorado .....	127.1	128.3	128.7	128.7	129.0	129.5	130.0	130.0	130.9	131.2	130.7	131.5	132.0
Connecticut .....	130.4	130.9	131.1	131.4	131.8	132.8	133.6	133.7	133.8	134.7	134.5	135.5	135.7
Delaware .....	47.0	47.3	47.6	48.3	48.5	48.2	48.6	48.4	48.6	48.9	49.5	49.7	49.3
District of Columbia .....	28.4	28.5	28.5	28.5	28.4	28.3	28.4	28.9	28.4	28.5	28.4	28.4	28.4
Florida .....	408.3	410.1	411.4	413.1	416.8	419.3	419.2	418.8	419.9	422.8	424.5	426.3	427.1
Georgia .....	186.1	187.0	188.5	189.2	190.6	190.8	191.7	191.8	192.8	193.8	194.5	195.1	196.1
Hawaii .....	36.2	36.1	36.1	36.0	35.9	35.8	35.7	35.6	35.3	35.3	35.3	35.1	35.0
Idaho .....	25.1	25.7	25.7	25.8	25.7	25.6	25.6	25.7	26.0	26.2	26.5	26.6	26.6
Illinois .....	397.2	399.1	400.9	401.0	402.9	404.3	405.2	406.3	406.5	406.8	407.9	409.2	409.1
Indiana .....	137.7	139.0	139.3	139.6	139.9	140.1	140.4	140.2	140.0	140.2	140.6	140.8	140.1
Iowa .....	79.2	79.5	79.6	79.8	80.5	80.7	80.9	81.3	81.0	81.1	81.3	81.8	81.8
Kansas .....	61.1	60.5	60.7	60.7	60.7	60.8	60.9	60.8	61.1	61.0	61.4	61.2	61.2
Kentucky .....	68.5	69.9	70.2	70.1	70.2	70.4	70.6	70.5	70.7	70.8	71.1	71.2	71.0
Louisiana .....	85.5	85.9	86.0	86.0	86.1	86.5	86.8	86.5	86.6	86.8	86.5	86.6	87.2
Maine .....	28.3	28.7	28.7	28.6	28.8	29.0	29.2	29.4	29.7	30.2	30.2	30.4	30.2
Maryland .....	130.7	130.4	130.7	130.8	130.7	130.9	131.3	131.5	131.8	131.1	131.9	132.3	132.7
Massachusetts .....	212.5	212.3	213.2	213.9	214.6	215.2	215.7	215.9	216.1	216.5	216.3	216.7	217.4
Michigan .....	206.2	205.5	204.9	205.7	206.2	206.6	207.1	207.9	208.9	209.4	209.7	209.0	208.6
Minnesota .....	145.7	146.2	146.4	146.7	147.9	148.5	149.1	149.2	149.8	149.9	150.9	151.3	151.5
Mississippi .....	41.7	41.4	40.6	40.8	41.1	41.1	41.1	41.2	41.5	41.3	41.5	41.5	41.6
Missouri .....	154.0	154.4	153.7	154.1	154.7	154.8	155.5	155.8	156.0	156.7	156.8	157.7	158.2
Montana .....	16.4	16.4	16.5	16.6	16.6	16.6	16.6	16.7	16.8	16.7	16.9	16.8	16.6
Nebraska .....	54.2	54.7	54.8	55.0	55.3	55.4	55.9	55.8	56.4	56.5	56.9	57.1	57.8
Nevada .....	40.1	40.4	40.4	40.5	40.9	41.1	41.2	41.4	41.5	41.7	41.8	42.2	42.6
New Hampshire .....	29.4	29.6	29.6	29.4	29.5	29.4	29.2	29.3	29.3	29.4	29.8	29.5	29.3
New Jersey .....	238.6	237.9	238.2	238.8	239.9	240.9	242.2	243.3	244.1	244.0	244.6	244.2	243.7
New Mexico .....	31.4	31.4	31.4	31.2	31.2	31.3	31.4	31.5	31.5	31.6	31.5	31.5	31.7
New York .....	721.1	720.3	720.7	721.3	721.3	721.5	722.1	721.3	724.1	725.8	726.3	727.6	728.0
North Carolina .....	166.4	167.6	168.0	168.3	168.5	168.9	169.3	170.6	172.5	173.4	173.0	174.2	174.6
North Dakota .....	14.7	14.9	14.9	14.9	15.0	15.0	15.2	15.3	15.4	15.3	15.4	15.4	15.4
Ohio .....	286.6	286.7	287.5	287.9	288.4	288.7	288.9	290.0	289.8	290.5	291.9	292.1	291.7
Oklahoma .....	69.2	69.3	69.3	69.5	69.9	70.2	70.2	70.3	70.5	70.7	70.9	71.1	71.1
Oregon .....	94.9	95.4	95.5	95.2	95.7	96.1	96.0	96.4	96.0	96.7	96.5	97.0	97.5
Pennsylvania .....	312.8	312.4	312.5	313.3	314.4	315.3	317.6	317.5	318.5	318.5	319.3	320.2	320.3
Rhode Island .....	26.5	26.7	26.6	26.6	26.6	26.7	26.6	26.9	27.0	26.8	27.0	27.2	27.6
South Carolina .....	74.6	75.1	75.2	75.2	75.3	75.3	75.8	76.0	76.6	76.9	77.6	78.1	78.5
South Dakota .....	20.9	21.1	21.1	21.2	21.4	21.6	21.7	21.7	21.6	21.6	21.7	22.0	22.4
Tennessee .....	120.7	120.7	120.8	121.6	122.0	121.7	121.7	123.4	123.5	123.2	122.7	122.8	122.7
Texas .....	463.4	465.2	466.7	467.9	469.0	469.7	471.2	473.5	475.6	477.4	478.5	479.8	481.6
Utah .....	52.6	52.8	52.9	53.2	53.6	54.0	53.9	53.7	53.8	53.7	53.7	53.5	54.0
Vermont .....	12.3	12.4	12.4	12.4	12.3	12.3	12.2	12.2	12.1	12.1	12.2	12.3	12.3
Virginia .....	168.0	168.1	168.1	167.6	168.6	169.1	169.5	170.6	170.7	170.7	170.6	171.1	170.9
Washington .....	127.0	129.2	129.6	129.8	130.3	130.4	131.0	131.5	132.0	132.5	133.7	134.5	134.1
West Virginia .....	28.1	28.3	28.3	28.3	28.5	28.5	28.6	28.4	28.3	28.4	28.4	28.2	28.3
Wisconsin .....	140.3	140.5	140.4	140.5	141.1	141.8	141.9	141.8	142.2	142.3	142.6	143.0	144.1
Wyoming .....	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.2

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
<b>Services</b>													
Alabama .....	429.1	432.0	432.0	432.0	433.2	433.9	434.3	435.1	435.6	438.0	437.8	438.4	440.3
Alaska .....	65.3	65.6	65.8	66.0	66.1	66.1	66.0	66.5	67.0	67.1	67.4	67.8	67.5
Arizona .....	595.7	600.1	603.3	607.2	608.8	612.5	618.3	617.3	619.9	621.1	624.3	630.9	633.4
Arkansas .....	252.4	253.4	255.6	255.8	256.3	257.3	257.7	257.2	259.6	260.9	263.0	263.2	262.6
California .....	4,036.7	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	4,230.3
Colorado .....	596.5	602.2	600.3	606.7	608.7	610.4	610.8	609.5	607.4	609.8	609.0	617.0	621.2
Connecticut .....	495.7	495.4	500.8	500.7	503.5	506.4	508.7	506.6	506.9	505.4	509.3	509.0	513.0
Delaware .....	107.0	108.5	108.7	108.5	108.8	109.5	109.9	110.2	110.7	111.0	110.9	111.9	112.1
District of Columbia .....	265.0	267.7	265.6	267.6	267.0	266.0	265.6	266.3	266.0	267.5	265.7	266.2	268.9
Florida .....	2,260.5	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	2,407.0
Georgia .....	932.8	938.8	945.1	955.2	963.1	967.4	973.2	972.3	981.5	982.8	983.4	983.3	986.1
Hawaii .....	169.2	169.7	169.7	169.7	170.1	170.3	169.5	168.4	169.1	169.7	170.3	169.5	169.3
Idaho .....	121.9	124.9	123.7	121.7	124.0	123.9	123.9	121.8	121.4	121.5	121.2	121.4	121.9
Illinois .....	1,684.0	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	1,731.6
Indiana .....	680.1	683.5	686.3	689.0	691.2	696.7	700.7	691.3	692.1	693.1	699.4	702.9	701.0
Iowa .....	366.1	366.3	365.4	364.9	368.3	369.1	369.9	371.6	373.0	373.9	376.6	377.0	377.7
Kansas .....	316.8	318.4	319.8	321.4	323.2	324.1	325.0	324.9	325.8	326.9	329.5	329.1	331.0
Kentucky .....	423.7	426.2	429.0	429.7	430.7	431.7	433.3	432.0	432.3	434.5	437.5	441.5	442.7
Louisiana .....	495.5	501.3	500.2	502.5	503.8	504.6	506.0	507.4	507.7	511.0	511.6	512.6	515.2
Maine .....	157.1	158.0	158.5	159.2	159.7	160.5	160.7	160.6	161.6	162.0	162.4	163.2	163.0
Maryland .....	753.2	754.1	755.6	756.8	760.4	762.7	764.0	763.1	764.5	763.7	762.3	763.4	762.6
Massachusetts .....	1,107.2	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
Michigan .....	1,216.7	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	1,262.0
Minnesota .....	700.4	703.2	705.4	706.1	706.8	708.9	710.5	708.1	714.6	716.3	718.2	724.9	728.6
Mississippi .....	255.3	258.7	259.9	261.0	261.1	261.5	261.3	262.7	263.7	263.7	263.8	265.3	263.4
Missouri .....	736.9	737.5	738.2	738.6	740.3	744.3	746.5	746.2	747.0	740.7	742.1	749.0	747.8
Montana .....	105.3	105.5	105.6	105.5	105.9	106.0	106.6	106.1	107.1	107.0	107.1	107.5	107.4
Nebraska .....	228.2	230.0	230.6	232.0	232.8	233.4	233.3	234.3	236.8	235.6	236.1	236.4	236.1
Nevada .....	380.1	381.8	383.2	385.1	386.1	387.7	387.2	386.5	389.6	390.0	392.2	392.3	393.0
New Hampshire .....	164.9	166.4	166.1	164.9	166.1	166.0	165.7	165.2	165.3	164.0	164.2	165.7	166.9
New Jersey .....	1,169.7	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	1,217.5
New Mexico .....	194.6	194.9	195.2	196.0	197.2	197.4	197.2	196.8	197.7	197.7	197.7	198.5	198.7
New York .....	2,689.7	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
North Carolina .....	864.5	878.2	882.1	886.5	891.3	896.2	899.5	899.8	904.2	905.4	909.5	916.3	925.4
North Dakota .....	87.0	87.5	87.1	87.1	87.2	87.5	87.8	88.4	89.1	89.0	89.1	89.4	89.1
Ohio .....	1,469.6	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	1,512.1
Oklahoma .....	377.4	378.7	380.7	382.0	381.7	382.6	383.0	382.9	385.2	386.2	389.7	394.2	392.8
Oregon .....	399.7	403.7	403.8	404.2	404.5	404.2	408.7	412.0	412.9	412.7	414.7	413.9	415.4
Pennsylvania .....	1,706.6	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	1,740.5
Rhode Island .....	150.4	151.2	151.7	152.3	152.5	152.3	152.1	151.9	151.7	151.6	152.2	152.6	152.8
South Carolina .....	392.3	396.3	399.1	398.5	398.6	400.2	401.4	409.3	410.9	413.0	415.4	416.3	417.9
South Dakota .....	92.1	92.7	92.7	92.8	92.7	92.2	92.5	92.9	94.4	94.5	95.0	95.6	94.2
Tennessee .....	685.5	687.7	689.3	688.2	690.6	692.6	691.1	699.0	698.7	700.4	696.6	700.0	696.7
Texas .....	2,390.1	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	2,506.7
Utah .....	268.3	270.0	271.7	272.5	273.6	275.6	276.4	277.7	277.1	279.1	278.7	279.5	280.2
Vermont .....	83.5	83.8	84.1	84.0	84.0	84.3	84.7	83.9	84.2	84.4	84.8	85.9	85.7
Virginia .....	973.8	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	1,029.3
Washington .....	675.9	677.5	680.2	680.8	683.3	686.6	689.4	689.5	695.6	698.8	704.6	709.5	710.7
West Virginia .....	198.4	199.3	199.8	200.6	202.8	202.9	202.5	202.5	203.4	203.7	202.7	203.5	205.1
Wisconsin .....	675.6	683.0	684.8	687.5	688.8	690.7	692.3	693.5	691.0	693.6	696.0	700.9	704.8
Wyoming .....	48.5	49.0	48.8	48.6	48.9	48.9	49.0	48.8	48.5	48.8	48.7	49.6	48.5

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
Government													
Alabama .....	345.3	345.3	346.0	346.2	347.0	347.1	347.3	346.7	346.2	346.3	345.2	344.9	349.3
Alaska .....	72.9	73.5	73.0	72.8	72.9	73.3	73.5	73.1	73.3	73.2	73.8	73.4	72.9
Arizona .....	327.3	318.2	325.7	326.6	327.0	327.3	327.5	325.4	329.5	332.6	332.3	333.5	337.5
Arkansas .....	182.9	184.0	185.6	183.7	182.8	183.5	183.9	183.7	184.0	184.7	185.3	185.1	185.4
California .....	2,142.4	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	2,182.5
Colorado .....	314.5	315.6	315.3	316.4	316.2	316.2	317.0	318.2	317.8	318.0	318.3	320.7	320.0
Connecticut .....	224.4	223.5	224.2	225.2	225.3	225.6	226.3	225.8	227.0	226.8	226.2	225.3	226.1
Delaware .....	53.2	53.4	53.7	53.9	53.4	53.6	53.8	53.9	53.8	53.7	54.1	54.8	54.6
District of Columbia .....	232.7	235.1	232.9	231.4	229.9	229.3	228.6	230.0	227.9	227.2	228.8	229.1	226.2
Florida .....	942.8	938.8	942.2	944.4	944.8	949.3	950.5	956.9	953.2	951.3	949.1	954.2	953.0
Georgia .....	576.2	578.4	580.0	581.1	581.3	581.1	582.9	584.0	586.2	587.1	588.0	590.8	591.7
Hawaii .....	111.4	110.6	112.7	114.4	112.7	112.1	111.6	111.3	110.8	111.3	111.4	112.0	110.8
Idaho .....	98.9	99.7	100.1	99.7	99.7	99.6	99.4	101.1	101.4	102.1	102.1	101.4	101.3
Illinois .....	804.6	808.1	808.8	808.3	807.5	806.2	804.1	803.8	801.2	803.4	804.1	802.4	815.6
Indiana .....	395.0	393.4	392.1	393.0	389.4	386.1	390.4	395.2	391.0	389.9	391.4	396.1	395.5
Iowa .....	234.3	234.5	234.5	235.0	236.8	233.4	234.6	236.8	237.8	237.5	238.6	238.0	237.1
Kansas .....	235.7	235.8	235.2	234.7	237.0	235.2	237.8	239.4	239.0	239.7	236.8	241.2	239.7
Kentucky .....	291.3	291.5	291.1	290.3	290.2	291.0	291.1	294.1	292.5	294.3	293.1	291.1	293.7
Louisiana .....	364.1	361.9	364.5	365.3	365.9	366.5	365.2	365.4	367.7	367.0	367.4	367.9	369.3
Maine .....	92.9	92.9	92.9	92.9	93.1	92.8	93.0	91.6	93.0	92.5	92.1	91.4	92.7
Maryland .....	418.1	420.1	417.7	418.4	416.9	416.0	414.8	420.4	420.4	419.8	420.3	419.5	422.7
Massachusetts .....	404.9	407.2	407.5	407.3	406.9	407.3	409.0	408.5	409.3	407.7	408.8	409.8	411.6
Michigan .....	649.9	646.1	644.6	652.6	647.3	643.9	650.0	654.7	655.1	652.3	655.5	655.5	658.8
Minnesota .....	379.1	380.3	382.9	379.9	379.8	380.1	379.9	379.7	381.1	382.6	380.2	380.9	381.3
Mississippi .....	217.1	218.8	222.3	220.3	220.3	220.3	220.3	220.2	221.7	220.7	221.3	222.2	223.9
Missouri .....	415.9	414.6	415.7	415.6	415.4	414.1	416.4	416.4	418.3	415.3	416.5	419.1	428.9
Montana .....	74.4	76.5	76.7	77.0	77.3	77.3	77.9	77.0	77.0	77.6	77.8	79.0	76.3
Nebraska .....	152.0	153.6	153.3	152.3	153.3	153.9	154.0	152.8	153.6	152.7	153.3	152.0	154.1
Nevada .....	109.2	106.9	107.2	107.4	108.0	108.0	109.2	108.4	109.5	109.3	110.5	109.5	111.7
New Hampshire .....	78.5	79.5	78.8	77.8	78.2	78.4	75.6	77.8	78.4	77.9	79.5	79.1	78.7
New Jersey .....	569.4	568.8	568.3	575.9	570.7	570.0	570.5	570.0	569.6	568.4	566.6	567.2	566.5
New Mexico .....	178.1	178.8	178.4	177.8	178.0	178.2	178.6	178.7	178.3	179.1	177.6	177.4	180.3
New York .....	1,371.5	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	1,368.7
North Carolina .....	574.4	578.9	599.2	586.9	588.4	589.0	587.5	593.0	592.3	594.5	595.2	593.8	593.8
North Dakota .....	68.5	69.4	69.7	71.1	70.3	70.4	70.5	70.9	71.1	70.9	70.9	70.7	70.6
Ohio .....	760.5	764.3	764.2	763.0	760.5	761.4	760.9	763.4	760.6	761.7	762.7	766.3	767.5
Oklahoma .....	269.3	270.7	272.6	278.7	276.8	277.6	277.3	277.6	278.7	280.4	280.1	282.0	279.7
Oregon .....	250.5	248.7	251.2	251.7	252.1	248.9	253.9	254.7	255.6	256.3	256.3	257.7	256.7
Pennsylvania .....	704.1	711.6	713.5	715.2	713.7	712.7	713.8	717.8	712.2	711.2	712.6	712.4	699.1
Rhode Island .....	63.8	63.5	64.1	64.4	64.1	63.8	64.8	65.1	65.3	64.7	65.8	66.2	66.8
South Carolina .....	299.2	299.7	300.0	299.8	299.9	290.9	300.0	303.4	303.7	304.2	304.1	303.9	312.0
South Dakota .....	67.2	69.9	70.1	70.5	70.4	70.1	70.1	69.9	69.8	70.7	70.5	70.7	71.2
Tennessee .....	388.0	385.4	384.8	384.7	384.0	383.9	383.6	385.6	385.6	385.4	385.1	385.0	394.3
Texas .....	1,475.4	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	1,501.6
Utah .....	171.7	171.8	172.0	172.7	172.7	174.3	174.8	175.0	175.7	177.5	178.2	178.1	177.5
Vermont .....	45.5	45.6	45.4	45.4	45.5	45.4	45.7	45.4	45.6	45.4	45.4	44.8	45.4
Virginia .....	596.0	591.0	594.0	594.4	597.8	598.6	598.5	595.7	596.7	597.2	597.8	597.9	598.9
Washington .....	459.2	462.0	459.3	459.1	459.0	456.3	460.3	456.3	457.5	457.0	459.5	457.7	459.2
West Virginia .....	138.9	138.9	139.2	139.6	140.5	140.9	140.8	139.3	140.2	139.9	139.8	150.8	138.3
Wisconsin .....	386.5	383.2	385.2	385.6	387.9	387.7	388.7	390.0	391.3	390.0	392.5	391.8	393.0
Wyoming .....	57.2	59.9	60.3	57.3	57.0	56.9	57.1	56.9	57.0	57.3	57.5	57.8	56.9

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 workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

Industry	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Total private</b> .....	34.5	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6
<b>Goods-producing</b> .....	41.3	41.3	41.3	41.3	41.2	41.4	41.6	41.4	41.0	40.8	41.1	41.0	41.1
<b>Mining</b> .....	45.3	45.6	45.1	45.2	45.2	44.9	45.4	44.4	43.8	44.1	44.6	43.8	44.4
<b>Construction</b> .....	39.0	38.8	39.1	38.9	38.2	39.0	39.8	39.2	38.5	38.7	38.6	38.4	39.1
<b>Manufacturing</b> .....	41.9	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7
<i>Overtime hours</i> .....	4.8	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.8
<b>Durable goods</b> .....	42.7	42.8	42.7	42.8	42.9	43.0	42.8	42.8	42.5	41.9	42.4	42.4	42.1
<i>Overtime hours</i> .....	5.1	5.1	5.0	5.1	5.2	5.2	5.2	5.1	5.0	4.6	4.8	4.8	4.9
Lumber and wood products .....	41.2	41.0	40.9	41.0	41.1	41.0	41.2	41.1	41.2	41.2	41.2	41.3	41.0
Furniture and fixtures .....	40.0	40.2	40.4	40.4	40.6	40.7	41.0	41.0	40.7	40.7	40.7	41.1	40.7
Stone, clay, and glass products .....	43.2	43.1	43.2	43.2	42.9	43.6	43.7	43.6	43.2	43.3	43.5	43.3	43.7
Primary metal industries .....	44.6	45.0	45.0	45.2	45.2	45.2	45.2	44.8	44.6	43.9	44.5	44.5	43.8
Blast furnaces and basic steel products .....	44.3	45.1	45.0	45.4	45.3	45.4	46.0	45.4	45.3	44.9	45.6	45.0	43.9
Fabricated metal products .....	42.5	42.5	42.5	42.6	42.7	42.9	42.7	42.7	42.4	41.8	42.6	42.5	42.2
Industrial machinery and equipment .....	43.5	43.5	43.5	43.6	43.7	43.7	43.6	43.4	43.3	42.6	43.0	43.2	43.0
Electronic and other electrical equipment .....	42.1	41.9	41.8	41.9	42.0	42.0	41.8	41.9	41.4	41.1	41.4	41.4	41.4
Transportation equipment .....	44.1	44.4	44.0	44.3	44.1	44.5	43.9	43.8	43.4	42.1	43.3	42.8	42.4
Motor vehicles and equipment .....	44.4	44.9	44.3	44.6	44.5	44.9	43.9	43.8	43.5	42.0	43.3	42.4	41.6
Instruments and related products .....	41.8	42.2	42.0	42.0	42.2	41.9	41.9	42.0	41.5	41.3	41.4	41.3	41.3
Miscellaneous manufacturing .....	40.4	40.2	40.3	40.4	40.5	40.6	40.4	40.4	40.5	40.1	40.0	40.0	40.0
<b>Nondurable goods</b> .....	40.7	40.7	40.8	40.9	41.0	41.0	41.1	40.9	40.8	40.7	41.0	40.9	41.0
<i>Overtime hours</i> .....	4.3	4.3	4.3	4.4	4.5	4.4	4.4	4.4	4.4	4.2	4.4	4.4	4.5
Food and kindred products .....	41.2	41.2	41.2	41.3	41.5	41.6	41.8	41.5	41.5	41.3	41.8	41.6	42.0
Tobacco products .....	36.6	38.0	38.2	39.1	39.0	38.8	38.3	38.5	37.7	38.2	39.3	38.9	40.6
Textile mill products .....	41.4	41.3	41.5	41.5	41.5	41.7	41.8	41.5	41.2	41.0	41.3	41.1	41.1
Apparel and other textile products .....	37.1	37.1	37.3	37.3	37.2	37.5	37.4	37.4	37.2	37.7	37.4	37.4	37.3
Paper and allied products .....	43.5	43.5	43.6	43.7	44.0	43.7	43.6	43.4	43.4	43.0	43.5	43.6	43.3
Printing and publishing .....	38.4	38.3	38.6	38.6	38.8	38.6	38.5	38.5	38.4	38.2	38.4	38.3	38.5
Chemicals and allied products .....	43.1	43.3	43.3	43.4	43.4	43.2	43.5	43.4	43.4	43.1	43.1	43.1	42.9
Petroleum and coal products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products .....	41.7	41.8	41.7	42.1	42.0	42.1	42.0	41.8	41.5	41.7	42.1	42.0	42.1
Leather and leather products .....	38.3	38.1	38.4	38.3	38.2	38.4	38.3	38.8	37.9	37.3	37.3	37.6	36.2
<b>Service-producing</b> .....	32.7	32.9	32.8	32.9	32.9	32.9	33.0	33.0	32.8	32.9	33.0	32.9	33.0
<b>Transportation and public utilities</b> .....	39.3	40.1	39.9	39.8	39.9	39.9	40.0	39.9	39.8	39.6	39.8	39.6	39.6
<b>Wholesale trade</b> .....	38.3	38.4	38.4	38.4	38.5	38.3	38.5	38.5	38.3	38.3	38.5	38.2	38.4
<b>Retail trade</b> .....	28.9	29.0	28.9	29.0	29.0	28.9	29.0	29.0	28.9	29.0	29.1	29.0	29.2
<b>Finance, insurance, and real estate</b> .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Services</b> .....	32.5	32.7	32.6	32.6	32.7	32.7	32.8	32.7	32.6	32.6	32.7	32.7	32.7

<sup>1</sup> 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.

<sup>2</sup> 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 workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(1982=100)

Industry	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	JuneP	JulyP
<b>Total private</b> .....	141.3	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2
<b>Goods-producing</b> .....	114.2	114.4	114.6	114.9	114.9	116.0	117.1	116.4	115.1	114.9	115.3	114.9	114.2
<b>Mining</b> .....	57.8	58.1	57.6	57.8	57.9	57.5	58.3	57.0	55.6	55.4	56.0	54.7	54.8
<b>Construction</b> .....	156.1	155.7	157.1	156.3	154.4	159.3	165.0	162.4	158.7	161.5	160.5	160.5	163.8
<b>Manufacturing</b> .....	108.9	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.7	109.4	109.1	107.3
<b>Durable goods</b> .....	112.3	113.0	112.8	113.5	113.9	114.6	114.6	114.5	113.7	112.2	113.1	112.8	110.2
Lumber and wood products .....	142.3	141.6	141.2	141.8	142.3	142.6	143.8	143.4	143.6	143.8	143.8	143.7	143.1
Furniture and fixtures .....	127.9	128.0	128.6	128.9	130.2	131.1	132.8	133.1	132.7	133.7	134.0	134.7	134.3
Stone, clay, and glass products .....	112.6	112.3	112.6	113.1	112.6	114.9	116.5	116.2	113.9	114.1	114.7	114.4	116.2
Primary metal industries .....	93.7	95.2	95.4	95.8	95.9	96.3	96.6	95.8	95.5	93.7	94.6	94.8	91.1
Blast furnaces and basic steel products .....	72.0	73.3	73.5	73.8	74.0	73.8	75.6	74.6	74.4	73.4	74.5	73.5	71.7
Fabricated metal products .....	117.2	117.8	117.9	118.5	119.0	119.9	119.8	120.1	119.1	117.5	119.2	118.4	116.8
Industrial machinery and equipment .....	109.3	109.8	109.9	110.9	111.4	111.7	111.7	111.3	111.1	109.1	110.1	110.8	109.4
Electronic and other electrical equipment .....	111.4	111.3	111.3	111.9	112.4	113.0	112.8	112.8	111.3	110.1	110.7	110.4	109.5
Transportation equipment .....	127.7	130.5	128.7	130.2	131.0	131.8	130.0	130.1	128.7	124.6	127.0	125.1	113.3
Motor vehicles and equipment .....	166.5	171.6	167.6	169.2	169.9	171.2	166.8	166.6	164.6	158.9	161.8	157.2	131.9
Instruments and related products .....	76.1	76.7	76.7	76.7	77.0	76.9	77.4	77.6	76.8	76.6	76.6	76.3	76.8
Miscellaneous manufacturing .....	104.2	103.7	103.2	103.4	102.9	103.9	103.8	103.8	104.1	103.4	102.0	102.0	102.0
<b>Nondurable goods</b> .....	104.1	103.9	104.3	104.6	104.9	105.1	105.2	104.6	104.3	104.0	104.4	103.9	103.4
Food and kindred products .....	116.2	115.9	116.4	116.8	117.8	118.4	119.2	118.5	118.3	119.9	119.1	119.0	119.0
Tobacco products .....	58.0	56.5	58.6	62.0	63.7	61.5	60.7	61.0	59.7	62.5	62.3	59.7	62.4
Textile mill products .....	90.0	88.9	89.5	89.7	89.3	89.9	89.6	88.6	87.8	87.4	87.7	86.8	85.9
Apparel and other textile products .....	73.4	73.0	72.8	72.6	72.0	72.2	71.6	70.8	70.2	70.0	68.8	68.3	67.9
Paper and allied products .....	110.7	110.3	110.8	111.2	112.2	111.6	111.6	111.1	111.1	109.9	110.7	110.5	109.1
Printing and publishing .....	126.1	125.5	126.2	126.5	127.2	126.7	126.3	126.0	125.3	124.7	125.6	125.4	125.7
Chemicals and allied products .....	100.4	100.8	101.4	102.0	102.1	102.0	103.1	103.2	103.4	102.7	102.8	102.8	102.2
Petroleum and coal products .....	74.5	75.6	75.0	74.0	74.4	74.2	75.0	71.9	73.6	73.1	73.9	73.3	73.8
Rubber and misc. plastics products .....	145.2	146.0	146.0	147.4	147.2	148.2	148.4	147.9	147.2	148.1	148.9	148.4	147.4
Leather and leather products .....	40.0	39.2	39.5	39.4	38.7	38.9	38.3	38.7	37.3	36.7	36.1	36.4	34.5
<b>Service-producing</b> .....	153.5	154.0	154.5	155.0	155.9	156.0	156.9	157.0	156.7	157.0	158.2	158.2	159.2
<b>Transportation and public utilities</b> .....	129.3	127.5	131.2	130.9	131.1	131.0	131.5	131.1	130.9	130.2	131.5	130.7	131.5
<b>Wholesale trade</b> .....	125.8	126.4	126.4	126.7	127.2	126.9	128.0	128.2	127.6	127.9	128.8	127.9	128.5
<b>Retail trade</b> .....	137.7	138.4	138.1	138.9	139.4	139.2	139.8	139.9	139.3	139.8	141.1	140.7	142.6
<b>Finance, insurance, and real estate</b> .....	129.2	129.8	129.3	130.2	131.5	130.9	132.5	133.4	133.6	134.2	134.9	134.9	136.0
<b>Services</b> .....	186.8	187.9	188.4	189.0	190.3	191.0	192.1	192.0	191.9	192.3	193.7	194.5	194.8

<sup>1</sup> 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) <sup>1</sup>			Percent change		
	May 1998 <sup>f</sup>	June 1998 <sup>f</sup>	July 1998 <sup>p</sup>	July 1997 to July 1998 <sup>p</sup>	May 1998 to June 1998 <sup>f</sup>	June 1998 To July 1998 <sup>p</sup>
Total .....	230,771	230,154	231,096	3.0	-0.3	0.4
Private sector .....	193,422	193,050	193,908	3.0	-.2	.4
Mining .....	1,344	1,314	1,320	-5.5	-2.2	.4
Construction .....	11,877	11,865	12,118	5.2	-.1	2.1
Manufacturing .....	40,887	40,781	40,326	-.6	-.3	-1.1
Durable goods .....	24,548	24,503	24,080	-.9	-.2	-1.7
Nondurable goods .....	16,340	16,278	16,246	-.2	-.4	-.2
Transportation and public utilities .....	13,563	13,514	13,492	2.8	-.4	-.2
Wholesale trade .....	13,644	13,545	13,618	2.7	-.7	.5
Retail trade .....	33,930	33,861	34,284	3.8	-.2	1.3
Finance, insurance, and real estate .....	13,853	13,817	13,948	4.6	-.3	1.0
Services .....	64,325	64,353	64,803	4.6	.0	.7
Government .....	37,349	37,103	37,187	3.0	-.7	.2

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

<sup>p</sup> = preliminary.

<sup>f</sup> = 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 workers<sup>1</sup> on private nonfarm payrolls by major industry, seasonally adjusted**

Industry	1997						1998						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Average hourly earnings</b>													
<b>Total private</b> (in current dollars) .....	\$12.27	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79
<b>Goods-producing</b> .....	13.89	13.95	13.98	14.05	14.10	14.15	14.16	14.21	14.25	14.25	14.27	14.28	14.33
<b>Mining</b> .....	16.15	16.16	16.24	16.37	16.48	16.46	16.47	16.76	16.82	16.72	16.77	16.72	16.82
<b>Construction</b> .....	15.99	16.06	16.10	16.17	16.24	16.34	16.27	16.34	16.40	16.45	16.46	16.50	16.65
<b>Manufacturing</b> .....	13.13	13.20	13.22	13.30	13.34	13.37	13.38	13.42	13.46	13.44	13.47	13.47	13.45
<b>Excluding overtime<sup>2</sup></b> .....	12.42	12.49	12.50	12.58	12.61	12.63	12.66	12.69	12.73	12.76	12.78	12.76	12.73
<b>Service-producing</b> .....	11.73	11.80	11.83	11.88	11.93	11.95	12.00	12.06	12.10	12.19	12.23	12.26	12.30
<b>Transportation and public utilities</b> .....	14.99	15.02	15.01	15.05	15.10	15.16	15.21	15.25	15.27	15.32	15.31	15.31	15.37
<b>Wholesale trade</b> .....	13.45	13.56	13.54	13.63	13.72	13.71	13.75	13.81	13.84	13.88	14.00	13.98	14.06
<b>Retail trade</b> .....	8.33	8.37	8.42	8.46	8.49	8.51	8.56	8.59	8.64	8.70	8.72	8.72	8.77
<b>Finance, insurance, and real estate</b> .....	13.36	13.51	13.53	13.60	13.65	13.66	13.72	13.83	13.85	14.00	14.03	14.08	14.11
<b>Services</b> .....	12.28	12.35	12.38	12.43	12.48	12.50	12.54	12.60	12.65	12.76	12.81	12.87	12.91
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	7.55	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.74	7.73	7.75	(4)
<b>Goods-producing</b> .....	8.55	8.56	8.56	8.59	8.61	8.64	8.64	8.68	8.70	8.68	8.67	8.67	(4)
<b>Service-producing</b> .....	7.22	7.24	7.24	7.26	7.29	7.30	7.33	7.36	7.39	7.43	7.43	7.44	(4)
<b>Average weekly earnings</b>													
<b>Total private</b> (in current dollars) .....	423.32	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53
<b>Goods-producing</b> .....	573.66	576.14	577.37	580.27	580.92	585.81	589.06	588.29	584.25	581.40	586.50	585.48	588.96
<b>Mining</b> .....	731.60	736.90	732.42	739.92	744.90	739.05	747.74	744.14	736.72	737.35	747.94	732.34	746.81
<b>Construction</b> .....	623.61	623.13	629.51	629.01	620.37	637.26	647.55	640.53	631.40	636.62	635.36	633.60	651.02
<b>Manufacturing</b> .....	550.15	553.08	553.92	558.60	561.61	564.21	563.30	563.64	562.63	556.42	563.05	563.05	560.87
<b>Service-producing</b> .....	383.57	388.22	388.02	390.85	392.50	393.16	396.00	397.98	396.88	401.05	403.59	403.35	405.90
<b>Transportation and public utilities</b> .....	589.11	602.30	598.90	598.99	602.49	604.88	608.40	608.48	607.75	606.67	609.34	606.28	608.65
<b>Wholesale trade</b> .....	515.14	520.70	519.94	523.39	528.22	525.09	529.38	531.69	530.07	531.60	539.00	534.04	539.90
<b>Retail trade</b> .....	240.74	242.73	243.34	245.34	246.21	245.94	248.24	249.11	249.70	252.30	253.75	252.88	256.08
<b>Finance, insurance, and real estate</b> .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<b>Services</b> .....	399.10	403.85	403.59	405.22	408.10	408.75	411.31	412.02	412.39	415.98	418.89	420.85	422.16
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	260.50	262.86	262.09	262.89	264.33	264.80	266.42	266.71	266.95	267.00	268.37	268.06	(4)
<b>Goods-producing</b> .....	353.02	353.68	353.56	354.69	354.87	357.64	359.62	359.15	356.90	354.30	356.32	355.48	(4)
<b>Service-producing</b> .....	236.04	238.32	237.61	238.91	239.77	240.02	241.76	242.97	242.44	244.39	245.19	244.90	(4)

<sup>1</sup> 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.

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

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

<sup>4</sup> Not available.

<sup>5</sup> This series is not computed because the average weekly hours' component is not available on a seasonally adjusted basis.

<sup>P</sup> = 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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Total</b> .....		123,622	122,660	126,166	126,882	125,797	-	-	-	-	-
<b>Total private</b> .....		104,001	104,125	105,956	106,989	107,012	85,392	85,480	86,738	87,666	87,654
<b>Mining</b> .....		599	603	579	585	584	453	457	440	445	443
Metal mining .....	10	55.2	55.1	50.7	51.7	51.8	42.5	42.3	38.5	39.4	-
Iron ores .....	101	9.1	8.5	8.4	8.7	-	7.5	7.0	7.0	7.2	-
Copper ores .....	102	15.9	16.2	15.1	15.1	-	12.0	12.2	11.4	11.3	-
Coal mining .....	12	96.9	96.0	91.9	90.9	91.0	79.4	78.7	75.3	74.5	-
Bituminous coal and lignite mining .....	122	91.0	90.2	86.3	85.2	-	74.4	73.8	70.6	69.6	-
Oil and gas extraction .....	13	335.2	339.9	326.8	331.3	329.8	245.4	250.3	242.7	246.2	-
Crude petroleum and natural gas .....	131	143.3	143.7	133.9	137.0	-	82.5	82.9	78.9	81.2	-
Oil and gas field services .....	138	186.8	191.0	188.0	189.2	-	158.8	163.2	159.7	160.6	-
Nonmetallic minerals, except fuels .....	14	112.1	112.1	110.0	111.1	111.4	85.4	85.5	83.9	84.8	-
Crushed and broken stone .....	142	43.1	43.1	41.8	42.3	-	33.8	33.8	32.9	33.1	-
Sand and gravel .....	144	38.0	38.2	37.5	37.9	-	-	-	-	-	-
Chemical and fertilizer minerals .....	147	11.8	11.7	11.7	11.7	-	-	-	-	-	-
<b>Construction</b> .....		5,886	6,005	5,972	6,171	6,293	4,596	4,706	4,637	4,809	4,921
General building contractors .....	15	1,350.4	1,377.7	1,384.5	1,441.2	1,467.3	958.7	983.5	969.8	1,017.3	-
Residential building construction .....	152	701.9	715.6	728.6	761.4	-	480.6	492.8	494.0	521.1	-
Operative builders .....	153	27.8	28.0	28.3	29.1	-	11.4	11.6	11.4	11.6	-
Nonresidential building construction .....	154	620.7	634.1	627.6	650.7	-	466.7	479.1	464.4	484.6	-
Heavy construction, except building .....	16	845.5	855.6	850.2	877.0	894.6	712.2	721.1	716.3	741.6	-
Highway and street construction .....	161	278.6	286.0	272.1	285.5	-	233.4	240.2	225.7	238.7	-
Heavy construction, except highway .....	162	566.9	569.6	578.1	591.5	-	478.8	480.9	490.6	502.9	-
Special trade contractors .....	17	3,690.3	3,771.5	3,737.4	3,852.6	3,930.8	2,925.0	3,001.0	2,951.0	3,050.1	-
Plumbing, heating, and air conditioning .....	171	803.4	818.9	807.8	826.0	-	595.2	609.9	595.3	607.3	-
Painting and paper hanging .....	172	213.0	220.1	207.0	217.9	-	178.2	185.5	171.9	182.9	-
Electrical work .....	173	683.0	700.1	707.3	726.6	-	539.6	555.7	558.3	574.5	-
Masonry, stonework, and plastering .....	174	480.7	489.4	500.8	515.0	-	415.9	423.3	432.5	446.4	-
Carpentry and floor work .....	175	259.4	267.6	260.8	272.5	-	200.3	207.7	196.7	206.9	-
Roofing, siding, and sheet metal work .....	176	251.7	259.4	246.6	258.4	-	202.4	209.4	195.1	206.4	-
<b>Manufacturing</b> .....		18,735	18,596	18,772	18,872	18,570	12,956	12,810	12,948	13,013	12,716
<b>Durable goods</b> .....		11,028	10,934	11,161	11,207	10,947	7,576	7,472	7,655	7,683	7,434
Lumber and wood products .....	24	803.1	802.8	799.9	810.7	813.1	661.8	660.9	656.9	667.4	670.8
Logging .....	241	82.6	84.6	76.1	79.5	-	66.4	67.6	59.8	62.5	-
Sawmills and planing mills .....	242	183.8	183.3	181.7	181.7	-	160.1	160.2	158.2	158.6	-
Sawmills and planing mills, general .....	2421	146.0	146.2	142.9	142.9	-	126.7	127.3	123.8	124.3	-
Hardwood dimension and flooring mills .....	2426	35.9	35.3	36.8	36.8	-	31.8	31.3	32.7	32.6	-
Millwork, plywood, and structural members .....	243	298.3	298.4	302.8	308.2	-	239.7	239.6	243.3	248.8	-
Millwork .....	2431	118.9	119.7	120.4	122.8	-	91.5	92.1	93.4	95.6	-
Wood kitchen cabinets .....	2434	81.8	82.0	84.3	85.9	-	66.2	66.3	68.1	69.7	-
Hardwood veneer and plywood .....	2435	28.8	27.8	28.9	28.9	-	24.6	23.5	24.6	24.7	-
Softwood veneer and plywood .....	2436	29.6	29.7	28.7	29.0	-	27.4	27.5	26.1	26.5	-
Wood containers .....	244	53.9	54.3	52.9	53.3	-	46.4	46.5	45.2	45.6	-
Wood buildings and mobile homes .....	245	94.0	93.5	96.6	97.8	-	75.7	75.0	77.2	78.3	-
Mobile homes .....	2451	70.8	69.9	73.6	74.3	-	59.6	58.7	61.4	62.3	-
Miscellaneous wood products .....	249	90.5	88.7	89.8	90.2	-	73.5	72.0	73.2	73.6	-
Furniture and fixtures .....	25	512.1	502.2	524.7	526.7	518.9	407.0	397.5	418.4	418.9	412.8
Household furniture .....	251	276.7	269.2	284.8	282.9	-	234.0	226.8	241.3	238.9	-
Wood household furniture .....	2511	126.1	123.0	126.4	126.6	-	109.5	106.8	109.6	109.3	-
Upholstered household furniture .....	2512	86.6	84.6	89.5	89.2	-	73.2	71.3	76.0	75.8	-
Metal household furniture .....	2514	19.4	16.8	21.8	20.1	-	16.1	13.5	18.3	16.6	-
Mattresses and bedsprings .....	2515	32.9	33.2	35.3	35.2	-	25.4	25.5	27.4	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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Furniture and fixtures—Continued											
Office furniture .....	252	63.7	63.7	64.8	66.7	-	47.2	47.1	48.0	49.0	-
Public building and related furniture .....	253	44.2	41.4	45.4	45.8	-	34.9	32.3	35.6	36.0	-
Partitions and fixtures .....	254	87.6	87.9	88.9	89.9	-	64.9	65.1	66.1	67.1	-
Miscellaneous furniture and fixtures .....	259	39.9	40.0	40.8	41.4	-	26.0	26.2	27.4	27.9	-
Stone, clay, and glass products .....	32	561.3	561.0	564.8	573.4	571.6	438.5	438.4	441.0	447.9	446.1
Flat glass .....	321	16.7	16.6	16.5	16.7	-	13.4	13.2	13.2	13.4	-
Glass and glassware, pressed or blown .....	322	70.6	71.0	70.7	71.8	-	58.3	58.9	58.0	59.0	-
Glass containers .....	3221	25.8	26.1	25.5	25.9	-	23.1	23.4	22.6	23.0	-
Pressed and blown glass, nec .....	3229	44.8	44.9	45.2	45.9	-	35.2	35.5	35.4	36.0	-
Products of purchased glass .....	323	63.1	61.7	63.2	63.9	-	49.2	47.8	49.0	49.2	-
Cement, hydraulic .....	324	17.8	17.9	17.5	18.1	-	13.7	13.8	13.2	13.7	-
Structural clay products .....	325	34.7	34.2	33.3	33.6	-	27.2	26.8	25.9	26.0	-
Pottery and related products .....	326	39.3	39.5	38.1	38.3	-	31.2	31.2	29.9	29.9	-
Concrete, gypsum, and plaster products .....	327	224.6	226.2	226.7	230.9	-	173.4	174.8	175.1	178.9	-
Concrete block and brick .....	3271	19.1	19.1	18.5	18.7	-	12.3	12.3	11.7	11.9	-
Concrete products, nec .....	3272	74.1	74.6	75.1	76.0	-	56.4	56.8	57.4	58.4	-
Ready-mixed concrete .....	3273	113.6	114.6	115.1	118.1	-	90.7	91.5	91.8	94.3	-
Misc. nonmetallic mineral products .....	329	79.4	79.1	79.6	80.7	-	61.0	61.0	61.6	62.5	-
Abrasive products .....	3291	20.2	20.1	20.4	20.8	-	16.1	16.1	16.3	16.6	-
Asbestos products .....	3292	2.6	2.5	2.6	2.6	-	2.1	2.1	2.2	2.2	-
Mineral wool .....	3296	24.4	24.4	24.4	24.9	-	-	-	-	-	-
Primary metal industries .....	33	710.9	702.4	715.1	719.3	695.3	555.6	547.1	560.7	564.0	541.7
Blast furnaces and basic steel products .....	331	235.8	234.8	234.5	236.2	234.0	181.6	180.9	181.8	183.0	181.3
Blast furnaces and steel mills .....	3312	163.0	163.0	161.8	162.7	-	126.7	126.7	126.4	127.0	-
Steel pipe and tubes .....	3317	28.3	27.8	28.8	29.1	-	21.4	20.9	21.8	22.0	-
Iron and steel foundries .....	332	129.0	127.7	132.3	133.3	-	105.8	104.4	108.1	109.1	-
Gray and ductile iron foundries .....	3321	79.5	77.8	80.1	81.2	-	65.7	64.3	65.9	66.9	-
Malleable iron foundries .....	3322	4.6	4.7	4.7	4.8	-	3.6	3.6	3.6	3.7	-
Steel foundries, nec .....	3325	27.0	27.1	28.7	28.7	-	22.2	22.1	23.6	23.6	-
Primary nonferrous metals .....	333	39.3	39.4	39.0	38.9	-	30.3	30.2	30.3	30.3	-
Primary aluminum .....	3334	22.2	22.2	22.3	22.4	-	17.9	17.8	18.2	18.3	-
Nonferrous rolling and drawing .....	335	169.1	166.9	168.5	169.3	-	129.6	127.5	129.3	129.9	-
Copper rolling and drawing .....	3351	22.4	22.0	21.9	22.2	-	17.5	17.2	17.7	18.0	-
Aluminum sheet, plate, and foil .....	3353	21.7	21.5	21.0	21.1	-	16.1	15.9	15.6	15.7	-
Nonferrous wire drawing and insulating .....	3357	72.7	71.6	72.5	72.8	-	55.3	54.3	54.9	54.9	-
Nonferrous foundries (castings) .....	336	91.4	87.8	92.9	93.5	-	74.3	70.6	75.3	75.7	-
Aluminum foundries .....	3365	25.2	24.1	26.1	26.3	-	20.6	19.5	21.4	21.5	-
Fabricated metal products .....	34	1,481.1	1,457.4	1,494.6	1,497.4	1,465.3	1,117.3	1,094.6	1,126.5	1,128.5	1,098.4
Metal cans and shipping containers .....	341	38.1	38.0	36.8	37.1	-	32.7	32.6	31.2	31.3	-
Metal cans .....	3411	30.6	30.5	29.5	29.7	-	26.6	26.5	25.5	25.6	-
Cutlery, handtools, and hardware .....	342	126.0	123.0	126.5	126.9	-	95.9	93.2	97.1	97.6	-
Hand and edge tools, and blades and handsaws .....	3423.5	43.2	42.2	43.4	43.5	-	33.4	32.5	33.5	33.8	-
Hardware, nec .....	3429	69.7	68.1	70.1	70.3	-	53.0	51.4	53.7	53.9	-
Plumbing and heating, except electric .....	343	58.3	57.7	59.0	59.3	-	41.8	41.0	41.8	41.9	-
Plumbing fixture fittings and trim .....	3432	23.8	23.4	24.5	24.6	-	17.4	16.7	17.8	17.9	-
Heating equipment, except electric .....	3433	20.5	20.3	20.3	20.3	-	13.8	13.7	13.3	13.2	-
Fabricated structural metal products .....	344	452.7	452.0	456.0	458.6	-	332.5	331.3	332.5	335.1	-
Fabricated structural metal .....	3441	78.3	77.9	79.4	80.2	-	57.7	57.3	57.9	58.5	-
Metal doors, sash, and trim .....	3442	79.6	79.4	78.6	79.8	-	59.2	59.0	57.6	58.4	-
Fabricated plate work (boiler shops) .....	3443	101.2	100.4	101.2	100.3	-	72.7	72.2	72.6	72.3	-
Sheet metal work .....	3444	120.7	121.1	122.2	123.0	-	93.1	92.9	93.6	94.5	-
Architectural metal work .....	3446	30.4	30.6	31.4	31.8	-	21.8	22.0	22.9	23.1	-
Screw machine products, bolts, etc .....	345	104.7	102.4	108.3	108.6	-	82.2	80.2	85.1	85.0	-
Screw machine products .....	3451	54.5	52.8	56.6	56.8	-	44.5	42.9	46.2	46.3	-
Bolts, nuts, rivets, and washers .....	3452	50.2	49.6	51.7	51.8	-	37.7	37.3	38.9	38.7	-
Metal forgings and stampings .....	346	256.0	244.3	258.8	256.2	-	204.1	192.8	204.4	202.0	-
Iron and steel forgings .....	3462	32.2	31.6	33.6	33.8	-	24.8	24.1	25.7	25.9	-
Automotive stampings .....	3465	114.8	105.3	115.5	112.1	-	94.6	85.5	94.8	91.5	-
Metal stampings, nec .....	3469	96.1	94.6	96.3	96.8	-	75.0	73.7	73.7	74.3	-

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Metal services, nec .....	347	139.4	136.8	142.0	141.8	—	111.9	109.9	114.9	114.7	—
Plating and polishing .....	3471	84.8	83.7	86.0	85.7	—	68.6	68.0	70.2	69.9	—
Metal coating and allied services .....	3479	54.6	53.1	56.0	56.1	—	43.3	41.9	44.7	44.8	—
Ordnance and accessories, nec .....	348	42.8	42.6	40.6	40.7	—	22.9	22.5	23.1	23.3	—
Ammunition, except for small arms, nec .....	3483	22.7	22.7	21.4	21.4	—	9.6	9.6	9.8	9.8	—
Miscellaneous fabricated metal products .....	349	263.1	260.6	266.6	268.2	—	193.3	191.1	196.4	197.6	—
Valves and pipe fittings, nec .....	3494	25.8	25.8	25.3	25.4	—	19.1	19.0	18.5	18.6	—
Misc. fabricated wire products .....	3496	57.2	56.0	56.8	57.5	—	43.2	42.3	42.9	43.3	—
Industrial machinery and equipment .....	35	2,171.3	2,159.5	2,206.7	2,212.1	2,182.2	1,368.1	1,353.4	1,395.1	1,398.6	1,368.6
Engines and turbines .....	351	83.9	80.2	83.1	83.4	—	54.3	50.5	52.2	52.7	—
Turbines and turbine generator sets .....	3511	24.3	24.2	23.4	23.5	—	13.6	13.4	13.1	13.1	—
Internal combustion engines, nec .....	3519	59.6	56.0	59.7	59.9	—	40.7	37.1	39.1	39.6	—
Farm and garden machinery .....	352	103.9	102.6	106.0	105.6	—	75.4	73.9	77.1	75.9	—
Farm machinery and equipment .....	3523	77.5	77.6	79.1	79.4	—	55.9	55.9	57.2	57.2	—
Construction and related machinery .....	353	243.7	244.9	255.2	256.2	—	158.4	159.2	166.7	167.1	—
Construction machinery .....	3531	90.3	90.0	93.2	93.4	—	61.9	61.6	63.8	63.8	—
Mining machinery .....	3532	17.2	17.2	16.9	16.8	—	10.3	10.2	10.0	9.9	—
Oil and gas field machinery .....	3533	46.1	47.1	51.7	51.9	—	30.9	31.6	35.1	35.1	—
Conveyors and conveying equipment .....	3535	40.4	40.6	41.9	42.3	—	22.6	22.8	22.8	23.1	—
Industrial trucks and tractors .....	3537	31.1	31.2	32.1	32.2	—	21.3	21.5	22.5	22.4	—
Metalworking machinery .....	354	349.5	346.2	351.6	351.7	—	249.0	245.4	251.3	250.9	—
Machine tools, metal cutting types .....	3541	42.6	42.2	42.6	42.6	—	26.5	26.3	26.9	26.8	—
Machine tools, metal forming types .....	3542	17.9	17.9	18.2	18.2	—	11.4	11.3	11.4	11.4	—
Special dies, tools, jigs, and fixtures .....	3544	167.6	164.5	169.0	168.7	—	128.3	125.3	129.2	128.6	—
Machine tool accessories .....	3545	52.9	52.9	54.5	54.3	—	37.1	37.1	38.9	38.9	—
Power driven handtools .....	3546	21.3	21.5	20.5	20.7	—	14.9	15.0	14.5	14.7	—
Special industry machinery .....	355	179.1	179.1	184.1	184.6	—	99.2	99.0	99.2	99.2	—
Textile machinery .....	3552	14.9	14.6	15.2	15.4	—	9.9	9.8	9.9	10.0	—
Printing trades machinery .....	3555	22.8	22.6	23.6	23.7	—	13.0	12.8	13.3	13.3	—
Food products machinery .....	3556	25.3	25.2	24.6	24.8	—	14.9	14.8	14.6	14.8	—
General industrial machinery .....	356	263.3	260.8	266.8	267.8	—	167.8	165.1	170.3	170.9	—
Pumps and pumping equipment .....	3561	30.9	30.5	30.6	30.7	—	17.6	17.2	17.9	18.0	—
Ball and roller bearings .....	3562	39.9	39.0	41.0	41.3	—	31.2	30.1	31.7	31.9	—
Air and gas compressors .....	3563	26.3	26.2	26.9	26.9	—	15.3	15.2	15.3	15.3	—
Blowers and fans .....	3564	35.1	35.1	35.5	35.7	—	23.6	23.6	24.2	24.5	—
Speed changers, drives, and gears .....	3566	17.8	17.7	18.5	18.6	—	12.7	12.6	13.5	13.4	—
Power transmission equipment, nec .....	3568	21.9	21.8	22.5	22.6	—	15.2	15.1	15.6	15.8	—
Computer and office equipment .....	357	377.0	379.3	376.8	375.7	372.7	141.5	142.3	145.5	145.7	—
Electronic computers .....	3571	195.7	197.1	197.8	195.1	—	63.8	65.0	70.7	70.2	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	61.3	61.5	61.8	62.6	—	24.8	24.9	24.5	24.7	—
Refrigeration and service machinery .....	358	205.5	201.1	205.2	206.8	—	148.4	144.6	148.6	150.1	—
Refrigeration and heating equipment .....	3585	143.5	139.1	141.6	142.9	—	109.8	106.1	108.3	109.5	—
Misc. industrial and commercial machinery .....	359	365.4	365.3	377.9	380.3	—	274.1	273.4	284.2	286.1	—
Carburetors, pistons, rings, valves .....	3592	23.2	23.1	23.5	23.6	—	18.4	18.2	18.9	19.0	—
Scales, balances, and industrial machinery, nec .....	3596,9	295.4	295.1	305.7	307.5	—	226.6	226.0	234.9	236.3	—
Electronic and other electrical equipment .....	36	1,686.5	1,683.6	1,710.3	1,717.0	1,699.1	1,064.8	1,058.0	1,075.4	1,076.6	1,059.7
Electric distribution equipment .....	361	82.3	82.0	82.9	83.5	—	56.3	55.9	55.7	55.7	—
Transformers, except electronic .....	3612	39.0	38.5	38.8	39.1	—	27.5	27.1	25.9	25.8	—
Switchgear and switchboard apparatus .....	3613	43.3	43.5	44.1	44.4	—	28.8	28.8	29.8	29.9	—
Electrical industrial apparatus .....	362	154.8	153.6	154.2	154.8	—	107.8	106.6	107.5	107.5	—
Motors and generators .....	3621	76.0	75.6	76.6	76.8	—	58.9	58.5	59.3	59.3	—
Relays and industrial controls .....	3625	58.6	57.9	56.7	57.0	—	34.2	33.6	33.1	33.2	—
Household appliances .....	363	113.9	112.6	114.9	115.6	—	89.3	87.4	91.0	91.7	—
Household refrigerators and freezers .....	3632	23.0	22.7	23.4	23.5	—	17.7	16.8	18.4	18.6	—
Household laundry equipment .....	3633	17.0	16.4	17.6	17.7	—	13.4	12.8	14.1	14.2	—
Electric housewares and fans .....	3634	26.9	25.9	25.5	26.0	—	20.9	19.6	19.0	19.3	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
<b>Electronic and other electrical equipment—Continued</b>											
Electric lighting and wiring equipment .....	364	180.0	178.5	181.7	183.7	-	129.0	127.2	128.9	130.7	-
Electric lamps .....	3641	22.0	21.6	21.1	21.2	-	17.0	16.7	16.2	16.2	-
Current-carrying wiring devices .....	3643	62.7	61.8	63.9	64.5	-	41.2	40.6	41.8	42.1	-
Noncurrent-carrying wiring devices .....	3644	18.1	17.9	17.9	18.0	-	13.8	13.5	13.3	13.4	-
Residential lighting fixtures .....	3645	20.4	20.4	20.8	21.2	-	15.3	14.8	15.7	16.1	-
Household audio and video equipment .....	365	78.4	77.5	77.1	77.7	-	50.7	49.6	49.5	50.2	-
Household audio and video equipment .....	3651	52.2	51.7	52.2	52.4	-	30.7	30.0	30.7	31.1	-
Communications equipment .....	366	276.7	278.1	279.0	280.9	-	131.1	131.5	129.4	129.2	-
Telephone and telegraph apparatus .....	3661	119.8	119.9	126.3	128.0	-	59.0	58.8	59.1	59.0	-
Electronic components and accessories .....	367	652.6	656.5	674.9	675.0	666.8	394.2	397.0	409.2	407.5	-
Electron tubes .....	3671	22.3	22.2	22.7	22.4	-	16.2	15.9	16.8	16.6	-
Semiconductors and related devices .....	3674	278.0	282.3	292.3	292.0	-	126.3	129.6	132.9	131.9	-
Electronic components, nec .....	3679	146.6	146.1	147.6	148.0	-	99.6	99.3	101.9	101.9	-
Misc. electrical equipment and supplies .....	369	147.8	144.8	145.6	145.8	-	106.4	102.8	104.2	104.1	-
Storage batteries .....	3691	26.4	26.0	25.2	25.2	-	20.3	19.8	19.5	19.6	-
Engine electrical equipment .....	3694	64.3	61.9	65.2	65.6	-	51.2	48.1	50.0	50.1	-
Transportation equipment .....	37	1,844.3	1,814.9	1,892.4	1,893.4	1,752.9	1,258.9	1,228.2	1,277.3	1,274.7	1,134.0
Motor vehicles and equipment .....	371	987.9	957.5	1,005.3	1,002.4	862.0	784.4	754.6	781.3	777.0	638.1
Motor vehicles and car bodies .....	3711	347.6	333.1	358.8	355.3	-	270.5	256.8	265.9	263.4	-
Truck and bus bodies .....	3713	42.2	41.6	42.5	42.9	-	33.5	32.9	33.8	34.0	-
Motor vehicle parts and accessories .....	3714	544.9	530.2	544.9	545.0	-	437.0	422.1	433.6	431.7	-
Truck trailers .....	3715	33.3	32.9	38.1	38.5	-	26.9	26.4	30.7	30.9	-
Aircraft and parts .....	372	499.2	503.0	522.8	523.7	525.1	249.9	252.1	265.7	264.9	-
Aircraft .....	3721	261.9	264.2	273.0	273.9	-	109.4	110.7	115.5	115.8	-
Aircraft engines and engine parts .....	3724	100.5	100.4	103.0	103.9	-	54.2	53.7	55.4	54.6	-
Aircraft parts and equipment, nec .....	3728	136.8	138.4	146.8	145.9	-	86.3	87.7	94.8	94.5	-
Ship and boat building and repairing .....	373	157.4	155.6	162.8	164.5	-	119.4	117.2	123.6	125.6	-
Ship building and repairing .....	3731	99.3	98.5	100.9	102.1	-	70.9	69.6	71.9	73.6	-
Boat building and repairing .....	3732	58.1	57.1	61.9	62.4	-	48.5	47.6	51.7	52.0	-
Railroad equipment .....	374	32.9	32.9	33.9	34.4	-	24.7	24.7	25.9	25.7	-
Guided missiles, space vehicles, and parts .....	376	90.8	90.8	90.2	90.4	-	24.4	24.3	24.3	24.4	-
Guided missiles and space vehicles .....	3761	62.8	62.8	62.6	62.8	-	15.4	15.3	15.3	15.4	-
Miscellaneous transportation equipment .....	379	53.5	52.3	55.1	55.6	-	39.2	38.3	40.7	41.2	-
Travel trailers and campers .....	3792	22.0	21.7	23.4	23.6	-	18.4	18.2	19.7	19.9	-
Instruments and related products .....	38	865.3	865.0	864.4	867.1	863.3	428.5	424.3	432.2	433.6	434.3
Search and navigation equipment .....	381	160.4	161.7	161.0	161.2	-	43.8	43.7	43.4	43.6	-
Measuring and controlling devices .....	382	300.8	299.3	302.3	302.9	-	154.3	152.5	155.5	155.4	-
Environmental controls .....	3822	41.5	40.8	40.6	40.7	-	27.9	27.3	27.5	27.8	-
Process control instruments .....	3823	66.7	65.9	66.2	66.2	-	34.0	33.6	34.0	33.9	-
Instruments to measure electricity .....	3825	75.9	76.2	77.1	77.7	-	32.7	32.3	32.5	32.5	-
Medical instruments and supplies .....	384	276.6	276.3	279.0	280.7	-	162.4	160.6	165.4	166.8	-
Surgical and medical instruments .....	3841	108.4	108.5	109.2	109.8	-	69.7	68.2	70.6	71.0	-
Surgical appliances and supplies .....	3842	95.2	94.5	97.1	97.9	-	58.5	58.1	60.3	61.0	-
Ophthalmic goods .....	385	35.1	34.9	36.8	37.1	-	21.3	21.0	25.1	25.7	-
Photographic equipment and supplies .....	386	84.7	85.0	77.6	77.5	-	40.3	40.1	36.5	35.8	-
Watches, clocks, watchcases, and parts .....	387	7.7	7.8	7.7	7.7	-	6.4	6.4	6.3	6.3	-
Miscellaneous manufacturing industries .....	39	391.7	385.2	387.9	389.9	385.1	275.4	269.1	271.2	272.8	267.7
Jewelry, silverware, and plated ware .....	391	48.7	47.5	48.6	48.9	-	33.4	32.5	33.6	33.7	-
Jewelry, precious metal .....	3911	36.3	35.7	36.5	36.8	-	24.5	24.0	24.8	24.9	-
Musical instruments .....	393	15.9	15.5	16.8	16.6	-	12.5	11.8	13.3	13.1	-
Toys and sporting goods .....	394	109.8	107.7	104.5	104.2	-	75.9	74.3	71.3	71.0	-
Dolls, games, toys, and children's vehicles .....	3942.4	37.2	36.1	33.7	33.8	-	24.5	23.7	21.1	21.3	-
Sporting and athletic goods, nec .....	3949	72.6	71.6	70.8	70.4	-	51.4	50.6	50.2	49.7	-
Pens, pencils, office, and art supplies .....	395	31.2	31.1	31.0	31.5	-	21.0	21.0	21.6	21.9	-
Costume jewelry and notions .....	396	23.8	23.0	23.1	23.3	-	16.8	15.8	16.5	16.7	-
Costume jewelry .....	3961	13.6	12.9	12.9	13.1	-	9.6	8.7	9.4	9.6	-
Miscellaneous manufactures .....	399	162.3	160.4	163.9	165.4	-	115.8	113.7	114.9	116.4	-
Signs and advertising specialties .....	3993	69.1	69.3	72.5	73.5	-	45.6	45.5	47.3	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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods</b> .....		7,707	7,662	7,611	7,665	7,623	5,380	5,338	5,293	5,330	5,282
Food and kindred products .....	20	1,688.2	1,715.5	1,676.8	1,703.9	1,728.9	1,248.6	1,275.1	1,239.0	1,263.1	1,282.3
Meat products .....	201	489.2	489.8	495.5	500.1	-	414.9	415.6	420.3	424.4	-
Meat packing plants .....	2011	148.6	148.7	152.8	153.8	-	123.3	123.5	126.7	127.6	-
Sausages and other prepared meats .....	2013	96.6	96.2	97.8	99.6	-	74.6	74.4	76.0	77.9	-
Poultry slaughtering and processing .....	2015	244.0	244.9	244.9	246.7	-	217.0	217.7	217.6	218.9	-
Dairy products .....	202	144.3	144.2	143.0	144.2	-	95.6	95.7	96.9	98.8	-
Cheese, natural and processed .....	2022	40.6	40.8	39.8	40.6	-	33.2	33.4	32.4	32.9	-
Fluid milk .....	2026	61.7	61.7	62.2	61.3	-	34.9	35.1	36.0	36.2	-
Preserved fruits and vegetables .....	203	230.1	252.8	215.8	227.5	-	192.7	214.8	179.7	191.1	-
Canned specialties .....	2032	18.2	17.9	18.0	18.1	-	14.4	13.9	14.0	14.2	-
Canned fruits and vegetables .....	2033	69.0	89.4	61.3	64.4	-	56.8	76.7	50.1	53.0	-
Frozen fruits and vegetables .....	2037	49.4	52.1	46.7	52.2	-	43.1	45.5	40.2	45.6	-
Grain mill products .....	204	125.1	124.4	123.4	124.7	-	89.1	88.8	87.1	87.8	-
Flour and other grain mill products .....	2041	19.2	19.0	18.8	19.2	-	11.8	11.7	11.5	11.6	-
Prepared feeds, nec .....	2048	39.9	38.9	39.8	39.9	-	25.8	25.0	25.5	25.4	-
Bakery products .....	205	207.3	206.4	207.1	208.5	-	139.5	138.6	139.6	140.8	-
Bread, cake, and related products .....	2051	147.8	147.1	150.6	151.4	-	89.9	89.4	91.7	92.4	-
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	59.5	59.3	56.5	57.1	-	49.6	49.2	47.9	48.4	-
Sugar and confectionery products .....	206	90.0	89.0	93.6	93.3	-	69.9	68.9	72.3	71.8	-
Raw cane sugar .....	2061	3.8	2.5	5.0	4.8	-	2.9	1.8	3.7	3.5	-
Cane sugar refining .....	2062	4.3	4.4	4.1	4.1	-	3.2	3.3	3.1	3.0	-
Beet sugar .....	2063	6.5	6.7	7.7	7.1	-	5.4	5.7	6.7	6.0	-
Candy and other confectionery products .....	2064	50.4	50.0	51.7	51.9	-	40.1	39.4	40.0	40.3	-
Fats and oils .....	207	33.3	33.3	34.6	34.5	-	22.7	22.7	22.9	23.0	-
Beverages .....	208	183.9	184.6	183.7	185.9	-	88.9	89.2	90.1	91.2	-
Malt beverages .....	2082	34.2	34.3	33.8	34.0	-	21.8	21.9	21.4	21.5	-
Bottled and canned soft drinks .....	2086	96.3	97.1	96.7	97.8	-	40.1	40.3	40.1	40.9	-
Misc. food and kindred products .....	209	185.0	191.0	180.1	185.2	-	135.3	140.8	130.1	134.2	-
Tobacco products .....	21	37.9	38.0	37.4	36.7	36.5	28.1	28.1	28.2	27.3	27.1
Cigarettes .....	211	28.1	28.3	27.0	26.9	-	20.9	21.0	20.1	20.0	-
Textile mill products .....	22	620.0	611.6	603.1	602.2	590.7	525.4	517.5	512.4	511.2	500.0
Broadwoven fabric mills, cotton .....	221	72.5	71.7	70.0	69.8	-	64.5	63.8	62.6	62.4	-
Broadwoven fabric mills, synthetics .....	222	63.9	63.1	64.4	64.9	-	53.6	52.9	54.6	55.1	-
Broadwoven fabric mills, wool .....	223	14.5	14.3	13.6	13.3	-	12.3	12.1	11.5	11.2	-
Narrow fabric mills .....	224	21.7	20.6	21.1	20.9	-	17.9	17.0	17.3	17.1	-
Knitting mills .....	225	175.6	173.3	164.5	164.1	-	150.6	148.6	140.5	140.1	-
Women's hosiery, except socks .....	2251	19.8	19.7	17.5	17.4	-	17.5	17.3	15.3	15.1	-
Hosiery, nec .....	2252	38.8	38.4	36.8	37.0	-	33.9	33.5	32.1	32.3	-
Knit outerwear mills .....	2253	52.8	52.1	49.2	49.3	-	45.0	44.6	42.2	42.2	-
Knit underwear mills .....	2254	16.9	16.7	13.0	13.0	-	15.0	14.9	11.6	11.5	-
Weft knit fabric mills .....	2257	25.3	24.8	26.1	25.7	-	21.2	20.6	22.1	21.9	-
Textile finishing, except wool .....	226	67.4	65.6	64.2	63.1	-	55.1	53.2	52.7	51.8	-
Finishing plants, cotton .....	2261	31.2	30.9	29.3	28.4	-	25.4	25.0	23.9	23.3	-
Finishing plants, synthetics .....	2262	21.5	20.3	20.2	20.1	-	17.3	16.1	16.3	16.1	-
Carpets and rugs .....	227	62.8	63.2	66.2	66.2	-	51.6	52.1	55.4	55.4	-
Yarn and thread mills .....	228	86.6	85.7	84.9	85.1	-	76.9	75.6	75.5	75.5	-
Yarn spinning mills .....	2281	63.1	62.2	61.9	62.0	-	56.3	55.2	55.7	55.7	-
Throwing and winding mills .....	2282	16.6	16.5	16.3	16.4	-	14.3	14.1	13.9	13.9	-
Miscellaneous textile goods .....	229	55.0	54.1	54.2	54.8	-	42.9	42.2	42.3	42.6	-
Apparel and other textile products .....	23	836.4	806.4	783.0	781.6	757.1	684.1	655.8	630.6	628.2	605.7
Men's and boys' suits and coats .....	231	29.4	27.7	28.4	28.5	-	23.8	22.4	23.0	22.9	-
Men's and boys' furnishings .....	232	211.9	203.1	189.4	190.8	-	179.5	172.2	159.8	160.6	-
Men's and boys' shirts .....	2321	44.8	42.6	39.0	38.9	-	38.4	37.0	33.9	33.7	-
Men's and boys' trousers and slacks .....	2325	70.6	69.2	65.0	65.7	-	60.8	59.4	56.3	56.6	-
Men's and boys' work clothing .....	2326	32.1	28.8	28.6	29.0	-	27.5	24.4	24.5	25.0	-
Women's and misses' outerwear .....	233	254.3	243.9	236.2	233.8	-	206.7	196.0	186.9	184.4	-
Women's and misses' blouses and shirts .....	2331	22.9	22.9	20.8	20.5	-	17.7	17.8	16.0	15.7	-
Women's, juniors', and misses' dresses .....	2335	41.1	39.1	38.4	37.8	-	32.5	30.5	29.7	29.5	-
Women's and misses' suits and coats .....	2337	25.1	25.1	23.9	24.4	-	19.6	19.5	18.5	18.8	-
Women's and misses' outerwear, nec .....	2339	165.2	156.8	153.1	151.1	-	136.9	128.2	122.7	120.4	-

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
<b>Apparel and other textile products—Continued</b>											
Women's and children's undergarments .....	234	35.4	34.5	32.3	32.3	—	27.9	27.1	25.0	25.1	—
Women's and children's underwear .....	2341	25.7	25.0	23.5	23.4	—	20.9	20.2	18.6	18.5	—
Brassieres, girdles, and allied garments .....	2342	9.7	9.5	8.8	8.9	—	7.0	6.9	6.4	6.6	—
Girls' and children's outerwear .....	236	30.9	30.3	27.0	26.6	—	25.5	24.8	22.2	21.6	—
Girls' and children's dresses and blouses .....	2361	12.5	12.4	10.0	10.0	—	10.6	10.5	8.6	8.5	—
Misc. apparel and accessories .....	238	34.9	32.6	33.5	33.1	—	28.0	25.8	27.1	26.5	—
Misc. fabricated textile products .....	239	221.7	216.9	219.6	219.7	—	178.6	173.7	173.4	173.8	—
Curtains and draperies .....	2391	20.1	19.9	19.2	18.8	—	16.0	15.6	14.7	14.6	—
House furnishings, nec .....	2392	54.7	54.5	56.5	55.8	—	46.5	46.3	47.3	46.8	—
Automotive and apparel trimmings .....	2396	62.8	60.6	60.9	61.4	—	50.4	48.0	47.4	47.7	—
Paper and allied products .....	26	689.4	687.1	682.3	687.4	683.7	525.9	524.0	519.6	523.6	519.9
Paper mills .....	262	160.8	161.2	155.7	157.2	—	125.3	125.8	122.0	123.3	—
Paperboard mills .....	263	50.2	50.5	49.8	50.3	—	38.4	38.7	38.4	38.7	—
Paperboard containers and boxes .....	265	221.0	218.9	218.1	218.9	—	171.6	169.3	169.1	169.6	—
Corrugated and solid fiber boxes .....	2653	133.4	132.7	132.8	132.6	—	100.2	99.2	99.3	99.2	—
Sanitary food containers .....	2656	17.8	17.5	16.8	17.0	—	15.9	15.6	15.2	15.3	—
Folding paperboard boxes .....	2657	47.5	46.9	46.6	46.8	—	38.4	37.9	37.7	37.8	—
Misc. converted paper products .....	267	245.6	244.7	247.0	249.2	—	181.2	180.7	180.7	182.6	—
Paper, coated and laminated, nec .....	2672	47.3	47.6	48.8	48.9	—	24.7	24.9	25.0	25.2	—
Bags: plastics, laminated, and coated .....	2673	40.2	39.8	39.9	40.2	—	31.4	31.3	31.3	31.5	—
Envelopes .....	2677	25.2	25.0	25.5	25.3	—	19.6	19.5	19.7	19.5	—
Printing and publishing .....	27	1,558.8	1,555.9	1,565.2	1,572.0	1,572.0	852.4	849.2	844.5	847.1	845.1
Newspapers .....	271	442.5	442.5	442.4	444.4	—	147.9	147.7	146.9	147.4	—
Periodicals .....	272	136.2	137.2	138.8	140.0	—	46.1	46.7	44.9	44.7	—
Books .....	273	129.7	128.7	128.9	129.0	—	68.8	68.1	64.8	64.0	—
Book publishing .....	2731	91.3	90.5	90.1	90.3	—	38.4	37.9	34.1	33.5	—
Book printing .....	2732	38.4	38.2	38.8	38.7	—	30.4	30.2	30.7	30.5	—
Miscellaneous publishing .....	274	88.3	89.2	91.3	91.7	—	41.3	41.5	42.8	43.3	—
Commercial printing .....	275	574.0	570.4	577.8	579.5	—	411.1	407.8	411.3	412.3	—
Commercial printing, lithographic .....	2752	371.8	369.9	376.6	377.7	—	265.5	263.3	267.5	268.5	—
Commercial printing, nec .....	2759	182.8	180.9	182.0	182.8	—	130.3	129.1	129.0	129.2	—
Manifold business forms .....	276	43.0	42.7	43.0	42.6	—	30.2	29.9	30.1	29.7	—
Blankbooks and bookbinding .....	278	66.6	67.0	65.4	66.5	—	51.3	51.6	49.8	50.8	—
Printing trade services .....	279	50.2	49.7	49.5	49.6	—	34.2	33.9	33.3	33.3	—
Chemicals and allied products .....	28	1,040.2	1,035.8	1,037.6	1,043.8	1,042.0	572.6	570.2	583.9	586.4	582.5
Industrial inorganic chemicals .....	281	118.1	117.3	116.2	116.9	—	56.3	56.5	61.6	62.3	—
Industrial inorganic chemicals, nec .....	2819	72.0	71.0	70.0	70.3	—	36.1	35.3	35.6	35.8	—
Plastics materials and synthetics .....	282	159.5	158.1	155.7	155.6	—	106.4	105.2	103.0	103.0	—
Plastics materials and resins .....	2821	80.1	80.6	80.7	81.1	—	50.0	50.3	49.6	49.9	—
Organic fibers, noncellulosic .....	2824	45.6	44.8	44.4	44.1	—	35.6	34.7	35.2	34.8	—
Drugs .....	283	268.4	268.7	272.5	275.5	—	120.1	119.8	125.2	125.6	—
Pharmaceutical preparations .....	2834	211.5	211.6	216.0	218.6	—	97.0	96.5	101.3	101.8	—
Soap, cleaners, and toilet goods .....	284	156.0	155.7	157.0	157.3	—	95.3	95.5	97.6	97.8	—
Soap and other detergents .....	2841	42.1	42.1	41.8	41.7	—	22.5	22.5	22.9	22.7	—
Polishing, sanitation, and finishing preparations .....	2842,3	39.4	39.1	40.9	41.3	—	21.8	21.8	23.1	23.5	—
Toilet preparations .....	2844	74.5	74.5	74.3	74.3	—	51.0	51.2	51.6	51.6	—
Paints and allied products .....	285	52.0	52.4	52.2	52.8	—	27.8	28.0	27.6	27.8	—
Industrial organic chemicals .....	286	139.3	138.8	137.6	138.5	—	78.3	78.0	80.2	80.7	—
Cyclic crudes and intermediates .....	2865	23.7	23.2	23.2	23.4	—	14.2	13.9	14.0	14.2	—
Industrial organic chemicals, nec .....	2869	113.1	113.1	111.9	112.6	—	62.2	62.2	64.4	64.7	—
Agricultural chemicals .....	287	52.5	50.9	51.9	51.7	—	31.5	30.8	31.6	31.2	—
Miscellaneous chemical products .....	289	94.4	93.9	94.5	95.5	—	56.9	56.4	57.1	58.0	—
Petroleum and coal products .....	29	142.3	142.7	136.6	138.8	139.1	94.6	94.8	90.3	92.0	91.9
Petroleum refining .....	291	97.5	97.4	93.0	94.4	—	63.8	63.5	60.7	61.7	—
Asphalt paving and roofing materials .....	295	30.6	31.1	29.1	29.8	—	23.1	23.7	21.7	22.3	—
Rubber and misc. plastics products .....	30	1,002.1	982.5	1,005.8	1,014.5	994.1	778.1	758.6	780.6	787.4	767.8
Tires and inner tubes .....	301	78.1	76.9	80.3	81.2	—	57.8	56.5	59.5	59.8	—
Rubber and plastics footwear .....	302	7.2	6.6	6.6	6.7	—	5.9	5.1	5.1	5.2	—
Hose, belting, gaskets, and packing .....	305	69.5	69.4	72.0	72.6	—	53.5	53.2	55.4	55.9	—
Rubber and plastics hose and belting .....	3052	28.3	28.0	29.4	29.7	—	22.1	21.7	23.0	23.1	—
Fabricated rubber products, nec .....	306	112.5	109.2	111.5	112.3	—	86.2	83.0	85.3	85.9	—
Miscellaneous plastics products, nec .....	308	734.8	720.4	735.4	741.7	—	574.7	560.8	575.3	580.6	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
Leather and leather products .....	31	91.7	86.0	83.6	83.7	79.3	70.0	64.3	63.5	63.3	59.5
Leather tanning and finishing .....	311	13.3	11.5	12.8	12.9	—	10.9	9.2	10.6	10.7	—
Footwear, except rubber .....	314	40.8	38.7	35.9	35.8	—	32.9	30.8	28.8	28.5	—
Men's footwear, except athletic .....	3143	21.5	21.2	19.7	19.4	—	16.9	16.7	15.3	15.0	—
Women's footwear, except athletic .....	3144	11.6	10.9	9.3	9.4	—	9.3	8.5	7.3	7.3	—
Luggage .....	316	10.7	10.1	9.9	10.0	—	7.8	7.2	7.0	7.0	—
Handbags and personal leather goods .....	317	9.8	9.4	9.3	9.3	—	5.7	5.4	5.4	5.5	—
<b>Transportation and public utilities .....</b>		<b>6,439</b>	<b>6,395</b>	<b>6,544</b>	<b>6,570</b>	<b>6,544</b>	<b>5,416</b>	<b>5,366</b>	<b>5,408</b>	<b>5,432</b>	<b>5,422</b>
Transportation .....		4,139	4,090	4,202	4,215	4,187	—	—	—	—	—
Railroad transportation .....	40	229.3	230.0	232.6	233.2	234.4	—	—	—	—	—
Class I railroads plus Amtrak <sup>2</sup> .....	4011	204.5	204.9	205.6	206.1	—	—	—	—	—	—
Local and interurban passenger transit .....	41	451.2	390.3	477.4	458.5	401.8	413.4	352.3	437.5	417.9	—
Local and suburban transportation .....	411	233.0	230.5	236.4	238.5	—	212.1	209.2	214.3	215.2	—
Taxicabs .....	412	30.4	30.2	31.3	31.1	—	—	—	—	—	—
Intercity and rural bus transportation .....	413	20.8	20.9	21.9	22.9	—	19.0	19.0	19.6	20.6	—
School buses .....	415	132.5	76.5	152.0	130.5	—	—	—	—	—	—
Trucking and warehousing .....	42	1,679.4	1,685.5	1,697.6	1,722.2	1,736.8	1,468.9	1,477.2	1,484.8	1,507.9	—
Trucking and courier services, except air .....	421	1,521.2	1,526.2	1,537.1	1,560.7	—	1,337.4	1,344.7	1,351.7	1,374.0	—
Public warehousing and storage .....	422	152.9	154.1	155.6	156.6	—	126.7	127.9	128.7	129.5	—
Water transportation .....	44	187.7	190.9	186.8	189.9	196.6	—	—	—	—	—
Water transportation of freight, nec .....	444	14.0	14.0	14.2	14.2	—	—	—	—	—	—
Water transportation services .....	449	125.8	128.7	128.2	129.3	—	111.5	114.6	113.1	114.1	—
Transportation by air .....	45	1,136.0	1,137.2	1,145.8	1,149.5	1,154.6	—	—	—	—	—
Air transportation, scheduled .....	451	973.3	973.6	971.0	972.8	—	—	—	—	—	—
Air transportation, scheduled .....	4512	512.8	513.2	524.6	527.1	—	—	—	—	—	—
Airports, flying fields, and services .....	458	118	120	129	131	—	—	—	—	—	—
Pipelines, except natural gas .....	46	14.5	14.6	14.1	14.5	14.6	11.8	12.0	11.4	11.8	—
Transportation services .....	47	440.6	441.8	447.3	447.2	447.9	359.1	360.7	364.9	364.0	—
Passenger transportation arrangement .....	472	217.6	218.1	217.1	217.2	—	181.4	182.5	182.4	182.5	—
Travel agencies .....	4724	171.0	171.9	173.1	173.0	—	143.0	144.3	145.7	145.7	—
Freight transportation arrangement .....	473	175.1	175.9	181.3	180.8	—	137.7	138.5	141.5	140.5	—
Communications and public utilities .....		2,300	2,305	2,342	2,355	2,357	—	—	—	—	—
Communications .....	48	1,426.5	1,431.3	1,484.9	1,494.4	1,494.9	1,105.1	1,103.9	1,073.1	1,081.1	—
Telephone communications .....	481	979.0	983.9	1,025.0	1,029.2	—	742.5	742.5	707.3	712.8	—
Telephone communications, except radio .....	4813	828.6	832.3	861.4	867.5	—	620.0	619.3	588.1	593.0	—
Radio and television broadcasting .....	483	241.8	241.6	245.4	247.0	—	201.4	201.1	201.9	202.8	—
Radio broadcasting stations .....	4832	113.8	113.8	117.2	117.7	—	—	—	—	—	—
Television broadcasting stations .....	4833	128.0	127.8	128.2	129.3	—	—	—	—	—	—
Cable and other pay television services .....	484	174.9	174.3	183.0	185.1	—	146.8	146.0	150.1	151.5	—
Electric, gas, and sanitary services .....	49	873.3	874.0	856.9	860.7	862.5	695.9	695.8	685.0	690.0	—
Electric services .....	491	371.0	372.1	364.5	366.9	—	297.2	297.4	293.9	296.7	—
Gas production and distribution .....	492	144.3	144.2	140.0	141.3	—	111.9	111.8	108.8	110.0	—
Combination utility services .....	493	161.3	160.8	156.8	156.3	—	125.1	125.0	122.2	122.6	—
Sanitary services .....	495	163.6	163.5	162.8	163.0	—	135.6	135.2	134.1	134.4	—
<b>Wholesale trade .....</b>		<b>6,674</b>	<b>6,698</b>	<b>6,818</b>	<b>6,862</b>	<b>6,870</b>	<b>5,384</b>	<b>5,403</b>	<b>5,460</b>	<b>5,502</b>	<b>5,503</b>
Durable goods .....	50	3,948	3,966	4,065	4,094	4,104	3,143	3,157	3,199	3,229	—
Motor vehicles, parts, and supplies .....	501	519.0	517.9	518.3	523.0	—	424.7	423.4	413.7	416.7	—
Automobiles and other motor vehicles .....	5012	144.2	144.5	148.3	148.9	—	—	—	—	—	—
Motor vehicle supplies and new parts .....	5013	295.5	294.4	291.2	293.7	—	—	—	—	—	—
Furniture and home furnishings .....	502	155.6	156.6	162.8	163.6	—	124.0	124.7	128.7	130.1	—
Furniture .....	5021	74.3	75.1	78.9	80.2	—	—	—	—	—	—
Home furnishings .....	5023	81.3	81.5	83.9	83.4	—	—	—	—	—	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Wholesale trade—Continued</b>											
<b>Durable goods—Continued</b>											
Lumber and other construction materials .....	503	259.7	261.4	268.4	271.6	—	215.0	216.5	223.2	226.1	—
Lumber, plywood, and millwork .....	5031	132.3	132.4	136.4	138.2	—	—	—	—	—	—
Construction materials, nec .....	5039	38.4	38.8	39.3	39.9	—	—	—	—	—	—
Professional and commercial equipment .....	504	861.3	867.9	903.4	909.3	—	674.7	681.6	698.6	705.2	—
Office equipment .....	5044	198.1	198.9	212.6	212.5	—	—	—	—	—	—
Computers, peripherals and software .....	5045	344.6	348.8	358.8	362.8	—	—	—	—	—	—
Medical and hospital equipment .....	5047	180.2	181.6	187.9	189.4	—	145.8	147.0	150.9	151.7	—
Metals and minerals, except petroleum .....	505	147.4	147.2	150.9	151.6	—	119.5	118.8	121.4	122.4	—
Electrical goods .....	506	536.6	540.7	553.9	555.1	—	401.3	403.6	401.6	402.8	—
Electrical apparatus and equipment .....	5063	223.8	225.4	232.9	234.0	—	—	—	—	—	—
Electrical appliances, television and radio sets .....	5064	49.4	49.8	49.1	49.4	—	—	—	—	—	—
Electronic parts and equipment .....	5065	263.4	265.5	271.9	271.7	—	—	—	—	—	—
Hardware, plumbing, and heating equipment .....	507	302.7	302.5	303.0	305.3	—	247.0	246.6	247.2	249.8	—
Hardware .....	5072	107.9	107.4	109.2	109.9	—	—	—	—	—	—
Plumbing and hydronic heating supplies .....	5074	119.1	119.6	118.7	119.2	—	—	—	—	—	—
Machinery, equipment, and supplies .....	508	821.5	825.7	843.3	850.6	—	657.1	661.3	672.9	679.2	—
Construction and mining machinery .....	5082	88.1	89.0	92.0	93.0	—	—	—	—	—	—
Farm and garden machinery .....	5083	124.9	125.0	125.7	127.4	—	—	—	—	—	—
Industrial machinery and equipment .....	5084	330.4	332.2	339.1	341.2	—	—	—	—	—	—
Industrial supplies .....	5085	153.4	153.5	159.3	160.3	—	—	—	—	—	—
Misc. wholesale trade durable goods .....	509	344.6	346.2	360.5	364.3	—	279.7	280.9	292.1	296.7	—
Scrap and waste materials .....	5093	130.6	130.0	133.7	132.0	—	—	—	—	—	—
<b>Nondurable goods .....</b>	<b>51</b>	<b>2,726</b>	<b>2,732</b>	<b>2,753</b>	<b>2,768</b>	<b>2,766</b>	<b>2,241</b>	<b>2,246</b>	<b>2,261</b>	<b>2,273</b>	<b>—</b>
Paper and paper products .....	511	266.6	266.6	267.8	269.3	—	224.2	224.8	223.9	225.6	—
Stationery and office supplies .....	5112	152.9	154.4	156.0	156.1	—	—	—	—	—	—
Drugs, proprietaries, and sundries .....	512	212.1	212.4	215.9	216.1	—	177.6	177.0	180.5	181.4	—
Apparel, piece goods, and notions .....	513	223.3	223.8	221.2	221.2	—	180.4	181.8	179.4	178.7	—
Groceries and related products .....	514	908.8	910.8	903.8	912.1	—	764.6	765.8	760.0	767.9	—
Groceries, general line .....	5141	286.9	286.8	288.1	288.8	—	—	—	—	—	—
Meats and meat products .....	5147	55.8	55.5	54.6	55.0	—	—	—	—	—	—
Fresh fruits and vegetables .....	5148	105.9	105.5	99.0	101.7	—	—	—	—	—	—
Farm-product raw materials .....	515	104.8	106.0	104.8	105.7	—	84.3	85.2	84.7	85.2	—
Chemicals and allied products .....	516	151.7	151.4	151.1	152.0	—	111.3	111.2	110.5	111.5	—
Petroleum and petroleum products .....	517	155.9	158.1	157.9	159.3	—	129.2	131.2	130.4	131.6	—
Petroleum bulk stations and terminals .....	5171	64.1	65.1	66.0	66.7	—	—	—	—	—	—
Petroleum products, nec .....	5172	91.8	93.0	91.9	92.6	—	—	—	—	—	—
Beer, wine, and distilled beverages .....	518	155.5	156.4	154.3	156.4	—	126.4	127.3	125.1	127.1	—
Beer and ale .....	5181	100.1	100.7	99.3	101.4	—	—	—	—	—	—
Wine and distilled beverages .....	5182	55.4	55.7	55.0	55.0	—	—	—	—	—	—
Misc. wholesale trade nondurable goods .....	519	546.8	546.6	576.5	575.6	—	443.3	441.5	466.6	464.0	—
Farm supplies .....	5191	169.5	168.8	180.1	177.8	—	—	—	—	—	—
<b>Retail trade .....</b>	<b>52</b>	<b>22,184</b>	<b>22,104</b>	<b>22,432</b>	<b>22,649</b>	<b>22,696</b>	<b>19,546</b>	<b>19,463</b>	<b>19,714</b>	<b>19,914</b>	<b>19,943</b>
Building materials and garden supplies .....	52	985.4	975.9	1,013.5	1,029.2	1,017.1	825.9	817.7	848.0	859.1	—
Lumber and other building materials .....	521	595.0	593.7	606.0	615.8	—	506.0	505.4	513.3	524.2	—
Paint, glass, and wallpaper stores .....	523	67.9	68.5	69.4	70.7	—	52.4	53.3	53.4	55.1	—
Hardware stores .....	525	166.2	165.6	167.6	169.4	—	137.2	136.8	138.0	139.9	—
Retail nurseries and garden stores .....	526	112.1	103.4	121.8	117.5	—	95.6	86.9	104.6	100.2	—
General merchandise stores .....	53	2,650.2	2,658.7	2,701.5	2,728.1	2,740.1	2,462.3	2,469.4	2,499.6	2,528.3	—
Department stores .....	531	2,325.4	2,337.5	2,382.3	2,405.5	2,417.1	2,184.1	2,193.7	2,227.5	2,253.1	—
Variety stores .....	533	138.4	136.1	135.5	137.3	—	117.6	115.8	114.3	116.1	—
Miscellaneous general merchandise stores .....	539	186.4	185.1	183.7	185.3	—	160.6	159.9	157.8	159.1	—
Food stores .....	54	3,510.5	3,523.5	3,521.6	3,558.0	3,576.1	3,182.1	3,193.8	3,194.4	3,226.9	—
Grocery stores .....	541	3,084.3	3,097.3	3,078.0	3,104.7	—	2,817.4	2,829.5	2,815.0	2,838.4	—
Meat and fish markets .....	542	48.0	48.2	48.9	49.0	—	—	—	—	—	—
Dairy products stores .....	545	14.4	15.0	13.4	14.1	—	—	—	—	—	—
Retail bakeries .....	546	211.1	209.6	225.0	228.4	—	184.5	182.7	196.1	198.5	—
Automotive dealers and service stations .....	55	2,330.2	2,339.7	2,349.9	2,372.1	2,384.6	1,954.7	1,958.2	1,948.5	1,968.8	—
New and used car dealers .....	551	1,053.3	1,054.8	1,059.8	1,065.3	1,070.4	884.5	885.4	887.4	893.0	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Retail trade—Continued</b>											
Automotive dealers and service stations—Continued											
Auto and home supply stores .....	553	396.1	400.8	407.0	412.1	—	318.1	319.8	311.1	314.5	—
Gasoline service stations .....	554	677.4	678.6	672.4	681.2	—	588.7	588.6	580.7	589.9	—
Automotive dealers, nec .....	559	9.7	10.0	9.7	9.7	—	8.1	8.3	7.9	8.0	—
Apparel and accessory stores .....	56	1,083.3	1,082.9	1,080.1	1,097.4	1,103.1	900.5	902.2	900.4	916.8	—
Men's and boys' clothing stores .....	561	81.6	79.7	79.9	79.5	—	65.2	63.1	64.7	64.6	—
Women's clothing stores .....	562	277.0	278.2	270.9	270.5	—	230.2	231.7	225.9	225.5	—
Family clothing stores .....	565	339.9	340.5	340.4	351.9	—	299.5	301.3	302.2	314.3	—
Shoe stores .....	566	198.7	197.0	201.0	202.8	—	157.2	155.4	158.7	159.6	—
Furniture and home furnishings stores .....	57	992.5	1,000.2	1,041.9	1,048.3	1,056.5	811.2	819.0	854.9	861.5	—
Furniture and home furnishings stores .....	571	511.6	514.7	534.1	537.6	—	414.9	418.5	433.6	437.5	—
Furniture stores .....	5712	299.5	301.5	316.5	317.6	—	—	—	—	—	—
Household appliance stores .....	572	71.4	71.2	68.7	69.2	—	57.6	57.7	55.5	56.0	—
Radio, television, and computer stores .....	573	409.5	414.3	439.1	441.5	—	338.7	342.8	365.8	368.0	—
Radio, television, and electronic stores .....	5731	179.0	181.9	191.2	191.3	—	148.8	151.0	159.6	159.1	—
Record and prerecorded tape stores .....	5735	77.1	77.4	82.7	83.1	—	62.6	63.1	68.9	70.3	—
Eating and drinking places .....	58	7,880.5	7,775.1	7,861.5	7,960.3	7,952.8	7,117.8	7,014.3	7,084.0	7,173.1	—
Miscellaneous retail establishments .....	59	2,750.9	2,747.5	2,861.7	2,861.8	2,865.3	2,291.2	2,287.9	2,384.6	2,379.0	—
Drug stores and proprietary stores .....	591	623.9	624.4	646.9	648.2	—	518.6	518.9	541.8	541.2	—
Liquor stores .....	592	111.0	111.6	113.0	115.2	—	—	—	—	—	—
Used merchandise stores .....	593	115.2	114.7	120.2	121.2	—	95.9	95.4	100.2	101.0	—
Miscellaneous shopping goods stores .....	594	952.5	956.8	984.5	987.1	—	795.2	798.8	817.9	819.2	—
Sporting goods and bicycle shops .....	5941	187.5	188.6	194.0	199.6	—	—	—	—	—	—
Book stores .....	5942	116.9	115.7	125.1	117.6	—	—	—	—	—	—
Stationery stores .....	5943	87.0	86.9	91.9	91.8	—	—	—	—	—	—
Jewelry stores .....	5944	141.2	140.6	142.9	143.7	—	—	—	—	—	—
Gift, novelty, and souvenir shops .....	5947	228.9	232.0	230.8	235.8	—	—	—	—	—	—
Sewing, needlework, and piece goods .....	5949	49.2	49.8	50.0	49.4	—	—	—	—	—	—
Nonstore retailers .....	596	328.7	327.6	343.2	344.3	—	278.0	277.1	290.8	291.2	—
Catalog and mail-order houses .....	5961	205.5	205.2	218.9	220.6	—	—	—	—	—	—
Merchandising machine operators .....	5962	67.9	67.3	68.9	68.4	—	—	—	—	—	—
Fuel dealers .....	598	95.0	94.9	95.3	95.2	—	78.2	78.1	78.7	78.4	—
Retail stores, nec .....	599	524.6	517.5	558.6	550.6	—	435.2	428.8	463.2	454.3	—
Florists, tobacco stores, and newsstands .....	5992,3,4	151.4	145.7	172.5	158.5	—	—	—	—	—	—
Optical goods stores .....	5995	67.3	67.4	74.5	74.6	—	56.1	56.6	60.6	60.2	—
Miscellaneous retail stores, nec .....	5999	305.9	304.4	311.6	317.5	—	249.9	248.4	255.2	259.9	—
<b>Finance, insurance, and real estate<sup>3</sup></b> .....		7,139	7,188	7,310	7,404	7,452	5,229	5,270	5,370	5,461	5,498
Finance .....		3,421	3,439	3,531	3,569	3,592	—	—	—	—	—
Depository institutions .....	60	2,037.7	2,044.1	2,038.5	2,055.5	2,062.2	1,468.1	1,473.5	1,465.9	1,483.4	—
Commercial banks .....	602	1,468.1	1,472.8	1,458.6	1,469.4	1,473.4	1,042.8	1,047.1	1,034.3	1,046.0	—
State commercial banks .....	6022	593.2	595.6	599.0	605.8	—	425.0	426.5	428.3	435.0	—
National and commercial banks, nec .....	6021,9	874.9	877.2	859.6	863.6	—	617.8	620.6	606.0	611.0	—
Savings institutions .....	603	263.7	263.9	263.9	266.3	267.8	—	—	—	—	—
Federal savings institutions .....	6035	146.0	146.5	146.0	147.8	—	—	—	—	—	—
Savings institutions, except federal .....	6036	117.7	117.4	117.9	118.5	—	—	—	—	—	—
Credit unions .....	606	172.3	173.3	178.0	179.4	—	136.9	137.9	141.7	142.8	—
Nondepository institutions .....	61	567.2	569.2	612.0	620.5	626.9	405.8	405.8	421.7	429.3	—
Personal credit institutions .....	614	179.0	180.4	185.6	186.8	—	125.7	125.9	110.0	111.3	—
Business credit institutions .....	615	114.4	115.6	121.3	122.7	—	—	—	—	—	—
Mortgage bankers and brokers .....	616	252.9	252.4	283.2	288.3	292.1	—	—	—	—	—
Security and commodity brokers .....	62	594.8	603.2	640.0	650.3	660.1	—	—	—	—	—
Security brokers and dealers .....	621	443.3	449.7	470.1	477.7	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges .....	622,3	25.0	25.6	25.5	25.9	—	—	—	—	—	—
Security and commodity services .....	628	126.5	127.9	144.4	146.7	—	84.4	85.4	96.6	98.5	—
Holding and other investment offices .....	67	221.4	222.5	240.1	242.3	243.0	—	—	—	—	—
Holding offices .....	671	106.0	106.3	110.2	111.0	—	—	—	—	—	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Finance, insurance, and real estate—Continued</b>											
Insurance .....	63,64	2,262	2,272	2,319	2,336	2,346	—	—	—	—	—
Insurance carriers .....	63	1,535.9	1,543.5	1,578.3	1,590.8	1,601.1	1,115.4	1,123.5	1,191.7	1,204.9	—
Life insurance .....	631	517.2	521.8	527.8	530.2	—	337.5	338.9	351.7	354.9	—
Medical service and health insurance .....	632	338.4	339.7	352.9	355.0	—	276.7	278.1	285.2	286.7	—
Hospital and medical service plans .....	6324	276.1	277.3	289.8	291.1	—	228.8	230.0	238.1	239.2	—
Fire, marine, and casualty insurance .....	633	540.0	540.7	544.2	549.3	—	388.5	392.8	430.7	437.5	—
Title insurance .....	636	71.4	72.0	80.4	82.3	—	—	—	—	—	—
Insurance agents, brokers, and service .....	64	726.4	728.5	740.5	744.7	745.2	—	—	—	—	—
Real estate .....	65	1,456	1,477	1,460	1,499	1,514	—	—	—	—	—
Real estate operators and lessors .....	651	592.4	598.8	579.2	594.7	—	—	—	—	—	—
Real estate agents and managers .....	653	705.1	719.4	716.1	736.7	—	—	—	—	—	—
Subdividers and developers .....	655	124.8	125.2	127.1	128.1	—	—	—	—	—	—
<b>Services .....</b>		<b>36,345</b>	<b>36,536</b>	<b>37,529</b>	<b>37,876</b>	<b>38,003</b>	<b>31,812</b>	<b>32,005</b>	<b>32,761</b>	<b>33,090</b>	<b>33,208</b>
Agricultural services .....	07	756.5	758.3	758.0	789.3	792.6	645.5	647.4	644.7	674.8	—
Veterinary services .....	074	184.4	185.7	189.3	193.6	—	155.4	156.5	159.5	163.6	—
Landscape and horticultural services .....	078	520.6	519.2	518.6	543.6	—	447.6	446.6	443.5	467.9	—
Hotels and other lodging places .....	70	1,837.6	1,878.4	1,788.3	1,874.7	1,920.5	—	—	—	—	—
Hotels and motels .....	701	1,770.4	1,799.7	1,736.6	1,803.4	—	1,560.8	1,593.6	1,525.7	1,589.0	—
Personal services .....	72	1,153.1	1,137.8	1,176.8	1,157.9	1,142.1	—	—	—	—	—
Laundry, cleaning, and garment services .....	721	439.4	439.9	443.8	444.8	—	387.3	387.3	391.2	391.7	—
Photographic studios, portrait .....	722	67.1	65.8	58.3	55.8	—	—	—	—	—	—
Beauty shops .....	723	397.8	392.2	403.9	403.0	—	354.1	349.1	357.5	356.5	—
Funeral service and crematories .....	726	97.1	97.8	100.4	100.6	—	—	—	—	—	—
Miscellaneous personal services .....	729	136.0	126.8	154.9	138.5	—	112.1	104.4	128.4	114.9	—
Business services .....	73	8,018.5	8,074.2	8,467.9	8,585.4	8,599.9	7,128.0	7,185.6	7,504.9	7,617.0	—
Advertising .....	731	255.2	256.8	265.6	269.4	—	185.4	186.6	190.6	193.6	—
Advertising agencies .....	7311	168.6	169.0	173.7	176.1	—	—	—	—	—	—
Credit reporting and collection .....	732	135.1	135.5	138.2	139.2	—	—	—	—	—	—
Mailing, reproduction, and stenographic services .....	733	304.4	304.3	314.9	314.8	—	—	—	—	—	—
Photocopying and duplicating services .....	7334	76.4	76.5	79.7	79.2	—	64.5	64.9	67.9	67.4	—
Services to buildings .....	734	949.4	944.9	980.0	985.9	986.1	849.7	845.3	877.3	882.7	—
Disinfecting and pest control services .....	7342	90.8	91.4	96.6	98.6	—	73.1	73.6	78.6	80.5	—
Building maintenance services, nec .....	7349	858.6	853.5	883.4	887.3	—	776.6	771.7	798.7	802.2	—
Miscellaneous equipment rental and leasing .....	735	257.1	257.6	264.6	269.2	—	207.6	208.2	209.9	215.2	—
Medical equipment rental .....	7352	40.3	40.8	40.2	40.4	—	30.9	31.2	29.1	29.3	—
Heavy construction equipment rental .....	7353	45.9	44.9	46.7	47.1	—	38.7	38.0	39.6	39.9	—
Equipment rental and leasing, nec .....	7359	170.9	171.9	177.7	181.7	—	138.0	139.0	141.2	146.0	—
Personnel supply services .....	736	2,982.0	3,018.7	3,134.4	3,192.2	3,172.5	—	—	—	—	—
Employment agencies .....	7361	327.8	327.0	333.0	341.3	—	—	—	—	—	—
Help supply services .....	7363	2,654.2	2,691.7	2,801.4	2,850.9	2,831.6	2,579.3	2,620.7	2,720.6	2,769.6	—
Computer and data processing services .....	737	1,407.3	1,417.7	1,575.0	1,597.1	1,618.2	1,124.7	1,133.1	1,256.4	1,276.1	—
Computer programming services .....	7371	320.7	322.9	363.7	369.4	—	273.0	275.2	309.2	314.6	—
Prepackaged software .....	7372	229.1	231.9	264.4	269.7	—	—	—	—	—	—
Computer integrated systems design .....	7373	162.3	164.1	180.2	182.9	—	114.3	115.7	125.2	127.7	—
Data processing and preparation .....	7374	249.8	249.3	270.1	273.0	—	—	—	—	—	—
Information retrieval services .....	7375	81.9	82.0	89.6	91.5	—	59.7	59.5	64.7	66.5	—
Computer maintenance and repair .....	7378	57.5	57.6	57.1	57.5	—	40.7	40.9	40.1	41.1	—
Miscellaneous business services .....	738	1,728.0	1,738.7	1,795.2	1,817.6	—	1,505.6	1,516.9	1,560.9	1,581.4	—
Detective and armored car services .....	7381	569.5	573.4	601.3	603.4	—	526.5	530.2	553.7	555.3	—
Security systems services .....	7382	56.8	57.2	59.4	59.4	—	48.9	49.1	48.2	48.2	—
Photofinishing laboratories .....	7384	75.2	75.4	79.9	81.0	—	—	—	—	—	—
Auto repair, services, and parking .....	75	1,127.0	1,133.6	1,154.7	1,167.2	1,172.2	930.3	934.1	937.1	948.4	—
Automotive rentals, without drivers .....	751	199.8	201.9	204.8	209.6	—	164.6	166.2	167.1	172.3	—
Passenger car rental .....	7514	131.9	133.8	136.9	140.5	—	110.3	111.7	113.0	116.7	—
Automobile parking .....	752	72.4	72.1	76.3	77.3	—	64.1	63.6	66.4	67.2	—
Automotive repair shops .....	753	623.8	626.3	631.4	638.8	—	503.8	504.3	497.2	503.1	—
Automotive and tire repair shops .....	7532,4	216.6	216.9	220.0	222.9	—	178.4	177.8	179.0	181.8	—
General automotive repair shops .....	7538	264.2	265.7	268.7	271.5	—	213.0	213.9	206.4	207.7	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Services—Continued</b>											
Auto repair, services, and parking—Continued											
Automotive services, except repair .....	754	231.0	233.3	242.2	241.5	—	197.8	200.0	206.4	205.8	—
Carwashes .....	7542	123.1	123.1	128.6	127.4	—	108.9	108.8	113.9	112.9	—
Miscellaneous repair services .....	76	379.5	381.5	385.3	390.3	390.4	310.9	312.0	314.9	319.7	—
Electrical repair shops .....	762	116.6	118.1	118.3	119.5	—	—	—	—	—	—
Motion pictures .....	78	549.8	555.7	565.3	557.2	565.1	462.8	468.8	469.0	462.5	—
Motion picture production and services .....	781	224.9	228.7	237.2	223.8	—	188.0	191.4	194.3	183.2	—
Motion picture theaters .....	783	143.9	146.8	136.9	143.7	—	—	—	—	—	—
Video tape rental .....	784	161.0	160.3	171.4	170.1	—	130.1	130.0	137.5	135.9	—
Amusement and recreation services .....	79	1,820.4	1,873.9	1,755.5	1,941.9	2,005.3	1,618.8	1,673.3	1,540.6	1,726.0	—
Bowling centers .....	793	71.5	69.4	74.6	69.1	—	63.0	60.8	65.9	60.6	—
Misc. amusement and recreation services .....	799	1,375.9	1,422.2	1,291.1	1,449.7	—	1,227.7	1,274.7	1,137.4	1,292.2	—
Physical fitness facilities .....	7991	166.3	165.2	179.2	182.4	—	147.5	147.2	159.6	162.7	—
Membership sports and recreation clubs .....	7997	413.8	427.8	384.2	450.8	—	371.7	385.5	340.8	406.2	—
Health services .....	80	9,728.9	9,759.8	9,881.2	9,927.2	9,941.1	8,627.0	8,652.9	8,754.3	8,799.7	—
Offices and clinics of medical doctors .....	801	1,744.6	1,751.4	1,804.0	1,818.0	1,827.1	1,434.9	1,439.3	1,485.8	1,497.6	—
Offices and clinics of dentists .....	802	627.8	629.2	640.6	644.4	—	549.5	550.8	558.1	561.9	—
Offices and clinics of other health practitioners .....	804	439.2	439.2	466.2	466.7	—	365.8	365.5	386.8	388.8	—
Offices and clinics of chiropractors and optometrists .....	8041, 2	164.8	166.5	171.0	171.3	—	—	—	—	—	—
Nursing and personal care facilities .....	805	1,756.3	1,761.9	1,756.9	1,762.1	1,762.7	1,579.9	1,585.2	1,580.8	1,585.6	—
Skilled nursing care facilities .....	8051	1,331.4	1,334.7	1,332.1	1,335.9	—	—	—	—	—	—
Intermediate care facilities .....	8052	208.4	208.4	208.7	209.1	—	187.4	186.9	187.6	188.3	—
Nursing and personal care, nec .....	8059	216.5	218.8	216.1	217.1	—	—	—	—	—	—
Hospitals .....	806	3,870.1	3,883.9	3,938.9	3,960.3	3,972.8	3,546.9	3,559.0	3,608.8	3,630.2	—
General medical and surgical hospitals .....	8062	3,568.5	3,581.4	3,630.0	3,649.6	—	—	—	—	—	—
Psychiatric hospitals .....	8063	84.6	84.2	84.8	85.4	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric .....	8069	217.0	218.3	224.1	225.3	—	—	—	—	—	—
Medical and dental laboratories .....	807	199.7	200.9	201.4	202.8	—	—	—	—	—	—
Home health care services .....	808	715.8	716.5	686.0	684.5	674.2	659.9	660.7	632.3	630.5	—
Legal services .....	81	959.5	963.7	971.8	994.7	1,000.7	767.7	771.6	775.3	796.6	—
Educational services .....	82	1,920.7	1,853.5	2,228.2	2,012.6	1,923.7	—	—	—	—	—
Elementary and secondary schools .....	821	616.4	581.8	667.9	643.6	—	—	—	—	—	—
Colleges and universities .....	822	1,043.3	1,005.7	1,284.3	1,088.0	—	—	—	—	—	—
Vocational schools .....	824	80.4	78.8	86.8	85.0	—	—	—	—	—	—
Social services .....	83	2,506.0	2,516.1	2,634.6	2,625.9	2,633.6	2,173.2	2,192.7	2,278.7	2,271.6	—
Individual and family services .....	832	671.7	679.5	707.3	708.9	—	582.7	589.8	613.1	614.4	—
Job training and related services .....	833	363.7	392.1	373.4	392.9	—	314.3	343.0	320.0	340.5	—
Child day care services .....	835	556.6	518.1	597.6	569.5	537.9	492.3	456.1	528.8	502.3	—
Residential care .....	836	722.0	727.0	748.4	755.1	759.9	626.3	632.3	648.1	654.1	—
Social services, nec .....	839	192.0	199.4	207.9	199.5	—	157.6	171.5	168.7	160.3	—
Museums and botanical and zoological gardens .....	84	97.1	98.4	94.8	98.3	99.9	—	—	—	—	—
Membership organizations .....	86	2,286.2	2,322.1	2,265.3	2,305.7	2,341.8	—	—	—	—	—
Business associations .....	861	108.8	109.9	108.8	110.4	—	—	—	—	—	—
Professional organizations .....	862	59.2	58.8	61.4	61.8	—	42.8	42.4	44.3	44.6	—
Labor organizations .....	863	143.3	137.3	143.2	142.5	—	—	—	—	—	—
Civic and social associations .....	864	471.0	511.9	451.1	487.4	—	—	—	—	—	—
Engineering and management services .....	87	3,010.7	3,035.0	3,206.0	3,252.0	3,278.1	2,307.7	2,326.2	2,454.3	2,494.3	—
Engineering and architectural services .....	871	876.1	882.6	911.5	932.7	940.3	720.8	728.0	749.3	768.9	—
Engineering services .....	8711	670.0	675.4	698.0	712.5	—	557.2	562.8	580.4	593.8	—
Architectural services .....	8712	148.1	148.9	154.9	158.9	—	116.0	117.2	120.9	124.7	—
Surveying services .....	8713	58.0	58.3	58.6	61.3	—	47.6	48.0	48.0	50.4	—
Accounting, auditing, and bookkeeping .....	872	589.8	588.8	636.5	635.7	—	413.0	411.2	453.8	453.7	—

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 <sup>1</sup>				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Services—Continued</b>											
Engineering and management services—Continued											
Research and testing services .....	873	596.2	605.0	626.5	638.4	—	456.1	463.7	482.1	491.6	—
Commercial physical research .....	8731	226.5	228.4	234.3	238.4	—	157.5	159.2	162.9	165.3	—
Commercial nonphysical research .....	8732	135.5	137.9	147.7	150.0	—	112.5	114.5	124.2	126.1	—
Noncommercial research organizations .....	8733	140.9	144.4	148.8	151.8	—	110.0	113.1	116.9	119.7	—
Management and public relations .....	874	948.6	958.6	1,031.5	1,045.2	1,053.9	717.8	723.3	769.1	780.1	—
Management services .....	8741	316.0	316.4	342.0	346.6	—	235.9	235.6	255.3	259.3	—
Management consulting services .....	8742	333.2	339.7	373.5	378.6	—	253.9	257.7	275.9	279.4	—
Public relations services .....	8743	39.0	39.5	42.5	42.9	—	25.7	26.0	28.7	29.1	—
Services, nec .....	89	49.8	50.5	51.6	52.4	52.7	39.7	40.3	40.6	41.5	—
<b>Government</b> .....		19,621	18,535	20,210	19,893	18,785	—	—	—	—	—
<b>Federal Government<sup>4</sup></b> .....		2,720	2,713	2,676	2,695	2,689	—	—	—	—	—
Executive, by agency <sup>4</sup> .....		2,657.5	2,650.4	2,614.6	—	—	—	—	—	—	—
Department of Defense .....		707.1	705.6	669.1	—	—	—	—	—	—	—
Postal Service <sup>5</sup> .....		849.5	845.2	854.1	—	—	—	—	—	—	—
Other executive agencies .....		1,100.9	1,099.6	1,091.4	—	—	—	—	—	—	—
Legislative .....		32.3	32.4	30.7	—	—	—	—	—	—	—
Judicial .....		29.8	29.9	30.7	—	—	—	—	—	—	—
Federal Government, except Postal Service .....		1,870.1	1,867.5	1,821.9	1,839.2	1,835.0	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities .....		50.2	49.9	47.6	47.6	—	—	—	—	—	—
Ship building and repairing .....	3731	22.3	22.2	22.1	22.2	—	—	—	—	—	—
Transportation and public utilities, except Postal Service .....		14.0	14.0	12.2	12.3	—	—	—	—	—	—
Services .....		364.8	366.4	360.7	359.6	—	—	—	—	—	—
Hospitals .....	806	223.7	224.4	221.3	221.7	—	—	—	—	—	—
State government .....		4,447	4,382	4,697	4,487	4,414	—	—	—	—	—
Construction .....		90.4	91.2	87.0	90.3	—	—	—	—	—	—
Transportation and public utilities .....		53.4	53.2	51.8	46.9	—	—	—	—	—	—
Services .....		2,460.5	2,371.7	2,711.2	2,476.4	—	—	—	—	—	—
Hospitals .....	806	365.1	365.1	365.1	365.1	—	—	—	—	—	—
Education .....	82	1,737.5	1,645.5	1,993.3	1,753.3	1,649.3	—	—	—	—	—
Social services .....		210.2	211.3	207.3	208.7	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		147.7	149.8	145.5	149.3	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		1,843.0	1,865.4	1,847.0	1,873.8	—	—	—	—	—	—
State government, except education .....		2,709.8	2,736.0	2,703.7	2,734.1	2,764.2	—	—	—	—	—
Local government .....		12,454	11,440	12,837	12,711	11,682	—	—	—	—	—
Transportation and public utilities .....		457.3	458.3	455.8	460.2	—	—	—	—	—	—
Services .....		8,084.6	6,973.9	8,565.3	8,278.9	—	—	—	—	—	—
Hospitals .....	806	636.8	638.5	650.1	652.1	—	—	—	—	—	—
Education .....	82	6,928.0	5,770.7	7,404.0	7,083.4	5,913.7	—	—	—	—	—
Social services .....		139.6	154.7	141.7	143.2	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		380.2	410.0	369.5	400.2	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		3,911.6	4,007.9	3,816.1	3,972.3	—	—	—	—	—	—
Local government, except education .....		5,525.5	5,669.4	5,433.2	5,628.0	5,768.5	—	—	—	—	—

<sup>1</sup> 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.

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

<sup>3</sup> Excludes nonoffice commissioned real estate sales agents.

<sup>4</sup> Prepared by the Office of Personnel Management. Data relate to civilian

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

<sup>5</sup> 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	Apr. 1997	May 1997	Mar. 1998	Apr. 1998	May 1998
<b>Total</b> .....	59,142	59,519	60,275	60,558	60,971
<b>Total private</b> .....	48,058	48,410	48,961	49,249	49,623
<b>Goods-producing</b> .....	6,643	6,676	6,717	6,716	6,744
<b>Mining</b> .....	80	81	82	82	82
<b>Construction</b> .....	619	630	640	648	661
<b>Manufacturing</b> .....	5,944	5,965	5,995	5,986	6,001
<b>Durable goods</b> .....	2,889	2,901	2,975	2,975	2,978
Lumber and wood products .....	136	138	138	140	141
Furniture and fixtures .....	160	161	165	166	167
Stone, clay, and glass products .....	104	104	106	106	107
Primary metal industries .....	102	102	104	104	104
Fabricated metal products .....	325	326	333	333	334
Industrial machinery and equipment .....	471	473	487	486	485
Electronic and other electrical equipment .....	689	691	714	710	709
Transportation equipment .....	381	383	401	404	406
Instruments and related products .....	351	351	356	356	355
Miscellaneous manufacturing .....	171	172	170	170	171
<b>Nondurable goods</b> .....	3,055	3,064	3,020	3,011	3,023
Food and kindred products .....	533	538	538	536	544
Tobacco products .....	11	11	13	12	11
Textile mill products .....	287	289	277	279	279
Apparel and other textile products .....	620	619	581	575	573
Paper and allied products .....	165	166	167	165	166
Printing and publishing .....	699	700	704	705	707
Chemicals and allied products .....	329	329	329	328	331
Petroleum and coal products .....	24	24	24	24	24
Rubber and misc. plastics products .....	338	339	344	343	343
Leather and leather products .....	49	49	45	44	44
<b>Service-producing</b> .....	52,499	52,843	53,558	53,842	54,227
<b>Transportation and public utilities</b> .....	1,938	1,949	1,945	1,946	1,964
<b>Wholesale trade</b> .....	2,038	2,051	2,067	2,071	2,083
<b>Retail trade</b> .....	11,347	11,524	11,413	11,536	11,746
<b>Finance, insurance, and real estate</b> .....	4,429	4,448	4,548	4,570	4,589
<b>Services</b> .....	21,663	21,762	22,271	22,410	22,497
<b>Government</b> .....	11,084	11,109	11,314	11,309	11,348
Federal .....	1,144	1,148	1,132	1,136	1,141
State .....	2,394	2,365	2,438	2,438	2,410
Local .....	7,546	7,596	7,744	7,735	7,797

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Alabama</b> .....	1,868.4	1,885.8	1,885.5	10.1	9.8	9.5	98.8	100.6	101.1
Birmingham .....	464.2	471.9	473.0	3.1	3.0	2.6	27.3	29.0	29.2
Huntsville .....	173.2	175.3	175.6	(1)	(1)	(1)	6.0	6.3	6.4
Mobile .....	222.5	224.2	225.1	(1)	(1)	(1)	17.1	17.1	17.1
Montgomery .....	156.5	157.7	158.1	(1)	(1)	(1)	8.6	8.1	8.3
Tuscaloosa .....	77.5	81.3	80.5	2.7	2.7	2.7	5.9	6.3	6.3
<b>Alaska</b> .....	283.1	277.1	287.0	10.1	10.3	10.5	15.0	13.3	15.2
Anchorage .....	127.4	128.3	131.1	2.4	2.7	2.6	7.5	7.0	7.8
<b>Arizona</b> .....	1,959.6	2,068.3	2,047.8	14.2	13.4	13.4	131.7	134.4	136.8
Phoenix-Mesa .....	1,368.7	1,459.6	1,444.9	6.5	6.0	6.0	94.4	98.0	99.8
Tucson .....	310.8	324.7	321.1	2.4	2.3	2.4	19.5	20.7	21.1
<b>Arkansas</b> .....	1,108.0	1,130.8	1,131.4	3.6	3.7	3.6	49.1	49.8	50.8
Fayetteville-Springdale-Rogers .....	137.2	140.4	139.9	(1)	(1)	(1)	5.8	5.5	5.7
Fort Smith .....	95.8	96.5	96.7	.9	.9	.8	4.0	4.2	4.4
Little Rock-North Little Rock .....	304.4	307.9	307.3	(1)	(1)	(1)	14.9	14.9	15.1
Pine Bluff .....	35.8	35.5	35.5	(1)	(1)	(1)	1.0	1.0	1.0
<b>California</b> .....	13,238.0	13,571.8	13,636.0	29.6	28.6	28.9	556.6	590.3	607.7
Bakersfield .....	184.0	182.0	184.0	10.8	10.8	10.8	8.8	7.8	8.1
Fresno .....	277.6	279.7	281.0	.6	.5	.5	13.6	14.3	14.8
Los Angeles-Long Beach .....	3,878.8	3,975.0	3,976.1	5.8	5.5	5.7	110.3	113.0	114.0
Modesto .....	134.5	135.2	136.5	(2)	(2)	(2)	7.1	7.2	7.4
Oakland .....	957.2	974.7	979.0	2.3	2.3	2.3	50.6	53.6	55.4
Orange County .....	1,239.4	1,277.1	1,282.5	.9	.9	.9	58.3	63.1	64.0
Riverside-San Bernardino .....	847.1	882.0	881.0	1.2	1.1	1.1	52.5	57.0	57.9
Sacramento .....	627.6	637.2	638.3	.2	.2	.2	34.1	34.6	36.4
Salinas .....	119.1	119.7	120.6	.1	.1	.1	4.5	4.8	5.0
San Diego .....	1,057.4	1,080.1	1,085.3	.4	.4	.4	53.1	54.2	55.4
San Francisco .....	992.2	1,000.9	1,005.4	.6	.5	.5	35.3	37.0	37.8
San Jose .....	934.3	956.8	961.9	.2	.1	.2	37.7	40.8	41.6
Santa Barbara-Santa Maria-Lompoc .....	153.1	153.9	153.8	1.1	1.0	1.0	6.6	6.3	6.6
Santa Rosa .....	166.5	171.3	171.2	.5	.4	.4	9.6	9.3	9.6
Stockton-Lodi .....	168.0	168.5	169.3	.1	.1	.1	8.2	7.7	8.2
Vallejo-Fairfield-Napa .....	152.3	156.1	157.1	.5	.5	.5	10.2	10.8	11.0
Ventura .....	246.1	251.4	252.7	1.7	1.5	1.5	11.3	11.0	11.2
<b>Colorado</b> .....	1,994.6	2,028.3	2,054.7	14.1	14.0	14.0	124.0	126.8	131.2
Boulder-Longmont .....	157.9	163.0	162.2	(1)	(1)	(1)	6.7	6.8	7.0
Colorado Springs .....	219.7	221.1	223.9	(1)	(1)	(1)	12.8	13.4	13.7
Denver .....	1,066.9	1,088.4	1,098.3	6.9	6.7	6.6	63.6	65.7	67.5
<b>Connecticut</b> .....	1,628.0	1,648.9	1,659.0	.8	.8	.8	59.7	59.6	62.3
Bridgeport .....	185.6	184.9	186.3	(2)	(2)	(2)	6.7	6.6	7.0
Danbury .....	86.3	86.9	87.0	(1)	(1)	(1)	3.6	3.8	4.0
Hartford .....	600.6	601.5	602.2	(1)	(1)	(1)	21.1	20.0	20.7
New Haven-Meriden .....	251.1	249.9	250.6	(1)	(1)	(1)	9.5	9.3	9.6
New London-Norwich .....	138.6	139.3	141.4	(1)	(1)	(1)	4.7	4.6	4.8
Stamford-Norwalk .....	205.9	208.0	211.1	(1)	(1)	(1)	6.1	5.7	5.9
Waterbury .....	87.7	88.6	89.4	(2)	(2)	(2)	3.4	3.5	3.6
<b>Delaware</b> .....	393.4	401.7	406.5	.1	.1	.1	21.8	22.1	22.8
Dover .....	51.8	54.5	54.9	.1	.1	.1	2.4	2.4	2.5
Wilmington-Newark .....	304.0	313.4	315.4	.2	.2	.2	16.4	16.6	17.1
<b>District of Columbia</b> .....	616.4	609.1	612.1	.1	.1	.1	9.1	8.6	8.7
Washington PMSA .....	2,501.3	2,538.0	2,559.3	1.0	1.1	1.1	127.8	131.7	134.4
<b>Florida</b> .....	6,422.1	6,674.3	6,668.3	6.5	6.8	6.8	333.0	345.7	348.3
Daytona Beach .....	149.7	154.4	153.5	(2)	(2)	(2)	7.7	7.7	7.8
Fort Lauderdale .....	627.0	647.6	647.9	.1	.1	.1	33.8	34.6	34.5
Fort Myers-Cape Coral .....	149.4	153.4	153.1	(2)	(2)	(2)	12.4	13.0	13.2
Gainesville .....	109.0	114.7	112.3	(2)	(2)	(2)	4.4	4.6	4.7
Jacksonville .....	520.5	542.6	542.5	(2)	(2)	(2)	28.4	28.5	28.8
Lakeland-Winter Haven .....	168.3	173.7	173.4	3.1	3.1	3.1	8.6	8.3	8.5
Melbourne-Titusville-Palm Bay .....	177.6	181.7	181.5	(2)	(2)	(2)	9.4	9.6	9.7
Miami .....	960.3	979.2	978.2	.3	.3	.3	33.9	33.6	34.1
Orlando .....	797.4	833.2	835.1	(2)	(2)	(2)	42.5	45.7	46.1
Pensacola .....	150.1	155.6	155.6	(2)	(2)	(2)	10.8	10.8	10.8
Sarasota-Bradenton .....	248.2	268.8	270.5	(2)	(2)	(2)	12.4	12.9	13.0
Tallahassee .....	144.5	149.9	146.7	(2)	(2)	(2)	6.0	5.9	5.9
Tampa-St. Petersburg-Clearwater .....	1,063.5	1,109.6	1,111.3	.4	.4	.4	51.0	54.6	55.0
West Palm Beach-Boca Raton .....	433.5	456.1	454.2	(2)	(2)	(2)	25.3	25.9	26.2

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Alabama</b> .....	381.5	375.7	375.8	91.5	91.4	91.6	429.0	433.1	435.4
Birmingham .....	51.8	50.4	50.2	30.0	30.4	30.3	112.4	114.8	116.0
Huntsville .....	39.3	39.7	39.7	3.7	3.4	3.4	34.8	35.2	35.3
Mobile .....	27.5	27.7	27.7	13.3	13.4	13.5	59.1	59.4	59.8
Montgomery .....	17.7	17.7	17.5	6.6	6.5	6.5	37.1	36.8	36.9
Tuscaloosa .....	11.7	12.2	12.4	2.4	2.6	2.6	18.3	18.4	18.5
<b>Alaska</b> .....	18.2	14.6	17.4	25.9	26.0	27.0	59.9	57.5	60.6
Anchorage .....	2.1	2.0	2.2	12.6	12.9	13.2	31.4	31.4	32.0
<b>Arizona</b> .....	206.4	215.1	216.1	96.9	98.3	99.2	476.1	499.6	496.6
Phoenix-Mesa .....	160.5	168.7	169.7	70.5	73.6	74.2	334.8	354.8	352.7
Tucson .....	28.4	29.3	29.6	13.5	13.4	13.5	67.2	70.1	69.1
<b>Arkansas</b> .....	255.2	254.9	256.6	65.4	67.8	67.7	253.5	257.3	258.6
Fayetteville-Springdale-Rogers .....	34.0	33.7	33.8	9.3	9.3	9.4	38.1	39.7	39.8
Fort Smith .....	27.4	26.6	26.8	6.6	6.5	6.5	20.3	19.9	20.0
Little Rock-North Little Rock .....	33.7	33.5	33.8	21.0	21.3	21.2	70.3	71.0	71.1
Pine Bluff .....	8.2	8.1	8.1	1.8	1.8	1.8	7.4	7.2	7.2
<b>California</b> .....	1,920.2	1,938.7	1,946.8	667.3	676.7	681.5	3,063.0	3,110.5	3,128.4
Bakersfield .....	10.0	10.3	10.5	10.2	10.5	10.7	43.0	42.4	42.9
Fresno .....	29.7	29.1	29.4	14.4	14.4	14.8	67.9	67.9	68.6
Los Angeles-Long Beach .....	664.3	680.3	681.4	210.3	216.4	217.0	858.5	872.8	876.2
Modesto .....	26.7	25.5	25.9	5.4	5.5	5.5	34.3	34.6	34.8
Oakland .....	120.0	120.2	121.1	61.3	60.6	61.0	214.6	216.5	218.0
Orange County .....	222.6	232.2	233.1	45.5	47.6	47.8	309.2	317.7	319.6
Riverside-San Bernardino .....	105.6	111.0	111.9	43.4	45.3	45.5	217.9	225.1	225.6
Sacramento .....	45.2	46.5	46.7	25.5	25.5	25.8	137.9	138.6	139.5
Salinas .....	9.4	8.7	8.8	5.6	5.7	5.8	31.4	31.7	31.9
San Diego .....	122.7	124.8	124.9	41.5	41.7	41.8	241.4	243.6	244.6
San Francisco .....	76.4	76.4	76.4	80.2	79.8	80.2	209.2	205.9	207.5
San Jose .....	257.0	259.0	260.2	27.6	28.5	29.0	184.4	187.9	189.6
Santa Barbara-Santa Maria-Lompoc .....	17.3	17.1	17.2	5.8	6.1	6.0	36.7	35.9	36.4
Santa Rosa .....	25.6	25.9	26.1	6.2	6.6	6.7	41.7	43.0	43.4
Stockton-Lodi .....	23.4	22.4	22.7	10.8	10.6	10.8	40.1	40.1	40.5
Vallejo-Fairfield-Napa .....	18.3	18.2	18.6	5.9	6.2	6.3	39.5	39.6	39.9
Ventura .....	33.0	34.3	34.6	9.6	10.2	10.2	60.6	60.7	61.2
<b>Colorado</b> .....	203.4	207.2	208.0	122.4	122.9	123.8	483.1	489.1	498.5
Boulder-Longmont .....	31.6	32.8	32.5	3.7	3.9	3.9	34.9	34.5	34.9
Colorado Springs .....	25.6	27.3	27.3	11.9	11.5	11.7	49.0	49.1	49.9
Denver .....	93.1	93.4	93.3	85.6	86.4	86.7	258.3	264.6	268.8
<b>Connecticut</b> .....	278.8	276.4	278.2	75.8	76.9	77.4	356.5	357.9	361.6
Bridgeport .....	40.0	39.7	39.9	7.2	7.2	7.2	41.4	41.5	41.5
Danbury .....	19.0	18.8	18.7	2.6	2.5	2.5	22.1	21.7	21.9
Hartford .....	93.2	94.3	95.3	27.5	27.2	27.6	125.7	123.2	124.5
New Haven-Meriden .....	39.9	39.3	39.3	16.0	16.2	16.4	53.4	52.6	53.4
New London-Norwich .....	25.1	24.5	24.4	6.6	6.7	6.8	28.8	27.9	28.9
Stamford-Norwalk .....	28.5	27.2	27.3	10.2	9.9	10.0	46.2	46.3	46.9
Waterbury .....	19.2	19.1	19.3	3.6	3.7	3.7	17.7	19.0	18.9
<b>Delaware</b> .....	56.9	59.1	59.6	16.0	15.8	15.8	87.8	87.3	89.3
Dover .....	6.0	6.2	6.2	1.8	1.9	2.0	12.7	12.9	13.0
Wilmington-Newark .....	42.7	45.3	45.8	13.8	14.0	13.8	61.9	62.5	63.1
<b>District of Columbia</b> .....	12.6	12.8	12.9	17.8	17.1	17.1	48.3	48.6	48.9
Washington PMSA .....	99.8	101.4	102.4	113.7	112.7	114.0	473.4	473.6	477.2
<b>Florida</b> .....	491.6	491.0	490.6	327.5	338.9	339.5	1,638.2	1,695.6	1,689.3
Daytona Beach .....	14.2	14.5	14.4	4.2	4.5	4.5	42.2	43.7	43.2
Fort Lauderdale .....	40.5	40.5	40.6	31.0	31.7	31.6	176.2	182.6	182.0
Fort Myers-Cape Coral .....	6.8	6.8	6.9	6.9	7.0	7.0	41.6	43.5	42.7
Gainesville .....	5.5	5.2	5.2	2.4	2.7	2.7	22.7	24.4	24.1
Jacksonville .....	37.4	38.9	39.2	36.1	37.5	37.6	128.4	132.1	132.9
Lakeland-Winter Haven .....	20.6	20.7	20.5	8.8	9.2	9.1	47.3	50.2	49.8
Melbourne-Titusville-Palm Bay .....	27.4	28.2	28.2	5.2	5.7	5.7	41.3	42.8	42.4
Miami .....	75.9	72.7	72.8	83.2	85.2	85.6	252.4	259.2	259.8
Orlando .....	52.2	53.3	53.2	41.3	42.9	42.9	196.8	204.7	204.9
Pensacola .....	11.0	10.7	10.8	7.2	7.7	7.7	38.9	40.4	40.8
Sarasota-Bradenton .....	20.5	21.6	21.6	5.4	5.4	5.4	58.0	61.8	61.0
Tallahassee .....	5.2	5.1	5.1	4.0	4.3	4.3	29.3	29.7	29.7
Tampa-St. Petersburg-Clearwater .....	88.8	87.3	87.6	48.2	49.8	49.8	257.0	263.2	261.8
West Palm Beach-Boca Raton .....	30.0	30.8	30.8	15.9	17.0	16.8	111.0	117.2	116.3

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	Finance, insurance, and real estate			Services			Government		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Alabama</b> .....	84.8	86.0	86.3	430.2	438.4	439.4	342.5	350.8	346.4
Birmingham .....	34.2	35.3	35.7	136.9	140.5	141.3	68.5	68.5	67.7
Huntsville .....	4.8	4.8	4.8	46.4	47.6	47.7	38.2	38.3	38.3
Mobile .....	10.2	10.0	10.1	60.9	61.0	61.2	34.4	35.6	35.7
Montgomery .....	9.3	9.4	9.4	40.9	41.6	41.8	36.3	37.6	37.7
Tuscaloosa .....	2.5	2.6	2.6	13.5	14.2	14.3	20.5	22.3	21.1
<b>Alaska</b> .....	12.6	12.4	12.8	69.1	68.4	71.2	72.3	74.6	72.3
Anchorage .....	7.3	7.3	7.4	36.1	36.6	37.3	28.0	28.4	28.6
<b>Arizona</b> .....	126.5	133.6	134.8	598.4	630.9	632.8	309.4	343.0	318.1
Phoenix-Mesa .....	106.6	114.4	115.6	434.5	459.9	462.2	160.9	184.2	164.7
Tucson .....	11.8	12.5	12.6	98.6	100.9	100.5	69.4	75.5	72.3
<b>Arkansas</b> .....	44.3	44.9	45.2	255.3	263.7	264.7	181.6	188.9	184.2
Fayetteville-Springdale-Rogers .....	4.9	5.0	5.0	26.7	27.2	27.3	18.4	20.0	18.9
Fort Smith .....	3.2	3.1	3.1	24.1	25.5	25.8	9.3	9.8	9.3
Little Rock-North Little Rock .....	17.4	17.4	17.3	88.7	90.3	90.3	58.4	59.5	58.5
Pine Bluff .....	1.3	1.3	1.3	8.5	8.5	8.6	7.6	7.6	7.5
<b>California</b> .....	760.1	779.7	784.3	4,066.0	4,226.1	4,243.0	2,175.2	2,221.2	2,215.4
Bakersfield .....	6.7	7.2	7.3	43.7	43.0	43.3	50.8	50.0	50.4
Fresno .....	13.8	13.7	13.7	71.7	72.1	72.3	65.9	67.7	66.9
Los Angeles-Long Beach .....	219.9	224.4	225.4	1,264.6	1,309.8	1,303.0	545.1	552.8	553.4
Modesto .....	4.5	4.4	4.4	32.6	32.9	33.2	23.9	25.1	25.2
Oakland .....	54.9	55.7	56.0	283.1	290.6	291.7	170.4	175.2	173.5
Orange County .....	92.5	94.2	94.8	374.7	381.5	384.1	135.7	139.9	138.2
Riverside-San Bernardino .....	30.3	31.5	31.6	221.2	233.0	231.3	175.0	178.0	176.1
Sacramento .....	41.7	43.5	43.9	173.4	175.6	176.0	169.6	172.7	169.8
Salinas .....	5.9	5.8	5.8	33.5	33.8	33.9	28.7	29.1	29.3
San Diego .....	61.4	62.4	62.6	340.3	353.9	356.6	196.6	199.1	199.0
San Francisco .....	102.6	104.3	105.2	361.7	372.4	373.4	126.2	124.6	124.4
San Jose .....	31.0	31.5	31.5	307.1	317.6	319.7	89.3	91.4	90.1
Santa Barbara-Santa Maria-Lompoc .....	7.3	7.4	7.4	46.9	47.9	47.1	31.4	32.2	32.1
Santa Rosa .....	9.4	9.7	9.8	48.5	49.6	49.8	25.0	26.8	25.4
Stockton-Lodi .....	8.8	8.6	8.6	41.7	43.1	42.5	34.9	35.9	35.9
Vallejo-Fairfield-Napa .....	6.2	6.4	6.4	40.2	42.3	42.7	31.5	32.1	31.7
Ventura .....	12.7	14.0	14.0	73.2	75.9	75.8	44.0	43.8	44.2
<b>Colorado</b> .....	127.9	131.0	132.5	605.0	609.6	626.8	314.7	327.7	319.9
Boulder-Longmont .....	5.6	5.6	5.6	50.3	51.4	52.4	25.1	28.0	25.9
Colorado Springs .....	11.8	12.1	12.1	73.5	72.1	74.0	35.1	35.6	35.2
Denver .....	84.6	87.8	88.4	329.6	334.7	341.0	144.6	149.1	146.0
<b>Connecticut</b> .....	131.7	135.2	136.5	500.9	511.5	517.1	223.8	228.6	225.1
Bridgeport .....	10.4	10.2	10.3	58.9	58.5	59.3	21.0	21.2	21.1
Danbury .....	4.5	4.8	4.9	24.9	25.1	25.3	9.6	10.2	9.7
Hartford .....	68.9	69.2	69.0	172.9	173.4	173.5	91.3	94.2	91.6
New Haven-Meriden .....	13.2	12.9	13.1	87.7	88.4	87.7	31.4	31.2	31.1
New London-Norwich .....	3.8	3.8	3.9	35.4	35.4	36.0	34.2	36.4	36.6
Stamford-Norwalk .....	23.7	26.3	26.7	73.5	74.5	76.3	17.7	18.1	18.0
Waterbury .....	4.3	4.2	4.3	27.0	26.6	27.1	12.5	12.5	12.5
<b>Delaware</b> .....	47.5	49.7	49.9	109.7	112.1	114.0	53.6	55.5	55.0
Dover .....	2.1	2.5	2.5	11.6	12.6	12.6	15.2	16.0	16.1
Wilmington-Newark .....	41.7	43.2	43.2	89.5	92.0	93.5	37.8	39.6	38.7
<b>District of Columbia</b> .....	28.3	28.4	28.5	265.7	266.7	268.6	234.5	226.8	227.3
Washington PMSA .....	134.7	133.5	135.2	959.3	985.6	999.4	591.6	596.4	595.6
<b>Florida</b> .....	410.1	426.2	427.4	2,271.4	2,399.3	2,411.8	943.8	970.8	954.6
Daytona Beach .....	6.4	6.6	6.5	51.8	53.6	53.4	23.2	23.8	23.7
Fort Lauderdale .....	44.5	46.0	46.1	215.7	226.3	227.2	85.2	85.8	85.8
Fort Myers-Cape Coral .....	8.9	9.2	9.2	47.8	48.5	48.3	24.9	25.3	25.7
Gainesville .....	5.2	5.3	5.3	32.3	33.7	33.9	36.5	38.8	36.4
Jacksonville .....	53.1	53.8	54.2	171.6	182.4	183.6	65.1	69.0	65.8
Lakeland-Winter Haven .....	7.7	8.0	8.1	46.2	48.1	48.0	26.0	26.1	26.3
Melbourne-Titusville-Palm Bay .....	5.8	6.0	6.0	63.7	64.1	64.2	24.8	25.3	25.3
Miami .....	67.5	68.1	67.5	312.1	323.2	322.7	135.0	136.9	135.4
Orlando .....	46.2	48.0	48.0	333.8	351.2	353.5	84.2	87.0	86.1
Pensacola .....	6.1	6.4	6.4	47.5	50.5	50.6	28.3	28.9	28.3
Sarasota-Bradenton .....	11.5	11.6	11.6	116.7	132.1	134.6	23.6	23.3	23.2
Tallahassee .....	5.7	5.8	5.9	38.5	39.1	39.1	55.6	59.8	56.5
Tampa-St. Petersburg-Clearwater .....	75.7	79.6	80.1	411.2	440.7	443.8	131.2	134.0	132.8
West Palm Beach-Boca Raton .....	30.5	31.3	31.6	166.7	178.5	178.0	54.1	55.4	54.5

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Georgia</b> .....	3,620.4	3,727.5	3,739.2	8.1	8.4	8.6	169.9	179.6	180.2
Albany .....	59.7	59.7	59.8	(2)	(2)	(2)	3.6	3.8	3.9
Athens .....	72.5	75.0	75.5	(1)	(1)	(1)	2.7	2.6	2.6
Atlanta .....	1,965.3	2,026.4	2,032.5	1.6	1.8	1.8	94.4	101.3	102.1
Augusta-Aiken .....	193.2	195.8	195.7	.4	.4	.4	11.8	11.1	11.1
Columbus .....	115.3	117.0	117.3	(1)	(1)	(1)	5.4	5.5	5.5
Macon .....	148.5	151.6	151.8	1.2	1.3	1.3	6.2	6.7	6.9
Savannah .....	131.1	134.1	134.5	(1)	(1)	(1)	7.6	7.4	7.5
<b>Hawaii</b> .....	534.5	529.6	527.3	(1)	(1)	(1)	22.2	21.2	21.2
Honolulu .....	406.4	400.9	399.0	(1)	(1)	(1)	17.2	16.5	16.4
<b>Idaho</b> .....	516.6	516.9	523.2	3.3	3.2	3.3	34.3	32.2	33.4
Boise City .....	195.1	197.6	199.8	(1)	(1)	(1)	14.3	12.5	12.9
<b>Illinois</b> .....	5,816.3	5,884.6	5,910.8	11.7	11.6	11.7	247.5	241.9	250.1
Bloomington-Normal .....	77.3	81.3	80.4	(1)	(1)	(1)	2.8	2.9	3.0
Champaign-Urbana .....	94.9	99.1	95.8	(1)	(1)	(1)	3.4	3.2	3.4
Chicago .....	4,075.5	4,104.3	4,129.3	1.7	1.8	1.8	166.1	162.7	167.0
Davenport-Moline-Rock Island .....	180.9	183.8	185.5	(1)	(1)	(1)	9.8	9.9	10.4
Decatur .....	57.6	57.5	57.9	(1)	(1)	(1)	4.0	4.0	4.1
Kankakee .....	43.9	43.5	44.4	(1)	(1)	(1)	2.0	1.8	1.9
Peoria-Pekin .....	172.3	174.8	175.2	(1)	(1)	(1)	8.4	7.7	8.2
Rockford .....	176.9	180.0	181.2	(1)	(1)	(1)	7.2	6.9	7.2
Springfield .....	113.9	114.1	114.6	(1)	(1)	(1)	5.0	4.9	5.0
<b>Indiana</b> .....	2,867.3	2,912.8	2,892.7	7.0	6.6	6.7	148.7	144.2	147.9
Bloomington .....	61.7	64.9	62.6	(1)	(1)	(1)	3.3	3.4	3.5
Elkhart-Goshen .....	117.5	117.4	117.5	(1)	(1)	(1)	5.0	4.9	5.0
Evansville-Henderson .....	154.4	153.9	154.7	1.3	1.3	1.3	10.0	9.8	10.4
Fort Wayne .....	271.0	273.2	273.7	(1)	(1)	(1)	13.6	13.9	14.5
Gary .....	267.2	267.8	268.3	(1)	(1)	(1)	18.3	17.6	18.0
Indianapolis .....	831.0	852.3	851.3	.8	.8	.8	47.2	48.8	50.0
Kokomo .....	51.3	54.0	53.5	(1)	(1)	(1)	2.3	2.6	2.7
Lafayette .....	88.4	94.4	90.3	(1)	(1)	(1)	4.1	4.1	4.4
Muncie .....	57.0	60.7	58.4	(1)	(1)	(1)	2.6	2.5	2.6
South Bend .....	135.5	136.3	136.6	(1)	(1)	(1)	8.1	7.3	7.7
Terre Haute .....	66.1	66.9	66.3	.2	.3	.3	3.3	3.2	3.3
<b>Iowa</b> .....	1,428.8	1,454.4	1,459.1	2.3	2.1	2.1	66.7	64.2	68.2
Cedar Rapids .....	113.0	115.3	116.4	(1)	(1)	(1)	5.6	6.1	6.6
Des Moines .....	275.0	272.8	274.7	(1)	(1)	(1)	13.1	11.8	12.7
Dubuque .....	51.1	52.6	52.3	(1)	(1)	(1)	2.1	2.1	2.2
Iowa City .....	65.7	68.9	69.0	(1)	(1)	(1)	2.5	2.5	2.7
Sioux City .....	66.0	66.4	66.5	(1)	(1)	(1)	4.0	4.0	4.2
Waterloo-Cedar Falls .....	70.2	73.4	71.9	(1)	(1)	(1)	3.0	2.9	3.0
<b>Kansas</b> .....	1,281.4	1,314.2	1,313.8	8.4	8.2	8.2	63.0	62.3	64.7
Lawrence .....	44.7	49.1	45.9	(1)	(1)	(1)	2.3	2.2	2.3
Topeka .....	100.9	100.2	102.3	(1)	(1)	(1)	4.7	4.8	5.0
Wichita .....	277.8	284.8	284.4	1.5	1.4	1.4	14.8	14.6	14.9
<b>Kentucky</b> .....	1,724.5	1,757.0	1,760.2	23.2	22.3	22.5	84.0	86.4	88.1
Lexington .....	267.0	276.3	276.1	.3	.3	.3	13.5	14.3	14.4
Louisville .....	556.0	571.8	575.3	.6	.5	.6	29.7	30.8	31.4
Owensboro .....	43.1	44.3	44.1	.3	.3	.3	3.2	3.6	3.6
<b>Louisiana</b> .....	1,854.0	1,888.4	1,890.7	53.7	55.5	55.7	118.0	120.1	122.1
Alexandria .....	54.3	54.5	54.7	.1	.1	.1	3.4	3.4	3.4
Baton Rouge .....	282.1	289.4	290.1	.9	1.0	1.0	31.2	33.8	34.0
Houma .....	74.2	78.0	78.7	7.2	7.6	7.4	3.5	3.8	3.9
Lafayette .....	160.8	165.0	164.7	15.1	15.6	15.6	9.1	10.4	10.5
Lake Charles .....	84.3	86.9	86.3	1.2	1.4	1.4	10.0	10.7	10.9
Monroe .....	67.8	68.7	69.0	.2	.2	.2	3.5	3.7	3.7
New Orleans .....	617.7	619.0	619.4	15.1	15.2	15.3	31.3	30.6	31.0
Shreveport-Bossier City .....	172.3	174.2	174.1	2.6	2.6	2.6	10.1	10.2	10.7
<b>Maine</b> .....	564.9	561.4	574.9	.1	.1	.1	24.9	24.5	25.7
Lewiston-Auburn .....	41.5	41.7	42.2	(2)	(2)	(2)	1.8	1.7	1.7
Portland .....	141.2	140.7	141.5	(2)	(2)	(2)	6.8	7.1	7.2

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Georgia</b> .....	589.9	590.8	591.7	230.1	238.1	239.2	911.0	935.9	934.1
Albany .....	9.2	8.7	8.6	3.0	3.2	3.2	13.7	14.1	14.1
Athens .....	11.6	11.7	11.8	1.8	1.9	1.9	18.1	18.5	18.6
Atlanta .....	219.0	221.1	221.3	163.9	169.8	169.8	520.9	533.5	532.3
Augusta-Aiken .....	41.2	41.7	41.3	6.6	6.8	6.8	41.9	43.1	43.1
Columbus .....	21.5	21.0	21.0	4.0	4.2	4.2	26.2	26.9	27.0
Macon .....	20.5	20.5	20.3	5.3	5.3	5.3	34.0	34.0	34.0
Savannah .....	17.6	18.2	18.3	9.5	9.6	9.7	33.0	34.1	34.7
<b>Hawaii</b> .....	16.8	16.1	16.2	41.4	40.4	40.7	134.6	131.8	131.8
Honolulu .....	12.9	12.4	12.4	33.5	32.5	32.7	99.9	97.3	97.4
<b>Idaho</b> .....	74.8	75.5	77.2	24.3	24.2	24.5	130.3	130.7	131.9
Boise City .....	34.6	36.5	36.9	9.5	9.8	9.9	46.9	46.4	47.0
<b>Illinois</b> .....	975.1	980.8	982.5	338.8	345.4	345.8	1,331.0	1,339.2	1,347.1
Bloomington-Normal .....	8.7	8.9	8.8	3.0	2.9	2.9	17.2	17.3	17.3
Champaign-Urbana .....	12.0	11.7	11.8	2.7	2.7	2.7	20.3	21.1	20.4
Chicago .....	660.5	661.3	661.4	248.3	253.7	254.2	922.9	927.9	934.3
Davenport-Moline-Rock Island .....	30.9	31.7	32.3	9.7	10.0	10.1	47.7	47.7	47.9
Decatur .....	13.6	13.4	13.5	5.0	4.9	4.9	12.4	12.5	12.4
Kankakee .....	8.3	8.3	8.3	2.0	2.0	2.1	11.0	10.9	11.1
Peoria-Pekin .....	32.4	32.7	33.1	9.5	9.8	9.8	41.4	42.6	42.2
Rockford .....	50.8	53.6	53.6	9.1	9.3	9.2	37.2	37.8	38.1
Springfield .....	4.5	4.7	4.7	4.9	4.9	4.9	24.4	24.5	24.6
<b>Indiana</b> .....	681.1	682.9	686.1	141.6	142.7	143.2	688.0	685.8	688.8
Bloomington .....	9.8	10.4	10.4	1.9	1.8	1.8	14.3	15.1	15.0
Elkhart-Goshen .....	59.4	59.4	59.8	3.0	2.7	2.7	22.6	22.2	22.2
Evansville-Henderson .....	32.5	31.8	32.0	7.2	7.1	7.1	38.2	38.2	38.2
Fort Wayne .....	75.6	75.8	76.0	13.0	12.8	12.8	64.5	64.8	65.0
Gary .....	50.4	49.6	49.6	15.6	15.6	15.6	64.4	64.5	65.2
Indianapolis .....	126.8	129.3	129.9	51.1	52.2	52.4	216.4	218.4	219.6
Kokomo .....	20.4	21.4	21.3	1.2	1.2	1.2	11.2	11.2	11.2
Lafayette .....	22.3	22.1	22.1	2.3	2.3	2.3	18.7	18.9	18.6
Muncie .....	11.1	9.6	9.5	3.3	3.5	3.6	13.6	13.7	13.8
South Bend .....	22.4	22.8	23.0	5.6	5.7	5.6	34.8	34.3	34.4
Terre Haute .....	12.0	12.0	12.1	2.9	2.7	2.7	19.2	19.0	19.1
<b>Iowa</b> .....	256.2	258.4	261.0	66.5	68.3	68.4	349.1	352.4	354.4
Cedar Rapids .....	21.5	22.4	22.8	8.2	7.8	7.8	25.3	25.7	25.8
Des Moines .....	25.2	24.7	25.1	13.6	13.7	13.7	71.2	70.5	71.1
Dubuque .....	12.0	11.8	12.1	2.2	2.1	2.1	12.4	12.6	12.7
Iowa City .....	4.8	4.7	4.8	2.4	2.3	2.3	12.8	13.0	12.9
Sioux City .....	12.7	13.3	13.3	4.0	3.9	3.9	16.3	15.6	15.6
Waterloo-Cedar Falls .....	15.0	15.2	15.4	2.4	2.3	2.4	16.5	16.8	16.8
<b>Kansas</b> .....	207.6	211.8	211.6	72.3	74.3	74.4	311.6	318.8	320.8
Lawrence .....	5.3	5.5	5.5	1.2	1.2	1.2	12.0	11.9	11.8
Topeka .....	10.2	10.1	10.1	6.2	6.2	6.2	21.4	21.2	21.3
Wichita .....	69.2	73.5	73.9	10.7	11.1	11.0	62.6	62.9	63.4
<b>Kentucky</b> .....	318.7	316.1	317.3	97.7	101.5	101.8	412.9	418.5	420.8
Lexington .....	46.8	46.3	48.7	10.8	10.8	10.8	60.3	62.5	62.9
Louisville .....	88.6	89.3	89.5	40.2	43.6	43.7	137.0	140.1	141.0
Owensboro .....	7.1	7.1	7.1	2.2	2.3	2.4	10.9	11.0	11.0
<b>Louisiana</b> .....	192.5	190.4	190.0	111.0	113.4	114.4	429.0	436.9	438.0
Alexandria .....	3.4	3.5	3.5	2.7	2.7	2.7	12.2	12.4	12.4
Baton Rouge .....	24.6	25.1	25.4	12.5	12.6	12.6	65.3	67.9	68.2
Houma .....	7.1	7.7	8.0	8.0	8.8	9.0	17.4	17.6	17.6
Lafayette .....	17.0	14.6	14.6	9.8	10.3	10.4	41.2	42.2	42.1
Lake Charles .....	11.7	12.2	12.3	4.2	4.2	4.1	18.2	18.5	18.5
Monroe .....	8.0	8.0	8.0	3.8	3.6	3.6	16.9	17.0	17.0
New Orleans .....	49.7	49.6	49.8	42.7	42.5	42.8	151.3	150.1	150.6
Shreveport-Bossier City .....	19.5	19.3	17.4	8.4	8.6	8.6	39.0	39.9	40.3
<b>Maine</b> .....	88.4	86.3	87.4	23.7	23.8	24.5	144.5	139.4	146.2
Lewiston-Auburn .....	8.0	7.9	8.0	1.7	1.7	1.7	10.5	10.3	10.7
Portland .....	14.9	14.9	14.7	6.5	6.5	6.6	40.7	40.1	40.9

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	Finance, insurance, and real estate			Services			Government		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Georgia</b> .....	186.4	194.5	196.2	944.4	985.3	994.0	580.6	594.9	595.2
Albany .....	2.1	2.1	2.1	15.3	15.0	15.1	12.8	12.8	12.8
Athens .....	2.2	2.2	2.2	15.7	15.2	15.4	20.4	22.9	23.0
Atlanta .....	127.1	132.3	133.1	581.6	606.5	612.4	256.8	260.1	259.7
Augusta-Aiken .....	6.0	5.9	5.9	45.9	47.1	47.5	39.4	39.7	39.6
Columbus .....	8.0	8.3	8.4	29.8	30.5	30.4	20.4	20.6	20.8
Macon .....	8.4	9.4	9.5	39.6	40.9	41.0	33.3	33.5	33.5
Savannah .....	4.3	4.3	4.3	38.2	39.5	39.2	20.9	21.0	20.8
<b>Hawaii</b> .....	36.2	35.0	35.1	169.2	169.3	168.9	114.1	115.8	113.4
Honolulu .....	29.1	28.0	28.0	121.7	120.9	120.8	92.1	93.3	91.3
<b>Idaho</b> .....	25.4	26.4	26.6	124.5	121.2	123.9	99.7	103.5	102.4
Boise City .....	11.0	11.6	11.8	49.7	49.3	49.9	29.1	31.5	31.4
<b>Illinois</b> .....	400.9	408.8	412.3	1,708.5	1,734.4	1,750.6	802.8	822.5	810.7
Bloomington-Normal .....	14.1	15.2	15.8	20.0	20.6	20.8	11.5	13.5	11.8
Champaign-Urbana .....	3.6	3.7	3.7	21.0	21.6	22.0	31.9	35.1	31.8
Chicago .....	313.3	319.8	321.9	1,265.3	1,286.5	1,298.5	497.4	490.6	490.2
Davenport-Moline-Rock Island .....	8.2	8.3	8.4	47.6	48.4	49.0	27.0	27.8	27.4
Decatur .....	2.1	2.0	2.1	13.9	13.7	14.0	6.6	7.0	6.9
Kankakee .....	1.7	1.7	1.7	11.8	11.7	12.1	7.1	7.1	7.2
Peoria-Pekin .....	7.9	8.0	8.0	53.5	54.1	54.3	19.2	19.9	19.6
Rockford .....	7.4	7.6	7.8	46.9	46.4	47.1	18.3	18.4	18.2
Springfield .....	8.0	7.8	7.8	33.4	33.4	34.0	33.7	33.9	33.6
<b>Indiana</b> .....	140.4	141.2	142.3	680.9	705.0	699.6	379.6	404.4	380.1
Bloomington .....	2.5	2.2	2.2	12.6	12.8	13.0	17.3	19.2	16.7
Elkhart-Goshen .....	3.0	3.2	3.3	18.1	17.9	18.0	6.4	7.1	6.9
Evansville-Henderson .....	7.3	7.5	7.6	42.9	43.5	43.7	15.0	14.7	14.4
Fort Wayne .....	15.1	14.5	14.6	63.5	63.0	63.1	25.7	28.4	27.7
Gary .....	9.3	9.5	9.6	72.7	73.1	72.9	36.5	37.9	37.4
Indianapolis .....	62.7	66.2	66.6	224.1	231.2	230.1	101.9	105.4	101.9
Kokomo .....	1.5	1.5	1.5	8.2	9.0	9.0	6.5	7.1	6.6
Lafayette .....	3.9	4.4	4.4	17.9	19.4	19.5	19.2	23.2	19.0
Muncie .....	1.8	1.9	1.9	16.1	17.2	17.2	8.5	12.3	9.8
South Bend .....	6.8	6.4	6.5	44.2	45.9	45.4	13.6	13.9	14.0
Terre Haute .....	2.3	2.3	2.3	16.3	16.0	16.2	9.9	11.4	10.3
<b>Iowa</b> .....	80.3	81.8	82.6	367.9	381.8	379.6	239.8	245.4	242.8
Cedar Rapids .....	5.9	6.4	6.3	34.7	35.3	35.4	11.8	11.6	11.7
Des Moines .....	37.7	38.6	38.9	78.4	79.2	79.8	35.8	34.3	33.4
Dubuque .....	1.7	1.8	1.9	16.7	18.3	17.5	4.0	3.9	3.8
Iowa City .....	1.9	2.1	2.1	14.3	15.5	15.0	27.0	28.8	29.2
Sioux City .....	2.6	2.6	2.6	18.7	19.2	19.0	7.7	7.8	7.9
Waterloo-Cedar Falls .....	3.3	3.2	3.2	19.0	19.9	19.9	11.0	13.1	11.2
<b>Kansas</b> .....	61.9	61.1	61.7	320.1	330.0	332.9	236.5	247.7	239.5
Lawrence .....	2.0	2.1	2.1	10.8	11.8	11.4	11.1	14.4	11.6
Topeka .....	6.7	6.8	6.8	28.5	28.6	30.1	23.2	22.5	22.8
Wichita .....	11.1	11.2	11.3	74.6	75.5	75.6	33.3	34.6	32.9
<b>Kentucky</b> .....	69.4	71.0	71.5	430.2	443.3	447.1	288.4	297.9	291.1
Lexington .....	10.0	10.3	10.4	72.6	75.6	75.7	52.7	54.2	52.9
Louisville .....	29.2	29.5	29.7	161.8	167.0	169.1	68.9	71.0	70.3
Owensboro .....	1.7	1.8	1.8	10.8	10.9	10.9	6.9	7.3	7.0
<b>Louisiana</b> .....	86.0	86.7	87.3	499.2	514.1	514.2	364.6	371.3	369.0
Alexandria .....	2.3	2.3	2.3	16.8	16.8	16.9	13.4	13.3	13.4
Baton Rouge .....	17.6	17.8	17.9	73.0	74.5	74.9	56.8	56.7	56.1
Houma .....	2.3	2.3	2.3	16.0	16.4	16.5	12.7	13.8	14.0
Lafayette .....	6.1	6.2	6.3	40.0	41.7	41.1	22.5	24.0	24.1
Lake Charles .....	2.7	2.7	2.6	23.4	24.1	23.4	12.9	13.1	13.1
Monroe .....	4.9	4.9	4.9	18.0	18.4	18.1	12.5	12.9	13.5
New Orleans .....	31.8	31.1	31.4	190.3	191.9	190.0	105.5	108.0	108.5
Shreveport-Bossier City .....	6.6	6.6	6.6	52.6	54.1	54.3	33.5	32.9	33.6
<b>Maine</b> .....	28.7	30.3	30.7	160.5	162.9	166.4	94.1	94.1	93.9
Lewiston-Auburn .....	2.1	2.3	2.3	12.6	12.8	12.8	4.8	5.0	5.0
Portland .....	12.5	12.8	12.9	42.1	40.9	41.3	17.7	18.4	17.9

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Maryland</b> .....	2,293.6	2,286.8	2,301.6	1.3	1.3	1.3	142.4	135.7	138.2
Baltimore PMSA .....	1,174.4	1,186.5	1,190.5	.2	.2	.2	66.1	64.4	65.9
Baltimore City .....	405.7	409.5	409.3	(1)	(1)	(1)	12.8	13.0	13.1
Suburban Maryland-D.C. ....	841.7	845.7	851.4	(1)	(1)	(1)	61.1	59.9	60.9
<b>Massachusetts</b> .....	3,150.1	3,215.3	3,240.2	1.4	1.4	1.5	104.6	108.4	113.5
Barnstable-Yarmouth .....	62.1	58.9	63.5	(1)	(1)	(1)	2.7	2.8	2.8
Boston .....	1,928.2	1,965.0	1,980.4	.4	.5	.5	59.0	61.6	64.8
Brockton .....	95.6	97.3	97.9	(2)	(2)	(2)	3.5	3.4	3.6
Fitchburg-Leominster .....	53.3	54.1	54.4	(2)	(2)	(2)	1.7	1.8	1.9
Lawrence .....	151.7	152.4	153.0	(2)	(2)	(2)	5.9	5.9	6.2
Lowell .....	116.5	120.5	121.0	(1)	(1)	(1)	5.3	5.1	5.2
New Bedford .....	64.4	65.4	65.9	(2)	(2)	(2)	2.3	2.2	2.3
Pittsfield .....	42.9	42.7	44.0	.1	.1	.1	1.8	1.8	1.9
Springfield .....	253.6	260.4	259.4	.1	.1	.1	8.1	7.9	8.2
Worcester .....	224.9	228.2	229.3	.2	.2	.2	7.4	7.2	7.4
<b>Michigan</b> .....	4,480.3	4,571.9	4,578.5	8.3	7.8	8.0	191.4	192.6	200.7
Ann Arbor .....	263.9	273.3	273.6	(1)	(1)	(1)	10.8	10.8	11.5
Benton Harbor .....	71.9	72.4	72.5	(1)	(1)	(1)	2.4	2.5	2.6
Detroit .....	2,093.2	2,148.8	2,154.8	.8	.8	.9	82.4	85.9	88.2
Flint .....	181.0	184.0	180.8	(1)	(1)	(1)	7.1	7.8	8.2
Grand Rapids-Muskegon-Holland .....	554.4	572.3	575.4	(1)	(1)	(1)	27.0	27.0	28.0
Jackson .....	61.4	62.7	62.8	(1)	(1)	(1)	2.7	2.5	2.7
Kalamazoo-Battle Creek .....	209.4	211.7	212.0	(1)	(1)	(1)	8.9	8.9	9.4
Lansing-East Lansing .....	228.3	233.9	231.6	(1)	(1)	(1)	9.3	9.4	9.9
Saginaw-Bay City-Midland .....	181.4	183.4	184.9	(1)	(1)	(1)	10.0	9.2	9.7
<b>Minnesota</b> .....	2,521.5	2,561.4	2,585.1	8.5	8.0	8.4	103.7	102.2	111.0
Duluth-Superior .....	112.0	112.8	114.1	5.3	4.9	5.0	4.3	4.1	4.6
Minneapolis-St. Paul .....	1,629.2	1,658.2	1,672.0	(2)	(2)	(2)	64.2	63.9	68.4
Rochester .....	74.4	75.8	77.3	(1)	(1)	(1)	3.2	3.2	3.4
St. Cloud .....	83.9	88.0	85.9	(1)	(1)	(1)	4.3	4.4	4.8
<b>Mississippi</b> .....	1,106.5	1,124.3	1,123.2	6.1	6.1	6.0	52.1	52.9	55.4
Jackson .....	221.8	226.5	227.3	(2)	(2)	(2)	11.6	12.0	12.4
<b>Missouri</b> .....	2,662.9	2,695.4	2,702.7	4.9	4.9	5.0	125.9	124.5	125.7
Kansas City .....	926.5	950.2	953.9	(1)	(1)	(1)	48.5	49.4	50.1
St. Louis .....	1,301.2	1,309.3	1,314.4	(1)	(1)	(1)	68.0	67.1	68.2
Springfield .....	160.0	164.1	163.9	(1)	(1)	(1)	6.9	6.8	6.8
<b>Montana</b> .....	370.0	374.4	374.6	5.7	5.3	5.6	19.1	18.1	19.2
<b>Nebraska</b> .....	863.3	881.3	884.4	1.3	1.3	1.4	41.3	41.6	42.1
Lincoln .....	145.8	148.3	148.8	(1)	(1)	(1)	6.8	7.3	7.3
Omaha .....	400.4	413.1	415.6	(1)	(1)	(1)	19.4	20.4	20.7
<b>Nevada</b> .....	891.8	924.3	930.0	14.8	13.6	14.1	82.8	88.1	90.5
Las Vegas .....	629.7	658.6	661.5	2.2	2.1	2.1	65.0	69.1	70.6
Reno .....	178.6	181.9	182.3	.7	.6	.6	12.2	13.3	14.0
<b>New Hampshire</b> .....	577.3	574.5	580.6	.5	.5	.5	22.4	22.5	23.0
Manchester .....	97.1	96.7	95.8	(1)	(1)	(1)	4.5	4.6	4.7
Nashua .....	92.6	94.1	94.8	(1)	(1)	(1)	3.0	3.2	3.1
Portsmouth-Rochester .....	115.0	114.7	113.7	(1)	(1)	(1)	3.3	3.1	3.1
<b>New Jersey</b> .....	3,780.5	3,803.0	3,854.6	2.0	1.9	1.9	136.5	137.5	141.7
Atlantic-Cape May .....	191.7	184.0	194.1	(1)	(1)	(1)	6.0	7.5	7.2
Bergen-Passaic .....	646.1	649.5	656.5	(1)	(1)	(1)	22.9	23.2	23.9
Camden .....	473.3	482.2	487.2	(1)	(1)	(1)	22.0	22.0	23.1
Jersey City .....	241.3	242.9	244.3	(1)	(1)	(1)	4.5	4.8	5.2
Middlesex-Somerset-Hunterdon .....	612.2	627.5	632.0	.5	.5	.5	19.8	19.9	20.1
Monmouth-Ocean .....	378.0	369.9	383.7	(1)	(1)	(1)	18.6	18.7	19.3
Newark .....	957.4	966.8	975.8	.8	.9	.9	32.9	33.5	34.7
Trenton .....	199.1	198.9	199.9	(1)	(1)	(1)	4.8	4.7	5.0
Vineland-Millville-Bridgeton .....	59.2	60.0	60.8	.3	.2	.3	2.2	2.1	2.3
<b>New Mexico</b> .....	712.6	720.0	723.2	15.7	15.5	15.6	43.9	43.4	44.4
Albuquerque .....	335.2	340.0	340.9	(1)	(1)	(1)	22.6	21.8	22.1
Las Cruces .....	50.0	52.8	51.6	(1)	(1)	(1)	3.2	3.3	3.3
Santa Fe .....	71.9	73.2	74.7	(1)	(1)	(1)	3.8	3.9	4.0

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Maryland</b> .....	177.3	176.2	177.0	108.3	106.0	107.2	543.8	539.9	545.6
Baltimore PMSA .....	100.3	99.9	100.2	58.8	59.9	59.0	271.5	274.0	276.1
Baltimore City .....	31.6	31.2	31.2	20.2	20.9	20.7	65.1	64.7	64.8
Suburban Maryland-D.C. ....	38.7	39.0	39.2	34.4	34.3	34.8	199.1	196.5	198.7
<b>Massachusetts</b> .....	450.9	454.1	456.3	135.7	138.7	139.8	719.1	728.1	740.5
Barnstable-Yarmouth .....	2.1	2.1	2.2	3.1	2.9	3.0	21.8	20.0	22.6
Boston .....	224.0	226.1	227.3	83.9	85.0	85.9	416.1	422.8	426.9
Brockton .....	10.8	10.5	10.6	5.1	4.8	4.9	31.3	31.6	32.0
Fitchburg-Leominster .....	13.8	13.9	14.0	2.1	2.1	2.1	12.3	12.4	12.3
Lawrence .....	38.6	38.4	38.4	5.0	5.0	5.0	35.0	34.4	34.9
Lowell .....	28.8	30.1	30.3	6.6	7.0	7.1	24.6	25.4	25.6
New Bedford .....	13.5	13.8	13.7	3.5	3.8	3.8	16.4	16.2	16.5
Pittsfield .....	7.7	7.5	7.5	1.3	1.3	1.3	10.3	10.3	10.6
Springfield .....	39.2	39.2	39.4	9.9	10.2	10.2	58.3	58.9	58.9
Worcester .....	41.7	42.4	42.7	9.5	9.5	9.4	50.0	50.9	51.6
<b>Michigan</b> .....	970.4	980.4	979.8	175.1	176.1	178.0	1,054.8	1,067.4	1,074.4
Ann Arbor .....	52.8	53.3	53.7	6.4	6.5	6.5	53.5	54.3	54.6
Benton Harbor .....	20.2	20.0	20.2	3.0	2.9	3.0	16.3	16.2	16.5
Detroit .....	442.5	447.1	446.5	94.5	95.6	96.1	486.0	498.0	499.8
Flint .....	41.4	40.3	36.5	5.5	5.5	5.6	45.3	46.4	46.5
Grand Rapids-Muskegon-Holland .....	156.4	158.3	160.0	18.8	18.9	19.0	137.8	141.7	142.4
Jackson .....	13.0	12.9	13.0	3.5	3.5	3.5	15.7	16.1	16.1
Kalamazoo-Battle Creek .....	49.8	49.9	50.1	7.1	7.1	7.2	46.8	47.0	47.3
Lansing-East Lansing .....	30.1	29.7	29.6	6.2	6.1	6.2	51.0	52.4	52.3
Saginaw-Bay City-Midland .....	40.0	40.3	40.7	7.4	7.2	7.3	45.7	46.2	46.8
<b>Minnesota</b> .....	436.8	440.2	446.9	124.0	126.8	126.9	607.1	610.2	616.8
Duluth-Superior .....	8.4	8.6	8.8	7.3	7.3	7.6	27.9	28.2	28.7
Minneapolis-St. Paul .....	276.1	275.9	278.5	88.4	90.4	90.6	387.6	390.5	394.9
Rochester .....	11.6	13.0	13.2	2.1	2.2	2.2	14.8	14.8	15.0
St. Cloud .....	15.8	15.9	16.2	3.0	3.1	3.1	25.3	25.9	25.6
<b>Mississippi</b> .....	243.1	242.1	242.2	53.0	53.3	53.5	238.4	239.3	239.4
Jackson .....	20.9	21.0	21.1	15.6	15.8	15.5	53.6	54.6	54.5
<b>Missouri</b> .....	420.6	420.7	424.1	166.8	166.5	166.7	629.6	634.8	638.4
Kansas City .....	108.0	109.1	108.5	74.5	78.8	79.3	227.1	231.0	232.0
St. Louis .....	197.1	197.1	197.6	83.7	83.4	83.8	308.1	309.5	312.7
Springfield .....	23.9	23.5	23.5	10.6	10.5	10.5	44.6	45.9	45.8
<b>Montana</b> .....	24.4	24.4	24.4	21.3	21.5	21.5	101.7	99.6	101.1
<b>Nebraska</b> .....	116.6	119.1	119.9	54.1	55.4	55.7	210.7	213.7	213.4
Lincoln .....	17.0	17.6	17.7	9.3	9.7	9.7	30.6	30.4	30.2
Omaha .....	39.7	41.5	41.9	28.5	29.1	29.4	95.2	97.4	97.4
<b>Nevada</b> .....	40.5	42.5	43.0	45.9	47.2	47.7	178.9	186.1	186.3
Las Vegas .....	22.0	22.8	23.1	32.9	33.9	34.3	127.7	134.3	134.5
Reno .....	13.3	14.2	14.3	11.5	11.3	11.4	40.7	41.0	41.0
<b>New Hampshire</b> .....	107.6	108.0	107.4	19.9	19.5	19.3	151.2	149.0	153.5
Manchester .....	14.1	13.5	13.7	5.7	5.7	5.8	23.8	23.5	23.3
Nashua .....	27.7	27.7	27.5	2.2	2.4	2.3	22.6	23.2	23.8
Portsmouth-Rochester .....	19.8	19.9	19.7	4.1	4.0	4.0	31.3	30.7	31.4
<b>New Jersey</b> .....	486.0	482.4	484.5	260.3	263.7	264.5	885.3	885.1	904.5
Atlantic-Cape May .....	6.6	6.4	6.6	7.2	7.2	7.3	42.7	38.7	43.9
Bergen-Passaic .....	107.5	106.6	107.5	35.2	36.3	36.9	176.8	178.0	179.9
Camden .....	55.1	55.6	56.2	22.1	22.3	22.0	124.8	126.6	127.0
Jersey City .....	29.2	29.0	29.7	28.6	28.5	28.4	55.3	55.3	55.4
Middlesex-Somerset-Hunterdon .....	92.9	92.9	93.4	50.8	52.0	51.8	143.0	145.3	147.4
Monmouth-Ocean .....	21.4	20.4	20.5	21.1	21.1	21.3	103.8	101.3	106.2
Newark .....	135.6	136.2	136.7	81.8	82.6	82.9	191.0	191.7	193.7
Trenton .....	20.1	19.0	18.9	7.3	7.4	7.5	32.6	32.8	32.9
Vineland-Millville-Bridgeton .....	13.3	13.0	13.5	3.0	3.0	3.0	11.5	11.7	11.6
<b>New Mexico</b> .....	46.0	44.8	45.3	31.4	33.5	32.6	169.9	171.2	173.3
Albuquerque .....	29.3	29.3	29.4	15.1	16.3	16.0	81.5	83.0	83.8
Las Cruces .....	2.7	2.7	2.7	1.6	1.8	1.6	10.8	11.2	11.5
Santa Fe .....	2.0	2.1	2.1	1.3	1.3	1.3	15.4	15.3	15.7

See footnotes at end of table.

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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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Maryland</b> .....	131.8	131.9	133.5	767.7	768.7	774.8	421.0	427.1	424.0
Baltimore PMSA .....	73.0	72.9	73.3	394.0	400.8	404.1	210.5	214.4	211.7
Baltimore City .....	33.9	34.1	34.3	155.1	156.1	155.8	87.0	89.5	89.4
Suburban Maryland-D.C. ....	49.8	49.6	50.1	291.4	293.5	295.9	167.2	172.9	171.8
<b>Massachusetts</b> .....	214.5	216.3	219.6	1,111.1	1,150.9	1,151.9	412.8	417.4	417.1
Barnstable-Yarmouth .....	3.5	3.3	3.5	21.1	20.3	21.6	7.8	7.5	7.8
Boston .....	159.4	160.9	163.3	753.8	776.5	779.3	231.6	231.6	232.4
Brockton .....	3.2	3.4	3.4	25.2	27.0	26.6	16.5	16.6	16.8
Fitchburg-Leominster .....	1.6	1.7	1.7	13.7	13.7	14.0	8.1	8.5	8.4
Lawrence .....	4.4	4.2	4.3	44.5	45.4	45.6	18.3	19.1	18.6
Lowell .....	3.8	3.8	3.8	32.2	33.2	33.4	15.2	15.9	15.6
New Bedford .....	1.8	1.8	1.8	16.9	17.6	17.8	10.0	10.0	10.0
Pittsfield .....	1.9	1.9	2.0	14.5	14.3	14.9	5.3	5.5	5.7
Springfield .....	12.8	13.1	13.3	79.5	83.1	82.4	45.7	47.9	46.9
Worcester .....	15.1	15.0	14.9	65.9	67.2	67.0	35.1	35.8	36.1
<b>Michigan</b> .....	208.3	209.0	211.2	1,235.1	1,267.4	1,279.7	637.0	671.2	646.7
Ann Arbor .....	10.0	10.2	10.3	65.6	67.5	67.8	64.8	70.7	69.2
Benton Harbor .....	2.6	2.3	2.4	19.0	19.6	19.2	8.4	8.9	8.6
Detroit .....	112.3	113.4	113.7	645.3	871.1	675.5	229.4	236.9	234.1
Flint .....	6.6	6.5	6.6	50.6	52.1	52.7	24.5	25.4	24.7
Grand Rapids-Muskegon-Holland .....	22.5	23.1	23.3	140.4	146.8	148.7	51.4	56.5	54.0
Jackson .....	1.9	1.9	1.9	15.0	15.0	15.2	9.6	10.8	10.4
Kalamazoo-Battle Creek .....	10.9	10.8	10.8	54.0	54.4	54.5	32.0	33.6	32.7
Lansing-East Lansing .....	13.8	14.1	14.3	57.5	58.6	58.6	60.4	63.6	60.7
Saginaw-Bay City-Midland .....	7.0	7.0	7.1	49.4	50.5	50.8	21.8	23.0	22.5
<b>Minnesota</b> .....	146.4	151.1	152.7	708.5	729.1	734.2	386.5	393.8	388.2
Duluth-Superior .....	3.4	3.5	3.5	31.9	32.5	33.1	23.5	23.7	22.8
Minneapolis-St. Paul .....	114.6	116.7	117.7	474.8	487.7	491.0	222.9	232.5	230.3
Rochester .....	2.3	2.3	2.4	33.0	33.1	34.0	7.4	7.2	7.1
St. Cloud .....	3.0	3.1	3.2	20.5	22.2	21.0	12.0	13.4	12.0
<b>Mississippi</b> .....	42.1	41.5	42.1	257.9	265.0	264.6	213.8	224.1	220.0
Jackson .....	15.7	16.3	16.5	59.5	60.3	60.6	44.0	45.5	45.7
<b>Missouri</b> .....	155.2	157.7	159.9	748.3	754.2	758.3	411.6	432.1	424.6
Kansas City .....	65.0	67.6	68.7	271.5	276.5	277.4	131.9	137.8	137.9
St. Louis .....	79.8	81.0	82.0	412.3	415.8	419.4	152.2	155.4	150.7
Springfield .....	6.7	7.1	7.2	47.6	49.4	49.3	19.7	20.9	20.8
<b>Montana</b> .....	16.7	16.8	16.9	108.1	107.6	110.2	73.0	81.1	75.7
<b>Nebraska</b> .....	54.7	57.0	58.1	230.4	237.6	238.1	154.2	155.6	155.7
Lincoln .....	9.4	9.9	10.0	37.8	37.7	37.7	34.9	35.7	36.2
Omaha .....	34.5	36.9	37.4	131.7	135.9	136.8	51.4	51.9	52.0
<b>Nevada</b> .....	40.2	42.2	42.7	383.2	392.9	395.2	105.5	111.7	110.5
Las Vegas .....	30.4	31.8	32.1	285.1	294.8	296.0	64.4	69.8	68.8
Reno .....	8.0	8.4	8.5	69.5	69.1	69.4	22.7	24.0	23.1
<b>New Hampshire</b> .....	29.8	29.4	29.7	168.9	164.7	168.7	77.0	80.9	78.5
Manchester .....	7.4	7.1	7.1	31.0	31.1	29.9	10.6	11.2	11.3
Nashua .....	4.6	4.3	4.4	24.2	24.7	24.9	8.3	8.6	8.8
Portsmouth-Rochester .....	6.3	6.5	6.4	30.0	29.0	29.4	20.2	21.5	19.7
<b>New Jersey</b> .....	240.8	243.7	247.1	1,191.4	1,216.4	1,235.4	578.2	572.3	575.0
Atlantic-Cape May .....	6.5	6.2	6.5	91.5	89.0	93.3	29.2	29.0	29.3
Bergen-Passaic .....	34.9	35.1	35.4	196.0	200.8	201.8	72.8	69.5	71.1
Camden .....	22.4	23.8	24.3	147.9	152.4	154.8	79.0	79.5	79.8
Jersey City .....	25.9	26.6	27.0	58.7	60.2	60.3	39.1	38.5	38.3
Middlesex-Somerset-Hunterdon .....	45.6	45.4	46.4	183.1	193.2	196.2	76.5	78.3	76.2
Monmouth-Ocean .....	18.2	17.9	18.3	127.8	126.3	131.0	67.1	64.2	67.1
Newark .....	71.9	72.8	73.7	299.0	305.4	308.7	144.4	143.7	144.5
Trenton .....	11.5	11.5	11.6	70.2	72.2	72.6	52.6	51.3	51.4
Vineland-Millville-Bridgeton .....	3.2	3.0	3.0	12.5	12.8	13.0	13.2	14.2	14.1
<b>New Mexico</b> .....	31.6	31.6	32.0	197.6	198.7	201.1	176.7	181.3	178.9
Albuquerque .....	16.7	17.0	17.0	105.7	106.9	107.6	64.3	65.7	65.0
Las Cruces .....	1.9	2.0	2.0	10.8	11.5	11.5	19.0	20.3	19.0
Santa Fe .....	3.2	3.3	3.4	21.5	21.7	22.8	24.7	25.6	25.4

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	Total			Mining			Construction		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>New York</b> .....	8,101.4	8,175.6	8,233.3	4.8	4.6	4.8	275.1	275.4	288.5
Albany-Schenectady-Troy .....	436.0	437.8	437.9	.5	.5	.5	16.1	15.4	16.3
Binghamton .....	113.8	115.7	115.7	(1)	(1)	(1)	4.3	3.9	4.3
Buffalo-Niagara Falls .....	550.1	549.3	551.5	(1)	(1)	(1)	21.9	21.1	22.3
Dutchess County .....	107.8	109.1	109.8	(1)	(1)	(1)	4.4	4.5	4.7
Elmira .....	43.3	43.0	43.3	(1)	(1)	(1)	1.7	1.6	1.8
Glens Falls .....	52.9	50.6	53.6	(1)	(1)	(1)	2.0	2.0	2.1
Nassau-Suffolk .....	1,136.0	1,146.4	1,161.5	(1)	(1)	(1)	50.2	52.4	53.9
New York PMSA .....	3,939.0	4,006.6	4,031.7	(1)	(1)	(1)	118.9	122.6	126.2
New York City .....	3,422.5	3,486.6	3,502.8	.3	.3	.3	94.3	97.9	100.8
Newburgh .....	122.7	121.3	123.4	(1)	(1)	(1)	4.5	4.4	4.6
Rochester .....	538.5	531.3	534.6	.5	.4	.4	18.8	16.6	17.8
Rockland County .....	101.7	104.8	106.9	(1)	(1)	(1)	3.8	3.8	3.9
Syracuse .....	339.5	337.7	339.7	(1)	(1)	(1)	14.0	13.0	13.9
Utica-Rome .....	128.8	129.6	129.9	(1)	(1)	(1)	3.9	3.8	4.1
Westchester County .....	394.3	394.3	400.7	(1)	(1)	(1)	18.9	18.7	19.3
<b>North Carolina</b> .....	3,696.6	3,755.2	3,773.4	4.0	4.0	4.0	207.3	211.4	213.9
Asheville .....	108.8	110.5	110.5	(1)	(1)	(1)	6.0	5.9	5.9
Charlotte-Gastonia-Rock Hill .....	760.2	769.6	769.4	(1)	(1)	(1)	47.2	47.3	47.3
Greensboro-Winston-Salem-High Point .....	636.9	637.4	638.3	(1)	(1)	(1)	31.9	31.8	32.0
Raleigh-Durham-Chapel Hill .....	615.9	635.8	636.6	(1)	(1)	(1)	35.0	35.6	35.9
<b>North Dakota</b> .....	315.1	321.2	320.8	4.4	4.1	4.3	17.3	16.2	18.0
Bismarck .....	49.6	50.3	50.3	(1)	(1)	(1)	2.9	2.7	2.8
Fargo-Moorhead .....	95.3	98.5	97.9	(1)	(1)	(1)	6.1	5.7	6.5
Grand Forks .....	46.2	47.8	46.8	(1)	(1)	(1)	3.2	2.8	3.1
<b>Ohio</b> .....	5,453.1	5,496.5	5,517.5	13.7	13.4	13.5	236.0	236.0	244.2
Akron .....	322.6	329.6	325.2	.5	.5	.5	13.6	13.5	13.9
Canton-Massillon .....	182.5	186.4	187.6	.5	.5	.5	8.8	8.9	9.3
Cincinnati .....	852.8	872.2	876.9	.7	.7	.8	40.6	41.9	43.0
Cleveland-Lorain-Elyria .....	1,153.8	1,166.4	1,177.0	.9	.8	.7	46.6	46.6	49.0
Columbus .....	823.0	837.0	844.2	.7	.7	.7	36.4	38.2	39.4
Dayton-Springfield .....	476.7	479.1	478.0	.4	.4	.4	17.8	18.1	18.6
Hamilton-Middletown .....	117.0	119.8	118.5	(1)	(1)	(1)	7.1	7.2	7.5
Lima .....	78.6	78.7	79.5	(1)	(1)	(1)	3.9	3.8	3.8
Mansfield .....	81.0	79.4	79.7	(1)	(1)	(1)	2.7	2.5	2.6
Steubenville-Weirton .....	48.9	51.3	51.6	.4	.4	.4	1.6	1.5	1.6
Toledo .....	317.7	319.1	317.3	.2	.1	.1	15.7	15.1	15.5
Youngstown-Warren .....	250.5	251.9	252.6	.5	.5	.6	10.7	10.3	10.9
<b>Oklahoma</b> .....	1,387.0	1,432.4	1,428.5	32.1	31.7	32.1	51.2	53.1	53.7
Enid .....	24.7	25.5	25.5	1.2	1.2	1.2	1.0	1.1	1.1
Lawton .....	37.4	37.5	37.4	.1	.1	.1	1.1	1.0	1.0
Oklahoma City .....	499.7	511.9	510.9	7.4	7.4	7.6	18.8	18.8	19.1
Tulsa .....	373.0	386.0	387.1	7.8	7.6	7.7	14.7	16.5	16.6
<b>Oregon</b> .....	1,539.0	1,566.7	1,573.9	1.9	1.8	1.9	83.8	81.3	84.0
Eugene-Springfield .....	139.3	141.0	142.1	.2	.2	.2	7.5	7.5	7.9
Medford-Ashland .....	68.3	69.7	70.3	.1	.1	.1	3.4	3.3	3.5
Portland-Vancouver .....	921.8	945.3	949.4	1.1	1.1	1.1	55.1	52.0	53.4
Salem .....	132.2	133.2	134.4	.3	.3	.3	7.8	7.9	8.0
<b>Pennsylvania</b> .....	5,428.7	5,491.7	5,485.4	20.8	20.3	20.4	223.4	224.4	233.5
Allentown Bethlehem-Easton .....	267.7	268.1	268.0	(1)	(1)	(1)	10.9	10.2	10.4
Altoona .....	58.6	58.9	59.6	(1)	(1)	(1)	2.7	2.5	2.7
Erie .....	128.8	130.2	130.1	(1)	(1)	(1)	4.7	4.5	4.7
Harrisburg-Lebanon-Carlisle .....	352.8	358.8	358.6	(1)	(1)	(1)	13.3	13.3	13.8
Johnstown .....	88.6	89.2	89.6	(1)	(1)	(1)	4.9	4.6	4.7
Lancaster .....	214.1	217.9	217.8	.4	.4	.4	12.5	12.8	13.0
Philadelphia PMSA .....	2,266.3	2,284.3	2,282.3	(1)	(1)	(1)	90.2	90.7	94.7
Philadelphia City .....	662.2	672.7	663.9	(1)	(1)	(1)	11.3	11.0	11.6
Pittsburgh .....	1,082.0	1,079.1	1,082.7	4.6	4.9	4.9	51.8	51.3	52.2
Reading .....	166.2	167.5	167.4	(1)	(1)	(1)	7.4	7.1	7.8
Scranton-Wilkes-Barre-Hazleton .....	276.1	279.0	278.9	.4	.3	.4	11.1	11.5	11.7
Sharon .....	47.4	48.6	48.2	(1)	(1)	(1)	1.7	1.7	1.7
State College .....	64.2	69.4	65.6	(1)	(1)	(1)	2.5	2.3	2.4
Williamsport .....	53.2	54.0	54.0	(1)	(1)	(1)	2.3	2.5	2.5
York .....	163.3	165.5	165.3	.4	.4	.4	8.7	8.6	9.0

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>New York</b> .....	927.5	917.9	924.9	414.1	412.2	415.7	1,658.9	1,657.4	1,683.1
Albany-Schenectady-Troy .....	39.4	39.0	39.4	17.4	17.2	17.3	93.1	92.6	93.3
Binghamton .....	25.0	25.3	25.5	4.9	4.8	4.9	23.7	24.1	24.0
Buffalo-Niagara Falls .....	89.8	89.8	90.4	26.4	25.6	26.1	131.1	130.0	131.3
Dutchess County .....	17.8	18.5	18.6	3.7	3.5	3.5	20.3	20.6	20.8
Elmira .....	9.7	9.6	9.7	1.5	1.5	1.5	10.5	10.4	10.4
Glens Falls .....	8.5	8.5	8.6	1.7	1.6	1.8	12.3	11.4	12.4
Nassau-Suffolk .....	112.6	112.3	112.9	53.2	54.0	54.5	292.4	289.9	297.8
New York PMSA .....	319.4	317.3	319.7	234.6	236.1	237.9	692.7	707.6	715.6
New York City .....	267.2	265.0	267.1	207.7	209.2	210.7	580.4	592.9	598.5
Newburgh .....	11.9	11.9	11.9	6.7	6.8	6.9	33.7	33.2	33.9
Rochester .....	128.3	121.8	122.3	16.8	16.9	17.1	114.2	113.0	114.7
Rockland County .....	12.0	12.3	12.4	6.4	6.5	6.6	22.4	25.1	25.6
Syracuse .....	49.8	49.6	50.2	19.7	19.8	19.9	79.9	79.3	80.8
Utica-Rome .....	19.5	19.3	19.4	4.0	3.6	3.7	27.3	26.8	27.1
Westchester County .....	38.4	38.1	38.3	19.9	19.8	20.0	85.6	85.4	87.2
<b>North Carolina</b> .....	836.4	827.0	828.7	170.9	169.4	170.6	847.0	846.1	850.1
Asheville .....	19.9	19.6	19.7	4.6	4.7	4.7	27.2	27.6	27.8
Charlotte-Gastonia-Rock Hill .....	144.7	143.4	143.4	54.0	52.9	53.0	184.3	186.6	186.9
Greensboro-Winston-Salem-High Point .....	165.7	165.0	164.9	33.3	31.8	31.8	143.7	142.1	142.5
Raleigh-Durham-Chapel Hill .....	83.5	85.4	85.7	26.7	27.5	27.5	129.8	132.6	132.4
<b>North Dakota</b> .....	23.5	23.9	23.8	18.1	18.5	18.4	81.5	81.4	81.5
Bismarck .....	2.8	2.9	3.0	3.2	3.2	3.2	12.3	12.5	12.5
Fargo-Moorhead .....	8.1	8.2	8.0	5.2	5.5	5.5	27.4	27.6	27.8
Grand Forks .....	3.4	3.7	3.4	2.2	2.4	2.3	12.2	12.5	12.7
<b>Ohio</b> .....	1,097.5	1,091.6	1,093.2	235.9	235.3	235.7	1,323.5	1,322.5	1,332.7
Akron .....	64.6	63.8	64.2	14.8	14.9	14.9	80.5	81.8	82.3
Canton-Massillon .....	46.3	47.2	47.3	5.2	5.2	5.2	45.7	47.0	47.2
Cincinnati .....	141.4	141.6	142.3	44.4	44.6	44.5	218.6	219.7	221.3
Cleveland-Lorain-Elyria .....	225.2	223.6	224.5	46.1	46.1	46.4	273.5	275.7	279.3
Columbus .....	93.1	94.2	94.7	36.5	36.0	36.4	214.3	215.5	216.7
Dayton-Springfield .....	100.1	99.6	98.2	20.8	21.0	21.2	110.4	112.0	112.3
Hamilton-Middletown .....	21.0	20.8	21.1	4.8	4.9	5.0	32.0	31.6	31.4
Lima .....	19.8	19.6	19.8	3.0	3.2	3.2	18.3	18.4	18.7
Mansfield .....	23.0	22.8	22.7	3.6	3.3	3.2	18.5	18.6	18.7
Steubenville-Weirton .....	11.5	13.8	13.8	2.6	2.6	2.6	10.9	10.5	10.6
Toledo .....	61.5	61.2	61.3	13.9	14.7	14.7	78.9	77.9	77.8
Youngstown-Warren .....	59.8	59.0	58.9	10.5	10.5	10.5	63.0	63.4	63.8
<b>Oklahoma</b> .....	182.3	185.4	186.5	79.6	82.3	82.7	326.0	328.7	330.3
Enid .....	2.1	2.4	2.4	2.1	2.1	2.1	6.2	6.3	6.3
Lawton .....	3.7	3.6	3.6	1.8	1.7	1.8	9.1	8.9	9.0
Oklahoma City .....	54.0	56.1	56.4	24.5	25.4	25.6	118.8	120.3	120.8
Tulsa .....	56.9	57.3	57.6	29.5	30.8	30.9	88.4	88.0	88.5
<b>Oregon</b> .....	245.5	244.1	247.9	74.7	75.5	75.7	378.7	384.8	387.0
Eugene-Springfield .....	21.1	21.7	21.8	4.6	4.7	4.7	34.7	35.4	35.6
Medford-Ashland .....	9.3	9.0	9.1	3.3	3.4	3.4	19.4	20.0	20.0
Portland-Vancouver .....	148.4	151.0	152.3	52.5	54.2	54.6	228.6	235.3	236.9
Salem .....	18.0	17.0	18.2	3.5	3.5	3.5	28.1	28.2	28.5
<b>Pennsylvania</b> .....	943.6	936.6	940.8	279.9	282.9	282.1	1,224.1	1,233.1	1,239.2
Allentown Bethlehem-Easton .....	56.8	55.5	56.2	15.5	15.5	15.5	56.7	56.3	56.6
Altoona .....	10.1	10.0	10.1	4.3	4.2	4.3	15.7	16.2	16.3
Erie .....	34.0	34.1	34.2	5.0	4.9	4.9	28.9	29.3	29.5
Harrisburg-Lebanon-Carlisle .....	45.7	45.4	45.5	23.2	23.5	23.3	78.6	80.3	80.8
Johnstown .....	13.3	12.8	13.0	5.2	5.3	5.1	20.7	20.6	21.0
Lancaster .....	57.6	56.7	56.6	8.3	8.8	8.7	53.3	54.9	54.9
Philadelphia PMSA .....	307.0	302.4	303.4	107.0	110.0	109.9	500.2	502.4	503.2
Philadelphia City .....	58.7	57.3	57.6	34.4	34.6	35.0	110.2	110.8	111.4
Pittsburgh .....	138.3	138.1	139.1	66.4	65.4	65.2	258.7	257.6	259.7
Reading .....	44.0	43.2	42.7	8.3	8.2	8.4	38.7	39.1	39.2
Scranton-Wilkes-Barre-Hazleton .....	54.7	54.5	55.2	15.3	15.7	15.8	66.6	66.1	65.9
Sharon .....	10.9	11.2	11.1	2.0	2.0	2.0	12.5	12.5	12.6
State College .....	8.7	8.9	8.9	2.1	2.2	2.3	12.6	13.3	13.1
Williamsport .....	13.5	13.3	13.4	2.0	1.9	2.0	13.0	13.4	13.4
York .....	48.4	47.5	47.5	7.6	7.6	7.7	39.2	40.4	40.6

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	Finance, insurance, and real estate			Services			Government		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>New York</b> .....	727.6	726.1	735.2	2,707.1	2,788.5	2,797.3	1,386.4	1,393.4	1,383.8
Albany-Schenectady-Troy .....	25.8	25.5	25.9	133.9	136.8	135.8	109.8	110.8	109.5
Binghamton .....	3.8	3.8	3.8	30.8	31.0	31.4	21.4	22.8	21.8
Buffalo-Niagara Falls .....	29.5	29.6	29.8	164.6	165.0	165.1	86.7	88.1	86.5
Dutchess County .....	4.7	4.7	4.9	33.6	34.4	33.8	23.3	23.0	23.5
Elmira .....	1.3	1.3	1.3	10.8	10.8	10.7	7.7	7.7	7.9
Glens Falls .....	2.1	2.1	2.1	16.2	14.7	16.2	10.2	10.3	10.4
Nassau-Suffolk .....	79.7	80.0	81.1	366.0	374.1	378.2	181.8	183.7	183.1
New York PMSA .....	508.4	509.4	515.3	1,455.8	1,507.3	1,513.5	609.2	606.4	603.5
New York City .....	475.0	476.2	481.6	1,273.0	1,322.2	1,325.3	524.5	522.9	518.5
Newburgh .....	5.7	5.5	5.7	32.2	31.8	32.4	28.1	27.7	28.0
Rochester .....	21.8	21.2	21.8	159.3	160.7	161.5	78.8	80.5	78.9
Rockland County .....	5.1	5.0	5.2	31.9	32.3	33.0	20.1	19.8	20.3
Syracuse .....	18.3	17.9	18.1	96.7	96.4	95.7	61.2	61.7	61.1
Utica-Rome .....	7.8	7.7	7.7	38.6	40.2	40.1	27.7	28.4	27.9
Westchester County .....	26.8	26.6	27.0	144.5	146.4	148.6	60.2	59.4	60.3
<b>North Carolina</b> .....	168.3	173.9	176.2	880.7	916.3	931.9	582.0	607.1	598.0
Asheville .....	3.3	3.1	3.1	32.0	33.5	33.3	15.8	16.1	16.0
Charlotte-Gastonia-Rock Hill .....	54.4	55.0	55.1	187.2	189.5	190.6	88.4	94.9	93.1
Greensboro-Winston-Salem-High Point .....	32.9	33.0	33.2	161.6	165.9	166.5	67.8	67.8	67.4
Raleigh-Durham-Chapel Hill .....	29.4	30.5	30.7	180.9	197.6	197.5	120.6	126.6	126.9
<b>North Dakota</b> .....	14.8	15.4	15.6	88.0	89.4	90.1	67.5	72.3	69.1
Bismarck .....	2.3	2.4	2.4	15.9	15.7	15.8	10.2	10.9	10.6
Fargo-Moorhead .....	6.0	6.5	6.5	29.8	30.8	30.3	12.7	14.2	13.3
Grand Forks .....	1.6	1.6	1.6	12.2	12.0	12.2	11.4	12.8	11.5
<b>Ohio</b> .....	289.3	292.1	294.5	1,493.2	1,520.9	1,533.1	764.0	784.7	770.6
Akron .....	13.0	13.3	13.3	92.6	91.6	93.0	43.0	50.2	43.1
Canton-Massillon .....	6.0	6.1	6.2	50.4	51.4	52.3	19.6	20.1	19.6
Cincinnati .....	53.1	55.1	55.4	254.2	263.3	266.3	99.8	105.3	103.3
Cleveland-Lorain-Elyria .....	74.9	75.3	75.8	337.9	350.4	352.5	148.7	147.9	148.8
Columbus .....	71.7	73.0	73.6	232.1	240.2	243.0	138.2	139.2	139.7
Dayton-Springfield .....	17.9	17.9	17.8	136.5	137.5	137.8	72.8	72.6	71.7
Hamilton-Middletown .....	6.5	6.5	6.7	27.1	27.4	27.7	18.5	21.4	19.1
Lima .....	2.1	2.1	2.2	20.9	20.9	21.1	10.6	10.7	10.7
Mansfield .....	2.9	2.5	2.5	19.5	19.0	19.2	10.8	10.7	10.8
Steubenville-Weirton .....	1.4	1.5	1.6	13.7	14.4	14.3	6.6	6.6	6.7
Toledo .....	10.9	11.0	11.1	91.2	90.4	91.2	45.4	48.7	45.6
Youngstown-Warren .....	9.5	9.4	9.4	64.8	65.4	65.9	31.7	33.4	32.6
<b>Oklahoma</b> .....	69.9	71.1	71.8	380.8	393.9	395.9	265.1	286.2	275.5
Enid .....	1.0	1.0	1.0	7.0	7.2	7.3	4.1	4.2	4.1
Lawton .....	1.7	1.7	1.7	8.2	8.4	8.3	11.7	12.1	11.9
Oklahoma City .....	29.0	30.0	30.1	147.2	149.3	150.4	100.0	104.6	100.9
Tulsa .....	20.2	20.8	21.1	114.3	122.2	122.8	41.2	42.8	41.9
<b>Oregon</b> .....	95.5	97.1	97.9	400.4	415.1	415.4	258.5	267.0	264.1
Eugene-Springfield .....	7.3	7.5	7.6	37.3	38.0	38.1	26.6	26.0	26.2
Medford-Ashland .....	3.1	3.1	3.1	18.8	19.7	19.9	10.9	11.1	11.2
Portland-Vancouver .....	67.0	66.9	67.5	250.8	262.7	261.7	118.3	122.1	121.9
Salem .....	6.7	6.6	6.7	30.5	31.9	31.3	37.3	37.8	37.9
<b>Pennsylvania</b> .....	316.4	320.2	323.5	1,715.0	1,749.0	1,747.5	705.5	725.2	698.4
Allentown Bethlehem-Easton .....	13.4	13.3	13.3	83.6	85.5	84.4	30.8	31.8	31.6
Altoona .....	1.9	2.0	2.0	16.0	16.1	16.4	7.9	7.9	7.8
Erie .....	5.5	5.5	5.6	36.0	35.9	35.9	14.7	16.0	15.3
Harrisburg-Lebanon-Carlisle .....	26.0	25.9	26.2	94.9	102.2	102.0	71.1	68.2	67.0
Johnstown .....	4.3	4.1	4.2	26.4	27.6	27.4	13.7	14.2	14.2
Lancaster .....	9.4	9.8	9.9	54.8	55.3	56.2	17.8	19.2	18.1
Philadelphia PMSA .....	159.0	160.0	162.0	808.8	819.5	821.9	294.1	299.3	287.2
Philadelphia City .....	54.1	54.5	55.1	276.5	284.2	281.7	117.0	120.3	111.5
Pittsburgh .....	62.5	62.0	62.4	373.6	372.2	373.2	126.1	127.6	126.0
Reading .....	8.8	8.8	8.9	40.7	41.0	41.7	18.3	20.1	18.9
Scranton-Wilkes-Barre-Hazleton .....	14.1	14.4	14.5	79.2	81.6	81.2	34.7	34.9	34.2
Sharon .....	1.5	1.6	1.7	13.2	13.9	13.5	5.6	5.7	5.6
State College .....	2.0	2.0	2.1	14.4	14.4	14.6	21.9	26.3	22.2
Williamsport .....	2.2	2.2	2.2	14.2	14.4	14.2	6.0	6.3	6.3
York .....	5.1	5.2	5.3	38.7	39.2	39.0	15.2	16.6	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	Total			Mining			Construction		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Rhode Island</b> .....	455.3	458.6	461.5	.2	.2	.2	15.5	17.1	17.3
Providence-Fall River-Warwick .....	509.3	512.1	513.4	.2	.2	.2	17.2	19.2	19.6
<b>South Carolina</b> .....	1,738.5	1,801.0	1,818.4	1.9	1.9	1.9	100.4	109.0	110.5
Charleston-North Charleston .....	224.0	234.6	236.6	(1)	(1)	(1)	16.2	17.8	18.1
Columbia .....	281.7	291.6	292.8	(1)	(1)	(1)	15.4	16.3	16.5
Greenville-Spartanburg-Anderson .....	461.9	473.1	476.8	(1)	(1)	(1)	30.2	31.2	31.8
<b>South Dakota</b> .....	362.1	363.7	368.6	2.3	1.8	1.8	17.2	16.6	17.6
Rapid City .....	48.8	46.8	48.6	(1)	(1)	(1)	3.3	3.2	3.5
Sioux Falls .....	104.6	107.4	108.9	(1)	(1)	(1)	5.4	5.4	5.8
<b>Tennessee</b> .....	2,596.8	2,629.2	2,626.3	4.6	4.5	4.5	118.3	122.0	123.3
Chattanooga .....	221.5	222.2	222.1	(1)	(1)	(1)	9.7	10.4	10.5
Johnson City-Kingsport-Bristol .....	200.6	201.8	202.0	(1)	(1)	(1)	11.2	11.6	11.6
Knoxville .....	323.2	320.9	323.0	.6	.6	.6	15.9	15.6	15.8
Memphis .....	555.7	560.8	559.2	(1)	(1)	(1)	24.6	24.7	24.9
Nashville .....	631.1	641.2	639.5	(1)	(1)	(1)	31.8	33.9	34.7
<b>Texas</b> .....	8,624.2	8,881.9	8,895.2	166.1	167.3	168.1	465.1	482.8	490.1
Abilene .....	54.7	56.8	56.2	1.7	1.6	1.6	2.2	2.4	2.4
Amarillo .....	92.9	95.9	95.1	.7	.6	.6	4.9	5.0	5.0
Austin-San Marcos .....	563.6	587.5	586.7	1.2	1.2	1.2	30.0	32.8	33.3
Beaumont-Port Arthur .....	156.5	160.6	160.8	.8	.8	.9	14.5	15.6	15.8
Brazoria .....	72.8	74.9	74.6	1.4	1.3	1.3	9.0	8.5	8.7
Brownsville-Harlingen-San Benito .....	97.6	100.6	100.2	(1)	(1)	(1)	3.6	3.5	3.5
Bryan-College Station .....	64.6	70.6	66.3	.8	.8	.8	3.1	3.2	3.4
Corpus Christi .....	154.4	157.3	158.4	2.4	2.5	2.5	11.8	11.0	11.1
Dallas .....	1,765.6	1,831.5	1,842.0	11.6	11.5	11.5	83.7	85.4	87.0
El Paso .....	243.8	250.5	250.6	(1)	(1)	(1)	12.1	12.7	12.9
Ft. Worth-Arlington .....	710.4	730.9	733.9	4.4	4.3	4.3	35.8	36.4	37.0
Galveston-Texas City .....	88.6	90.2	90.8	.7	.7	.7	4.5	4.1	4.2
Houston .....	1,894.4	1,966.3	1,976.6	67.6	69.9	70.5	127.4	134.7	137.2
Killeen-Temple .....	97.9	100.8	101.3	(1)	(1)	(1)	4.3	4.2	4.5
Laredo .....	60.1	62.5	62.4	3.2	2.1	2.0	2.1	2.4	2.5
Longview-Marshall .....	88.8	90.0	90.4	3.3	3.3	3.4	4.5	4.6	4.7
Lubbock .....	112.0	116.9	116.0	.1	.1	.1	4.4	4.7	4.9
McAllen-Edinburg-Mission .....	133.6	142.9	141.3	1.1	1.3	1.3	7.1	7.4	7.4
Odessa Midland .....	103.4	106.8	107.1	13.4	13.1	12.8	5.5	6.9	7.2
San Angelo .....	44.0	43.6	43.4	.7	.7	.7	1.9	1.9	1.9
San Antonio .....	665.2	688.2	687.2	1.9	2.0	2.0	34.6	36.6	37.1
Sherman-Denison .....	43.8	44.5	44.1	(1)	(1)	(1)	2.1	2.2	2.3
Texarkana .....	51.4	51.9	52.2	(1)	(1)	(1)	2.2	2.1	2.1
Tyler .....	77.5	79.3	80.1	1.6	1.5	1.6	2.9	3.1	3.2
Victoria .....	35.4	36.6	36.8	1.6	1.8	1.8	2.4	2.5	2.6
Waco .....	95.4	96.8	97.4	(1)	(1)	(1)	4.7	4.8	5.0
Wichita Falls .....	59.8	60.7	60.6	1.2	1.1	1.1	2.4	2.4	2.5
<b>Utah</b> .....	999.2	1,025.7	1,032.1	8.4	8.1	8.2	67.6	68.6	70.6
Provo-Orem .....	132.6	135.8	136.1	(1)	(1)	(1)	9.7	9.0	9.3
Salt Lake City-Ogden .....	673.1	691.8	695.5	3.0	2.8	2.8	45.2	46.2	46.6
<b>Vermont</b> .....	278.9	280.6	282.7	.6	.6	.6	14.1	12.9	13.9
Barre-Montpelier .....	30.5	31.5	31.7	(1)	(1)	(1)	1.5	1.5	1.6
Burlington .....	98.2	100.7	101.2	(1)	(1)	(1)	5.1	4.5	4.8
<b>Virginia</b> .....	3,260.6	3,323.1	3,347.0	11.6	11.0	11.0	188.8	195.9	199.2
Bristol .....	37.8	36.7	36.7	(1)	(1)	(1)	1.6	1.4	1.4
Charlottesville .....	81.1	82.7	84.0	(1)	(1)	(1)	4.6	4.5	4.6
Danville .....	45.5	46.1	46.3	(1)	(1)	(1)	2.4	2.3	2.4
Lynchburg .....	96.4	97.0	96.9	(1)	(1)	(1)	5.9	5.8	5.9
Norfolk-Virginia Beach-Newport News .....	673.5	675.7	681.4	(1)	(1)	(1)	41.3	39.7	40.1
Northern Virginia .....	1,008.5	1,038.2	1,048.1	.7	.7	.8	56.4	58.5	59.5
Richmond-Petersburg .....	529.0	538.3	538.9	.7	.7	.7	33.9	34.6	35.0
Roanoke .....	142.3	141.5	141.9	(1)	(1)	(1)	8.5	8.8	8.9
<b>Washington</b> .....	2,548.3	2,595.0	2,620.2	3.6	3.4	3.5	139.7	140.8	145.5
Seattle-Bellevue-Everett .....	1,308.0	1,351.3	1,369.4	.7	.7	.7	67.2	67.4	70.3
Spokane .....	187.5	190.3	189.7	(1)	(1)	(1)	11.2	11.0	11.5
Tacoma .....	231.2	235.8	236.5	.2	.2	.2	12.9	13.9	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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Rhode Island</b>	80.4	79.0	79.3	15.8	15.9	16.2	100.4	98.5	100.4
Providence-Fall River-Warwick	102.6	102.0	102.4	17.9	18.0	18.2	116.2	114.2	114.9
<b>South Carolina</b>	364.5	363.8	364.9	75.4	77.5	78.0	419.8	441.2	447.0
Charleston-North Charleston	21.5	22.0	22.0	12.0	13.1	13.1	56.5	57.1	58.0
Columbia	25.7	26.5	26.9	13.0	12.9	12.8	65.4	67.6	68.2
Greenville-Spartanburg-Anderson	123.2	123.8	123.9	20.5	20.9	21.1	117.0	121.0	121.8
<b>South Dakota</b>	50.3	49.1	50.0	16.4	16.1	16.2	90.5	89.8	90.9
Rapid City	4.4	4.5	4.6	2.0	1.7	1.8	14.8	14.1	14.8
Sioux Falls	14.0	14.4	14.6	6.6	6.5	6.5	26.3	26.8	27.1
<b>Tennessee</b>	520.0	514.9	516.3	151.1	152.3	152.3	610.2	618.8	620.3
Chattanooga	43.0	41.6	41.7	11.9	12.1	12.1	53.1	53.2	53.4
Johnson City-Kingsport-Bristol	52.6	50.7	50.6	7.9	7.5	7.6	45.3	45.5	45.5
Knoxville	48.9	49.2	49.8	14.6	14.4	14.4	85.2	84.5	85.1
Memphis	63.8	63.2	63.2	60.7	62.8	62.8	141.0	141.4	142.1
Nashville	96.5	95.4	95.8	31.3	31.6	31.8	151.7	155.5	156.3
<b>Texas</b>	1,087.6	1,095.8	1,101.7	516.5	537.9	540.8	2,053.9	2,092.2	2,105.2
Abilene	3.2	3.3	3.4	2.4	2.4	2.4	14.4	14.8	14.8
Amarillo	9.3	9.4	9.4	5.7	5.6	5.6	26.2	26.6	26.9
Austin-San Marcos	76.3	78.1	78.4	18.8	19.6	19.7	121.2	125.2	126.2
Beaumont-Port Arthur	24.9	25.1	25.4	8.3	8.0	8.0	35.9	36.6	36.7
Brazoria	16.5	16.8	16.8	2.7	2.8	2.7	14.7	15.0	15.2
Brownsville-Harlingen-San Benito	12.2	12.0	12.0	4.4	4.6	4.6	23.7	24.3	24.4
Bryan-College Station	4.1	4.4	4.4	1.5	1.5	1.6	14.3	14.8	14.7
Corpus Christi	13.2	13.3	13.5	6.4	6.4	6.5	36.3	36.4	36.9
Dallas	246.5	249.7	250.0	121.1	127.7	129.4	431.2	440.0	442.9
El Paso	43.8	40.9	41.1	13.4	14.2	14.3	57.9	59.1	59.2
Ft. Worth-Arlington	110.2	110.5	110.9	64.5	68.0	68.5	179.1	186.7	187.8
Galveston-Texas City	8.0	8.0	8.0	4.2	4.3	4.3	19.8	20.2	20.4
Houston	209.8	215.3	216.3	133.2	138.3	138.8	434.7	448.1	452.2
Killeen-Temple	9.2	9.4	9.5	3.6	3.7	3.7	22.8	23.6	23.7
Laredo	1.4	1.5	1.5	10.0	11.1	11.2	16.2	17.0	17.0
Longview-Marshall	18.9	19.1	19.4	4.0	4.1	4.1	22.4	22.8	22.9
Lubbock	7.6	7.9	8.0	5.6	5.5	5.5	31.6	32.6	32.7
McAllen-Edinburg-Mission	13.2	13.3	13.3	4.7	4.9	4.8	36.4	39.9	39.3
Odessa Midland	7.6	7.4	7.5	4.3	4.1	4.2	27.7	27.6	27.6
San Angelo	5.5	4.7	4.7	2.4	2.3	2.3	10.2	10.4	10.4
San Antonio	50.3	50.2	50.4	30.8	30.9	31.1	162.3	164.8	166.0
Sherman-Denison	10.8	10.5	10.5	1.7	1.6	1.6	9.8	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	10.9	3.7	3.9	4.0	19.5	20.2	20.5
Victoria	3.3	3.3	3.3	1.5	1.5	1.6	9.4	9.6	9.7
Waco	16.7	16.4	16.5	3.7	4.0	3.9	22.0	22.5	22.5
Wichita Falls	8.3	8.4	8.6	3.0	2.9	2.9	13.8	13.6	13.6
<b>Utah</b>	132.6	135.0	135.1	55.9	57.7	58.1	239.1	243.2	244.5
Provo-Orem	19.5	20.5	20.7	2.3	2.3	2.3	30.5	30.7	31.0
Salt Lake City-Ogden	81.9	83.0	83.1	44.0	46.3	46.3	162.4	165.5	167.0
<b>Vermont</b>	46.7	47.9	48.3	12.4	12.5	12.7	65.9	65.1	66.3
Barre-Montpelier	3.4	3.5	3.5	1.1	1.1	1.1	6.9	6.8	7.0
Burlington	17.9	19.0	19.0	4.8	4.7	4.9	22.3	22.0	22.6
<b>Virginia</b>	404.2	404.7	405.7	168.1	171.9	172.6	726.7	736.1	742.7
Bristol	9.8	8.9	9.0	1.3	1.3	1.3	10.1	10.3	10.3
Charlottesville	8.1	8.2	8.2	2.4	2.3	2.4	16.5	16.7	16.7
Danville	15.2	15.1	15.1	1.0	1.0	1.0	9.8	10.0	9.9
Lynchburg	25.5	25.2	25.1	3.6	3.6	3.6	20.3	19.9	19.9
Norfolk-Virginia Beach-Newport News	68.5	68.9	69.1	32.3	32.7	32.8	157.9	157.2	159.6
Northern Virginia	43.1	44.9	45.4	60.5	61.3	61.9	216.7	217.0	219.0
Richmond-Petersburg	61.2	61.1	61.2	27.2	28.0	27.8	123.9	127.7	127.9
Roanoke	19.4	19.0	18.9	8.7	8.6	8.5	36.6	36.0	36.2
<b>Washington</b>	372.0	377.4	380.1	135.2	136.7	138.3	615.2	622.3	631.7
Seattle-Bellevue-Everett	218.4	226.5	228.9	78.9	80.3	81.5	305.9	313.7	317.4
Spokane	23.0	22.7	22.7	7.9	8.0	8.0	47.2	48.0	48.3
Tacoma	25.6	25.5	25.7	9.9	9.9	10.1	57.8	60.5	60.6

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	Finance, insurance, and real estate			Services			Government		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Rhode Island</b> .....	26.8	27.4	27.7	151.6	153.4	153.3	64.6	67.1	67.1
Providence-Fall River-Warwick .....	28.9	29.0	29.5	160.3	161.8	161.1	66.0	67.7	67.5
<b>South Carolina</b> .....	75.8	78.4	79.5	401.6	420.9	425.8	299.1	308.3	310.8
Charleston-North Charleston .....	8.5	8.5	8.7	60.6	65.3	65.8	48.7	50.8	50.9
Columbia .....	20.2	20.6	20.8	70.0	71.6	72.0	72.0	76.1	75.6
Greenville-Spartanburg-Anderson .....	15.5	15.8	15.9	98.4	101.3	102.0	57.1	59.1	60.3
<b>South Dakota</b> .....	21.1	22.0	22.6	95.4	95.6	96.9	68.9	72.7	72.6
Rapid City .....	1.8	1.8	1.8	15.1	13.8	14.8	7.4	7.7	7.3
Sioux Falls .....	11.4	12.4	12.7	30.6	31.4	31.5	10.3	10.5	10.7
<b>Tennessee</b> .....	121.6	123.0	123.6	691.6	703.0	703.0	379.4	390.7	383.0
Chattanooga .....	15.5	15.5	15.5	55.3	55.9	55.8	33.0	33.5	33.1
Johnson City-Kingsport-Bristol .....	6.1	6.2	6.2	49.5	50.9	51.0	28.0	29.4	29.5
Knoxville .....	14.0	14.1	14.2	89.4	88.5	89.0	54.6	54.0	54.1
Memphis .....	28.2	27.8	28.0	160.8	160.5	161.0	76.6	80.4	77.2
Nashville .....	39.4	39.5	40.0	200.3	200.6	201.0	80.1	84.7	79.9
<b>Texas</b> .....	466.4	479.4	483.9	2,417.2	2,503.5	2,527.4	1,451.4	1,523.0	1,478.0
Abilene .....	2.4	2.5	2.5	18.6	19.6	19.2	9.8	10.2	9.9
Amarillo .....	4.7	5.0	5.0	25.9	26.5	26.9	15.5	17.2	15.7
Austin-San Marcos .....	30.0	30.5	30.8	161.5	170.2	171.3	124.6	129.9	125.8
Beaumont-Port Arthur .....	5.1	5.3	5.4	41.5	42.3	42.6	25.5	26.9	26.0
Brazoria .....	1.8	1.8	1.8	13.7	13.9	14.1	13.0	14.8	14.0
Brownsville-Harlingen-San Benito .....	3.7	3.7	3.8	27.9	28.9	29.2	22.1	23.6	22.7
Bryan-College Station .....	2.4	2.3	2.3	14.8	15.4	15.3	23.6	28.2	23.8
Corpus Christi .....	6.7	6.6	6.7	47.4	49.7	50.1	30.2	31.4	31.1
Dallas .....	139.2	144.5	145.9	539.3	568.4	575.2	193.0	204.3	200.1
El Paso .....	9.6	10.2	10.3	55.4	58.0	58.7	51.6	55.4	54.1
Ft. Worth-Arlington .....	31.8	33.0	33.2	194.3	199.5	201.4	90.3	92.5	90.8
Galveston-Texas City .....	5.4	5.5	5.5	19.2	19.5	20.0	26.8	27.9	27.7
Houston .....	100.3	103.5	104.3	575.2	600.6	608.5	246.2	255.9	248.8
Killeen-Temple .....	4.0	4.2	4.3	27.0	28.0	28.1	27.0	27.7	27.5
Laredo .....	2.3	2.4	2.5	10.8	11.4	11.5	14.1	14.6	14.2
Longview-Marshall .....	3.2	3.2	3.3	21.0	21.1	21.3	11.5	11.8	11.3
Lubbock .....	5.5	5.7	5.7	33.9	35.2	35.5	23.3	25.2	23.6
McAllen-Edinburg-Mission .....	4.9	5.0	5.0	30.9	32.2	32.4	35.3	38.9	37.8
Odessa Midland .....	3.6	3.5	3.6	24.8	25.5	25.9	16.5	18.7	18.3
San Angelo .....	1.7	1.6	1.6	12.9	13.1	13.2	8.7	8.9	8.6
San Antonio .....	44.0	44.9	45.3	209.4	222.9	223.1	131.9	135.9	132.2
Sherman-Denison .....	2.1	2.1	2.1	11.8	12.6	12.3	5.5	5.7	5.5
Texarkana .....	1.7	1.7	1.8	14.3	14.7	15.0	11.7	11.7	11.5
Tyler .....	4.0	4.1	4.2	23.6	24.4	24.6	10.9	11.2	11.1
Victoria .....	1.6	1.4	1.4	9.6	9.9	10.0	6.0	6.6	6.4
Waco .....	5.7	5.8	5.9	27.6	28.1	28.3	15.0	15.2	15.3
Wichita Falls .....	2.2	2.2	2.2	16.4	17.0	16.9	12.5	13.1	12.8
<b>Utah</b> .....	52.7	53.7	54.1	288.6	276.1	281.0	174.3	183.3	180.5
Provo-Orem .....	3.8	4.2	4.2	49.4	49.5	50.8	17.4	19.6	17.8
Salt Lake City-Ogden .....	43.6	44.0	44.3	180.0	187.6	189.6	113.0	116.4	115.8
<b>Vermont</b> .....	12.5	12.2	12.4	81.6	82.5	83.2	45.1	46.9	45.3
Barre-Montpelier .....	2.6	2.5	2.5	7.8	8.7	8.4	7.2	7.4	7.6
Burlington .....	4.9	5.1	5.1	28.9	29.8	30.1	14.3	15.6	14.7
<b>Virginia</b> .....	170.2	171.0	173.0	991.2	1,029.2	1,043.9	599.8	603.3	598.9
Bristol .....	1.2	1.3	1.3	7.9	7.8	7.8	5.9	5.7	5.6
Charlottesville .....	4.3	4.1	4.2	20.3	20.3	20.8	24.9	26.6	27.1
Danville .....	1.4	1.4	1.5	9.5	10.2	10.2	6.2	6.1	6.2
Lynchburg .....	4.3	4.2	4.3	23.8	25.7	25.4	13.0	12.6	12.7
Norfolk-Virginia Beach-Newport News .....	31.6	32.0	32.7	199.1	200.7	202.9	142.8	144.5	144.2
Northern Virginia .....	55.5	56.2	56.9	394.1	418.5	424.3	181.5	181.1	180.3
Richmond-Petersburg .....	44.5	44.5	44.3	136.9	145.5	146.7	100.7	96.2	95.3
Roanoke .....	9.4	9.3	9.3	41.5	41.7	42.0	18.2	18.1	18.1
<b>Washington</b> .....	128.0	134.1	134.9	683.7	711.6	716.4	470.9	488.7	469.8
Seattle-Bellevue-Everett .....	77.1	81.8	82.6	374.6	395.7	401.6	185.2	185.2	186.4
Spokane .....	10.9	11.1	11.1	55.6	57.3	55.6	31.7	32.2	32.5
Tacoma .....	12.0	12.2	12.3	64.9	64.9	64.1	47.9	48.7	46.9

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>West Virginia</b> .....	713.1	732.4	722.2	24.9	23.1	23.0	36.4	35.5	37.0
Charleston .....	131.5	133.5	134.5	1.9	1.9	1.9	7.2	7.0	7.4
Huntington-Ashland .....	121.4	123.0	122.1	1.6	1.2	1.3	5.9	6.0	6.0
Parkersburg-Marietta .....	70.7	70.5	70.2	.3	.3	.3	4.7	3.9	3.9
Wheeling .....	66.0	67.2	66.9	1.6	1.5	1.5	2.6	2.5	2.8
<b>Wisconsin</b> .....	2,691.7	2,717.7	2,754.3	2.9	2.6	2.6	117.7	115.0	122.1
Appleton-Oshkosh-Neenah .....	195.9	199.2	201.7	(1)	(1)	(1)	11.4	11.2	11.9
Eau Claire .....	72.6	74.8	74.1	(1)	(1)	(1)	3.4	3.3	3.6
Green Bay .....	135.7	135.3	136.5	(1)	(1)	(1)	7.0	6.7	6.9
Janesville-Beloit .....	70.1	70.1	70.3	(1)	(1)	(1)	2.9	2.8	3.0
Kenosha .....	50.6	52.3	52.0	(1)	(1)	(1)	2.2	2.2	2.2
La Crosse .....	68.0	69.8	70.1	(1)	(1)	(1)	3.1	3.0	3.2
Madison .....	269.0	273.5	274.4	(1)	(1)	(1)	13.3	13.2	13.8
Milwaukee-Waukesha .....	836.1	845.4	855.0	(1)	(1)	(1)	32.0	31.4	32.8
Racine .....	81.9	83.5	84.3	(1)	(1)	(1)	3.4	3.6	3.8
Sheboygan .....	59.7	58.7	60.1	(1)	(1)	(1)	2.5	2.5	2.6
Wausau .....	65.5	66.1	66.7	(1)	(1)	(1)	3.1	3.1	3.2
<b>Wyoming</b> .....	234.0	226.9	233.8	17.0	16.8	17.4	16.7	16.1	16.9
Casper .....	30.7	30.9	31.3	2.0	2.1	2.2	1.9	1.9	2.0
<b>Puerto Rico</b> .....	1,000.7	964.5	981.9	1.1	1.1	1.1	56.0	54.2	54.6
Caguas .....	67.3	64.8	67.0	(1)	(1)	(1)	2.9	3.0	3.0
Mayaguez .....	72.3	67.8	70.3	(1)	(1)	(1)	3.9	4.4	4.5
Ponce .....	80.0	77.6	78.9	(1)	(1)	(1)	4.7	4.8	5.1
San Juan-Bayamon .....	619.2	606.2	610.8	.6	.6	.6	38.8	37.8	37.9
<b>Virgin Islands</b> .....	41.5	41.4	41.6	(1)	(1)	(1)	1.8	1.8	1.8

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>West Virginia</b> .....	82.1	82.7	83.1	39.1	38.8	39.1	163.4	164.6	165.5
Charleston .....	10.0	10.3	10.3	9.4	9.1	9.0	31.4	31.7	32.4
Huntington-Ashland .....	17.0	16.6	16.6	6.9	6.7	6.7	31.9	31.3	31.1
Parkersburg-Marietta .....	13.4	13.1	13.3	2.7	2.6	2.6	17.7	17.4	17.5
Wheeling .....	5.9	6.2	6.1	2.8	2.9	2.8	17.4	17.1	16.9
<b>Wisconsin</b> .....	616.7	616.1	625.8	125.3	125.3	125.5	611.2	615.3	623.7
Appleton-Oshkosh-Neenah .....	60.1	59.0	60.1	7.4	7.7	7.6	40.7	42.9	43.3
Eau Claire .....	12.5	12.9	13.1	3.6	3.5	3.5	20.0	20.2	19.9
Green Bay .....	29.0	28.5	29.2	9.8	10.1	10.1	31.6	31.5	31.7
Janesville-Beloit .....	21.7	21.7	22.1	2.6	2.6	2.6	16.6	16.0	16.0
Kenosha .....	11.4	11.6	11.6	1.9	2.1	2.2	12.4	12.3	12.3
La Crosse .....	11.8	11.8	11.9	3.0	2.9	3.0	18.1	18.3	18.4
Madison .....	30.1	30.0	30.6	9.2	9.8	9.7	57.0	56.2	56.7
Milwaukee-Waukesha .....	177.8	178.5	180.0	39.9	40.2	40.2	180.7	182.5	184.6
Racine .....	25.4	26.1	26.2	2.6	2.4	2.4	16.7	16.7	16.9
Sheboygan .....	24.4	24.0	24.5	1.8	1.8	1.8	11.1	10.9	11.1
Wausau .....	18.9	18.7	19.1	3.4	3.6	3.5	15.9	16.3	16.5
<b>Wyoming</b> .....	10.9	10.7	11.0	14.1	13.9	14.1	54.9	52.0	54.4
Casper .....	1.6	1.5	1.5	1.7	1.6	1.6	8.4	8.5	8.5
<b>Puerto Rico</b> .....	151.4	143.8	142.8	27.1	25.7	25.6	196.8	196.7	196.0
Caguas .....	15.7	15.2	28.8	.7	.7	.7	14.5	15.0	15.0
Mayaguez .....	18.8	17.5	17.7	.7	.6	.6	12.0	11.6	11.7
Ponce .....	10.5	9.6	9.7	2.2	2.5	2.2	13.0	13.5	13.3
San Juan-Bayamon .....	69.2	65.7	64.3	22.1	20.4	20.5	130.1	129.7	129.3
<b>Virgin Islands</b> .....	2.3	2.4	2.4	2.4	2.4	2.4	9.4	9.0	9.0

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>West Virginia</b> .....	28.4	28.4	28.6	200.0	205.9	207.4	138.8	153.4	138.5
Charleston .....	7.5	7.8	7.9	40.1	40.5	41.4	24.0	25.2	24.2
Huntington-Ashland .....	3.8	3.9	4.0	33.5	35.5	35.7	20.8	21.8	20.7
Parkersburg-Marietta .....	2.6	2.6	2.6	18.4	19.3	19.3	10.9	11.3	10.7
Wheeling .....	2.8	2.9	2.9	22.7	23.3	23.2	10.2	10.8	10.7
<b>Wisconsin</b> .....	141.6	143.1	145.4	687.6	698.8	713.3	388.7	401.6	395.8
Appleton-Oshkosh-Neenah .....	9.7	9.9	10.1	44.5	45.4	46.0	22.1	23.1	22.7
Eau Claire .....	2.5	2.6	2.6	19.9	19.9	20.1	10.9	12.4	11.3
Green Bay .....	9.3	9.4	9.3	32.9	32.9	32.9	16.1	16.2	16.2
Janesville-Beloit .....	1.9	1.9	1.9	16.0	16.1	16.0	8.5	8.9	8.8
Kenosha .....	1.7	1.8	1.8	12.8	13.7	13.4	8.2	8.6	8.5
La Crosse .....	2.4	2.6	2.6	20.4	21.0	20.9	9.2	10.2	10.1
Madison .....	21.2	21.9	22.5	68.8	69.9	71.0	69.3	72.5	70.1
Milwaukee-Waukesha .....	58.2	58.8	59.3	255.3	262.7	265.3	92.3	91.3	92.9
Racine .....	2.3	2.3	2.3	21.9	23.0	23.2	9.6	9.6	9.6
Sheboygan .....	2.1	2.2	2.2	11.5	10.9	11.4	6.4	6.4	6.5
Wausau .....	4.7	4.9	4.9	12.2	12.0	12.3	7.4	7.5	7.4
<b>Wyoming</b> .....	8.3	8.2	8.4	53.4	49.1	53.4	58.7	60.1	58.2
Casper .....	1.2	1.2	1.2	8.5	8.5	8.7	5.4	5.6	5.6
<b>Puerto Rico</b> .....	46.9	46.2	46.2	190.0	193.0	189.0	331.4	303.8	326.6
Caguas .....	1.6	1.8	1.8	11.5	11.7	11.8	20.4	17.4	19.5
Mayaguez .....	1.9	2.0	2.0	11.1	11.0	10.3	23.9	20.7	23.5
Ponce .....	2.3	2.4	2.4	16.2	17.6	16.9	31.1	27.2	29.3
San Juan-Bayamon .....	37.0	36.1	36.1	129.0	131.7	128.9	192.4	184.2	193.2
<b>Virgin Islands</b> .....	1.9	1.8	1.8	10.0	10.5	10.3	13.7	13.5	13.9

<sup>1</sup> Combined with construction.  
<sup>2</sup> 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 workers<sup>1</sup> on private nonfarm payrolls by detailed industry**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Total private</b> .....		34.9	34.8	34.6	34.7	34.8	-	-	-	-	-
<b>Goods-producing</b> .....		41.4	41.0	41.2	41.2	40.9	-	-	-	-	-
<b>Mining</b> .....		45.8	45.1	44.4	44.0	43.6	-	-	-	-	-
Metal mining .....	10	44.2	44.3	44.3	44.2	-	-	-	-	-	-
Iron ores .....	101	44.5	44.0	45.9	44.3	-	-	-	-	-	-
Copper ores .....	102	46.2	47.1	45.1	46.6	-	-	-	-	-	-
Coal mining .....	12	45.6	44.0	44.6	44.9	-	-	-	-	-	-
Bituminous coal and lignite mining .....	122	45.6	44.1	44.5	44.8	-	-	-	-	-	-
Oil and gas extraction .....	13	45.3	44.4	43.4	42.5	-	-	-	-	-	-
Crude petroleum and natural gas .....	131	42.7	41.4	41.1	40.5	-	-	-	-	-	-
Oil and gas field services .....	138	46.6	45.9	44.3	43.3	-	-	-	-	-	-
Nonmetallic minerals, except fuels .....	14	48.3	48.8	47.1	47.5	-	-	-	-	-	-
Crushed and broken stone .....	142	50.0	50.9	48.9	49.3	-	-	-	-	-	-
<b>Construction</b> .....		39.6	40.1	39.2	39.1	40.0	-	-	-	-	-
General building contractors .....	15	38.6	38.8	38.1	38.0	-	-	-	-	-	-
Residential building construction .....	152	37.3	37.2	36.4	36.7	-	-	-	-	-	-
Operative builders .....	153	39.0	38.8	37.9	37.9	-	-	-	-	-	-
Nonresidential building construction .....	154	39.9	40.4	39.8	39.5	-	-	-	-	-	-
Heavy construction, except building .....	16	43.5	44.6	43.3	42.8	-	-	-	-	-	-
Highway and street construction .....	161	45.5	47.0	44.5	43.7	-	-	-	-	-	-
Heavy construction, except highway .....	162	42.4	43.4	42.7	42.3	-	-	-	-	-	-
Special trade contractors .....	17	39.0	39.5	38.6	38.6	-	-	-	-	-	-
Plumbing, heating, and air conditioning .....	171	39.9	40.2	39.7	39.8	-	-	-	-	-	-
Painting and paper hanging .....	172	37.3	38.2	37.1	36.7	-	-	-	-	-	-
Electrical work .....	173	40.1	40.4	40.2	40.3	-	-	-	-	-	-
Masonry, stonework, and plastering .....	174	36.2	36.9	36.3	36.1	-	-	-	-	-	-
Carpentry and floor work .....	175	35.9	36.1	36.6	36.6	-	-	-	-	-	-
Roofing, siding, and sheet metal work .....	176	35.9	37.2	34.4	34.5	-	-	-	-	-	-
<b>Manufacturing</b> .....		42.0	41.2	41.8	41.8	41.1	4.7	4.5	4.6	4.6	4.4
<b>Durable goods</b> .....		42.8	41.9	42.5	42.5	41.4	5.0	4.7	4.8	4.8	4.5
Lumber and wood products .....	24	41.5	40.8	41.4	41.6	41.0	4.5	4.4	4.6	4.7	-
Logging .....	241	41.1	41.2	40.9	42.2	-	5.8	6.0	5.8	6.0	-
Sawmills and planing mills .....	242	42.9	41.8	42.0	42.3	-	5.5	5.1	4.9	5.0	-
Sawmills and planing mills, general .....	2421	43.4	42.5	42.3	42.6	-	6.0	5.7	5.3	5.4	-
Hardwood dimension and flooring mills .....	2426	41.3	39.5	41.1	41.5	-	3.4	3.0	3.5	3.6	-
Millwork, plywood, and structural members .....	243	41.9	41.1	42.0	41.8	-	4.4	4.4	5.0	5.0	-
Millwork .....	2431	41.6	41.0	41.5	41.7	-	3.7	3.7	4.2	4.2	-
Wood kitchen cabinets .....	2434	40.3	40.0	41.4	40.9	-	4.0	4.4	5.4	5.3	-
Hardwood veneer and plywood .....	2435	42.7	40.5	42.5	42.0	-	4.7	4.7	5.3	5.3	-
Softwood veneer and plywood .....	2436	45.5	43.2	44.0	42.6	-	6.3	5.9	5.9	5.6	-
Wood containers .....	244	39.2	38.9	38.7	39.5	-	3.9	3.3	3.7	4.0	-
Wood buildings and mobile homes .....	245	39.7	39.0	40.7	41.0	-	2.8	3.0	3.3	3.8	-
Mobile homes .....	2451	39.7	39.4	41.1	41.2	-	2.6	2.9	3.4	3.8	-
Miscellaneous wood products .....	249	41.2	40.5	40.6	40.3	-	3.7	3.6	3.6	3.6	-
Furniture and fixtures .....	25	39.9	39.5	40.1	40.9	40.3	3.3	3.4	3.3	3.6	-
Household furniture .....	251	38.4	37.7	39.4	39.8	-	2.4	2.5	2.7	2.9	-
Wood household furniture .....	2511	38.8	37.6	40.3	40.1	-	2.5	2.4	2.8	3.0	-
Upholstered household furniture .....	2512	37.4	36.8	37.5	38.7	-	1.7	1.7	1.7	2.2	-
Metal household furniture .....	2514	39.5	39.0	40.5	41.5	-	3.4	3.3	4.6	4.4	-
Mattresses and bedsprings .....	2515	38.4	39.7	39.6	40.1	-	3.2	4.9	3.4	3.4	-
Office furniture .....	252	41.5	41.7	40.2	41.9	-	4.4	4.4	3.4	4.2	-
Public building and related furniture .....	253	41.1	40.6	41.8	42.6	-	4.2	4.7	4.9	5.0	-
Partitions and fixtures .....	254	43.5	43.5	41.8	43.0	-	5.0	5.3	4.1	4.9	-
Miscellaneous furniture and fixtures .....	259	39.5	39.4	40.4	40.6	-	3.2	3.3	4.3	4.3	-

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Total private</b> .....		\$12.18	\$12.17	\$12.70	\$12.66	\$12.67	\$425.08	\$423.52	\$439.42	\$439.30	\$440.92
<b>Goods-producing</b> .....		13.86	13.93	14.28	14.27	14.35	573.80	571.13	588.34	587.92	586.92
<b>Mining</b> .....		16.14	16.07	16.73	16.72	16.75	739.21	724.76	742.81	735.68	730.30
Metal mining .....	10	17.77	17.70	18.25	18.22	—	785.43	784.11	808.48	805.32	—
Iron ores .....	101	18.42	19.19	19.87	19.61	—	819.69	844.36	912.03	868.72	—
Copper ores .....	102	16.36	16.10	16.10	16.25	—	755.83	758.31	726.11	757.25	—
Coal mining .....	12	18.91	18.97	19.08	19.12	—	862.30	834.68	850.97	858.49	—
Bituminous coal and lignite mining .....	122	19.20	19.29	19.31	19.37	—	875.52	850.69	859.30	867.78	—
Oil and gas extraction .....	13	15.69	15.54	16.50	16.46	—	710.76	689.98	716.10	699.55	—
Crude petroleum and natural gas .....	131	21.22	21.03	22.24	22.29	—	906.09	870.64	914.06	902.75	—
Oil and gas field services .....	138	12.99	12.98	13.77	13.62	—	605.33	595.78	610.01	589.75	—
Nonmetallic minerals, except fuels .....	14	14.20	14.31	14.66	14.75	—	685.86	698.33	690.49	700.63	—
Crushed and broken stone .....	142	13.62	13.66	14.05	14.19	—	681.00	695.29	687.05	699.57	—
<b>Construction</b> .....		15.91	16.03	16.42	16.43	16.64	630.04	642.80	643.66	642.41	665.60
General building contractors .....	15	14.94	15.03	15.72	15.59	—	576.68	583.16	598.93	592.42	—
Residential building construction .....	152	13.86	13.86	14.68	14.52	—	516.98	515.59	534.35	532.88	—
Operative builders .....	153	14.98	15.00	14.93	15.28	—	584.22	582.00	565.85	579.11	—
Nonresidential building construction .....	154	15.98	16.14	16.75	16.67	—	637.60	652.06	666.65	658.47	—
Heavy construction, except building .....	16	15.61	15.78	15.96	16.07	—	679.04	703.79	691.07	687.80	—
Highway and street construction .....	161	15.88	16.07	16.01	16.28	—	722.54	755.29	712.45	711.44	—
Heavy construction, except highway .....	162	15.47	15.63	15.93	15.97	—	655.93	678.34	680.21	675.53	—
Special trade contractors .....	17	16.30	16.41	16.77	16.79	—	635.70	648.20	647.32	648.09	—
Plumbing, heating, and air conditioning .....	171	16.66	16.83	17.09	17.08	—	664.73	676.57	678.47	679.78	—
Painting and paper hanging .....	172	14.60	14.55	15.08	15.00	—	544.58	555.81	559.47	550.50	—
Electrical work .....	173	17.73	17.82	18.23	18.37	—	710.97	719.93	732.85	740.31	—
Masonry, stonework, and plastering .....	174	16.14	16.22	16.74	16.74	—	584.27	598.52	607.66	604.31	—
Carpentry and floor work .....	175	15.90	15.95	16.36	16.34	—	570.81	575.80	598.78	598.04	—
Roofing, siding, and sheet metal work .....	176	14.04	14.36	14.46	14.48	—	504.04	534.19	497.42	499.56	—
<b>Manufacturing</b> .....		13.09	13.10	13.47	13.44	13.40	549.78	539.72	563.05	561.79	550.74
<b>Durable goods</b> .....		13.65	13.61	13.98	13.94	13.83	584.22	570.26	594.15	592.45	572.56
Lumber and wood products .....	24	10.78	10.83	11.06	11.09	11.17	447.37	441.86	457.88	461.34	457.97
Logging .....	241	12.29	12.36	12.37	12.56	—	505.12	509.23	505.93	530.03	—
Sawmills and planing mills .....	242	10.87	10.86	11.06	11.06	—	466.32	453.95	464.52	467.84	—
Sawmills and planing mills, general .....	2421	11.30	11.27	11.50	11.51	—	490.42	478.98	486.45	490.33	—
Hardwood dimension and flooring mills .....	2426	9.16	9.12	9.39	9.38	—	378.31	360.24	385.93	389.27	—
Millwork, plywood, and structural members .....	243	10.88	10.94	11.23	11.21	—	455.87	449.63	471.66	468.58	—
Millwork .....	2431	10.87	11.01	11.26	11.23	—	452.19	451.41	467.29	468.29	—
Wood kitchen cabinets .....	2434	10.76	10.72	11.24	11.17	—	433.63	428.80	465.34	456.85	—
Hardwood veneer and plywood .....	2435	9.44	9.52	9.95	10.00	—	403.09	385.56	422.88	420.00	—
Softwood veneer and plywood .....	2436	13.02	13.20	13.41	13.42	—	592.41	570.24	590.04	571.69	—
Wood containers .....	244	8.35	8.24	8.85	8.82	—	327.32	320.54	342.50	348.39	—
Wood buildings and mobile homes .....	245	10.80	11.02	11.36	11.37	—	428.76	429.78	462.35	466.17	—
Mobile homes .....	2451	11.04	11.23	11.50	11.54	—	438.29	442.46	472.65	475.45	—
Miscellaneous wood products .....	249	10.31	10.34	10.41	10.49	—	424.77	418.77	422.65	422.75	—
Furniture and fixtures .....	25	10.51	10.53	10.79	10.81	10.95	419.35	415.94	432.68	442.13	441.29
Household furniture .....	251	9.92	9.94	10.14	10.19	—	380.93	374.74	399.52	405.56	—
Wood household furniture .....	2511	9.45	9.49	9.75	9.79	—	366.66	356.82	392.93	392.58	—
Upholstered household furniture .....	2512	10.61	10.48	10.81	10.90	—	396.81	385.66	405.38	421.83	—
Metal household furniture .....	2514	9.48	9.58	9.73	9.70	—	374.46	373.62	394.07	402.55	—
Mattresses and bedsprings .....	2515	10.72	10.79	10.54	10.51	—	411.65	428.36	417.38	421.45	—
Office furniture .....	252	11.64	11.59	11.72	11.66	—	483.06	483.30	471.14	488.55	—
Public building and related furniture .....	253	11.47	11.20	11.96	11.79	—	471.42	454.72	499.93	502.25	—
Partitions and fixtures .....	254	11.17	11.31	11.67	11.62	—	485.90	491.99	487.81	499.66	—
Miscellaneous furniture and fixtures .....	259	10.36	10.42	11.01	11.12	—	409.22	410.55	444.80	451.47	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	43.6	43.3	43.9	43.9	43.9	6.1	6.2	6.5	6.5	—
Flat glass .....	321	47.3	43.2	46.0	45.8	—	8.4	6.1	8.4	7.4	—
Glass and glassware, pressed or blown .....	322	42.5	42.1	42.2	42.5	—	4.8	4.7	4.7	4.9	—
Glass containers .....	3221	44.7	44.4	44.5	44.9	—	6.6	6.4	6.6	6.7	—
Pressed and blown glass, nec .....	3229	41.0	40.6	40.7	41.0	—	3.6	3.5	3.5	3.7	—
Products of purchased glass .....	323	41.3	39.9	42.6	41.7	—	4.0	3.2	5.3	4.7	—
Cement, hydraulic .....	324	44.5	44.8	45.7	45.2	—	4.9	5.2	6.4	5.7	—
Structural clay products .....	325	42.6	42.1	41.8	42.0	—	4.9	5.1	4.7	4.8	—
Pottery and related products .....	326	40.5	38.7	40.5	40.7	—	4.4	4.2	4.5	4.9	—
Concrete, gypsum, and plaster products .....	327	45.5	46.3	46.0	46.2	—	8.0	8.6	8.7	8.7	—
Concrete block and brick .....	3271	47.1	47.2	46.8	47.7	—	9.3	9.5	9.1	9.9	—
Concrete products, nec .....	3272	44.2	44.4	44.7	45.2	—	6.5	6.9	7.4	7.5	—
Ready-mixed concrete .....	3273	45.7	47.0	46.2	46.2	—	8.7	9.6	9.4	9.1	—
Misc. nonmetallic mineral products .....	329	42.6	41.7	43.6	43.3	—	5.2	5.0	5.1	5.4	—
Abrasives products .....	3291	43.0	41.1	42.0	42.0	—	3.9	3.7	3.3	3.3	—
Asbestos products .....	3292	46.3	44.9	47.2	47.1	—	7.5	6.8	7.9	8.1	—
Primary metal industries .....	33	44.8	43.9	44.5	44.5	43.3	6.5	6.3	6.3	6.3	—
Blast furnaces and basic steel products .....	331	44.6	44.3	45.4	44.9	44.0	6.3	6.2	6.6	6.1	—
Blast furnaces and steel mills .....	3312	45.0	45.1	45.8	45.3	—	6.6	6.6	6.8	6.3	—
Steel pipe and tubes .....	3317	43.5	41.4	45.0	45.0	—	5.7	5.7	6.7	6.5	—
Iron and steel foundries .....	332	46.2	44.7	45.2	45.3	—	7.1	6.7	6.2	6.2	—
Gray and ductile iron foundries .....	3321	46.9	44.9	46.1	46.3	—	8.0	7.4	7.1	6.8	—
Malleable iron foundries .....	3322	51.5	50.7	50.8	50.3	—	10.3	8.7	7.6	7.0	—
Steel foundries, nec .....	3325	43.9	42.9	42.7	42.7	—	4.9	5.1	4.8	5.0	—
Primary nonferrous metals .....	333	44.1	43.7	43.7	43.8	—	6.0	5.9	5.9	5.7	—
Primary aluminum .....	3334	43.7	43.4	44.6	44.7	—	5.9	5.8	6.3	6.2	—
Nonferrous rolling and drawing .....	335	45.1	44.2	44.2	44.8	—	7.3	7.3	7.3	7.5	—
Copper rolling and drawing .....	3351	43.7	41.9	43.7	43.5	—	7.0	7.4	7.7	7.4	—
Aluminum sheet, plate, and foil .....	3353	46.5	45.8	44.0	44.9	—	8.5	8.1	10.0	10.0	—
Nonferrous wire drawing and insulating .....	3357	45.5	44.3	43.8	44.6	—	7.1	7.2	6.6	6.9	—
Nonferrous foundries (castings) .....	336	43.4	42.0	42.2	42.9	—	5.0	4.5	4.6	4.8	—
Aluminum foundries .....	3365	43.3	41.5	42.1	43.1	—	5.2	4.6	4.9	5.6	—
Fabricated metal products .....	34	42.6	41.6	42.5	42.6	41.4	4.9	4.6	4.8	4.9	—
Metal cans and shipping containers .....	341	43.6	43.5	44.6	45.2	—	6.7	7.1	6.9	7.3	—
Metal cans .....	3411	43.7	43.7	44.3	45.1	—	6.5	7.1	6.3	6.9	—
Cutlery, handtools, and hardware .....	342	42.3	41.2	42.3	42.9	—	4.3	3.9	4.3	4.5	—
Hand and edge tools, and blades and handsaws .....	3423,5	42.1	41.0	42.9	43.6	—	4.2	3.8	4.7	5.2	—
Hardware, nec .....	3429	42.4	41.3	42.6	43.0	—	4.4	4.1	4.4	4.5	—
Plumbing and heating, except electric .....	343	41.5	39.7	41.1	41.8	—	4.0	4.1	3.3	3.6	—
Plumbing fixture fittings and trim .....	3432	40.9	40.9	40.2	41.5	—	3.4	3.9	3.4	3.7	—
Heating equipment, except electric .....	3433	41.0	39.5	40.0	40.8	—	3.5	3.4	2.8	3.6	—
Fabricated structural metal products .....	344	42.1	41.9	42.3	42.7	—	4.6	4.7	4.7	5.1	—
Fabricated structural metal .....	3441	42.7	42.1	43.1	43.9	—	5.4	5.6	6.0	6.5	—
Metal doors, sash, and trim .....	3442	41.2	41.4	42.1	42.6	—	3.7	4.1	3.5	4.2	—
Fabricated plate work (boiler shops) .....	3443	43.0	42.7	43.0	43.2	—	5.2	5.2	5.1	5.4	—
Sheet metal work .....	3444	41.5	41.1	41.1	41.2	—	4.0	3.8	4.1	4.2	—
Architectural metal work .....	3446	41.2	41.4	42.6	42.8	—	4.1	4.4	5.1	4.8	—
Screw machine products, bolts, etc .....	345	43.7	42.7	43.6	43.9	—	5.5	5.2	5.6	5.6	—
Screw machine products .....	3451	42.6	41.8	42.1	42.4	—	4.9	4.5	4.8	5.1	—
Bolts, nuts, rivets, and washers .....	3452	44.9	43.7	45.4	45.7	—	6.2	6.0	6.6	6.2	—
Metal forgings and stampings .....	346	44.1	41.7	43.1	43.0	—	6.0	4.6	5.6	5.3	—
Iron and steel forgings .....	3462	44.3	43.5	44.5	44.0	—	6.6	6.7	6.6	6.4	—
Automotive stampings .....	3465	45.3	41.1	43.6	43.1	—	6.6	3.8	5.8	5.1	—
Metal stampings, nec .....	3469	42.0	40.7	41.6	41.8	—	4.6	4.2	4.4	4.5	—
Metal services, nec .....	347	41.9	40.8	42.0	41.6	—	4.9	4.5	4.9	4.8	—
Plating and polishing .....	3471	41.2	39.8	41.2	41.0	—	4.7	4.1	4.6	4.6	—
Metal coating and allied services .....	3479	43.0	42.4	43.2	42.6	—	5.3	5.2	5.4	5.0	—
Ordnance and accessories, nec .....	348	40.4	39.2	40.1	40.4	—	3.1	2.6	3.2	3.5	—
Ammunition, except for small arms, nec .....	3483	41.0	39.8	41.9	41.4	—	2.9	2.5	3.1	3.2	—
Misc. fabricated metal products .....	349	42.5	41.4	42.2	42.0	—	4.5	4.3	4.2	4.1	—
Valves and pipe fittings, nec .....	3494	41.8	41.6	42.4	42.1	—	4.6	4.4	4.6	4.3	—
Misc. fabricated wire products .....	3496	41.3	39.6	40.9	40.7	—	3.9	3.5	3.7	3.7	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	\$13.13	\$13.20	\$13.58	\$13.59	\$13.65	\$572.47	\$571.56	\$596.16	\$596.60	\$599.24
Flat glass .....	321	18.49	18.57	18.29	18.27	—	874.58	802.22	841.34	836.77	—
Glass and glassware, pressed or blown .....	322	15.01	15.02	15.46	15.61	—	637.93	632.34	652.41	663.43	—
Glass containers .....	3221	15.63	15.69	16.27	16.43	—	698.66	696.64	724.02	737.71	—
Pressed and blown glass, nec .....	3229	14.56	14.54	14.89	15.04	—	596.96	590.32	606.02	616.64	—
Products of purchased glass .....	323	11.77	11.71	12.14	12.00	—	486.10	467.23	517.16	500.40	—
Cement, hydraulic .....	324	16.98	17.18	18.42	18.08	—	755.61	769.66	841.79	817.22	—
Structural clay products .....	325	11.48	11.60	11.86	11.93	—	489.05	488.36	495.75	501.06	—
Pottery and related products .....	326	11.44	11.43	11.96	12.01	—	463.32	442.34	484.38	488.81	—
Concrete, gypsum, and plaster products .....	327	12.61	12.71	13.14	13.15	—	573.76	588.47	604.44	607.53	—
Concrete block and brick .....	3271	12.36	12.49	12.56	12.69	—	582.16	589.53	587.81	605.31	—
Concrete products, nec .....	3272	11.16	11.29	11.74	11.71	—	493.27	501.28	524.78	529.29	—
Ready-mixed concrete .....	3273	13.98	13.46	13.95	13.97	—	611.47	632.62	644.49	645.41	—
Misc. nonmetallic mineral products .....	329	13.54	13.73	13.73	13.71	—	576.80	572.54	598.63	593.64	—
Abrasive products .....	3291	11.85	11.91	12.23	12.12	—	509.55	489.50	513.66	509.04	—
Asbestos products .....	3292	15.67	15.63	15.70	15.74	—	725.52	701.79	741.04	741.35	—
Primary metal industries .....	33	15.16	15.28	15.54	15.53	15.69	679.17	670.79	691.53	691.09	679.38
Blast furnaces and basic steel products .....	331	18.03	18.13	18.55	18.56	18.81	804.14	803.16	842.17	833.34	827.64
Blast furnaces and steel mills .....	3312	19.66	19.71	20.24	20.26	—	884.70	888.92	926.99	917.78	—
Steel pipe and tubes .....	3317	14.13	14.10	14.45	14.33	—	614.66	583.74	650.25	644.85	—
Iron and steel foundries .....	332	13.59	13.79	13.96	13.86	—	627.86	616.41	630.99	627.86	—
Gray and ductile iron foundries .....	3321	14.38	14.72	14.73	14.50	—	674.42	660.93	679.05	671.35	—
Malleable iron foundries .....	3322	16.38	15.66	15.89	15.76	—	843.57	793.96	807.21	792.73	—
Steel foundries, nec .....	3325	12.42	12.57	13.07	13.05	—	545.24	539.25	558.09	557.24	—
Primary nonferrous metals .....	333	16.68	16.79	17.02	16.99	—	735.59	733.72	743.77	744.16	—
Primary aluminum .....	3334	16.74	16.74	16.99	16.95	—	731.54	726.52	757.75	757.67	—
Nonferrous rolling and drawing .....	335	14.39	14.42	14.63	14.69	—	648.99	637.36	646.65	658.11	—
Copper rolling and drawing .....	3351	14.47	14.73	15.06	15.19	—	632.34	617.19	658.12	660.77	—
Aluminum sheet, plate, and foil .....	3353	16.59	16.65	16.82	16.87	—	771.44	762.57	740.08	757.46	—
Nonferrous wire drawing and insulating .....	3357	14.39	14.38	14.87	14.87	—	654.75	637.03	651.31	663.20	—
Nonferrous foundries (castings) .....	336	12.04	11.88	12.31	12.36	—	522.54	498.96	519.48	530.24	—
Aluminum foundries .....	3365	11.55	11.69	11.84	11.95	—	500.12	485.14	498.46	515.05	—
Fabricated metal products .....	34	12.72	12.66	13.02	13.00	12.89	541.87	526.66	553.35	553.80	533.65
Metal cans and shipping containers .....	341	16.31	16.40	16.56	16.72	—	711.12	713.40	738.58	755.74	—
Metal cans .....	3411	17.37	17.46	17.70	17.82	—	759.07	763.00	784.11	803.68	—
Cutlery, handtools, and hardware .....	342	12.43	12.40	12.31	12.25	—	525.79	510.88	520.71	525.53	—
Hand and edge tools, and blades and handsaws .....	3423,5	11.94	11.87	12.11	12.13	—	502.67	486.67	519.52	528.87	—
Hardware, nec .....	3429	12.55	12.61	12.58	12.46	—	532.12	520.79	535.91	535.78	—
Plumbing and heating, except electric .....	343	11.73	11.82	11.84	11.87	—	486.80	469.25	486.62	496.17	—
Plumbing fixture fittings and trim .....	3432	11.37	11.49	11.43	11.50	—	465.03	469.94	459.49	477.25	—
Heating equipment, except electric .....	3433	11.78	11.66	12.07	12.23	—	482.98	460.57	482.80	498.98	—
Fabricated structural metal products .....	344	12.01	12.04	12.40	12.46	—	505.62	504.48	524.52	532.04	—
Fabricated structural metal .....	3441	12.02	12.09	12.69	12.75	—	513.25	508.99	546.94	559.73	—
Metal doors, sash, and trim .....	3442	10.33	10.35	10.50	10.53	—	425.60	428.49	442.05	448.58	—
Fabricated plate work (boiler shops) .....	3443	13.39	13.37	13.64	13.70	—	575.77	570.90	586.52	591.84	—
Sheet metal work .....	3444	12.26	12.33	12.77	12.85	—	508.79	506.76	524.85	529.42	—
Architectural metal work .....	3446	11.48	11.51	11.77	11.81	—	472.98	476.51	501.40	505.47	—
Screw machine products, bolts, etc .....	345	12.79	12.79	13.19	13.25	—	558.92	546.13	575.08	581.68	—
Screw machine products .....	3451	12.10	12.23	12.50	12.60	—	515.46	511.21	526.25	534.24	—
Bolts, nuts, rivets, and washers .....	3452	13.56	13.41	13.95	13.97	—	608.84	586.02	633.33	638.43	—
Metal forgings and stampings .....	346	14.94	14.50	15.39	15.11	—	658.85	604.65	663.31	649.73	—
Iron and steel forgings .....	3462	14.17	14.42	14.65	14.52	—	627.73	627.27	651.93	638.88	—
Automotive stampings .....	3465	17.17	16.43	17.75	17.25	—	777.80	675.27	773.90	743.48	—
Metal stampings, nec .....	3469	12.18	12.21	12.52	12.64	—	511.56	496.95	520.83	528.35	—
Metal services, nec .....	347	10.75	10.74	11.09	11.17	—	450.43	438.19	465.78	464.67	—
Plating and polishing .....	3471	10.61	10.58	11.01	11.09	—	437.13	421.08	453.61	454.69	—
Metal coating and allied services .....	3479	10.95	10.98	11.20	11.28	—	470.85	465.55	483.84	480.53	—
Ordnance and accessories, nec .....	348	15.05	15.38	14.53	14.57	—	608.02	602.90	582.65	588.63	—
Ammunition, except for small arms, nec .....	3483	15.88	16.25	13.84	14.02	—	651.08	646.75	579.90	580.43	—
Misc. fabricated metal products .....	349	12.09	12.22	12.44	12.47	—	513.83	505.91	524.97	523.74	—
Valves and pipe fittings, nec .....	3494	12.23	12.50	12.78	12.86	—	511.21	520.00	541.87	541.41	—
Misc. fabricated wire products .....	3496	10.84	10.94	11.07	11.12	—	447.69	433.22	452.76	452.58	—

See footnotes at end of table.



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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	43.4	42.8	43.1	43.2	42.3	5.3	5.1	5.1	5.3	—
Engines and turbines .....	351	43.3	44.7	45.1	44.9	—	5.2	5.4	6.7	6.3	—
Turbines and turbine generator sets .....	3511	42.4	43.9	42.3	42.5	—	4.5	4.0	4.5	4.5	—
Internal combustion engines, nec .....	3519	43.6	45.0	46.0	45.7	—	5.4	5.9	7.5	6.9	—
Farm and garden machinery .....	352	42.5	41.7	42.3	41.1	—	4.6	4.5	4.1	3.3	—
Farm machinery and equipment .....	3523	43.2	42.0	41.9	41.6	—	5.4	5.4	3.8	3.6	—
Construction and related machinery .....	353	44.9	44.2	44.2	44.3	—	6.1	5.8	6.0	6.2	—
Construction machinery .....	3531	44.4	43.1	44.0	43.8	—	5.5	4.8	5.6	5.7	—
Mining machinery .....	3532	43.0	41.5	41.9	41.2	—	5.0	3.7	3.9	4.2	—
Oil and gas field machinery .....	3533	49.9	50.0	48.4	47.7	—	9.7	9.6	9.5	9.4	—
Conveyors and conveying equipment .....	3535	43.5	42.5	42.6	43.0	—	5.7	5.1	4.8	5.4	—
Industrial trucks and tractors .....	3537	41.4	40.8	41.0	41.8	—	4.0	4.2	3.9	4.4	—
Metalworking machinery .....	354	44.1	43.1	43.0	43.2	—	6.2	5.9	5.5	5.7	—
Machine tools, metal cutting types .....	3541	44.3	43.6	43.2	43.7	—	5.7	5.7	5.1	5.5	—
Machine tools, metal forming types .....	3542	43.8	44.1	43.7	44.1	—	5.4	6.0	5.5	5.6	—
Special dies, tools, jigs, and fixtures .....	3544	44.3	43.3	43.1	43.5	—	6.7	6.4	5.9	6.2	—
Machine tool accessories .....	3545	43.2	42.5	42.6	41.9	—	4.9	4.7	4.6	4.5	—
Power driven handtools .....	3546	41.4	41.6	42.1	42.2	—	3.9	4.1	4.1	4.2	—
Special industry machinery .....	355	43.4	42.3	41.9	42.4	—	5.1	4.8	4.4	4.8	—
Textile machinery .....	3552	42.0	41.1	40.6	40.8	—	3.9	3.9	3.2	3.6	—
Printing trades machinery .....	3555	41.3	41.4	41.6	42.3	—	4.5	4.6	4.5	5.2	—
Food products machinery .....	3556	42.3	41.1	42.2	42.1	—	4.3	4.2	4.6	4.5	—
General industrial machinery .....	356	43.1	42.4	42.9	43.0	—	5.0	4.7	4.8	5.1	—
Pumps and pumping equipment .....	3561	42.3	40.8	41.0	42.1	—	4.6	4.0	4.3	5.1	—
Ball and roller bearings .....	3562	43.4	42.7	44.6	44.2	—	5.8	6.1	6.7	6.9	—
Air and gas compressors .....	3563	43.2	42.2	43.5	43.4	—	4.8	4.2	4.8	4.9	—
Blowers and fans .....	3564	44.1	43.5	42.8	43.4	—	4.7	4.5	3.6	4.4	—
Speed changers, drives, and gears .....	3566	42.8	43.5	43.0	42.6	—	5.6	5.6	5.8	5.6	—
Power transmission equipment, nec .....	3568	42.8	41.5	42.7	42.2	—	5.4	4.5	4.9	4.8	—
Computer and office equipment .....	357	42.3	41.8	41.1	40.7	—	3.5	3.3	3.4	3.4	—
Electronic computers .....	3571	41.9	41.8	41.5	40.7	—	2.5	2.2	3.5	3.7	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	43.0	42.5	41.2	41.6	—	5.3	4.8	4.0	3.5	—
Refrigeration and service machinery .....	358	43.5	43.0	45.5	46.2	—	4.9	5.0	5.5	6.0	—
Refrigeration and heating equipment .....	3585	43.8	43.6	46.8	47.8	—	5.3	5.5	6.1	6.7	—
Misc. industrial and commercial machinery .....	359	42.9	42.4	42.7	42.9	—	5.5	5.4	5.3	5.5	—
Carburetors, pistons, rings, valves .....	3592	40.8	38.4	41.4	41.3	—	4.5	3.6	5.4	5.4	—
Scales, balances, and industrial machinery, nec .....	3596,9	42.9	42.5	42.7	43.0	—	5.6	5.5	5.3	5.6	—
Electronic and other electrical equipment .....	36	42.0	41.2	41.2	41.4	40.7	4.1	3.9	3.6	3.7	—
Electric distribution equipment .....	361	41.8	41.0	40.3	40.9	—	4.1	4.1	3.9	4.4	—
Transformers, except electronic .....	3612	42.3	41.8	41.4	41.7	—	3.7	3.8	3.4	3.8	—
Switchgear and switchboard apparatus .....	3613	41.4	40.2	39.4	40.1	—	4.4	4.3	4.3	4.9	—
Electrical industrial apparatus .....	362	41.7	40.8	41.2	41.7	—	3.7	3.4	3.5	3.7	—
Motors and generators .....	3621	41.9	40.6	41.0	41.8	—	3.8	3.3	3.3	3.6	—
Relays and industrial controls .....	3625	40.9	40.3	40.7	40.8	—	3.6	3.2	3.4	3.5	—
Household appliances .....	363	39.8	38.8	40.2	40.3	—	2.8	3.0	2.0	2.1	—
Household refrigerators and freezers .....	3632	37.7	40.4	40.0	41.8	—	2.1	3.1	1.7	1.9	—
Household laundry equipment .....	3633	39.7	38.2	40.1	38.5	—	1.7	1.9	2.1	1.2	—
Electric housewares and fans .....	3634	41.7	40.1	40.7	41.5	—	2.9	2.4	1.9	2.3	—
Electric lighting and wiring equipment .....	364	42.3	40.8	41.2	41.4	—	4.4	3.9	3.7	3.9	—
Electric lamps .....	3641	43.4	42.8	41.1	41.2	—	5.3	4.4	3.5	3.7	—
Current-carrying wiring devices .....	3643	41.6	40.6	40.8	40.7	—	4.4	4.3	3.7	3.7	—
Noncurrent-carrying wiring devices .....	3644	41.7	40.3	43.2	43.0	—	3.0	3.0	3.6	3.8	—
Residential lighting fixtures .....	3645	39.0	38.3	39.1	39.5	—	2.0	1.6	2.9	3.7	—
Household audio and video equipment .....	365	42.4	41.3	40.6	40.7	—	4.1	4.5	4.5	4.6	—
Household audio and video equipment .....	3651	41.9	41.1	38.9	40.1	—	3.5	3.2	2.9	3.5	—
Communications equipment .....	366	42.3	42.2	41.9	42.7	—	3.8	3.8	3.0	3.5	—
Telephone and telegraph apparatus .....	3661	44.2	44.6	44.1	45.5	—	4.5	4.6	3.7	4.7	—
Electronic components and accessories .....	367	42.4	41.9	41.0	41.1	—	4.5	4.4	3.9	3.8	—
Electron tubes .....	3671	39.8	39.6	40.9	44.3	—	4.3	4.4	3.7	3.9	—
Semiconductors and related devices .....	3674	43.2	43.9	42.1	41.7	—	4.8	5.6	4.7	4.6	—
Electronic components, nec .....	3679	42.4	40.7	41.1	41.6	—	4.2	3.1	3.7	3.8	—
Misc. electrical equipment and supplies .....	369	42.1	40.7	42.4	42.5	—	4.4	3.5	4.1	4.3	—
Storage batteries .....	3691	41.4	39.9	42.1	43.3	—	4.1	4.4	4.1	5.1	—
Engine electrical equipment .....	3694	43.0	40.9	43.1	42.6	—	5.2	3.1	4.7	4.5	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	\$13.96	\$14.02	\$14.36	\$14.41	\$14.45	\$605.86	\$600.06	\$618.92	\$622.51	\$611.24
Engines and turbines .....	351	16.87	17.27	17.23	17.13	—	730.47	771.97	777.07	769.14	—
Turbines and turbine generator sets .....	3511	19.10	19.16	20.33	20.14	—	809.84	841.12	859.96	855.95	—
Internal combustion engines, nec .....	3519	16.14	16.60	16.27	16.20	—	703.70	747.00	748.42	740.34	—
Farm and garden machinery .....	352	13.76	13.98	13.92	13.80	—	584.80	582.97	588.82	567.18	—
Farm machinery and equipment .....	3523	14.77	14.91	14.75	14.61	—	638.06	626.22	618.03	607.78	—
Construction and related machinery .....	353	13.52	13.60	13.72	13.72	—	607.05	601.12	606.42	607.80	—
Construction machinery .....	3531	13.88	13.96	14.10	14.07	—	616.27	601.68	620.40	616.27	—
Mining machinery .....	3532	14.60	14.38	14.48	14.67	—	627.80	596.77	606.71	604.40	—
Oil and gas field machinery .....	3533	13.25	13.34	13.53	13.59	—	661.18	667.00	654.85	648.24	—
Conveyors and conveying equipment .....	3535	13.62	13.68	13.74	13.75	—	592.47	581.40	585.32	591.25	—
Industrial trucks and tractors .....	3537	12.33	12.47	12.63	12.66	—	510.46	508.78	517.83	529.19	—
Metalworking machinery .....	354	14.77	14.79	15.19	15.27	—	651.36	637.45	653.17	659.66	—
Machine tools, metal cutting types .....	3541	14.40	14.54	14.88	15.13	—	637.92	633.94	642.82	661.18	—
Machine tools, metal forming types .....	3542	15.12	15.23	15.71	15.61	—	662.26	671.64	686.53	688.40	—
Special dies, tools, jigs, and fixtures .....	3544	15.48	15.51	15.87	15.93	—	685.76	671.58	684.00	692.96	—
Machine tool accessories .....	3545	13.10	13.05	13.37	13.45	—	565.92	554.63	569.56	563.56	—
Power driven handtools .....	3546	12.14	12.16	12.41	12.42	—	502.60	505.86	522.46	524.12	—
Special industry machinery .....	355	14.61	14.68	15.00	15.10	—	634.07	620.96	628.50	640.24	—
Textile machinery .....	3552	12.67	12.80	13.00	13.10	—	532.14	526.08	527.80	534.48	—
Printing trades machinery .....	3555	15.56	15.50	15.87	16.30	—	642.63	641.70	660.19	689.49	—
Food products machinery .....	3556	14.15	14.55	14.82	14.70	—	598.55	598.01	625.40	618.87	—
General industrial machinery .....	356	13.71	13.65	14.00	14.08	—	590.90	578.76	600.60	605.44	—
Pumps and pumping equipment .....	3561	14.36	14.37	14.75	14.67	—	607.43	586.30	604.75	617.61	—
Ball and roller bearings .....	3562	14.97	14.84	15.20	15.35	—	649.70	633.67	677.92	678.47	—
Air and gas compressors .....	3563	14.36	14.55	14.71	14.72	—	620.35	614.01	639.89	638.85	—
Blowers and fans .....	3564	11.47	11.45	11.67	11.76	—	505.83	498.08	499.48	510.38	—
Speed changers, drives, and gears .....	3566	14.52	14.59	14.99	15.05	—	621.46	634.67	644.57	641.13	—
Power transmission equipment, nec .....	3568	13.29	12.93	13.46	13.55	—	568.81	536.60	574.74	571.81	—
Computer and office equipment .....	357	14.17	14.18	15.13	15.10	—	599.39	592.72	621.84	614.57	—
Electronic computers .....	3571	15.45	15.47	16.45	16.37	—	647.36	646.65	682.68	666.26	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	13.45	13.33	13.62	13.88	—	578.35	566.53	561.14	577.41	—
Refrigeration and service machinery .....	358	12.56	12.75	12.97	13.09	—	546.36	548.25	590.14	604.76	—
Refrigeration and heating equipment .....	3585	12.86	13.08	13.30	13.41	—	563.27	570.29	622.44	641.00	—
Misc. industrial and commercial machinery .....	359	13.55	13.56	13.99	14.06	—	581.30	574.94	597.37	603.17	—
Carburetors, pistons, rings, valves .....	3592	14.13	14.05	14.51	14.61	—	576.50	539.52	600.71	603.39	—
Scales, balances, and industrial machinery, nec ..	3596,9	13.37	13.39	13.83	13.91	—	573.57	569.08	590.54	598.13	—
Electronic and other electrical equipment .....	36	12.59	12.69	13.05	13.07	13.16	528.78	522.83	537.66	541.10	535.61
Electric distribution equipment .....	361	12.54	12.70	13.07	13.09	—	524.17	520.70	526.72	535.38	—
Transformers, except electronic .....	3612	11.59	11.77	12.03	12.10	—	490.26	491.99	498.04	504.57	—
Switchgear and switchboard apparatus .....	3613	13.47	13.61	14.01	13.98	—	557.66	547.12	551.99	560.60	—
Electrical industrial apparatus .....	362	12.12	12.15	12.36	12.40	—	505.40	495.72	509.23	517.08	—
Motors and generators .....	3621	11.26	11.31	11.44	11.49	—	471.79	459.19	469.04	480.28	—
Relays and industrial controls .....	3625	13.74	13.67	14.06	14.14	—	561.97	550.90	572.24	576.91	—
Household appliances .....	363	12.05	12.30	12.20	12.27	—	479.59	477.24	490.44	494.48	—
Household refrigerators and freezers .....	3632	13.01	13.14	12.98	13.24	—	490.48	530.86	519.20	553.43	—
Household laundry equipment .....	3633	14.35	14.88	14.26	14.02	—	569.70	568.42	571.83	539.77	—
Electric housewares and fans .....	3634	10.03	10.40	10.45	10.58	—	418.25	417.04	425.32	439.07	—
Electric lighting and wiring equipment .....	364	12.66	12.60	12.71	12.74	—	535.52	514.08	523.65	527.44	—
Electric lamps .....	3641	15.42	15.61	16.37	16.51	—	669.23	668.11	672.81	680.21	—
Current-carrying wiring devices .....	3643	12.88	13.13	13.04	13.10	—	535.81	533.08	532.03	533.17	—
Noncurrent-carrying wiring devices .....	3644	11.27	11.22	11.63	11.72	—	469.96	452.17	502.42	503.96	—
Residential lighting fixtures .....	3645	9.25	9.04	9.24	9.40	—	360.75	346.23	361.28	371.30	—
Household audio and video equipment .....	365	10.90	11.25	11.94	12.12	—	462.16	464.63	484.76	493.28	—
Household audio and video equipment .....	3651	10.62	10.79	11.40	11.60	—	444.98	443.47	443.46	465.16	—
Communications equipment .....	366	13.96	14.15	13.93	13.86	—	590.51	597.13	583.67	591.82	—
Telephone and telegraph apparatus .....	3661	15.39	15.50	14.72	14.57	—	680.24	691.30	649.15	662.94	—
Electronic components and accessories .....	367	12.30	12.51	13.21	13.22	—	521.52	524.17	541.61	543.34	—
Electron tubes .....	3671	14.59	14.77	14.79	14.77	—	580.68	584.89	604.91	654.31	—
Semiconductors and related devices .....	3674	15.58	15.88	17.48	17.50	—	673.06	697.13	735.91	729.75	—
Electronic components, nec .....	3679	10.37	10.41	10.76	10.68	—	439.69	423.69	442.24	444.29	—
Misc. electrical equipment and supplies .....	369	13.63	13.13	13.61	13.76	—	573.82	534.39	577.06	584.80	—
Storage batteries .....	3691	14.86	14.59	14.88	15.13	—	615.20	582.14	626.45	655.13	—
Engine electrical equipment .....	3694	13.75	12.81	13.90	14.07	—	591.25	523.93	599.09	599.38	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>	June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	44.6	42.4	43.7	43.0	40.8	6.2	5.0	5.8	5.2	—
Motor vehicles and equipment .....	371	45.3	42.1	44.1	42.7	39.5	6.6	4.8	6.1	5.1	—
Motor vehicles and car bodies .....	3711	46.4	43.4	44.6	41.7	—	6.7	4.7	6.5	5.0	—
Truck and bus bodies .....	3713	44.8	44.2	43.9	44.7	—	6.2	5.4	6.6	5.8	—
Motor vehicle parts and accessories .....	3714	45.0	41.2	44.1	43.2	—	6.9	4.8	6.0	5.2	—
Truck trailers .....	3715	42.2	43.9	44.0	43.6	—	4.3	4.3	5.5	5.2	—
Aircraft and parts .....	372	44.6	43.4	44.0	44.3	—	7.0	6.6	6.0	6.1	—
Aircraft .....	3721	44.4	41.4	44.0	44.2	—	7.1	6.6	6.0	6.1	—
Aircraft engines and engine parts .....	3724	44.5	46.3	44.0	44.5	—	6.3	6.3	5.6	6.0	—
Aircraft parts and equipment, nec .....	3728	44.9	44.1	44.1	44.2	—	7.3	6.9	6.3	6.1	—
Ship and boat building and repairing .....	373	41.9	42.1	42.6	42.3	—	3.9	3.8	4.9	4.8	—
Ship building and repairing .....	3731	43.4	43.8	43.7	42.8	—	4.6	4.7	5.6	5.3	—
Boat building and repairing .....	3732	39.7	39.6	41.1	41.6	—	2.8	2.6	3.9	4.1	—
Railroad equipment .....	374	43.6	44.3	43.0	43.3	—	3.9	3.9	3.6	4.1	—
Guided missiles, space vehicles, and parts .....	376	42.8	42.5	41.9	42.1	—	4.0	4.1	4.0	3.8	—
Guided missiles and space vehicles .....	3761	42.8	42.7	41.5	41.3	—	3.9	4.3	3.7	3.7	—
Misc. transportation equipment .....	379	39.6	38.8	40.4	41.2	—	3.1	3.5	3.6	3.7	—
Travel trailers and campers .....	3792	37.7	36.7	37.8	39.6	—	1.6	1.9	2.0	2.3	—
Instruments and related products .....	38	41.9	41.2	41.2	41.3	40.6	3.9	3.5	3.1	3.2	—
Search and navigation equipment .....	381	43.5	42.6	42.1	41.9	—	3.9	3.5	3.4	3.4	—
Measuring and controlling devices .....	382	41.6	41.0	41.0	41.0	—	3.4	3.0	2.9	3.0	—
Environmental controls .....	3822	41.2	39.2	39.6	40.6	—	3.2	3.0	3.1	3.9	—
Process control instruments .....	3823	41.4	41.5	41.1	41.2	—	3.3	2.9	3.0	3.0	—
Instruments to measure electricity .....	3825	41.3	41.0	41.7	41.0	—	3.3	2.8	2.1	1.7	—
Medical instruments and supplies .....	384	41.7	40.7	40.9	41.1	—	3.6	3.0	3.3	3.3	—
Surgical and medical instrument .....	3841	41.9	41.3	41.0	41.1	—	4.3	3.2	3.2	3.3	—
Surgical appliances and supplies .....	3842	41.0	40.0	40.5	41.0	—	3.0	2.9	3.5	3.5	—
Ophthalmic goods .....	385	40.4	39.6	41.3	40.5	—	2.6	2.4	3.1	2.4	—
Photographic equipment and supplies .....	386	43.5	43.0	42.4	42.9	—	7.7	7.4	3.2	4.5	—
Watches, clocks, watchcases, and parts .....	387	40.2	39.5	39.7	39.4	—	3.0	3.0	2.9	2.1	—
Miscellaneous manufacturing industries .....	39	40.1	39.5	39.9	39.9	39.2	2.9	2.8	2.9	2.9	—
Jewelry, silverware, and plated ware .....	391	39.2	38.9	39.3	39.4	—	1.8	1.4	2.4	2.2	—
Jewelry, precious metal .....	3911	38.6	38.3	38.5	38.4	—	1.5	1.3	2.4	1.9	—
Musical instruments .....	393	41.9	38.8	39.3	40.9	—	2.6	2.2	2.2	2.8	—
Toys and sporting goods .....	394	39.6	39.2	40.1	39.6	—	2.5	2.5	2.5	2.3	—
Dolls, games, toys, and children's vehicles .....	3942.4	39.1	38.1	38.9	38.9	—	2.0	2.0	1.3	1.5	—
Sporting and athletic goods, nec .....	3949	39.8	39.7	40.6	39.9	—	2.8	2.7	2.9	2.6	—
Pens, pencils, office, and art supplies .....	395	40.9	40.5	39.5	39.1	—	3.4	3.4	3.3	3.2	—
Costume jewelry and notions .....	396	39.9	38.5	38.7	38.6	—	2.8	2.3	2.5	2.0	—
Costume jewelry .....	3961	39.6	38.8	38.1	37.7	—	2.4	2.1	2.0	1.2	—
Miscellaneous manufactures .....	399	40.5	39.9	40.3	40.5	—	3.4	3.3	3.4	3.5	—
Signs and advertising specialties .....	3993	41.3	41.2	41.5	41.4	—	4.2	4.2	4.3	4.1	—
<b>Nondurable goods</b> .....		40.7	40.3	40.8	40.9	40.5	4.1	4.3	4.2	4.3	4.4
Food and kindred products .....	20	40.8	41.1	41.5	41.4	41.6	4.7	5.3	4.9	5.0	—
Meat products .....	201	39.9	40.1	41.0	40.9	—	4.1	4.5	4.6	4.6	—
Meat packing plants .....	2011	40.3	40.9	42.6	42.2	—	4.2	5.2	4.8	4.7	—
Sausages and other prepared meats .....	2013	41.1	42.1	41.7	42.3	—	5.3	6.0	5.9	6.1	—
Poultry slaughtering and processing .....	2015	39.2	38.9	39.8	39.6	—	3.7	3.6	4.1	3.9	—
Dairy products .....	202	42.6	42.8	42.0	42.6	—	5.3	5.4	5.1	5.5	—
Cheese, natural and processed .....	2022	42.2	41.9	41.3	42.1	—	4.8	4.4	4.4	5.0	—
Fluid milk .....	2026	41.7	42.6	40.9	41.4	—	4.6	4.9	4.5	4.7	—
Preserved fruits and vegetables .....	203	40.8	40.8	41.0	41.0	—	5.1	6.1	5.0	5.1	—
Canned specialties .....	2032	40.8	40.5	41.6	41.9	—	5.5	4.6	5.5	5.9	—
Canned fruits and vegetables .....	2033	39.8	41.8	40.9	39.2	—	5.1	7.5	5.1	4.6	—
Frozen fruits and vegetables .....	2037	40.2	38.7	39.9	39.5	—	4.9	5.2	4.3	4.4	—
Grain mill products .....	204	44.8	45.6	45.8	45.3	—	6.5	7.3	6.9	6.6	—
Flour and other grain mill products .....	2041	44.9	46.8	45.9	45.7	—	6.4	7.9	6.8	6.8	—
Prepared feeds, nec .....	2048	44.0	43.7	43.8	44.3	—	6.5	6.3	5.6	6.1	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	\$17.42	\$17.20	\$17.65	\$17.47	\$17.06	\$776.93	\$729.28	\$771.31	\$751.21	\$696.05
Motor vehicles and equipment .....	371	17.89	17.52	18.16	17.86	17.21	810.42	737.59	800.86	762.62	679.80
Motor vehicles and car bodies .....	3711	21.39	21.02	22.06	21.87	-	992.50	912.27	983.88	911.98	-
Truck and bus bodies .....	3713	14.84	14.63	15.71	15.16	-	664.83	646.65	689.67	677.65	-
Motor vehicle parts and accessories .....	3714	16.47	16.17	16.61	16.39	-	741.15	666.20	732.50	708.05	-
Truck trailers .....	3715	11.23	11.04	11.41	11.48	-	473.91	484.66	502.04	500.53	-
Aircraft and parts .....	372	18.78	18.86	18.92	19.00	-	837.59	818.52	832.48	841.70	-
Aircraft .....	3721	(2)	(2)	(2)	(2)	-	-	-	-	-	-
Aircraft engines and engine parts .....	3724	18.37	18.44	18.75	18.92	-	817.47	853.77	825.00	841.94	-
Aircraft parts and equipment, nec .....	3728	16.66	16.69	16.71	16.72	-	748.03	736.03	736.91	739.02	-
Ship and boat building and repairing .....	373	13.14	13.20	13.26	13.31	-	550.57	555.72	564.88	563.01	-
Ship building and repairing .....	3731	14.56	14.60	14.62	14.72	-	631.90	639.48	638.89	630.02	-
Boat building and repairing .....	3732	10.87	10.93	11.24	11.27	-	431.54	432.83	461.96	468.83	-
Railroad equipment .....	374	16.52	16.72	17.00	16.98	-	720.27	740.70	731.00	735.23	-
Guided missiles, space vehicles, and parts .....	376	19.31	19.60	19.68	20.06	-	826.47	833.00	824.59	844.53	-
Guided missiles and space vehicles .....	3761	(2)	(2)	(2)	(2)	-	-	-	-	-	-
Misc. transportation equipment .....	379	11.34	11.25	11.92	11.80	-	449.06	436.50	481.57	486.16	-
Travel trailers and campers .....	3792	11.33	10.91	12.06	11.92	-	427.14	400.40	455.87	472.03	-
Instruments and related products .....	38	13.51	13.50	13.75	13.69	13.76	566.07	556.20	566.50	565.40	558.66
Search and navigation equipment .....	381	16.72	16.89	17.17	17.15	-	727.32	719.51	722.86	718.59	-
Measuring and controlling devices .....	382	13.49	13.50	13.79	13.74	-	561.18	553.50	565.39	563.34	-
Environmental controls .....	3822	11.60	11.70	11.93	11.82	-	477.92	458.64	472.43	479.89	-
Process control instruments .....	3823	13.26	13.06	13.74	13.70	-	548.96	541.99	564.71	564.44	-
Instruments to measure electricity .....	3825	15.38	15.45	15.83	15.89	-	635.19	633.45	660.11	651.49	-
Medical instruments and supplies .....	384	12.58	12.46	12.85	12.76	-	524.59	507.12	525.57	524.44	-
Surgical and medical instrument .....	3841	12.09	11.79	12.09	12.04	-	506.57	486.93	495.69	494.84	-
Surgical appliances and supplies .....	3842	11.46	11.55	11.93	11.90	-	469.86	462.00	483.17	487.90	-
Ophthalmic goods .....	385	10.01	10.10	10.25	10.18	-	404.40	399.96	423.33	412.29	-
Photographic equipment and supplies .....	386	15.89	15.90	16.33	16.44	-	691.22	683.70	692.39	705.28	-
Watches, clocks, watchcases, and parts .....	387	9.95	10.02	10.49	10.41	-	399.99	395.79	416.45	410.15	-
Miscellaneous manufacturing industries .....	39	10.49	10.51	10.79	10.81	10.81	420.65	415.15	430.52	431.32	423.75
Jewelry, silverware, and plated ware .....	391	10.85	10.84	11.33	11.36	-	425.32	421.68	445.27	447.58	-
Jewelry, precious metal .....	3911	10.90	10.91	11.46	11.48	-	420.74	417.85	441.21	440.83	-
Musical instruments .....	393	10.59	10.72	11.00	10.90	-	443.72	415.94	432.30	445.81	-
Toys and sporting goods .....	394	9.91	9.93	10.38	10.36	-	392.44	389.26	416.24	410.26	-
Dolls, games, toys, and children's vehicles .....	3942,4	9.43	9.49	10.01	9.98	-	368.71	361.57	389.39	388.22	-
Sporting and athletic goods, nec .....	3949	10.13	10.13	10.53	10.51	-	403.17	402.16	427.52	419.35	-
Pens, pencils, office, and art supplies .....	395	11.08	11.15	11.29	11.36	-	453.17	451.58	445.96	444.18	-
Costume jewelry and notions .....	396	9.31	9.47	9.79	9.72	-	371.47	364.60	378.87	375.19	-
Costume jewelry .....	3961	8.32	8.41	8.99	8.86	-	329.47	326.31	342.52	334.02	-
Miscellaneous manufactures .....	399	10.82	10.79	10.90	10.96	-	438.21	430.52	439.27	443.88	-
Signs and advertising specialties .....	3993	11.26	11.28	11.56	11.53	-	465.04	464.74	479.74	477.34	-
<b>Nondurable goods .....</b>		12.26	12.36	12.71	12.69	12.79	498.98	498.11	518.57	519.02	518.00
Food and kindred products .....	20	11.44	11.52	11.78	11.76	11.77	466.75	473.47	488.87	486.86	489.63
Meat products .....	201	9.26	9.38	9.60	9.60	-	369.47	376.14	393.60	392.64	-
Meat packing plants .....	2011	9.89	10.08	10.18	10.20	-	398.57	412.27	433.67	430.44	-
Sausages and other prepared meats .....	2013	10.67	10.82	11.05	10.92	-	438.54	455.52	460.79	461.92	-
Poultry slaughtering and processing .....	2015	8.38	8.44	8.71	8.72	-	328.50	328.32	346.66	345.31	-
Dairy products .....	202	13.19	13.20	13.39	13.45	-	561.89	564.96	562.38	572.97	-
Cheese, natural and processed .....	2022	12.18	12.11	12.21	12.34	-	514.00	507.41	504.27	519.51	-
Fluid milk .....	2026	13.96	13.90	14.12	14.12	-	582.13	592.14	577.51	584.57	-
Preserved fruits and vegetables .....	203	10.89	11.12	11.25	11.25	-	444.31	453.70	461.25	461.25	-
Canned specialties .....	2032	14.16	14.60	14.56	15.15	-	577.73	591.30	605.70	634.79	-
Canned fruits and vegetables .....	2033	12.02	12.15	12.20	12.29	-	478.40	507.87	498.98	481.77	-
Frozen fruits and vegetables .....	2037	10.13	10.23	10.49	10.36	-	407.23	395.90	418.55	409.22	-
Grain mill products .....	204	14.09	14.32	14.84	14.82	-	631.23	652.99	679.67	671.35	-
Flour and other grain mill products .....	2041	12.50	12.48	12.95	13.02	-	561.25	584.06	594.41	595.01	-
Prepared feeds, nec .....	2048	11.19	11.24	11.53	11.63	-	492.36	491.19	505.01	515.21	-

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	40.1	40.1	41.1	40.9	—	4.5	4.7	5.1	5.2	—
Bread, cake, and related products .....	2051	40.3	40.1	40.9	40.8	—	4.8	4.9	5.6	5.7	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	39.8	40.1	41.3	41.1	—	3.9	4.4	4.2	4.2	—
Sugar and confectionery products .....	206	39.5	39.1	40.0	40.4	—	3.3	3.7	3.2	3.6	—
Raw cane sugar .....	2061	40.1	41.5	49.1	45.8	—	3.4	4.0	6.1	6.0	—
Cane sugar refining .....	2062	46.4	46.2	47.7	49.7	—	8.9	9.5	8.5	9.6	—
Beet sugar .....	2063	42.2	41.7	40.7	41.3	—	2.2	3.0	2.5	2.3	—
Candy and other confectionery products .....	2064	38.4	37.8	39.6	40.3	—	2.9	3.3	3.2	3.7	—
Fats and oils .....	207	42.7	42.4	42.6	43.0	—	5.9	6.2	5.9	5.8	—
Beverages .....	208	44.2	44.3	44.7	44.7	—	6.0	6.6	6.5	6.2	—
Malt beverages .....	2082	48.7	47.1	49.0	48.2	—	8.9	8.2	8.3	8.1	—
Bottled and canned soft drinks .....	2086	43.8	45.0	45.4	45.6	—	6.2	7.6	7.3	7.1	—
Misc. food and kindred products .....	209	38.8	40.7	39.0	39.1	—	4.3	5.4	4.2	4.2	—
Tobacco products .....	21	39.2	35.3	39.0	39.8	39.3	2.4	2.8	2.9	2.7	—
Cigarettes .....	211	39.4	35.0	38.3	39.6	—	2.5	3.1	2.7	2.7	—
Textile mill products .....	22	41.7	40.6	41.1	41.5	40.5	4.7	4.4	4.4	4.7	—
Broadwoven fabric mills, cotton .....	221	42.5	41.8	42.0	41.9	—	5.8	5.8	5.6	5.6	—
Broadwoven fabric mills, synthetics .....	222	42.1	40.6	41.2	41.6	—	5.2	4.6	5.0	5.0	—
Broadwoven fabric mills, wool .....	223	42.2	41.1	37.4	39.6	—	5.7	5.8	3.3	4.2	—
Narrow fabric mills .....	224	41.2	39.8	39.8	40.6	—	3.5	2.8	2.3	3.0	—
Knitting mills .....	225	40.6	39.5	40.0	40.9	—	3.7	3.5	3.5	3.9	—
Women's hosiery, except socks .....	2251	38.0	37.6	38.0	38.7	—	2.1	2.6	2.0	2.6	—
Hosiery, nec .....	2252	38.6	37.7	38.2	38.8	—	3.2	3.2	3.0	3.3	—
Knit outerwear mills .....	2253	40.6	40.4	40.7	42.4	—	3.3	3.2	3.3	3.8	—
Knit underwear mills .....	2254	41.3	38.4	39.2	39.1	—	3.3	2.8	1.9	2.0	—
Weft knit fabric mills .....	2257	42.7	39.8	40.6	41.3	—	6.0	4.9	5.1	5.4	—
Textile finishing, except wool .....	226	42.8	41.9	41.5	41.9	—	5.4	5.2	4.8	5.4	—
Finishing plants, cotton .....	2261	43.0	42.3	41.7	41.7	—	5.7	5.7	4.8	5.2	—
Finishing plants, synthetics .....	2262	42.1	41.2	41.0	42.5	—	4.8	4.2	4.1	5.8	—
Carpets and rugs .....	227	41.3	40.8	42.0	42.8	—	4.9	4.5	5.1	5.6	—
Yarn and thread mills .....	228	41.9	40.6	41.3	41.1	—	4.7	4.4	4.5	4.4	—
Yarn spinning mills .....	2281	42.6	41.7	42.2	42.4	—	5.1	4.7	4.9	4.7	—
Throwing and winding mills .....	2282	38.5	35.8	36.9	36.5	—	3.0	2.6	2.8	3.2	—
Miscellaneous textile goods .....	229	42.8	41.4	42.2	42.2	—	5.1	4.5	4.7	5.0	—
Apparel and other textile products .....	23	37.7	36.6	37.4	37.8	36.9	2.2	2.0	2.1	2.2	—
Men's and boys' suits and coats .....	231	37.6	37.6	37.4	38.1	—	1.2	1.3	0.7	1.0	—
Men's and boys' furnishings .....	232	37.1	35.5	37.0	37.5	—	1.5	1.4	1.6	1.8	—
Men's and boys' shirts .....	2321	36.0	34.1	36.8	36.8	—	1.4	1.3	1.5	1.4	—
Men's and boys' trousers and slacks .....	2325	36.7	35.1	36.2	37.0	—	1.2	1.4	1.5	1.6	—
Men's and boys' work clothing .....	2326	38.0	36.7	37.2	37.5	—	1.8	1.6	1.5	1.9	—
Women's and misses' outerwear .....	233	36.4	35.6	36.1	36.5	—	1.6	1.7	1.3	1.6	—
Women's and misses' blouses and shirts .....	2331	36.6	35.5	35.5	35.5	—	1.5	1.7	1.9	1.5	—
Women's, juniors', and misses' dresses .....	2335	37.1	37.1	37.4	36.8	—	2.3	1.9	2.1	2.1	—
Women's and misses' suits and coats .....	2337	36.4	36.7	37.4	38.0	—	2.1	1.7	1.3	1.6	—
Women's and misses' outerwear, nec .....	2339	36.2	35.1	35.6	36.4	—	1.4	1.6	1.1	1.5	—
Women's and children's undergarments .....	234	37.5	36.5	37.3	37.5	—	2.1	2.0	1.7	1.7	—
Women's and children's underwear .....	2341	37.4	36.7	36.4	37.3	—	1.8	1.7	1.3	1.5	—
Brassieres, girdles, and allied garments .....	2342	37.8	36.1	39.9	37.9	—	2.8	3.0	2.9	2.3	—
Girls' and children's outerwear .....	236	37.3	36.8	35.6	37.4	—	2.7	2.7	2.9	3.8	—
Girls' and children's dresses and blouses .....	2361	37.5	36.7	35.7	37.9	—	3.3	2.8	4.0	4.9	—
Misc. apparel and accessories .....	238	37.6	36.8	37.2	36.0	—	1.7	1.2	1.6	0.8	—
Misc. fabricated textile products .....	239	40.0	38.5	39.3	39.5	—	3.9	3.0	3.5	3.6	—
Curtains and draperies .....	2391	37.0	36.6	35.5	35.9	—	1.3	1.0	1.4	1.2	—
House furnishings, nec .....	2392	39.2	39.6	39.9	40.1	—	3.8	4.0	3.7	4.1	—
Automotive and apparel trimmings .....	2396	41.1	37.5	39.9	40.0	—	4.8	2.2	3.8	3.7	—
Paper and allied products .....	26	43.4	43.3	43.3	43.5	42.8	5.4	5.9	5.5	5.5	—
Paper mills .....	262	44.7	44.7	45.3	44.4	—	6.3	6.7	6.8	6.1	—
Paperboard mills .....	263	44.9	44.3	44.7	45.6	—	6.7	7.4	7.9	6.9	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	\$12.45	\$12.48	\$12.84	\$12.81	—	\$499.25	\$500.45	\$527.72	\$523.93	—
Bread, cake, and related products .....	2051	12.57	12.69	12.91	12.91	—	506.57	508.87	528.02	526.73	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	12.24	12.09	12.71	12.64	—	487.15	484.81	524.92	519.50	—
Sugar and confectionery products .....	206	13.09	13.27	13.09	13.34	—	517.06	518.86	523.60	538.94	—
Raw cane sugar .....	2061	11.87	11.54	11.08	11.05	—	475.99	478.91	544.03	506.09	—
Cane sugar refining .....	2062	17.67	17.63	18.14	17.88	—	819.89	814.51	865.28	888.64	—
Beet sugar .....	2063	13.91	14.04	14.02	14.27	—	587.00	585.47	570.61	589.35	—
Candy and other confectionery products .....	2064	12.17	12.42	12.27	12.64	—	467.33	469.48	485.89	509.39	—
Fats and oils .....	207	12.77	12.90	12.86	12.78	—	545.28	546.96	547.84	549.54	—
Beverages .....	208	15.99	16.01	16.12	15.86	—	706.76	709.24	720.56	708.94	—
Malt beverages .....	2082	22.08	22.12	22.21	21.95	—	1,075.30	1,041.85	1,088.29	1,057.99	—
Bottled and canned soft drinks .....	2086	13.35	13.40	13.47	13.27	—	584.73	603.00	611.54	605.11	—
Misc. food and kindred products .....	209	10.19	10.12	10.64	10.62	—	395.37	411.88	414.96	415.24	—
Tobacco products .....	21	21.12	20.96	20.35	20.87	\$21.11	827.90	739.89	793.65	830.63	\$829.62
Cigarettes .....	211	24.82	24.78	24.73	24.76	—	977.91	867.30	979.16	980.50	—
Textile mill products .....	22	9.98	10.02	10.37	10.36	10.40	416.17	406.81	426.21	429.94	421.20
Broadwoven fabric mills, cotton .....	221	10.38	10.51	10.86	10.89	—	441.15	439.32	456.12	456.29	—
Broadwoven fabric mills, synthetics .....	222	10.96	10.95	11.27	11.27	—	461.42	444.57	464.32	468.83	—
Broadwoven fabric mills, wool .....	223	10.55	10.64	10.78	10.97	—	445.21	437.30	403.17	434.41	—
Narrow fabric mills .....	224	9.11	9.06	9.42	9.48	—	375.33	360.59	374.92	384.89	—
Knitting mills .....	225	9.10	9.11	9.45	9.46	—	369.46	359.85	378.00	386.91	—
Women's hosiery, except socks .....	2251	8.57	8.51	8.74	8.93	—	325.66	319.98	332.12	345.59	—
Hosiery, nec .....	2252	9.03	9.11	9.46	9.56	—	348.56	343.45	361.37	370.93	—
Knit outerwear mills .....	2253	8.50	8.50	8.72	8.73	—	345.10	343.40	354.90	370.15	—
Knit underwear mills .....	2254	9.12	9.30	10.00	9.87	—	376.66	357.12	392.00	385.92	—
Weft knit fabric mills .....	2257	10.06	9.84	10.25	10.24	—	429.56	391.63	416.15	422.91	—
Textile finishing, except wool .....	226	10.25	10.27	10.58	10.58	—	438.70	430.31	439.07	443.30	—
Finishing plants, cotton .....	2261	10.12	10.21	10.47	10.32	—	435.16	431.88	436.60	430.34	—
Finishing plants, synthetics .....	2262	10.82	10.72	11.03	11.22	—	455.52	441.66	452.23	476.85	—
Carpets and rugs .....	227	9.94	10.03	10.53	10.30	—	410.52	409.22	442.26	440.84	—
Yarn and thread mills .....	228	9.69	9.75	10.00	10.03	—	406.01	395.85	413.00	412.23	—
Yarn spinning mills .....	2281	9.69	9.74	9.99	10.02	—	412.79	406.16	421.58	424.85	—
Throwing and winding mills .....	2282	9.87	9.78	10.14	10.09	—	380.00	350.12	374.17	368.29	—
Miscellaneous textile goods .....	229	11.51	11.59	11.82	11.87	—	492.63	479.83	498.80	500.91	—
Apparel and other textile products .....	23	8.25	8.19	8.46	8.50	8.49	311.03	299.75	316.40	321.30	313.28
Men's and boys' suits and coats .....	231	8.37	8.41	8.60	8.65	—	314.71	316.22	321.64	329.57	—
Men's and boys' furnishings .....	232	7.68	7.71	7.98	7.96	—	284.93	273.71	295.26	298.50	—
Men's and boys' shirts .....	2321	7.49	7.57	7.82	7.82	—	269.64	258.14	287.78	287.78	—
Men's and boys' trousers and slacks .....	2325	7.78	7.92	8.24	8.15	—	285.53	277.99	298.29	301.55	—
Men's and boys' work clothing .....	2326	7.67	7.43	7.78	7.80	—	291.46	272.68	289.42	292.50	—
Women's and misses' outerwear .....	233	7.80	7.79	8.12	8.18	—	283.92	277.32	293.13	298.57	—
Women's and misses' blouses and shirts .....	2331	6.99	6.96	7.41	7.41	—	255.83	247.08	263.06	263.06	—
Women's, juniors', and misses' dresses .....	2335	8.82	8.68	9.30	9.36	—	327.22	322.03	347.82	344.45	—
Women's and misses' suits and coats .....	2337	8.11	7.98	8.10	8.12	—	295.20	292.87	302.94	308.56	—
Women's and misses' outerwear, nec .....	2339	7.62	7.66	7.92	7.99	—	275.84	268.87	281.95	290.84	—
Women's and children's undergarments .....	234	7.80	7.89	8.13	8.15	—	292.50	287.99	303.25	305.63	—
Women's and children's underwear .....	2341	7.70	7.77	7.97	8.02	—	287.98	285.16	290.11	299.15	—
Brassieres, girdles, and allied garments .....	2342	8.09	8.24	8.57	8.50	—	305.80	297.46	341.94	322.15	—
Girls' and children's outerwear .....	236	7.50	7.56	8.10	8.19	—	279.75	278.21	288.36	306.31	—
Girls' and children's dresses and blouses .....	2361	7.38	7.34	7.86	7.94	—	276.75	269.38	280.60	300.93	—
Misc. apparel and accessories .....	238	7.78	7.74	8.13	8.19	—	292.53	284.83	302.44	294.84	—
Misc. fabricated textile products .....	239	9.40	9.16	9.28	9.35	—	376.00	352.66	364.70	369.33	—
Curtains and draperies .....	2391	8.07	8.12	8.27	8.27	—	298.59	297.19	293.59	296.89	—
House furnishings, nec .....	2392	8.75	8.80	8.97	9.03	—	343.00	348.48	357.90	362.10	—
Automotive and apparel trimmings .....	2396	11.31	10.75	10.67	10.79	—	464.84	403.13	425.73	431.60	—
Paper and allied products .....	26	14.97	15.16	15.50	15.44	15.65	649.70	656.43	671.15	671.64	669.82
Paper mills .....	262	19.03	19.27	19.82	19.78	—	850.64	861.37	897.85	878.23	—
Paperboard mills .....	263	18.44	18.54	19.65	19.15	—	827.96	821.32	878.36	873.24	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
Paper and allied products—Continued											
Paperboard containers and boxes .....	265	43.2	43.1	42.9	43.2	—	5.3	5.9	5.3	5.5	—
Corrugated and solid fiber boxes .....	2653	43.5	43.4	43.5	43.9	—	5.6	6.3	5.6	5.9	—
Sanitary food containers .....	2656	42.6	43.2	43.4	43.1	—	5.2	5.6	5.7	5.8	—
Folding paperboard boxes .....	2657	43.6	42.8	41.8	42.6	—	5.6	5.7	5.1	5.6	—
Misc. converted paper products .....	267	42.3	42.2	42.0	42.7	—	4.5	4.9	4.3	4.8	—
Paper, coated and laminated, nec .....	2672	43.5	43.3	43.0	44.0	—	4.3	4.6	4.3	4.6	—
Bags: plastics, laminated, and coated .....	2673	42.3	42.5	42.4	43.1	—	4.8	5.4	4.6	5.6	—
Envelopes .....	2677	41.5	40.6	40.3	40.4	—	3.7	3.8	3.1	3.2	—
Printing and publishing .....	27	38.0	38.1	38.1	38.0	38.2	2.9	3.1	3.1	2.9	—
Newspapers .....	271	33.0	32.9	33.1	33.0	—	1.4	1.3	1.5	1.5	—
Periodicals .....	272	36.8	36.3	35.7	35.6	—	2.5	2.7	1.9	2.0	—
Books .....	273	38.3	39.1	38.7	38.2	—	2.9	3.8	3.4	3.0	—
Book publishing .....	2731	37.0	36.7	37.9	37.6	—	1.8	2.1	2.9	2.6	—
Book printing .....	2732	40.1	42.2	39.6	38.8	—	4.2	5.9	3.9	3.4	—
Miscellaneous publishing .....	274	36.0	36.2	35.9	36.3	—	2.1	2.1	2.4	2.1	—
Commercial printing .....	275	39.4	39.6	39.8	39.5	—	3.5	3.8	3.7	3.5	—
Commercial printing, lithographic .....	2752	39.1	39.4	39.5	39.1	—	3.3	3.8	3.6	3.4	—
Commercial printing, nec .....	2759	39.7	39.7	40.3	40.2	—	3.7	3.7	3.9	3.5	—
Manifold business forms .....	276	41.5	41.6	40.6	41.9	—	3.6	3.9	2.8	4.0	—
Blankbooks and bookbinding .....	278	39.6	39.6	39.4	39.6	—	2.9	2.7	3.0	3.1	—
Printing trade services .....	279	39.6	39.9	39.9	40.7	—	4.1	4.3	4.5	4.4	—
Chemicals and allied products .....	28	43.1	42.7	43.0	43.1	42.6	5.0	5.0	5.0	5.1	—
Industrial inorganic chemicals .....	281	46.2	46.0	45.1	45.2	—	5.9	6.1	5.9	5.6	—
Industrial inorganic chemicals, nec .....	2819	46.2	45.6	44.4	44.8	—	5.7	5.8	5.9	5.5	—
Plastics materials and synthetics .....	282	43.5	43.3	43.2	43.3	—	5.4	5.5	5.5	5.5	—
Plastics materials and resins .....	2821	44.9	44.4	44.2	44.1	—	5.4	5.5	5.2	5.1	—
Organic fibers, noncellulosic .....	2824	42.1	42.4	42.7	42.8	—	5.0	5.2	5.0	5.2	—
Drugs .....	283	41.2	40.6	41.4	42.0	—	4.5	4.2	4.5	4.7	—
Pharmaceutical preparations .....	2834	41.3	40.7	41.4	42.0	—	4.2	4.0	4.4	4.6	—
Soap, cleaners, and toilet goods .....	284	41.3	40.5	41.1	41.7	—	3.2	3.3	3.5	3.7	—
Soap and other detergents .....	2841	42.5	43.2	43.0	44.1	—	4.0	4.4	5.2	5.2	—
Polishing, sanitation, and finishing preparations .....	2842,3	41.8	41.8	41.4	42.2	—	3.7	3.8	3.8	4.2	—
Toilet preparations .....	2844	40.6	38.8	40.2	40.4	—	2.6	2.7	2.7	2.7	—
Paints and allied products .....	285	42.8	42.4	43.2	43.2	—	5.0	5.0	4.9	5.1	—
Industrial organic chemicals .....	286	44.5	44.1	44.7	44.5	—	6.3	6.2	6.1	6.2	—
Cyclic crudes and intermediates .....	2865	46.5	44.3	43.7	44.6	—	7.9	6.1	5.2	6.4	—
Industrial organic chemicals, nec .....	2869	44.1	44.1	44.9	44.4	—	5.9	6.2	6.3	6.1	—
Agricultural chemicals .....	287	44.4	44.6	44.9	44.4	—	5.9	6.0	6.8	6.4	—
Miscellaneous chemical products .....	289	43.7	43.1	43.2	43.1	—	5.0	4.8	4.7	4.8	—
Petroleum and coal products .....	29	42.9	42.8	42.9	43.3	43.8	6.2	6.4	6.2	6.6	—
Petroleum refining .....	291	42.4	42.0	42.3	42.4	—	5.1	5.1	5.4	5.6	—
Asphalt paving and roofing materials .....	295	44.9	45.5	44.7	46.0	—	9.6	10.3	8.8	9.6	—
Rubber and misc. plastics products .....	30	41.7	41.0	41.9	42.0	41.1	4.4	4.2	4.4	4.6	—
Tires and inner tubes .....	301	43.2	43.4	42.6	43.0	—	5.8	6.4	5.5	5.8	—
Rubber and plastics footwear .....	302	41.4	41.6	38.2	39.2	—	2.5	2.9	2.5	2.7	—
Hose, belting, gaskets, and packing .....	305	42.5	41.6	42.2	42.3	—	4.8	4.8	4.7	4.7	—
Rubber and plastics hose and belting .....	3052	43.9	42.3	43.8	45.1	—	5.3	5.6	5.6	6.5	—
Fabricated rubber products, nec .....	306	42.4	40.9	42.4	42.6	—	4.5	3.8	4.3	4.5	—
Miscellaneous plastics products, nec .....	308	41.4	40.7	41.7	41.8	—	4.2	4.0	4.3	4.5	—
Leather and leather products .....	31	38.8	37.8	37.4	38.1	36.1	2.1	1.9	2.0	2.2	—
Leather tanning and finishing .....	311	42.3	38.4	41.1	40.9	—	4.9	4.3	4.9	5.0	—
Footwear, except rubber .....	314	38.1	37.2	36.1	37.6	—	1.5	1.2	1.3	1.6	—
Men's footwear, except athletic .....	3143	38.4	37.6	35.4	37.7	—	1.5	1.0	1.1	1.5	—
Women's footwear, except athletic .....	3144	38.1	37.9	37.4	37.0	—	1.3	1.2	1.8	1.7	—
Luggage .....	316	38.2	40.8	36.3	36.4	—	1.8	3.3	1.3	1.1	—
Handbags and personal leather goods .....	317	37.7	37.2	37.6	36.9	—	1.4	0.9	1.7	1.6	—
<b>Service-producing .....</b>		<b>33.1</b>	<b>33.1</b>	<b>32.8</b>	<b>33.0</b>	<b>33.3</b>	—	—	—	—	—
<b>Transportation and public utilities .....</b>		<b>39.9</b>	<b>39.5</b>	<b>39.5</b>	<b>39.7</b>	<b>39.7</b>	—	—	—	—	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Nondurable goods—Continued</b>											
<b>Paper and allied products—Continued</b>											
Paperboard containers and boxes .....	265	\$12.76	\$12.98	\$13.09	\$13.12	—	\$551.23	\$559.44	\$561.56	\$566.78	—
Corrugated and solid fiber boxes .....	2653	12.73	12.96	13.03	13.09	—	553.76	562.46	566.81	574.65	—
Sanitary food containers .....	2656	12.81	12.98	13.44	13.42	—	545.71	560.74	583.30	578.40	—
Folding paperboard boxes .....	2657	13.53	13.73	13.84	13.86	—	589.91	587.64	578.51	590.44	—
Misc. converted paper products .....	267	13.07	13.18	13.43	13.48	—	552.86	556.20	564.06	575.60	—
Paper, coated and laminated, nec .....	2672	14.81	14.92	15.58	15.45	—	644.24	646.04	669.94	679.80	—
Bags: plastics, laminated, and coated .....	2673	11.67	11.88	11.98	12.28	—	493.64	504.90	507.95	529.27	—
Envelopes .....	2677	11.83	11.93	12.45	12.56	—	490.95	484.36	501.74	507.42	—
Printing and publishing .....	27	12.89	13.01	13.32	13.30	\$13.38	489.82	495.68	507.49	505.40	\$511.12
Newspapers .....	271	12.88	12.90	13.08	13.08	—	425.04	424.41	432.95	431.64	—
Periodicals .....	272	14.32	14.27	14.70	14.70	—	526.98	518.00	524.79	523.32	—
Books .....	273	12.07	12.23	12.39	12.42	—	462.28	478.19	479.49	474.44	—
Book publishing .....	2731	11.42	11.54	11.66	11.81	—	422.54	423.52	441.91	444.06	—
Book printing .....	2732	12.83	12.98	13.16	13.07	—	514.48	547.76	521.14	507.12	—
Miscellaneous publishing .....	274	12.69	12.91	12.97	12.79	—	456.84	467.34	465.62	464.28	—
Commercial printing .....	275	13.05	13.24	13.58	13.56	—	514.17	524.30	540.48	535.62	—
Commercial printing, lithographic .....	2752	13.34	13.52	13.84	13.84	—	521.59	532.69	546.68	541.14	—
Commercial printing, nec .....	2759	12.29	12.53	12.89	12.80	—	487.91	497.44	519.47	514.56	—
Manifold business forms .....	276	13.76	13.94	14.01	14.21	—	571.04	579.90	568.81	595.40	—
Blankbooks and bookbinding .....	278	10.16	10.12	10.43	10.46	—	402.34	400.75	410.94	414.22	—
Printing trade services .....	279	16.09	16.06	16.81	16.57	—	637.16	640.79	670.72	674.40	—
Chemicals and allied products .....	28	16.54	16.59	17.11	17.05	17.23	712.87	708.39	735.73	734.86	734.00
Industrial inorganic chemicals .....	281	18.37	18.64	19.61	18.98	—	848.69	857.44	884.41	857.90	—
Industrial inorganic chemicals, nec .....	2819	18.59	18.95	20.28	19.66	—	858.86	864.12	900.43	880.77	—
Plastics materials and synthetics .....	282	17.34	17.40	17.83	17.90	—	754.29	753.42	770.26	775.07	—
Plastics materials and resins .....	2821	19.22	19.31	19.79	19.80	—	862.98	857.36	874.72	873.18	—
Organic fibers, noncellulosic .....	2824	14.94	14.87	14.80	14.96	—	628.97	630.49	631.96	640.29	—
Drugs .....	283	16.56	16.30	17.02	17.08	—	682.27	661.78	704.63	717.36	—
Pharmaceutical preparations .....	2834	16.43	16.03	16.93	16.97	—	678.56	652.42	700.90	712.74	—
Soap, cleaners, and toilet goods .....	284	13.08	13.27	13.77	13.80	—	540.20	537.44	565.95	575.46	—
Soap and other detergents .....	2841	16.55	16.60	17.32	17.20	—	703.38	717.12	744.76	758.52	—
Polishing, sanitation, and finishing preparations .....	2842,3	12.60	12.63	13.57	13.54	—	526.68	527.93	561.80	571.39	—
Toilet preparations .....	2844	11.68	11.94	12.18	12.30	—	474.21	463.27	499.64	496.92	—
Paints and allied products .....	285	14.14	14.04	14.38	14.41	—	605.19	595.30	621.22	622.51	—
Industrial organic chemicals .....	286	19.93	19.88	20.48	20.35	—	886.89	876.71	915.46	905.58	—
Cyclic crudes and intermediates .....	2865	20.25	20.57	20.33	20.34	—	941.63	911.25	888.42	907.16	—
Industrial organic chemicals, nec .....	2869	19.99	19.85	20.64	20.49	—	881.56	875.39	926.74	909.76	—
Agricultural chemicals .....	287	16.46	16.75	16.88	16.90	—	730.82	747.05	757.91	750.36	—
Miscellaneous chemical products .....	289	14.97	15.20	15.20	15.20	—	654.19	655.12	656.64	655.12	—
Petroleum and coal products .....	29	19.92	20.00	20.80	20.74	20.80	854.57	856.00	892.32	898.04	911.04
Petroleum refining .....	291	22.39	22.55	23.63	23.47	—	949.34	947.10	999.55	995.13	—
Asphalt paving and roofing materials .....	295	14.92	15.09	15.11	15.56	—	669.91	686.60	675.42	715.76	—
Rubber and misc. plastics products .....	30	11.52	11.57	11.85	11.82	11.91	480.38	474.37	496.52	496.44	489.50
Tires and inner tubes .....	301	18.69	18.46	18.74	18.62	—	807.41	801.16	798.32	800.66	—
Rubber and plastics footwear .....	302	9.55	9.43	10.25	10.16	—	395.37	392.29	391.55	398.27	—
Hose, belting, gaskets, and packing .....	305	11.66	11.68	11.93	11.92	—	495.55	485.89	503.45	504.22	—
Rubber and plastics hose and belting .....	3052	11.83	11.95	11.94	12.03	—	519.34	505.49	522.97	542.55	—
Fabricated rubber products, nec .....	306	11.17	11.26	11.53	11.61	—	473.61	460.53	488.87	494.59	—
Miscellaneous plastics products, nec .....	308	10.83	10.88	11.18	11.14	—	448.36	442.82	466.21	465.65	—
Leather and leather products .....	31	8.94	8.78	9.33	9.35	9.27	346.87	331.88	348.94	356.24	334.65
Leather tanning and finishing .....	311	11.90	11.90	12.08	12.22	—	503.37	456.96	496.49	499.80	—
Footwear, except rubber .....	314	8.42	8.25	8.83	8.85	—	320.80	306.90	318.76	332.76	—
Men's footwear, except athletic .....	3143	9.16	8.89	9.53	9.48	—	351.74	334.26	337.36	357.40	—
Women's footwear, except athletic .....	3144	7.33	7.35	7.65	7.74	—	279.27	278.57	286.11	286.38	—
Luggage .....	316	8.82	8.97	9.24	9.26	—	336.92	365.98	335.41	337.06	—
Handbags and personal leather goods .....	317	7.84	7.77	8.25	8.20	—	295.57	289.04	310.20	302.58	—
<b>Service-producing .....</b>		<b>11.62</b>	<b>11.58</b>	<b>12.18</b>	<b>12.13</b>	<b>12.13</b>	<b>384.62</b>	<b>383.30</b>	<b>399.50</b>	<b>400.29</b>	<b>403.93</b>
<b>Transportation and public utilities .....</b>		<b>14.82</b>	<b>14.99</b>	<b>15.21</b>	<b>15.24</b>	<b>15.35</b>	<b>591.32</b>	<b>592.11</b>	<b>600.80</b>	<b>605.03</b>	<b>609.40</b>

See footnotes at end of table.



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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	49.4	48.5	47.2	46.7	-	-	-	-	-	-
Local and interurban passenger transit .....	41	34.4	35.4	35.0	34.6	-	-	-	-	-	-
Local and suburban transportation .....	411	38.6	38.3	38.9	39.0	-	-	-	-	-	-
Intercity and rural bus transportation .....	413	38.1	38.2	37.8	37.7	-	-	-	-	-	-
Trucking and warehousing .....	42	40.7	40.3	40.0	40.3	-	-	-	-	-	-
Trucking and courier services, except air .....	421	40.7	40.3	40.1	40.3	-	-	-	-	-	-
Public warehousing and storage .....	422	40.1	39.8	39.5	40.0	-	-	-	-	-	-
Water transportation:											
Water transportation services .....	449	38.2	38.1	37.2	37.2	-	-	-	-	-	-
Pipelines, except natural gas .....	46	44.1	43.2	42.3	43.3	-	-	-	-	-	-
Transportation services .....	47	38.6	37.4	37.8	37.6	-	-	-	-	-	-
Passenger transportation arrangement .....	472	38.1	36.9	37.5	37.3	-	-	-	-	-	-
Travel agencies .....	4724	38.2	36.8	37.7	37.5	-	-	-	-	-	-
Freight transportation arrangement .....	473	39.3	37.7	37.4	37.3	-	-	-	-	-	-
Communications .....	48	40.5	40.5	40.5	40.9	-	-	-	-	-	-
Telephone communications .....	481	42.0	42.2	42.1	42.6	-	-	-	-	-	-
Telephone communications, except radio .....	4813	42.3	42.8	42.6	43.2	-	-	-	-	-	-
Radio and television broadcasting .....	483	35.9	35.2	35.4	35.5	-	-	-	-	-	-
Cable and other pay television services .....	484	39.2	39.3	40.2	40.6	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	42.2	42.0	41.9	42.3	-	-	-	-	-	-
Electric services .....	491	42.2	42.0	41.7	42.4	-	-	-	-	-	-
Gas production and distribution .....	492	42.2	41.9	41.2	41.7	-	-	-	-	-	-
Combination utility services .....	493	42.5	42.5	43.1	42.5	-	-	-	-	-	-
Sanitary services .....	495	42.0	42.0	42.3	42.6	-	-	-	-	-	-
<b>Wholesale trade</b> .....		38.7	38.3	38.4	38.3	38.4	-	-	-	-	-
Durable goods .....	50	39.5	39.0	38.9	38.9	-	-	-	-	-	-
Motor vehicles, parts, and supplies .....	501	38.1	37.7	37.3	37.4	-	-	-	-	-	-
Furniture and home furnishings .....	502	37.5	37.4	37.3	36.9	-	-	-	-	-	-
Lumber and other construction materials .....	503	40.5	40.4	39.9	40.1	-	-	-	-	-	-
Professional and commercial equipment .....	504	40.2	39.4	39.6	39.5	-	-	-	-	-	-
Medical and hospital equipment .....	5047	40.0	39.1	39.5	39.2	-	-	-	-	-	-
Metals and minerals, except petroleum .....	505	42.2	41.4	40.8	40.9	-	-	-	-	-	-
Electrical goods .....	506	39.2	38.7	39.1	39.0	-	-	-	-	-	-
Hardware, plumbing, and heating equipment .....	507	39.5	39.3	39.2	39.2	-	-	-	-	-	-
Machinery, equipment, and supplies .....	508	39.8	39.1	39.5	39.6	-	-	-	-	-	-
Misc. wholesale trade durable goods .....	509	38.1	37.9	37.1	37.2	-	-	-	-	-	-
Nondurable goods .....	51	37.7	37.5	37.6	37.5	-	-	-	-	-	-
Paper and paper products .....	511	36.4	36.3	36.8	36.7	-	-	-	-	-	-
Drugs, proprietaries, and sundries .....	512	36.4	35.7	36.3	36.4	-	-	-	-	-	-
Apparel, piece goods, and notions .....	513	36.8	36.4	36.9	36.9	-	-	-	-	-	-
Groceries and related products .....	514	38.7	38.8	38.6	38.7	-	-	-	-	-	-
Farm-product raw materials .....	515	35.4	35.1	34.7	34.3	-	-	-	-	-	-
Chemicals and allied products .....	516	40.6	39.8	40.1	40.4	-	-	-	-	-	-
Petroleum and petroleum products .....	517	38.2	37.9	37.5	37.5	-	-	-	-	-	-
Beer, wine, and distilled beverages .....	518	38.1	38.1	37.9	37.6	-	-	-	-	-	-
Misc. wholesale trade nondurable goods .....	519	37.0	36.4	36.8	36.5	-	-	-	-	-	-
<b>Retail trade</b> .....		29.4	29.6	29.0	29.3	29.9	-	-	-	-	-
Building materials and garden supplies .....	52	35.5	35.6	35.0	35.1	-	-	-	-	-	-
Lumber and other building materials .....	521	36.9	37.1	36.3	36.4	-	-	-	-	-	-
Paint, glass, and wallpaper stores .....	523	36.3	36.2	35.9	35.7	-	-	-	-	-	-
Hardware stores .....	525	31.9	32.0	31.1	31.6	-	-	-	-	-	-
Retail nurseries and garden stores .....	526	32.5	32.1	32.7	32.3	-	-	-	-	-	-

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	\$17.90	\$18.05	\$17.95	\$17.93	—	\$884.26	\$875.43	\$847.24	\$837.33	—
Local and interurban passenger transit .....	41	10.81	11.02	10.96	11.15	—	371.86	390.11	383.60	385.79	—
Local and suburban transportation .....	411	11.23	11.44	11.48	11.53	—	433.48	438.15	446.57	449.67	—
Intercity and rural bus transportation .....	413	13.37	13.46	12.90	12.92	—	509.40	514.17	487.62	487.08	—
Trucking and warehousing .....	42	13.14	13.16	13.62	13.62	—	534.80	530.35	544.80	548.89	—
Trucking and courier services, except air .....	421	13.34	13.34	13.84	13.85	—	542.94	537.60	554.98	558.16	—
Public warehousing and storage .....	422	10.89	11.07	11.12	11.07	—	436.69	440.59	439.24	442.80	—
Water transportation:											
Water transportation services .....	449	18.57	19.24	20.00	19.73	—	709.37	733.04	744.00	733.96	—
Pipelines, except natural gas .....	46	20.27	20.05	20.72	20.66	—	893.91	866.16	876.46	894.58	—
Transportation services .....	47	13.14	13.26	13.39	13.38	—	507.20	495.92	506.14	503.09	—
Passenger transportation arrangement .....	472	13.33	13.49	13.80	13.70	—	507.87	497.78	517.50	511.01	—
Travel agencies .....	4724	13.62	13.81	14.07	13.93	—	520.28	508.21	530.44	522.38	—
Freight transportation arrangement .....	473	13.23	13.31	13.25	13.38	—	519.94	501.79	495.55	499.07	—
Communications .....	48	16.90	17.04	17.02	17.13	—	684.45	690.12	689.31	700.62	—
Telephone communications .....	481	17.47	17.57	17.51	17.52	—	733.74	741.45	737.17	746.35	—
Telephone communications, except radio .....	4813	17.99	18.09	17.97	17.97	—	760.98	774.25	765.52	776.30	—
Radio and television broadcasting .....	483	17.13	17.25	17.59	17.94	—	614.97	607.20	622.69	636.87	—
Cable and other pay television services .....	484	13.45	13.72	13.74	14.08	—	527.24	539.20	552.35	571.65	—
Electric, gas, and sanitary services .....	49	19.00	19.03	19.88	19.79	—	801.80	799.26	832.97	837.12	—
Electric services .....	491	19.92	19.95	20.87	20.72	—	840.62	837.90	870.28	878.53	—
Gas production and distribution .....	492	17.93	17.62	18.40	18.34	—	756.65	738.28	765.08	764.78	—
Combination utility services .....	493	23.11	23.43	24.24	24.30	—	982.18	995.78	1,044.74	1,032.75	—
Sanitary services .....	495	14.75	14.79	15.66	15.62	—	619.50	621.18	662.42	665.41	—
<b>Wholesale trade .....</b>		<b>13.37</b>	<b>13.38</b>	<b>13.96</b>	<b>13.89</b>	<b>\$13.98</b>	<b>517.42</b>	<b>512.45</b>	<b>536.06</b>	<b>531.99</b>	<b>\$536.83</b>
Durable goods .....	50	13.91	13.95	14.56	14.47	—	549.45	544.05	566.38	562.88	—
Motor vehicles, parts, and supplies .....	501	12.03	12.11	12.94	12.94	—	458.34	456.55	482.66	483.96	—
Furniture and home furnishings .....	502	12.47	12.45	13.03	13.01	—	467.63	465.63	486.02	480.07	—
Lumber and other construction materials .....	503	12.63	12.74	13.07	13.09	—	511.52	514.70	521.49	524.91	—
Professional and commercial equipment .....	504	16.51	16.53	17.14	17.05	—	663.70	651.28	678.74	673.48	—
Medical and hospital equipment .....	5047	15.91	16.07	16.97	17.00	—	636.40	628.34	670.32	666.40	—
Metals and minerals, except petroleum .....	505	13.38	13.35	13.97	14.06	—	564.64	552.69	569.98	575.05	—
Electrical goods .....	506	15.03	15.10	15.68	15.51	—	589.18	584.37	613.09	604.89	—
Hardware, plumbing, and heating equipment .....	507	13.14	13.22	13.74	13.60	—	519.03	519.55	538.61	533.12	—
Machinery, equipment, and supplies .....	508	14.00	14.02	14.65	14.45	—	557.20	548.18	578.68	572.22	—
Misc. wholesale trade durable goods .....	509	10.87	10.87	11.39	11.42	—	414.15	411.97	422.57	424.82	—
Nondurable goods .....	51	12.57	12.55	13.07	13.03	—	473.89	470.63	491.43	488.63	—
Paper and paper products .....	511	12.70	12.62	13.45	13.52	—	462.28	458.11	494.96	496.18	—
Drugs, proprietaries, and sundries .....	512	16.57	16.19	17.24	17.16	—	603.15	577.98	625.81	624.62	—
Apparel, piece goods, and notions .....	513	12.46	12.45	12.83	12.74	—	458.53	453.18	473.43	470.11	—
Groceries and related products .....	514	12.86	12.87	13.32	13.19	—	497.68	499.36	514.15	510.45	—
Farm-product raw materials .....	515	9.58	9.54	10.04	10.00	—	339.13	334.85	348.39	343.00	—
Chemicals and allied products .....	516	14.15	14.22	14.78	14.89	—	574.49	565.96	592.68	601.56	—
Petroleum and petroleum products .....	517	11.55	11.44	11.86	11.91	—	441.21	433.58	444.75	446.63	—
Beer, wine, and distilled beverages .....	518	14.66	14.80	15.24	15.28	—	558.55	563.88	577.60	574.53	—
Misc. wholesale trade nondurable goods .....	519	10.25	10.32	10.79	10.73	—	379.25	375.65	397.07	391.65	—
<b>Retail trade .....</b>		<b>8.27</b>	<b>8.27</b>	<b>8.71</b>	<b>8.69</b>	<b>8.70</b>	<b>243.14</b>	<b>244.79</b>	<b>252.59</b>	<b>254.62</b>	<b>260.13</b>
Building materials and garden supplies .....	52	9.73	9.77	10.12	10.12	—	345.42	347.81	354.20	355.21	—
Lumber and other building materials .....	521	10.13	10.18	10.55	10.55	—	373.80	377.68	382.97	384.02	—
Paint, glass, and wallpaper stores .....	523	10.28	10.33	10.53	10.52	—	373.16	373.95	378.03	375.56	—
Hardware stores .....	525	8.22	8.15	8.55	8.52	—	262.22	260.80	265.91	269.23	—
Retail nurseries and garden stores .....	526	8.61	8.66	8.86	8.87	—	279.83	277.99	289.72	286.50	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	30.0	30.2	29.9	30.3	-	-	-	-	-	-
Department stores .....	531	30.1	30.2	30.0	30.4	-	-	-	-	-	-
Variety stores .....	533	27.6	28.4	27.3	27.7	-	-	-	-	-	-
Misc. general merchandise stores .....	539	30.6	30.9	30.2	30.9	-	-	-	-	-	-
Food stores .....	54	30.3	30.9	29.8	30.5	-	-	-	-	-	-
Grocery stores .....	541	30.5	31.0	29.9	30.7	-	-	-	-	-	-
Retail bakeries .....	546	28.9	29.3	29.2	29.3	-	-	-	-	-	-
Automotive dealers and service stations .....	55	36.1	36.0	35.5	35.7	-	-	-	-	-	-
New and used car dealers .....	551	37.2	37.0	36.9	37.1	-	-	-	-	-	-
Auto and home supply stores .....	553	38.4	38.4	38.2	38.4	-	-	-	-	-	-
Gasoline service stations .....	554	32.9	32.9	31.7	32.0	-	-	-	-	-	-
Automotive dealers, nec .....	559	36.0	35.3	35.1	36.5	-	-	-	-	-	-
Apparel and accessory stores .....	56	27.0	27.5	26.4	26.7	-	-	-	-	-	-
Men's and boys' clothing stores .....	561	29.0	29.3	28.2	28.5	-	-	-	-	-	-
Women's clothing stores .....	562	25.3	25.9	24.3	24.3	-	-	-	-	-	-
Family clothing stores .....	565	27.8	28.3	27.1	27.3	-	-	-	-	-	-
Shoe stores .....	566	26.8	27.4	26.1	26.8	-	-	-	-	-	-
Furniture and home furnishings stores .....	57	33.4	33.3	33.0	33.3	-	-	-	-	-	-
Furniture and home furnishings stores .....	571	33.2	33.2	32.9	33.1	-	-	-	-	-	-
Household appliance stores .....	572	34.7	34.7	34.0	34.5	-	-	-	-	-	-
Radio, television, and computer stores .....	573	33.3	33.1	33.0	33.3	-	-	-	-	-	-
Radio, television, and electronic stores .....	5731	33.1	33.4	32.4	33.2	-	-	-	-	-	-
Record and prerecorded tape stores .....	5735	26.0	26.5	26.2	26.9	-	-	-	-	-	-
Eating and drinking places <sup>4</sup> .....	58	25.8	26.0	25.6	25.7	-	-	-	-	-	-
Miscellaneous retail establishments .....	59	29.8	30.0	29.6	29.9	-	-	-	-	-	-
Drug stores and proprietary stores .....	591	29.2	29.4	28.5	29.1	-	-	-	-	-	-
Used merchandise stores .....	593	30.7	30.3	30.3	30.0	-	-	-	-	-	-
Miscellaneous shopping goods stores .....	594	28.6	28.9	27.8	28.5	-	-	-	-	-	-
Nonstore retailers .....	596	32.2	32.0	32.5	32.8	-	-	-	-	-	-
Fuel dealers .....	598	37.2	36.6	36.8	36.8	-	-	-	-	-	-
Retail stores, nec .....	599	30.5	30.7	31.5	30.8	-	-	-	-	-	-
Optical goods stores .....	5995	33.3	33.3	33.4	33.9	-	-	-	-	-	-
Miscellaneous retail stores, nec .....	5999	30.9	31.4	31.2	31.3	-	-	-	-	-	-
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		36.7	35.9	36.1	36.0	36.1	-	-	-	-	-
Depository institutions .....	60	36.1	35.2	35.0	35.4	-	-	-	-	-	-
Commercial banks .....	602	35.9	34.8	34.7	35.2	-	-	-	-	-	-
State commercial banks .....	6022	36.2	35.2	34.8	35.2	-	-	-	-	-	-
National and commercial banks, nec .....	6021,9	35.7	34.6	34.6	35.3	-	-	-	-	-	-
Credit unions .....	606	36.5	35.9	35.7	35.8	-	-	-	-	-	-
Nondepository institutions .....	61	39.2	37.9	38.0	37.8	-	-	-	-	-	-
Personal credit institutions .....	614	39.8	38.5	38.2	37.8	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services .....	628	38.8	37.4	38.1	38.0	-	-	-	-	-	-
Insurance carriers .....	63	38.7	38.0	39.1	38.6	-	-	-	-	-	-
Life insurance .....	631	38.6	37.6	38.9	38.6	-	-	-	-	-	-
Medical service and health insurance .....	632	39.1	38.5	39.2	38.7	-	-	-	-	-	-
Hospital and medical service plans .....	6324	39.4	38.8	39.8	39.3	-	-	-	-	-	-
Fire, marine, and casualty insurance .....	633	38.5	38.0	39.2	38.6	-	-	-	-	-	-
<b>Services</b> .....		32.8	32.8	32.5	32.7	32.9	-	-	-	-	-
Agricultural services .....	07	35.9	35.9	36.0	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 workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	\$8.12	\$8.10	\$8.66	\$8.56	—	\$243.60	\$244.62	\$258.93	\$259.37	—
Department stores .....	531	8.17	8.15	8.72	8.62	—	245.92	246.13	261.60	262.05	—
Variety stores .....	533	7.38	7.35	7.80	7.68	—	203.69	208.74	212.94	212.74	—
Misc. general merchandise stores .....	539	7.95	7.93	8.31	8.29	—	243.27	245.04	250.96	256.16	—
Food stores .....	54	8.62	8.61	9.02	8.96	—	261.19	266.05	268.80	273.28	—
Grocery stores .....	541	8.73	8.73	9.12	9.04	—	266.27	270.63	272.69	277.53	—
Retail bakeries .....	546	7.60	7.65	8.03	8.06	—	219.64	224.15	234.48	236.16	—
Automotive dealers and service stations .....	55	11.45	11.45	12.15	12.19	—	413.35	412.20	431.33	435.18	—
New and used car dealers .....	551	14.54	14.59	15.36	15.45	—	540.89	539.83	566.78	573.20	—
Auto and home supply stores .....	553	9.48	9.45	9.96	9.96	—	364.03	362.88	380.47	382.46	—
Gasoline service stations .....	554	7.40	7.38	7.77	7.81	—	243.46	242.80	246.31	249.92	—
Automotive dealers, nec .....	559	12.75	12.62	13.32	13.45	—	459.00	445.49	467.53	490.93	—
Apparel and accessory stores .....	56	8.09	7.97	8.46	8.46	—	218.43	219.18	223.34	225.88	—
Men's and boys' clothing stores .....	561	9.80	9.87	10.31	10.49	—	284.20	289.19	290.74	298.97	—
Women's clothing stores .....	562	7.86	7.79	8.32	8.26	—	198.86	201.76	202.18	200.72	—
Family clothing stores .....	565	7.88	7.70	8.25	8.32	—	219.06	217.91	223.58	227.14	—
Shoe stores .....	566	8.04	7.89	8.26	8.21	—	215.47	216.19	215.59	220.03	—
Furniture and home furnishings stores .....	57	11.25	11.25	11.78	11.65	—	375.75	374.63	388.74	387.95	—
Furniture and home furnishings stores .....	571	10.48	10.44	11.10	11.04	—	347.94	346.61	365.19	365.42	—
Household appliance stores .....	572	10.64	10.60	11.25	11.12	—	369.21	367.82	382.50	383.64	—
Radio, television, and computer stores .....	573	12.29	12.36	12.66	12.44	—	409.26	409.12	417.78	414.25	—
Radio, television, and electronic stores .....	5731	11.13	11.16	11.66	11.59	—	368.40	372.74	377.78	384.79	—
Record and prerecorded tape stores .....	5735	7.00	6.90	7.30	7.01	—	182.00	182.85	191.26	188.57	—
Eating and drinking places <sup>4</sup> .....	58	5.98	5.98	6.31	6.32	—	154.28	155.48	161.54	162.42	—
Miscellaneous retail establishments .....	59	9.09	9.07	9.43	9.40	—	270.88	272.10	279.13	281.06	—
Drug stores and proprietary stores .....	591	9.70	9.68	10.10	9.98	—	283.24	284.59	287.85	290.42	—
Used merchandise stores .....	593	7.55	7.59	7.84	7.88	—	231.79	229.98	237.55	236.40	—
Miscellaneous shopping goods stores .....	594	8.41	8.33	8.72	8.70	—	240.53	240.74	242.42	247.95	—
Nonstore retailers .....	596	9.71	9.75	10.00	9.98	—	312.66	312.00	325.00	327.34	—
Fuel dealers .....	598	12.06	12.19	12.43	12.43	—	448.63	446.15	457.42	457.42	—
Retail stores, nec .....	599	9.15	9.19	9.49	9.55	—	279.08	282.13	298.94	294.14	—
Optical goods stores .....	5995	11.30	11.35	11.06	10.77	—	376.29	377.96	369.40	365.10	—
Miscellaneous retail stores, nec .....	5999	9.41	9.42	9.94	9.96	—	290.77	295.79	310.13	311.75	—
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		13.26	13.21	13.99	13.94	\$13.95	486.64	474.24	505.04	501.84	\$503.60
Depository institutions .....	60	10.19	10.18	10.73	10.75	—	367.86	358.34	375.55	380.55	—
Commercial banks .....	602	9.71	9.69	10.28	10.34	—	348.59	337.21	356.72	363.97	—
State commercial banks .....	6022	9.61	9.64	10.13	10.06	—	347.88	339.33	352.52	354.11	—
National and commercial banks, nec .....	6021,9	9.77	9.73	10.39	10.54	—	348.79	336.66	359.49	372.06	—
Credit unions .....	606	10.10	10.11	10.55	10.54	—	368.65	362.95	376.64	377.33	—
Nondepository institutions .....	61	13.65	13.79	14.47	14.45	—	535.08	522.64	549.86	546.21	—
Personal credit institutions .....	614	11.84	11.76	12.35	12.26	—	471.23	452.76	471.77	463.43	—
Security and commodity brokers: Security and commodity services .....	628	18.74	19.10	20.73	20.75	—	727.11	714.34	789.81	788.50	—
Insurance carriers .....	63	15.76	15.75	16.60	16.62	—	609.91	598.50	649.06	641.53	—
Life insurance .....	631	14.07	14.31	15.13	15.06	—	543.10	538.06	588.56	581.32	—
Medical service and health insurance .....	632	15.01	14.74	15.49	15.74	—	586.89	567.49	607.21	609.14	—
Hospital and medical service plans .....	6324	15.33	15.01	15.78	16.06	—	604.00	582.39	628.04	631.16	—
Fire, marine, and casualty insurance .....	633	17.33	17.31	18.12	18.02	—	667.21	657.78	710.30	695.57	—
<b>Services</b> .....		12.14	12.06	12.75	12.70	12.68	398.19	395.57	414.38	415.29	417.17
Agricultural services .....	07	9.26	9.34	9.84	9.80	—	332.43	335.31	354.24	351.82	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	29.5	29.8	28.8	29.3	-	-	-	-	-	-
Landscape and horticultural services .....	078	38.5	38.4	38.9	38.5	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	31.4	31.3	31.3	31.3	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services .....	721	34.5	34.2	34.8	34.5	-	-	-	-	-	-
Beauty shops <sup>4</sup> .....	723	28.1	27.5	28.3	28.1	-	-	-	-	-	-
Miscellaneous personal services .....	729	27.2	27.1	26.6	27.1	-	-	-	-	-	-
Business services .....											
Advertising .....	731	33.5	33.3	33.6	33.7	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	36.8	35.5	36.0	36.6	-	-	-	-	-	-
Services to buildings .....	734	28.9	28.5	28.5	28.6	-	-	-	-	-	-
Disinfecting and pest control services .....	7342	37.0	36.6	37.7	37.8	-	-	-	-	-	-
Building maintenance services, nec .....	7349	28.1	27.7	27.6	27.7	-	-	-	-	-	-
Miscellaneous equipment rental and leasing .....	735	39.8	39.4	39.0	39.3	-	-	-	-	-	-
Medical equipment rental .....	7352	37.1	36.3	36.3	36.5	-	-	-	-	-	-
Heavy construction equipment rental .....	7353	40.6	41.1	41.2	41.4	-	-	-	-	-	-
Equipment rental and leasing, nec .....	7359	40.2	39.6	39.0	39.3	-	-	-	-	-	-
Personnel supply services:											
Help supply services .....	7363	32.0	32.4	32.7	32.8	-	-	-	-	-	-
Computer and data processing services .....	737	38.6	37.9	38.4	38.3	-	-	-	-	-	-
Computer programming services .....	7371	38.5	37.9	37.9	38.0	-	-	-	-	-	-
Computer integrated systems design .....	7373	39.6	38.5	39.6	39.4	-	-	-	-	-	-
Information retrieval services .....	7375	37.4	38.2	37.7	38.1	-	-	-	-	-	-
Computer maintenance and repair .....	7378	39.0	38.5	39.0	39.6	-	-	-	-	-	-
Miscellaneous business services .....	738	33.2	32.8	33.1	33.1	-	-	-	-	-	-
Detective and armored car services .....	7381	34.6	34.2	34.5	34.6	-	-	-	-	-	-
Security systems services .....	7382	35.7	35.9	36.0	36.1	-	-	-	-	-	-
Auto repair, services, and parking .....											
Automotive rentals, without drivers .....	751	37.0	36.8	37.0	36.9	-	-	-	-	-	-
Passenger car rental .....	7514	37.2	37.0	37.2	37.2	-	-	-	-	-	-
Automobile parking .....	752	34.2	33.7	32.1	32.4	-	-	-	-	-	-
Automotive repair shops .....	753	38.4	38.4	38.0	38.1	-	-	-	-	-	-
Automotive and tire repair shops .....	7532,4	38.0	37.9	38.1	38.0	-	-	-	-	-	-
General automotive repair shops .....	7538	38.1	38.0	37.7	38.1	-	-	-	-	-	-
Automotive services, except repair .....	754	32.6	33.1	31.2	31.1	-	-	-	-	-	-
Carwashes .....	7542	30.1	31.5	28.2	27.8	-	-	-	-	-	-
Miscellaneous repair services .....											
Motion pictures .....	78	29.6	30.5	28.9	29.5	-	-	-	-	-	-
Motion picture production and services .....	781	38.5	38.9	38.6	39.3	-	-	-	-	-	-
Video tape rental .....	784	24.6	24.7	23.2	23.9	-	-	-	-	-	-
Amusement and recreation services .....											
Bowling centers .....	793	24.1	24.5	24.2	24.5	-	-	-	-	-	-
Misc. amusement and recreation services .....	799	27.5	28.7	25.7	26.8	-	-	-	-	-	-
Physical fitness facilities .....	7991	19.2	19.1	19.6	19.4	-	-	-	-	-	-
Membership sports and recreation clubs .....	7997	29.3	30.0	28.0	28.0	-	-	-	-	-	-
Health services .....											
Offices and clinics of medical doctors .....	801	33.4	33.1	32.8	32.9	-	-	-	-	-	-
Offices and clinics of dentists .....	802	28.6	28.3	28.2	28.2	-	-	-	-	-	-
Offices and clinics of other health practitioners .....	804	30.4	30.2	30.3	30.3	-	-	-	-	-	-
Nursing and personal care facilities .....	805	32.7	32.9	32.2	32.5	-	-	-	-	-	-
Intermediate care facilities .....	8052	32.3	32.5	31.5	31.8	-	-	-	-	-	-
Hospitals .....	806	34.9	34.9	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 workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	\$9.43	\$9.55	\$9.93	\$9.78	—	\$278.19	\$284.59	\$285.98	\$286.55	—
Landscape and horticultural services .....	078	9.24	9.34	9.86	9.83	—	355.74	358.66	383.55	378.46	—
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	8.43	8.40	8.91	8.87	—	264.70	262.92	278.88	277.63	—
Personal services:											
Laundry, cleaning, and garment services .....	721	8.05	8.12	8.36	8.38	—	277.73	277.70	290.93	289.11	—
Beauty shops <sup>4</sup> .....	723	9.23	9.27	9.45	9.54	—	259.36	254.93	267.44	268.07	—
Miscellaneous personal services .....	729	8.73	8.60	9.10	9.18	—	237.46	233.06	242.06	248.78	—
Business services .....											
Advertising .....	73	11.79	11.71	12.46	12.46	—	394.97	389.94	418.66	419.90	—
Mailing, reproduction, and stenographic services:	731	16.87	16.65	17.38	17.18	—	625.88	604.40	636.11	630.51	—
Photocopying and duplicating services .....	7334	10.90	10.97	11.17	11.12	—	401.12	389.44	402.12	406.99	—
Services to buildings .....	734	7.90	7.95	8.25	8.24	—	228.31	226.58	235.13	235.66	—
Disinfecting and pest control services .....	7342	10.79	10.80	11.27	11.36	—	399.23	395.28	424.88	429.41	—
Building maintenance services, nec .....	7349	7.54	7.59	7.85	7.81	—	211.87	210.24	216.66	216.34	—
Miscellaneous equipment rental and leasing .....	735	11.78	11.77	12.48	12.47	—	468.84	463.74	486.72	490.07	—
Medical equipment rental .....	7352	10.92	11.05	12.26	12.26	—	405.13	401.12	445.04	447.49	—
Heavy construction equipment rental .....	7353	15.63	15.86	16.22	16.33	—	634.58	651.85	668.26	676.06	—
Equipment rental and leasing, nec .....	7359	10.86	10.76	11.41	11.40	—	436.57	426.10	444.99	448.02	—
Personnel supply services:											
Help supply services .....	7363	9.62	9.55	10.19	10.15	—	307.84	309.42	333.21	332.92	—
Computer and data processing services .....	737	20.11	19.93	20.97	21.06	—	776.25	755.35	805.25	806.60	—
Computer programming services .....	7371	23.09	22.84	24.26	24.42	—	888.97	865.64	919.45	927.96	—
Computer integrated systems design .....	7373	20.55	20.52	20.87	20.79	—	813.78	790.02	826.45	819.13	—
Information retrieval services .....	7375	15.21	15.38	15.81	15.58	—	568.85	587.52	596.04	593.60	—
Computer maintenance and repair .....	7378	14.62	14.89	16.13	16.54	—	570.18	573.27	629.07	654.98	—
Miscellaneous business services .....	738	9.69	9.69	10.12	10.17	—	321.71	317.83	334.97	336.63	—
Detective and armored car services .....	7381	7.80	7.90	8.19	8.24	—	269.88	270.18	282.56	285.10	—
Security systems services .....	7382	12.34	12.34	13.28	13.23	—	440.54	443.01	478.08	477.60	—
Auto repair, services, and parking .....											
Automotive rentals, without drivers .....	75	10.48	10.49	11.01	11.02	—	383.57	383.93	395.26	395.62	—
Passenger car rental .....	751	9.96	10.03	10.50	10.44	—	368.52	369.10	388.50	385.24	—
Automobile parking .....	7514	8.96	9.04	9.56	9.51	—	333.31	334.48	355.63	353.77	—
Automotive repair shops .....	752	7.62	7.67	8.10	8.13	—	260.60	258.48	260.01	263.41	—
Automotive and tire repair shops .....	753	11.84	11.82	12.40	12.42	—	454.66	453.89	471.20	473.20	—
General automotive repair shops .....	7532,4	12.39	12.40	12.96	12.98	—	470.82	469.96	493.78	493.24	—
Automotive services, except repair .....	7538	11.89	11.81	12.36	12.38	—	453.01	448.78	465.97	471.68	—
Carwashes .....	754	7.87	7.93	8.41	8.43	—	256.56	262.48	262.39	262.17	—
Miscellaneous repair services .....	7542	6.92	6.92	7.46	7.37	—	208.29	217.98	210.37	204.89	—
Motion pictures .....	76	12.62	12.67	13.17	13.20	—	489.66	489.06	507.05	509.52	—
Motion picture production and services .....	78	13.16	13.03	14.31	14.19	—	389.54	397.42	413.56	418.61	—
Video tape rental .....	781	18.70	18.76	19.58	20.11	—	719.95	729.76	755.79	790.32	—
Video tape rental .....	784	6.43	6.46	7.38	7.30	—	158.18	159.56	171.22	174.47	—
Amusement and recreation services .....											
Bowling centers .....	79	8.74	8.50	9.63	9.28	—	240.35	241.40	251.34	248.70	—
Misc. amusement and recreation services .....	793	7.65	7.62	7.76	7.76	—	184.37	186.69	187.79	190.12	—
Physical fitness facilities .....	799	8.18	7.98	8.88	8.55	—	224.95	229.03	228.22	229.14	—
Membership sports and recreation clubs .....	7991	8.38	8.36	8.76	8.71	—	160.90	159.68	171.70	168.97	—
Membership sports and recreation clubs .....	7997	8.55	8.44	9.35	9.06	—	250.52	253.20	261.80	253.68	—
Health services .....											
Offices and clinics of medical doctors .....	80	13.18	13.25	13.65	13.67	—	436.26	438.58	449.09	451.11	—
Offices and clinics of medical doctors .....	801	13.68	13.73	14.26	14.23	—	456.91	454.46	467.73	468.17	—
Offices and clinics of dentists .....	802	13.60	13.60	14.05	14.07	—	388.96	384.88	396.21	396.77	—
Offices and clinics of other health practitioners .....	804	12.43	12.41	13.20	13.21	—	377.87	374.78	399.96	400.26	—
Nursing and personal care facilities .....	805	9.25	9.38	9.70	9.72	—	302.48	308.60	312.34	315.90	—
Intermediate care facilities .....	8052	8.70	8.90	9.19	9.23	—	281.01	289.25	289.49	293.51	—
Hospitals .....	806	14.95	15.03	15.35	15.38	—	521.76	524.55	535.72	536.76	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>	June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	29.1	28.9	29.0	28.8	—	—	—	—	—	—
Legal services .....	81	35.6	34.6	34.7	34.8	—	—	—	—	—	—
Social services .....	83	31.5	31.3	31.1	31.2	—	—	—	—	—	—
Individual and family services .....	832	31.8	31.2	31.2	31.1	—	—	—	—	—	—
Job training and related services .....	833	31.0	30.8	30.8	30.5	—	—	—	—	—	—
Child day care services .....	835	30.3	30.5	30.0	30.2	—	—	—	—	—	—
Residential care .....	836	32.4	32.4	31.9	32.1	—	—	—	—	—	—
Social services, nec .....	839	31.7	30.9	32.5	31.4	—	—	—	—	—	—
Membership organizations:											
Professional organizations .....	862	35.2	34.8	34.8	35.0	—	—	—	—	—	—
Engineering and management services .....	87	37.6	37.1	37.1	37.2	—	—	—	—	—	—
Engineering and architectural services .....	871	39.8	39.2	39.4	39.5	—	—	—	—	—	—
Engineering services .....	8711	40.1	39.5	39.7	39.8	—	—	—	—	—	—
Architectural services .....	8712	39.0	38.5	38.3	38.5	—	—	—	—	—	—
Surveying services .....	8713	38.2	38.4	38.5	38.7	—	—	—	—	—	—
Accounting, auditing, and bookkeeping .....	872	36.0	35.6	35.9	35.7	—	—	—	—	—	—
Research and testing services .....	873	37.3	36.9	36.4	36.5	—	—	—	—	—	—
Commercial physical research .....	8731	40.7	40.1	40.1	40.0	—	—	—	—	—	—
Commercial nonphysical research .....	8732	31.5	31.0	29.9	30.5	—	—	—	—	—	—
Noncommercial research organizations .....	8733	37.3	36.8	36.0	36.1	—	—	—	—	—	—
Management and public relations .....	874	36.4	35.9	36.0	36.3	—	—	—	—	—	—
Management services .....	8741	35.4	35.1	35.2	35.7	—	—	—	—	—	—
Management consulting services .....	8742	36.8	36.2	36.4	36.8	—	—	—	—	—	—
Public relations services .....	8743	36.0	35.5	35.1	35.8	—	—	—	—	—	—
Services, nec .....	89	36.4	34.7	34.5	34.3	—	—	—	—	—	—

See footnotes at end of table.

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

**B-15. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>	June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	\$11.33	\$11.33	\$11.39	\$11.46	—	\$329.70	\$327.44	\$330.31	\$330.05	—
Legal services .....	81	17.39	17.24	17.83	18.04	—	619.08	596.50	618.70	627.79	—
Social services .....	83	8.80	8.73	9.10	9.13	—	277.20	273.25	283.01	284.86	—
Individual and family services .....	832	9.37	9.29	9.63	9.65	—	297.97	289.85	300.46	300.12	—
Job training and related services .....	833	8.48	8.30	8.80	8.87	—	262.88	255.64	271.04	270.54	—
Child day care services .....	835	7.45	7.32	7.83	7.76	—	225.74	223.26	234.90	234.35	—
Residential care .....	836	8.89	8.90	9.23	9.26	—	288.04	288.36	294.44	297.25	—
Social services, nec .....	839	11.00	10.65	11.02	11.27	—	348.70	329.09	358.15	353.88	—
Membership organizations:											
Professional organizations .....	862	17.56	17.52	18.23	18.02	—	618.11	609.70	634.40	630.70	—
Engineering and management services .....	87	17.09	16.96	17.74	17.66	—	642.58	629.22	658.15	656.95	—
Engineering and architectural services .....	871	18.81	18.66	19.46	19.32	—	748.64	731.47	766.72	763.14	—
Engineering services .....	8711	19.66	19.55	20.29	20.17	—	788.37	772.23	805.51	802.77	—
Architectural services .....	8712	16.79	16.53	17.59	17.36	—	654.81	636.41	673.70	668.36	—
Surveying services .....	8713	13.33	13.19	13.74	13.73	—	509.21	506.50	528.99	531.35	—
Accounting, auditing, and bookkeeping .....	872	14.78	14.66	15.20	15.22	—	532.08	521.90	545.68	543.35	—
Research and testing services .....	873	17.62	17.35	18.33	18.22	—	657.23	640.22	667.21	665.03	—
Commercial physical research .....	8731	19.84	19.26	20.26	20.03	—	807.49	772.33	812.43	801.20	—
Commercial nonphysical research .....	8732	13.58	13.56	14.87	14.92	—	427.77	420.36	444.61	455.06	—
Noncommercial research organizations .....	8733	20.68	20.50	21.52	21.44	—	771.36	754.40	774.72	773.98	—
Management and public relations .....	874	16.17	16.12	17.04	16.92	—	588.59	578.71	613.44	614.20	—
Management services .....	8741	14.61	14.67	15.33	15.15	—	517.19	514.92	539.62	540.86	—
Management consulting services .....	8742	18.21	18.09	19.09	19.05	—	670.13	654.86	694.88	701.04	—
Public relations services .....	8743	14.99	14.75	15.86	15.88	—	539.64	523.63	556.69	568.50	—
Services, nec .....	89	16.65	16.57	17.74	17.74	—	606.06	574.98	612.03	608.48	—

<sup>1</sup> 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.

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

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

<sup>4</sup> Money payments only; tips, not included.

<sup>5</sup> Excludes nonoffice commissioned real estate sales agents.

— Data not available.

<sup>P</sup> = 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)			
	May 1997	June 1997	May 1998	June 1998P	May 1997	June 1997	May 1998	June 1998P
Average hourly earnings, excluding lump-sum payments .....	\$20.50	\$20.68	\$20.82	\$20.89	\$20.51	\$20.51	\$20.97	\$21.66
Average hourly earnings, including lump-sum payments .....	20.81	20.98	20.88	20.95	20.51	20.51	21.19	21.86

P = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**B-16. Average hourly earnings, excluding overtime,<sup>1</sup> of production workers on manufacturing payrolls**

Industry	June 1997	July 1997	May 1998	June 1998 <sup>P</sup>	July 1998 <sup>P</sup>
<b>Manufacturing</b> .....	<b>\$12.40</b>	<b>\$12.42</b>	<b>\$12.78</b>	<b>\$12.74</b>	<b>\$12.72</b>
<b>Durable goods</b> .....	12.89	12.89	13.23	13.19	13.12
Lumber and wood products .....	10.22	10.27	10.48	10.49	(2)
Furniture and fixtures .....	10.10	10.09	10.37	10.35	(2)
Stone, clay, and glass products .....	12.27	12.32	12.64	12.66	(2)
Primary metal industries .....	14.13	14.25	14.51	14.51	(2)
Fabricated metal products .....	12.03	11.99	12.32	12.30	(2)
Industrial machinery and equipment .....	13.16	13.23	13.56	13.58	(2)
Electronic and other electrical equipment .....	12.00	12.11	12.50	12.51	(2)
Transportation equipment .....	16.29	16.24	16.56	16.47	(2)
Instruments and related products .....	12.91	12.95	13.24	13.17	(2)
Miscellaneous manufacturing .....	10.13	10.15	10.41	10.44	(2)
<b>Nondurable goods</b> .....	11.67	11.74	12.08	12.06	\$12.14
Food and kindred products .....	10.82	10.83	11.12	11.10	(2)
Tobacco products .....	20.49	20.15	19.62	20.20	(2)
Textile mill products .....	9.45	9.51	9.84	9.81	(2)
Apparel and other textile products .....	8.01	7.97	8.24	8.26	(2)
Paper and allied products .....	14.10	14.20	14.57	14.52	(2)
Printing and publishing .....	12.42	12.49	12.81	12.80	(2)
Chemicals and allied products .....	15.63	15.67	16.16	16.10	(2)
Petroleum and coal products .....	18.58	18.62	19.39	19.27	(2)
Rubber and misc. plastics products .....	10.95	11.00	11.26	11.21	(2)
Leather and leather products .....	8.70	8.57	9.09	9.08	(2)

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

<sup>2</sup> Not available.

<sup>P</sup> = 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 workers<sup>1</sup> on private nonfarm payrolls by major industry, in current and constant (1982) dollars**

Industry	Average hourly earnings					Average weekly earnings				
	June 1997	July 1997	May 1998	June 1998P	July 1998P	June 1997	July 1997	May 1998	June 1998P	July 1998P
<b>Total private:</b>										
Current dollars .....	\$12.18	\$12.17	\$12.70	\$12.66	\$12.67	\$425.08	\$423.52	\$439.42	\$439.30	\$440.92
Constant (1982) dollars .....	7.50	7.49	7.72	7.68	(2)	261.75	260.63	266.96	266.57	(2)
<b>Mining:</b>										
Current dollars .....	16.14	16.07	16.73	16.72	\$16.75	739.21	724.76	742.81	735.68	\$730.30
Constant (1982) dollars .....	9.94	9.89	10.16	10.15	(2)	455.18	446.01	451.28	446.41	(2)
<b>Construction:</b>										
Current dollars .....	15.91	16.03	16.42	16.43	\$16.64	630.04	642.80	643.66	642.41	\$665.60
Constant (1982) dollars .....	9.80	9.86	9.98	9.97	(2)	387.96	395.57	391.04	389.81	(2)
<b>Manufacturing:</b>										
Current dollars .....	13.09	13.10	13.47	13.44	\$13.40	549.78	539.72	563.05	561.79	\$550.74
Constant (1982) dollars .....	8.06	8.06	8.18	8.16	(2)	338.53	332.14	342.07	340.89	(2)
<b>Transportation and public utilities:</b>										
Current dollars .....	14.82	14.99	15.21	15.24	\$15.35	591.32	592.11	600.80	605.03	\$609.40
Constant (1982) dollars .....	9.13	9.22	9.24	9.25	(2)	364.11	364.38	365.01	367.13	(2)
<b>Wholesale trade:</b>										
Current dollars .....	13.37	13.38	13.96	13.89	\$13.98	517.42	512.45	536.06	531.99	\$536.83
Constant (1982) dollars .....	8.23	8.23	8.48	8.43	(2)	318.61	315.35	325.67	322.81	(2)
<b>Retail trade</b>										
Current dollars .....	8.27	8.27	8.71	8.69	\$8.70	243.14	244.79	252.59	254.62	\$260.13
Constant (1982) dollars .....	5.09	5.09	5.29	5.27	(2)	149.72	150.64	153.46	154.50	(2)
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	13.26	13.21	13.99	13.94	\$13.95	486.64	474.24	505.04	501.84	\$503.60
Constant (1982) dollars .....	8.17	8.13	8.50	8.46	(2)	299.66	291.84	306.83	304.51	(2)
<b>Services:</b>										
Current dollars .....	12.14	12.06	12.75	12.70	\$12.68	398.19	395.57	414.38	415.29	\$417.17
Constant (1982) dollars .....	7.48	7.42	7.75	7.71	(2)	245.19	243.43	251.75	252.00	(2)

<sup>1</sup> 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.

<sup>2</sup> 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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Alabama</b> .....	41.4	42.2	41.9	\$11.81	\$12.05	\$12.18	\$488.93	\$508.51	\$510.34
Birmingham .....	43.0	42.7	42.6	12.52	12.77	12.90	538.36	545.28	549.54
Mobile .....	42.1	44.6	43.6	14.06	14.04	14.17	591.93	626.18	617.81
<b>Alaska</b> .....	41.6	39.7	48.8	11.71	11.97	11.46	487.14	475.21	559.25
<b>Arizona</b> .....	41.1	40.3	40.6	11.69	12.08	12.20	480.46	486.82	495.32
<b>Arkansas</b> .....	41.2	41.8	41.7	10.75	11.00	10.96	442.90	459.80	457.03
Fayetteville-Springdale-Rogers .....	40.5	42.0	41.9	10.47	10.65	10.84	424.04	447.30	454.20
Fort Smith .....	40.9	43.7	44.0	10.62	11.08	11.04	434.36	484.20	485.76
Little Rock-North Little Rock .....	42.7	41.8	42.2	11.71	11.84	11.62	500.02	494.91	490.36
Pine Bluff .....	42.3	41.2	37.7	12.33	12.64	11.87	521.56	520.77	447.50
<b>California</b> .....	41.7	41.6	41.9	13.18	13.52	13.55	549.61	562.43	567.75
Bakersfield .....	41.8	41.6	41.6	13.49	14.00	13.98	563.88	582.40	581.57
Fresno .....	40.6	40.1	40.3	11.75	12.04	12.05	477.05	482.80	485.62
Los Angeles-Long Beach .....	42.2	42.2	42.2	12.40	12.65	12.67	523.28	533.83	534.67
Modesto .....	41.9	42.1	42.6	13.37	13.81	13.94	560.20	581.40	593.84
Oakland .....	42.1	41.4	41.3	15.47	15.58	15.59	651.29	645.01	643.87
Orange County .....	42.3	43.3	43.6	12.80	12.95	13.04	541.44	560.74	568.54
Riverside-San Bernardino .....	41.7	42.1	42.9	11.83	12.05	12.15	493.31	507.31	521.24
Sacramento .....	41.4	40.7	40.9	14.07	14.60	14.62	582.50	594.22	597.96
Salinas .....	37.5	39.0	41.3	13.83	13.97	14.16	518.63	544.83	584.81
San Diego .....	40.3	40.1	40.1	13.27	13.58	13.64	534.78	544.56	542.95
San Francisco .....	41.1	41.2	41.4	14.30	14.53	14.65	598.73	598.64	606.51
San Jose .....	42.3	42.2	42.3	16.53	16.67	16.71	699.22	703.47	706.83
Santa Barbara-Santa Maria-Lompoc .....	41.5	41.7	41.3	13.44	14.29	14.17	557.76	595.89	585.22
Santa Rosa .....	40.0	39.9	40.1	14.84	15.07	15.14	593.60	601.29	607.11
Stockton-Lodi .....	42.8	40.9	41.9	13.28	13.53	13.41	568.38	553.38	561.88
Vallejo-Fairfield-Napa .....	40.8	42.2	42.1	15.21	15.57	15.48	620.57	657.05	651.71
Ventura .....	42.2	43.2	43.1	12.46	12.46	12.58	525.81	538.27	542.20
<b>Colorado</b> .....	41.9	41.6	41.8	13.26	13.63	13.75	555.59	567.01	574.75
Denver .....	41.5	42.7	43.2	13.03	12.65	12.92	540.75	540.16	558.14
<b>Connecticut</b> .....	42.5	42.9	43.1	14.38	14.75	14.81	611.15	632.78	638.31
Bridgeport .....	42.8	42.7	42.7	14.78	15.29	15.36	632.58	652.88	655.87
Danbury .....	43.6	43.4	42.9	14.70	14.88	14.94	640.92	645.79	640.93
Hartford .....	42.3	43.2	43.3	15.22	15.45	15.54	643.81	687.44	672.88
New Haven-Meriden .....	42.8	42.1	42.8	14.08	14.59	14.76	602.62	614.24	631.73
New London-Norwich .....	41.5	41.9	42.0	14.79	15.36	15.31	613.79	643.58	643.02
Stamford-Norwalk .....	40.6	40.0	40.1	13.64	13.65	13.65	553.78	545.60	547.37
Waterbury .....	44.3	43.0	43.6	13.30	14.05	14.06	589.19	604.15	613.02
<b>Delaware</b> .....	42.0	42.5	41.9	14.69	15.34	15.35	616.98	651.95	643.17
Dover .....	41.3	40.5	41.1	13.36	13.82	13.75	551.77	559.71	565.13
Wilmington-Newark .....	43.1	44.3	43.5	17.60	18.69	18.69	758.56	827.97	813.02
<b>District of Columbia:</b> Washington PMSA .....	39.4	39.8	39.3	13.95	14.17	14.07	549.63	563.97	552.95
<b>Florida</b> .....	41.9	41.9	42.0	10.88	11.31	11.36	455.87	473.89	477.12
<b>Georgia</b> .....	42.3	42.2	42.2	11.50	12.05	12.01	486.45	508.51	506.82
Atlanta .....	42.3	41.6	41.5	12.38	12.97	12.77	523.67	539.55	529.96
Savannah .....	47.4	47.0	47.9	13.86	14.68	14.69	656.96	689.96	703.65
<b>Hawaii</b> .....	36.5	36.7	36.4	13.08	13.19	13.25	477.42	484.07	482.30
Honolulu .....	39.8	39.3	39.7	12.93	13.17	13.24	514.61	517.58	525.63
<b>Idaho</b> .....	40.3	38.1	37.8	12.22	12.89	12.72	492.47	491.11	480.82
<b>Illinois</b> .....	42.1	41.8	41.9	13.29	13.70	13.71	559.51	572.66	574.45
Bloomington-Normal .....	40.4	39.7	41.0	17.20	17.36	17.97	694.88	689.19	736.77
Champaign-Urbana .....	41.8	41.8	42.0	10.99	11.28	11.41	459.38	471.50	479.22
Chicago .....	42.1	41.6	41.9	13.23	13.52	13.54	556.98	562.43	567.33
Davenport-Moline-Rock Island .....	42.8	43.5	43.2	15.32	15.56	15.66	655.70	676.86	676.31
Decatur .....	43.2	42.4	42.2	16.63	16.80	16.81	718.42	712.32	709.36
Kankakee .....	41.4	41.5	42.5	14.72	14.92	14.98	609.41	619.18	636.65
Peoria-Pekin .....	42.8	42.5	42.1	16.51	16.63	16.46	706.63	706.78	692.97
Rockford .....	42.8	43.3	42.8	14.51	15.63	15.65	621.03	676.78	669.82
Springfield .....	40.9	40.2	40.2	12.01	12.32	12.38	491.21	495.26	497.68

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>Indiana</b> .....	42.6	43.2	43.1	\$14.65	\$14.89	\$14.79	\$624.09	\$643.25	\$637.45
Bloomington .....	41.6	39.9	40.0	12.39	12.30	12.24	515.42	490.77	489.60
Elkhart-Goshen .....	39.7	39.5	40.5	12.35	12.34	12.40	490.30	487.43	502.20
Evansville-Henderson .....	43.3	42.9	42.7	14.48	15.11	14.85	626.98	648.22	634.10
Fort Wayne .....	40.9	41.8	41.8	14.55	14.76	14.72	595.10	616.97	615.30
Gary .....	42.2	44.3	44.4	18.14	18.58	18.98	765.51	823.09	816.07
Indianapolis .....	44.1	44.2	44.3	15.67	15.56	15.56	691.05	687.75	689.31
Kokomo .....	44.5	51.1	50.5	19.20	20.13	20.51	854.40	1,028.64	1,035.76
Lafayette .....	41.7	43.8	44.1	15.55	15.74	15.98	648.44	689.41	704.72
Muncie .....	43.1	44.9	44.9	14.55	14.23	14.29	627.11	638.93	641.62
South Bend .....	41.1	41.1	41.0	12.87	12.75	12.71	528.96	524.03	521.11
Terre Haute .....	43.6	46.2	46.5	14.77	14.58	14.61	643.97	673.60	679.37
<b>Iowa</b> .....	42.8	42.3	41.9	13.43	13.91	13.79	574.80	588.39	577.80
Cedar Rapids .....	42.0	41.0	41.3	16.38	17.64	17.26	687.96	723.24	712.84
Des Moines .....	42.7	41.0	41.1	13.41	14.11	14.11	572.61	578.51	579.92
Dubuque .....	41.8	41.1	41.2	14.64	15.40	15.12	611.95	632.94	622.94
Sioux City .....	39.6	39.2	38.5	11.47	11.63	11.73	454.21	455.90	451.61
<b>Kansas</b> .....	42.5	42.2	41.8	13.38	13.73	13.58	568.65	579.41	567.64
Topeka .....	40.5	41.5	41.5	14.96	15.69	15.63	605.88	651.14	648.65
Wichita .....	44.0	43.6	43.8	15.57	16.05	16.04	685.08	699.78	702.55
<b>Kentucky</b> .....	41.8	41.1	41.2	13.02	13.74	13.83	544.24	564.71	569.80
Lexington .....	42.8	42.4	42.3	14.00	13.85	14.02	599.20	587.24	593.05
Louisville .....	42.0	41.1	41.8	14.74	15.20	15.24	619.08	624.72	637.03
<b>Louisiana</b> .....	43.8	44.3	43.8	14.05	14.88	14.52	615.39	659.18	635.98
Baton Rouge .....	42.2	43.3	43.2	16.79	17.53	17.65	708.54	759.05	762.48
New Orleans .....	43.8	43.2	43.1	14.01	14.49	14.39	613.64	625.97	620.21
Shreveport-Bossier City .....	42.4	42.6	41.0	13.86	14.04	13.13	587.66	598.10	538.33
<b>Maine</b> .....	40.8	41.4	40.9	13.00	13.41	13.19	530.40	555.17	539.47
Lewiston-Auburn .....	42.4	41.2	41.1	10.84	11.64	11.61	459.62	479.57	477.17
Portland .....	37.1	42.4	43.1	10.99	11.30	11.50	407.73	479.12	495.65
<b>Maryland</b> .....	41.2	41.5	41.7	14.25	14.46	14.29	587.10	600.09	595.89
Baltimore PMSA .....	41.2	41.9	41.8	14.95	14.90	14.86	615.94	624.31	621.15
<b>Massachusetts</b> .....	42.3	42.1	42.2	13.34	13.73	13.76	564.28	578.03	580.67
Boston .....	41.7	41.7	42.0	14.37	14.87	14.93	599.23	620.08	627.06
Springfield .....	41.8	41.6	41.7	12.91	13.43	13.43	539.64	558.69	560.03
Worcester .....	44.0	42.2	42.5	13.34	13.94	13.88	586.96	588.27	589.90
<b>Michigan</b> .....	44.3	43.3	42.9	16.91	17.56	17.21	749.11	760.35	738.31
Ann Arbor .....	46.0	44.1	43.5	17.86	19.11	19.00	821.56	842.75	826.50
Detroit .....	45.5	44.0	43.8	18.55	19.52	19.41	844.02	858.88	850.16
Flint .....	46.6	43.2	34.8	22.03	24.57	22.91	1,026.60	1,061.42	797.27
Grand Rapids-Muskegon-Holland .....	41.9	41.7	41.4	14.53	14.48	14.46	608.81	603.82	598.64
Jackson .....	40.7	43.1	43.7	13.05	12.72	12.74	531.13	548.23	556.74
Kalamazoo-Battle Creek .....	44.6	44.7	44.6	14.99	15.78	15.51	668.55	705.37	691.75
Lansing East Lansing .....	44.2	40.1	41.8	18.38	19.22	19.17	812.40	770.72	801.31
Saginaw-Bay City-Midland .....	47.5	45.1	43.8	19.92	21.24	21.01	946.20	957.92	920.24
<b>Minnesota</b> .....	41.1	41.2	41.3	13.54	13.87	13.84	566.49	571.44	571.59
Duluth-Superior .....	39.9	40.3	39.6	12.20	12.49	12.76	486.78	503.35	505.30
Minneapolis-St. Paul .....	41.3	42.2	42.0	14.47	14.83	14.74	597.61	625.83	619.08
St. Cloud .....	42.6	42.9	43.6	12.47	12.87	12.73	531.22	552.12	555.03
<b>Mississippi</b> .....	40.9	41.4	41.6	10.35	10.66	10.67	423.32	441.32	443.87
Jackson .....	41.2	40.8	41.9	11.89	11.81	11.76	489.87	481.85	492.74
<b>Missouri</b> .....	41.7	42.5	41.6	12.98	13.45	13.17	541.27	571.63	547.87
Kansas City .....	43.2	43.5	43.0	14.28	14.13	14.09	616.90	614.66	605.87
St. Louis .....	43.0	43.2	41.4	15.02	15.59	15.36	645.86	673.49	635.90
Springfield .....	40.9	40.7	40.9	10.99	11.44	11.45	449.49	465.61	468.31
<b>Montana</b> .....	39.3	39.8	40.4	13.27	14.00	13.60	521.51	557.20	549.44
<b>Nebraska</b> .....	41.0	41.9	41.8	12.03	12.11	12.02	493.23	507.41	502.44
Lincoln .....	45.0	43.9	44.6	13.26	14.09	14.17	596.70	618.55	631.98
Omaha .....	41.3	42.7	43.2	13.41	13.49	13.20	553.83	576.02	570.24
<b>Nevada</b> .....	42.9	42.7	43.0	14.21	14.69	14.31	609.61	627.26	615.33
Las Vegas .....	40.8	40.5	40.8	15.26	17.04	16.65	622.61	690.12	679.32

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		
	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P	June 1997	May 1998	June 1998P
<b>New Hampshire</b> .....	42.1	41.0	41.1	\$12.49	\$12.72	\$12.86	\$525.83	\$521.52	\$528.55
Manchester .....	41.0	40.0	41.0	13.83	13.95	13.87	567.03	558.00	568.67
Nashua .....	40.9	41.5	42.4	14.52	14.28	14.39	593.87	592.62	610.14
Portsmouth-Rochester .....	42.0	41.2	40.0	11.72	12.11	12.17	492.24	498.93	486.80
<b>New Jersey</b> .....	42.2	41.6	41.8	14.05	14.55	14.46	592.91	605.28	604.43
<b>New Mexico</b> .....	40.9	38.4	38.0	11.61	12.94	12.75	474.85	496.90	484.50
Albuquerque .....	39.8	38.1	37.2	14.47	14.33	13.92	575.91	545.97	517.82
<b>New York</b> .....	41.0	41.3	41.3	13.16	13.52	13.46	539.56	558.38	555.90
Albany-Schenectady-Troy .....	41.6	42.4	42.3	14.47	14.32	14.49	601.95	607.17	612.93
Binghamton .....	39.9	41.5	41.5	10.55	10.72	10.59	420.95	444.88	439.49
Buffalo-Niagara Falls .....	43.3	43.2	43.1	16.63	17.33	17.38	720.08	748.66	749.08
Dutchess County .....	37.7	40.1	41.1	12.10	12.24	12.04	456.17	490.82	494.84
Elmira .....	41.2	40.9	40.6	12.01	12.66	12.51	494.81	517.79	507.91
Nassau-Suffolk .....	40.7	40.1	40.7	12.23	12.36	12.43	497.76	495.64	505.90
New York PMSA .....	38.3	39.3	39.4	11.96	12.47	12.29	458.07	490.07	484.23
New York City .....	38.0	39.0	39.2	11.72	12.23	12.06	445.36	476.97	472.75
Newburgh .....	41.1	39.3	39.9	11.70	11.02	11.14	480.87	433.09	444.49
Rochester .....	43.1	42.4	42.0	14.83	14.89	14.77	639.17	631.34	620.34
Rockland County .....	40.1	43.0	42.4	15.82	15.59	15.46	634.38	670.37	655.50
Syracuse .....	42.9	42.6	43.4	14.26	14.44	14.53	611.75	615.14	630.60
Utica-Rome .....	40.5	40.5	40.3	11.50	11.79	11.72	465.75	477.50	472.32
Westchester County .....	40.3	40.7	40.7	12.58	13.16	13.05	506.97	535.61	531.14
<b>North Carolina</b> .....	41.3	41.0	41.3	11.38	11.77	11.79	469.99	482.57	486.93
Asheville .....	42.6	41.7	42.2	10.87	11.24	11.32	463.06	468.71	477.70
Charlotte-Gastonia-Rock Hill .....	41.0	41.6	41.7	12.33	12.79	12.78	505.53	532.06	532.93
Greensboro-Winston-Salem-High Point .....	41.0	40.1	40.8	11.59	11.89	11.96	475.19	476.79	487.97
Raleigh-Durham-Chapel Hill .....	41.9	41.3	41.6	12.37	12.86	12.85	518.30	531.12	534.56
<b>North Dakota</b> .....	41.7	40.5	40.6	11.16	11.38	11.31	465.37	460.89	459.19
Fargo-Moorhead .....	42.7	39.3	41.4	11.00	10.60	10.82	469.70	416.58	447.95
<b>Ohio</b> .....	43.3	43.0	42.7	15.15	15.76	15.69	656.00	677.68	669.96
Akron .....	41.5	43.1	43.0	12.71	12.98	13.12	527.47	559.44	564.16
Canton-Massillon .....	41.6	42.1	42.0	13.49	13.87	13.80	561.18	583.93	579.60
Cincinnati .....	43.0	43.2	42.9	14.59	15.10	15.23	627.37	652.32	653.37
Cleveland-Lorain-Elyria .....	43.8	43.3	43.0	15.11	15.36	15.29	661.82	665.09	657.47
Columbus .....	42.5	42.7	42.4	14.15	14.75	14.75	601.38	629.83	625.40
Dayton-Springfield .....	44.8	43.0	41.8	16.27	16.76	16.41	728.90	720.68	685.94
Hamilton-Middletown .....	44.9	45.0	45.2	16.93	17.62	17.60	760.16	792.90	795.52
Lima .....	43.4	42.6	43.0	16.23	16.20	16.12	704.38	690.12	693.16
Mansfield .....	42.6	42.6	42.0	15.84	16.55	16.31	674.78	705.03	685.02
Steubenville-Weirton .....	41.3	41.5	41.9	16.21	18.11	18.04	689.47	751.57	755.88
Toledo .....	43.4	44.4	43.7	16.33	16.99	16.55	708.72	754.36	723.24
Youngstown-Warren .....	43.6	41.4	41.2	17.03	17.57	17.48	742.51	727.40	720.18
<b>Oklahoma</b> .....	42.5	41.3	41.3	12.13	12.65	12.61	515.53	522.45	520.79
Oklahoma City .....	42.6	43.5	42.7	13.23	13.59	13.49	563.60	591.17	576.02
Tulsa .....	42.0	42.2	42.9	12.83	13.04	13.14	538.86	550.29	563.71
<b>Oregon</b> .....	41.2	41.2	40.6	13.34	13.96	13.97	549.61	575.15	567.18
Eugene-Springfield .....	40.5	41.2	40.0	12.77	13.32	13.29	517.19	548.78	531.60
Medford-Ashland .....	39.5	39.3	39.1	12.60	12.71	12.86	497.70	499.50	502.83
Portland-Vancouver .....	42.1	41.7	40.7	13.15	14.15	14.26	553.62	590.06	580.38
Salem .....	39.5	38.8	38.9	11.72	12.15	11.98	462.94	471.42	466.02
<b>Pennsylvania</b> .....	41.8	41.4	41.8	13.70	14.01	14.00	572.66	580.01	585.20
Allentown-Bethlem-Easton .....	42.0	42.1	42.0	13.86	14.34	14.17	582.12	603.71	595.14
Altoona .....	41.2	40.2	40.1	11.63	12.11	12.15	479.16	486.82	487.22
Erie .....	43.6	42.7	43.9	13.86	14.00	13.93	604.30	597.80	611.53
Harrisburg-Lebanon-Carlisle .....	39.9	39.1	39.9	13.10	13.42	13.51	522.69	524.72	539.05
Johnstown .....	40.2	40.6	41.1	10.09	10.26	10.14	405.62	416.56	416.75
Lancaster .....	39.8	40.0	40.9	12.53	12.80	12.85	498.69	512.00	525.57
Philadelphia PMSA .....	41.7	40.9	41.2	14.82	15.44	15.34	617.99	631.50	632.01
Pittsburgh .....	42.8	42.2	42.1	14.65	14.97	14.88	627.02	631.73	626.45
Reading .....	41.9	41.8	42.3	14.92	15.11	14.94	625.15	631.60	631.96
Scranton-Wilkes-Barre-Hazleton .....	41.1	40.5	40.8	12.35	12.67	12.65	507.59	513.14	516.12
Sharon .....	43.3	41.6	42.9	14.50	14.90	14.86	627.85	619.84	637.49
State College .....	41.8	41.3	41.0	11.88	11.89	11.82	496.58	491.06	484.62
Williamsport .....	40.5	40.4	40.1	11.16	11.48	11.52	451.98	463.79	461.95
York .....	42.0	42.0	43.1	14.06	14.47	14.29	590.52	607.74	615.90

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		
	June 1997	May 1998	June 1998 <sup>P</sup>	June 1997	May 1998	June 1998 <sup>P</sup>	June 1997	May 1998	June 1998 <sup>P</sup>
<b>Rhode Island</b> .....	40.9	41.3	41.4	\$11.29	\$11.53	\$11.58	\$461.76	\$476.19	\$479.41
Providence-Fall River-Warwick .....	41.4	41.6	41.5	11.36	11.75	11.82	470.30	488.80	490.53
<b>South Carolina</b> .....	42.1	42.5	42.5	10.33	10.49	10.50	434.89	445.83	446.25
<b>South Dakota</b> .....	41.8	42.5	42.5	9.95	10.15	10.19	415.91	431.38	433.08
Rapid City .....	40.5	41.0	40.9	9.76	10.45	10.56	395.28	428.45	431.90
Sioux Falls .....	41.8	43.7	43.9	10.33	10.58	10.63	431.79	462.35	466.66
<b>Tennessee</b> .....	41.3	40.8	41.2	11.70	11.93	12.00	483.21	486.74	494.40
Chattanooga .....	42.8	42.2	42.9	10.73	10.85	11.08	459.24	457.87	475.33
Johnson City-Kingsport-Bristol .....	39.1	39.0	39.3	12.78	12.65	12.75	499.70	493.35	501.08
Knoxville .....	41.4	41.0	40.6	11.10	11.82	11.92	459.54	484.62	483.95
Memphis .....	42.6	41.1	41.5	12.07	12.45	12.54	514.18	511.70	520.41
Nashville .....	41.3	40.8	41.9	12.70	12.81	13.06	524.51	522.65	547.21
<b>Texas</b> .....	43.5	44.0	44.1	12.01	12.15	12.15	522.44	534.60	535.82
Dallas .....	43.2	42.1	43.3	12.06	12.24	12.29	520.99	515.30	532.16
Ft. Worth-Arlington .....	43.9	43.5	44.0	12.85	13.07	12.95	564.12	568.55	569.80
Houston .....	45.8	45.8	45.6	13.97	14.29	14.15	639.83	654.48	645.24
San Antonio .....	40.9	42.7	42.7	9.66	9.71	9.69	395.09	414.62	413.76
<b>Utah</b> .....	39.7	40.4	40.1	12.77	13.02	13.01	506.97	526.01	521.70
Salt Lake City-Ogden .....	39.3	40.9	40.1	12.75	12.91	12.96	501.08	528.02	519.70
<b>Vermont</b> .....	40.3	39.5	39.9	12.67	12.92	12.96	510.60	510.34	517.10
Burlington .....	43.3	43.6	43.5	13.08	13.48	13.81	566.36	587.73	600.74
<b>Virginia</b> .....	42.3	42.0	42.7	12.40	12.82	12.80	524.52	538.44	546.56
Bristol .....	39.2	38.6	39.4	10.88	10.62	10.40	426.50	409.93	409.76
Charlottesville .....	46.3	44.1	45.4	10.26	10.39	10.39	475.04	458.20	471.71
Danville .....	43.2	42.1	43.0	12.14	12.66	12.77	524.45	532.99	549.11
Lynchburg .....	44.6	46.0	46.5	12.13	12.78	12.42	541.00	587.88	577.53
Northern Virginia .....	41.4	41.9	40.7	12.75	13.16	13.27	527.85	551.40	540.09
Richmond-Petersburg .....	42.7	41.4	43.0	15.75	15.99	16.02	672.53	661.99	688.86
Roanoke .....	40.4	40.2	40.8	14.39	13.70	13.94	581.36	550.74	568.75
<b>Washington</b> .....	40.6	41.1	41.2	15.05	15.60	15.77	611.03	641.16	649.72
<b>West Virginia</b> .....	41.7	41.5	42.0	13.16	13.63	13.69	548.77	565.65	574.98
Charleston .....	45.7	48.0	47.0	14.77	15.46	15.68	674.99	742.08	736.96
Huntington-Ashland .....	42.8	42.7	43.0	14.52	15.41	15.41	621.46	658.01	662.63
Parkersburg-Marietta .....	44.1	40.6	41.0	16.83	17.24	17.37	742.20	699.94	712.17
Wheeling .....	40.2	41.9	41.7	14.83	16.65	16.45	596.17	697.64	685.97
<b>Wisconsin</b> .....	42.1	41.6	41.7	13.58	14.02	13.96	571.72	583.23	582.13
Appleton-Oshkosh-Neenah .....	43.4	43.8	43.8	14.76	15.16	15.16	640.58	664.01	684.01
Eau Claire .....	41.3	41.1	41.4	12.94	12.91	12.94	534.42	530.60	535.72
Green Bay .....	41.9	40.6	40.8	15.02	15.28	15.79	629.34	620.37	644.23
Janesville-Beloit .....	45.1	43.2	42.9	17.16	17.79	17.51	773.92	768.53	751.18
Kenosha .....	38.3	39.1	38.7	14.29	15.90	15.14	547.31	621.69	585.92
La Crosse .....	42.3	41.9	43.1	11.75	12.24	12.07	497.03	512.86	520.22
Madison .....	40.3	39.3	39.9	12.70	12.99	13.04	511.81	510.51	520.30
Milwaukee-Waukesha .....	41.5	41.3	40.7	14.86	14.83	14.75	616.69	612.48	600.33
Racine .....	42.0	42.6	41.8	13.98	14.62	14.54	587.16	622.81	607.77
Sheboygan .....	42.0	42.9	44.0	12.72	13.78	13.65	534.24	591.16	600.60
Wausau .....	43.1	42.2	43.3	13.14	13.41	13.46	566.33	565.90	582.82
<b>Wyoming</b> .....	40.5	40.7	40.6	14.44	15.08	14.62	584.82	613.76	593.57
<b>Puerto Rico</b> .....	39.7	40.5	40.0	7.91	8.47	8.46	314.03	343.04	338.40
<b>Virgin Islands</b> .....	42.2	39.6	39.7	17.86	18.60	18.55	753.69	736.56	736.44

<sup>P</sup> = preliminary.

State and area data have been adjusted to March 1997 benchmarks.

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

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

**C-1. Labor force status by census region and division, seasonally adjusted<sup>1</sup>**

(Numbers in thousands)

Census region and division	1997							1998					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
<b>NORTHEAST</b>													
Civilian labor force .....	26,135.7	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	26,037.4
Employed .....	24,706.7	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	24,848.8
Unemployed .....	1,428.9	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	1,188.5
Unemployment rate .....	5.5	5.4	5.4	5.3	5.2	5.2	5.1	4.9	4.9	5.0	4.7	4.7	4.6
<b>New England</b>													
Civilian labor force .....	7,122.9	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	7,106.8
Employed .....	6,803.3	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	6,855.5
Unemployed .....	319.6	313.5	311.7	308.7	303.3	298.5	292.7	269.7	258.4	276.2	243.1	264.3	251.3
Unemployment rate .....	4.5	4.4	4.4	4.3	4.2	4.2	4.1	3.8	3.6	3.9	3.4	3.7	3.5
<b>Middle Atlantic</b>													
Civilian labor force .....	19,012.7	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	18,930.5
Employed .....	17,903.4	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	17,993.3
Unemployed .....	1,109.3	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	937.2
Unemployment rate .....	5.8	5.8	5.8	5.7	5.6	5.5	5.4	5.3	5.4	5.4	5.2	5.1	5.0
<b>SOUTH</b>													
Civilian labor force .....	47,116.6	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	47,985.3
Employed .....	44,738.5	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	45,926.0
Unemployed .....	2,378.2	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	2,059.4
Unemployment rate .....	5.0	5.0	4.9	4.9	4.7	4.6	4.6	4.4	4.3	4.4	4.3	4.3	4.3
<b>South Atlantic</b>													
Civilian labor force .....	24,365.4	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	24,785.5
Employed .....	23,235.9	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	23,791.5
Unemployed .....	1,129.5	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	993.9
Unemployment rate .....	4.6	4.6	4.5	4.5	4.3	4.3	4.2	4.2	4.2	4.2	4.1	4.0	4.0
<b>East South Central</b>													
Civilian labor force .....	8,067.5	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	8,126.7
Employed .....	7,622.5	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	7,794.4
Unemployed .....	445.1	445.8	431.7	434.1	417.7	409.7	397.5	369.1	351.0	382.8	357.7	355.0	332.3
Unemployment rate .....	5.5	5.5	5.3	5.4	5.1	5.0	4.9	4.5	4.3	4.7	4.4	4.4	4.1
<b>West South Central</b>													
Civilian labor force .....	14,683.7	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	15,073.2
Employed .....	13,880.1	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	14,340.1
Unemployed .....	803.6	796.4	784.9	773.7	762.9	743.2	727.2	714.5	674.4	693.3	698.1	694.2	733.1
Unemployment rate .....	5.5	5.4	5.3	5.2	5.2	5.0	4.9	4.8	4.5	4.6	4.7	4.6	4.9

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 adjusted<sup>1</sup> — Continued**

(Numbers in thousands)

Census region and division	1997							1998					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
<b>MIDWEST</b>													
Civilian labor force .....	32,860.8	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	33,306.7
Employed .....	31,553.2	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	32,100.4
Unemployed .....	1,307.6	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	1,206.4
Unemployment rate .....	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.7	3.7	3.8	3.4	3.5	3.6
<b>East North Central</b>													
Civilian labor force .....	22,798.5	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	23,033.1
Employed .....	21,841.8	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	22,140.7
Unemployed .....	956.7	970.5	961.2	966.4	966.8	962.9	959.3	930.8	917.3	924.3	811.1	843.6	892.5
Unemployment rate .....	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	3.5	3.7	3.9
<b>West North Central</b>													
Civilian labor force .....	10,062.3	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	10,273.6
Employed .....	9,711.4	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	9,959.7
Unemployed .....	350.9	345.3	343.1	343.8	335.7	329.7	327.4	315.2	311.8	332.3	320.7	329.8	313.9
Unemployment rate .....	3.5	3.4	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.2	3.1	3.2	3.1
<b>WEST</b>													
Civilian labor force .....	29,942.0	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	30,660.2
Employed .....	28,275.7	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	29,072.0
Unemployed .....	1,666.3	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	1,588.2
Unemployment rate .....	5.6	5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.3	5.2	5.2	5.2
<b>Mountain</b>													
Civilian labor force .....	8,365.8	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	8,714.9
Employed .....	8,009.0	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	8,348.4
Unemployed .....	356.8	354.3	351.1	350.6	347.5	349.0	349.7	335.6	348.5	368.1	374.8	362.3	366.5
Unemployment rate .....	4.3	4.2	4.2	4.1	4.1	4.1	4.1	3.9	4.0	4.2	4.3	4.2	4.2
<b>Pacific</b>													
Civilian labor force .....	21,576.2	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	21,945.3
Employed .....	20,266.7	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	20,723.6
Unemployed .....	1,309.5	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	1,221.7
Unemployment rate .....	6.1	6.0	6.0	6.0	5.9	5.8	5.8	5.7	5.6	5.7	5.6	5.6	5.6

<sup>P</sup> = preliminary.

<sup>1</sup> 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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	JuneP
<b>Alabama</b>													
Civilian labor force .....	2,187.7	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	2,144.1
Employed .....	2,071.6	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	2,062.3
Unemployed .....	116.1	115.3	111.9	110.7	105.7	102.7	99.1	89.1	81.8	89.9	78.7	86.7	81.7
Unemployment rate .....	5.3	5.3	5.1	5.1	4.9	4.7	4.6	4.1	3.8	4.2	3.7	4.0	3.8
<b>Alaska</b>													
Civilian labor force .....	314.9	315.6	316.1	316.7	317.0	317.4	318.5	317.6	318.0	317.4	316.3	318.5	319.6
Employed .....	289.8	290.5	291.0	292.1	293.0	294.4	295.9	297.8	297.9	298.5	298.3	299.6	299.3
Unemployed .....	25.1	25.1	25.1	24.5	24.0	23.1	22.6	19.8	20.1	19.0	18.1	18.9	20.3
Unemployment rate .....	8.0	8.0	7.9	7.7	7.6	7.3	7.1	6.2	6.3	6.0	5.7	5.9	6.4
<b>Arizona</b>													
Civilian labor force .....	2,141.3	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	2,252.7
Employed .....	2,043.0	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	2,163.3
Unemployed .....	98.4	97.6	95.5	94.6	93.3	94.7	93.0	83.8	89.3	99.0	99.6	92.5	89.3
Unemployment rate .....	4.6	4.5	4.4	4.4	4.3	4.3	4.2	3.7	4.0	4.4	4.4	4.1	4.0
<b>Arkansas</b>													
Civilian labor force .....	1,199.6	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	1,243.0
Employed .....	1,135.2	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	1,183.0
Unemployed .....	64.4	65.6	64.4	63.0	61.6	61.7	62.1	65.6	65.4	70.1	65.1	64.8	60.1
Unemployment rate .....	5.4	5.4	5.3	5.2	5.0	5.0	5.0	5.3	5.3	5.6	5.2	5.2	4.8
<b>California</b>													
Civilian labor force .....	15,962.4	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	16,251.0
Employed .....	14,957.7	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	15,320.5
Unemployed .....	1,004.8	994.8	996.3	999.4	989.3	973.6	971.0	968.3	958.0	980.0	964.0	960.4	930.5
Unemployment rate .....	6.3	6.2	6.2	6.2	6.2	6.1	6.0	6.0	5.9	6.0	5.9	5.9	5.7
<b>Colorado</b>													
Civilian labor force .....	2,154.3	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	2,246.3
Employed .....	2,084.7	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	2,170.1
Unemployed .....	69.7	68.6	68.8	68.6	66.5	67.4	66.9	63.1	67.2	69.9	75.3	71.4	76.2
Unemployment rate .....	3.2	3.2	3.2	3.1	3.0	3.1	3.0	2.8	3.0	3.1	3.4	3.2	3.4
<b>Connecticut</b>													
Civilian labor force .....	1,721.7	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	1,717.8
Employed .....	1,632.2	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
Unemployed .....	89.5	87.1	85.1	84.2	82.6	80.0	77.5	65.3	65.0	69.4	67.1	65.3	65.1
Unemployment rate .....	5.2	5.1	4.9	4.9	4.8	4.6	4.5	3.8	3.8	4.0	3.9	3.8	3.8
<b>Delaware</b>													
Civilian labor force .....	377.6	378.6	379.7	380.5	381.9	383.9	387.0	387.9	388.7	393.2	393.2	393.9	394.3
Employed .....	361.6	363.3	365.1	366.7	368.7	371.2	374.0	374.6	375.0	379.6	378.3	377.7	378.5
Unemployed .....	15.9	15.3	14.6	13.8	13.3	12.7	13.0	13.3	13.6	13.6	14.9	16.2	15.9
Unemployment rate .....	4.2	4.0	3.8	3.6	3.5	3.3	3.4	3.4	3.5	3.5	3.8	4.1	4.0
<b>District of Columbia</b>													
Civilian labor force .....	254.3	255.0	256.2	256.1	255.7	255.6	255.7	258.5	260.6	260.6	268.4	267.1	265.2
Employed .....	234.7	234.9	235.6	235.0	234.6	234.8	234.9	236.7	237.0	236.3	244.6	245.3	243.6
Unemployed .....	19.6	20.1	20.6	21.1	21.1	20.8	20.8	21.8	23.6	24.2	23.8	21.8	21.7
Unemployment rate .....	7.7	7.9	8.0	8.2	8.3	8.1	8.1	8.4	9.1	9.3	8.9	8.2	8.2
<b>Florida</b>													
Civilian labor force .....	7,079.1	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	7,313.3
Employed .....	6,739.6	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	6,986.0
Unemployed .....	339.5	332.1	333.8	335.5	333.9	337.0	337.7	337.8	336.1	346.4	342.9	328.7	327.3
Unemployment rate .....	4.8	4.7	4.7	4.7	4.6	4.7	4.7	4.7	4.6	4.8	4.7	4.5	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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
<b>Georgia</b>													
Civilian labor force .....	3,916.5	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	3,963.0
Employed .....	3,732.6	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	3,801.2
Unemployed .....	183.9	180.9	177.2	173.0	166.9	164.2	158.9	157.0	163.6	159.1	157.7	160.5	161.8
Unemployment rate .....	4.7	4.6	4.5	4.4	4.2	4.2	4.1	4.0	4.1	4.0	4.0	4.1	4.1
<b>Hawaii</b>													
Civilian labor force .....	591.7	592.4	592.1	592.8	592.4	592.5	593.1	593.4	592.8	592.9	592.3	593.4	592.3
Employed .....	552.5	553.6	554.4	555.2	556.3	557.1	557.7	560.4	558.7	558.6	561.0	559.0	556.8
Unemployed .....	39.2	38.8	37.7	37.6	36.1	35.4	35.4	33.0	34.1	34.4	31.3	34.5	35.5
Unemployment rate .....	6.6	6.5	6.4	6.3	6.1	6.0	6.0	5.6	5.7	5.8	5.3	5.8	6.0
<b>Idaho</b>													
Civilian labor force .....	633.8	634.8	634.9	636.2	638.0	638.4	641.0	640.1	641.7	644.8	646.7	647.2	645.1
Employed .....	599.8	601.4	600.8	602.5	604.2	605.8	607.4	608.1	609.5	611.2	613.5	616.4	612.7
Unemployed .....	33.9	33.4	34.1	33.7	33.7	32.6	33.6	32.0	32.2	33.5	33.2	30.9	32.5
Unemployment rate .....	5.4	5.3	5.4	5.3	5.3	5.1	5.2	5.0	5.0	5.2	5.1	4.8	5.0
<b>Illinois</b>													
Civilian labor force .....	6,115.8	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	6,155.5
Employed .....	5,834.8	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	5,878.4
Unemployed .....	281.0	284.9	283.2	284.0	287.6	294.8	295.1	302.7	283.6	280.0	255.9	241.8	277.1
Unemployment rate .....	4.6	4.6	4.6	4.6	4.7	4.8	4.8	4.9	4.6	4.5	4.2	3.9	4.5
<b>Indiana</b>													
Civilian labor force .....	3,093.6	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	3,082.1
Employed .....	2,986.6	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	2,994.5
Unemployed .....	107.0	108.9	113.0	112.7	113.5	109.2	109.1	101.8	100.5	106.9	87.2	88.9	87.5
Unemployment rate .....	3.5	3.5	3.6	3.6	3.6	3.5	3.5	3.3	3.2	3.4	2.8	2.9	2.8
<b>Iowa</b>													
Civilian labor force .....	1,574.6	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	1,574.3
Employed .....	1,523.3	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	1,534.5
Unemployed .....	51.3	49.5	49.2	48.1	45.7	45.3	46.0	44.5	41.4	41.5	38.2	36.7	39.8
Unemployment rate .....	3.3	3.1	3.1	3.1	2.9	2.9	2.9	2.8	2.6	2.6	2.4	2.3	2.5
<b>Kansas</b>													
Civilian labor force .....	1,353.5	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	1,413.1
Employed .....	1,303.5	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	1,363.5
Unemployed .....	50.0	49.9	49.7	50.6	50.4	50.6	52.7	48.8	47.7	49.5	47.7	50.3	49.6
Unemployment rate .....	3.7	3.7	3.6	3.7	3.6	3.6	3.8	3.5	3.4	3.5	3.4	3.5	3.5
<b>Kentucky</b>													
Civilian labor force .....	1,931.7	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	1,943.7
Employed .....	1,825.6	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	1,858.4
Unemployed .....	106.1	104.3	101.7	100.0	97.0	94.9	92.3	88.4	79.9	86.9	77.8	81.6	85.3
Unemployment rate .....	5.5	5.4	5.2	5.2	5.0	4.9	4.8	4.6	4.1	4.5	4.0	4.2	4.4
<b>Louisiana</b>													
Civilian labor force .....	2,019.8	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	2,083.5
Employed .....	1,891.2	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	1,975.1
Unemployed .....	128.7	125.4	122.7	120.2	119.7	119.4	117.3	105.3	88.2	95.8	113.8	109.7	108.4
Unemployment rate .....	6.4	6.2	6.1	5.9	5.9	5.9	5.7	5.1	4.3	4.7	5.5	5.3	5.2
<b>Maine</b>													
Civilian labor force .....	656.6	655.1	655.6	656.4	657.8	659.0	661.1	660.9	657.9	655.0	653.3	654.1	650.2
Employed .....	620.9	620.0	620.6	621.1	622.5	624.0	626.3	627.7	627.6	626.6	627.1	629.0	624.4
Unemployed .....	35.7	35.1	35.0	35.3	35.3	35.0	34.9	33.1	30.3	28.4	26.2	25.1	25.8
Unemployment rate .....	5.4	5.4	5.3	5.4	5.4	5.3	5.3	5.0	4.6	4.3	4.0	3.8	4.0

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	JuneP
<b>Maryland</b>													
Civilian labor force .....	2,788.3	2,787.0	2,781.4	2,783.8	2,784.1	2,789.1	2,790.8	2,803.7	2,802.1	2,798.9	2,793.0	2,783.7	2,774.8
Employed .....	2,642.0	2,641.7	2,638.5	2,637.7	2,844.5	2,651.8	2,657.1	2,668.8	2,667.2	2,668.5	2,668.0	2,657.0	2,651.3
Unemployed .....	146.4	145.3	142.9	146.1	139.6	137.4	133.7	134.9	134.9	130.4	125.0	126.7	123.4
Unemployment rate .....	5.2	5.2	5.1	5.2	5.0	4.9	4.8	4.8	4.8	4.7	4.5	4.6	4.4
<b>Massachusetts</b>													
Civilian labor force .....	3,267.7	3,269.7	3,271.2	3,269.1	3,268.5	3,263.2	3,254.5	3,258.8	3,258.3	3,288.4	3,244.7	3,263.7	3,255.3
Employed .....	3,135.1	3,138.4	3,138.3	3,138.0	3,141.2	3,138.8	3,130.3	3,141.8	3,149.4	3,146.5	3,148.8	3,144.1	3,144.8
Unemployed .....	132.6	131.4	132.9	131.2	127.3	126.4	124.3	116.9	108.9	121.9	95.8	119.6	110.5
Unemployment rate .....	4.1	4.0	4.1	4.0	3.9	3.9	3.8	3.6	3.5	3.7	3.0	3.7	3.4
<b>Michigan</b>													
Civilian labor force .....	4,977.9	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
Employed .....	4,771.7	4,774.1	4,770.5	4,779.0	4,798.9	4,804.4	4,815.7	4,849.4	4,848.1	4,848.8	4,857.2	4,850.9	4,853.6
Unemployed .....	206.2	213.2	200.7	203.2	200.9	199.0	197.3	197.7	205.0	198.8	176.6	187.9	179.8
Unemployment rate .....	4.1	4.3	4.0	4.1	4.0	4.0	3.9	3.9	4.1	3.9	3.5	3.7	3.6
<b>Minnesota</b>													
Civilian labor force .....	2,614.2	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	2,698.7
Employed .....	2,529.1	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	2,629.6
Unemployed .....	85.2	84.4	83.9	83.2	81.3	79.6	77.3	72.6	69.1	77.1	69.4	74.5	69.1
Unemployment rate .....	3.3	3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.9	2.6	2.8	2.6
<b>Mississippi</b>													
Civilian labor force .....	1,258.4	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	1,273.5
Employed .....	1,186.3	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	1,214.9
Unemployed .....	72.1	72.5	74.0	76.5	73.2	69.6	65.8	69.8	69.1	75.4	68.3	66.0	58.6
Unemployment rate .....	5.7	5.7	5.8	6.0	5.7	5.4	5.1	5.4	5.4	5.8	5.3	5.1	4.6
<b>Missouri</b>													
Civilian labor force .....	2,880.4	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	2,911.6
Employed .....	2,762.3	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	2,790.2
Unemployed .....	118.2	117.5	117.3	120.3	119.9	116.9	115.7	115.0	118.7	124.7	129.6	131.8	121.4
Unemployment rate .....	4.1	4.1	4.1	4.2	4.1	4.0	4.0	4.0	4.1	4.3	4.4	4.5	4.2
<b>Montana</b>													
Civilian labor force .....	452.2	454.2	455.2	455.7	458.0	459.0	460.6	462.2	462.5	481.8	462.6	464.4	464.1
Employed .....	427.8	429.6	430.8	431.4	433.3	434.2	435.9	437.1	438.2	436.8	437.2	438.5	439.3
Unemployed .....	24.4	24.6	24.4	24.3	24.7	24.8	24.7	25.1	24.3	25.0	25.4	25.8	24.9
Unemployment rate .....	5.4	5.4	5.4	5.3	5.4	5.4	5.4	5.4	5.3	5.4	5.5	5.6	5.4
<b>Nebraska</b>													
Civilian labor force .....	900.5	903.9	906.5	910.6	913.9	919.0	923.6	924.2	928.2	926.8	928.7	927.2	927.9
Employed .....	875.6	880.2	883.2	888.3	893.4	899.9	905.9	907.6	908.4	906.3	910.5	908.8	912.3
Unemployed .....	24.9	23.7	23.3	22.3	20.5	19.1	17.7	16.6	17.9	20.5	18.2	18.4	15.6
Unemployment rate .....	2.8	2.6	2.6	2.5	2.2	2.1	1.9	1.8	1.9	2.2	2.0	2.0	1.7
<b>Nevada</b>													
Civilian labor force .....	882.5	885.9	888.3	892.1	895.1	897.1	900.6	905.7	911.4	909.6	914.5	915.8	920.3
Employed .....	846.9	850.5	853.5	856.6	859.7	861.7	864.8	866.7	869.7	867.2	870.4	872.9	880.4
Unemployed .....	35.6	35.4	34.8	35.6	35.4	35.4	35.8	39.0	41.8	42.4	44.1	42.9	40.0
Unemployment rate .....	4.0	4.0	3.9	4.0	4.0	3.9	4.0	4.3	4.6	4.7	4.8	4.7	4.3
<b>New Hampshire</b>													
Civilian labor force .....	647.0	650.9	649.1	648.3	652.8	653.2	651.2	653.3	652.7	652.0	653.5	655.2	654.0
Employed .....	626.0	630.8	629.5	629.1	633.3	633.7	632.1	635.4	634.6	632.7	634.9	635.5	636.1
Unemployed .....	21.0	20.1	19.5	19.2	19.5	19.5	19.1	17.9	18.1	19.3	18.6	19.6	17.8
Unemployment rate .....	3.2	3.1	3.0	3.0	3.0	3.0	2.9	2.7	2.8	3.0	2.8	3.0	2.7

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	JuneP
<b>New Jersey</b>													
Civilian labor force .....	4,205.7	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	4,192.3
Employed .....	3,987.9	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	3,991.0
Unemployed .....	217.8	212.6	211.8	212.8	210.1	206.9	206.6	204.7	210.6	214.0	214.1	209.3	201.3
Unemployment rate .....	5.2	5.1	5.0	5.1	5.0	4.9	4.9	4.9	5.0	5.1	5.1	5.0	4.8
<b>New Mexico</b>													
Civilian labor force .....	819.2	823.1	824.1	825.7	829.8	832.8	835.5	836.1	837.7	841.7	842.7	842.7	847.0
Employed .....	770.2	773.5	775.8	776.2	779.8	781.3	782.2	784.9	785.1	787.7	790.7	788.1	790.2
Unemployed .....	49.0	49.5	48.4	49.6	50.0	51.5	53.3	51.2	52.5	54.0	52.1	54.5	56.8
Unemployment rate .....	6.0	6.0	5.9	6.0	6.0	6.2	6.4	6.1	6.3	6.4	6.2	6.5	6.7
<b>New York</b>													
Civilian labor force .....	8,825.2	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	8,779.2
Employed .....	8,253.3	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	8,299.6
Unemployed .....	571.9	571.8	568.7	563.4	557.0	546.7	534.0	527.2	542.3	533.5	505.4	500.5	479.6
Unemployment rate .....	6.5	6.5	6.4	6.4	6.3	6.2	6.1	6.0	6.2	6.1	5.8	5.7	5.5
<b>North Carolina</b>													
Civilian labor force .....	3,847.3	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	3,784.7
Employed .....	3,706.9	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	3,669.5
Unemployed .....	140.4	140.4	140.1	138.0	136.7	139.4	139.8	138.4	141.3	148.8	140.1	126.3	115.2
Unemployment rate .....	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.6	3.7	3.9	3.7	3.3	3.0
<b>North Dakota</b>													
Civilian labor force .....	348.2	347.6	346.9	346.7	346.1	346.3	346.1	346.2	346.0	346.4	344.9	346.4	347.0
Employed .....	339.0	339.1	339.0	338.9	339.5	339.2	339.1	339.6	339.4	338.0	338.2	339.1	339.2
Unemployed .....	9.2	8.5	7.9	7.7	6.6	7.1	7.0	6.4	6.6	8.4	6.7	7.3	7.8
Unemployment rate .....	2.7	2.5	2.3	2.2	1.9	2.0	2.0	1.8	1.9	2.4	1.9	2.1	2.2
<b>Ohio</b>													
Civilian labor force .....	5,687.4	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	5,805.5
Employed .....	5,434.6	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	5,544.8
Unemployed .....	252.8	253.4	255.3	259.0	259.7	256.1	254.6	234.7	240.9	247.5	222.0	246.7	260.7
Unemployment rate .....	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.0	4.2	4.3	3.8	4.3	4.5
<b>Oklahoma</b>													
Civilian labor force .....	1,596.0	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	1,614.1
Employed .....	1,527.4	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	1,550.1
Unemployed .....	68.6	67.3	66.0	65.6	62.8	60.8	57.3	52.7	56.9	57.5	60.5	59.5	64.1
Unemployment rate .....	4.3	4.2	4.1	4.1	3.9	3.8	3.6	3.3	3.5	3.6	3.8	3.7	4.0
<b>Oregon</b>													
Civilian labor force .....	1,711.5	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	1,754.8
Employed .....	1,612.6	1,620.2	1,636.6	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	1,660.0
Unemployed .....	98.8	100.2	99.5	99.9	99.0	96.5	94.2	94.1	83.9	87.2	89.9	92.2	94.8
Unemployment rate .....	5.8	5.8	5.7	5.7	5.6	5.5	5.3	5.2	4.7	4.9	5.1	5.2	5.4
<b>Pennsylvania</b>													
Civilian labor force .....	5,981.9	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	5,959.1
Employed .....	5,662.2	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	5,702.8
Unemployed .....	319.7	317.6	313.8	307.8	298.4	292.9	286.7	276.4	279.8	284.8	256.6	255.6	256.3
Unemployment rate .....	5.3	5.3	5.2	5.1	5.0	4.9	4.8	4.6	4.7	4.8	4.3	4.3	4.3
<b>Rhode Island</b>													
Civilian labor force .....	505.3	505.5	506.0	507.1	507.7	506.7	507.5	508.6	506.5	509.5	506.6	501.8	499.3
Employed .....	477.3	478.4	479.5	480.9	481.6	481.4	482.9	484.1	481.9	483.7	481.9	478.4	478.9
Unemployed .....	28.0	27.1	26.5	26.2	26.0	25.2	24.6	24.5	24.6	25.8	24.7	23.4	20.5
Unemployment rate .....	5.5	5.4	5.2	5.2	5.1	5.0	4.9	4.6	4.9	5.1	4.9	4.7	4.1

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>
<b>South Carolina</b>													
Civilian labor force .....	1,923.0	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	1,928.3
Employed .....	1,833.5	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	1,866.4
Unemployed .....	89.5	85.5	82.5	79.0	72.8	70.8	70.0	73.8	65.8	46.2	56.6	65.0	61.9
Unemployment rate .....	4.7	4.4	4.3	4.1	3.8	3.7	3.7	3.9	3.4	2.4	3.0	3.4	3.2
<b>South Dakota</b>													
Civilian labor force .....	390.8	391.5	392.1	392.5	394.4	395.9	397.5	398.0	398.7	398.8	398.4	399.8	401.0
Employed .....	378.7	379.6	380.3	380.9	383.0	384.8	386.7	386.7	386.2	387.8	387.4	388.9	390.4
Unemployed .....	12.1	11.7	11.8	11.6	11.3	11.2	10.8	11.3	10.5	10.8	11.0	10.9	10.6
Unemployment rate .....	3.1	3.0	3.0	2.9	2.9	2.8	2.7	2.8	2.6	2.7	2.8	2.7	2.6
<b>Tennessee</b>													
Civilian labor force .....	2,689.8	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	2,765.4
Employed .....	2,539.1	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	2,658.7
Unemployed .....	150.7	153.7	144.2	146.9	141.9	142.5	140.6	121.9	120.3	130.7	132.9	120.7	106.7
Unemployment rate .....	5.6	5.7	5.3	5.4	5.2	5.2	5.1	4.4	4.3	4.7	4.8	4.3	3.9
<b>Texas</b>													
Civilian labor force .....	9,868.2	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	10,132.5
Employed .....	9,326.2	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	9,632.0
Unemployed .....	541.9	538.2	531.7	524.9	518.8	501.3	490.5	490.9	463.9	469.9	458.7	460.3	500.6
Unemployment rate .....	5.5	5.4	5.4	5.3	5.2	5.0	4.9	4.9	4.6	4.7	4.6	4.6	4.9
<b>Utah</b>													
Civilian labor force .....	1,034.0	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	1,081.8
Employed .....	1,001.1	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	1,047.0
Unemployed .....	32.9	32.3	32.5	32.1	31.9	31.1	30.9	30.9	31.1	33.6	34.6	33.0	34.8
Unemployment rate .....	3.2	3.1	3.1	3.1	3.0	2.9	2.9	2.9	2.9	3.1	3.2	3.1	3.2
<b>Vermont</b>													
Civilian labor force .....	324.7	325.4	325.9	326.4	328.5	329.3	330.3	329.2	330.8	331.8	330.2	329.1	330.2
Employed .....	311.9	312.7	313.3	313.8	315.9	316.9	318.0	317.2	319.3	320.4	319.6	317.9	318.6
Unemployed .....	12.8	12.7	12.7	12.6	12.6	12.4	12.3	12.0	11.5	11.4	10.6	11.2	11.5
Unemployment rate .....	3.9	3.9	3.9	3.9	3.8	3.8	3.7	3.6	3.5	3.4	3.2	3.4	3.5
<b>Virginia</b>													
Civilian labor force .....	3,375.7	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	3,554.6
Employed .....	3,236.7	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	3,443.7
Unemployed .....	139.0	136.6	134.7	132.1	127.1	124.8	121.2	116.4	115.8	118.6	99.4	106.2	110.9
Unemployment rate .....	4.1	4.0	4.0	3.8	3.7	3.6	3.4	3.3	3.3	3.3	2.8	3.0	3.1
<b>Washington</b>													
Civilian labor force .....	2,995.7	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	3,027.5
Employed .....	2,854.1	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	2,887.0
Unemployed .....	141.7	140.2	139.7	141.3	135.8	132.6	133.6	134.6	124.6	125.0	125.9	134.0	140.5
Unemployment rate .....	4.7	4.7	4.6	4.7	4.5	4.4	4.4	4.5	4.1	4.1	4.2	4.4	4.6
<b>West Virginia</b>													
Civilian labor force .....	803.7	803.4	802.2	801.7	804.6	805.0	802.7	802.9	800.4	807.0	806.2	811.3	807.3
Employed .....	748.3	747.9	747.4	747.6	750.8	752.1	751.0	753.7	754.2	752.0	752.9	759.3	751.3
Unemployed .....	55.4	55.5	54.7	54.1	53.8	52.9	51.6	49.2	46.2	55.1	53.4	52.0	55.9
Unemployment rate .....	6.9	6.9	6.8	6.7	6.7	6.6	6.4	6.1	5.8	6.8	6.6	6.4	6.9
<b>Wisconsin</b>													
Civilian labor force .....	2,923.7	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	2,956.7
Employed .....	2,814.0	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	2,869.4
Unemployed .....	109.7	110.1	108.9	107.4	105.1	103.8	103.2	93.8	87.3	91.1	69.4	78.4	87.3
Unemployment rate .....	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.2	2.9	3.1	2.4	2.7	3.0
<b>Wyoming</b>													
Civilian labor force .....	248.4	249.7	250.1	250.5	252.1	253.0	254.9	254.0	254.2	255.0	254.8	256.3	257.6
Employed .....	235.5	236.9	237.5	238.2	240.1	241.4	243.5	243.5	244.0	244.3	244.2	245.0	245.5
Unemployed .....	12.9	12.8	12.6	12.3	12.1	11.6	11.4	10.6	10.2	10.7	10.5	11.3	12.1
Unemployment rate .....	5.2	5.1	5.0	4.9	4.8	4.6	4.5	4.2	4.0	4.2	4.1	4.4	4.7

<sup>P</sup> = 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			
	May		June		May		June		May		June	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Alabama</b> .....	2,180.3	2,139.6	2,218.4	2,174.7	103.4	76.0	138.2	104.0	4.7	3.6	6.2	4.8
Anniston .....	55.2	53.3	56.8	54.2	2.7	2.2	3.9	2.8	4.9	4.1	6.9	5.2
Birmingham .....	470.5	469.6	478.4	475.7	14.9	10.9	20.1	15.3	3.2	2.3	4.2	3.2
Decatur .....	72.3	71.3	73.6	72.5	3.6	2.4	4.7	3.2	5.0	3.3	6.4	4.4
Dothan .....	67.5	66.6	68.5	67.3	3.2	2.0	4.1	2.5	4.7	3.1	6.0	3.8
Florence .....	71.8	70.3	73.5	72.0	4.5	4.1	6.1	5.5	6.3	5.9	8.3	7.6
Gadsden .....	50.9	50.6	51.6	51.1	2.5	1.9	3.2	2.6	4.8	3.8	6.2	5.2
Huntsville .....	170.0	170.0	172.5	171.8	4.8	4.2	6.2	5.5	2.8	2.5	3.6	3.2
Mobile .....	272.0	267.4	278.2	272.6	12.7	8.5	17.0	12.2	4.7	3.2	6.1	4.5
Montgomery .....	162.0	159.1	164.5	161.1	6.4	4.6	8.8	6.1	4.0	2.9	5.3	3.8
Tuscaloosa .....	82.9	84.1	83.3	84.3	2.7	1.9	3.7	2.8	3.3	2.3	4.4	3.3
<b>Alaska</b> .....	313.6	317.8	322.3	327.5	24.3	18.5	24.5	19.8	7.8	5.8	7.6	6.0
Anchorage .....	136.1	140.4	137.8	142.4	7.7	5.9	7.9	6.4	5.6	4.2	5.7	4.5
<b>Arizona</b> .....	2,139.7	2,261.8	2,163.7	2,275.3	96.7	87.7	108.1	99.0	4.5	3.9	5.0	4.4
Flagstaff .....	57.7	58.5	58.7	61.7	4.3	3.4	5.7	4.6	7.4	5.9	9.8	7.4
Phoenix-Mesa .....	1,400.6	1,495.6	1,416.1	1,499.0	41.2	35.0	43.9	40.2	2.9	2.3	3.1	2.7
Tucson .....	357.3	369.6	357.8	369.5	11.1	9.3	12.4	10.5	3.1	2.5	3.5	2.8
Yuma .....	63.0	68.5	64.6	70.7	18.4	22.3	20.9	22.8	29.2	32.6	32.4	32.3
<b>Arkansas</b> .....	1,202.5	1,252.7	1,221.4	1,264.5	59.1	62.2	66.8	62.2	4.9	5.0	5.5	4.9
Fayetteville-Springdale-Rogers .....	136.2	142.3	137.5	143.5	4.0	4.4	4.7	4.4	2.9	3.1	3.4	3.1
Fort Smith .....	94.3	97.0	95.3	98.2	4.5	4.5	5.0	4.5	4.8	4.7	5.2	4.6
Jonesboro .....	39.5	42.0	40.4	42.5	1.6	1.7	1.8	1.7	4.0	4.0	4.5	4.0
Little Rock-North Little Rock .....	292.2	304.9	297.2	307.7	10.9	11.2	12.8	11.5	3.7	3.7	4.3	3.7
Pine Bluff .....	36.0	36.6	36.5	37.3	2.7	2.7	3.2	3.1	7.6	7.3	8.7	8.3
<b>California</b> .....	15,858.8	16,168.3	15,976.3	16,263.4	945.2	896.1	1,005.7	930.8	6.0	5.5	6.3	5.7
Bakersfield .....	282.8	281.4	288.1	286.7	29.3	30.6	34.3	31.3	10.8	10.9	11.9	10.9
Chico-Paradise .....	85.1	86.1	84.8	86.1	7.0	7.0	8.0	7.6	8.3	8.1	9.4	8.8
Fresno .....	430.0	442.5	432.0	445.3	51.7	58.4	54.3	59.0	12.0	13.2	12.6	13.2
Los Angeles-Long Beach .....	4,464.8	4,555.3	4,454.0	4,533.9	298.3	283.6	304.8	287.0	6.7	6.2	6.8	6.3
Merced .....	83.7	83.6	85.4	86.7	12.6	12.3	12.5	12.9	15.0	14.7	14.6	14.8
Modesto .....	201.5	204.4	206.4	208.3	27.6	25.8	27.7	26.8	13.7	12.6	13.4	12.9
Oakland .....	1,162.8	1,183.5	1,176.5	1,195.9	49.3	43.9	53.7	47.1	4.2	3.7	4.6	3.9
Orange County .....	1,367.3	1,409.0	1,381.9	1,422.5	43.8	38.2	47.2	42.0	3.2	2.7	3.4	3.0
Redding .....	72.4	72.1	74.6	73.8	6.1	6.3	6.5	6.5	8.4	8.7	8.7	8.8
Riverside-San Bernardino .....	1,345.6	1,389.1	1,363.1	1,400.5	85.6	77.6	96.7	85.1	6.4	5.6	7.1	6.1
Sacramento .....	732.2	742.7	740.8	748.3	38.9	35.8	42.1	37.6	5.3	4.8	5.7	5.0
Salinas .....	183.0	182.1	184.4	183.2	14.4	14.8	13.6	13.9	7.9	8.1	7.4	7.6
San Diego .....	1,269.5	1,289.0	1,284.6	1,302.5	52.8	42.9	57.6	46.2	4.2	3.3	4.5	3.5
San Francisco .....	922.8	933.3	930.7	943.4	29.5	26.2	33.3	28.7	3.2	2.8	3.6	3.0
San Jose .....	924.3	954.4	938.3	966.0	28.1	27.3	29.6	29.3	3.0	2.9	3.2	3.0
San Luis Obispo-Atascadero-Paso Robles .....	107.3	109.7	107.4	110.9	4.2	4.3	4.9	4.5	3.9	4.0	4.6	4.0
Santa Barbara-Santa Maria-Lompoc .....	198.4	194.8	197.5	194.8	7.9	7.0	8.3	7.2	4.0	3.6	4.2	3.7
Santa Cruz-Watsonville .....	145.2	149.7	148.0	151.9	8.7	8.5	8.6	7.8	6.0	5.7	5.8	5.1
Santa Rosa .....	238.5	244.7	239.3	246.3	8.5	7.7	9.2	8.1	3.6	3.2	3.9	3.3
Stockton-Lodi .....	248.9	249.8	249.4	249.4	24.7	25.4	27.3	26.2	9.9	10.2	10.9	10.5
Vallejo-Fairfield-Napa .....	237.0	243.9	241.9	247.2	14.1	11.9	14.9	12.7	6.0	4.9	6.1	5.1
Ventura .....	381.5	386.4	382.4	389.8	21.2	17.2	23.2	18.9	5.6	4.4	6.1	4.9
Visalia-Tulare-Porterville .....	160.7	163.7	162.1	164.1	18.9	21.2	22.9	22.1	11.8	12.9	14.1	13.5
Yolo .....	86.6	87.5	87.2	89.1	4.3	4.1	4.4	4.1	4.9	4.7	5.0	4.6
Yuba City .....	56.9	57.1	57.3	58.2	8.2	8.7	8.1	8.5	14.4	15.3	14.2	14.6
<b>Colorado</b> .....	2,128.9	2,230.6	2,188.1	2,280.7	71.1	72.4	83.2	90.0	3.3	3.2	3.8	3.9
Boulder-Longmont .....	164.7	172.7	167.7	174.1	4.6	4.7	5.7	6.2	2.8	2.7	3.4	3.6
Colorado Springs .....	243.5	251.7	250.5	258.6	8.9	9.4	11.0	12.2	3.7	3.7	4.4	4.7
Denver .....	1,074.4	1,128.9	1,101.2	1,147.9	30.3	29.3	35.7	36.6	2.8	2.6	3.2	3.2
Fort Collins-Loveland .....	133.0	138.6	136.3	141.6	4.2	4.1	5.1	5.4	3.1	3.0	3.7	3.8
Grand Junction .....	56.0	58.7	57.1	60.5	2.3	2.3	2.8	3.0	4.1	4.0	4.9	5.0
Greeley .....	80.3	83.4	82.1	85.9	3.1	3.0	3.8	4.0	3.8	3.6	4.6	4.6
Pueblo .....	59.3	63.6	60.8	65.8	2.7	4.1	3.2	5.6	4.5	6.4	5.2	8.6
<b>Connecticut</b> .....	1,716.6	1,716.3	1,750.1	1,746.1	89.6	63.8	94.7	70.2	5.2	3.7	5.4	4.0
Bridgeport .....	219.2	217.7	223.6	222.4	13.3	9.8	14.3	10.8	6.0	4.5	6.4	4.9
Danbury .....	107.4	108.9	109.5	110.3	3.7	2.6	3.9	3.0	3.4	2.4	3.5	2.7
Hartford .....	587.7	582.5	594.6	590.0	32.0	22.2	33.8	24.5	5.4	3.8	5.7	4.2
New Haven-Meriden .....	272.1	268.2	276.5	271.5	14.9	10.0	15.5	10.7	5.5	3.7	5.6	3.9
New London-Norwich .....	153.5	154.7	158.0	158.8	8.9	6.6	9.3	7.1	5.8	4.2	5.9	4.5
Stamford-Norwalk .....	191.5	196.2	197.6	201.0	6.2	4.7	6.6	5.3	3.3	2.4	3.4	2.7
Waterbury .....	117.6	119.4	120.3	121.7	7.0	5.2	7.3	5.6	6.0	4.4	6.1	4.6
<b>Delaware</b> .....	373.0	390.3	381.2	397.9	13.6	13.8	16.2	16.1	3.6	3.5	4.2	4.0
Dover .....	65.6	69.3	66.1	70.1	2.7	3.0	3.2	3.3	4.1	4.3	4.9	4.7
Wilmington-Newark .....	281.1	291.4	287.1	295.7	11.6	11.0	14.4	12.9	4.1	3.8	5.0	4.4

See footnotes at end of table.

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			
	May		June		May		June		May		June	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>District of Columbia</b>	253.8	263.9	258.9	269.6	19.2	21.4	22.3	24.3	7.6	8.1	8.8	9.0
Washington	2,493.2	2,581.1	2,538.4	2,618.4	90.3	78.5	102.8	89.7	3.6	3.0	4.0	3.4
<b>Florida</b>	7,077.5	7,316.7	7,145.0	7,379.2	330.1	317.9	364.2	351.2	4.7	4.3	5.1	4.8
Daytona Beach	186.7	191.4	188.0	191.9	7.1	6.9	7.4	6.9	3.8	3.6	3.9	3.6
Fort Lauderdale	745.9	770.4	753.6	777.0	37.0	37.2	38.5	38.3	5.0	4.8	5.1	4.9
Fort Myers-Cape Coral	170.2	172.4	169.7	172.9	5.4	5.6	6.0	5.6	3.2	3.2	3.5	3.2
Fort Pierce-Port St. Lucie	119.3	122.2	120.9	126.0	9.3	8.8	11.7	12.6	7.8	7.2	9.7	10.0
Fort Walton Beach	79.3	82.5	81.9	84.9	2.6	2.6	2.8	2.8	3.2	3.2	3.5	3.3
Gainesville	101.2	104.3	100.2	103.0	3.1	3.0	3.3	3.1	3.0	2.9	3.3	3.0
Jacksonville	530.4	551.2	536.4	556.4	19.0	17.9	20.8	19.6	3.6	3.2	3.9	3.5
Lakeland-Winter Haven	194.9	198.0	198.0	201.1	10.9	9.6	14.5	13.1	5.6	4.8	7.3	6.5
Melbourne-Titusville-Palm Bay	201.1	207.0	203.9	209.0	9.0	9.1	9.4	9.8	4.5	4.4	4.6	4.7
Miami	1,037.6	1,053.2	1,049.9	1,060.5	76.0	72.0	81.1	75.9	7.3	6.8	7.7	7.2
Naples	85.5	88.8	85.4	88.4	3.6	3.1	4.9	4.3	4.2	3.5	5.8	4.9
Ocala	93.4	96.1	93.8	97.1	4.3	4.2	4.5	4.6	4.6	4.4	4.8	4.8
Orlando	808.4	845.5	819.6	855.3	26.9	25.7	29.6	28.5	3.3	3.0	3.6	3.3
Panama City	66.6	68.3	68.7	70.0	3.7	3.6	3.9	3.7	5.6	5.3	5.6	5.3
Pensacola	168.5	175.0	170.5	177.2	6.9	7.2	7.6	8.1	4.1	4.1	4.4	4.6
Punta Gorda	45.7	46.3	45.6	46.6	1.7	1.5	1.7	1.5	3.6	3.2	3.8	3.3
Sarasota-Bradenton	260.6	281.6	262.5	284.7	6.5	6.4	6.9	7.0	2.5	2.3	2.6	2.5
Tallahassee	141.9	145.0	141.8	144.3	4.6	5.0	5.1	5.4	3.2	3.4	3.6	3.7
Tampa-St. Petersburg-Clearwater	1,124.8	1,170.1	1,135.2	1,178.9	39.3	37.2	41.8	39.3	3.5	3.2	3.7	3.3
West Palm Beach-Boca Raton	479.9	498.2	481.5	501.1	28.7	27.7	32.7	31.7	6.0	5.6	6.8	6.3
<b>Georgia</b>	3,893.8	3,939.7	3,950.0	3,996.1	172.5	148.5	205.4	183.5	4.4	3.8	5.2	4.6
Albany	57.5	57.3	58.6	58.8	3.6	4.1	4.4	5.3	6.3	7.1	7.5	9.0
Athens	73.4	74.7	73.8	75.8	2.0	2.0	2.3	2.3	2.7	2.6	3.1	3.1
Atlanta	2,053.3	2,086.8	2,084.0	2,105.1	74.9	62.0	88.8	75.8	3.6	3.0	4.3	3.6
Augusta-Aiken	204.3	202.4	208.8	207.0	12.0	9.7	15.2	12.8	5.9	4.8	7.3	6.2
Columbus	122.8	122.4	123.9	124.1	5.9	5.2	6.7	6.4	4.8	4.3	5.4	5.2
Macon	151.9	153.4	154.0	155.6	7.0	7.4	8.5	8.9	4.6	4.8	5.5	5.7
Savannah	133.8	132.9	134.7	134.8	6.3	5.1	7.9	6.7	4.7	3.8	5.9	5.0
<b>Hawaii</b>	588.5	591.2	595.3	596.1	38.9	34.5	42.9	39.3	6.6	5.8	7.2	6.6
Honolulu	424.3	424.3	428.4	426.8	22.8	20.9	24.7	23.5	5.3	4.9	5.8	5.5
<b>Idaho</b>	632.7	648.2	645.8	657.2	32.6	29.7	30.5	29.0	5.2	4.6	4.7	4.4
Boise City	210.7	216.7	213.3	218.2	7.3	7.6	7.8	7.6	3.5	3.5	3.6	3.5
Pocatello	38.6	40.2	38.6	39.1	2.1	1.8	2.2	1.7	5.4	4.4	5.7	4.4
<b>Illinois</b>	6,099.0	6,120.8	6,207.6	6,247.5	259.8	231.1	291.2	286.8	4.3	3.8	4.7	4.6
Bloomington-Normal	80.1	82.4	80.1	82.9	1.8	1.7	2.1	2.1	2.3	2.1	2.6	2.5
Champaign-Urbana	93.9	93.8	91.8	92.1	2.5	2.3	2.7	2.8	2.6	2.4	3.0	3.0
Chicago	4,061.3	4,082.3	4,130.3	4,162.1	168.8	148.4	182.1	181.4	4.2	3.6	4.4	4.4
Davenport-Moline-Rock Island	182.0	186.4	186.9	189.7	6.0	4.8	6.7	6.1	3.3	2.6	3.6	3.2
Decatur	58.8	57.4	60.0	59.4	3.9	2.8	4.6	3.7	6.6	4.8	7.6	6.3
Kankakee	51.3	51.4	52.7	53.4	2.6	2.5	2.9	3.2	5.1	4.9	5.5	6.0
Peoria-Pekin	180.4	181.3	184.2	184.7	7.0	5.2	7.9	6.7	3.9	2.9	4.3	3.6
Rockford	194.5	194.9	199.5	199.5	7.5	6.8	12.2	8.3	3.9	3.5	6.1	4.2
Springfield	105.4	105.7	108.0	107.9	3.9	3.5	4.7	4.4	3.7	3.3	4.3	4.1
<b>Indiana</b>	3,116.1	3,116.9	3,142.3	3,131.0	104.8	86.8	106.1	86.7	3.4	2.8	3.4	2.8
Bloomington	61.7	61.9	59.9	60.2	1.4	1.7	1.5	1.7	2.3	2.8	2.6	2.9
Elkhart-Goshen	95.5	93.3	95.6	94.0	2.8	2.2	2.8	2.1	2.9	2.3	2.9	2.2
Evansville-Henderson	158.2	156.5	160.7	158.5	6.6	5.9	6.8	6.0	4.2	3.8	4.3	3.8
Fort Wayne	267.4	266.7	271.0	269.2	7.4	6.2	7.7	6.2	2.8	2.3	2.8	2.3
Gary	306.4	303.2	308.7	305.3	12.8	10.0	12.2	10.2	4.2	3.3	4.0	3.4
Indianapolis	831.2	842.1	838.9	844.4	22.4	19.4	22.9	19.3	2.7	2.3	2.7	2.3
Kokomo	52.0	52.9	51.8	53.0	1.6	1.4	1.7	1.5	3.1	2.6	3.3	2.7
Lafayette	89.3	90.7	87.0	87.7	1.9	2.0	2.1	2.0	2.2	2.2	2.5	2.2
Muncie	64.2	63.6	60.9	61.4	2.3	2.5	2.3	2.4	3.6	3.9	3.8	4.0
South Bend	137.5	137.0	139.2	137.9	4.3	3.5	4.3	3.3	3.1	2.5	3.1	2.4
Terre Haute	72.3	70.0	71.3	69.8	4.3	3.5	4.2	3.2	5.9	5.0	5.8	4.6
<b>Iowa</b>	1,572.9	1,581.8	1,598.3	1,597.9	44.7	32.0	51.1	39.6	2.8	2.0	3.2	2.5
Cedar Rapids	107.0	110.5	109.1	111.4	2.6	1.7	2.8	1.9	2.4	1.5	2.6	1.7
Des Moines	250.2	251.9	256.0	253.9	6.1	4.0	6.7	4.8	2.4	1.6	2.6	1.9
Dubuque	49.4	49.9	49.5	50.0	1.7	1.1	1.9	1.4	3.5	2.3	3.8	2.8
Iowa City	65.2	67.3	64.8	68.3	1.5	1.1	1.9	1.6	2.2	1.7	2.9	2.3
Sioux City	65.0	65.4	66.1	66.1	2.2	1.5	2.5	1.9	3.3	2.3	3.8	2.8
Waterloo-Cedar Falls	68.0	69.6	67.5	68.3	2.4	1.8	2.7	2.2	3.5	2.5	4.0	3.2

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			
	May		June		May		June		May		June	
	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>
<b>Kansas</b> .....	1,341.5	1,410.2	1,379.0	1,439.5	47.9	47.0	53.2	52.8	3.6	3.3	3.9	3.7
Lawrence .....	53.1	56.0	51.0	53.6	2.1	2.2	2.5	2.6	3.9	3.9	4.8	4.9
Topeka .....	85.1	88.8	89.9	92.3	3.8	3.3	4.3	3.5	4.5	3.7	4.8	3.8
Wichita .....	269.1	284.6	277.2	289.0	9.0	8.1	9.7	8.8	3.3	2.9	3.5	3.0
<b>Kentucky</b> .....	1,934.2	1,946.4	1,970.9	1,982.1	105.4	79.7	110.7	89.0	5.4	4.1	5.6	4.5
Lexington .....	252.3	257.9	255.8	262.1	6.7	4.7	7.4	5.6	2.7	1.8	2.9	2.1
Louisville .....	550.5	562.7	559.1	571.5	26.0	17.1	24.0	18.7	4.7	3.0	4.3	3.3
Owensboro .....	49.8	50.5	51.0	51.1	3.0	2.3	3.4	2.3	6.1	4.5	6.7	4.5
<b>Louisiana</b> .....	2,012.1	2,070.2	2,063.7	2,127.4	119.9	99.5	151.5	131.5	6.0	4.8	7.3	6.2
Alexandria .....	58.0	59.7	60.1	61.7	3.3	2.8	4.4	3.8	5.7	4.7	7.3	6.1
Baton Rouge .....	285.7	299.0	294.2	306.2	14.6	11.9	19.8	15.4	5.1	4.0	6.7	5.0
Houma .....	88.3	94.8	90.3	97.6	3.0	2.6	3.8	3.4	3.4	2.7	4.2	3.4
Lafayette .....	173.8	181.7	176.7	185.7	8.4	8.5	10.7	10.7	4.8	4.7	6.1	5.8
Lake Charles .....	90.2	92.2	90.8	93.6	5.5	4.0	7.1	5.1	6.1	4.4	7.8	5.5
Monroe .....	69.6	70.6	70.8	72.7	4.3	3.2	5.6	4.4	6.1	4.5	7.9	6.1
New Orleans .....	613.4	626.6	628.4	638.9	31.6	26.9	41.8	33.8	5.2	4.3	6.6	5.3
Shreveport-Bossier City .....	187.3	190.2	190.0	199.4	16.0	9.7	15.0	17.6	8.6	5.1	7.9	8.8
<b>Maine</b> .....	656.3	652.8	671.7	665.5	35.2	24.4	35.4	25.5	5.4	3.7	5.3	3.8
Bangor .....	49.2	51.2	49.6	50.6	2.1	1.2	2.0	1.3	4.2	2.4	4.1	2.7
Lewiston-Auburn .....	50.6	51.0	51.4	51.3	2.7	2.0	2.9	2.2	5.4	3.9	5.7	4.2
Portland .....	130.6	130.8	132.0	131.3	3.6	2.7	3.8	2.9	2.7	2.0	2.9	2.2
<b>Maryland</b> .....	2,783.3	2,776.3	2,835.7	2,822.6	138.8	121.4	158.3	135.5	5.0	4.4	5.6	4.8
Baltimore .....	1,318.6	1,312.1	1,342.2	1,333.3	74.0	64.8	84.1	74.4	5.6	4.9	6.3	5.6
Cumberland .....	46.0	46.7	46.6	47.1	3.5	3.2	4.2	3.4	7.6	6.9	8.9	7.3
Hagerstown .....	69.9	71.7	70.9	73.1	3.0	2.7	3.7	3.0	4.3	3.8	5.2	4.1
<b>Massachusetts</b> .....	3,248.7	3,246.1	3,316.0	3,305.0	122.9	108.3	138.2	116.2	3.8	3.3	4.2	3.5
Barnstable-Yarmouth .....	72.7	72.2	79.1	78.0	3.1	2.8	3.2	2.6	4.3	3.8	4.1	3.4
Boston .....	1,799.6	1,801.9	1,829.8	1,829.4	59.2	50.8	67.3	55.0	3.3	2.8	3.7	3.0
Brockton .....	131.4	130.4	133.6	132.4	6.0	5.1	7.0	5.5	4.6	3.9	5.2	4.2
Fitchburg-Leominster .....	70.4	69.8	71.6	70.9	3.2	2.5	3.8	2.9	4.5	3.6	5.4	4.0
Lawrence .....	197.6	197.8	201.3	200.5	9.7	8.9	11.1	9.9	4.9	4.5	5.5	4.9
Lowell .....	161.9	164.8	164.4	166.9	5.8	5.3	6.6	5.9	3.6	3.2	4.0	3.5
New Bedford .....	81.0	80.8	83.2	81.7	5.4	5.1	6.1	5.0	6.7	6.3	7.3	6.1
Pittsfield .....	39.9	39.6	41.3	41.1	2.0	1.7	2.1	1.8	5.0	4.4	5.1	4.4
Springfield .....	284.0	285.4	286.9	286.8	10.9	11.0	12.3	11.8	3.8	3.8	4.3	4.1
Worcester .....	248.8	247.9	252.4	251.7	8.8	8.1	9.8	9.1	3.5	3.3	3.9	3.6
<b>Michigan</b> .....	4,997.6	5,049.1	5,053.5	5,112.4	190.3	169.1	222.3	195.7	3.8	3.3	4.4	3.8
Ann Arbor .....	288.0	294.4	289.8	295.7	6.3	5.5	7.4	6.0	2.2	1.9	2.6	2.0
Benton Harbor .....	84.5	83.8	85.7	84.2	4.2	3.7	5.4	4.1	5.0	4.4	6.3	4.9
Detroit .....	2,238.1	2,267.1	2,265.3	2,297.5	77.7	69.8	92.4	84.4	3.5	3.1	4.1	3.7
Flint .....	204.8	205.6	207.1	211.9	10.8	9.2	12.2	14.7	5.3	4.5	5.9	6.9
Grand Rapids-Muskegon-Holland .....	585.4	596.3	591.4	604.8	18.0	15.7	21.9	18.7	3.1	2.6	3.7	3.1
Jackson .....	77.1	77.5	78.0	78.1	3.2	2.6	3.9	2.9	4.1	3.3	5.0	3.7
Kalamazoo-Battle Creek .....	230.0	230.0	234.5	231.5	8.3	7.0	11.5	8.0	3.6	3.0	4.9	3.5
Lansing-East Lansing .....	246.1	242.6	240.1	240.3	6.5	6.9	7.3	6.5	2.6	2.9	3.0	2.7
Saginaw-Bay City-Midland .....	201.6	202.9	204.6	205.0	8.2	7.7	9.3	7.9	4.1	3.8	4.5	3.8
<b>Minnesota</b> .....	2,605.9	2,695.3	2,654.9	2,739.4	72.5	59.4	97.5	81.6	2.8	2.2	3.7	3.0
Duluth-Superior .....	122.3	125.3	125.3	128.6	6.0	4.7	7.1	6.1	4.9	3.7	5.7	4.7
Minneapolis-St. Paul .....	1,619.4	1,682.9	1,647.3	1,707.8	34.8	29.3	48.3	41.0	2.2	1.7	2.9	2.4
Rochester .....	65.1	68.6	67.0	70.2	1.2	1.0	1.7	1.5	1.9	1.5	2.5	2.1
St. Cloud .....	92.8	95.0	91.0	93.6	3.1	2.4	3.9	3.1	3.4	2.5	4.3	3.3
<b>Mississippi</b> .....	1,260.4	1,285.8	1,276.6	1,291.5	73.4	68.2	87.7	74.1	5.8	5.3	6.9	5.7
Biloxi-Gulfport-Pascagoula .....	159.5	164.8	160.2	164.4	8.6	6.7	9.5	7.3	5.4	4.1	5.9	4.4
Hattiesburg .....	50.5	52.0	50.7	51.8	1.6	1.7	2.0	1.8	3.1	3.2	4.0	3.5
Jackson .....	221.8	230.6	225.1	232.3	8.0	7.9	9.7	8.6	3.6	3.4	4.3	3.7
<b>Missouri</b> .....	2,890.5	2,923.6	2,928.6	2,959.7	111.9	122.3	123.4	126.5	3.9	4.2	4.2	4.3
Columbia .....	81.6	81.9	82.1	82.4	1.1	1.3	1.4	1.4	1.3	1.6	1.7	1.7
Joplin .....	80.6	81.5	81.2	82.2	2.9	3.4	3.1	3.6	3.6	4.2	3.8	4.3
Kansas City .....	947.5	988.7	971.1	1,006.2	32.4	35.4	35.9	39.4	3.4	3.6	3.7	3.9
St. Joseph .....	49.0	49.9	49.2	49.7	2.3	2.4	2.5	2.2	4.6	4.8	5.2	4.4
St. Louis LMA .....	1,340.9	1,351.9	1,360.5	1,373.4	51.4	57.3	56.4	62.5	3.8	4.2	4.1	4.5
Springfield .....	168.6	169.1	169.5	170.6	5.4	5.4	5.8	5.4	3.2	3.2	3.4	3.2
<b>Montana</b> .....	452.8	464.9	458.3	470.2	22.1	23.8	24.2	24.7	4.9	5.1	5.3	5.2
Billings .....	68.4	70.1	68.5	70.2	2.8	2.9	3.3	3.2	4.2	4.2	4.8	4.6
Great Falls .....	37.7	37.9	38.1	38.2	1.8	1.9	2.1	2.0	4.6	5.1	5.5	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			
	May		June		May		June		May		June	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Nebraska	900.6	929.1	914.7	942.1	24.5	17.6	29.7	20.5	2.7	1.9	3.2	2.2
Lincoln	139.3	143.3	140.5	143.3	3.4	2.1	4.0	2.3	2.4	1.5	2.9	1.6
Omaha	377.9	396.3	384.5	402.4	10.6	7.1	12.8	8.5	2.8	1.8	3.3	2.1
Nevada	872.7	910.2	889.6	927.6	32.5	39.8	40.3	44.7	3.7	4.4	4.5	4.8
Las Vegas	657.4	689.4	669.1	702.5	24.8	28.5	30.5	32.9	3.8	4.1	4.6	4.7
Reno	169.7	173.8	172.4	176.2	5.6	6.7	6.6	7.2	3.3	3.8	3.8	4.1
New Hampshire	642.4	652.9	656.0	663.1	19.5	18.4	21.5	18.4	3.0	2.8	3.3	2.8
Manchester	100.6	102.0	102.1	101.5	2.8	2.5	3.1	2.5	2.7	2.4	3.0	2.5
Nashua	100.7	105.1	103.1	106.2	2.6	2.7	3.2	2.7	2.6	2.6	3.1	2.5
Portsmouth-Rochester	122.8	123.9	123.7	123.4	3.0	2.7	3.5	2.9	2.4	2.2	2.8	2.4
New Jersey	4,194.9	4,179.6	4,264.3	4,251.0	208.2	200.4	224.1	207.6	5.0	4.8	5.3	4.9
Atlantic-Cape May	175.6	176.2	184.5	185.4	13.2	14.9	13.4	14.5	7.5	8.4	7.2	7.8
Bergen-Passaic	677.5	673.1	689.6	682.6	34.8	31.2	37.7	32.0	5.1	4.6	5.5	4.7
Jersey City	284.7	283.6	288.4	287.1	22.5	22.4	24.4	23.6	7.9	7.9	8.5	8.2
Middlesex-Somerset-Hunterdon	637.3	644.8	644.0	651.5	22.3	21.6	23.9	22.2	3.5	3.4	3.7	3.4
Monmouth-Ocean	525.0	519.6	543.1	541.1	23.4	22.4	25.2	23.1	4.4	4.3	4.6	4.3
Newark	1,020.3	1,017.0	1,036.0	1,030.4	51.7	47.2	56.1	49.0	5.1	4.6	5.4	4.8
Trenton	171.7	167.7	172.1	169.9	7.3	6.8	7.8	7.4	4.2	4.0	4.5	4.4
Vineland-Millville-Bridgeton	65.6	67.0	66.5	68.0	5.4	6.2	5.7	6.3	8.3	9.3	8.6	9.3
New Mexico	813.9	840.7	829.3	857.2	47.8	53.1	58.2	66.0	5.9	6.3	7.0	7.7
Albuquerque	355.1	365.4	361.3	371.1	14.0	16.8	18.1	22.1	3.9	4.8	5.0	6.0
Las Cruces	66.9	69.3	66.6	69.2	5.5	6.4	6.1	6.9	8.2	9.2	9.2	10.0
Santa Fe	73.1	75.9	74.8	77.9	2.6	2.4	3.1	3.2	3.6	3.2	4.2	4.1
New York	8,766.6	8,736.6	8,909.3	8,863.5	553.3	482.3	562.8	470.8	6.3	5.5	6.3	5.3
Albany-Schenectady-Troy	452.2	447.7	458.2	459.4	17.9	17.5	17.3	16.0	4.0	3.9	3.8	3.5
Binghamton	124.4	124.5	126.1	127.7	4.9	5.0	4.9	4.7	3.9	4.0	3.9	3.7
Buffalo-Niagara Falls	579.7	576.5	588.7	590.8	28.5	31.3	29.8	31.1	4.9	5.4	5.1	5.3
Dutchess County	118.8	118.8	120.5	121.4	4.9	4.3	4.7	4.0	4.1	3.6	3.9	3.3
Elmira	44.4	44.0	45.3	45.1	1.8	1.9	2.0	2.0	4.1	4.4	4.5	4.4
Glens Falls	61.3	64.1	65.7	62.2	3.5	3.1	3.4	2.9	5.7	4.9	5.1	4.7
Jamestown	68.1	67.4	69.1	68.9	3.9	3.7	3.8	3.5	5.7	5.5	5.5	5.1
Nassau-Suffolk	1,384.0	1,401.9	1,415.7	1,425.2	50.7	48.3	55.1	47.5	3.7	3.4	3.9	3.3
New York	3,989.8	3,963.1	4,036.9	3,996.1	342.4	272.6	348.8	270.4	8.6	6.9	8.6	6.8
New York City	3,357.4	3,315.8	3,385.4	3,338.9	319.6	250.4	324.2	247.1	9.5	7.6	9.6	7.4
Newburgh	171.8	172.5	177.7	174.7	7.4	6.6	7.8	6.7	4.3	3.8	4.4	3.8
Rochester	576.1	568.9	587.6	579.7	22.5	24.4	22.4	22.7	3.9	4.3	3.8	3.9
Syracuse	365.4	360.6	372.2	368.4	16.3	15.3	16.1	14.5	4.5	4.3	4.3	3.9
Utica-Rome	142.9	141.9	145.7	145.6	7.2	6.7	7.2	8.5	5.0	4.8	4.9	4.5
North Carolina	3,856.8	3,811.1	3,907.1	3,844.7	135.1	122.9	156.2	131.2	3.5	3.2	4.0	3.4
Asheville	112.8	111.5	113.6	111.8	3.2	2.7	3.5	2.9	2.8	2.4	3.1	2.8
Charlotte-Gastonia-Rock Hill	754.6	745.3	762.3	748.9	22.9	18.9	27.2	20.9	3.0	2.5	3.6	2.8
Fayetteville	116.5	115.2	117.7	115.3	4.7	4.8	5.6	4.6	4.0	4.1	4.7	4.0
Goldboro	47.9	48.4	49.2	49.4	1.9	2.0	2.1	2.1	3.9	4.1	4.3	4.2
Greensboro-Winston-Salem-High Point	644.5	630.3	650.1	632.2	17.5	15.9	20.2	16.7	2.7	2.5	3.1	2.6
Greenville	64.1	64.7	65.5	64.0	3.4	2.8	4.0	3.3	5.2	4.4	6.1	5.1
Hickory-Morganton-Lenoir	175.0	171.0	177.9	171.7	5.4	4.3	7.5	4.5	3.1	2.5	4.2	2.6
Jacksonville	44.6	45.6	45.0	45.9	1.3	1.5	1.5	1.5	3.0	3.2	3.3	3.2
Raleigh-Durham-Chapel Hill	608.0	614.8	614.5	617.5	11.5	10.5	13.7	11.1	1.9	1.7	2.2	1.8
Rocky Mount	72.5	68.3	73.9	68.8	5.4	4.4	6.1	5.1	7.5	6.4	8.2	7.5
Wilmington	110.5	108.0	112.2	109.5	4.1	3.9	5.1	4.2	3.7	3.6	4.5	3.8
North Dakota	351.7	348.8	361.5	360.1	9.9	6.5	11.0	9.3	2.8	1.9	3.0	2.6
Bismarck	54.3	54.2	56.4	56.2	1.2	1.0	1.5	1.3	2.3	1.8	2.6	2.2
Fargo-Moorhead	101.5	102.8	103.0	104.7	1.7	1.2	2.1	1.6	1.7	1.1	2.1	1.5
Grand Forks	52.8	52.8	54.6	53.7	3.8	1.0	3.1	1.6	7.1	1.9	5.7	3.0
Ohio	5,684.2	5,802.9	5,758.4	5,878.6	236.5	225.0	254.1	261.7	4.2	3.9	4.4	4.5
Akron	364.2	371.0	361.7	367.8	14.6	13.6	14.9	14.8	4.0	3.7	4.1	4.0
Canton-Massillon	202.3	207.6	203.6	210.4	9.5	7.9	9.2	9.1	4.7	3.8	4.5	4.3
Cincinnati	834.7	861.5	847.2	875.0	28.9	26.7	32.0	32.8	3.5	3.1	3.8	3.7
Cleveland-Lorain-Elyria	1,108.3	1,136.2	1,123.8	1,153.8	48.3	45.3	49.9	50.3	4.4	4.0	4.4	4.4
Columbus	801.0	827.7	813.1	839.5	21.5	21.9	23.2	24.7	2.7	2.6	2.9	2.9
Dayton-Springfield	473.8	480.2	478.6	485.8	17.7	16.8	19.4	22.2	3.7	3.5	4.1	4.6
Hamilton-Middletown	174.4	177.5	172.5	176.3	5.7	5.6	6.0	6.4	3.3	3.2	3.5	3.6
Lima	74.9	76.3	76.5	77.4	3.4	3.2	3.9	3.5	4.5	4.1	5.1	4.5
Mansfield	83.2	83.2	84.8	84.6	4.1	4.4	4.7	5.1	4.9	5.2	5.5	6.0
Steubenville-Weirton	58.7	57.7	59.3	58.7	7.2	3.4	7.3	3.8	12.3	6.0	12.3	6.4
Toledo	314.8	318.9	316.8	320.9	12.8	14.3	14.8	17.3	4.1	4.5	4.7	5.4
Youngstown-Warren	286.2	291.9	289.6	295.2	15.3	14.7	18.0	17.0	5.3	5.0	5.5	5.7

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			
	May		June		May		June		May		June	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Texas—Continued</b>												
Texarkana .....	56.6	57.4	58.0	59.0	4.2	4.0	4.9	4.8	7.5	7.0	8.4	8.2
Tyler .....	87.8	89.5	89.9	91.8	4.7	4.1	5.8	5.3	5.3	4.6	6.4	5.8
Victoria .....	43.0	43.9	43.7	45.1	2.2	1.8	2.7	2.8	5.1	4.2	6.2	5.8
Waco .....	98.4	100.4	101.1	103.1	4.4	4.2	5.8	5.6	4.4	4.2	5.6	5.5
Wichita Falls .....	66.6	66.3	66.6	67.6	2.7	2.8	3.4	3.8	4.0	4.2	5.1	5.6
<b>Utah</b> .....	1,021.4	1,070.6	1,046.5	1,095.1	30.2	30.7	37.5	39.7	3.0	2.9	3.6	3.6
Provo-Orem .....	148.2	154.6	151.3	157.1	3.7	3.7	4.7	4.9	2.5	2.4	3.1	3.1
Salt Lake City-Ogden .....	658.6	691.5	674.2	706.3	18.4	18.9	23.0	24.4	2.8	2.7	3.4	3.5
<b>Vermont</b> .....	322.0	327.1	327.2	332.8	12.0	10.5	11.7	10.5	3.7	3.2	3.6	3.2
Burlington .....	96.8	99.6	97.3	101.2	2.3	2.0	2.4	2.2	2.4	2.0	2.4	2.2
<b>Virginia</b> .....	3,367.3	3,581.2	3,435.8	3,612.9	138.8	105.5	159.8	127.8	4.1	3.0	4.7	3.5
Charlottesville .....	70.4	75.6	72.1	77.4	1.7	1.1	1.9	1.4	2.4	1.5	2.7	1.7
Danville .....	56.0	58.7	57.2	59.9	4.2	3.8	4.8	4.4	7.4	6.1	8.4	7.4
Lynchburg .....	99.0	103.0	100.2	104.0	3.7	2.8	4.7	3.3	3.8	2.7	4.6	3.2
Norfolk-Virginia Beach-Newport News .....	715.9	748.5	734.6	760.5	37.0	27.2	44.2	33.2	5.2	3.6	6.0	4.4
Richmond-Petersburg .....	488.5	521.7	498.5	525.7	17.7	13.8	20.7	17.1	3.6	2.7	4.2	3.3
Roanoke .....	125.3	129.7	126.9	130.7	4.5	3.3	5.0	3.6	3.6	2.5	3.9	2.7
<b>Washington</b> .....	2,979.0	3,040.2	3,017.3	3,049.5	133.2	124.2	134.4	133.4	4.5	4.1	4.5	4.4
Bellingham .....	78.5	79.5	79.2	79.3	4.2	3.9	4.5	4.1	5.4	4.9	5.6	5.2
Bremerton .....	92.9	90.9	93.2	90.0	4.8	4.2	5.0	4.5	5.1	4.6	5.4	5.0
Olympia .....	97.7	99.9	97.5	99.5	4.6	4.3	4.8	4.8	4.7	4.3	4.9	4.6
Richland-Kennewick-Pasco .....	95.8	94.6	102.5	101.3	6.1	5.7	6.4	6.7	6.4	6.1	6.3	6.6
Seattle-Bellevue-Everett .....	1,337.8	1,386.7	1,343.6	1,378.8	43.5	37.6	43.8	40.2	3.2	2.7	3.3	2.9
Spokane .....	207.6	208.9	206.2	205.4	8.5	7.8	8.6	8.6	4.1	3.7	4.2	4.2
Tacoma .....	328.9	334.5	328.2	329.9	14.2	13.5	14.6	14.5	4.3	4.0	4.4	4.4
Yakima .....	114.1	114.0	126.9	124.5	10.2	9.9	10.2	10.4	9.0	8.6	8.0	8.4
<b>West Virginia</b> .....	805.8	816.9	816.2	819.7	51.3	49.6	53.3	53.7	6.4	6.1	6.5	6.5
Charleston .....	130.6	132.7	132.6	135.6	5.9	5.8	6.2	6.2	4.5	4.3	4.6	4.6
Huntington-Ashland .....	137.9	139.1	140.4	140.1	9.2	8.3	10.3	9.2	6.7	6.0	7.3	6.5
Parkersburg-Marietta .....	77.0	78.4	78.7	78.9	3.9	4.5	4.1	4.8	5.1	5.7	5.2	6.1
Wheeling .....	74.4	74.7	75.4	75.3	5.4	3.7	5.4	4.1	7.2	5.0	7.2	5.5
<b>Wisconsin</b> .....	2,913.0	2,941.9	2,991.0	3,025.9	102.9	73.9	118.7	96.2	3.5	2.5	4.0	3.2
Appleton-Oshkosh-Neenah .....	220.1	225.0	226.2	231.4	6.3	4.8	7.4	6.3	2.9	2.2	3.3	2.7
Eau Claire .....	82.5	83.4	83.3	83.7	2.7	1.9	3.2	2.5	3.3	2.3	3.8	3.0
Green Bay .....	131.4	130.4	134.3	133.9	4.2	2.9	5.0	3.8	3.2	2.2	3.7	2.8
Janesville-Beloit .....	80.3	79.6	82.9	81.4	3.5	2.4	4.8	3.1	4.4	3.1	5.8	3.9
Kenosha .....	78.1	79.2	78.9	80.4	2.7	2.0	3.4	2.8	3.4	2.6	4.4	3.5
La Crosse .....	69.6	71.2	70.6	72.7	1.8	1.4	2.1	2.0	2.6	2.0	3.0	2.7
Madison .....	257.3	260.5	260.8	264.9	4.2	3.2	4.9	4.0	1.6	1.2	1.9	1.5
Milwaukee-Waukesha .....	798.1	809.0	821.6	832.3	29.9	21.1	34.1	27.5	3.7	2.6	4.2	3.3
Racine .....	92.8	94.9	95.9	97.9	3.8	2.9	4.5	3.6	4.1	3.0	4.7	3.7
Sheboygan .....	60.0	60.0	62.7	62.5	1.5	1.0	2.0	1.4	2.5	1.7	3.2	2.3
Wausau .....	72.2	72.8	74.0	74.8	2.4	1.8	2.7	2.5	3.4	2.5	3.6	3.3
<b>Wyoming</b> .....	246.4	254.2	253.4	262.5	11.7	10.2	11.8	11.0	4.7	4.0	4.7	4.2
Casper .....	31.8	32.8	31.9	33.4	1.8	1.5	1.9	1.6	5.7	4.5	5.8	4.7
Cheyenne .....	37.5	38.7	38.0	39.8	1.3	1.1	1.3	1.2	3.3	2.8	3.4	3.1
<b>Puerto Rico</b> .....	1,295.7	1,324.1	1,324.8	1,341.0	175.5	171.1	194.0	183.5	13.5	12.9	14.6	13.7
Aguadilla .....	52.4	52.1	51.1	51.5	10.7	9.3	10.3	9.9	20.4	17.9	20.1	19.2
Arecibo .....	52.4	53.1	54.3	52.8	8.4	8.5	9.5	8.9	16.0	16.1	17.5	16.8
Caguas .....	115.5	116.0	117.6	136.4	13.7	13.4	16.2	15.4	11.9	11.5	13.8	11.3
Mayaguez .....	93.2	93.4	95.1	94.4	17.8	14.5	15.5	14.7	19.1	15.5	16.3	15.6
Ponce .....	110.8	114.5	115.7	115.0	19.5	18.9	21.9	19.6	17.6	16.5	19.0	17.1
San Juan-Bayamon .....	698.4	723.3	712.2	721.0	72.3	74.3	83.9	81.4	10.4	10.3	11.8	11.3

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 <sup>3</sup> .....	729	57,400	2,600	11,800
Nov. 1994 to Aug. 1995 <sup>4</sup> .....	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

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

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

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

<sup>4</sup> 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
<b>Total, 16 years and over:</b>		
Civilian labor force .....	293	216
Employed .....	312	235
Unemployed .....	145	161
<b>Men, 20 years and over:</b>		
Civilian labor force .....	194	164
Employed .....	206	174
Unemployed .....	97	113
<b>Women, 20 years and over:</b>		
Civilian labor force .....	219	165
Employed .....	224	171
Unemployed .....	91	105
<b>Both sexes, 16 to 19 years:</b>		
Civilian labor force .....	97	95
Employed .....	96	95
Unemployed .....	62	81
<b>Black, 16 years and over:</b>		
Civilian labor force .....	138	101
Employed .....	140	105
Unemployed .....	66	76
<b>Men, 20 years and over:</b>		
Civilian labor force .....	78	69
Employed .....	71	72
Unemployed .....	43	50
<b>Women, 20 years and over:</b>		
Civilian labor force .....	98	73
Employed .....	97	74
Unemployed .....	44	51
<b>Both sexes, 16 to 19 years:</b>		
Civilian labor force .....	40	42
Employed .....	35	37
Unemployed .....	32	37
<b>Hispanic origin, 16 years and over:</b>		
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
<b>Occupation</b>		
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
<b>Industry</b>		
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.

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

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
<b>Labor force and not-in-labor-force data other than agricultural employment and unemployment:</b>		
Total <sup>1</sup> .....	-0.000017682	2985.26
Men <sup>1</sup> .....	-.000032770	2764.05
Women .....	-.000029553	2529.99
Both sexes, 16 to 19 years .....	-.000171805	2544.62
White <sup>1</sup> .....	-.000020028	2984.72
Men .....	-.000036840	2766.67
Women .....	-.000033710	2526.82
Both sexes, 16 to 19 years ....	-.000204195	2549.88
Black .....	-.000125300	3139.26
Men .....	-.000302096	2930.79
Women .....	-.000182509	2637.41
Both sexes, 16 to 19 years ....	-.001294516	2949.48
Hispanic origin .....	-.000206380	3895.71
Not in labor force, total or white, excluding women and 16-to-19 year olds .....	.000005931	828.79
<b>Agricultural employment:</b>		
Total or white .....	.000782035	3048.57
Men .....	.000858136	2825.09
Women or both sexes, 16 to 19 years .....	-.000024885	2582.39
Black .....	-.000134884	3154.76
Hispanic origin:		
Total or women .....	.011857446	2894.85
Men or both sexes, 16 to 19 years .....	.015736341	1702.50
<b>Unemployment:</b>		
Total or white .....	-.000017962	2957.13
Black .....	-.000212109	3149.77
Hispanic origin .....	-.000101820	3576.47

<sup>1</sup> 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 <sup>1</sup> .....	-.000009288	1564.84
Low correlation characteristics <sup>1</sup> .....	-.000016162	2550.56
Men:		
Most characteristics .....	-.000022599	1921.13
High correlation characteristics .....	-.000016814	1500.99
Low correlation characteristics .....	-.000058387	2668.56
Women:		
Most characteristics .....	-.000021229	1689.99
Low correlation characteristics .....	-.000059785	2690.59
Both sexes, 16 to 19 years .....	-.000186555	2616.54
Black:		
Most characteristics .....	-.000098960	2147.36
Low correlation characteristics .....	-.001928030	6513.82
Men:		
Most characteristics .....	-.000234427	2280.03
Low correlation characteristics .....	-.002881467	5829.60
Women:		
Most characteristics .....	-.000156363	1860.78
Low correlation characteristics .....	-.002311407	5420.13
Both sexes, 16 to 19 years .....	-.001288452	3131.77
Hispanic origin:		
Total .....	-.000157201	2774.53
Civilian labor force and not in labor force .....	-.000102898	1930.51
Low correlation characteristics .....	-.002624078	8620.43
Men, civilian labor force and not in labor force .....	-.000248038	2347.42
Men, 16 years and over; 20 years and over; and both sexes, 16 to 19 years .....	-.000398909	3615.62
Women, 16 years and over and 20 years and over .....	-.000338741	2569.69
Agricultural employment:		
Total or white:		
Total .....	-.000395757	3838.04
Men .....	-.000672985	3959.25
Women or both sexes, 16 to 19 years .....	.000130289	2367.00
Black:		
Total or women .....	-.000122355	2861.72
Men or both sexes, 16 to 19 years .....	-.019110769	5876.77
Hispanic origin:		
Total or women .....	.002872129	4640.81
Men or both sexes, 16 to 19 years .....	.002884390	4028.10
Self-employed .....	-.000245791	2091.57
Unemployment: <sup>2</sup>		
Total or white:		
Total, men, women .....	-.000093662	4191.84
Both sexes, 16 to 19 years and low correlation characteristics .....	-.000071624	5121.75
Black:		
Total, men, women, and both sexes, 16 to 19 years .....	-.000414217	4361.16
High correlation characteristics .....	.000048170	3088.91
Hispanic origin:		
Total, men, women .....	-.000252897	5054.25
Both sexes, 16 to 19 years and low correlation characteristics .....	-.000996431	7037.75

<sup>1</sup> 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.

<sup>2</sup> 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
<b>Agricultural employment:</b>					
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
<b>Unemployment:</b>					
Total .....	1.40	.74	.88	.46	.65
Part time .....	1.40	.67	.88	.42	.54
<b>Labor force and not-in-labor-force data other than agricultural employment and unemployment:</b>					
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. Week-end 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)
<b>Monthly data</b>		
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. <sup>1</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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.
<b>Annual average data</b>		
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.

<sup>1</sup>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.

<sup>2</sup>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 <sup>5</sup>
	Employment <sup>1</sup>	Revision <sup>2</sup>	Added <sup>3</sup>	Required <sup>4</sup>	
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

<sup>1</sup> 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.

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

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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  $\rho$  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 <sup>1</sup>		
		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	<sup>2</sup> 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	<sup>3</sup> 5,145	2,700	100
State .....	4,692	6,880	3,848	82
Local .....	12,471	20,367	8,764	70

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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 <sup>1</sup>	
	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	( <sup>2</sup> )	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	( <sup>2</sup> )	.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 <sup>1</sup>	
	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 <sup>3</sup> .....	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 <sup>4</sup> .....	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 <sup>3</sup> .....	130	5.2	2.0	3.1
Computer and data processing services .....	64	4.7	( <sup>2</sup> )	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 <sup>3</sup> .....	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 <sup>3</sup> .....	-7	-.2	.1	1.4
Engineering and architectural services .....	-9	-1.1	-.8	1.3
Management and public relations <sup>3</sup> .....	-12	-1.3	.9	3.3
Services, nec .....	0	0	.3	.7
Government .....	-87	-.4	( <sup>2</sup> )	.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	( <sup>2</sup> )	.3
Education .....	1	0	-.1	.3
Other local government .....	-33	-.6	0	.4

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

<sup>2</sup> Less than 0.05 percent.

<sup>3</sup> Data relate to 1989-97.

<sup>4</sup> Includes other industries, not shown separately.

**Table 2-E. Relative standard errors<sup>1</sup> 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

<sup>1</sup> Relative errors were estimated with sample data from March 1994-March 1995.

**Table 2-F. Relative standard errors<sup>1</sup> 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

<sup>1</sup> 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 <sup>1</sup>	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 <sup>1</sup>	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 <sup>2</sup> .....	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

<sup>1</sup> The 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.

<sup>2</sup> Includes 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.

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**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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