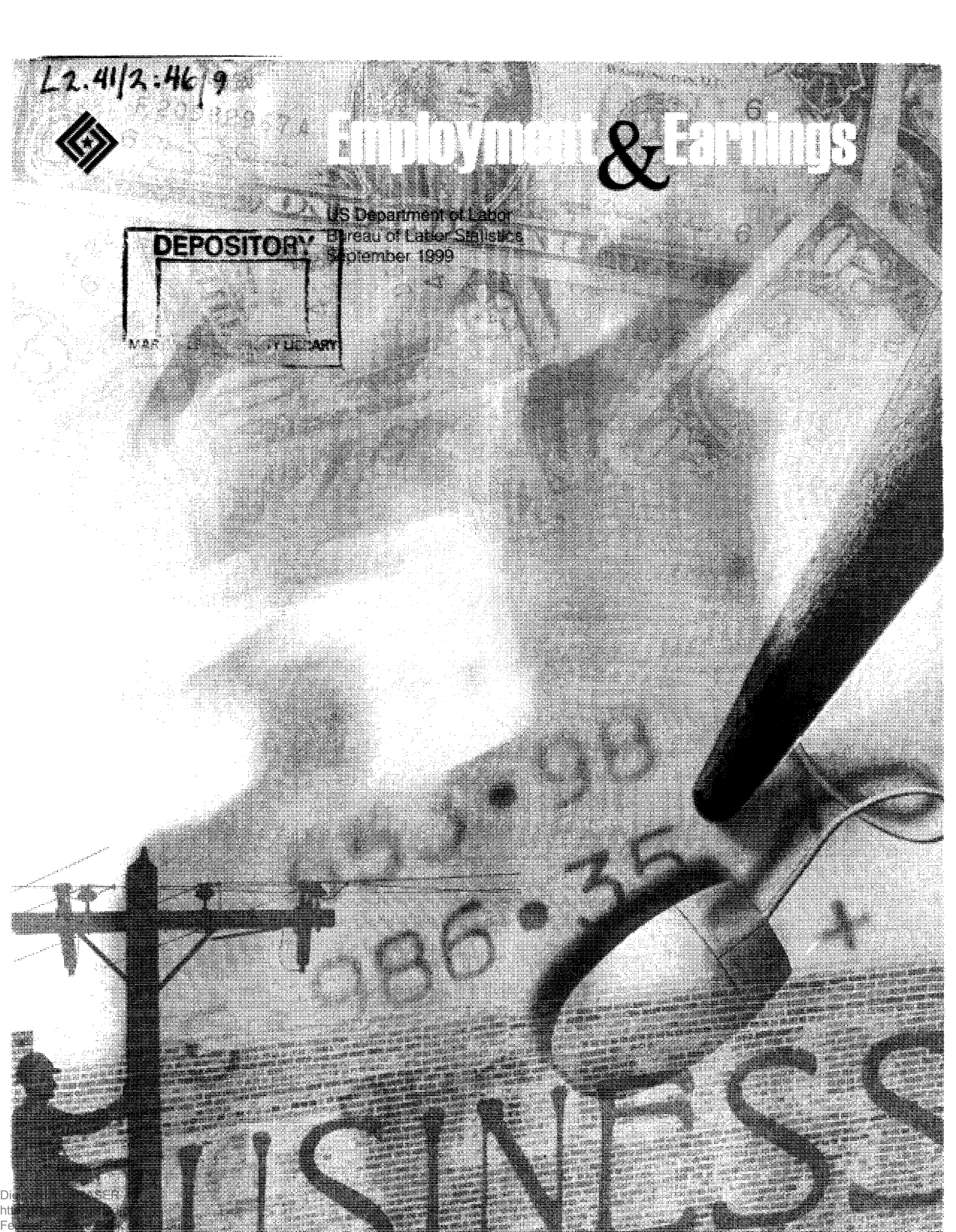


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# Employment & Earnings

US Department of Labor  
Bureau of Labor Statistics  
September 1999





**U.S. DEPARTMENT OF LABOR**  
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**September 1999**  
**Vol. 46 No. 9**

**Calendar of Features**

In addition to the monthly data appearing regularly in *Employment & 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**

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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 averages	May
Area definitions	May

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

Annual averages	May
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# Employment & Earnings

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jobs, and hospitals had its largest monthly employment increase so far this year (6,000). Over the month, employment was up sharply in both social services (34,000) and amusement and recreation services (17,000), after seasonal adjustment.

In August, employment in transportation and public utilities grew by 12,000, less than the average for the first 7 months of this year. August's job gain was equally divided between transportation and communications.

Employment in finance, insurance, and real estate also grew less in August (11,000) than its average for the first 7 months of the year. Most of the growth in August was in finance (8,000), with half of this increase in securities brokerages. Mortgage bankers and brokerages lost 2,000 jobs for the third consecutive month, following 4 years of growth.

Employment in retail trade changed little in August, following a substantial rise in July. Eating and drinking places lost 38,000 jobs in August, following an increase of 74,000 in the prior month. Several retail trade industries added jobs in August, including food stores (11,000) and automotive dealers (8,000). Employment in wholesale trade increased by 20,000 in August, with the majority of the growth in durable goods distribution (15,000).

Government employment rose by 47,000 in August, after

seasonal adjustment, with growth concentrated in local education (25,000) and State education (13,000).

### Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls edged up 0.1 hour in August to 34.6 hours, seasonally adjusted. The manufacturing workweek declined by 0.2 hour to 41.7 hours, reversing July's increase; factory overtime was down 0.1 hour to 4.6 hours. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls rose by 0.1 percent to 148.5 (1982=100), seasonally adjusted. The manufacturing index fell by 0.7 percent in August to 106.4. (See table B-9.)

### Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls increased by 2 cents in August to \$13.30, seasonally adjusted. This follows gains of 6 cents and 4 cents in June and July, respectively. Over the month, average weekly earnings rose by 0.4 percent to \$460.18, seasonally adjusted. Over the year, both average hourly and weekly earnings rose by 3.5 percent. (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>
September	October 8	December	January 7
October	November 5	January	February 4
November	December 3	February	March 3

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

(Numbers in thousands)

Category	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Labor force status												
Civilian noninstitutional population .....	205,479	205,699	205,919	206,104	206,270	206,719	206,873	207,036	207,236	207,427	207,632	207,828	208,038
Civilian labor force .....	137,481	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091	139,019	139,408	139,254	139,264
Percent of population .....	66.9	67.1	67.1	67.1	67.2	67.4	67.3	67.0	67.1	67.0	67.1	67.0	66.9
Employed .....	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224	133,432	133,307	133,411
Percent of population .....	63.9	64.1	64.0	64.1	64.2	64.5	64.4	64.3	64.2	64.2	64.3	64.1	64.1
Unemployed .....	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795	5,975	5,947	5,853
Not in labor force .....	67,998	67,618	67,803	67,911	67,723	67,372	67,602	68,220	68,145	68,408	68,225	68,574	68,774
	Unemployment rates												
All workers .....	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2	4.3	4.3	4.2
Men, 20 years and over .....	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6	3.6	3.5	3.6
Women, 20 years and over .....	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6	3.9	4.0	3.7
Both sexes, 16 to 19 years .....	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6	13.5	12.7	13.5
White .....	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7	3.8	3.7	3.7
Black .....	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5	7.3	8.8	7.8
Hispanic origin .....	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7	6.8	6.2	6.5

NOTE: Beginning in January 1999, data reflect 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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
	Employment												
Total .....	126,170	126,361	126,567	126,841	127,186	127,378	127,730	127,813	128,134	128,162	128,443	128,781	128,905
Total private .....	106,301	106,470	106,654	106,893	107,213	107,386	107,676	107,726	108,035	108,085	108,338	108,625	108,702
Goods-producing industries .....	25,344	25,333	25,306	25,298	25,354	25,315	25,329	25,285	25,288	25,199	25,180	25,248	25,153
Mining .....	585	583	578	574	570	560	553	550	538	531	526	529	526
Construction .....	6,005	6,009	6,042	6,085	6,173	6,170	6,238	6,232	6,277	6,239	6,258	6,272	6,243
Manufacturing .....	18,754	18,741	18,686	18,639	18,611	18,585	18,538	18,503	18,473	18,429	18,396	18,447	18,384
Service-producing industries .....	100,826	101,028	101,261	101,543	101,832	102,063	102,401	102,528	102,846	102,963	103,263	103,533	103,752
Transportation and public utilities .....	6,625	6,637	6,657	6,671	6,684	6,708	6,723	6,732	6,750	6,758	6,781	6,797	6,809
Wholesale trade .....	6,846	6,871	6,876	6,891	6,901	6,924	6,937	6,947	6,965	6,977	6,993	7,011	7,031
Retail trade .....	22,353	22,382	22,392	22,443	22,525	22,556	22,648	22,611	22,724	22,748	22,796	22,895	22,892
Finance, insurance, and real estate .....	7,445	7,467	7,494	7,520	7,542	7,570	7,581	7,595	7,611	7,621	7,636	7,644	7,655
Services .....	37,688	37,780	37,929	38,070	38,207	38,313	38,458	38,556	38,697	38,782	38,952	39,030	39,162
Government .....	19,869	19,891	19,913	19,948	19,973	19,992	20,054	20,087	20,099	20,077	20,105	20,156	20,203
	Over-the-month change												
Total .....	362	191	206	274	345	192	352	83	321	28	281	338	124
Total private .....	292	169	184	239	320	173	290	50	309	50	253	287	77
Goods-producing industries .....	104	-11	-27	-8	56	-39	14	-44	3	-89	-19	68	-95
Mining .....	-3	-2	-5	-4	-4	-10	-7	-3	-12	-7	-5	3	-3
Construction .....	15	4	33	43	88	-3	68	-6	45	-38	19	14	-29
Manufacturing .....	92	-13	-55	-47	-28	-26	-47	-35	-30	-44	-33	51	-63
Service-producing industries .....	258	202	233	282	289	231	338	127	318	117	300	270	219
Transportation and public utilities .....	19	12	20	14	13	24	15	9	18	8	23	16	12
Wholesale trade .....	10	25	5	15	10	23	13	10	18	12	16	18	20
Retail trade .....	32	29	10	51	82	31	92	-37	113	24	48	99	-3
Finance, insurance, and real estate .....	15	22	27	26	22	28	11	14	16	10	15	8	11
Services .....	112	92	149	141	137	106	145	98	141	85	170	78	132
Government .....	70	22	22	35	25	19	62	33	12	-22	28	51	47
	Hours of work <sup>1</sup>												
Total private .....	34.6	34.5	34.6	34.6	34.6	34.6	34.6	34.5	34.4	34.4	34.5	34.5	34.6
Manufacturing .....	41.7	41.6	41.7	41.7	41.7	41.6	41.6	41.5	41.6	41.7	41.7	41.9	41.7
Overtime .....	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.6	4.7	4.7	4.6
	Indexes of aggregate weekly hours (1982=100) <sup>1</sup>												
Total private .....	145.5	145.1	146.0	146.1	146.6	146.8	147.3	146.8	147.0	147.2	147.8	148.3	148.5
Manufacturing .....	108.5	108.3	108.1	107.7	107.5	107.1	106.8	106.5	106.5	106.5	106.3	107.2	106.4
	Earnings <sup>1</sup>												
Average hourly earnings, total private:													
Current dollars .....	\$12.85	\$12.88	\$12.91	\$12.94	\$12.98	\$13.04	\$13.06	\$13.11	\$13.14	\$13.18	\$13.24	\$13.28	\$13.30
Constant (1982) dollars <sup>2</sup> .....	7.78	7.80	7.80	7.80	7.81	7.83	7.84	7.86	7.83	7.85	7.89	7.88	N.A.
Average weekly earnings, total private .....	444.61	444.36	446.69	447.72	449.11	451.18	451.88	452.30	452.02	453.39	456.78	458.16	460.18

<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.

**HOUSEHOLD DATA  
HISTORICAL**

**A-2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1987 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>										
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
1998 <sup>1</sup>	98,758	73,959	74.9	70,693	71.6	2,553	68,140	3,266	4.4	24,799
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1998:</b>										
August	98,892	73,754	74.6	70,503	71.3	2,631	67,872	3,251	4.4	25,138
September	99,006	74,202	74.9	70,841	71.6	2,644	68,197	3,361	4.5	24,804
October	99,121	74,189	74.8	70,925	71.6	2,734	68,191	3,264	4.4	24,932
November	99,217	74,345	74.9	71,182	71.7	2,578	68,604	3,163	4.3	24,872
December	99,309	74,437	75.0	71,204	71.7	2,414	68,790	3,233	4.3	24,872
<b>1999:</b>										
January <sup>3</sup>	99,198	74,599	75.2	71,459	72.0	2,456	69,003	3,140	4.2	24,599
February	99,279	74,504	75.0	71,276	71.8	2,424	68,851	3,228	4.3	24,776
March	99,362	74,234	74.7	71,352	71.8	2,406	68,946	2,881	3.9	25,128
April	99,465	74,234	74.6	71,225	71.6	2,534	68,691	3,010	4.1	25,230
May	99,563	74,316	74.6	71,198	71.5	2,413	68,786	3,118	4.2	25,247
June	99,668	74,420	74.7	71,321	71.6	2,434	68,887	3,099	4.2	25,248
July	99,761	74,500	74.7	71,444	71.6	2,450	68,995	3,056	4.1	25,261
August	99,863	74,400	74.5	71,332	71.4	2,409	68,923	3,067	4.1	25,464
<b>Annual averages</b>										
<b>WOMEN</b>										
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
1998 <sup>1</sup>	106,462	63,714	59.8	60,771	57.1	825	59,945	2,944	4.6	42,748
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1998:</b>										
August	106,587	63,727	59.8	60,761	57.0	861	59,900	2,966	4.7	42,860
September	106,693	63,879	59.9	60,977	57.2	826	60,151	2,902	4.5	42,814
October	106,798	63,927	59.9	60,933	57.1	824	60,109	2,994	4.7	42,871
November	106,887	63,848	59.7	60,931	57.0	770	60,161	2,917	4.6	43,039
December	106,960	64,110	59.9	61,322	57.3	808	60,514	2,788	4.3	42,850
<b>1999:</b>										
January <sup>3</sup>	107,521	64,748	60.2	61,937	57.6	843	61,095	2,810	4.3	42,773
February	107,593	64,767	60.2	61,869	57.5	903	60,965	2,899	4.5	42,826
March	107,674	64,582	60.0	61,680	57.3	874	60,806	2,902	4.5	43,092
April	107,771	64,857	60.2	61,845	57.4	850	60,994	3,012	4.6	42,914
May	107,864	64,704	60.0	62,026	57.5	883	61,143	2,677	4.1	43,160
June	107,964	64,988	60.2	62,112	57.5	920	61,191	2,876	4.4	42,977
July	108,067	64,754	59.9	61,863	57.2	843	61,020	2,891	4.5	43,313
August	108,175	64,864	60.0	62,079	57.4	810	61,269	2,786	4.3	43,311

<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 1999, data are not strictly comparable with data for 1998 and earlier years because of revisions in the population controls used in the household survey. For additional information, see "Revisions in the Current Population Survey Effective January 1999" in the February 1999 issue of this publication.



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

(Numbers in thousands)

Employment status, sex, and age	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup> ..	205,479	205,699	205,919	206,104	206,270	206,719	206,873	207,036	207,236	207,427	207,632	207,828	208,038
Civilian labor force .....	137,481	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091	139,019	139,408	139,254	139,264
Percent of population .....	66.9	67.1	67.1	67.1	67.2	67.4	67.3	67.0	67.1	67.0	67.1	67.0	66.9
Employed .....	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224	133,432	133,307	133,411
Employment-population ratio .....	63.9	64.1	64.0	64.1	64.2	64.5	64.4	64.3	64.2	64.2	64.3	64.1	64.1
Unemployed .....	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795	5,975	5,947	5,853
Unemployment rate .....	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2	4.3	4.3	4.2
<b>Men, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	98,892	99,006	99,121	99,217	99,309	99,198	99,279	99,362	99,465	99,563	99,668	99,761	99,863
Civilian labor force .....	73,754	74,202	74,189	74,345	74,437	74,599	74,504	74,234	74,234	74,316	74,420	74,500	74,400
Percent of population .....	74.6	74.9	74.8	74.9	75.0	75.2	75.0	74.7	74.6	74.6	74.7	74.7	74.5
Employed .....	70,503	70,841	70,925	71,182	71,204	71,459	71,276	71,352	71,225	71,198	71,321	71,444	71,332
Employment-population ratio .....	71.3	71.6	71.6	71.7	71.7	72.0	71.8	71.8	71.6	71.5	71.6	71.6	71.4
Agriculture .....	2,631	2,644	2,734	2,578	2,414	2,456	2,424	2,406	2,534	2,413	2,434	2,450	2,409
Nonagricultural industries .....	67,872	68,197	68,191	68,604	68,790	69,003	68,851	68,946	68,691	68,786	68,887	68,995	68,923
Unemployed .....	3,251	3,361	3,264	3,163	3,233	3,140	3,228	2,881	3,010	3,118	3,099	3,056	3,067
Unemployment rate .....	4.4	4.5	4.4	4.3	4.3	4.2	4.3	3.9	4.1	4.2	4.2	4.1	4.1
Not in labor force .....	25,138	24,804	24,932	24,872	24,872	24,599	24,776	25,128	25,230	25,247	25,248	25,261	25,464
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	90,889	91,003	91,101	91,192	91,220	91,124	91,189	91,215	91,302	91,368	91,487	91,561	91,692
Civilian labor force .....	69,518	69,869	69,913	70,023	70,069	70,295	70,174	69,951	69,991	69,932	70,127	70,164	70,179
Percent of population .....	76.5	76.8	76.7	76.8	76.8	77.1	77.0	76.7	76.7	76.5	76.7	76.6	76.5
Employed .....	66,940	67,262	67,362	67,573	67,553	67,884	67,577	67,713	67,608	67,399	67,633	67,687	67,682
Employment-population ratio .....	73.7	73.9	73.9	74.1	74.1	74.5	74.1	74.2	74.0	73.8	73.9	73.9	73.8
Agriculture .....	2,420	2,402	2,449	2,374	2,237	2,312	2,212	2,222	2,353	2,212	2,248	2,271	2,242
Nonagricultural industries .....	64,520	64,860	64,913	65,199	65,316	65,572	65,365	65,492	65,255	65,186	65,385	65,416	65,440
Unemployed .....	2,578	2,607	2,551	2,450	2,516	2,411	2,598	2,238	2,383	2,534	2,494	2,477	2,496
Unemployment rate .....	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6	3.6	3.5	3.6
Not in labor force .....	21,371	21,134	21,188	21,169	21,151	20,829	21,014	21,263	21,312	21,436	21,360	21,397	21,513
<b>Women, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	106,587	106,693	106,798	106,887	106,960	107,521	107,593	107,674	107,771	107,864	107,964	108,067	108,175
Civilian labor force .....	63,727	63,879	63,927	63,848	64,110	64,748	64,767	64,582	64,857	64,704	64,988	64,754	64,864
Percent of population .....	59.8	59.9	59.9	59.7	59.9	60.2	60.2	60.0	60.2	60.0	60.2	59.9	60.0
Employed .....	60,761	60,977	60,933	60,931	61,322	61,937	61,869	61,680	61,845	62,026	62,112	61,863	62,079
Employment-population ratio .....	57.0	57.2	57.1	57.0	57.3	57.6	57.5	57.3	57.4	57.5	57.5	57.2	57.4
Agriculture .....	861	826	824	770	808	843	903	874	850	883	920	843	810
Nonagricultural industries .....	59,900	60,151	60,109	60,161	60,514	61,095	60,965	60,806	60,994	61,143	61,191	61,020	61,269
Unemployed .....	2,966	2,902	2,994	2,917	2,788	2,810	2,899	2,902	3,012	2,677	2,876	2,891	2,786
Unemployment rate .....	4.7	4.5	4.7	4.6	4.3	4.3	4.5	4.5	4.6	4.1	4.4	4.5	4.3
Not in labor force .....	42,860	42,814	42,871	43,039	42,850	42,773	42,826	43,092	42,914	43,160	42,977	43,313	43,311
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	98,901	98,994	99,037	99,135	99,181	99,686	99,746	99,833	99,923	100,008	100,131	100,203	100,285
Civilian labor force .....	59,708	59,804	59,826	59,896	60,078	60,718	60,622	60,533	60,788	60,729	61,092	60,791	60,908
Percent of population .....	60.4	60.4	60.4	60.4	60.6	60.9	60.8	60.6	60.8	60.7	61.0	60.7	60.7
Employed .....	57,295	57,426	57,437	57,503	57,745	58,466	58,291	58,183	58,320	58,520	58,719	58,373	58,654
Employment-population ratio .....	57.9	58.0	58.0	58.0	58.2	58.7	58.4	58.3	58.4	58.5	58.6	58.3	58.5
Agriculture .....	806	767	771	734	753	808	839	834	801	831	869	797	764
Nonagricultural industries .....	56,489	56,659	56,666	56,769	56,992	57,659	57,452	57,349	57,519	57,689	57,849	57,576	57,890
Unemployed .....	2,413	2,378	2,389	2,393	2,333	2,251	2,330	2,350	2,468	2,209	2,373	2,418	2,254
Unemployment rate .....	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6	3.9	4.0	3.7
Not in labor force .....	39,193	39,190	39,211	39,239	39,103	38,968	39,124	39,300	39,135	39,279	39,039	39,412	39,377
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup> ..	15,689	15,702	15,781	15,777	15,868	15,909	15,939	15,988	16,011	16,051	16,014	16,065	16,061
Civilian labor force .....	8,255	8,408	8,377	8,274	8,400	8,334	8,475	8,331	8,312	8,358	8,189	8,300	8,177
Percent of population .....	52.6	53.5	53.1	52.4	52.9	52.4	53.2	52.1	51.9	52.1	51.1	51.7	50.9
Employed .....	7,029	7,130	7,059	7,037	7,228	7,046	7,276	7,136	7,141	7,306	7,081	7,247	7,075
Employment-population ratio .....	44.8	45.4	44.7	44.6	45.5	44.3	45.7	44.6	44.6	45.5	44.2	45.1	44.0
Agriculture .....	266	301	338	240	232	179	277	224	230	252	237	225	212
Nonagricultural industries .....	6,763	6,829	6,721	6,797	6,996	6,867	6,999	6,912	6,911	7,054	6,843	7,023	6,862
Unemployed .....	1,226	1,278	1,318	1,237	1,172	1,288	1,199	1,195	1,171	1,052	1,108	1,053	1,102
Unemployment rate .....	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6	13.5	12.7	13.5
Not in labor force .....	7,434	7,294	7,404	7,503	7,468	7,575	7,464	7,657	7,698	7,693	7,825	7,765	7,884

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-4. Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin, seasonally adjusted**

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> ..	171,655	171,804	171,956	172,084	172,197	172,394	172,491	172,597	172,730	172,859	172,999	173,133	173,275
Civilian labor force .....	115,385	115,751	115,714	115,687	115,996	116,529	116,610	116,284	116,370	116,254	116,578	116,393	116,602
Percent of population .....	67.2	67.4	67.3	67.2	67.4	67.6	67.6	67.4	67.4	67.3	67.4	67.2	67.3
Employed .....	110,848	111,221	111,162	111,304	111,560	112,135	112,189	112,144	111,917	111,985	112,092	112,117	112,277
Employment-population ratio .....	64.6	64.7	64.6	64.7	64.8	65.0	65.0	65.0	64.8	64.8	64.8	64.8	64.8
Unemployed .....	4,537	4,530	4,552	4,383	4,436	4,394	4,420	4,140	4,454	4,269	4,486	4,276	4,325
Unemployment rate .....	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7	3.8	3.7	3.7
<b>Men, 20 years and over</b>													
Civilian labor force .....	59,384	59,587	59,579	59,634	59,712	59,751	59,799	59,698	59,664	59,500	59,711	59,837	59,968
Percent of population .....	77.1	77.3	77.2	77.2	77.2	77.5	77.5	77.3	77.2	77.0	77.2	77.3	77.4
Employed .....	57,450	57,615	57,646	57,806	57,813	57,920	57,830	58,010	57,874	57,615	57,784	57,978	58,013
Employment-population ratio .....	74.6	74.7	74.7	74.8	74.8	75.1	75.0	75.1	74.9	74.5	74.7	74.9	74.8
Unemployed .....	1,934	1,972	1,933	1,828	1,899	1,831	1,969	1,688	1,790	1,884	1,927	1,859	1,955
Unemployment rate .....	3.3	3.3	3.2	3.1	3.2	3.1	3.3	2.8	3.0	3.2	3.2	3.1	3.3
<b>Women, 20 years and over</b>													
Civilian labor force .....	49,025	49,108	49,062	49,065	49,230	49,759	49,721	49,602	49,672	49,669	49,933	49,542	49,701
Percent of population .....	59.7	59.8	59.7	59.6	59.8	60.2	60.1	59.9	60.0	60.0	60.2	59.7	59.9
Employed .....	47,321	47,456	47,401	47,415	47,585	48,110	48,109	47,983	47,862	48,067	48,215	47,878	48,134
Employment-population ratio .....	57.6	57.7	57.6	57.6	57.8	58.2	58.2	58.0	57.8	58.0	58.2	57.7	58.0
Unemployed .....	1,704	1,652	1,661	1,650	1,645	1,650	1,612	1,620	1,811	1,602	1,718	1,665	1,567
Unemployment rate .....	3.5	3.4	3.4	3.4	3.3	3.3	3.2	3.3	3.6	3.2	3.4	3.4	3.2
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,976	7,056	7,073	6,988	7,054	7,019	7,090	6,984	7,034	7,085	6,934	7,013	6,932
Percent of population .....	55.8	56.4	56.4	55.7	56.1	55.6	56.1	55.2	55.5	55.8	54.6	55.1	54.4
Employed .....	6,077	6,150	6,115	6,083	6,162	6,105	6,250	6,151	6,181	6,302	6,093	6,261	6,129
Employment-population ratio .....	48.6	49.1	48.8	48.5	49.0	48.4	49.5	48.6	48.8	49.7	48.0	49.2	48.1
Unemployed .....	899	906	958	905	892	913	840	833	853	783	840	753	803
Unemployment rate .....	12.9	12.8	13.5	13.0	12.6	13.0	11.8	11.9	12.1	11.0	12.1	10.7	11.6
Men .....	14.2	14.7	14.1	14.1	14.5	14.1	12.2	12.7	12.6	11.9	11.8	10.9	12.2
Women .....	11.5	10.8	13.0	11.6	10.6	11.9	11.4	11.1	11.6	10.1	12.5	10.6	10.9
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> ..	24,418	24,458	24,496	24,529	24,561	24,665	24,697	24,729	24,765	24,798	24,833	24,867	24,904
Civilian labor force .....	15,937	16,027	16,163	16,201	16,157	16,356	16,242	16,212	16,286	16,303	16,300	16,384	16,279
Percent of population .....	65.3	65.5	66.0	66.0	65.8	66.3	65.8	65.6	65.8	65.7	65.6	65.9	65.4
Employed .....	14,517	14,584	14,776	14,804	14,884	15,085	14,900	14,904	15,029	15,079	15,103	14,949	15,005
Employment-population ratio .....	59.5	59.6	60.3	60.4	60.6	61.2	60.3	60.3	60.7	60.8	60.8	60.1	60.3
Unemployed .....	1,420	1,443	1,387	1,397	1,273	1,271	1,342	1,308	1,257	1,224	1,197	1,434	1,274
Unemployment rate .....	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5	7.3	8.8	7.8
<b>Men, 20 years and over</b>													
Civilian labor force .....	7,021	6,999	7,144	7,086	7,063	7,210	7,160	7,065	7,118	7,206	7,152	7,132	7,151
Percent of population .....	72.1	71.7	73.1	72.4	72.0	73.3	72.7	71.6	72.0	72.8	72.1	71.8	71.9
Employed .....	6,487	6,499	6,653	6,590	6,588	6,782	6,682	6,656	6,681	6,727	6,712	6,601	6,706
Employment-population ratio .....	66.6	66.6	68.0	67.3	67.2	68.9	67.8	67.4	67.6	68.0	67.7	66.5	67.4
Unemployed .....	534	500	491	496	475	428	477	409	437	479	440	531	445
Unemployment rate .....	7.6	7.1	6.9	7.0	6.7	5.9	6.7	5.8	6.1	6.6	6.1	7.4	6.2
<b>Women, 20 years and over</b>													
Civilian labor force .....	7,903	7,948	7,992	8,051	8,035	8,114	8,082	8,129	8,241	8,177	8,214	8,318	8,229
Percent of population .....	64.7	64.9	65.2	65.6	65.4	65.7	65.3	65.6	66.4	65.8	66.0	66.8	66.0
Employed .....	7,302	7,320	7,391	7,443	7,474	7,579	7,509	7,545	7,681	7,653	7,671	7,663	7,658
Employment-population ratio .....	59.7	59.8	60.3	60.6	60.8	61.3	60.7	60.9	61.9	61.6	61.7	61.5	61.4
Unemployed .....	601	628	601	608	561	535	573	584	560	524	544	654	571
Unemployment rate .....	7.6	7.9	7.5	7.6	7.0	6.6	7.1	7.2	6.8	6.4	6.6	7.9	6.9

See footnotes at end of table.

**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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	1,013	1,080	1,027	1,064	1,059	1,032	1,000	1,018	927	920	934	934	899
Percent of population .....	41.3	44.0	41.8	43.3	43.0	41.8	40.5	41.2	37.5	37.1	37.7	37.6	36.2
Employed .....	728	765	732	771	822	725	708	702	667	699	721	685	642
Employment-population ratio .....	29.7	31.1	29.8	31.4	33.4	29.3	28.6	28.4	26.9	28.2	29.0	27.6	25.8
Unemployed .....	285	315	295	293	237	307	293	316	260	222	214	249	257
Unemployment rate .....	28.1	29.2	28.7	27.5	22.4	29.8	29.2	31.0	28.1	24.1	22.9	26.7	28.6
Men .....	29.7	32.7	34.7	33.0	27.3	34.2	31.6	32.9	33.0	26.2	26.7	30.8	29.4
Women .....	26.8	25.7	23.5	22.1	17.6	25.0	27.0	29.1	23.5	22.0	19.6	22.9	27.9
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> ..	21,159	21,224	21,286	21,349	21,405	21,296	21,355	21,414	21,483	21,548	21,618	21,684	21,752
Civilian labor force .....	14,316	14,457	14,437	14,389	14,488	14,511	14,591	14,570	14,543	14,535	14,643	14,592	14,734
Percent of population .....	67.7	68.1	67.8	67.4	67.7	68.1	68.3	68.0	67.7	67.5	67.7	67.3	67.7
Employed .....	13,257	13,394	13,382	13,345	13,383	13,550	13,610	13,732	13,541	13,558	13,654	13,685	13,776
Employment-population ratio .....	62.7	63.1	62.9	62.5	62.5	63.6	63.7	64.1	63.0	62.9	63.2	63.1	63.3
Unemployed .....	1,059	1,063	1,055	1,044	1,105	960	980	838	1,002	977	989	907	959
Unemployment rate .....	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7	6.8	6.2	6.5

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>Less than a high school diploma</b>													
Civilian noninstitutional population <sup>1</sup> .....	29,204	29,290	28,713	29,084	29,094	28,901	28,112	28,442	27,991	28,298	28,515	28,015	28,568
Civilian labor force .....	12,496	12,563	12,408	12,463	12,500	12,379	12,164	12,094	11,753	11,743	12,047	12,069	12,412
Percent of population .....	42.8	42.9	43.2	42.9	43.0	42.8	43.3	42.5	42.0	41.5	42.2	43.1	43.4
Employed .....	11,612	11,692	11,556	11,574	11,626	11,459	11,257	11,356	10,972	10,959	11,238	11,244	11,530
Employment-population ratio .....	39.8	39.9	40.2	39.8	40.0	39.7	40.0	39.9	39.2	38.7	39.4	40.1	40.4
Unemployed .....	884	871	852	889	874	920	907	739	781	784	810	825	883
Unemployment rate .....	7.1	6.9	6.9	7.1	7.0	7.4	7.5	6.1	6.6	6.7	6.7	6.8	7.1
<b>High school graduates, no college<sup>2</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	57,729	57,589	57,666	57,273	57,115	57,477	57,062	57,805	57,945	57,931	57,963	57,162	57,195
Civilian labor force .....	37,367	37,289	37,540	37,408	37,296	37,590	37,261	37,740	37,577	37,416	37,403	36,941	36,845
Percent of population .....	64.7	64.8	65.1	65.3	65.3	65.4	65.3	65.3	64.8	64.6	64.5	64.6	64.4
Employed .....	35,883	35,783	36,056	35,947	35,873	36,291	35,979	36,448	36,253	36,058	35,961	35,629	35,550
Employment-population ratio .....	62.2	62.1	62.5	62.8	62.8	63.1	63.1	63.1	62.6	62.2	62.0	62.3	62.2
Unemployed .....	1,484	1,506	1,484	1,461	1,423	1,299	1,282	1,292	1,324	1,359	1,442	1,313	1,294
Unemployment rate .....	4.0	4.0	4.0	3.9	3.8	3.5	3.4	3.4	3.5	3.6	3.9	3.6	3.5
<b>Less than a bachelor's degree<sup>3</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	41,842	41,769	42,573	42,863	43,022	43,154	43,911	43,028	43,059	42,742	42,780	43,610	43,130
Civilian labor force .....	31,117	31,271	31,349	31,727	31,800	32,399	32,465	31,892	32,160	31,930	31,937	32,102	31,803
Percent of population .....	74.4	74.9	73.6	74.0	73.9	75.1	73.9	74.1	74.7	74.7	74.7	73.6	73.7
Employed .....	30,231	30,343	30,423	30,825	30,911	31,470	31,462	30,989	31,202	31,043	31,130	31,097	30,795
Employment-population ratio .....	72.3	72.6	71.5	71.9	71.8	72.9	71.6	72.0	72.5	72.6	72.8	71.3	71.4
Unemployed .....	886	928	926	902	889	929	1,003	903	958	886	806	1,005	1,008
Unemployment rate .....	2.8	3.0	3.0	2.8	2.8	2.9	3.1	2.8	3.0	2.8	2.5	3.1	3.2
<b>College graduates</b>													
Civilian noninstitutional population <sup>1</sup> .....	43,431	43,669	43,520	43,408	43,484	43,516	43,949	43,859	44,289	44,442	44,464	45,042	45,086
Civilian labor force .....	34,739	34,914	34,779	34,554	34,838	34,950	35,040	34,997	35,493	35,771	35,856	35,981	36,142
Percent of population .....	80.0	80.0	79.9	79.6	80.1	80.3	79.7	79.8	80.1	80.5	80.6	79.9	80.2
Employed .....	34,129	34,335	34,108	33,922	34,205	34,325	34,368	34,345	34,742	35,107	35,128	35,317	35,579
Employment-population ratio .....	78.6	78.6	78.4	78.1	78.7	78.9	78.2	78.3	78.4	79.0	79.0	78.4	78.9
Unemployed .....	610	579	671	632	633	624	673	652	752	664	727	664	563
Unemployment rate .....	1.8	1.7	1.9	1.8	1.8	1.8	1.9	1.9	2.1	1.9	2.0	1.8	1.6

<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 1999, data reflect revised population controls used in the household survey.

**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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>EMPLOYED</b>													
Full-time workers .....	108,150	108,512	108,561	109,016	109,483	110,307	109,985	110,104	109,668	109,990	110,313	109,640	109,885
Men, 16 years and over .....	63,202	63,216	63,417	63,726	63,829	64,138	63,857	64,047	63,650	63,624	63,758	63,800	63,681
Men, 20 years and over .....	61,808	61,911	62,039	62,312	62,375	62,795	62,493	62,660	62,326	62,197	62,332	62,312	62,238
Women, 16 years and over .....	45,097	45,344	45,154	45,289	45,604	46,042	46,013	45,957	45,955	46,271	46,612	45,950	46,305
Women, 20 years and over .....	44,019	44,265	44,231	44,387	44,675	45,148	45,169	45,105	45,052	45,299	45,595	44,979	45,347
Both sexes, 16 to 19 years .....	2,323	2,336	2,291	2,317	2,433	2,364	2,324	2,339	2,290	2,494	2,386	2,349	2,300
Part-time workers .....	22,975	23,284	23,281	23,249	23,258	23,198	23,157	23,160	23,351	23,261	22,989	23,562	23,482
Men, 16 years and over .....	7,332	7,644	7,490	7,554	7,490	7,236	7,376	7,365	7,500	7,505	7,535	7,620	7,698
Men, 20 years and over .....	5,181	5,364	5,295	5,332	5,272	5,070	5,058	5,145	5,219	5,163	5,272	5,391	5,591
Women, 16 years and over .....	15,638	15,682	15,797	15,690	15,770	15,862	15,780	15,776	15,880	15,757	15,505	15,932	15,704
Women, 20 years and over .....	13,230	13,154	13,197	13,125	13,134	13,348	13,131	13,160	13,295	13,227	13,110	13,388	13,251
Both sexes, 16 to 19 years .....	4,564	4,766	4,789	4,792	4,852	4,780	4,967	4,854	4,836	4,871	4,607	4,783	4,640
<b>UNEMPLOYED</b>													
Looking for full-time work .....	4,919	4,916	4,871	4,736	4,781	4,708	4,929	4,617	4,805	4,592	4,628	4,732	4,756
Men, 16 years and over .....	2,739	2,788	2,698	2,611	2,675	2,529	2,691	2,283	2,498	2,532	2,574	2,558	2,672
Men, 20 years and over .....	2,364	2,383	2,324	2,235	2,319	2,235	2,384	2,058	2,196	2,272	2,234	2,251	2,337
Women, 16 years and over .....	2,209	2,159	2,215	2,179	2,131	2,063	2,167	2,230	2,325	2,057	2,132	2,155	2,104
Women, 20 years and over .....	1,959	1,924	1,944	1,918	1,891	1,802	1,933	1,973	2,063	1,836	1,918	1,974	1,875
Both sexes, 16 to 19 years .....	596	609	603	583	571	671	612	585	546	484	476	506	544
Looking for part-time work .....	1,298	1,298	1,362	1,340	1,263	1,272	1,196	1,191	1,214	1,247	1,317	1,216	1,118
Men, 16 years and over .....	539	571	594	577	581	489	472	485	552	608	586	515	434
Men, 20 years and over .....	205	213	223	219	209	180	208	178	186	285	265	225	165
Women, 16 years and over .....	744	708	748	757	663	752	735	698	710	651	748	714	659
Women, 20 years and over .....	459	424	442	464	412	447	429	397	408	370	452	448	390
Both sexes, 16 to 19 years .....	634	661	697	657	642	645	560	615	621	592	600	543	563
<b>UNEMPLOYMENT RATES<sup>1</sup></b>													
Full-time workers .....	4.4	4.3	4.3	4.2	4.2	4.1	4.3	4.0	4.2	4.0	4.0	4.1	4.1
Men, 16 years and over .....	4.2	4.2	4.1	3.9	4.0	3.8	4.0	3.4	3.8	3.8	3.9	3.9	4.0
Men, 20 years and over .....	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.5	3.5	3.5	3.6
Women, 16 years and over .....	4.7	4.5	4.7	4.6	4.5	4.3	4.5	4.6	4.8	4.3	4.4	4.5	4.3
Women, 20 years and over .....	4.3	4.2	4.2	4.1	4.1	3.8	4.1	4.2	4.4	3.9	4.0	4.2	4.0
Both sexes, 16 to 19 years .....	20.4	20.7	20.8	20.1	19.0	22.1	20.8	20.0	19.3	16.2	16.6	17.7	19.1
Part-time workers .....	5.3	5.3	5.5	5.4	5.2	5.2	4.9	4.9	4.9	5.1	5.4	4.9	4.5
Men, 16 years and over .....	6.8	7.0	7.3	7.1	7.2	6.3	6.0	6.2	6.9	7.5	7.2	6.3	5.3
Men, 20 years and over .....	3.8	3.8	4.0	3.9	3.8	3.4	3.9	3.4	3.4	5.2	4.8	4.0	2.9
Women, 16 years and over .....	4.5	4.3	4.5	4.6	4.0	4.5	4.5	4.2	4.3	4.0	4.6	4.3	4.0
Women, 20 years and over .....	3.4	3.1	3.2	3.4	3.0	3.2	3.2	2.9	3.0	2.7	3.3	3.2	2.9
Both sexes, 16 to 19 years .....	12.2	12.2	12.7	12.1	11.7	11.9	10.1	11.2	11.4	10.8	11.5	10.2	10.8

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(In thousands)

Category	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>MARITAL STATUS</b>													
Total .....	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224	133,432	133,307	133,411
Married men, spouse present .....	42,874	43,170	43,090	43,209	43,227	43,542	43,016	43,114	43,190	42,882	43,291	43,353	43,398
Married women, spouse present .....	32,670	32,891	33,037	32,953	33,093	33,652	33,092	33,134	33,285	33,487	33,802	33,302	33,458
Women who maintain families .....	7,928	7,984	7,940	7,969	8,087	8,076	8,113	8,148	8,050	8,039	7,991	8,289	8,357
<b>OCCUPATION</b>													
Managerial and professional specialty .....	38,942	39,553	39,679	39,459	39,729	39,836	39,531	39,900	40,504	40,500	40,946	40,901	40,893
Technical, sales, and administrative support .....	38,843	38,478	38,431	38,430	38,307	38,846	39,254	38,893	38,866	39,103	38,729	38,573	38,842
Service occupations .....	17,770	17,926	17,692	18,024	17,976	18,070	18,163	18,074	17,868	18,111	18,020	18,035	18,034
Precision production, craft, and repair .....	14,158	14,045	14,192	14,552	14,685	14,751	14,742	14,661	14,518	14,432	14,084	14,405	14,241
Operators, fabricators, and laborers .....	17,968	18,118	18,168	18,067	18,480	18,476	18,021	18,177	17,656	17,813	18,190	17,985	18,058
Farming, forestry, and fishing .....	3,590	3,585	3,604	3,538	3,396	3,422	3,490	3,417	3,539	3,441	3,504	3,423	3,422
<b>CLASS OF WORKER</b>													
Agriculture:													
Wage and salary workers .....	2,111	2,145	2,247	2,005	1,912	1,987	1,895	1,893	1,908	1,919	1,911	1,938	1,900
Self-employed workers .....	1,342	1,290	1,282	1,304	1,304	1,298	1,381	1,376	1,439	1,348	1,369	1,300	1,262
Unpaid family workers .....	31	40	33	40	34	30	44	39	31	33	37	47	48
Nonagricultural industries:													
Wage and salary workers .....	118,840	119,148	119,275	119,718	120,380	121,115	121,066	121,005	120,785	121,168	121,005	121,157	121,163
Private industries .....	100,508	100,700	100,728	101,111	101,694	102,202	102,283	102,306	102,076	102,496	101,895	102,089	101,920
Private households .....	871	918	946	969	943	881	849	917	941	910	1,001	943	871
Other industries .....	99,637	99,782	99,782	100,142	100,751	101,321	101,434	101,389	101,135	101,586	100,894	101,146	101,049
Government .....	18,332	18,448	18,547	18,607	18,686	18,913	18,782	18,699	18,709	18,672	19,110	19,068	19,243
Self-employed workers .....	8,955	9,096	9,030	8,929	8,814	8,830	8,658	8,650	8,813	8,687	8,857	8,837	9,066
Unpaid family workers .....	88	88	95	112	122	121	114	125	63	60	87	74	91
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
All industries:													
Part time for economic reasons .....	3,503	3,419	3,404	3,340	3,417	3,562	3,426	3,564	3,408	3,422	3,418	3,299	3,248
Slack work or business conditions .....	2,019	1,913	2,031	1,910	1,927	2,093	1,984	2,045	1,920	1,946	2,092	1,983	1,871
Could only find part-time work .....	1,188	1,168	1,136	1,157	1,148	1,115	1,141	1,208	1,124	1,137	1,014	1,044	1,057
Part time for noneconomic reasons .....	18,653	18,687	18,667	18,634	18,674	18,485	18,642	18,545	18,882	18,632	18,666	19,122	19,359
Nonagricultural industries:													
Part time for economic reasons .....	3,339	3,191	3,253	3,191	3,257	3,413	3,298	3,374	3,224	3,247	3,232	3,130	3,105
Slack work or business conditions .....	1,926	1,800	1,927	1,824	1,841	1,989	1,906	1,955	1,831	1,838	1,944	1,846	1,791
Could only find part-time work .....	1,155	1,132	1,110	1,130	1,116	1,094	1,108	1,159	1,092	1,111	1,010	1,028	1,041
Part time for noneconomic reasons .....	18,031	18,161	18,107	18,110	18,155	17,921	18,061	17,944	18,320	18,098	18,016	18,618	18,781

<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 1999, data reflect revised population controls used in the household survey.

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

(In thousands)

Age and sex	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over .....	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224	133,432	133,307	133,411
16 to 24 years .....	19,490	19,676	19,757	19,705	19,859	19,891	20,081	20,063	19,940	20,087	19,896	20,081	20,037
16 to 19 years .....	7,029	7,130	7,059	7,037	7,228	7,046	7,276	7,136	7,141	7,306	7,081	7,247	7,075
16 to 17 years .....	2,730	2,788	2,721	2,709	2,808	2,751	2,841	2,786	2,818	2,815	2,726	2,878	2,752
18 to 19 years .....	4,286	4,339	4,332	4,340	4,419	4,313	4,413	4,361	4,319	4,494	4,373	4,357	4,293
20 to 24 years .....	12,461	12,546	12,698	12,668	12,631	12,846	12,804	12,926	12,799	12,781	12,816	12,834	12,962
25 years and over .....	111,820	112,115	112,126	112,409	112,654	113,557	113,068	112,985	113,124	113,219	113,519	113,207	113,427
25 to 54 years .....	95,212	95,364	95,309	95,623	95,822	96,713	96,146	95,968	95,967	96,047	96,161	95,882	96,018
55 years and over .....	16,607	16,783	16,771	16,781	16,871	16,836	16,972	17,053	17,136	17,071	17,287	17,376	17,423
Men, 16 years and over .....	70,503	70,841	70,925	71,182	71,204	71,459	71,276	71,352	71,225	71,198	71,321	71,444	71,332
16 to 24 years .....	10,141	10,206	10,246	10,332	10,347	10,320	10,435	10,425	10,158	10,427	10,291	10,411	10,412
16 to 19 years .....	3,563	3,579	3,563	3,609	3,651	3,574	3,699	3,639	3,617	3,800	3,688	3,757	3,650
16 to 17 years .....	1,377	1,393	1,348	1,380	1,405	1,427	1,453	1,404	1,398	1,461	1,433	1,487	1,434
18 to 19 years .....	2,177	2,172	2,213	2,218	2,243	2,170	2,238	2,242	2,223	2,341	2,275	2,255	2,192
20 to 24 years .....	6,578	6,627	6,683	6,723	6,696	6,745	6,736	6,786	6,541	6,627	6,603	6,654	6,762
25 years and over .....	60,444	60,617	60,680	60,840	60,843	61,148	60,843	60,905	61,026	60,801	61,012	61,015	61,021
25 to 54 years .....	51,167	51,232	51,299	51,606	51,502	51,811	51,430	51,435	51,446	51,356	51,381	51,455	51,366
55 years and over .....	9,238	9,386	9,340	9,311	9,374	9,362	9,465	9,495	9,536	9,417	9,566	9,597	9,637
Women, 16 years and over .....	60,761	60,977	60,933	60,931	61,322	61,937	61,869	61,680	61,845	62,026	62,112	61,863	62,079
16 to 24 years .....	9,349	9,470	9,511	9,373	9,512	9,572	9,646	9,637	9,782	9,661	9,606	9,670	9,625
16 to 19 years .....	3,466	3,551	3,496	3,428	3,577	3,471	3,578	3,497	3,524	3,507	3,393	3,490	3,425
16 to 17 years .....	1,353	1,395	1,373	1,329	1,403	1,324	1,388	1,382	1,420	1,355	1,294	1,390	1,317
18 to 19 years .....	2,109	2,167	2,119	2,122	2,176	2,142	2,175	2,119	2,096	2,153	2,097	2,102	2,102
20 to 24 years .....	5,883	5,919	6,015	5,945	5,935	6,101	6,068	6,140	6,258	6,154	6,213	6,180	6,200
25 years and over .....	51,376	51,498	51,446	51,569	51,811	52,410	52,226	52,080	52,099	52,417	52,507	52,192	52,406
25 to 54 years .....	44,045	44,132	44,010	44,017	44,320	44,902	44,715	44,534	44,521	44,690	44,781	44,427	44,652
55 years and over .....	7,369	7,397	7,431	7,470	7,497	7,474	7,508	7,558	7,600	7,654	7,722	7,779	7,786

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over .....	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795	5,975	5,947	5,853
16 to 24 years .....	2,366	2,400	2,320	2,171	2,153	2,240	2,274	2,223	2,217	2,092	2,181	2,128	2,126
16 to 19 years .....	1,226	1,278	1,318	1,237	1,172	1,288	1,199	1,195	1,171	1,052	1,108	1,053	1,102
16 to 17 years .....	565	596	607	595	573	619	520	554	572	531	524	493	517
18 to 19 years .....	669	679	704	646	611	653	666	640	608	531	586	563	592
20 to 24 years .....	1,140	1,122	1,002	934	981	952	1,075	1,028	1,046	1,040	1,073	1,075	1,023
25 years and over .....	3,865	3,894	3,931	3,879	3,864	3,743	3,835	3,573	3,792	3,718	3,788	3,792	3,745
25 to 54 years .....	3,419	3,416	3,475	3,377	3,340	3,257	3,359	3,087	3,271	3,218	3,242	3,242	3,272
55 years and over .....	449	464	466	516	517	509	501	504	513	462	537	544	472
Men, 16 years and over .....	3,251	3,361	3,264	3,163	3,233	3,140	3,228	2,881	3,010	3,118	3,099	3,056	3,067
16 to 24 years .....	1,286	1,374	1,255	1,190	1,247	1,241	1,179	1,151	1,192	1,180	1,231	1,180	1,126
16 to 19 years .....	673	754	713	713	717	729	630	643	627	584	605	579	571
16 to 17 years .....	320	352	357	344	349	349	262	286	332	313	282	271	270
18 to 19 years .....	360	386	351	373	364	375	368	354	310	277	333	303	308
20 to 24 years .....	613	620	542	477	530	512	548	508	565	597	626	601	555
25 years and over .....	1,983	1,994	2,006	1,952	1,987	1,900	2,036	1,721	1,827	1,958	1,861	1,866	1,963
25 to 54 years .....	1,739	1,711	1,739	1,652	1,688	1,646	1,750	1,481	1,562	1,662	1,601	1,559	1,680
55 years and over .....	247	286	276	296	300	273	295	252	258	261	258	316	286
Women, 16 years and over .....	2,966	2,902	2,994	2,917	2,788	2,810	2,899	2,902	3,012	2,677	2,876	2,891	2,786
16 to 24 years .....	1,080	1,026	1,065	981	906	999	1,095	1,071	1,025	912	950	948	1,000
16 to 19 years .....	553	524	605	524	455	559	568	551	544	468	503	473	531
16 to 17 years .....	245	244	250	251	224	270	259	267	240	217	241	222	248
18 to 19 years .....	309	293	353	273	247	278	298	286	298	255	253	260	284
20 to 24 years .....	527	502	460	457	451	440	527	520	481	444	447	475	469
25 years and over .....	1,882	1,900	1,925	1,927	1,877	1,842	1,799	1,852	1,965	1,760	1,927	1,926	1,782
25 to 54 years .....	1,680	1,705	1,736	1,725	1,652	1,611	1,609	1,606	1,709	1,556	1,641	1,683	1,593
55 years and over .....	202	178	190	220	217	236	206	251	256	201	279	228	185

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.



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

(Percent)

Age and sex	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over .....	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2	4.3	4.3	4.2
16 to 24 years .....	10.8	10.9	10.5	9.9	9.8	10.1	10.2	10.0	10.0	9.4	9.9	9.6	9.6
16 to 19 years .....	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6	13.5	12.7	13.5
16 to 17 years .....	17.1	17.6	18.2	18.0	16.9	18.4	15.5	16.6	16.9	15.9	16.1	14.6	15.8
18 to 19 years .....	13.5	13.5	14.0	13.0	12.1	13.1	13.1	12.8	12.3	10.6	11.8	11.4	12.1
20 to 24 years .....	8.4	8.2	7.3	6.9	7.2	6.9	7.7	7.4	7.6	7.5	7.7	7.7	7.3
25 years and over .....	3.3	3.4	3.4	3.3	3.3	3.2	3.3	3.1	3.2	3.2	3.2	3.2	3.2
25 to 54 years .....	3.5	3.5	3.5	3.4	3.4	3.3	3.4	3.1	3.3	3.2	3.3	3.3	3.3
55 years and over .....	2.6	2.7	2.7	3.0	3.0	2.9	2.9	2.9	2.9	2.6	3.0	3.0	2.6
Men, 16 years and over .....	4.4	4.5	4.4	4.3	4.3	4.2	4.3	3.9	4.1	4.2	4.2	4.1	4.1
16 to 24 years .....	11.3	11.9	10.9	10.3	10.8	10.7	10.1	9.9	10.5	10.2	10.7	10.2	9.8
16 to 19 years .....	15.9	17.4	16.7	16.5	16.4	16.9	14.6	15.0	14.8	13.3	14.1	13.4	13.5
16 to 17 years .....	18.9	20.2	20.9	20.0	19.9	19.7	15.3	16.9	19.2	17.7	16.5	15.4	15.8
18 to 19 years .....	14.2	15.1	13.7	14.4	14.0	14.7	14.1	13.6	12.2	10.6	12.8	11.8	12.3
20 to 24 years .....	8.5	8.6	7.5	6.6	7.3	7.1	7.5	7.0	8.0	8.3	8.7	8.3	7.6
25 years and over .....	3.2	3.2	3.2	3.1	3.2	3.0	3.2	2.7	2.9	3.1	3.0	3.0	3.1
25 to 54 years .....	3.3	3.2	3.3	3.1	3.2	3.1	3.3	2.8	2.9	3.1	3.0	2.9	3.2
55 years and over .....	2.6	3.0	2.9	3.1	3.1	2.8	3.0	2.6	2.6	2.7	2.6	3.2	2.9
Women, 16 years and over .....	4.7	4.5	4.7	4.6	4.3	4.3	4.5	4.5	4.6	4.1	4.4	4.5	4.3
16 to 24 years .....	10.4	9.8	10.1	9.5	8.7	9.5	10.2	10.0	9.5	8.6	9.0	8.9	9.4
16 to 19 years .....	13.8	12.9	14.8	13.3	11.3	13.9	13.7	13.6	13.4	11.8	12.9	11.9	13.4
16 to 17 years .....	15.3	14.9	15.4	15.9	13.8	16.9	15.7	16.2	14.5	13.8	15.7	13.8	15.8
18 to 19 years .....	12.8	11.9	14.3	11.4	10.2	11.5	12.1	11.9	12.5	10.6	10.7	11.0	11.9
20 to 24 years .....	8.2	7.8	7.1	7.1	7.1	6.7	8.0	7.8	7.1	6.7	6.7	7.1	7.0
25 years and over .....	3.5	3.6	3.6	3.6	3.5	3.4	3.3	3.4	3.6	3.2	3.5	3.6	3.3
25 to 54 years .....	3.7	3.7	3.8	3.8	3.6	3.5	3.5	3.5	3.7	3.4	3.5	3.7	3.4
55 years and over .....	2.7	2.3	2.5	2.9	2.8	3.1	2.7	3.2	3.3	2.6	3.5	2.9	2.3

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Percent)

Category	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug
<b>CHARACTERISTIC</b>													
Total .....	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2	4.3	4.3	4.2
Men, 20 years and over .....	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6	3.6	3.5	3.6
Women, 20 years and over .....	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6	3.9	4.0	3.7
Both sexes, 16 to 19 years .....	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6	13.5	12.7	13.5
White .....	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7	3.8	3.7	3.7
Black and other .....	7.6	7.9	7.6	7.5	7.0	6.9	7.4	7.2	6.9	6.7	6.6	7.3	6.8
Black .....	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5	7.3	8.8	7.8
Hispanic origin .....	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7	6.8	6.2	6.5
Married men, spouse present .....	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.1	2.3	2.4	2.2	2.3	2.3
Married women, spouse present .....	3.1	2.7	2.8	2.9	2.8	2.8	2.8	2.7	2.9	2.5	2.7	2.9	2.7
Women who maintain families .....	6.8	7.6	6.9	6.9	6.3	6.1	6.5	6.7	7.2	6.0	6.6	6.4	6.4
<b>OCCUPATION<sup>1</sup></b>													
Managerial and professional specialty .....	1.9	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	1.9	1.8
Technical, sales, and administrative support .....	3.7	3.9	3.9	3.7	3.7	3.8	3.9	3.8	3.9	3.3	3.6	4.0	3.6
Precision production, craft, and repair .....	4.5	4.3	4.0	3.8	3.2	3.5	4.4	3.6	3.8	4.1	4.9	3.8	4.6
Operators, fabricators, and laborers .....	6.6	7.0	6.8	6.7	6.7	5.9	6.0	5.9	6.5	6.5	6.0	6.3	6.2
Farming, forestry, and fishing .....	5.9	7.0	5.4	6.3	7.5	7.7	7.8	6.9	7.3	8.0	7.5	6.4	6.2
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers ...	4.7	4.8	4.6	4.5	4.4	4.3	4.3	4.2	4.4	4.2	4.4	4.4	4.3
Goods-producing industries .....	4.8	5.1	4.6	4.6	4.6	4.6	4.7	4.3	4.5	4.4	4.7	4.4	5.0
Mining .....	3.6	3.0	2.4	2.2	4.3	7.4	7.7	5.3	9.3	5.9	4.7	6.4	4.0
Construction .....	7.4	8.6	6.7	7.0	6.4	7.3	7.5	6.7	7.4	7.2	7.5	6.7	7.9
Manufacturing .....	3.9	4.0	3.9	3.8	4.0	3.5	3.7	3.4	3.3	3.4	3.8	3.5	3.9
Durable goods .....	3.5	3.7	3.2	3.2	3.4	3.4	3.3	2.9	3.1	3.3	3.6	3.8	3.7
Nondurable goods .....	4.5	4.6	5.1	4.8	4.9	3.8	4.3	4.1	3.7	3.6	4.0	3.0	4.2
Service-producing industries .....	4.7	4.6	4.7	4.5	4.4	4.2	4.2	4.2	4.3	4.1	4.3	4.4	4.0
Transportation and public utilities .....	3.5	3.5	3.5	3.2	3.2	2.5	3.2	2.9	2.8	3.3	2.8	3.6	3.1
Wholesale and retail trade .....	5.6	5.7	5.6	5.2	5.5	5.2	5.2	5.4	5.4	5.3	5.4	5.2	4.8
Finance, insurance, and real estate .....	2.7	2.4	2.5	2.8	2.8	2.4	2.4	1.9	3.2	2.1	2.3	2.3	2.4
Services .....	4.7	4.5	4.7	4.6	4.1	4.1	4.0	4.2	4.1	3.9	4.2	4.5	4.0
Government workers .....	2.2	2.2	2.2	2.1	2.0	2.2	2.3	2.1	2.5	2.6	2.4	2.3	2.1
Agricultural wage and salary workers .....	7.4	7.9	6.7	7.6	8.3	9.6	11.3	9.5	9.7	10.7	9.6	8.9	9.8

<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 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Reason	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>NUMBER OF UNEMPLOYED</b>													
Job losers and persons who completed temporary jobs .....	2,834	2,865	2,813	2,758	2,754	2,696	2,738	2,563	2,700	2,663	2,683	2,740	2,662
On temporary layoff .....	937	909	857	850	841	864	849	812	838	821	892	850	929
Not on temporary layoff .....	1,897	1,956	1,956	1,908	1,913	1,832	1,889	1,751	1,862	1,842	1,791	1,890	1,734
Job leavers .....	734	727	730	677	709	699	751	780	841	789	864	755	797
Reentrants .....	2,124	2,161	2,142	2,130	2,031	1,993	2,110	1,988	2,044	2,040	2,057	2,011	1,896
New entrants .....	507	501	577	534	504	537	509	431	469	415	349	402	483
<b>PERCENT DISTRIBUTION</b>													
Job losers and persons who completed temporary jobs .....	45.7	45.8	44.9	45.2	45.9	45.5	44.8	44.5	44.6	45.1	45.1	46.4	45.6
On temporary layoff .....	15.1	14.5	13.7	13.9	14.0	14.6	13.9	14.1	13.9	13.9	15.0	14.4	15.9
Not on temporary layoff .....	30.6	31.3	31.2	31.3	31.9	30.9	30.9	30.4	30.8	31.2	30.1	32.0	29.7
Job leavers .....	11.8	11.6	11.7	11.1	11.8	11.8	12.3	13.5	13.9	13.4	14.5	12.8	13.6
Reentrants .....	34.3	34.6	34.2	34.9	33.9	33.6	34.5	34.5	33.8	34.5	34.6	34.0	32.5
New entrants .....	8.2	8.0	9.2	8.8	8.4	9.1	8.3	7.5	7.7	7.0	5.9	6.8	8.3
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers and persons who completed temporary jobs .....	2.1	2.1	2.0	2.0	2.0	1.9	2.0	1.8	1.9	1.9	1.9	2.0	1.9
Job leavers .....	.5	.5	.5	.5	.5	.5	.5	.6	.6	.6	.6	.5	.6
Reentrants .....	1.5	1.6	1.6	1.5	1.5	1.4	1.5	1.4	1.5	1.5	1.5	1.4	1.4
New entrants .....	.4	.4	.4	.4	.4	.4	.4	.3	.3	.3	.3	.3	.3

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Duration	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>NUMBER OF UNEMPLOYED</b>													
Less than 5 weeks .....	2,652	2,638	2,754	2,546	2,614	2,353	2,601	2,478	2,788	2,467	2,529	2,680	2,621
5 to 14 weeks .....	1,956	1,968	1,896	1,983	1,839	2,071	1,944	1,891	1,867	1,816	1,736	1,766	1,810
15 weeks and over .....	1,644	1,636	1,598	1,611	1,578	1,469	1,550	1,434	1,446	1,523	1,668	1,505	1,449
15 to 26 weeks .....	810	732	732	752	754	753	766	736	773	794	824	787	745
27 weeks and over .....	834	904	866	859	824	716	784	697	673	729	844	718	704
Average (mean) duration, in weeks .....	13.7	14.3	14.1	14.4	14.1	13.4	13.8	13.5	13.1	13.4	14.5	13.6	13.2
Median duration, in weeks .....	6.8	6.6	5.9	6.7	6.7	6.9	7.0	6.9	6.1	6.7	6.2	5.7	6.5
<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 .....	42.4	42.3	44.1	41.5	43.3	39.9	42.7	42.7	45.7	42.5	42.6	45.0	44.6
5 to 14 weeks .....	31.3	31.5	30.3	32.3	30.5	35.1	31.9	32.6	30.6	31.3	29.3	29.7	30.8
15 weeks and over .....	26.3	26.2	25.6	26.2	26.2	24.9	25.4	24.7	23.7	26.2	28.1	25.3	24.6
15 to 26 weeks .....	13.0	11.7	11.7	12.2	12.5	12.8	12.6	12.7	12.7	13.7	13.9	13.2	12.7
27 weeks and over .....	13.3	14.5	13.9	14.0	13.7	12.1	12.9	12.0	11.0	12.6	14.2	12.1	12.0

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	Civilian noninstitutional population	August 1999								
		Total	Percent of population	Civilian labor force				Unemployed		Not in labor force
				Employed		Number	Percent of labor force			
				Total	Percent of population			Agri-culture	Nonagri-cultural industries	
<b>TOTAL</b>										
16 years and over .....	208,038	140,090	67.3	134,264	64.5	3,525	130,739	5,826	4.2	67,948
16 to 19 years .....	16,061	9,014	56.1	7,962	49.6	309	7,653	1,051	11.7	7,048
16 to 17 years .....	8,070	3,716	46.0	3,237	40.1	146	3,091	479	12.9	4,354
18 to 19 years .....	7,991	5,298	66.3	4,725	59.1	163	4,562	572	10.8	2,694
20 to 24 years .....	17,999	14,315	79.5	13,258	73.7	382	12,876	1,057	7.4	3,684
25 to 54 years .....	118,369	99,082	83.7	95,855	81.0	2,123	93,732	3,227	3.3	19,287
25 to 34 years .....	37,810	31,879	84.3	30,625	81.0	679	29,947	1,253	3.9	5,931
25 to 29 years .....	18,263	15,377	84.2	14,704	80.5	346	14,358	673	4.4	2,886
30 to 34 years .....	19,547	16,502	84.4	15,921	81.4	333	15,588	581	3.5	3,046
35 to 44 years .....	44,794	37,842	84.5	36,611	81.7	838	35,773	1,231	3.3	6,952
35 to 39 years .....	22,464	18,867	84.0	18,223	81.1	423	17,800	644	3.4	3,597
40 to 44 years .....	22,329	18,975	85.0	18,388	82.3	416	17,972	587	3.1	3,354
45 to 54 years .....	35,765	29,361	82.1	28,619	80.0	606	28,013	742	2.5	6,404
45 to 49 years .....	19,383	16,308	84.1	15,867	81.9	361	15,506	441	2.7	3,075
50 to 54 years .....	16,382	13,053	79.7	12,752	77.8	245	12,507	301	2.3	3,329
55 to 64 years .....	23,065	13,708	59.4	13,338	57.8	432	12,906	370	2.7	9,357
55 to 59 years .....	12,739	8,875	69.7	8,639	67.8	234	8,405	236	2.7	3,864
60 to 64 years .....	10,326	4,833	46.8	4,699	45.5	198	4,501	134	2.8	5,493
65 years and over .....	32,545	3,972	12.2	3,851	11.8	280	3,571	121	3.1	28,573
65 to 69 years .....	9,274	2,079	22.4	2,016	21.7	98	1,917	64	3.1	7,195
70 to 74 years .....	8,633	1,111	12.9	1,080	12.5	78	1,001	31	2.8	7,522
75 years and over .....	14,637	782	5.3	755	5.2	103	652	26	3.3	13,856
<b>Men</b>										
16 years and over .....	99,863	75,190	75.3	72,348	72.4	2,617	69,731	2,842	3.8	24,674
16 to 19 years .....	8,171	4,681	57.3	4,138	50.6	240	3,898	543	11.6	3,490
16 to 17 years .....	4,142	1,954	47.2	1,708	41.3	114	1,594	246	12.6	2,188
18 to 19 years .....	4,030	2,727	67.7	2,430	60.3	126	2,304	297	10.9	1,303
20 to 24 years .....	8,919	7,572	84.9	7,035	78.9	309	6,726	537	7.1	1,348
25 to 54 years .....	57,977	53,119	91.6	51,622	89.0	1,542	50,080	1,497	2.8	4,858
25 to 34 years .....	18,470	17,255	93.4	16,647	90.1	487	16,160	608	3.5	1,215
25 to 29 years .....	8,861	8,216	92.7	7,898	89.1	257	7,641	318	3.9	645
30 to 34 years .....	9,609	9,039	94.1	8,749	91.0	231	8,519	290	3.2	570
35 to 44 years .....	22,058	20,444	92.7	19,910	90.3	627	19,283	535	2.6	1,613
35 to 39 years .....	11,084	10,303	93.0	10,040	90.6	330	9,710	263	2.6	781
40 to 44 years .....	10,974	10,141	92.4	9,870	89.9	296	9,573	271	2.7	833
45 to 54 years .....	17,449	15,419	88.4	15,065	86.3	427	14,637	354	2.3	2,030
45 to 49 years .....	9,487	8,557	90.2	8,352	88.0	268	8,084	206	2.4	929
50 to 54 years .....	7,962	6,862	86.2	6,713	84.3	160	6,553	148	2.2	1,101
55 to 64 years .....	10,985	7,478	68.1	7,292	66.4	314	6,978	187	2.5	3,507
55 to 59 years .....	6,110	4,790	78.4	4,672	76.5	168	4,504	117	2.4	1,320
60 to 64 years .....	4,875	2,689	55.2	2,619	53.7	145	2,474	70	2.6	2,187
65 years and over .....	13,811	2,340	16.9	2,261	16.4	213	2,049	79	3.4	11,471
65 to 69 years .....	4,251	1,199	28.2	1,160	27.3	77	1,083	39	3.2	3,052
70 to 74 years .....	3,854	666	17.3	650	16.9	56	594	17	2.5	3,188
75 years and over .....	5,706	475	8.3	451	7.9	80	372	23	4.9	5,231
<b>Women</b>										
16 years and over .....	108,175	64,900	60.0	61,917	57.2	908	61,008	2,984	4.6	43,275
16 to 19 years .....	7,890	4,333	54.9	3,824	48.5	69	3,755	508	11.7	3,557
16 to 17 years .....	3,928	1,762	44.9	1,528	38.9	32	1,497	234	13.3	2,166
18 to 19 years .....	3,962	2,571	64.9	2,296	58.0	37	2,259	275	10.7	1,391
20 to 24 years .....	9,080	6,743	74.3	6,223	68.5	73	6,150	520	7.7	2,337
25 to 54 years .....	60,392	45,963	76.1	44,233	73.2	581	43,652	1,730	3.8	14,429
25 to 34 years .....	19,340	14,624	75.6	13,978	72.3	191	13,787	646	4.4	4,716
25 to 29 years .....	9,402	7,161	76.2	6,806	72.4	89	6,717	355	5.0	2,241
30 to 34 years .....	9,938	7,462	75.1	7,172	72.2	102	7,070	291	3.9	2,476
35 to 44 years .....	22,736	17,398	76.5	16,701	73.5	211	16,490	697	4.0	5,338
35 to 39 years .....	11,380	8,563	75.2	8,183	71.9	92	8,090	381	4.4	2,817
40 to 44 years .....	11,356	8,834	77.8	8,518	75.0	119	8,399	316	3.6	2,521
45 to 54 years .....	18,316	13,942	76.1	13,554	74.0	179	13,376	388	2.8	4,374
45 to 49 years .....	9,896	7,750	78.3	7,515	75.9	93	7,422	235	3.0	2,146
50 to 54 years .....	8,420	6,191	73.5	6,039	71.7	86	5,953	153	2.5	2,228
55 to 64 years .....	12,080	6,230	51.6	6,047	50.1	118	5,929	183	2.9	5,850
55 to 59 years .....	6,629	4,086	61.6	3,967	59.8	66	3,901	119	2.9	2,544
60 to 64 years .....	5,451	2,144	39.3	2,080	38.2	53	2,028	64	3.0	3,306
65 years and over .....	18,734	1,632	8.7	1,589	8.5	67	1,522	43	2.6	17,102
65 to 69 years .....	5,024	881	17.5	855	17.0	21	834	25	2.9	4,143
70 to 74 years .....	4,779	445	9.3	430	9.0	23	408	14	3.3	4,334
75 years and over .....	8,931	307	3.4	304	3.4	23	281	3	.9	8,624

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	Civilian noninstitutional population	August 1999								Not in labor force	
		Civilian labor force							Unemployed		
		Total	Percent of population	Employed				Number			Percent of labor force
				Total	Percent of population	Agriculture	Nonagricultural industries				
<b>WHITE</b>											
16 years and over .....	173,275	117,093	67.6	112,846	65.1	3,340	109,507	4,246	3.6	56,182	
16 to 19 years .....	12,736	7,620	59.8	6,890	54.1	306	6,585	730	9.6	5,116	
16 to 17 years .....	6,362	3,171	49.8	2,809	44.2	145	2,663	362	11.4	3,191	
18 to 19 years .....	6,374	4,449	69.8	4,081	64.0	160	3,921	368	8.3	1,925	
20 to 24 years .....	14,431	11,720	81.2	10,979	76.1	359	10,620	742	6.3	2,711	
25 to 54 years .....	97,363	82,121	84.3	79,759	81.9	1,993	77,765	2,362	2.9	15,242	
25 to 34 years .....	30,428	25,782	84.7	24,939	82.0	650	24,289	843	3.3	4,646	
25 to 29 years .....	14,592	12,397	85.0	11,945	81.9	337	11,608	452	3.6	2,196	
30 to 34 years .....	15,836	13,386	84.5	12,994	82.1	313	12,681	391	2.9	2,450	
35 to 44 years .....	36,775	31,288	85.1	30,362	82.6	779	29,583	925	3.0	5,487	
35 to 39 years .....	18,376	15,502	84.4	15,025	81.8	403	14,622	476	3.1	2,874	
40 to 44 years .....	18,399	15,786	85.8	15,337	83.4	375	14,961	449	2.8	2,613	
45 to 54 years .....	30,159	25,051	83.1	24,458	81.1	565	23,893	593	2.4	5,108	
45 to 49 years .....	16,217	13,791	85.0	13,456	83.0	336	13,119	336	2.4	2,426	
50 to 54 years .....	13,942	11,260	80.8	11,002	78.9	229	10,773	258	2.3	2,683	
55 to 64 years .....	19,893	12,031	60.5	11,721	58.9	417	11,304	310	2.6	7,862	
55 to 59 years .....	10,990	7,775	70.7	7,579	69.0	224	7,355	196	2.5	3,215	
60 to 64 years .....	8,903	4,256	47.8	4,142	46.5	192	3,950	114	2.7	4,647	
65 years and over .....	28,853	3,601	12.5	3,498	12.1	265	3,232	103	2.9	25,252	
65 to 69 years .....	8,045	1,863	23.2	1,813	22.5	89	1,724	50	2.7	6,181	
70 to 74 years .....	7,595	1,012	13.3	983	12.9	78	905	29	2.9	6,583	
75 years and over .....	13,213	725	5.5	701	5.3	98	604	24	3.3	12,488	
<b>Men</b>											
16 years and over .....	84,028	64,049	76.2	61,901	73.7	2,465	59,436	2,148	3.4	19,979	
16 to 19 years .....	6,518	3,986	61.2	3,598	55.2	240	3,358	388	9.7	2,532	
16 to 17 years .....	3,276	1,648	50.3	1,461	44.6	114	1,347	187	11.3	1,628	
18 to 19 years .....	3,242	2,338	72.1	2,136	65.9	126	2,011	201	8.6	904	
20 to 24 years .....	7,261	6,368	87.7	5,967	82.2	286	5,680	401	6.3	893	
25 to 54 years .....	48,344	44,899	92.9	43,775	90.5	1,439	42,336	1,124	2.5	3,445	
25 to 34 years .....	15,105	14,267	94.5	13,836	91.6	463	13,373	431	3.0	838	
25 to 29 years .....	7,227	6,795	94.0	6,572	90.9	247	6,325	223	3.3	432	
30 to 34 years .....	7,878	7,472	94.9	7,264	92.2	216	7,048	208	2.8	406	
35 to 44 years .....	18,348	17,241	94.0	16,829	91.7	577	16,252	412	2.4	1,107	
35 to 39 years .....	9,168	8,634	94.2	8,435	92.0	311	8,124	199	2.3	533	
40 to 44 years .....	9,181	8,607	93.7	8,394	91.4	266	8,128	213	2.5	574	
45 to 54 years .....	14,890	13,390	89.9	13,109	88.0	399	12,710	281	2.1	1,500	
45 to 49 years .....	8,039	7,223	91.7	7,223	89.9	254	6,969	152	2.1	664	
50 to 54 years .....	6,851	6,015	87.8	5,886	85.9	145	5,742	129	2.1	836	
55 to 64 years .....	9,609	6,486	69.2	6,486	67.5	302	6,185	160	2.4	2,962	
55 to 59 years .....	5,338	4,248	79.6	4,145	77.7	161	3,984	102	2.4	1,091	
60 to 64 years .....	4,271	2,399	56.2	2,341	54.8	141	2,201	58	2.4	1,872	
65 years and over .....	12,296	2,149	17.5	2,075	16.9	198	1,878	74	3.4	10,147	
65 to 69 years .....	3,733	1,095	29.3	1,057	28.3	68	989	39	3.5	2,638	
70 to 74 years .....	3,402	612	18.0	598	17.6	56	542	15	2.4	2,789	
75 years and over .....	5,162	442	8.6	421	8.2	74	347	21	4.8	4,720	
<b>Women</b>											
16 years and over .....	89,248	53,044	59.4	50,945	57.1	875	50,071	2,099	4.0	36,204	
16 to 19 years .....	6,218	3,634	58.4	3,293	53.0	66	3,227	342	9.4	2,584	
16 to 17 years .....	3,085	1,523	49.3	1,348	43.7	31	1,316	175	11.5	1,563	
18 to 19 years .....	3,133	2,112	67.4	1,945	62.1	34	1,911	167	7.9	1,021	
20 to 24 years .....	7,170	5,352	74.6	5,012	69.9	73	4,939	340	6.4	1,818	
25 to 54 years .....	49,019	37,222	75.9	35,984	73.4	555	35,429	1,238	3.3	11,797	
25 to 34 years .....	15,323	11,515	75.1	11,103	72.5	187	10,916	412	3.6	3,808	
25 to 29 years .....	7,365	5,602	76.1	5,373	72.9	89	5,283	229	4.1	1,763	
30 to 34 years .....	7,958	5,913	74.3	5,730	72.0	97	5,633	183	3.1	2,045	
35 to 44 years .....	18,426	14,046	76.2	13,533	73.4	202	13,331	513	3.7	4,380	
35 to 39 years .....	9,208	6,867	74.6	6,590	71.6	92	6,498	277	4.0	2,341	
40 to 44 years .....	9,218	7,179	77.9	6,943	75.3	110	6,833	236	3.3	2,039	
45 to 54 years .....	15,269	11,661	76.4	11,348	74.3	166	11,182	313	2.7	3,608	
45 to 49 years .....	8,178	6,416	78.5	6,233	76.2	82	6,151	184	2.9	1,761	
50 to 54 years .....	7,092	5,244	74.0	5,116	72.1	84	5,031	129	2.5	1,847	
55 to 64 years .....	10,284	5,384	52.4	5,235	50.9	115	5,120	150	2.8	4,900	
55 to 59 years .....	5,652	3,528	62.4	3,434	60.7	63	3,371	94	2.7	2,125	
60 to 64 years .....	4,632	1,856	40.1	1,801	38.9	52	1,749	56	3.0	2,775	
65 years and over .....	16,556	1,451	8.8	1,422	8.6	67	1,355	29	2.0	15,105	
65 to 69 years .....	4,312	768	17.8	756	17.5	21	735	12	1.5	3,544	
70 to 74 years .....	4,193	400	9.5	386	9.2	23	363	14	3.6	3,793	
75 years and over .....	8,051	283	3.5	280	3.5	23	257	3	1.0	7,768	

See footnotes at end of table.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	August 1999									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force	
<b>BLACK</b>										
16 years and over .....	24,904	16,474	66.2	15,156	60.9	118	15,039	1,318	8.0	8,430
16 to 19 years .....	2,484	1,052	42.3	770	31.0	3	767	282	26.8	1,432
16 to 17 years .....	1,256	399	31.8	301	24.0	-	301	98	24.5	856
18 to 19 years .....	1,229	653	53.1	469	38.2	3	466	184	28.2	576
20 to 24 years .....	2,623	1,973	75.2	1,695	64.6	18	1,676	278	14.1	651
25 to 54 years .....	14,746	12,003	81.4	11,303	76.6	73	11,230	700	5.8	2,743
25 to 34 years .....	5,189	4,400	84.8	4,050	78.0	16	4,034	350	8.0	789
25 to 29 years .....	2,554	2,161	84.6	1,964	76.9	6	1,959	197	9.1	393
30 to 34 years .....	2,635	2,239	85.0	2,086	79.1	11	2,075	153	6.8	396
35 to 44 years .....	5,620	4,625	82.3	4,390	78.1	35	4,354	236	5.1	995
35 to 39 years .....	2,867	2,363	82.4	2,241	78.2	15	2,226	122	5.2	504
40 to 44 years .....	2,753	2,262	82.2	2,149	78.1	21	2,128	113	5.0	491
45 to 54 years .....	3,937	2,978	75.6	2,863	72.7	21	2,842	115	3.9	959
45 to 49 years .....	2,260	1,792	79.3	1,709	75.7	15	1,695	82	4.6	468
50 to 54 years .....	1,677	1,186	70.7	1,154	68.8	6	1,148	33	2.8	491
55 to 64 years .....	2,298	1,889	51.7	1,144	49.8	13	1,132	45	3.7	1,110
55 to 59 years .....	1,253	771	61.5	740	59.0	10	730	31	4.0	482
60 to 64 years .....	1,045	418	40.0	404	38.7	3	401	14	3.2	627
65 years and over .....	2,752	258	9.4	245	8.9	11	233	13	5.2	2,494
65 to 69 years .....	927	145	15.7	137	14.7	6	131	9	6.0	781
70 to 74 years .....	758	64	8.4	61	8.1	-	61	2	(1)	694
75 years and over .....	1,068	49	4.6	47	4.4	5	42	2	(1)	1,018
<b>Men</b>										
16 years and over .....	11,167	7,688	68.8	7,124	63.8	106	7,018	564	7.3	3,479
16 to 19 years .....	1,221	505	41.3	364	29.8	-	364	140	27.8	716
16 to 17 years .....	630	218	34.6	168	26.7	-	168	50	22.9	413
18 to 19 years .....	591	287	48.6	196	33.2	-	196	91	31.6	304
20 to 24 years .....	1,201	899	74.9	787	65.6	18	769	112	12.4	302
25 to 54 years .....	6,661	5,596	84.0	5,305	79.6	66	5,240	290	5.2	1,065
25 to 34 years .....	2,317	2,058	88.8	1,911	82.5	16	1,895	147	7.1	259
25 to 29 years .....	1,126	993	88.2	911	80.8	6	905	83	8.3	133
30 to 34 years .....	1,191	1,064	89.4	1,000	84.0	11	990	64	6.1	126
35 to 44 years .....	2,571	2,171	84.5	2,093	81.4	33	2,060	78	3.6	400
35 to 39 years .....	1,305	1,104	84.6	1,070	82.0	15	1,055	35	3.1	201
40 to 44 years .....	1,266	1,067	84.3	1,023	80.8	18	1,005	44	4.1	199
45 to 54 years .....	1,773	1,367	77.1	1,302	73.4	17	1,285	65	4.8	406
45 to 49 years .....	1,027	825	80.4	778	75.8	11	768	47	5.7	202
50 to 54 years .....	746	542	72.6	524	70.2	33	518	18	3.3	205
55 to 64 years .....	975	566	58.0	549	56.3	10	539	17	2.9	409
55 to 59 years .....	540	359	66.5	349	64.6	7	342	10	2.9	181
60 to 64 years .....	435	207	47.5	201	46.1	3	198	6	3.0	228
65 years and over .....	1,109	123	11.0	118	10.6	11	106	5	3.9	987
65 to 69 years .....	395	64	16.3	64	16.3	6	58	-	(1)	331
70 to 74 years .....	330	30	9.1	28	8.4	-	28	2	(1)	300
75 years and over .....	384	28	7.3	26	6.7	5	20	2	(1)	356
<b>Women</b>										
16 years and over .....	13,738	8,787	64.0	8,033	58.5	12	8,020	754	8.6	4,951
16 to 19 years .....	1,263	547	43.3	406	32.1	3	403	142	25.9	716
16 to 17 years .....	625	181	29.0	133	21.3	-	133	48	26.6	444
18 to 19 years .....	638	366	57.4	272	42.7	3	270	94	25.6	272
20 to 24 years .....	1,422	1,074	75.5	908	63.8	-	908	166	15.5	349
25 to 54 years .....	8,085	6,407	79.2	5,997	74.2	7	5,990	410	6.4	1,678
25 to 34 years .....	2,872	2,342	81.5	2,139	74.5	-	2,139	203	8.7	530
25 to 29 years .....	1,428	1,168	81.8	1,054	73.8	-	1,054	114	9.8	260
30 to 34 years .....	1,444	1,174	81.3	1,086	75.2	-	1,086	89	7.6	270
35 to 44 years .....	3,050	2,454	80.5	2,297	75.3	3	2,294	157	6.4	595
35 to 39 years .....	1,562	1,259	80.6	1,171	75.0	-	1,171	88	7.0	303
40 to 44 years .....	1,487	1,195	80.4	1,126	75.7	3	1,123	70	5.8	292
45 to 54 years .....	2,164	1,611	74.4	1,561	72.1	4	1,557	50	3.1	553
45 to 49 years .....	1,233	966	78.4	931	75.6	4	927	35	3.6	266
50 to 54 years .....	931	645	69.2	630	67.6	-	630	15	2.3	287
55 to 64 years .....	1,324	623	47.1	595	45.0	3	592	28	4.5	701
55 to 59 years .....	713	412	57.7	391	54.8	3	389	21	5.0	301
60 to 64 years .....	610	211	34.6	204	33.4	-	204	7	3.4	399
65 years and over .....	1,643	136	8.3	127	7.7	-	127	9	6.4	1,507
65 to 69 years .....	531	81	15.2	72	13.6	-	72	9	10.7	450
70 to 74 years .....	428	33	7.8	33	7.8	-	33	-	(1)	394
75 years and over .....	684	21	3.1	21	3.1	-	21	-	(1)	663

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

the household survey.

NOTE: Beginning in January 1999, data reflect revised population controls used in

**A-15. Employment status of the civilian noninstitutional population by race, sex, and age**

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>TOTAL</b>								
Civilian noninstitutional population .....	205,479	208,038	90,889	91,692	98,901	100,285	15,689	16,061
Civilian labor force .....	138,379	140,090	69,823	70,509	59,426	60,568	9,130	9,014
Percent of population .....	67.3	67.3	76.8	76.9	60.1	60.4	58.2	56.1
Employed .....	132,206	134,264	67,464	68,210	56,786	58,093	7,955	7,962
Agriculture .....	3,818	3,525	2,556	2,377	883	840	379	309
Nonagricultural industries .....	128,388	130,739	64,908	65,833	55,903	57,253	7,577	7,653
Unemployed .....	6,173	5,826	2,359	2,299	2,639	2,475	1,175	1,051
Unemployment rate .....	4.5	4.2	3.4	3.3	4.4	4.1	12.9	11.7
Not in labor force .....	67,100	67,948	21,066	21,183	39,476	39,717	6,559	7,048
<b>White</b>								
Civilian noninstitutional population .....	171,655	173,275	77,030	77,510	82,127	83,030	12,497	12,736
Civilian labor force .....	115,959	117,093	59,515	60,063	48,763	49,410	7,681	7,620
Percent of population .....	67.6	67.6	77.3	77.5	59.4	59.5	61.5	59.8
Employed .....	111,511	112,846	57,787	58,303	46,861	47,653	6,863	6,890
Agriculture .....	3,529	3,340	2,349	2,225	835	809	345	306
Nonagricultural industries .....	107,982	109,507	55,438	56,078	46,026	46,843	6,518	6,585
Unemployed .....	4,448	4,246	1,728	1,760	1,902	1,757	818	730
Unemployment rate .....	3.8	3.6	2.9	2.9	3.9	3.6	10.7	9.6
Not in labor force .....	55,696	56,182	17,516	17,447	33,364	33,620	4,816	5,116
<b>Black</b>								
Civilian noninstitutional population .....	24,418	24,904	9,743	9,946	12,222	12,475	2,453	2,484
Civilian labor force .....	16,129	16,474	7,055	7,183	7,912	8,239	1,161	1,052
Percent of population .....	66.1	66.2	72.4	72.2	64.7	66.1	47.3	42.3
Employed .....	14,663	15,156	6,548	6,760	7,267	7,627	848	770
Agriculture .....	175	118	139	106	20	9	16	3
Nonagricultural industries .....	14,488	15,039	6,409	6,654	7,247	7,618	832	767
Unemployed .....	1,466	1,318	507	424	645	613	313	282
Unemployment rate .....	9.1	8.0	7.2	5.9	8.2	7.4	27.0	26.8
Not in labor force .....	8,289	8,430	2,687	2,763	4,310	4,235	1,292	1,432

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**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**

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	August 1999									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			
				Total	Full time	Part time	Total	Looking for full-time work	Looking for part-time work	Percent of labor force
<b>TOTAL ENROLLED</b>										
Total, 16 to 24 years .....	9,768	4,744	48.6	4,363	1,711	2,652	381	147	234	8.0
16 to 19 years .....	6,437	2,710	42.1	2,442	695	1,747	268	87	181	9.9
20 to 24 years .....	3,331	2,034	61.1	1,920	1,015	905	113	60	53	5.6
High school .....	4,390	1,576	35.9	1,379	274	1,105	197	59	138	12.5
College .....	5,377	3,168	58.9	2,984	1,437	1,547	184	88	96	5.8
Full-time students .....	4,441	2,361	53.2	2,211	963	1,249	149	58	92	6.3
Part-time students .....	936	807	86.2	773	474	298	34	31	4	4.3
Men, 16 to 24 years .....	4,780	2,274	47.6	2,067	854	1,213	207	90	117	9.1
16 to 19 years .....	3,254	1,371	42.1	1,217	390	827	154	58	95	11.2
20 to 24 years .....	1,526	903	59.1	849	463	386	53	32	22	5.9
High school .....	2,347	890	37.9	767	171	596	123	47	76	13.8
College .....	2,433	1,384	56.9	1,300	682	617	84	43	41	6.1
Full-time students .....	2,045	1,048	51.2	976	477	499	72	33	38	6.8
Part-time students .....	388	336	86.7	324	206	118	12	10	3	3.7
Women, 16 to 24 years .....	4,988	2,470	49.5	2,296	857	1,439	174	57	117	7.0
16 to 19 years .....	3,183	1,339	42.1	1,225	305	920	114	29	85	8.5
20 to 24 years .....	1,804	1,131	62.7	1,071	552	519	60	28	31	5.3
High school .....	2,043	686	33.6	612	103	509	74	12	62	10.8
College .....	2,945	1,784	60.6	1,684	754	930	100	45	55	5.6
Full-time students .....	2,397	1,313	54.8	1,235	486	749	78	24	53	5.9
Part-time students .....	548	471	85.9	449	268	181	22	21	1	4.7
<b>White</b>										
Total, 16 to 24 years .....	7,528	3,924	52.1	3,667	1,428	2,239	258	74	184	6.6
16 to 19 years .....	4,960	2,282	46.0	2,099	590	1,510	182	47	135	8.0
20 to 24 years .....	2,568	1,642	64.0	1,567	838	729	75	27	48	4.6
Men .....	3,724	1,876	50.4	1,743	715	1,029	133	47	86	7.1
Women .....	3,804	2,048	53.8	1,923	713	1,210	124	27	98	6.1
High school .....	3,344	1,322	39.5	1,186	239	946	137	25	111	10.3
College .....	4,184	2,602	62.2	2,481	1,188	1,293	121	48	73	4.6
Full-time students .....	3,440	1,948	56.6	1,847	786	1,062	101	32	70	5.2
Part-time students .....	743	654	87.9	634	403	231	20	17	3	3.0
<b>Black</b>										
Total, 16 to 24 years .....	1,557	583	37.5	478	203	275	106	68	38	18.1
16 to 19 years .....	1,096	313	28.6	240	66	174	73	38	35	23.2
20 to 24 years .....	462	270	58.6	237	137	101	33	30	3	12.2
Men .....	729	281	38.5	210	102	109	71	40	31	25.1
Women .....	828	302	36.5	267	101	166	35	28	7	11.7
High school .....	794	183	23.0	127	21	107	55	31	24	30.2
College .....	763	401	52.5	350	182	168	51	36	14	12.6
Full-time students .....	638	294	46.1	257	130	127	37	23	14	12.5
Part-time students .....	125	106	84.9	93	52	41	14	14	-	12.8
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	1,249	484	38.7	433	143	291	51	13	38	10.5
16 to 19 years .....	925	278	30.1	236	48	188	42	13	30	15.2
20 to 24 years .....	324	206	63.5	198	95	103	8	-	8	4.0
Men .....	623	223	35.8	198	73	126	25	6	18	11.0
Women .....	626	261	41.6	235	70	165	26	7	19	10.0
High school .....	748	179	24.0	150	24	126	29	5	25	16.4
College .....	502	304	60.7	283	119	164	21	8	13	7.0
Full-time students .....	391	224	57.2	206	78	128	18	7	11	8.0
Part-time students .....	110	81	73.1	77	41	36	3	2	1	4.0

See footnotes at end of table.



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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	August 1999									
	Civilian noninstitutional population	Civilian labor force								Percent of labor force
		Total	Percent of population	Employed			Unemployed			
			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 .....	24,292	18,585	76.5	16,857	12,348	4,509	1,727	1,394	334	9.3
16 to 19 years .....	9,624	6,304	65.5	5,520	2,868	2,652	784	518	266	12.4
20 to 24 years .....	14,668	12,281	83.7	11,338	9,481	1,857	943	876	68	7.7
Less than a high school diploma .....	7,991	4,864	60.9	4,127	2,312	1,815	737	544	192	15.1
High school graduates, no college .....	8,391	6,834	81.4	6,187	4,840	1,347	647	553	94	9.5
Less than a bachelor's degree .....	6,134	5,283	86.1	5,035	3,843	1,192	247	205	43	4.7
College graduates .....	1,776	1,604	90.3	1,508	1,354	154	96	91	5	6.0
Men, 16 to 24 years .....	12,310	9,979	81.1	9,106	7,149	1,957	873	750	123	8.7
16 to 19 years .....	4,918	3,310	67.3	2,921	1,695	1,225	389	280	109	11.8
20 to 24 years .....	7,393	6,669	90.2	6,186	5,454	732	483	470	14	7.2
Less than a high school diploma .....	4,254	2,935	69.0	2,536	1,594	942	399	320	79	13.6
High school graduates, no college .....	4,356	3,751	86.1	3,424	2,909	515	327	289	39	8.7
Less than a bachelor's degree .....	3,002	2,644	88.1	2,530	2,064	466	114	109	5	4.3
College graduates .....	697	649	93.0	616	582	34	33	33	—	5.1
Women, 16 to 24 years .....	11,982	8,606	71.8	7,751	5,200	2,552	854	643	211	9.9
16 to 19 years .....	4,707	2,994	63.6	2,599	1,172	1,427	394	237	157	13.2
20 to 24 years .....	7,275	5,612	77.1	5,152	4,027	1,125	460	406	54	8.2
Less than a high school diploma .....	3,737	1,929	51.6	1,591	718	873	338	224	113	17.5
High school graduates, no college .....	4,035	3,083	76.4	2,763	1,931	832	320	265	55	10.4
Less than a bachelor's degree .....	3,132	2,638	84.2	2,505	1,779	726	134	96	38	5.1
College graduates .....	1,079	955	88.6	892	772	121	63	59	5	6.6
<b>White</b>										
Total, 16 to 24 years .....	19,639	15,416	78.5	14,202	10,375	3,827	1,214	958	256	7.9
16 to 19 years .....	7,776	5,338	68.6	4,791	2,493	2,298	547	354	193	10.3
20 to 24 years .....	11,863	10,078	85.0	9,411	7,883	1,529	667	604	62	6.6
Men .....	10,055	8,477	84.3	7,821	6,194	1,627	656	555	101	7.7
Women .....	9,584	6,939	72.4	6,381	4,181	2,201	557	403	154	8.0
Less than a high school diploma .....	6,414	4,107	64.0	3,571	2,012	1,558	536	392	144	13.1
High school graduates, no college .....	6,674	5,540	83.0	5,108	3,966	1,142	432	364	68	7.8
Less than a bachelor's degree .....	5,028	4,382	87.2	4,215	3,229	986	167	127	40	3.8
College graduates .....	1,523	1,387	91.1	1,309	1,169	140	79	74	5	5.7
<b>Black</b>										
Total, 16 to 24 years .....	3,550	2,441	68.8	1,987	1,503	484	454	391	63	18.6
16 to 19 years .....	1,388	739	53.2	530	278	251	209	151	58	28.3
20 to 24 years .....	2,162	1,702	78.7	1,457	1,225	233	245	240	4	14.4
Men .....	1,692	1,123	66.3	941	723	218	182	165	17	16.2
Women .....	1,858	1,318	71.0	1,046	780	266	272	226	46	20.7
Less than a high school diploma .....	1,213	579	47.8	403	215	188	176	138	39	30.5
High school graduates, no college .....	1,406	1,079	76.7	880	727	153	198	175	24	18.4
Less than a bachelor's degree .....	811	675	83.2	604	465	140	71	70	—	10.5
College graduates .....	120	108	89.9	100	97	3	8	8	—	7.8
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	3,795	2,707	71.3	2,404	1,873	531	304	263	41	11.2
16 to 19 years .....	1,394	851	61.1	726	441	286	125	92	32	14.7
20 to 24 years .....	2,401	1,857	77.3	1,677	1,432	245	179	171	8	9.6
Men .....	1,973	1,686	85.5	1,511	1,234	277	176	154	22	10.4
Women .....	1,823	1,021	56.0	893	639	254	128	109	19	12.6
Less than a high school diploma .....	1,958	1,250	63.9	1,090	868	223	160	143	17	12.8
High school graduates, no college .....	1,211	937	77.4	831	629	202	106	82	24	11.3
Less than a bachelor's degree .....	557	453	81.4	424	326	98	29	29	—	6.4
College graduates .....	69	67	( <sup>1</sup> )	58	50	8	9	9	—	( <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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	Total		Men		Women		White		Black		Hispanic origin	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>TOTAL</b>												
Civilian noninstitutional population ...	172,205	173,978	82,072	82,773	90,133	91,205	145,006	146,108	19,417	19,797	16,153	16,708
Civilian labor force .....	115,317	116,762	62,383	62,937	52,934	53,825	96,766	97,752	13,129	13,450	11,219	11,652
Percent of population .....	67.0	67.1	76.0	76.0	58.7	59.0	66.7	66.9	67.6	67.9	69.5	69.7
Employed .....	111,484	113,044	60,611	61,175	50,873	51,870	93,926	94,977	12,307	12,692	10,579	11,035
Employment-population ratio .....	64.7	65.0	73.9	73.9	56.4	56.9	64.8	65.0	63.4	64.1	65.5	66.0
Unemployed .....	3,833	3,718	1,771	1,762	2,061	1,955	2,841	2,775	822	758	640	617
Unemployment rate .....	3.3	3.2	2.8	2.8	3.9	3.6	2.9	2.8	6.3	5.6	5.7	5.3
<b>Less than a high school diploma</b>												
Civilian noninstitutional population ...	29,204	28,568	13,914	13,622	15,291	14,946	23,382	23,094	4,333	4,109	7,259	7,362
Civilian labor force .....	12,402	12,299	7,697	7,557	4,705	4,742	10,084	10,119	1,661	1,603	4,331	4,436
Percent of population .....	42.5	43.1	55.3	55.5	30.8	31.7	43.1	43.8	38.3	39.0	59.7	60.3
Employed .....	11,602	11,507	7,282	7,157	4,320	4,350	9,486	9,549	1,500	1,416	4,023	4,099
Employment-population ratio .....	39.7	40.3	52.3	52.5	28.2	29.1	40.6	41.3	34.6	34.5	55.4	55.7
Unemployed .....	800	793	414	400	386	392	598	570	161	187	308	337
Unemployment rate .....	6.5	6.4	5.4	5.3	8.2	8.3	5.9	5.6	9.7	11.6	7.1	7.6
<b>High school graduates, no college</b>												
Civilian noninstitutional population ...	57,729	57,195	26,490	25,927	31,239	31,268	48,825	48,155	7,029	7,106	4,151	4,369
Civilian labor force .....	37,305	36,797	20,046	19,588	17,259	17,209	31,072	30,569	4,984	4,968	3,049	3,211
Percent of population .....	64.6	64.3	75.7	75.6	55.3	55.0	63.6	63.5	70.9	69.9	73.5	73.5
Employed .....	35,898	35,550	19,373	19,007	16,525	16,543	30,096	29,667	4,600	4,682	2,892	3,066
Employment-population ratio .....	62.2	62.2	73.1	73.3	52.9	52.9	61.6	61.6	65.4	65.9	69.7	70.2
Unemployed .....	1,407	1,247	673	581	734	666	976	902	384	285	158	145
Unemployment rate .....	3.8	3.4	3.4	3.0	4.3	3.9	3.1	2.9	7.7	5.7	5.2	4.5
<b>Less than a bachelor's degree<sup>1</sup></b>												
Civilian noninstitutional population ...	41,842	43,130	19,024	19,956	22,817	23,174	35,269	36,090	5,014	5,377	3,051	3,089
Civilian labor force .....	31,106	31,751	15,585	16,192	15,521	15,559	26,017	26,298	3,875	4,192	2,438	2,446
Percent of population .....	74.3	73.6	81.9	81.1	68.0	67.1	73.8	72.9	77.3	78.0	79.9	79.2
Employed .....	30,227	30,765	15,211	15,751	15,016	15,014	25,366	25,576	3,695	3,969	2,344	2,351
Employment-population ratio .....	72.2	71.3	80.0	78.9	65.8	64.8	71.9	70.9	73.7	73.8	76.8	76.1
Unemployed .....	879	986	374	441	505	546	651	722	180	223	94	95
Unemployment rate .....	2.8	3.1	2.4	2.7	3.3	3.5	2.5	2.7	4.7	5.3	3.9	3.9
<b>Some college, no degree</b>												
Civilian noninstitutional population ...	29,152	29,736	13,433	14,068	15,719	15,668	24,387	24,782	3,758	3,864	2,168	2,133
Civilian labor force .....	21,170	21,305	10,768	11,110	10,401	10,195	17,532	17,503	2,876	2,987	1,716	1,684
Percent of population .....	72.6	71.6	80.2	79.0	66.2	65.1	71.9	70.6	76.5	77.3	79.1	79.0
Employed .....	20,510	20,658	10,472	10,817	10,038	9,840	17,046	17,045	2,724	2,831	1,641	1,622
Employment-population ratio .....	70.4	69.5	78.0	76.9	63.9	62.8	69.9	68.8	72.5	73.3	75.7	76.0
Unemployed .....	660	648	297	293	363	355	486	458	151	156	75	63
Unemployment rate .....	3.1	3.0	2.8	2.6	3.5	3.5	2.8	2.6	5.3	5.2	4.4	3.7
<b>Associate degree</b>												
Civilian noninstitutional population ...	12,689	13,394	5,591	5,889	7,098	7,505	10,882	11,308	1,255	1,513	883	956
Civilian labor force .....	9,936	10,446	4,816	5,082	5,120	5,364	8,485	8,795	1,000	1,205	723	761
Percent of population .....	78.3	78.0	86.1	86.3	72.1	71.5	78.0	77.8	79.6	79.7	81.9	79.6
Employed .....	9,717	10,107	4,739	4,933	4,978	5,174	8,320	8,531	971	1,138	703	729
Employment-population ratio .....	76.6	75.5	84.8	83.8	70.1	68.9	76.5	75.4	77.3	75.2	79.7	76.2
Unemployed .....	219	339	77	148	142	190	166	264	29	67	20	32
Unemployment rate .....	2.2	3.2	1.6	2.9	2.8	3.5	2.0	3.0	2.9	5.6	2.7	4.3
<b>College graduates</b>												
Civilian noninstitutional population ...	43,431	45,086	22,644	23,268	20,787	21,818	37,531	38,770	3,041	3,205	1,692	1,888
Civilian labor force .....	34,504	35,915	19,056	19,600	15,448	16,315	29,593	30,766	2,609	2,687	1,401	1,559
Percent of population .....	79.4	79.7	84.2	84.2	74.3	74.8	78.9	79.4	85.8	83.8	82.8	82.6
Employed .....	33,757	35,223	18,745	19,260	15,012	15,963	28,978	30,185	2,512	2,624	1,321	1,520
Employment-population ratio .....	77.7	78.1	82.8	82.8	72.2	73.2	77.2	77.9	82.6	81.9	78.1	80.5
Unemployed .....	747	692	310	340	437	352	615	581	96	63	80	40
Unemployment rate .....	2.2	1.9	1.6	1.7	2.8	2.2	2.1	1.9	3.7	2.3	5.7	2.5

<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 1999, data reflect revised population controls used in the household survey.

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

(In thousands)

Age, sex, and race	August 1999									
	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 .....	112,552	95,449	9,483	7,620	21,712	2,057	17,249	2,407	4,768	1,057
16 to 19 years .....	3,563	2,994	439	130	4,399	312	3,822	266	604	447
16 to 17 years .....	759	595	124	39	2,478	103	2,223	152	178	301
18 to 19 years .....	2,805	2,399	315	91	1,921	209	1,598	114	426	146
20 years and over .....	108,989	92,455	9,044	7,490	17,313	1,745	13,427	2,141	4,164	610
20 to 24 years .....	10,496	9,177	922	397	2,762	451	2,139	173	936	121
25 years and over .....	98,493	83,278	8,122	7,093	14,551	1,294	11,288	1,968	3,228	490
25 to 54 years .....	85,683	72,765	6,873	6,045	10,172	1,125	7,609	1,437	2,878	349
55 years and over .....	12,810	10,513	1,249	1,048	4,379	169	3,679	531	350	141
<b>Men, 16 years and over</b> .....	65,320	57,220	4,635	3,465	7,028	909	5,596	523	2,474	368
16 to 19 years .....	2,086	1,774	238	74	2,052	152	1,781	119	338	205
16 to 17 years .....	63,234	55,446	4,397	3,391	4,976	757	3,815	404	2,136	164
20 to 24 years .....	5,917	5,307	421	189	1,118	238	809	71	502	35
25 years and over .....	57,317	50,140	3,975	3,202	3,858	518	3,006	333	1,634	128
25 to 54 years .....	49,610	43,644	3,299	2,667	2,011	424	1,441	146	1,433	64
55 years and over .....	7,707	6,496	676	535	1,846	94	1,565	187	201	65
<b>Women, 16 years and over</b> .....	47,233	38,229	4,848	4,155	14,684	1,148	11,653	1,883	2,294	689
16 to 19 years .....	1,477	1,220	201	56	2,347	159	2,041	146	266	242
16 to 17 years .....	45,755	37,009	4,647	4,099	12,337	989	9,612	1,737	2,028	447
20 to 24 years .....	4,579	3,870	501	208	1,644	213	1,330	102	434	85
25 years and over .....	41,176	33,138	4,147	3,891	10,693	776	8,283	1,635	1,594	361
25 to 54 years .....	36,073	29,121	3,574	3,378	8,160	701	6,169	1,291	1,445	285
55 years and over .....	5,103	4,017	573	513	2,533	75	2,114	344	149	76
<b>White</b>										
<b>Men, 16 years and over</b> .....	55,970	48,942	3,973	3,055	5,931	717	4,754	460	1,842	306
16 to 19 years .....	1,839	1,586	189	64	1,759	125	1,520	114	236	152
16 to 17 years .....	54,131	47,356	3,784	2,991	4,172	592	3,234	346	1,606	153
20 to 24 years .....	5,070	4,536	372	162	897	196	647	54	366	35
25 years and over .....	49,061	42,820	3,413	2,828	3,275	397	2,587	292	1,240	118
25 to 54 years .....	42,159	36,995	2,819	2,345	1,616	319	1,169	128	1,070	54
55 years and over .....	6,902	5,825	593	484	1,660	78	1,418	164	170	65
<b>Women, 16 years and over</b> .....	37,983	30,418	4,048	3,517	12,962	868	10,375	1,719	1,546	553
16 to 19 years .....	1,243	1,030	161	53	2,049	117	1,803	130	165	177
16 to 17 years .....	36,740	29,388	3,887	3,465	10,913	752	8,573	1,589	1,381	376
20 to 24 years .....	3,651	3,092	407	153	1,361	172	1,099	91	265	75
25 years and over .....	33,089	26,296	3,481	3,312	9,551	580	7,474	1,497	1,116	301
25 to 54 years .....	28,712	22,887	2,978	2,846	7,272	525	5,575	1,172	1,003	235
55 years and over .....	4,377	3,409	502	466	2,279	55	1,899	325	112	66
<b>Black</b>										
<b>Men, 16 years and over</b> .....	6,417	5,626	496	295	707	143	529	36	511	53
16 to 19 years .....	170	130	35	5	194	19	170	4	93	48
16 to 17 years .....	6,247	5,496	461	290	513	124	358	31	419	5
20 to 24 years .....	654	595	39	20	133	32	87	14	112	-
25 years and over .....	5,592	4,901	421	270	380	92	271	17	307	5
25 to 54 years .....	5,049	4,460	357	232	256	80	173	3	285	5
55 years and over .....	543	441	65	37	124	12	98	14	21	-
<b>Women, 16 years and over</b> .....	6,801	5,757	558	487	1,231	231	866	134	659	95
16 to 19 years .....	174	141	30	4	231	37	184	10	96	46
16 to 17 years .....	6,627	5,616	528	483	1,000	194	682	124	564	49
20 to 24 years .....	707	606	62	40	201	37	156	8	159	7
25 years and over .....	5,920	5,010	467	443	800	157	526	116	405	42
25 to 54 years .....	5,386	4,563	416	407	612	141	373	98	371	39
55 years and over .....	534	447	51	36	188	16	154	18	34	2

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
Total .....	132,206	134,264	71,537	72,348	67,464	68,210	60,669	61,917	56,786	58,093
Managerial and professional specialty .....	38,558	40,504	19,969	20,695	19,783	20,472	18,589	19,809	18,341	19,634
Executive, administrative, and managerial .....	19,235	19,508	10,808	10,879	10,738	10,805	8,427	8,629	8,339	8,557
Officials and administrators, public administration .....	672	643	324	295	324	295	348	348	348	346
Other executive, administrative, and managerial .....	13,882	13,995	8,417	8,511	8,363	8,442	5,465	5,484	5,391	5,434
Management-related occupations .....	4,681	4,871	2,068	2,073	2,051	2,068	2,614	2,797	2,601	2,778
Professional specialty .....	19,323	20,995	9,161	9,816	9,046	9,667	10,162	11,180	10,002	11,077
Engineers .....	2,011	2,070	1,802	1,861	1,795	1,859	209	208	209	208
Mathematical and computer scientists .....	1,919	1,908	1,337	1,286	1,319	1,273	581	621	570	620
Natural scientists .....	554	591	399	401	398	401	155	190	155	190
Health diagnosing occupations .....	1,167	1,110	826	843	826	843	341	267	341	267
Health assessment and treating occupations .....	2,764	3,147	402	420	402	418	2,362	2,727	2,351	2,722
Teachers, college and university .....	815	851	483	512	479	512	332	339	328	339
Teachers, except college and university .....	4,450	4,924	1,075	1,265	1,058	1,240	3,375	3,659	3,301	3,622
Lawyers and judges .....	998	1,003	724	711	715	711	274	293	274	293
Other professional specialty occupations .....	4,644	5,391	2,113	2,516	2,053	2,411	2,531	2,875	2,472	2,816
Technical, sales, and administrative support .....	39,045	38,998	14,136	14,058	13,211	13,019	24,909	24,939	23,015	22,994
Technicians and related support .....	4,326	4,412	2,076	2,118	2,041	2,064	2,250	2,294	2,216	2,239
Health technologists and technicians .....	1,716	1,727	313	316	310	310	1,404	1,411	1,382	1,371
Engineering and science technicians .....	1,278	1,251	971	977	954	954	307	274	301	264
Technicians, except health, engineering, and science .....	1,331	1,435	792	826	777	800	539	609	532	604
Sales occupations .....	16,079	16,226	7,995	8,016	7,377	7,324	8,084	8,210	6,869	7,012
Supervisors and proprietors .....	4,781	4,866	2,851	2,805	2,822	2,769	1,930	2,061	1,901	2,023
Sales representatives, finance and business services .....	2,740	2,758	1,583	1,543	1,534	1,525	1,157	1,215	1,110	1,174
Sales representatives, commodities, except retail .....	1,694	1,557	1,228	1,142	1,215	1,137	466	415	460	404
Sales workers, retail and personal services .....	6,781	6,953	2,303	2,496	1,778	1,863	4,478	4,457	3,344	3,351
Sales-related occupations .....	83	91	30	30	28	30	54	61	53	60
Administrative support, including clerical .....	18,640	18,359	4,065	3,924	3,793	3,631	14,575	14,435	13,930	13,743
Supervisors .....	679	659	243	292	239	290	437	367	437	367
Computer equipment operators .....	367	393	162	173	156	167	204	220	200	213
Secretaries, stenographers, and typists .....	3,678	3,449	71	80	69	73	3,607	3,369	3,505	3,293
Financial records processing .....	2,274	2,231	199	217	192	202	2,075	2,014	2,048	1,983
Mail and message distributing .....	1,009	1,039	659	595	649	566	350	445	340	424
Other administrative support, including clerical .....	10,633	10,588	2,731	2,568	2,488	2,333	7,902	8,020	7,402	7,463
Service occupations .....	18,081	18,341	7,311	7,490	6,274	6,430	10,770	10,851	9,396	9,483
Private household .....	808	832	44	39	35	30	764	793	622	671
Protective service .....	2,556	2,644	2,078	2,141	2,010	2,055	477	502	374	395
Service, except private household and protective .....	14,718	14,866	5,189	5,310	4,229	4,345	9,529	9,556	8,400	8,418
Food service .....	6,091	6,133	2,642	2,639	1,966	1,952	3,449	3,494	2,689	2,716
Health service .....	2,666	2,586	283	281	265	269	2,383	2,306	2,266	2,195
Cleaning and building service .....	3,141	3,155	1,678	1,767	1,519	1,646	1,463	1,388	1,390	1,321
Personal service .....	2,821	2,991	586	622	478	479	2,234	2,369	2,055	2,186
Precision production, craft, and repair .....	14,360	14,355	13,177	13,113	12,807	12,780	1,183	1,241	1,160	1,202
Mechanics and repairers .....	4,710	4,759	4,485	4,545	4,386	4,452	225	215	223	213
Construction trades .....	5,686	5,799	5,591	5,655	5,374	5,466	95	144	94	134
Other precision production, craft, and repair .....	3,965	3,797	3,101	2,914	3,048	2,862	863	882	843	855
Operators, fabricators, and laborers .....	18,138	18,231	13,707	13,925	12,556	12,786	4,431	4,306	4,176	4,088
Machine operators, assemblers, and inspectors .....	7,769	7,245	4,892	4,509	4,687	4,326	2,876	2,736	2,781	2,665
Transportation and material moving occupations .....	5,185	5,537	4,699	5,027	4,561	4,916	487	509	474	492
Motor vehicle operators .....	3,901	4,149	3,506	3,715	3,402	3,626	395	435	383	417
Other transportation and material moving occupations .....	1,285	1,387	1,192	1,313	1,159	1,290	92	75	91	74
Handlers, equipment cleaners, helpers, and laborers .....	5,184	5,449	4,117	4,389	3,308	3,544	1,068	1,061	922	931
Construction laborers .....	895	989	855	960	737	844	40	28	34	28
Other handlers, equipment cleaners, helpers, and laborers .....	4,290	4,461	3,261	3,429	2,572	2,700	1,028	1,032	888	903
Farming, forestry, and fishing .....	4,023	3,836	3,236	3,066	2,832	2,723	786	771	698	693
Farm operators and managers .....	1,243	1,185	958	890	947	881	285	295	280	293
Other farming, forestry, and fishing occupations .....	2,780	2,652	2,278	2,176	1,885	1,842	501	476	417	399

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	132,206	134,264	71,537	72,348	60,669	61,917
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	29.2	30.2	27.9	28.6	30.6	32.0
Executive, administrative, and managerial .....	14.5	14.5	15.1	15.0	13.9	13.9
Professional specialty .....	14.6	15.6	12.8	13.6	16.7	18.1
Technical, sales, and administrative support .....	29.5	29.0	19.8	19.4	41.1	40.3
Technicians and related support .....	3.3	3.3	2.9	2.9	3.7	3.7
Sales occupations .....	12.2	12.1	11.2	11.1	13.3	13.3
Administrative support, including clerical .....	14.1	13.7	5.7	5.4	24.0	23.3
Service occupations .....	13.7	13.7	10.2	10.4	17.8	17.5
Private household .....	.6	.6	.1	.1	1.3	1.3
Protective service .....	1.9	2.0	2.9	3.0	.8	.8
Service, except private household and protective .....	11.1	11.1	7.3	7.3	15.7	15.4
Precision production, craft, and repair .....	10.9	10.7	18.4	18.1	2.0	2.0
Operators, fabricators, and laborers .....	13.7	13.6	19.2	19.2	7.3	7.0
Machine operators, assemblers, and inspectors .....	5.9	5.4	6.8	6.2	4.7	4.4
Transportation and material moving occupations .....	3.9	4.1	6.6	6.9	.8	.8
Handlers, equipment cleaners, helpers, and laborers .....	3.9	4.1	5.8	6.1	1.8	1.7
Farming, forestry, and fishing .....	3.0	2.9	4.5	4.2	1.3	1.2
<b>White</b>						
Total, 16 years and over (thousands) .....	111,511	112,846	61,328	61,901	50,183	50,945
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	30.3	31.1	29.0	29.5	32.0	33.1
Executive, administrative, and managerial .....	15.3	15.3	16.0	15.9	14.5	14.5
Professional specialty .....	15.0	15.9	13.0	13.6	17.4	18.6
Technical, sales, and administrative support .....	29.6	29.1	19.8	19.6	41.5	40.6
Technicians and related support .....	3.2	3.3	2.8	2.9	3.7	3.7
Sales occupations .....	12.5	12.5	11.7	11.6	13.4	13.5
Administrative support, including clerical .....	13.9	13.3	5.3	5.0	24.4	23.4
Service occupations .....	12.4	12.5	9.0	9.2	16.5	16.6
Private household .....	.6	.6	.1	.1	1.3	1.3
Protective service .....	1.8	1.8	2.7	2.7	.7	.7
Service, except private household and protective .....	10.0	10.1	6.3	6.4	14.5	14.6
Precision production, craft, and repair .....	11.3	11.3	19.1	18.9	1.9	2.0
Operators, fabricators, and laborers .....	13.1	12.9	18.3	18.3	6.7	6.3
Machine operators, assemblers, and inspectors .....	5.5	5.0	6.6	6.0	4.2	3.9
Transportation and material moving occupations .....	3.8	3.9	6.3	6.6	.7	.8
Handlers, equipment cleaners, helpers, and laborers .....	3.8	3.9	5.5	5.7	1.7	1.6
Farming, forestry, and fishing .....	3.3	3.1	4.8	4.6	1.5	1.4
<b>Black</b>						
Total, 16 years and over (thousands) .....	14,663	15,156	6,950	7,124	7,713	8,033
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	19.2	21.3	15.8	17.8	22.3	24.4
Executive, administrative, and managerial .....	9.6	9.4	8.5	8.0	10.6	10.5
Professional specialty .....	9.6	11.9	7.3	9.7	11.7	13.9
Technical, sales, and administrative support .....	29.3	29.6	18.3	18.4	39.3	39.5
Technicians and related support .....	3.3	3.1	3.1	2.4	3.5	3.7
Sales occupations .....	9.8	9.2	7.1	7.2	12.3	10.9
Administrative support, including clerical .....	16.1	17.2	8.0	8.7	23.4	24.8
Service occupations .....	22.9	21.4	19.7	18.6	25.9	23.9
Private household .....	.5	.7	.1	.1	.9	1.2
Protective service .....	3.6	3.6	5.8	5.6	1.6	1.8
Service, except private household and protective .....	18.8	17.2	13.8	12.9	23.3	20.9
Precision production, craft, and repair .....	7.9	7.3	14.7	13.3	1.8	1.9
Operators, fabricators, and laborers .....	19.1	19.2	28.7	29.5	10.5	10.0
Machine operators, assemblers, and inspectors .....	7.9	7.8	9.0	8.8	6.8	6.8
Transportation and material moving occupations .....	5.9	6.0	10.7	11.3	1.5	1.2
Handlers, equipment cleaners, helpers, and laborers .....	5.4	5.4	8.9	9.4	2.1	1.9
Farming, forestry, and fishing .....	1.5	1.3	2.9	2.4	.3	.3

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-21. Employed persons by industry and occupation**

(In thousands)

Industry	August 1999												
	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 .....	3,525	143	96	47	5	143	-	12	31	2	60	19	2,967
Mining .....	600	87	96	30	13	35	-	6	177	28	108	21	-
Construction .....	9,186	1,372	155	51	64	435	-	37	5,281	88	619	1,049	35
Manufacturing .....	19,775	3,026	1,992	614	688	1,824	-	240	3,750	5,710	750	1,075	105
Durable goods .....	12,003	1,824	1,249	414	333	1,041	-	135	2,571	3,409	384	545	97
Nondurable goods .....	7,772	1,202	743	200	355	782	-	105	1,179	2,302	366	530	7
Transportation and public utilities .....	9,797	1,428	550	363	262	2,450	-	305	1,357	147	2,289	629	18
Wholesale and retail trade .....	27,781	2,566	597	261	11,575	2,410	-	5,355	1,382	375	1,117	2,038	105
Wholesale trade .....	5,276	608	158	45	2,066	846	-	81	343	133	516	416	66
Retail trade .....	22,504	1,958	440	216	9,509	1,564	-	5,275	1,039	242	601	1,622	39
Finance, insurance, and real estate .....	8,910	2,746	377	210	2,285	2,720	-	325	148	5	12	24	59
Services .....	48,596	6,812	16,101	2,575	1,298	7,068	832	9,407	2,031	872	545	549	506
Private households .....	933	6	5	5	-	-	832	57	-	-	-	14	13
Other service industries .....	47,663	6,806	16,095	2,570	1,298	7,068	-	9,350	2,031	872	545	535	493
Professional services .....	31,528	4,081	13,651	2,095	209	5,127	-	5,327	431	164	271	73	99
Public administration .....	6,095	1,328	1,032	261	37	1,275	-	1,822	198	17	37	46	41

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

used in the household survey.

NOTE: Beginning in January 1999, data reflect revised population controls

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

(In thousands)

Age and sex	August 1999									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Total	Wage and salary workers			Government	Self-employed workers	Unpaid family workers
					Private industries					
				Total	Private household workers	Other private industries				
Total, 16 years and over .....	2,088	1,379	58	121,595	102,949	923	102,026	18,646	9,057	87
16 to 19 years .....	262	23	24	7,562	7,141	147	6,994	421	80	11
16 to 17 years .....	118	18	10	3,046	2,881	83	2,798	165	39	6
18 to 19 years .....	145	4	14	4,516	4,260	65	4,196	256	41	5
20 to 24 years .....	328	49	5	12,576	11,626	109	11,517	950	292	8
25 to 34 years .....	530	144	5	28,413	24,768	137	24,631	3,645	1,520	14
35 to 44 years .....	513	307	18	33,080	27,748	186	27,561	5,332	2,672	21
45 to 54 years .....	260	345	1	25,574	19,817	177	19,640	5,756	2,421	18
55 to 64 years .....	144	285	4	11,455	9,333	101	9,231	2,122	1,450	2
65 years and over .....	52	226	2	2,935	2,516	64	2,452	420	622	13
Men, 16 years and over .....	1,567	1,019	30	64,210	55,791	64	55,726	8,420	5,494	26
16 to 19 years .....	204	18	18	3,844	3,657	21	3,636	186	46	8
16 to 17 years .....	95	15	4	1,569	1,497	17	1,481	72	23	3
18 to 19 years .....	109	3	14	2,275	2,160	4	2,156	115	24	5
20 to 24 years .....	262	45	2	6,541	6,101	17	6,084	440	179	6
25 to 34 years .....	387	100	1	15,304	13,594	1	13,593	1,710	854	2
35 to 44 years .....	373	247	6	17,680	15,350	12	15,338	2,330	1,602	-
45 to 54 years .....	191	236	-	13,171	10,611	7	10,605	2,559	1,464	3
55 to 64 years .....	108	203	3	6,049	5,079	2	5,077	970	929	-
65 years and over .....	42	171	-	1,622	1,397	4	1,393	225	419	7
Women, 16 years and over .....	521	359	28	57,384	47,158	858	46,300	10,226	3,563	61
16 to 19 years .....	58	5	6	3,719	3,484	126	3,358	235	34	3
16 to 17 years .....	23	3	6	1,477	1,384	66	1,318	94	16	3
18 to 19 years .....	35	2	-	2,241	2,100	60	2,040	141	17	-
20 to 24 years .....	66	4	3	6,035	5,525	93	5,432	510	113	2
25 to 34 years .....	144	44	4	13,109	11,174	136	11,038	1,935	666	12
35 to 44 years .....	140	60	11	15,400	12,398	174	12,224	3,002	1,069	21
45 to 54 years .....	68	109	1	12,403	9,206	171	9,035	3,197	957	16
55 to 64 years .....	35	82	1	5,406	4,253	99	4,154	1,152	521	2
65 years and over .....	10	55	2	1,313	1,118	60	1,059	195	203	6

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Hours of work	August 1999					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	124,238	3,373	120,864	100.0	100.0	100.0
1 to 34 hours .....	27,837	905	26,932	22.4	26.8	22.3
1 to 4 hours .....	1,287	85	1,202	1.0	2.5	1.0
5 to 14 hours .....	4,091	176	3,915	3.3	5.2	3.2
15 to 29 hours .....	13,953	393	13,560	11.2	11.7	11.2
30 to 34 hours .....	8,505	250	8,255	6.8	7.4	6.8
35 hours and over .....	96,401	2,469	93,932	77.6	73.2	77.7
35 to 39 hours .....	8,300	196	8,104	6.7	5.8	6.7
40 hours .....	48,859	937	47,922	39.3	27.8	39.6
41 hours and over .....	39,242	1,336	37,906	31.6	39.6	31.4
41 to 48 hours .....	14,324	246	14,078	11.5	7.3	11.6
49 to 59 hours .....	14,283	361	13,921	11.5	10.7	11.5
60 hours and over .....	10,636	729	9,906	8.6	21.6	8.2
Average hours, total at work .....	39.9	42.9	39.9	-	-	-
Average hours, persons who usually work full time .....	43.3	48.8	43.2	-	-	-

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Reason for working less than 35 hours	August 1999					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over .....	27,837	9,483	18,354	26,932	9,231	17,701
Economic reasons .....	3,238	1,340	1,898	3,102	1,271	1,831
Slack work or business conditions .....	1,759	984	775	1,677	940	736
Could only find part-time work .....	1,068	-	1,068	1,046	-	1,046
Seasonal work .....	145	90	55	120	72	48
Job started or ended during week .....	267	267	-	259	259	-
Noneconomic reasons .....	24,598	8,143	16,455	23,830	7,960	15,870
Child-care problems .....	745	73	671	729	73	656
Other family or personal obligations .....	5,011	684	4,327	4,874	671	4,202
Health or medical limitations .....	652	-	652	615	-	615
In school or training .....	4,827	133	4,694	4,690	122	4,568
Retired or Social Security limit on earnings .....	1,911	-	1,911	1,766	-	1,766
Vacation or personal day .....	4,701	4,701	-	4,619	4,619	-
Holiday, legal or religious .....	63	63	-	63	63	-
Weather-related curtailment .....	146	146	-	117	117	-
All other reasons .....	6,543	2,343	4,199	6,358	2,295	4,063
Average hours:						
Economic reasons .....	22.9	23.4	22.5	22.8	23.3	22.5
Other reasons .....	21.6	24.0	20.4	21.7	24.1	20.5

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.



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

(Numbers in thousands)

Industry and class of worker	August 1999							
	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 .....	120,864	26,932	3,102	7,960	15,870	93,932	39.9	43.2
Wage and salary workers .....	112,439	24,288	2,805	7,383	14,100	88,151	39.9	42.9
Mining .....	535	37	5	23	9	498	47.7	48.3
Construction .....	7,305	981	201	433	347	6,324	42.1	43.4
Manufacturing .....	18,432	2,133	254	1,200	678	16,299	42.7	43.6
Durable goods .....	11,223	1,230	138	771	321	9,992	43.1	43.7
Nondurable goods .....	7,209	902	116	429	357	6,307	42.2	43.4
Transportation and public utilities .....	8,770	1,254	185	561	509	7,516	42.6	44.2
Wholesale and retail trade .....	24,706	7,431	930	1,128	5,373	17,276	38.0	43.4
Finance, insurance, and real estate .....	7,768	1,476	92	622	762	6,292	40.1	42.1
Service industries .....	39,233	10,200	1,111	2,938	6,152	29,033	38.3	42.1
Private households .....	863	463	58	39	366	400	30.1	41.9
All other industries .....	38,370	9,737	1,053	2,899	5,785	28,633	38.5	42.1
Public administration .....	5,689	777	28	480	269	4,912	41.0	42.1
Self-employed workers .....	8,338	2,592	294	569	1,729	5,746	40.1	46.6
Unpaid family workers .....	87	52	3	8	41	35	30.3	37.8

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, race, and marital status	August 1999							
	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 .....	120,864	26,932	3,102	7,960	15,870	93,932	39.9	43.2
16 to 19 years .....	7,277	4,212	396	300	3,516	3,065	29.5	39.9
16 to 17 years .....	2,910	2,252	134	74	2,044	658	24.2	38.4
18 to 19 years .....	4,367	1,960	262	225	1,472	2,407	33.0	40.2
20 years and over .....	113,588	22,720	2,706	7,660	12,354	90,868	40.5	43.3
20 to 24 years .....	12,327	3,316	561	729	2,025	9,011	37.8	41.5
25 years and over .....	101,260	19,404	2,144	6,931	10,329	81,856	40.9	43.5
25 to 54 years .....	86,311	14,748	1,844	5,905	6,998	71,563	41.5	43.6
55 years and over .....	14,950	4,657	300	1,026	3,331	10,293	37.3	42.9
<b>Men, 16 years and over</b> .....	65,836	10,322	1,434	3,837	5,051	55,514	42.6	44.7
16 to 19 years .....	3,718	1,967	199	161	1,607	1,751	31.0	40.4
16 to 17 years .....	1,494	1,119	83	38	998	376	25.5	39.0
18 to 19 years .....	2,224	848	116	123	609	1,375	34.7	40.8
20 years and over .....	62,118	8,355	1,235	3,676	3,445	53,763	43.3	44.9
20 to 24 years .....	6,487	1,379	274	333	773	5,108	39.6	42.6
25 years and over .....	55,631	6,976	961	3,343	2,672	48,655	43.7	45.1
25 to 54 years .....	47,296	4,901	813	2,794	1,294	42,395	44.4	45.2
55 years and over .....	8,335	2,075	148	549	1,378	6,260	39.8	44.3
<b>Women, 16 years and over</b> .....	55,028	16,610	1,668	4,123	10,819	38,418	36.6	41.0
16 to 19 years .....	3,559	2,245	197	138	1,910	1,314	28.0	39.1
16 to 17 years .....	1,416	1,134	51	36	1,046	282	22.9	37.4
18 to 19 years .....	2,143	1,111	146	102	863	1,032	31.3	39.5
20 years and over .....	51,470	14,365	1,471	3,985	8,909	37,105	37.2	41.0
20 to 24 years .....	5,840	1,936	288	396	1,252	3,904	35.7	40.2
25 years and over .....	45,629	12,428	1,183	3,588	7,657	33,201	37.4	41.1
25 to 54 years .....	39,015	9,847	1,031	3,111	5,704	29,168	37.9	41.2
55 years and over .....	6,615	2,582	152	477	1,953	4,033	34.2	40.8
<b>Race</b>								
White, 16 years and over .....	100,903	23,068	2,416	6,771	13,881	77,835	39.9	43.3
Men .....	56,011	8,729	1,132	3,323	4,275	47,282	42.8	44.9
Women .....	44,891	14,338	1,284	3,449	9,606	30,553	36.2	41.0
Black, 16 years and over .....	14,090	2,705	544	845	1,315	11,385	39.6	42.0
Men .....	6,691	1,104	239	374	492	5,586	41.1	43.2
Women .....	7,399	1,601	306	472	823	5,798	38.2	40.9
<b>Marital status</b>								
Men, 16 years and over:								
Married, spouse present .....	39,234	4,713	552	2,396	1,765	34,521	44.1	45.4
Widowed, divorced, or separated .....	7,690	1,118	196	451	471	6,572	42.8	44.6
Single (never married) .....	18,911	4,491	686	990	2,815	14,421	39.3	43.1
Women, 16 years and over:								
Married, spouse present .....	28,461	8,792	661	2,262	5,869	19,669	36.2	40.7
Widowed, divorced, or separated .....	11,123	2,697	352	897	1,447	8,426	38.6	41.6
Single (never married) .....	15,444	5,121	655	964	3,502	10,323	35.9	41.0

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Occupation and sex	August 1999							
	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>	120,572	26,861	3,080	7,925	15,856	93,711	39.9	43.2
Managerial and professional specialty	35,993	6,569	441	2,845	3,283	29,424	41.9	44.3
Executive, administrative, and managerial	18,394	2,643	114	1,372	1,157	15,751	43.7	45.3
Professional specialty	17,599	3,926	327	1,472	2,126	13,673	40.1	43.1
Technical, sales, and administrative support	36,600	9,541	860	2,368	6,312	27,059	38.1	42.1
Technicians and related support	4,172	830	67	323	440	3,342	39.5	41.8
Sales occupations	15,357	4,342	481	803	3,058	11,015	39.2	44.3
Administrative support, including clerical	17,071	4,369	312	1,242	2,814	12,703	36.8	40.3
Service occupations	17,097	5,940	857	894	4,189	11,157	36.1	42.1
Private household	780	410	49	32	329	371	30.2	41.5
Protective service	2,460	358	45	129	184	2,102	42.9	45.1
Service, except private household and protective	13,857	5,172	763	733	3,676	8,685	35.2	41.5
Precision production, craft, and repair	13,592	1,665	306	800	560	11,927	42.7	43.8
Operators, fabricators, and laborers	17,290	3,147	616	1,018	1,512	14,144	40.9	43.2
Machine operators, assemblers, and inspectors	6,922	1,000	208	471	320	5,922	40.9	42.1
Transportation and material moving occupations	5,148	714	134	225	355	4,435	44.3	46.4
Handlers, equipment cleaners, helpers, and laborers	5,220	1,433	274	322	837	3,787	37.6	41.5
Men, 16 years and over <sup>1</sup>	65,411	10,195	1,420	3,790	4,985	55,217	42.6	44.8
Managerial and professional specialty	19,143	2,445	181	1,287	977	16,698	44.7	46.1
Executive, administrative, and managerial	10,315	1,069	45	616	408	9,246	46.0	47.2
Professional specialty	8,828	1,376	136	671	569	7,451	43.1	44.9
Technical, sales, and administrative support	13,422	2,378	236	711	1,430	11,045	42.1	44.9
Technicians and related support	2,012	284	32	146	106	1,728	41.9	43.3
Sales occupations	7,663	1,448	132	368	948	6,215	43.2	46.7
Administrative support, including clerical	3,748	646	72	197	377	3,102	39.7	42.2
Service occupations	7,116	1,763	324	331	1,109	5,353	39.3	43.6
Private household	39	26	4	—	22	13	( <sup>2</sup> )	( <sup>2</sup> )
Protective service	2,008	248	36	102	110	1,760	43.8	45.6
Service, except private household and protective	5,069	1,488	283	228	977	3,580	37.6	42.6
Precision production, craft, and repair	12,448	1,443	262	741	440	11,005	43.0	43.9
Operators, fabricators, and laborers	13,283	2,167	417	720	1,029	11,116	41.8	44.0
Machine operators, assemblers, and inspectors	4,329	511	91	285	135	3,817	41.9	42.8
Transportation and material moving occupations	4,741	589	113	199	276	4,152	45.0	46.8
Handlers, equipment cleaners, helpers, and laborers	4,213	1,067	213	235	618	3,147	38.2	41.9
Women, 16 years and over <sup>1</sup>	55,161	16,667	1,660	4,135	10,871	38,494	36.6	41.0
Managerial and professional specialty	16,850	4,124	260	1,557	2,306	12,726	38.8	41.9
Executive, administrative, and managerial	8,079	1,575	69	756	749	6,504	40.7	42.8
Professional specialty	8,771	2,549	191	801	1,557	6,222	37.0	41.0
Technical, sales, and administrative support	23,177	7,163	624	1,657	4,882	16,014	35.8	40.3
Technicians and related support	2,160	546	36	176	334	1,614	37.2	40.2
Sales occupations	7,694	2,894	349	435	2,110	4,800	35.1	41.4
Administrative support, including clerical	13,324	3,723	240	1,046	2,438	9,601	36.0	39.7
Service occupations	9,982	4,177	533	564	3,080	5,805	33.8	40.8
Private household	741	384	44	32	307	358	30.5	41.2
Protective service	452	110	9	27	74	342	38.7	42.3
Service, except private household and protective	8,788	3,684	480	505	2,699	5,105	33.9	40.7
Precision production, craft, and repair	1,144	222	44	59	120	922	39.8	42.5
Operators, fabricators, and laborers	4,008	980	199	298	483	3,027	37.9	40.6
Machine operators, assemblers, and inspectors	2,593	488	117	186	185	2,105	39.1	40.8
Transportation and material moving occupations	408	125	21	26	78	282	36.2	41.3
Handlers, equipment cleaners, helpers, and laborers	1,007	367	61	87	219	640	35.2	39.8

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-28. Unemployed persons by marital status, race, age, and sex**

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
Total, 16 years and over .....	3,003	2,842	4.0	3.8	3,170	2,984	5.0	4.6
Married, spouse present .....	915	911	2.1	2.1	1,167	1,017	3.5	3.0
Widowed, divorced, or separated .....	378	383	4.3	4.4	589	633	4.6	4.9
Single (never married) .....	1,711	1,548	7.8	7.0	1,414	1,333	8.0	7.4
White, 16 years and over .....	2,182	2,148	3.4	3.4	2,266	2,099	4.3	4.0
Married, spouse present .....	746	759	1.9	2.0	983	835	3.4	2.8
Widowed, divorced, or separated .....	278	289	3.9	4.0	426	463	4.2	4.5
Single (never married) .....	1,157	1,100	6.5	6.1	856	801	6.5	6.0
Black, 16 years and over .....	670	564	8.8	7.3	796	754	9.4	8.6
Married, spouse present .....	125	116	3.8	3.4	132	123	5.0	4.4
Widowed, divorced, or separated .....	78	87	6.3	7.2	153	149	6.8	6.6
Single (never married) .....	466	361	15.3	11.8	512	483	14.0	12.9
Total, 25 years and over .....	1,771	1,762	2.8	2.8	2,061	1,955	3.9	3.6
Married, spouse present .....	879	855	2.1	2.0	1,038	897	3.3	2.8
Widowed, divorced, or separated .....	352	362	4.1	4.3	542	593	4.4	4.7
Single (never married) .....	540	546	4.8	4.8	480	465	5.5	5.3
White, 25 years and over .....	1,334	1,358	2.5	2.5	1,507	1,417	3.5	3.2
Married, spouse present .....	718	720	1.9	1.9	867	731	3.1	2.6
Widowed, divorced, or separated .....	257	271	3.7	3.9	388	433	4.0	4.4
Single (never married) .....	359	367	4.1	4.1	252	252	4.2	4.2
Black, 25 years and over .....	345	312	5.6	5.0	477	447	6.9	6.2
Married, spouse present .....	119	98	3.7	2.9	124	112	4.9	4.2
Widowed, divorced, or separated .....	75	83	6.1	7.0	144	138	6.6	6.3
Single (never married) .....	151	131	8.7	7.4	209	196	9.4	8.6

NOTE: Beginning in 1999, data reflect revised population controls used in the household survey.

A-29. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
Total, 16 years and over <sup>1</sup> .....	6,173	5,826	4.5	4.2	4.0	3.8	5.0	4.6
Managerial and professional specialty .....	858	860	2.2	2.1	1.6	1.9	2.8	2.2
Executive, administrative, and managerial .....	356	396	1.8	2.0	1.5	1.8	2.3	2.2
Professional specialty .....	503	464	2.5	2.2	1.7	2.1	3.3	2.2
Technical, sales, and administrative support .....	1,509	1,443	3.7	3.6	2.9	2.7	4.2	4.0
Technicians and related support .....	76	97	1.7	2.2	1.2	2.7	2.2	1.7
Sales occupations .....	748	663	4.4	3.9	3.1	2.4	5.8	5.3
Administrative support, including clerical .....	684	682	3.5	3.6	3.5	3.4	3.5	3.6
Service occupations .....	1,306	1,094	6.7	5.6	5.8	5.0	7.4	6.1
Private household .....	89	83	10.0	9.1	( <sup>2</sup> )	( <sup>2</sup> )	10.5	8.9
Protective service .....	60	90	2.3	3.3	1.4	2.8	5.8	5.4
Service, except private household and protective .....	1,157	921	7.3	5.8	7.5	5.8	7.2	5.9
Precision production, craft, and repair .....	606	628	4.1	4.2	3.9	3.8	5.6	7.7
Mechanics and repairers .....	159	155	3.3	3.2	3.2	2.6	5.3	13.1
Construction trades .....	268	327	4.5	5.3	4.4	5.2	10.1	10.3
Other precision production, craft, and repair .....	178	146	4.3	3.7	4.1	3.1	5.1	5.8
Operators, fabricators, and laborers .....	1,215	1,134	6.3	5.9	6.0	5.3	7.1	7.7
Machine operators, assemblers, and inspectors .....	415	421	5.1	5.5	4.5	4.3	6.0	7.4
Transportation and material moving occupations .....	269	231	4.9	4.0	4.4	3.9	9.8	4.7
Handlers, equipment cleaners, helpers, and laborers .....	531	481	9.3	8.1	9.5	7.7	8.5	9.9
Construction laborers .....	139	88	13.5	8.2	13.6	7.7	( <sup>2</sup> )	( <sup>2</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	392	393	8.4	8.1	8.3	7.7	8.4	9.6
Farming, forestry, and fishing .....	162	163	3.9	4.1	4.0	3.7	3.4	5.5
No previous work experience .....	506	477	-	-	-	-	-	-
16 to 19 years .....	340	331	-	-	-	-	-	-
20 to 24 years .....	81	76	-	-	-	-	-	-
25 years and over .....	85	70	-	-	-	-	-	-

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-30. Unemployed persons by industry and sex**

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
Total, 16 years and over .....	6,173	5,826	4.5	4.2	4.0	3.8	5.0	4.6
Nonagricultural private wage and salary workers .....	4,851	4,448	4.6	4.1	4.2	3.8	5.0	4.6
Mining .....	23	26	3.7	4.2	3.9	3.8	2.7	7.3
Construction .....	407	453	5.6	6.0	5.8	5.8	4.3	7.7
Manufacturing .....	797	756	3.7	3.8	3.4	3.3	4.4	4.9
Durable goods .....	453	455	3.5	3.7	3.5	3.3	3.5	5.0
Lumber and wood products .....	46	50	5.7	6.2	6.2	6.4	3.0	5.5
Furniture and fixtures .....	36	32	4.8	4.9	4.5	4.2	5.6	6.5
Stone, clay, and glass products .....	17	23	2.7	3.7	2.7	3.5	2.5	4.1
Primary metal industries .....	46	19	5.7	2.5	6.4	2.6	2.5	2.0
Fabricated metal products .....	52	44	3.4	3.3	3.9	3.0	2.2	4.2
Machinery and computing equipment .....	78	86	3.1	3.6	3.3	3.6	2.4	3.4
Electrical machinery, equipment, and supplies .....	63	58	3.3	3.2	2.8	1.5	4.2	6.1
Transportation equipment .....	62	93	2.6	4.0	2.3	2.8	3.5	7.9
Automobiles .....	32	51	2.5	3.8	2.5	2.3	2.3	8.4
Other transportation equipment .....	30	42	2.7	4.3	2.1	3.4	4.9	7.1
Professional and photographic equipment .....	15	19	1.9	2.6	.8	3.0	3.5	2.0
Other durable goods industries .....	38	30	5.1	4.2	5.0	4.1	5.2	4.3
Nondurable goods .....	344	301	4.1	3.8	3.2	3.2	5.4	4.7
Food and kindred products .....	87	75	5.0	4.3	4.7	3.3	5.8	6.0
Textile mill products .....	18	27	2.6	5.2	1.6	5.3	4.0	5.1
Apparel and other textile products .....	70	69	9.0	9.4	6.1	10.1	10.4	9.1
Paper and allied products .....	16	17	2.3	2.9	1.5	3.4	4.4	1.4
Printing and publishing .....	60	52	3.5	3.1	3.4	3.5	3.5	2.7
Chemicals and allied products .....	17	14	1.2	1.0	1.8	.8	.1	1.3
Rubber and miscellaneous plastics products .....	54	29	5.2	3.0	2.5	2.1	10.6	5.0
Other nondurable goods industries .....	21	19	5.7	5.7	5.4	4.5	6.3	8.5
Transportation and public utilities .....	274	261	3.7	3.3	3.5	3.2	4.3	3.5
Transportation .....	196	190	4.3	3.9	3.9	3.9	5.4	4.2
Communications and other public utilities .....	77	71	2.8	2.3	2.6	2.0	3.1	2.8
Wholesale and retail trade .....	1,483	1,271	5.5	4.7	4.7	4.0	6.3	5.4
Wholesale trade .....	188	168	3.6	3.3	3.0	2.6	4.9	4.5
Retail trade .....	1,296	1,104	5.9	5.0	5.3	4.4	6.5	5.6
Finance, insurance, and real estate .....	210	198	2.6	2.4	2.2	2.0	3.0	2.7
Service industries .....	1,658	1,482	4.8	4.1	4.3	3.8	5.0	4.3
Professional services .....	667	588	3.3	2.8	2.5	2.5	3.6	3.0
Other service industries .....	991	894	6.9	5.9	5.8	4.8	8.0	7.1
Agricultural wage and salary workers .....	120	148	4.9	6.6	4.4	6.0	6.3	8.4
Government, self-employed, and unpaid family workers .....	696	753	2.4	2.5	1.9	2.2	3.0	2.8
No previous work experience .....	506	477	-	-	-	-	-	-

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	6,173	5,826	2,359	2,299	2,639	2,475	1,175	1,051	4,448	4,246	1,466	1,318
Job losers and persons who completed temporary jobs .....	2,715	2,559	1,399	1,314	1,135	1,112	181	133	2,026	1,922	586	523
On temporary layoff .....	782	784	320	346	421	404	42	34	622	633	135	118
Not on temporary layoff .....	1,932	1,775	1,079	968	714	707	140	100	1,404	1,289	452	405
Permanent job losers .....	1,342	1,250	776	691	514	507	51	52	988	935	293	258
Persons who completed temporary jobs .....	590	525	303	277	199	200	88	48	417	354	159	147
Job leavers .....	795	866	292	361	383	339	120	167	617	701	144	141
Reentrants .....	2,157	1,925	588	584	1,036	919	534	421	1,487	1,310	585	513
New entrants .....	506	477	80	41	86	105	340	331	318	314	151	141
<b>PERCENT DISTRIBUTION</b>												
Job losers and persons who completed temporary jobs .....	44.0	43.9	59.3	57.1	43.0	44.9	15.4	12.7	45.6	45.3	40.0	39.7
On temporary layoff .....	12.7	13.5	13.6	15.0	16.0	16.3	3.5	3.2	14.0	14.9	9.2	8.9
Not on temporary layoff .....	31.3	30.5	45.8	42.1	27.0	28.6	11.9	9.5	31.6	30.3	30.8	30.8
Job leavers .....	12.9	14.9	12.4	15.7	14.5	13.7	10.2	15.9	13.9	16.5	9.8	10.7
Reentrants .....	34.9	33.0	24.9	25.4	39.3	37.1	45.4	40.0	33.4	30.8	39.9	38.9
New entrants .....	8.2	8.2	3.4	1.8	3.3	4.3	29.0	31.4	7.1	7.4	10.3	10.7
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers and persons who completed temporary jobs .....	2.0	1.8	2.0	1.9	1.9	1.8	2.0	1.5	1.7	1.6	3.6	3.2
Job leavers .....	.6	.6	.4	.5	.6	.6	1.3	1.8	.5	.6	.9	.9
Reentrants .....	1.6	1.4	.8	.8	1.7	1.5	5.8	4.7	1.3	1.1	3.6	3.1
New entrants .....	.4	.3	.1	.1	.1	.2	3.7	3.7	.3	.3	.9	.9

NOTE: Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Reason, sex, and age	August 1999						
	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 .....	5,826	100.0	42.9	33.9	23.2	10.9	12.3
Job losers and persons who completed temporary jobs .....	2,559	100.0	43.3	31.7	25.0	13.0	12.0
On temporary layoff .....	784	100.0	49.4	39.2	11.4	5.7	5.7
Not on temporary layoff .....	1,775	100.0	40.6	28.3	31.1	16.3	14.8
Permanent job losers .....	1,250	100.0	37.7	30.8	31.5	17.4	14.1
Persons who completed temporary jobs .....	525	100.0	47.6	22.3	30.1	13.5	16.5
Job leavers .....	866	100.0	55.5	29.6	14.9	8.0	7.0
Reentrants .....	1,925	100.0	41.0	34.9	24.1	9.2	14.9
New entrants .....	477	100.0	25.1	50.0	24.9	11.1	13.8
Men, 20 years and over .....	2,299	100.0	42.4	29.3	28.4	10.9	17.5
Job losers and persons who completed temporary jobs .....	1,314	100.0	44.0	29.5	26.5	11.3	15.2
On temporary layoff .....	346	100.0	57.3	31.3	11.4	5.3	6.1
Not on temporary layoff .....	968	100.0	39.2	28.8	31.9	13.5	18.5
Permanent job losers .....	691	100.0	35.2	31.7	33.1	14.5	18.6
Persons who completed temporary jobs .....	277	100.0	49.2	21.6	29.2	11.0	18.2
Job leavers .....	361	100.0	55.9	28.0	16.1	7.1	9.0
Reentrants .....	584	100.0	32.0	29.4	38.6	12.9	25.6
New entrants .....	41	100.0	(1)	(1)	(1)	(1)	(1)
Women, 20 years and over .....	2,475	100.0	41.4	35.3	23.3	12.2	11.1
Job losers and persons who completed temporary jobs .....	1,112	100.0	38.8	35.5	25.7	16.2	9.4
On temporary layoff .....	404	100.0	40.1	47.7	12.3	6.5	5.8
Not on temporary layoff .....	707	100.0	38.1	28.6	33.3	21.8	11.5
Permanent job losers .....	507	100.0	37.0	30.3	32.7	23.2	9.4
Persons who completed temporary jobs .....	200	100.0	41.0	24.0	34.9	18.2	16.8
Job leavers .....	339	100.0	48.8	34.2	17.0	8.8	8.2
Reentrants .....	919	100.0	43.7	35.0	21.4	8.9	12.5
New entrants .....	105	100.0	24.6	40.2	35.2	9.3	25.8
Both sexes, 16 to 19 years .....	1,051	100.0	47.5	40.8	11.7	7.7	4.1
Job losers and persons who completed temporary jobs .....	133	100.0	73.6	21.2	5.3	3.1	2.1
On temporary layoff .....	34	100.0	(1)	(1)	(1)	(1)	(1)
Not on temporary layoff .....	100	100.0	71.5	21.4	7.1	4.2	2.9
Permanent job losers .....	52	100.0	(1)	(1)	(1)	(1)	(1)
Persons who completed temporary jobs .....	48	100.0	(1)	(1)	(1)	(1)	(1)
Job leavers .....	167	100.0	68.3	23.5	8.2	8.2	-
Reentrants .....	421	100.0	47.8	42.4	9.8	4.7	5.1
New entrants .....	331	100.0	26.1	55.3	18.7	13.0	5.6

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

used in the household survey.

NOTE: Beginning in January 1999, data reflect revised population controls

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

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
Total, 16 years and over .....	6,173	5,826	100.0	100.0	4,932	4,768	100.0	100.0
Less than 5 weeks .....	2,509	2,498	40.6	42.9	1,849	1,918	37.5	40.2
5 to 14 weeks .....	2,150	1,976	34.8	33.9	1,751	1,623	35.5	34.0
5 to 10 weeks .....	1,477	1,424	23.9	24.4	1,180	1,144	23.9	24.0
11 to 14 weeks .....	673	552	10.9	9.5	571	479	11.6	10.0
15 weeks and over .....	1,514	1,352	24.5	23.2	1,331	1,227	27.0	25.7
15 to 26 weeks .....	679	633	11.0	10.9	582	566	11.8	11.9
27 weeks and over .....	835	719	13.5	12.3	749	662	15.2	13.9
27 to 51 weeks .....	397	352	6.4	6.0	374	340	7.6	7.1
52 weeks and over .....	438	367	7.1	6.3	375	321	7.6	6.7
Average (mean) duration, in weeks .....	13.7	13.1	-	-	14.6	14.2	-	-
Median duration, in weeks .....	7.0	6.7	-	-	7.7	7.4	-	-

NOTE: Beginning in January 1999, data reflect revised population controls

used in the household survey.



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

Sex, age, race, and marital status	August 1999							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 .....	5,826	2,498	1,976	1,352	633	719	13.1	6.7	
16 to 19 years .....	1,051	499	429	123	81	43	8.1	5.1	
20 to 24 years .....	1,057	526	350	180	91	89	10.6	4.6	
25 to 34 years .....	1,253	532	403	318	163	155	13.3	7.2	
35 to 44 years .....	1,231	507	396	327	144	183	14.8	7.3	
45 to 54 years .....	742	276	225	242	93	149	17.4	7.9	
55 to 64 years .....	370	117	130	123	51	71	18.2	8.9	
65 years and over .....	121	40	43	39	10	29	19.4	8.6	
<b>Men, 16 years and over</b> .....	2,842	1,223	899	720	301	419	14.6	6.9	
16 to 19 years .....	543	249	226	68	50	17	8.1	5.6	
20 to 24 years .....	537	282	162	92	38	54	11.3	4.3	
25 to 34 years .....	608	271	168	169	81	88	13.9	6.6	
35 to 44 years .....	535	209	170	156	54	102	18.4	7.9	
45 to 54 years .....	354	124	95	135	41	94	20.6	9.0	
55 to 64 years .....	187	63	53	70	28	42	20.2	9.3	
65 years and over .....	79	24	25	30	9	22	20.0	10.5	
<b>Women, 16 years and over</b> .....	2,984	1,275	1,077	632	332	300	11.8	6.6	
16 to 19 years .....	508	250	202	56	30	26	8.1	4.7	
20 to 24 years .....	520	244	188	88	52	35	9.8	5.3	
25 to 34 years .....	646	261	235	149	83	67	12.7	7.7	
35 to 44 years .....	697	298	227	172	91	81	12.0	6.8	
45 to 54 years .....	388	151	130	107	52	55	14.5	7.2	
55 to 64 years .....	183	54	76	53	23	29	16.1	8.5	
65 years and over .....	43	16	18	8	1	7	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Race</b>									
White, 16 years and over .....	4,246	1,930	1,397	920	408	512	12.4	5.9	
Men .....	2,148	955	674	520	198	321	13.9	6.5	
Women .....	2,099	975	723	400	210	191	10.8	5.4	
Black, 16 years and over .....	1,318	467	475	376	188	188	16.1	8.6	
Men .....	564	214	187	162	79	83	17.6	8.0	
Women .....	754	253	287	214	109	105	15.0	9.0	
<b>Marital status</b>									
Men, 16 years and over:									
Married, spouse present .....	911	391	261	260	105	154	15.6	7.0	
Widowed, divorced, or separated .....	383	150	97	136	49	88	18.6	8.6	
Single (never married) .....	1,548	683	541	324	147	177	12.9	6.5	
Women, 16 years and over:									
Married, spouse present .....	1,017	415	399	203	125	77	10.7	6.7	
Widowed, divorced, or separated .....	633	279	196	158	66	91	14.1	6.2	
Single (never married) .....	1,333	580	481	272	140	131	11.5	6.6	

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

used in the household survey.

NOTE: Beginning in January 1999, data reflect revised population controls

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Occupation and industry	August 1999							Average (mean) duration	Median duration
	Thousands of persons					Weeks			
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
<b>OCCUPATION</b>									
Managerial and professional specialty .....	860	329	330	201	80	122	13.7	7.4	
Technical, sales, and administrative support .....	1,443	624	494	324	178	146	11.7	6.7	
Service occupations .....	1,094	466	385	243	109	134	12.5	6.8	
Precision production, craft, and repair .....	628	310	174	144	77	66	12.6	4.8	
Operators, fabricators, and laborers .....	1,134	553	304	277	124	153	14.2	5.0	
Farming, forestry, and fishing .....	163	77	46	39	10	29	14.4	5.1	
<b>INDUSTRY<sup>1</sup></b>									
Agriculture .....	148	70	49	29	9	19	11.6	5.5	
Construction .....	458	220	136	101	47	54	12.2	5.5	
Manufacturing .....	758	347	204	207	99	108	15.0	6.6	
Durable goods .....	455	216	109	130	69	61	14.9	6.1	
Nondurable goods .....	303	132	95	76	30	47	15.2	6.9	
Transportation and public utilities .....	282	130	82	70	33	36	12.1	5.9	
Wholesale and retail trade .....	1,285	559	464	262	132	130	11.7	6.1	
Finance, insurance, and real estate .....	199	104	54	40	26	14	8.9	4.3	
Services .....	1,783	765	633	385	191	194	12.4	6.7	
Public administration .....	129	41	45	43	16	27	19.4	9.0	
No previous work experience .....	477	120	238	119	53	66	16.2	8.4	

<sup>1</sup> Includes wage and salary workers only.

used in the household survey.

NOTE: Beginning in January 1999, data reflect revised population controls

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

(In thousands)

Category	Total		Age						Sex			
	Aug. 1998	Aug. 1999	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
	Total not in the labor force .....	67,100	67,948	10,211	10,732	19,033	19,287	37,856	37,929	24,352	24,674	42,748
Do not want a job now <sup>1</sup> .....	61,920	63,206	8,447	9,047	16,512	17,115	36,961	37,045	22,360	22,810	39,560	40,396
Want a job <sup>1</sup> .....	5,180	4,742	1,765	1,685	2,521	2,172	895	884	1,992	1,863	3,188	2,879
Did not search for work in previous year .....	3,274	3,040	1,039	977	1,547	1,350	687	713	1,216	1,146	2,058	1,894
Searched for work in previous year <sup>2</sup> .....	1,907	1,702	725	708	974	822	207	172	777	717	1,130	985
Not available to work now .....	655	568	259	240	355	291	42	37	197	192	459	377
Available to work now .....	1,251	1,134	466	468	619	532	166	134	580	525	671	609
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	280	265	99	122	130	117	51	26	168	153	112	112
Reasons other than discouragement .....	971	869	368	346	489	415	115	108	412	372	559	497
Family responsibilities .....	166	140	42	27	114	107	11	5	22	25	145	114
In school or training .....	147	143	115	101	32	37	-	-	59	66	88	77
Ill health or disability .....	95	77	20	6	54	44	21	28	52	44	43	32
Other <sup>4</sup> .....	563	510	191	213	289	226	82	70	280	236	283	273

<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 1999, data reflect revised population controls used in the household survey.

**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>	
	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>AGE</b>												
Total, 16 years and over <sup>2</sup> .....	7,462	7,298	5.6	5.4	4,015	3,909	5.6	5.4	3,447	3,389	5.7	5.5
16 to 19 years .....	431	488	5.4	6.1	173	239	4.2	5.8	258	250	6.6	6.5
20 years and over .....	7,031	6,810	5.7	5.4	3,842	3,671	5.7	5.4	3,189	3,139	5.6	5.4
20 to 24 years .....	756	718	5.9	5.4	378	316	5.5	4.5	378	402	6.4	6.5
25 years and over .....	6,275	6,092	5.6	5.4	3,464	3,355	5.7	5.5	2,812	2,737	5.5	5.3
25 to 54 years .....	5,537	5,352	5.8	5.6	3,043	2,915	5.9	5.6	2,494	2,437	5.7	5.5
55 years and over .....	738	740	4.5	4.3	421	439	4.6	4.6	317	301	4.4	3.9
55 to 64 years .....	648	604	5.1	4.5	359	361	5.1	5.0	290	243	5.0	4.0
65 years and over .....	90	136	2.5	3.5	63	78	3.0	3.5	27	58	1.8	3.6
<b>RACE AND HISPANIC ORIGIN</b>												
White .....	6,386	6,184	5.7	5.5	3,484	3,339	5.7	5.4	2,903	2,845	5.8	5.6
Black .....	783	802	5.3	5.3	380	390	5.5	5.5	403	413	5.2	5.1
Hispanic origin .....	451	456	3.4	3.3	269	264	3.3	3.2	181	191	3.4	3.4
<b>MARITAL STATUS</b>												
Married, spouse present .....	3,945	3,879	5.3	5.1	2,444	2,382	5.7	5.5	1,501	1,497	4.7	4.5
Widowed, divorced, or separated .....	1,332	1,252	6.5	6.1	495	472	5.9	5.6	837	780	6.9	6.4
Single (never married) .....	2,184	2,167	6.0	5.8	1,076	1,056	5.3	5.1	1,109	1,112	6.8	6.7
<b>FULL- OR PART-TIME STATUS</b>												
Primary job full time, secondary job part time .....	4,344	3,992	-	-	2,541	2,350	-	-	1,803	1,641	-	-
Primary and secondary jobs both part time .....	1,408	1,514	-	-	469	499	-	-	939	1,014	-	-
Primary and secondary jobs both full time .....	271	332	-	-	184	260	-	-	87	72	-	-
Hours vary on primary or secondary job .....	1,384	1,418	-	-	796	777	-	-	588	641	-	-

<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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-38. Employment status of male Vietnam-era veterans and nonveterans by age**

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Aug. 1998	Aug. 1999	Total		Employed		Unemployed			
			Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999	Number		Percent of labor force	
							Aug. 1998	Aug. 1999	Aug. 1998	Aug. 1999
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,804	7,754	6,537	6,331	6,366	6,175	171	156	2.6	2.5
40 to 54 years .....	5,924	5,435	5,301	4,742	5,152	4,616	149	126	2.8	2.7
40 to 44 years .....	700	486	632	415	607	403	25	12	4.0	3.0
45 to 49 years .....	2,175	1,826	1,940	1,594	1,877	1,543	63	52	3.2	3.2
50 to 54 years .....	3,049	3,123	2,729	2,733	2,667	2,670	61	62	2.3	2.3
55 years and over .....	1,880	2,319	1,236	1,589	1,215	1,559	22	30	1.8	1.9
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	20,343	21,468	18,373	19,411	17,935	18,947	439	464	2.4	2.4
40 to 44 years .....	9,217	9,464	8,484	8,769	8,258	8,535	226	234	2.7	2.7
45 to 49 years .....	6,923	7,398	6,281	6,713	6,164	6,564	117	149	1.9	2.2
50 to 54 years .....	4,203	4,606	3,609	3,929	3,512	3,848	96	81	2.7	2.1

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 1999, data reflect revised population controls used in the household survey.

## Need information from the Bureau of Labor Statistics?

You can get it now on the WEB.

Here are the Bureau's addresses.

Bureau of Labor Statistics ..... <http://stats.bls.gov>  
Division of Information Services ..... <http://stats.bls.gov/opbinfo.htm>  
BLS Regional Offices ..... <http://stats.bls.gov/regnhome.htm>

### **Employment and Unemployment:**

Employment, hours, and earnings by industry

National ..... <http://stats.bls.gov/ceshome.htm>

State and area ..... <http://stats.bls.gov/790home.htm>

National labor force statistics ..... <http://stats.bls.gov/cpsHOME.htm>

Region, State, and metropolitan area

labor force data ..... <http://stats.bls.gov/lauhome.htm>

Longitudinal research ..... <http://stats.bls.gov/nlshome.htm>

Covered employment and wages ..... <http://stats.bls.gov/cewhome.htm>

Occupational employment statistics ..... <http://stats.bls.gov/oeshome.htm>

Mass layoff statistics ..... <http://stats.bls.gov/lauhome.htm>

### **Prices and Living Conditions:**

Consumer price indexes ..... <http://stats.bls.gov/cpihome.htm>

Producer price indexes ..... <http://stats.bls.gov/ppihome.htm>

Consumer Expenditure Survey ..... <http://stats.bls.gov/csxhome.htm>

### **Compensation and Working Conditions:**

National Compensation Survey ..... <http://stats.bls.gov/comhome.htm>

Collective bargaining ..... <http://stats.bls.gov/cbahome.htm>

Employment cost trends ..... <http://stats.bls.gov/ecthome.htm>

Employee Benefits Survey ..... <http://stats.bls.gov/ebshome.htm>

Occupational Compensation Survey ..... <http://stats.bls.gov/ocshome.htm>

Safety and health ..... <http://stats.bls.gov/oshhome.htm>

### **Productivity:**

Quarterly labor productivity ..... <http://stats.bls.gov/lprhome.htm>

Industry productivity ..... <http://stats.bls.gov/iprhome.htm>

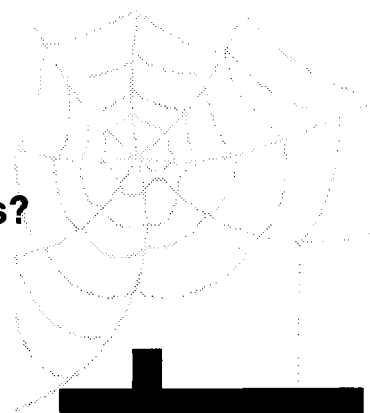
Multifactor productivity ..... <http://stats.bls.gov/mprhome.htm>

**Employment Projections** ..... <http://stats.bls.gov/emphome.htm>

### **International data:**

Foreign labor statistics ..... <http://stats.bls.gov/flshome.htm>

U.S. import and export price indexes ..... <http://stats.bls.gov/ipphome.htm>



Internet





**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	16.15	733.21	39.0	16.04	625.56
1998 .....	34.6	12.78	442.19	43.9	16.90	741.91	38.8	16.59	643.69
Monthly data, not seasonally adjusted									
1998:									
August .....	35.2	\$12.76	\$449.15	44.0	\$16.88	\$742.72	40.2	\$16.77	\$674.15
September .....	34.3	12.90	442.47	42.9	17.11	734.02	37.5	16.79	629.63
October .....	34.6	12.93	447.38	44.0	17.07	751.08	40.0	16.89	675.60
November .....	34.7	13.00	451.10	43.8	17.29	757.30	38.6	16.82	649.25
December .....	34.7	13.00	451.10	43.7	17.29	755.57	39.1	16.87	659.62
1999:									
January .....	34.0	13.11	445.74	42.3	17.23	728.83	37.9	16.74	634.45
February .....	34.3	13.10	449.33	42.7	17.08	729.32	38.0	16.66	633.08
March .....	34.2	13.12	448.70	42.2	17.01	717.82	37.7	16.79	632.98
April .....	34.3	13.16	451.39	43.3	16.93	733.07	38.6	16.85	650.41
May .....	34.6	13.19	456.37	44.2	17.00	751.40	39.3	17.02	668.89
June .....	34.6	13.14	454.64	44.2	16.93	748.31	39.8	17.08	679.78
July <sup>P</sup> .....	34.7	13.16	456.65	44.6	17.14	764.44	39.9	17.23	687.48
August <sup>P</sup> .....	35.1	13.21	463.67	44.5	17.08	760.06	40.0	17.27	690.80

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	14.92	592.32	38.4	13.45	516.48
1998 .....	41.7	13.49	12.79	562.53	39.5	15.31	604.75	38.4	14.06	539.90
Monthly data, not seasonally adjusted										
<b>1998:</b>										
August .....	41.7	\$13.45	\$12.74	\$560.87	39.9	\$15.30	\$610.47	38.7	\$14.18	\$548.77
September .....	41.5	13.60	12.88	564.40	39.3	15.41	605.61	38.1	14.16	539.50
October .....	41.9	13.55	12.83	567.75	39.3	15.39	604.83	38.3	14.19	543.48
November .....	42.2	13.60	12.87	573.92	39.7	15.48	614.56	38.7	14.34	554.96
December .....	42.6	13.69	12.94	583.19	39.1	15.50	606.05	38.4	14.32	549.89
<b>1999:</b>										
January .....	41.3	13.66	12.98	564.16	38.7	15.57	602.56	38.0	14.42	547.96
February .....	41.3	13.66	13.00	564.16	39.0	15.56	606.84	38.3	14.38	550.75
March .....	41.4	13.73	13.04	568.42	38.8	15.51	601.79	38.2	14.34	547.79
April .....	41.6	13.80	13.10	574.08	38.6	15.57	601.00	38.3	14.48	554.58
May .....	41.7	13.85	13.14	577.55	38.8	15.55	603.34	38.6	14.53	560.86
June .....	41.8	13.91	13.17	581.44	39.0	15.56	606.84	38.4	14.44	554.50
July <sup>P</sup> .....	41.2	13.92	13.21	573.50	39.0	15.73	613.47	38.4	14.54	558.34
August <sup>P</sup> .....	41.7	13.93	13.19	580.88	39.7	15.66	621.70	38.8	14.64	568.03

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	8.33	240.74	36.1	13.34	481.57	32.6	12.28	400.33
1998 .....	29.0	8.73	253.17	36.4	14.06	511.78	32.6	12.85	418.91
Monthly data, not seasonally adjusted									
<b>1998:</b>									
August .....	29.9	\$8.72	\$260.73	36.9	\$14.12	\$521.03	33.2	\$12.75	\$423.30
September .....	29.1	8.88	258.41	35.9	14.10	506.19	32.3	12.97	418.93
October .....	28.9	8.84	255.48	36.1	14.20	512.62	32.6	13.01	424.13
November .....	28.9	8.86	256.05	36.9	14.43	532.47	32.8	13.15	431.32
December .....	29.2	8.88	259.30	36.2	14.40	521.28	32.6	13.18	429.67
<b>1999:</b>									
January .....	28.1	9.00	252.90	36.0	14.48	521.28	32.3	13.30	429.59
February .....	28.6	8.98	256.83	36.3	14.55	528.17	32.5	13.32	432.90
March .....	28.6	9.00	257.40	36.0	14.53	523.08	32.4	13.33	431.89
April .....	28.7	9.03	259.16	35.9	14.61	524.50	32.4	13.32	431.57
May .....	29.1	9.03	262.77	36.4	14.72	535.81	32.7	13.34	436.22
June .....	29.4	9.02	265.19	35.9	14.50	520.55	32.6	13.23	431.30
July <sup>p</sup> .....	29.8	9.02	268.80	36.1	14.53	524.53	32.8	13.20	432.96
August <sup>p</sup> .....	30.0	9.03	270.90	36.8	14.66	539.49	33.2	13.28	440.90

<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 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1998 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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Total</b> .....	126,170	126,361	126,567	126,841	127,186	127,378	127,730	127,813	128,134	128,162	128,443	128,781	128,905
<b>Total private</b> .....	106,301	106,470	106,654	106,893	107,213	107,386	107,676	107,726	108,035	108,085	108,338	108,625	108,702
<b>Goods-producing</b> .....	25,344	25,333	25,306	25,298	25,354	25,315	25,329	25,285	25,288	25,199	25,180	25,248	25,153
<b>Mining</b> .....	585	583	578	574	570	560	553	550	538	531	526	529	526
Metal mining .....	50	50	50	50	50	50	50	50	49	49	48	48	46
Coal mining .....	90	90	90	90	90	89	88	87	86	86	84	85	84
Oil and gas extraction .....	336	334	329	325	320	312	306	305	294	287	285	286	287
Nonmetallic minerals, except fuels .....	109	109	109	109	110	109	109	108	109	109	109	110	109
<b>Construction</b> .....	6,005	6,009	6,042	6,085	6,173	6,170	6,238	6,232	6,277	6,239	6,258	6,272	6,243
General building contractors .....	1,381	1,382	1,389	1,394	1,404	1,410	1,426	1,429	1,428	1,427	1,430	1,434	1,426
Heavy construction, except building .....	842	837	843	850	876	871	869	864	874	854	857	857	851
Special trade contractors .....	3,782	3,790	3,810	3,841	3,893	3,889	3,943	3,939	3,975	3,958	3,971	3,981	3,966
<b>Manufacturing</b> .....	18,754	18,741	18,686	18,639	18,611	18,585	18,538	18,503	18,473	18,429	18,396	18,447	18,384
<b>Durable goods</b> .....	11,177	11,159	11,128	11,092	11,074	11,050	11,027	11,014	10,993	10,971	10,960	11,013	10,975
Lumber and wood products .....	813	815	817	820	823	826	827	827	824	824	824	826	827
Furniture and fixtures .....	532	532	532	532	534	534	535	535	536	537	538	546	542
Stone, clay, and glass products .....	564	565	566	568	570	569	571	569	570	569	568	570	567
Primary metal industries .....	713	712	705	700	699	696	695	693	691	689	687	692	689
Fabricated metal products .....	1,502	1,500	1,498	1,494	1,493	1,495	1,491	1,490	1,489	1,487	1,485	1,493	1,484
Industrial machinery and equipment .....	2,203	2,197	2,188	2,177	2,167	2,148	2,146	2,139	2,132	2,129	2,128	2,130	2,117
Computer and office equipment .....	378	377	374	373	370	362	362	360	361	362	364	361	359
Electronic and other electrical equipment .....	1,698	1,692	1,683	1,673	1,669	1,663	1,659	1,659	1,658	1,658	1,657	1,667	1,665
Electronic components and accessories .....	655	651	647	643	640	637	636	636	635	635	637	639	642
Transportation equipment .....	1,894	1,891	1,892	1,887	1,882	1,884	1,871	1,873	1,864	1,853	1,849	1,863	1,861
Motor vehicles and equipment .....	997	996	998	996	994	996	989	992	996	996	998	1,015	1,012
Aircraft and parts .....	526	525	523	520	518	517	510	511	503	498	491	488	484
Instruments and related products .....	866	863	859	855	851	849	847	844	842	839	837	840	835
Miscellaneous manufacturing .....	392	392	388	386	386	386	385	385	387	386	387	386	388
<b>Nondurable goods</b> .....	7,577	7,582	7,558	7,547	7,537	7,535	7,511	7,489	7,480	7,458	7,436	7,434	7,409
Food and kindred products .....	1,675	1,687	1,685	1,690	1,693	1,699	1,695	1,693	1,689	1,688	1,680	1,682	1,673
Tobacco products .....	40	40	40	40	40	40	40	39	38	38	39	39	36
Textile mill products .....	594	593	590	586	582	579	575	571	567	563	560	559	557
Apparel and other textile products .....	755	751	738	729	724	718	707	702	698	691	686	680	670
Paper and allied products .....	673	672	669	666	666	664	664	662	662	661	659	659	659
Printing and publishing .....	1,566	1,565	1,565	1,564	1,560	1,561	1,559	1,557	1,555	1,551	1,552	1,553	1,552
Chemicals and allied products .....	1,044	1,043	1,042	1,043	1,042	1,041	1,041	1,037	1,038	1,036	1,033	1,031	1,032
Petroleum and coal products .....	140	140	140	140	140	139	139	139	139	138	137	138	137
Rubber and misc. plastics products .....	1,009	1,010	1,009	1,010	1,012	1,016	1,015	1,014	1,019	1,018	1,016	1,021	1,021
Leather and leather products .....	81	81	80	79	78	78	76	75	75	74	74	72	72
<b>Service-producing</b> .....	100,826	101,028	101,261	101,543	101,832	102,063	102,401	102,528	102,846	102,963	103,263	103,533	103,752
<b>Transportation and public utilities</b> .....	6,625	6,637	6,657	6,671	6,684	6,708	6,723	6,732	6,750	6,758	6,781	6,797	6,809
Transportation .....	4,305	4,313	4,327	4,335	4,340	4,356	4,367	4,378	4,397	4,402	4,423	4,439	4,445
Railroad transportation .....	232	233	232	230	231	233	233	235	234	233	233	230	231
Local and interurban passenger transit .....	475	471	473	474	474	474	475	476	483	480	483	484	482
Trucking and warehousing .....	1,755	1,759	1,766	1,770	1,769	1,786	1,789	1,796	1,800	1,802	1,810	1,817	1,818
Water transportation .....	184	183	183	184	183	182	181	177	180	180	181	183	186
Transportation by air .....	1,190	1,196	1,199	1,201	1,205	1,204	1,213	1,218	1,220	1,226	1,234	1,241	1,243
Pipelines, except natural gas .....	14	14	14	14	14	14	14	14	14	13	13	13	13
Transportation services .....	455	457	460	462	464	463	462	462	466	468	469	471	472
Communications and public utilities .....	2,320	2,324	2,330	2,336	2,344	2,352	2,356	2,354	2,353	2,356	2,358	2,358	2,364
Communications .....	1,467	1,472	1,480	1,484	1,492	1,502	1,507	1,506	1,508	1,513	1,513	1,518	1,524
Electric, gas, and sanitary services .....	853	852	850	852	852	850	849	848	845	843	845	840	840
<b>Wholesale trade</b> .....	6,846	6,871	6,876	6,891	6,901	6,924	6,937	6,947	6,965	6,977	6,993	7,011	7,031
Durable goods .....	4,055	4,066	4,068	4,074	4,077	4,088	4,100	4,103	4,113	4,124	4,139	4,154	4,169
Nondurable goods .....	2,791	2,805	2,808	2,817	2,824	2,836	2,837	2,844	2,852	2,853	2,854	2,857	2,862

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Retail trade</b> .....	22,353	22,382	22,392	22,443	22,525	22,556	22,648	22,611	22,724	22,748	22,796	22,895	22,892
Building materials and garden supplies	950	954	957	961	967	972	979	982	982	979	982	986	990
General merchandise stores	2,733	2,745	2,744	2,750	2,758	2,773	2,781	2,794	2,799	2,784	2,782	2,781	2,791
Department stores	2,429	2,437	2,441	2,447	2,456	2,470	2,475	2,489	2,499	2,486	2,482	2,478	2,484
Food stores	3,483	3,486	3,485	3,488	3,487	3,481	3,492	3,490	3,492	3,487	3,479	3,475	3,486
Automotive dealers and service stations	2,345	2,349	2,356	2,361	2,370	2,377	2,390	2,392	2,399	2,400	2,403	2,408	2,416
New and used car dealers	1,048	1,050	1,052	1,055	1,059	1,061	1,065	1,069	1,074	1,077	1,080	1,085	1,090
Apparel and accessory stores	1,149	1,150	1,144	1,148	1,147	1,152	1,167	1,167	1,163	1,172	1,178	1,187	1,182
Furniture and home furnishings stores	1,031	1,033	1,038	1,042	1,048	1,055	1,064	1,070	1,081	1,084	1,091	1,089	1,097
Eating and drinking places	7,779	7,782	7,787	7,808	7,857	7,843	7,855	7,785	7,863	7,880	7,911	7,985	7,947
Miscellaneous retail establishments	2,883	2,883	2,881	2,885	2,891	2,903	2,920	2,931	2,945	2,962	2,970	2,984	2,983
<b>Finance, insurance, and real estate</b> .....	7,445	7,467	7,494	7,520	7,542	7,570	7,581	7,595	7,611	7,621	7,636	7,644	7,655
Finance	3,616	3,623	3,642	3,651	3,663	3,675	3,681	3,690	3,697	3,706	3,709	3,713	3,721
Depository institutions	2,043	2,040	2,044	2,044	2,047	2,049	2,051	2,051	2,050	2,047	2,045	2,042	2,043
Commercial banks	1,467	1,465	1,466	1,466	1,467	1,469	1,470	1,469	1,467	1,465	1,463	1,461	1,461
Savings institutions	258	258	258	258	257	258	258	258	257	256	256	256	256
Nondepository institutions	669	673	684	693	698	705	708	712	716	720	721	721	722
Mortgage bankers and brokers	337	342	350	355	360	362	365	368	370	374	372	370	368
Security and commodity brokers	653	656	660	658	661	663	661	664	668	672	676	682	686
Holding and other investment offices	251	254	254	256	257	258	261	263	263	267	267	268	270
Insurance	2,355	2,362	2,367	2,375	2,379	2,383	2,386	2,392	2,395	2,399	2,402	2,404	2,406
Insurance carriers	1,607	1,611	1,614	1,619	1,624	1,627	1,628	1,632	1,631	1,635	1,638	1,634	1,634
Insurance agents, brokers, and service	748	751	753	756	755	756	758	760	764	764	764	770	772
Real estate	1,474	1,482	1,485	1,494	1,500	1,512	1,514	1,513	1,519	1,516	1,525	1,527	1,528
<b>Services<sup>1</sup></b> .....	37,688	37,780	37,929	38,070	38,207	38,313	38,458	38,556	38,697	38,782	38,952	39,030	39,162
Agricultural services	709	712	716	726	739	747	751	747	755	751	757	757	755
Hotels and other lodging places	1,784	1,785	1,784	1,782	1,783	1,785	1,786	1,789	1,791	1,786	1,797	1,808	1,810
Personal services	1,197	1,195	1,194	1,198	1,202	1,205	1,201	1,200	1,204	1,189	1,200	1,206	1,205
Business services	8,649	8,654	8,729	8,779	8,829	8,869	8,922	8,963	9,010	9,047	9,088	9,139	9,185
Services to buildings	952	956	959	962	964	971	971	973	978	979	984	990	996
Personnel supply services	3,249	3,230	3,254	3,267	3,292	3,308	3,331	3,343	3,350	3,366	3,387	3,416	3,419
Help supply services	2,887	2,874	2,891	2,903	2,922	2,933	2,954	2,967	2,975	2,986	3,000	3,021	3,030
Computer and data processing services	1,626	1,639	1,658	1,675	1,691	1,708	1,724	1,734	1,749	1,765	1,781	1,793	1,808
Auto repair, services, and parking	1,150	1,153	1,155	1,160	1,163	1,168	1,175	1,176	1,178	1,182	1,184	1,185	1,186
Miscellaneous repair services	382	384	386	388	390	392	392	393	396	398	395	394	397
Motion pictures	575	577	577	575	577	573	582	580	587	604	611	597	599
Amusement and recreation services	1,608	1,622	1,626	1,641	1,647	1,653	1,656	1,660	1,668	1,675	1,695	1,694	1,711
Health services	9,859	9,873	9,883	9,892	9,899	9,905	9,919	9,932	9,951	9,954	9,964	9,976	9,995
Offices and clinics of medical doctors	1,811	1,818	1,825	1,831	1,833	1,840	1,844	1,850	1,856	1,860	1,864	1,870	1,875
Nursing and personal care facilities	1,760	1,761	1,759	1,757	1,756	1,756	1,755	1,754	1,753	1,755	1,755	1,753	1,755
Hospitals	3,937	3,943	3,948	3,950	3,952	3,954	3,959	3,963	3,966	3,966	3,969	3,968	3,974
Home health care services	661	658	654	651	651	645	651	653	656	653	653	655	658
Legal services	977	980	985	986	988	989	992	995	998	999	1,002	1,000	1,004
Educational services	2,176	2,189	2,206	2,214	2,223	2,218	2,237	2,243	2,254	2,265	2,272	2,274	2,271
Social services	2,660	2,672	2,682	2,695	2,708	2,721	2,734	2,744	2,755	2,760	2,778	2,765	2,799
Child day care services	610	610	612	615	618	621	625	627	628	629	633	631	627
Residential care	749	753	757	760	762	765	768	769	772	775	777	780	784
Museums and botanical and zoological gardens	93	93	93	94	94	94	94	95	94	93	94	94	94
Membership organizations	2,365	2,369	2,374	2,375	2,380	2,385	2,389	2,392	2,392	2,394	2,409	2,404	2,406
Engineering and management services	3,214	3,231	3,248	3,273	3,292	3,316	3,335	3,354	3,370	3,391	3,411	3,441	3,451
Engineering and architectural services	912	913	915	919	922	926	930	933	939	940	942	949	949
Management and public relations	1,046	1,058	1,068	1,081	1,090	1,103	1,111	1,123	1,133	1,143	1,153	1,163	1,175
<b>Government</b> .....	19,869	19,891	19,913	19,948	19,973	19,992	20,054	20,087	20,099	20,077	20,105	20,156	20,203
Federal	2,688	2,689	2,711	2,723	2,701	2,702	2,713	2,710	2,688	2,666	2,664	2,657	2,659
Federal, except Postal Service	1,818	1,815	1,833	1,843	1,819	1,822	1,834	1,831	1,809	1,788	1,789	1,777	1,778
State	4,633	4,647	4,633	4,637	4,652	4,644	4,670	4,680	4,688	4,677	4,675	4,683	4,701
Education	1,931	1,939	1,923	1,923	1,932	1,920	1,941	1,948	1,955	1,941	1,934	1,948	1,961
Other State government	2,702	2,708	2,710	2,714	2,720	2,724	2,729	2,732	2,733	2,736	2,741	2,735	2,740
Local	12,548	12,555	12,569	12,588	12,620	12,646	12,671	12,697	12,723	12,734	12,766	12,816	12,843
Education	7,109	7,103	7,108	7,132	7,148	7,165	7,181	7,200	7,206	7,225	7,239	7,268	7,293
Other local government	5,439	5,452	5,461	5,456	5,472	5,481	5,490	5,497	5,517	5,509	5,527	5,548	5,550

<sup>1</sup> Includes other industries, not shown separately.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998

benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 forward are subject to revision.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1998							1999					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<b>Total</b> .....	60,781	60,848	60,990	61,146	61,221	61,315	61,464	61,599	61,767	61,852	62,008	62,035	62,227
<b>Total private</b> .....	49,731	49,819	49,910	50,006	50,074	50,160	50,275	50,394	50,524	50,591	50,734	50,771	50,916
<b>Goods-producing</b> .....	6,760	6,720	6,734	6,731	6,700	6,680	6,675	6,674	6,658	6,647	6,643	6,630	6,632
<b>Mining</b> .....	84	84	84	83	83	82	82	82	82	82	79	78	78
<b>Construction</b> .....	663	667	670	673	674	677	679	682	687	689	695	695	700
<b>Manufacturing</b> .....	6,013	5,969	5,980	5,975	5,943	5,921	5,914	5,910	5,889	5,876	5,869	5,857	5,854
<b>Durable goods</b> .....	2,987	2,956	2,974	2,969	2,956	2,943	2,939	2,936	2,930	2,924	2,926	2,922	2,927
Lumber and wood products .....	143	144	144	145	145	146	147	147	148	149	148	149	149
Furniture and fixtures .....	168	169	169	169	168	168	169	169	170	169	170	171	171
Stone, clay, and glass products .....	105	105	105	105	105	105	104	104	104	104	103	102	103
Primary metal industries .....	105	102	105	105	105	104	103	103	102	102	101	101	101
Fabricated metal products .....	337	338	338	339	338	337	337	338	338	336	339	339	339
Industrial machinery and equipment .....	485	481	480	477	475	472	472	467	466	464	464	464	466
Electronic and other electrical equipment .....	708	704	700	696	689	684	682	679	677	675	676	675	675
Transportation equipment .....	407	384	405	406	408	406	405	408	405	407	405	404	404
Instruments and related products .....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing .....	172	172	172	171	169	169	169	169	168	168	169	168	169
<b>Nondurable goods</b> .....	3,026	3,013	3,006	3,006	2,987	2,978	2,975	2,974	2,959	2,952	2,943	2,935	2,927
Food and kindred products .....	554	554	553	555	551	555	558	560	557	557	554	556	555
Tobacco products .....	13	13	13	13	13	13	13	13	13	12	12	12	12
Textile mill products .....	278	277	275	276	274	271	270	269	267	266	263	261	259
Apparel and other textile products .....	562	558	550	548	536	529	525	521	513	508	503	498	494
Paper and allied products .....	164	163	163	162	162	161	161	161	161	161	161	160	160
Printing and publishing .....	707	706	705	705	705	703	702	702	701	701	700	698	699
Chemicals and allied products .....	334	335	335	336	335	335	335	335	335	336	336	337	336
Petroleum and coal products .....	25	24	24	24	24	24	24	24	25	25	25	25	24
Rubber and misc. plastics products .....	345	340	345	345	345	345	345	348	346	346	349	349	348
Leather and leather products .....	44	43	43	42	42	42	42	41	41	40	40	39	40
<b>Service-producing</b> .....	54,021	54,128	54,256	54,415	54,521	54,635	54,789	54,925	55,109	55,205	55,365	55,405	55,595
<b>Transportation and public utilities</b> .....	1,976	1,983	1,993	2,004	2,016	2,015	2,025	2,032	2,048	2,049	2,054	2,059	2,073
<b>Wholesale trade</b> .....	2,099	2,102	2,105	2,106	2,110	2,115	2,118	2,121	2,127	2,132	2,140	2,140	2,148
<b>Retail trade</b> .....	11,739	11,777	11,786	11,806	11,804	11,813	11,842	11,874	11,923	11,937	11,974	11,998	12,008
<b>Finance, insurance, and real estate</b> .....	4,647	4,662	4,670	4,678	4,697	4,712	4,726	4,743	4,751	4,753	4,752	4,753	4,769
<b>Services</b> .....	22,510	22,575	22,622	22,681	22,747	22,825	22,889	22,950	23,017	23,073	23,171	23,191	23,286
<b>Government</b> .....	11,050	11,029	11,080	11,140	11,147	11,155	11,189	11,205	11,243	11,261	11,274	11,264	11,311
Federal .....	1,142	1,128	1,132	1,138	1,148	1,151	1,141	1,141	1,148	1,149	1,133	1,124	1,126
State .....	2,359	2,365	2,372	2,384	2,382	2,385	2,394	2,390	2,403	2,407	2,414	2,413	2,415
Local .....	7,549	7,536	7,576	7,618	7,617	7,619	7,654	7,674	7,692	7,705	7,727	7,727	7,770

<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 1998 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Total private</b> .....	86,973	87,106	87,253	87,448	87,702	87,855	88,077	88,170	88,358	88,428	88,613	88,862	88,879
<b>Goods-producing</b> .....	17,982	17,976	17,962	17,959	18,014	17,988	17,976	17,963	17,926	17,872	17,849	17,925	17,841
<b>Mining</b> .....	444	442	438	435	432	423	416	413	403	398	396	397	397
<b>Construction</b> .....	4,647	4,641	4,675	4,716	4,787	4,792	4,830	4,836	4,827	4,812	4,830	4,834	4,805
<b>Manufacturing</b> .....	12,891	12,893	12,849	12,808	12,795	12,773	12,730	12,714	12,696	12,662	12,623	12,694	12,639
<b>Durable goods</b> .....	7,634	7,628	7,605	7,577	7,568	7,548	7,529	7,527	7,519	7,504	7,487	7,549	7,518
Lumber and wood products .....	668	669	670	673	675	678	679	679	677	676	676	677	678
Furniture and fixtures .....	424	424	423	424	426	426	426	427	427	428	429	435	432
Stone, clay, and glass products .....	440	441	442	443	446	445	446	445	446	446	445	447	444
Primary metal industries .....	558	557	552	547	546	543	542	541	539	538	535	540	537
Fabricated metal products .....	1,129	1,130	1,127	1,125	1,123	1,126	1,121	1,119	1,119	1,118	1,115	1,125	1,115
Industrial machinery and equipment .....	1,391	1,389	1,383	1,376	1,369	1,357	1,355	1,351	1,347	1,346	1,343	1,345	1,332
Electronic and other electrical equipment .....	1,061	1,059	1,051	1,042	1,040	1,037	1,031	1,035	1,037	1,033	1,030	1,047	1,042
Transportation equipment .....	1,257	1,255	1,258	1,250	1,247	1,243	1,236	1,239	1,232	1,226	1,222	1,240	1,247
Motor vehicles and equipment .....	758	759	760	757	755	753	749	754	757	758	757	778	782
Instruments and related products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing .....	274	273	269	269	269	267	267	267	269	268	268	268	269
<b>Nondurable goods</b> .....	5,257	5,265	5,244	5,231	5,227	5,225	5,201	5,187	5,177	5,158	5,136	5,145	5,121
Food and kindred products .....	1,240	1,253	1,252	1,257	1,261	1,266	1,264	1,264	1,259	1,258	1,252	1,259	1,247
Tobacco products .....	31	31	31	31	31	31	30	30	29	28	29	29	26
Textile mill products .....	503	502	499	495	492	490	486	483	479	476	473	474	470
Apparel and other textile products .....	606	603	591	581	579	574	564	560	558	553	546	541	534
Paper and allied products .....	512	511	509	507	506	505	503	502	502	501	500	499	499
Printing and publishing .....	844	844	843	840	836	837	835	833	829	827	827	826	827
Chemicals and allied products .....	586	586	585	585	586	584	583	582	583	582	580	581	581
Petroleum and coal products .....	92	92	92	93	94	93	93	92	92	90	89	91	91
Rubber and misc. plastics products .....	782	783	782	783	784	788	786	786	790	788	785	792	793
Leather and leather products .....	61	60	60	59	58	57	57	56	56	55	55	53	53
<b>Service-producing</b> .....	68,991	69,130	69,291	69,489	69,688	69,867	70,101	70,207	70,432	70,556	70,764	70,937	71,038
<b>Transportation and public utilities</b> .....	5,502	5,509	5,527	5,540	5,561	5,579	5,592	5,595	5,600	5,602	5,620	5,629	5,649
<b>Wholesale trade</b> .....	5,488	5,507	5,510	5,523	5,534	5,551	5,565	5,579	5,592	5,600	5,610	5,620	5,621
<b>Retail trade</b> .....	19,633	19,651	19,657	19,699	19,750	19,798	19,888	19,888	19,976	20,009	20,055	20,158	20,139
<b>Finance, insurance, and real estate</b> .....	5,473	5,484	5,508	5,528	5,542	5,565	5,569	5,571	5,580	5,583	5,591	5,597	5,600
<b>Services</b> .....	32,895	32,979	33,089	33,199	33,301	33,374	33,487	33,574	33,684	33,762	33,888	33,933	34,029

<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.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 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:												
1995 .....	63.8	58.0	54.6	56.5	47.5	54.8	55.6	59.1	57.9	56.9	55.2	57.7
1996 .....	49.6	64.9	59.4	55.1	61.9	60.8	57.0	62.5	57.3	63.5	59.7	61.2
1997 .....	56.2	61.0	61.9	62.8	58.8	56.3	60.7	61.0	59.4	65.4	63.6	62.1
1998 .....	63.8	57.9	58.8	60.5	55.9	57.9	58.0	55.8	54.6	52.9	59.1	58.6
1999 .....	54.4	58.3	52.1	58.8	51.5	57.0	<sup>P</sup> 57.9	<sup>P</sup> 50.1				
Over 3-month span:												
1995 .....	63.8	62.9	58.0	53.5	53.9	52.7	59.3	61.0	59.4	58.6	57.3	55.3
1996 .....	62.6	62.5	63.3	63.1	63.1	64.3	64.3	62.2	64.6	64.2	66.2	63.2
1997 .....	63.8	63.6	67.7	67.3	62.6	61.7	61.4	66.2	67.3	69.9	70.8	71.2
1998 .....	66.7	66.2	64.5	63.9	61.4	58.7	60.0	58.4	57.6	57.6	59.0	60.4
1999 .....	60.7	55.9	59.6	54.6	56.3	<sup>P</sup> 56.3	<sup>P</sup> 55.5					
Over 6-month span:												
1995 .....	66.7	59.7	58.6	56.5	59.0	60.0	57.7	61.0	60.5	59.3	61.7	63.2
1996 .....	62.6	65.2	64.5	65.2	64.7	64.6	67.0	65.4	65.9	66.7	66.9	66.7
1997 .....	67.4	68.3	65.6	67.0	65.6	64.9	66.3	68.4	69.7	71.3	71.3	71.9
1998 .....	70.6	66.9	65.9	62.4	62.6	61.1	58.0	59.8	60.0	60.8	60.8	58.0
1999 .....	61.1	58.8	57.3	<sup>P</sup> 59.4	<sup>P</sup> 55.6							
Over 12-month span:												
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	68.7	66.9
1997 .....	69.0	67.3	68.3	69.7	69.5	70.1	70.1	70.4	70.5	69.7	69.8	71.3
1998 .....	70.4	68.3	67.1	64.0	62.1	61.7	61.8	63.8	59.8	59.0	59.3	58.6
1999 .....	<sup>P</sup> 59.7	<sup>P</sup> 56.7										
Manufacturing payrolls, 139 industries <sup>1</sup>												
Over 1-month span:												
1995 .....	57.2	50.4	47.1	52.9	41.4	45.3	45.0	51.1	48.6	51.1	45.3	48.2
1996 .....	42.4	55.4	46.8	41.0	55.8	51.4	47.1	56.5	48.9	55.0	50.7	54.0
1997 .....	50.0	52.9	53.6	56.1	52.2	53.2	51.1	55.4	53.6	62.2	61.2	55.4
1998 .....	58.6	51.8	50.4	50.4	40.6	46.8	40.3	45.3	42.1	36.3	39.9	45.0
1999 .....	40.3	42.4	39.6	44.6	36.3	45.3	<sup>P</sup> 57.9	<sup>P</sup> 39.2				
Over 3-month span:												
1995 .....	55.4	51.4	44.2	41.7	43.5	37.4	42.1	43.9	48.2	46.8	44.6	41.4
1996 .....	46.8	46.0	43.5	46.0	48.2	51.1	51.8	49.6	53.2	52.5	55.0	50.7
1997 .....	51.8	51.4	57.6	56.8	54.3	51.8	53.6	55.4	59.7	68.3	65.8	64.4
1998 .....	59.4	57.9	51.8	44.2	41.7	34.9	37.4	37.1	38.1	34.2	35.6	35.3
1999 .....	37.4	31.7	37.1	30.2	33.8	<sup>P</sup> 43.9	<sup>P</sup> 44.6					
Over 6-month span:												
1995 .....	55.4	45.7	43.2	38.1	41.7	42.8	41.0	42.1	43.5	43.2	44.2	45.0
1996 .....	41.4	46.0	45.7	47.1	46.0	48.6	52.9	50.4	51.8	51.4	52.5	51.8
1997 .....	54.7	54.0	51.4	54.3	52.5	52.2	55.4	61.2	61.5	64.7	66.2	65.1
1998 .....	59.7	49.3	48.2	36.7	36.7	36.7	28.4	31.3	33.5	35.3	32.7	28.1
1999 .....	33.1	29.1	28.1	<sup>P</sup> 36.3	<sup>P</sup> 31.7							
Over 12-month span:												
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	54.3	50.7
1997 .....	54.7	52.5	54.0	54.0	55.4	56.8	57.2	57.9	58.3	56.5	55.4	57.2
1998 .....	54.0	49.3	46.0	40.6	35.6	33.8	30.9	32.0	26.6	26.6	25.5	26.3
1999 .....	<sup>P</sup> 31.7	<sup>P</sup> 25.9										

<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.

<sup>P</sup> = 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 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1998) and all seasonally adjusted data (beginning January 1995) are subject to revision.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
	Total <sup>1</sup>												
Alabama .....	1,916.6	1,918.8	1,917.3	1,916.4	1,916.8	1,923.0	1,927.3	1,929.8	1,929.4	1,932.0	1,933.7	1,933.8	1,933.9
Alaska .....	275.2	275.5	276.3	276.8	276.6	276.1	277.8	277.5	278.0	277.5	277.3	276.3	276.8
Arizona .....	2,084.8	2,091.0	2,099.6	2,101.3	2,113.4	2,117.7	2,114.4	2,117.3	2,125.0	2,133.6	2,138.5	2,153.5	2,161.1
Arkansas .....	1,124.3	1,124.7	1,125.4	1,129.8	1,132.0	1,131.4	1,131.4	1,131.9	1,133.2	1,133.2	1,133.9	1,134.4	1,140.8
California .....	13,606.4	13,648.4	13,679.8	13,717.2	13,748.8	13,782.9	13,827.9	13,833.8	13,852.4	13,881.7	13,938.9	13,967.1	13,980.8
Colorado .....	2,063.1	2,064.8	2,070.0	2,073.7	2,074.6	2,076.2	2,085.1	2,084.8	2,086.3	2,072.5	2,089.6	2,092.4	2,107.9
Connecticut .....	1,649.3	1,651.3	1,645.8	1,651.4	1,652.5	1,660.3	1,660.5	1,663.4	1,663.9	1,665.4	1,663.3	1,665.2	1,670.1
Delaware .....	398.5	401.3	401.7	401.8	403.9	406.1	408.1	408.8	408.7	409.4	411.4	411.4	410.5
District of Columbia .....	610.8	618.7	617.8	615.3	616.4	615.4	615.1	615.3	614.8	615.1	615.6	616.4	612.8
Florida .....	6,698.5	6,723.1	6,751.8	6,757.8	6,773.0	6,791.4	6,809.6	6,825.1	6,839.6	6,867.3	6,888.7	6,916.7	6,935.4
Georgia .....	3,741.5	3,761.4	3,774.8	3,772.9	3,782.9	3,796.3	3,800.7	3,813.7	3,831.6	3,834.6	3,842.5	3,858.8	3,857.2
Hawaii .....	529.3	531.2	536.2	530.7	528.3	527.2	526.5	527.5	527.6	528.9	529.9	530.8	529.7
Idaho .....	521.1	523.2	522.8	525.9	527.1	532.8	536.8	537.2	536.5	536.4	533.2	534.1	530.8
Illinois .....	5,918.1	5,921.4	5,921.4	5,929.0	5,937.5	5,947.1	5,943.9	5,942.8	5,944.1	5,967.9	5,971.0	5,977.6	5,980.8
Indiana .....	2,906.5	2,926.6	2,937.6	2,933.8	2,931.5	2,940.7	2,940.5	2,954.5	2,956.8	2,960.9	2,945.9	2,955.7	2,950.6
Iowa .....	1,457.3	1,454.2	1,457.1	1,460.1	1,460.8	1,466.9	1,459.7	1,467.2	1,466.7	1,475.3	1,479.6	1,485.2	1,487.1
Kansas .....	1,312.0	1,316.8	1,316.3	1,322.4	1,328.4	1,330.6	1,333.8	1,334.7	1,334.5	1,341.8	1,340.3	1,343.9	1,343.9
Kentucky .....	1,757.5	1,761.8	1,760.6	1,763.7	1,763.3	1,765.6	1,772.8	1,773.8	1,775.7	1,783.0	1,788.7	1,790.1	1,795.4
Louisiana .....	1,904.9	1,905.1	1,907.9	1,908.2	1,913.3	1,918.3	1,910.8	1,909.7	1,908.1	1,914.3	1,914.9	1,919.6	1,915.8
Maine .....	570.0	570.2	573.0	574.7	576.1	577.1	578.6	579.9	580.8	581.4	581.6	583.8	583.7
Maryland .....	2,329.5	2,334.2	2,339.7	2,342.5	2,346.6	2,346.3	2,355.3	2,361.3	2,359.3	2,364.1	2,365.1	2,372.3	2,378.6
Massachusetts .....	3,183.5	3,185.8	3,187.9	3,189.9	3,191.6	3,198.5	3,193.9	3,203.9	3,209.9	3,217.5	3,217.7	3,220.4	3,226.2
Michigan .....	4,466.8	4,525.6	4,535.3	4,540.1	4,543.9	4,547.1	4,541.7	4,537.4	4,551.7	4,557.2	4,557.9	4,569.2	4,584.0
Minnesota .....	2,563.2	2,568.8	2,569.4	2,578.4	2,584.8	2,592.3	2,593.2	2,589.9	2,590.7	2,603.1	2,604.2	2,609.3	2,611.1
Mississippi .....	1,141.4	1,134.5	1,133.2	1,134.5	1,133.8	1,134.9	1,135.9	1,135.5	1,135.4	1,133.3	1,133.2	1,130.8	1,139.9
Missouri .....	2,688.4	2,693.0	2,698.6	2,702.8	2,708.5	2,717.6	2,711.8	2,706.4	2,704.0	2,704.0	2,704.5	2,707.8	2,720.9
Montana .....	374.4	374.6	375.1	375.3	376.4	376.8	378.2	378.2	379.4	380.2	379.7	378.0	381.7
Nebraska .....	882.8	880.1	881.3	882.7	882.6	886.7	880.5	879.6	875.9	876.9	876.7	879.9	883.7
Nevada .....	927.7	931.9	934.0	943.3	943.9	946.7	949.9	949.9	952.4	955.5	960.6	963.3	969.7
New Hampshire .....	586.5	586.7	587.8	590.7	591.2	591.5	593.7	595.7	597.5	597.8	596.5	598.3	600.4
New Jersey .....	3,800.9	3,808.7	3,821.0	3,817.3	3,821.1	3,833.2	3,832.7	3,840.3	3,846.7	3,854.8	3,861.1	3,864.7	3,870.2
New Mexico .....	721.5	722.6	722.2	723.9	725.3	725.8	726.4	726.7	729.1	729.3	729.7	730.0	730.5
New York <sup>2</sup> .....	8,235.8	8,257.2	8,263.3	8,280.9	8,293.1	8,312.9	8,305.4	8,328.0	8,334.5	8,341.9	8,350.6	8,353.1	8,386.1
North Carolina .....	3,795.8	3,816.9	3,806.3	3,811.0	3,814.5	3,823.2	3,831.5	3,830.3	3,824.8	3,834.9	3,820.2	3,817.9	3,838.8
North Dakota .....	316.1	314.9	317.0	317.1	317.5	319.3	319.9	319.4	319.7	321.4	320.7	318.0	317.4
Ohio .....	5,445.0	5,485.3	5,489.0	5,497.2	5,498.2	5,501.3	5,489.4	5,499.2	5,498.4	5,510.5	5,510.5	5,521.1	5,532.0
Oklahoma .....	1,440.8	1,447.0	1,447.0	1,449.7	1,451.6	1,454.2	1,455.8	1,459.9	1,465.0	1,470.9	1,473.4	1,477.7	1,473.3
Oregon .....	1,557.4	1,559.5	1,561.1	1,565.7	1,571.2	1,573.6	1,578.7	1,580.1	1,584.2	1,587.0	1,583.6	1,582.3	1,587.6
Pennsylvania .....	5,503.2	5,508.2	5,516.8	5,508.7	5,515.5	5,526.4	5,518.8	5,532.1	5,528.1	5,541.1	5,533.4	5,533.0	5,535.5
Rhode Island .....	459.9	459.9	462.1	461.5	460.9	461.0	458.3	459.9	461.1	464.2	461.3	462.8	465.7
South Carolina .....	1,789.2	1,793.6	1,800.0	1,803.2	1,806.0	1,812.0	1,818.8	1,821.1	1,822.6	1,825.1	1,829.3	1,838.2	1,835.9
South Dakota .....	361.7	361.2	362.1	363.6	363.7	364.9	365.2	366.4	366.2	367.7	366.3	365.5	366.7
Tennessee .....	2,646.5	2,657.0	2,644.4	2,650.5	2,653.9	2,655.8	2,652.4	2,652.7	2,650.7	2,657.3	2,663.5	2,674.7	2,678.5
Texas .....	8,955.4	8,978.9	9,001.5	9,026.8	9,046.6	9,063.9	9,077.0	9,099.4	9,118.6	9,137.7	9,155.9	9,181.4	9,198.7
Utah .....	1,024.9	1,027.9	1,032.3	1,030.6	1,034.2	1,036.9	1,037.7	1,040.1	1,042.4	1,046.0	1,046.5	1,048.5	1,051.8
Vermont .....	286.0	286.8	287.0	286.1	287.1	288.6	288.9	288.8	290.1	291.1	291.2	291.2	291.3
Virginia .....	3,309.3	3,321.3	3,329.0	3,337.8	3,341.7	3,348.8	3,347.2	3,358.3	3,363.9	3,363.1	3,368.9	3,378.9	3,383.3
Washington .....	2,606.3	2,612.5	2,608.7	2,613.7	2,619.0	2,625.6	2,626.6	2,631.6	2,639.9	2,643.9	2,645.0	2,643.6	2,656.4
West Virginia .....	717.4	718.9	721.3	722.6	722.6	724.3	726.5	728.9	725.8	723.0	721.2	724.4	725.4
Wisconsin .....	2,712.1	2,722.8	2,718.3	2,720.0	2,725.1	2,731.5	2,727.9	2,730.9	2,734.6	2,740.7	2,745.4	2,738.6	2,739.9
Wyoming .....	228.6	227.5	226.6	227.3	227.4	228.0	229.1	230.3	229.6	231.8	231.9	229.4	230.6

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
	Construction												
Alabama	102.8	103.7	103.0	103.7	104.6	106.2	107.1	106.9	106.6	106.7	106.4	107.2	108.0
Alaska	13.2	13.1	13.1	13.2	13.4	13.4	14.1	13.9	14.4	14.4	13.3	13.2	13.3
Arizona	144.5	145.2	147.0	147.3	148.9	150.1	153.5	154.0	154.9	154.9	155.1	156.5	157.3
Arkansas	47.7	47.6	47.6	48.1	48.4	48.4	49.3	49.5	49.4	49.4	49.7	49.6	49.8
California	608.7	612.0	614.3	621.5	625.2	627.1	641.7	632.1	631.5	636.6	650.1	656.2	664.7
Colorado	133.4	134.1	136.2	137.3	136.7	135.9	138.8	137.4	138.5	136.9	138.5	137.7	139.9
Connecticut	57.6	57.8	58.3	58.4	58.8	60.5	61.0	61.1	61.0	61.2	60.6	59.9	60.1
Delaware	22.2	22.3	22.3	21.9	22.3	22.9	23.9	24.8	24.3	24.3	23.9	23.9	24.2
District of Columbia	9.0	9.0	9.0	8.8	8.8	8.7	8.9	8.9	8.9	9.2	9.2	9.0	9.0
Florida	352.6	355.1	356.3	357.9	358.4	359.7	361.6	360.9	364.7	365.8	367.0	369.0	369.2
Georgia	183.7	185.5	186.1	187.8	189.0	192.1	192.6	191.0	191.6	192.8	193.2	196.4	195.4
Hawaii <sup>3</sup>	21.4	21.3	21.0	20.5	20.1	20.2	20.7	20.7	20.6	20.6	20.7	20.1	20.1
Idaho	32.7	32.8	32.9	33.4	33.8	34.1	35.3	34.1	34.1	33.9	33.6	33.3	33.6
Illinois	240.0	239.4	239.3	240.2	240.7	241.8	243.1	243.2	241.2	247.5	246.6	247.3	247.7
Indiana	145.2	144.7	144.4	144.9	145.3	145.9	144.4	145.5	144.1	145.0	144.3	144.9	144.6
Iowa	63.0	62.8	62.8	62.6	62.1	62.9	63.4	64.2	62.5	62.9	64.1	64.5	64.8
Kansas	62.3	62.2	62.0	62.6	62.5	63.8	64.8	65.1	64.1	66.2	66.1	67.1	67.3
Kentucky	84.4	84.6	84.7	85.5	84.9	85.3	86.2	87.1	84.2	87.1	87.4	88.0	87.5
Louisiana	130.3	129.4	128.8	129.9	130.7	130.6	131.5	131.7	132.7	133.2	133.2	133.5	132.1
Maine	24.9	25.0	25.1	25.1	25.0	25.1	26.2	26.6	26.7	27.4	27.3	26.9	26.9
Maryland	142.2	143.0	143.4	143.9	143.7	143.8	144.9	146.2	144.9	144.5	144.3	144.6	144.8
Massachusetts	108.0	108.3	108.5	109.0	109.2	110.6	113.1	114.7	116.1	114.9	113.9	114.3	114.5
Michigan	184.7	183.6	184.7	186.8	188.3	189.6	184.1	190.4	190.6	192.3	192.2	193.4	195.9
Minnesota	101.0	101.3	101.9	103.3	104.5	106.5	107.7	109.0	109.2	111.5	110.3	108.5	109.2
Mississippi	54.4	55.1	55.4	56.0	56.7	56.8	58.1	58.5	58.2	57.3	55.9	55.7	55.9
Missouri	133.5	128.7	128.8	129.4	132.0	134.7	130.0	132.9	131.7	133.7	134.1	135.5	138.5
Montana	18.8	18.7	18.5	18.5	18.6	18.9	18.9	19.3	19.4	19.6	19.8	19.6	19.6
Nebraska	41.7	42.0	42.0	42.0	41.0	42.7	41.8	42.1	40.7	40.9	40.8	41.8	41.7
Nevada	85.8	86.6	86.1	86.3	86.6	87.0	88.6	87.1	86.6	86.8	86.1	86.7	88.2
New Hampshire	22.6	22.8	22.9	23.5	23.7	24.0	23.6	24.2	24.2	24.5	23.8	24.0	23.9
New Jersey	135.1	135.2	136.0	135.4	135.6	136.7	137.4	138.2	137.9	137.1	136.8	136.5	136.7
New Mexico	43.7	43.6	43.4	43.6	43.6	43.9	44.2	44.4	43.5	43.5	43.3	43.1	43.5
New York	281.1	283.0	283.6	285.0	287.9	290.1	292.0	296.8	296.5	297.3	298.2	299.8	302.2
North Carolina	216.2	216.1	215.5	217.5	218.4	219.3	220.5	220.9	218.7	219.7	217.4	216.9	215.4
North Dakota	15.1	14.9	15.0	14.9	14.9	15.3	14.5	15.6	15.2	15.1	15.4	15.4	15.6
Ohio	227.7	226.8	226.3	226.5	226.8	227.6	228.7	231.5	227.4	228.4	229.1	230.0	232.1
Oklahoma	54.4	54.4	54.7	54.7	55.1	55.5	55.6	54.8	55.3	55.4	55.5	56.3	56.0
Oregon	82.5	82.5	81.6	83.7	83.3	84.3	85.6	85.1	85.5	85.7	85.3	84.1	83.6
Pennsylvania	219.8	220.6	220.6	220.6	222.3	224.5	222.3	230.7	228.8	230.2	228.3	226.3	226.3
Rhode Island	15.3	15.7	15.8	15.9	15.6	15.8	15.2	15.3	15.8	16.4	15.8	16.0	16.3
South Carolina	106.3	106.8	107.9	108.6	108.8	109.6	109.8	110.2	111.0	111.6	111.6	112.3	112.0
South Dakota	16.1	16.0	15.9	16.2	16.2	16.4	16.4	16.6	16.7	16.7	16.8	16.6	16.4
Tennessee	123.9	124.6	124.9	125.7	126.0	126.8	128.8	128.0	126.2	128.1	128.0	128.6	131.1
Texas	501.6	503.1	503.0	507.1	508.2	508.8	512.5	518.0	518.7	523.1	523.5	523.9	528.3
Utah	68.0	68.7	69.3	70.1	70.7	71.5	71.6	71.2	70.9	71.6	72.3	72.9	73.6
Vermont	14.3	14.1	14.0	13.9	13.9	14.4	15.1	15.0	15.1	15.7	14.9	14.5	14.3
Virginia	188.8	189.7	190.4	192.1	192.4	192.9	193.0	194.7	194.9	196.8	196.4	196.6	196.9
Washington	142.9	143.0	142.7	143.5	144.0	145.0	146.3	146.6	147.3	147.8	148.4	149.4	151.4
West Virginia	34.3	33.9	34.3	34.9	35.0	35.7	35.5	36.9	34.6	34.5	33.9	34.2	34.5
Wisconsin	112.5	112.9	112.8	113.5	114.9	116.7	116.2	117.7	118.5	121.3	118.3	116.3	116.3
Wyoming	15.9	15.7	15.5	15.6	15.7	15.9	16.6	16.7	16.5	17.0	17.0	16.3	16.5

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>Manufacturing</b>													
Alabama .....	380.6	379.6	379.6	377.6	374.4	374.9	375.5	373.1	372.6	370.9	371.6	369.7	371.4
Alaska .....	14.2	14.4	14.7	15.1	15.1	13.4	15.7	15.4	14.3	13.2	14.1	13.9	14.4
Arizona .....	217.0	217.4	217.8	218.1	218.2	218.6	217.4	217.5	218.0	218.4	218.4	219.0	217.8
Arkansas .....	253.6	253.7	254.1	254.0	253.8	254.1	254.5	254.2	253.7	252.8	253.0	251.8	253.0
California .....	1,963.6	1,964.6	1,965.6	1,965.7	1,960.6	1,959.5	1,959.0	1,952.9	1,948.9	1,950.0	1,950.9	1,950.4	1,943.3
Colorado .....	208.3	207.3	206.3	206.3	206.0	205.6	206.0	206.3	206.5	206.2	206.4	206.0	205.6
Connecticut .....	279.2	279.3	278.0	277.4	276.4	275.6	276.3	276.0	276.7	276.3	275.8	274.1	273.3
Delaware .....	58.0	59.9	59.8	60.1	60.5	60.6	59.8	59.7	59.7	59.1	59.8	59.9	57.7
District of Columbia .....	12.4	12.6	12.5	12.5	12.5	12.6	12.1	12.2	12.1	12.1	12.1	12.0	12.1
Florida .....	498.9	499.1	499.6	497.8	498.0	498.5	497.5	498.0	496.9	498.6	498.1	497.8	497.8
Georgia .....	589.6	595.1	594.4	595.2	595.7	597.0	596.3	596.2	596.0	594.8	593.1	593.8	590.9
Hawaii .....	16.3	16.2	16.5	16.2	16.2	16.2	16.2	16.2	16.1	16.2	16.2	16.1	16.1
Idaho .....	76.6	75.9	76.0	75.9	76.2	76.1	75.9	76.4	76.3	76.7	75.7	75.9	76.2
Illinois .....	979.6	978.0	978.4	975.8	973.2	973.1	973.1	974.4	972.0	972.0	969.4	971.6	968.5
Indiana .....	675.1	685.1	684.1	685.1	684.6	684.9	686.5	686.9	685.4	686.9	683.5	685.0	688.4
Iowa .....	263.4	263.3	262.9	263.3	263.4	263.6	262.4	265.0	264.8	265.4	266.6	267.6	267.3
Kansas .....	211.1	213.7	213.9	214.1	214.2	214.4	214.8	214.9	213.8	213.3	213.1	213.2	212.2
Kentucky .....	321.2	321.6	321.4	322.8	321.9	321.4	321.2	320.3	320.2	319.2	317.6	315.9	320.3
Louisiana .....	190.9	192.4	191.8	191.2	191.9	192.0	191.5	191.5	191.1	190.6	190.0	191.1	191.0
Maine .....	86.5	86.2	86.9	85.9	85.9	85.4	86.6	86.4	85.7	84.6	84.7	84.9	84.7
Maryland .....	176.4	176.1	176.7	177.2	176.6	176.7	176.5	177.0	177.0	177.5	176.8	176.8	178.7
Massachusetts .....	450.1	447.1	445.3	443.4	441.5	440.2	438.4	436.4	436.0	435.6	435.0	434.7	435.4
Michigan .....	915.3	972.2	971.5	970.6	966.9	966.7	962.8	957.9	963.4	961.7	963.2	963.9	969.6
Minnesota .....	443.5	444.6	444.2	445.1	445.1	445.0	443.9	443.7	441.0	441.9	442.7	441.7	441.9
Mississippi .....	245.5	243.7	244.4	244.9	244.3	244.9	244.3	241.4	240.6	240.1	239.3	240.0	241.0
Missouri .....	415.5	423.3	423.4	421.6	419.6	420.0	420.6	417.0	416.8	414.7	413.6	413.7	417.9
Montana .....	24.5	24.5	24.6	24.8	25.0	25.0	24.8	24.9	24.8	24.6	24.6	24.4	24.5
Nebraska .....	119.4	118.7	118.6	118.3	117.8	118.0	118.3	117.9	117.7	117.6	116.9	116.8	118.0
Nevada .....	42.5	42.4	42.5	42.5	42.5	42.4	42.1	41.9	42.3	42.3	42.6	43.0	43.1
New Hampshire .....	107.7	107.2	107.3	107.3	107.3	107.3	107.1	106.8	106.8	106.2	105.8	105.9	106.7
New Jersey .....	475.7	476.9	476.2	474.5	473.7	473.6	474.4	470.7	469.0	469.1	467.5	466.3	466.7
New Mexico .....	44.8	44.6	44.4	44.1	44.1	44.1	44.3	44.3	44.1	44.1	44.1	43.6	43.4
New York .....	906.4	918.8	917.7	916.8	914.6	915.0	915.0	912.5	909.3	906.6	905.2	905.8	904.7
North Carolina .....	826.0	825.3	823.8	821.7	820.4	818.4	817.7	815.7	811.6	811.0	809.3	808.0	808.2
North Dakota .....	24.0	24.1	24.1	23.8	24.2	24.3	23.9	23.7	23.7	23.8	24.0	23.9	23.5
Ohio .....	1,059.4	1,095.8	1,096.0	1,097.7	1,093.8	1,091.8	1,093.6	1,088.9	1,086.1	1,086.8	1,085.0	1,086.6	1,087.5
Oklahoma .....	183.7	186.3	185.9	186.2	186.3	186.1	186.7	186.2	186.5	186.2	186.2	186.9	186.4
Oregon .....	244.3	243.2	242.0	241.5	241.7	241.9	242.8	242.2	242.0	241.7	240.9	238.9	237.8
Pennsylvania .....	947.2	945.5	942.9	939.8	939.7	938.1	935.3	935.2	934.2	933.5	930.6	931.0	933.7
Rhode Island .....	78.7	78.5	78.6	78.4	78.1	77.9	77.9	78.4	78.3	78.6	77.5	77.8	78.8
South Carolina .....	364.4	362.6	364.5	363.1	363.1	363.2	363.7	362.7	361.9	362.0	361.4	361.4	361.0
South Dakota .....	49.6	49.7	49.8	49.8	49.8	50.0	50.2	50.1	49.9	49.7	49.3	48.6	48.8
Tennessee .....	515.3	514.0	512.3	511.2	510.0	509.7	509.8	508.1	505.8	505.5	507.1	505.3	509.1
Texas .....	1,107.5	1,108.5	1,107.7	1,107.2	1,106.5	1,106.7	1,104.5	1,102.1	1,100.3	1,099.4	1,098.5	1,098.9	1,103.0
Utah .....	133.9	133.6	133.6	133.2	134.1	134.1	133.6	133.6	134.2	134.1	133.6	133.8	134.2
Vermont .....	48.4	48.5	48.5	48.5	48.5	48.8	48.5	48.3	48.5	48.7	48.9	48.7	49.1
Virginia .....	403.4	404.7	404.6	403.3	402.5	401.9	401.8	402.3	401.0	392.1	392.3	395.2	395.3
Washington .....	381.9	380.4	378.7	376.4	375.4	374.6	373.4	371.8	371.9	369.5	368.2	366.0	363.8
West Virginia .....	82.7	82.2	82.0	82.2	82.2	82.1	80.5	80.9	81.8	81.7	82.0	81.5	82.5
Wisconsin .....	611.3	618.4	616.5	615.4	616.1	615.8	616.5	615.0	614.7	613.1	613.2	610.1	607.3
Wyoming .....	10.9	11.0	10.9	10.8	10.8	10.9	10.9	11.1	10.8	11.0	11.4	11.3	11.3

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
	Transportation and public utilities												
Alabama .....	92.7	92.7	92.6	92.5	92.6	92.7	93.6	93.9	93.4	93.9	93.8	93.9	94.1
Alaska .....	25.6	25.9	25.7	25.8	25.8	25.9	25.8	25.8	25.8	25.8	25.5	26.2	26.2
Arizona .....	101.0	101.4	102.8	102.8	103.2	104.0	105.0	104.6	105.3	105.8	106.0	106.0	106.1
Arkansas .....	68.0	68.2	68.3	69.0	69.1	69.2	68.4	68.6	68.5	68.7	68.9	69.3	69.5
California .....	695.0	695.0	696.2	697.3	699.2	701.8	705.6	706.9	707.5	710.2	711.8	715.0	716.2
Colorado .....	129.6	130.4	131.1	131.4	132.0	132.2	132.1	132.5	133.0	133.1	133.2	132.8	133.8
Connecticut .....	77.0	76.8	70.5	76.4	76.2	76.2	76.2	76.6	76.5	75.9	75.6	74.9	76.6
Delaware .....	16.1	16.3	16.5	16.5	16.8	16.9	17.3	17.3	17.3	17.4	17.7	17.8	17.3
District of Columbia .....	16.1	16.1	15.8	15.8	15.8	15.8	16.1	16.0	15.8	15.8	15.8	15.5	15.5
Florida .....	336.5	339.2	341.4	341.8	343.0	344.6	347.4	347.3	347.2	348.9	350.8	351.0	351.2
Georgia .....	242.8	243.6	244.3	245.2	246.2	247.2	247.7	249.8	251.4	252.9	254.5	255.9	256.8
Hawaii .....	41.4	41.1	41.2	40.7	40.4	40.1	40.2	40.2	40.1	40.4	40.4	40.4	40.4
Idaho .....	25.7	25.9	25.9	26.0	25.8	25.9	26.4	26.3	26.4	26.3	26.2	26.3	26.3
Illinois .....	346.4	347.6	348.0	349.4	350.4	352.0	350.8	350.4	352.0	351.8	351.9	352.5	352.5
Indiana .....	145.0	144.8	144.8	145.2	145.5	145.8	146.4	146.3	146.4	145.9	144.6	144.9	146.0
Iowa .....	69.8	69.8	70.0	70.4	70.5	70.8	70.3	70.6	71.0	71.7	71.9	72.4	72.3
Kansas .....	74.5	74.8	75.2	76.2	76.5	77.2	76.9	77.0	76.7	76.6	76.5	76.3	76.5
Kentucky .....	101.8	102.3	102.6	102.5	102.2	102.8	103.9	103.9	104.2	104.9	104.8	105.0	105.4
Louisiana .....	114.0	114.4	114.6	115.0	115.6	116.3	115.2	115.6	115.0	115.2	115.7	115.8	115.8
Maine .....	23.6	23.6	23.6	23.9	23.9	24.0	24.2	24.2	24.2	24.1	24.4	24.3	24.4
Maryland .....	108.8	109.7	109.5	109.9	109.9	110.0	110.8	110.6	111.3	113.2	113.1	112.4	113.4
Massachusetts .....	137.0	136.2	136.2	135.6	135.4	135.4	137.4	137.7	137.2	138.1	137.7	138.2	137.7
Michigan .....	178.1	178.1	177.8	178.4	178.5	178.2	180.4	179.1	180.1	180.4	178.8	179.7	179.2
Minnesota .....	128.9	128.9	116.3	129.2	129.6	130.3	130.5	130.4	130.5	131.6	131.5	131.0	130.8
Mississippi .....	53.8	53.9	53.7	53.8	53.0	53.5	54.1	54.3	54.4	54.3	54.0	54.7	54.3
Missouri .....	165.1	164.9	165.4	165.7	166.1	166.9	167.3	166.9	165.5	165.9	165.7	165.0	166.1
Montana .....	21.6	21.4	21.4	21.7	21.7	21.8	22.0	22.0	22.1	22.0	22.0	21.9	21.9
Nebraska .....	56.3	56.6	57.1	57.4	57.8	58.2	58.1	58.7	58.6	58.8	58.8	59.3	59.9
Nevada .....	47.8	47.9	48.0	48.2	48.2	48.3	48.7	48.7	48.7	48.7	49.2	49.6	50.2
New Hampshire .....	20.6	20.9	20.8	21.0	21.1	21.1	21.3	21.0	20.9	21.2	21.2	21.4	21.6
New Jersey .....	261.2	261.7	262.9	262.0	261.5	261.6	262.6	263.4	263.4	263.6	262.8	263.4	262.6
New Mexico .....	33.6	33.8	33.7	33.7	33.9	33.9	34.1	34.0	34.3	34.0	33.9	34.1	34.1
New York .....	412.6	412.5	413.5	413.1	412.9	412.7	415.5	415.8	415.0	417.0	416.3	416.1	416.5
North Carolina .....	172.2	172.6	172.8	172.8	173.7	173.3	175.2	174.9	174.9	175.4	174.7	174.6	175.9
North Dakota .....	17.8	17.5	17.6	17.7	17.6	17.7	17.8	17.7	17.7	18.0	18.0	17.9	17.7
Ohio .....	241.7	242.4	242.9	243.2	243.0	242.7	242.7	242.4	242.7	243.8	243.5	243.7	244.0
Oklahoma .....	82.4	82.9	82.9	83.2	83.5	83.5	84.0	84.5	83.9	83.9	83.9	84.3	84.4
Oregon .....	76.4	76.1	77.0	76.7	76.8	77.0	77.6	77.9	78.4	78.3	78.9	79.6	79.4
Pennsylvania .....	286.0	286.4	286.8	287.1	287.5	287.3	288.2	288.8	288.8	289.7	288.9	288.6	289.7
Rhode Island .....	16.1	16.1	16.2	16.1	16.1	16.0	16.2	16.0	16.2	16.3	16.1	16.1	15.8
South Carolina .....	76.8	76.8	77.3	77.5	77.6	78.0	79.0	79.6	79.1	79.6	80.0	80.1	79.9
South Dakota .....	16.7	16.7	16.9	16.7	16.8	16.9	16.6	16.8	17.0	16.9	16.9	16.6	16.5
Tennessee .....	158.9	158.3	158.6	158.6	158.2	158.2	159.9	159.7	159.9	160.4	161.6	162.2	162.7
Texas .....	543.2	545.9	547.5	549.1	550.5	551.6	556.2	557.4	557.5	559.3	560.3	561.4	562.3
Utah .....	58.6	59.1	59.2	59.3	59.3	59.5	59.5	59.8	59.8	59.8	60.2	59.9	59.8
Vermont .....	12.5	12.5	12.7	12.6	12.6	12.5	12.5	12.6	12.5	12.5	12.3	12.4	12.3
Virginia .....	173.5	173.7	173.8	174.7	174.9	175.6	176.2	176.2	176.3	178.2	179.1	180.7	181.3
Washington .....	136.4	137.1	137.4	137.6	138.4	138.8	138.6	139.4	139.3	139.7	139.6	139.5	140.6
West Virginia .....	39.0	38.9	39.3	39.4	39.3	39.2	39.4	39.6	39.5	39.0	39.1	39.3	39.1
Wisconsin .....	128.0	128.0	128.2	128.2	128.4	128.9	128.8	128.4	128.6	128.6	127.6	127.5	128.7
Wyoming .....	13.9	13.9	13.9	14.0	13.9	14.0	13.8	14.0	14.2	14.0	14.0	14.1	14.1

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
	Trade												
Alabama .....	444.1	444.0	442.8	443.4	443.3	444.9	446.4	448.5	450.7	450.9	451.9	452.8	452.9
Alaska .....	56.9	57.0	57.4	57.0	56.6	57.3	56.9	57.2	57.7	57.9	57.6	58.0	57.6
Arizona .....	500.0	502.5	503.6	504.0	504.5	506.1	509.7	510.6	513.5	514.2	514.9	516.5	516.9
Arkansas .....	256.2	256.6	257.3	257.9	258.2	258.3	258.4	258.0	259.9	259.4	259.2	259.9	261.4
California .....	3,127.6	3,135.5	3,138.4	3,141.4	3,148.8	3,158.5	3,154.9	3,153.5	3,157.4	3,154.4	3,158.4	3,166.0	3,168.1
Colorado .....	495.7	497.2	498.9	499.3	500.1	500.8	503.4	504.3	504.5	507.2	507.2	510.1	511.7
Connecticut .....	355.1	355.4	354.5	355.4	356.9	358.9	357.8	359.5	359.1	358.4	358.3	358.7	358.4
Delaware .....	86.7	87.1	87.8	87.8	88.0	88.4	88.6	88.8	89.0	89.3	89.6	89.9	90.0
District of Columbia .....	48.9	48.7	49.3	48.5	48.5	48.5	47.4	48.0	47.8	48.3	48.6	48.8	49.4
Florida .....	1,687.0	1,693.5	1,697.2	1,699.1	1,700.5	1,702.9	1,709.0	1,707.1	1,714.4	1,719.7	1,720.5	1,729.0	1,731.6
Georgia .....	931.5	932.7	935.4	934.5	935.3	936.4	935.6	940.1	947.8	948.1	949.1	954.3	953.7
Hawaii .....	131.0	131.8	131.7	131.7	131.1	130.7	130.7	130.6	130.7	130.7	130.7	130.8	130.2
Idaho .....	132.2	132.9	132.9	133.5	134.2	134.3	135.4	135.8	135.1	134.9	133.9	133.9	133.3
Illinois .....	1,338.1	1,337.2	1,337.9	1,342.3	1,345.4	1,347.4	1,352.9	1,354.3	1,355.4	1,358.2	1,355.2	1,353.1	1,353.9
Indiana .....	691.5	690.5	690.5	689.9	686.2	688.7	698.9	699.5	699.9	696.3	691.5	693.2	692.4
Iowa .....	355.0	355.1	355.7	356.1	357.0	358.2	358.7	360.8	360.5	362.7	362.8	362.4	362.4
Kansas .....	319.0	319.1	319.1	319.0	321.0	322.3	322.9	323.9	325.2	325.8	326.6	327.8	328.6
Kentucky .....	417.7	418.2	417.6	418.7	418.8	419.8	421.2	420.7	424.6	425.9	427.7	427.9	428.5
Louisiana .....	443.9	445.6	446.0	445.8	447.5	448.8	446.2	444.6	444.7	446.8	448.4	448.3	447.9
Maine .....	142.2	143.0	143.9	145.2	146.2	146.1	145.2	144.9	145.8	145.5	145.9	146.2	145.4
Maryland .....	540.2	539.1	538.7	538.4	539.3	537.4	540.7	540.5	541.1	542.5	544.0	544.6	545.0
Massachusetts .....	723.7	724.8	726.2	725.8	726.7	727.2	728.0	728.0	730.3	733.4	733.0	733.5	739.3
Michigan .....	1,066.5	1,067.7	1,071.2	1,072.3	1,075.0	1,076.1	1,079.3	1,078.4	1,082.8	1,086.7	1,083.1	1,083.3	1,085.4
Minnesota .....	617.5	617.6	617.9	618.8	620.1	621.3	622.7	620.5	620.5	621.9	623.8	628.7	629.4
Mississippi .....	246.0	244.9	244.4	244.9	244.0	243.6	244.0	247.3	248.3	246.8	247.0	244.8	244.1
Missouri .....	634.5	635.4	636.4	636.1	635.7	638.3	637.2	640.2	640.1	639.8	638.6	637.6	640.0
Montana .....	100.6	100.9	100.7	100.4	100.6	100.8	101.2	101.4	101.5	101.6	101.8	102.2	101.9
Nebraska .....	213.6	213.3	214.3	214.6	214.9	214.4	212.7	211.8	211.6	212.5	212.2	212.1	214.0
Nevada .....	190.2	190.5	191.1	192.1	192.3	193.6	194.5	194.7	195.6	196.9	197.4	199.0	200.1
New Hampshire .....	152.4	152.5	152.7	154.3	153.9	154.9	154.2	155.0	155.8	154.2	154.6	154.7	156.2
New Jersey .....	883.9	885.2	889.0	888.4	890.5	895.5	896.2	898.2	900.0	901.9	903.6	904.8	907.2
New Mexico .....	170.8	170.6	171.2	171.8	172.0	172.2	171.5	172.4	173.0	172.9	172.6	172.9	173.4
New York .....	1,664.5	1,665.5	1,668.9	1,671.2	1,675.3	1,678.4	1,675.8	1,676.7	1,678.2	1,673.7	1,678.1	1,680.0	1,684.7
North Carolina .....	858.2	859.9	862.1	864.8	863.6	867.2	873.0	873.9	875.5	878.6	873.5	875.4	875.6
North Dakota .....	81.0	81.0	81.1	81.0	80.6	80.7	81.3	81.2	81.5	82.1	81.3	81.2	81.6
Ohio .....	1,326.5	1,328.0	1,328.4	1,328.6	1,332.1	1,334.8	1,332.0	1,333.9	1,336.7	1,334.8	1,335.2	1,337.1	1,337.3
Oklahoma .....	331.2	331.8	331.7	332.6	333.9	334.8	334.2	335.7	337.2	338.6	339.2	339.6	337.7
Oregon .....	385.0	384.2	384.7	385.6	386.5	387.7	386.6	386.5	387.8	389.9	387.7	388.9	387.7
Pennsylvania .....	1,233.5	1,235.5	1,235.5	1,234.5	1,235.8	1,238.7	1,235.3	1,239.3	1,242.9	1,241.2	1,242.5	1,244.4	1,244.6
Rhode Island .....	99.5	99.7	100.1	99.7	99.9	100.2	99.8	99.8	99.6	100.5	100.6	101.0	101.1
South Carolina .....	430.4	431.6	433.1	435.1	437.4	440.2	438.0	440.4	440.0	441.0	442.5	443.2	444.6
South Dakota .....	89.3	89.1	89.2	89.1	89.3	89.8	91.1	90.6	89.8	91.1	90.9	90.5	89.5
Tennessee .....	626.1	626.0	626.8	627.8	629.4	629.8	627.0	627.7	628.7	633.7	637.4	637.3	640.7
Texas .....	2,108.5	2,112.4	2,117.9	2,121.3	2,124.7	2,128.4	2,126.3	2,134.2	2,142.1	2,145.0	2,150.1	2,153.9	2,151.3
Utah .....	242.9	243.4	243.3	243.2	242.6	242.8	245.4	244.9	246.6	247.0	247.2	247.7	248.2
Vermont .....	65.7	65.7	65.8	65.8	66.0	66.0	64.9	65.5	65.7	65.5	65.0	66.2	65.8
Virginia .....	731.7	734.8	735.3	739.5	739.1	739.9	739.9	742.4	744.8	743.8	745.1	744.2	742.7
Washington .....	625.7	627.8	629.4	631.4	633.4	635.7	635.5	636.3	639.5	641.3	641.6	641.6	642.6
West Virginia .....	163.1	163.4	164.2	164.6	164.5	164.4	165.6	166.8	166.9	166.7	166.1	167.1	167.8
Wisconsin .....	610.2	610.7	609.6	610.5	609.6	612.1	609.6	611.5	613.2	614.4	615.6	614.7	613.2
Wyoming .....	52.6	52.4	52.2	52.4	52.4	52.6	52.6	53.3	52.8	53.4	53.6	53.1	53.0

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
	Finance, insurance, and real estate												
Alabama .....	87.3	87.6	87.7	87.8	87.9	88.1	88.4	88.5	88.5	88.8	88.9	89.1	89.3
Alaska .....	12.5	12.6	12.5	12.5	12.6	12.6	12.7	12.7	12.8	12.7	12.7	12.8	12.9
Arizona .....	140.9	141.4	141.5	142.1	142.6	143.4	142.8	143.5	144.1	144.3	144.8	145.0	145.9
Arkansas .....	45.0	45.0	45.0	44.9	45.0	45.0	45.1	45.2	45.6	45.5	45.4	45.4	45.4
California .....	802.0	803.6	806.0	808.3	807.6	808.2	809.1	808.7	808.0	811.2	811.5	812.7	813.9
Colorado .....	136.5	137.0	137.1	137.1	137.1	137.8	138.3	138.3	138.4	138.6	138.9	138.6	139.5
Connecticut .....	137.2	137.5	137.5	137.6	137.8	138.5	138.8	138.8	139.1	138.7	138.7	139.3	139.6
Delaware .....	48.8	48.9	49.1	48.9	49.2	49.6	50.1	50.0	50.2	49.9	50.1	50.6	50.7
District of Columbia .....	29.1	29.2	28.9	28.9	29.0	29.1	29.0	29.0	28.9	28.9	28.8	29.0	28.9
Florida .....	431.5	433.6	435.2	436.4	437.7	438.9	439.2	439.0	441.8	442.9	444.5	446.4	446.3
Georgia .....	200.6	201.5	202.1	202.4	203.0	203.9	204.9	206.0	206.7	207.2	207.7	209.3	210.2
Hawaii .....	35.6	35.5	35.5	35.6	35.3	35.2	35.3	35.2	34.9	35.2	35.0	35.1	34.9
Idaho .....	22.9	23.0	23.1	23.2	23.2	23.3	23.7	23.5	23.8	23.9	23.8	23.8	23.7
Illinois .....	404.9	406.5	406.6	406.7	406.6	408.0	408.8	407.9	408.6	409.7	410.1	411.6	412.6
Indiana .....	141.2	141.8	142.4	143.3	143.6	144.0	146.2	146.5	146.9	146.6	146.3	146.7	147.1
Iowa .....	83.5	83.6	83.9	84.3	84.2	84.1	83.5	83.9	83.9	84.3	84.3	85.0	85.1
Kansas .....	62.2	62.2	62.3	62.4	62.6	62.7	62.9	63.0	63.1	63.2	63.3	62.9	63.0
Kentucky .....	70.1	70.1	70.2	70.3	70.4	70.5	70.9	71.0	70.9	70.9	71.3	71.5	71.6
Louisiana .....	87.1	87.1	87.1	86.8	86.8	87.0	86.5	86.6	86.5	86.8	87.0	87.5	87.5
Maine .....	30.0	29.7	29.7	30.0	30.2	30.3	30.7	30.8	30.7	31.0	31.1	31.1	30.9
Maryland .....	135.0	135.3	135.5	133.3	134.5	134.9	136.3	137.1	137.1	137.4	137.9	137.2	138.2
Massachusetts .....	217.4	217.6	218.3	218.6	219.2	220.0	219.3	220.2	220.6	221.5	221.6	221.6	222.0
Michigan .....	209.3	208.7	209.2	209.3	209.5	209.1	210.0	209.0	209.9	209.2	209.1	209.4	209.8
Minnesota .....	157.3	157.9	158.2	158.7	159.5	160.0	159.3	159.3	159.5	159.4	159.4	159.2	159.3
Mississippi .....	42.2	42.3	42.3	42.3	42.3	42.2	42.7	42.6	42.1	42.2	42.3	42.0	42.2
Missouri .....	161.3	162.0	163.1	163.8	164.4	164.9	165.1	165.4	165.1	165.2	165.7	165.9	166.5
Montana .....	17.0	17.1	17.3	17.2	17.3	17.3	17.4	17.4	17.3	17.5	17.5	17.5	17.6
Nebraska .....	57.9	58.1	58.1	58.2	58.5	58.6	58.7	58.8	58.6	58.4	58.9	59.0	59.0
Nevada .....	43.5	43.6	44.0	44.2	44.7	44.8	44.9	45.1	45.0	45.1	45.3	45.4	45.4
New Hampshire .....	31.3	31.3	31.4	31.3	31.5	31.5	31.4	31.5	31.5	31.6	31.5	31.8	31.5
New Jersey .....	247.4	248.5	249.2	249.9	249.8	250.7	253.1	254.1	254.9	256.6	256.5	256.6	257.0
New Mexico .....	31.9	31.8	32.0	32.1	32.1	32.2	32.1	32.3	32.1	32.3	32.5	32.6	32.6
New York .....	735.9	737.3	737.7	739.2	739.7	742.0	740.8	740.1	739.2	739.8	740.2	740.6	742.5
North Carolina .....	178.8	180.2	181.6	181.8	182.6	183.1	182.8	183.4	183.5	184.5	184.0	183.4	183.2
North Dakota .....	15.6	15.6	15.5	15.8	15.9	16.0	16.1	15.9	15.8	15.9	16.0	16.0	15.9
Ohio .....	299.1	299.9	300.1	301.4	301.7	301.9	303.0	302.9	303.2	302.8	303.5	304.3	305.2
Oklahoma .....	73.2	73.6	74.0	74.5	74.6	74.8	75.4	75.5	75.3	75.4	75.8	75.9	76.1
Oregon .....	95.4	95.5	95.7	95.6	95.4	95.5	96.1	96.6	96.9	97.1	96.9	96.9	97.2
Pennsylvania .....	318.6	319.3	319.2	319.4	319.7	320.0	320.0	321.1	321.4	322.3	323.7	324.4	325.4
Rhode Island .....	28.7	28.9	29.0	29.3	29.4	29.3	29.0	29.1	29.5	29.5	29.3	29.5	29.5
South Carolina .....	80.0	80.5	80.8	81.1	81.2	81.7	82.1	82.3	82.6	83.0	83.5	83.8	83.8
South Dakota .....	22.4	22.5	23.0	23.0	23.2	23.3	23.3	23.3	23.3	23.4	23.3	23.6	23.7
Tennessee .....	125.9	126.1	126.9	127.1	127.3	127.1	127.4	127.4	126.3	126.7	127.1	127.3	127.3
Texas .....	497.5	499.3	500.8	502.9	504.6	507.1	509.3	510.2	510.6	512.2	512.2	513.4	516.6
Utah .....	55.6	56.2	56.3	56.6	56.5	56.3	56.4	56.8	57.0	57.2	57.7	58.2	58.6
Vermont .....	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.7	12.7	12.9	12.9	13.0	13.2
Virginia .....	175.8	176.2	176.8	177.4	177.6	177.1	177.7	179.0	179.2	179.1	179.5	180.1	181.2
Washington .....	135.7	136.6	136.7	137.2	137.5	138.2	139.3	139.0	139.6	140.3	141.5	140.9	141.0
West Virginia .....	28.6	28.6	28.7	28.9	28.9	29.0	29.7	29.7	29.5	29.2	29.2	29.5	29.3
Wisconsin .....	144.0	144.3	144.5	144.9	145.4	145.8	146.3	146.6	146.9	147.0	147.7	147.7	148.3
Wyoming .....	8.6	8.6	8.7	8.6	8.7	8.6	8.7	8.7	8.7	8.8	8.9	8.7	8.7

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>Services</b>													
Alabama .....	452.2	453.7	453.0	452.6	454.7	456.2	457.0	458.5	456.8	460.1	461.6	463.2	461.3
Alaska .....	68.7	68.8	68.8	69.4	69.3	69.4	69.5	69.2	69.2	70.1	69.6	70.1	70.3
Arizona .....	630.9	634.5	637.1	637.5	640.7	643.4	632.0	633.3	636.2	640.8	644.8	648.1	650.7
Arkansas .....	263.8	264.0	263.8	265.7	266.4	267.0	266.3	267.1	266.8	267.9	268.4	268.9	271.7
California .....	4,228.5	4,245.7	4,260.7	4,273.4	4,289.9	4,304.2	4,334.1	4,352.0	4,366.3	4,379.9	4,411.3	4,417.6	4,425.1
Colorado .....	621.9	623.0	623.5	625.4	625.5	626.9	629.1	627.5	626.5	611.4	626.8	629.9	636.1
Connecticut .....	514.7	515.4	515.7	516.3	517.0	520.1	520.0	521.4	520.5	523.8	523.1	526.3	528.6
Delaware .....	112.2	112.6	112.1	112.5	112.9	113.2	113.4	113.4	113.0	114.1	115.0	115.0	115.2
District of Columbia .....	274.4	274.8	275.5	275.0	275.8	275.6	275.6	275.4	275.8	275.4	275.6	277.3	279.0
Florida .....	2,428.2	2,440.2	2,455.5	2,457.5	2,464.6	2,475.3	2,484.8	2,498.7	2,499.1	2,514.3	2,527.5	2,542.7	2,556.7
Georgia .....	1,006.6	1,006.2	1,007.8	1,011.8	1,017.6	1,022.1	1,024.4	1,031.1	1,037.1	1,039.2	1,044.4	1,048.1	1,047.2
Hawaii .....	171.9	172.7	172.5	173.4	173.1	172.9	172.6	173.6	174.1	174.4	176.2	176.5	176.6
Idaho .....	125.5	126.9	126.4	127.4	127.3	131.8	133.7	133.4	133.1	132.9	131.6	132.0	129.5
Illinois .....	1,775.9	1,777.7	1,778.1	1,787.3	1,794.1	1,801.4	1,790.9	1,793.9	1,794.4	1,808.5	1,818.5	1,820.1	1,820.7
Indiana .....	714.2	714.6	718.8	715.6	715.6	718.6	708.9	714.9	718.5	725.6	725.6	727.2	729.8
Iowa .....	384.4	382.3	382.0	384.2	385.0	386.7	381.3	383.1	385.1	388.4	390.1	392.9	393.0
Kansas .....	335.2	335.3	336.0	337.4	340.3	340.8	342.0	341.9	342.2	343.8	342.8	343.8	343.5
Kentucky .....	444.5	445.1	445.3	445.8	447.1	447.7	450.7	452.2	452.6	455.4	456.7	458.4	459.3
Louisiana .....	513.7	512.1	514.0	514.4	516.4	519.2	517.2	517.9	517.2	521.3	521.0	522.6	523.3
Maine .....	169.0	169.1	170.4	171.4	171.9	172.5	172.1	172.7	173.2	174.5	174.5	176.1	176.5
Maryland .....	790.4	792.7	794.1	798.5	800.4	802.9	804.0	808.3	807.1	808.4	806.7	812.4	815.6
Massachusetts .....	1,134.5	1,137.1	1,138.4	1,141.7	1,143.5	1,147.2	1,146.0	1,149.2	1,151.7	1,157.5	1,159.6	1,160.8	1,162.1
Michigan .....	1,243.1	1,247.8	1,250.5	1,254.9	1,257.4	1,259.6	1,258.2	1,256.7	1,259.0	1,259.5	1,264.1	1,269.1	1,269.0
Minnesota .....	729.9	731.4	731.7	732.9	735.0	736.3	736.3	733.5	735.2	741.5	743.1	748.0	750.2
Mississippi .....	263.8	264.0	262.5	261.1	261.9	262.2	261.4	259.9	260.0	260.4	263.2	262.6	264.6
Missouri .....	759.7	759.5	758.5	763.4	767.0	766.9	767.5	761.0	758.5	759.5	759.2	760.5	762.2
Montana .....	107.6	108.1	108.3	108.2	108.5	108.6	109.2	109.4	109.7	110.5	110.6	110.9	111.4
Nebraska .....	240.6	240.6	239.5	240.7	241.6	243.2	240.0	239.3	238.1	237.3	237.3	238.8	239.0
Nevada .....	392.7	394.6	395.7	403.6	403.1	403.6	403.0	404.1	404.7	405.7	409.0	411.1	413.3
New Hampshire .....	172.1	172.6	172.9	173.2	173.7	173.4	176.2	176.9	178.0	180.1	178.6	180.1	179.7
New Jersey .....	1,227.6	1,231.2	1,233.2	1,234.7	1,238.1	1,242.3	1,236.7	1,244.4	1,249.9	1,254.4	1,261.2	1,265.2	1,268.5
New Mexico .....	203.3	204.6	205.6	206.6	207.7	207.9	207.1	207.8	208.5	209.4	210.2	210.5	211.5
New York .....	2,806.8	2,814.0	2,817.5	2,828.1	2,837.2	2,848.5	2,848.4	2,857.3	2,867.5	2,879.0	2,884.9	2,890.1	2,902.4
North Carolina .....	939.9	938.6	944.6	946.9	951.1	956.7	960.9	960.5	959.2	964.4	962.1	961.3	960.4
North Dakota .....	89.6	89.5	89.7	89.9	89.9	90.6	90.6	90.4	90.7	91.1	91.2	90.3	90.4
Ohio .....	1,512.3	1,513.7	1,516.1	1,521.6	1,521.9	1,522.5	1,518.6	1,520.2	1,521.2	1,531.4	1,533.6	1,537.6	1,537.8
Oklahoma .....	406.0	406.9	407.2	407.4	408.1	409.1	411.1	413.6	415.4	419.6	421.8	422.0	421.2
Oregon .....	416.7	420.2	421.3	423.2	424.8	425.9	428.4	430.0	431.3	431.2	431.7	431.2	435.0
Pennsylvania .....	1,782.3	1,784.4	1,784.5	1,784.4	1,785.2	1,789.9	1,787.2	1,788.4	1,785.3	1,796.5	1,793.1	1,796.5	1,796.8
Rhode Island .....	157.7	157.7	158.3	158.4	158.0	157.9	156.2	158.1	158.0	159.1	158.0	157.9	159.2
South Carolina .....	420.5	422.2	423.4	424.3	426.0	427.2	431.6	431.9	434.1	434.5	435.8	437.9	437.7
South Dakota .....	94.4	94.5	94.3	95.8	95.6	95.9	94.9	95.9	96.7	97.5	96.4	96.2	96.4
Tennessee .....	707.7	708.3	707.1	711.9	714.2	715.9	712.9	713.7	715.8	715.8	715.8	718.6	717.1
Texas .....	2,523.9	2,532.8	2,540.6	2,549.7	2,559.7	2,569.3	2,577.0	2,583.3	2,592.9	2,604.7	2,615.3	2,636.1	2,644.1
Utah .....	280.4	281.4	281.8	282.6	284.2	285.2	287.3	288.9	288.8	290.9	290.3	290.7	291.7
Vermont .....	86.6	86.9	86.7	85.9	86.6	87.2	87.9	87.8	88.4	88.6	89.4	88.8	88.7
Virginia .....	1,023.1	1,028.7	1,033.3	1,036.7	1,042.1	1,045.7	1,045.2	1,048.3	1,050.7	1,053.7	1,057.4	1,062.4	1,062.3
Washington .....	711.3	714.7	715.3	718.2	720.7	723.2	721.1	725.4	727.5	728.9	730.6	732.3	736.9
West Virginia .....	208.5	208.5	208.9	209.8	210.2	211.1	212.1	212.5	211.4	210.2	209.9	211.0	213.2
Wisconsin .....	709.7	711.2	711.0	711.3	712.5	713.2	710.3	712.7	714.5	717.5	722.8	723.3	726.2
Wyoming .....	50.5	50.5	50.4	50.7	51.0	51.2	51.6	51.5	51.7	52.3	51.2	51.3	50.9

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>Government</b>													
Alabama	346.5	346.7	347.8	348.0	348.6	349.4	348.7	349.8	350.5	350.4	349.3	347.5	346.7
Alaska	73.7	73.3	73.8	73.3	73.3	73.5	73.4	73.6	73.9	74.0	75.4	73.0	73.4
Arizona	337.6	335.8	337.1	336.8	342.7	339.6	341.5	341.3	340.6	342.6	341.8	349.8	356.0
Arkansas	186.7	186.3	186.1	187.0	187.9	186.2	186.2	186.2	186.1	186.2	186.1	186.3	186.8
California	2,155.6	2,166.8	2,173.6	2,184.7	2,192.9	2,199.0	2,198.8	2,203.6	2,209.1	2,215.6	2,221.4	2,226.0	2,226.2
Colorado	323.4	321.7	322.8	322.8	323.3	323.2	323.9	325.0	325.4	326.0	325.6	324.4	328.3
Connecticut	227.8	228.4	230.5	229.1	228.6	229.7	229.6	229.2	230.2	230.2	230.3	231.1	232.7
Delaware	54.4	54.1	54.0	54.0	54.1	54.4	54.9	54.7	55.1	55.2	55.2	54.2	55.3
District of Columbia	220.8	228.2	226.7	225.7	225.9	225.0	225.9	225.7	225.4	225.3	225.4	224.7	218.8
Florida	957.0	955.7	959.9	960.5	964.0	964.6	963.3	967.3	968.6	970.2	973.4	973.8	975.7
Georgia	584.9	589.0	596.9	588.1	588.2	589.7	591.3	591.5	593.2	591.6	592.5	593.1	595.1
Hawaii	111.7	112.6	117.8	112.6	112.1	111.9	110.8	111.0	111.1	111.4	110.7	111.8	112.4
Idaho	102.5	102.8	102.6	103.5	103.6	104.3	103.5	104.7	104.8	104.9	105.6	106.0	105.7
Illinois	822.4	824.2	822.3	816.6	816.5	812.8	813.7	808.2	809.9	809.5	808.7	810.6	814.1
Indiana	387.4	398.2	405.8	403.0	403.8	406.0	402.1	407.6	408.5	407.7	403.0	406.8	395.2
Iowa	235.9	235.0	237.5	236.9	236.3	238.2	237.9	237.3	236.8	237.7	237.5	238.1	239.9
Kansas	240.4	242.3	240.8	243.8	244.4	242.4	242.5	242.0	242.5	246.0	244.9	245.9	245.8
Kentucky	294.3	296.5	295.6	294.9	294.8	294.7	296.6	296.1	296.0	296.6	300.3	299.3	299.7
Louisiana	367.0	366.5	368.4	368.3	368.0	368.1	367.0	366.8	366.2	366.2	366.0	367.8	366.1
Maine	93.7	93.5	93.3	93.1	92.9	93.6	93.5	94.2	94.4	94.2	93.6	94.2	94.8
Maryland	435.3	437.0	440.5	440.1	440.9	439.3	440.8	440.2	439.4	439.2	440.9	442.9	441.6
Massachusetts	411.5	413.4	413.7	414.5	414.8	416.6	416.3	416.3	416.7	415.2	415.5	416.0	413.9
Michigan	662.0	659.7	662.5	660.0	660.5	660.0	659.2	658.3	658.2	660.0	659.9	662.9	667.5
Minnesota	377.0	379.0	381.1	382.4	382.9	384.8	384.6	385.2	386.9	387.2	385.3	384.4	382.4
Mississippi	229.3	224.0	224.1	225.1	225.2	225.2	225.1	225.3	225.6	226.1	225.6	224.9	231.6
Missouri	414.0	414.4	418.1	417.9	418.8	420.9	419.0	418.0	421.3	420.0	422.6	424.6	424.6
Montana	79.3	78.9	79.2	79.3	79.5	79.4	79.4	78.4	79.5	79.2	78.1	76.4	79.8
Nebraska	152.2	149.7	150.5	150.3	149.8	150.4	149.8	149.8	149.5	149.8	149.6	151.0	151.0
Nevada	112.0	113.1	113.5	113.2	113.5	113.9	114.9	115.0	116.2	116.8	117.9	115.7	117.2
New Hampshire	79.3	78.9	79.3	79.6	79.5	78.9	79.5	79.9	79.9	79.6	80.5	79.9	80.3
New Jersey	568.0	568.0	572.4	570.3	569.9	570.8	570.3	569.2	569.5	570.1	570.6	569.9	569.6
New Mexico	178.4	178.7	177.2	177.4	177.5	177.5	179.1	177.6	179.7	179.2	179.4	179.6	178.7
New York <sup>2</sup>	1,424.0	1,421.6	1,419.9	1,422.9	1,421.0	1,421.8	1,413.3	1,424.2	1,424.4	1,424.0	1,423.3	1,416.3	1,428.7
North Carolina	600.5	620.2	601.8	601.5	600.7	601.2	597.5	597.1	597.4	597.3	595.1	594.2	616.0
North Dakota	69.0	68.3	70.1	70.0	70.4	70.6	71.7	71.1	71.3	71.5	71.0	69.6	68.9
Ohio	765.2	765.6	766.1	765.0	765.8	766.9	757.7	766.2	768.1	769.5	767.7	768.8	775.1
Oklahoma	278.0	279.4	278.8	279.5	278.9	279.3	278.0	279.1	280.9	282.0	281.2	282.9	281.6
Oregon	255.3	256.0	257.0	257.6	260.9	259.5	259.8	260.0	260.5	261.2	260.3	260.7	264.9
Pennsylvania	694.9	695.7	706.4	701.9	704.3	707.0	709.8	707.6	706.1	707.4	706.1	701.6	698.9
Rhode Island	63.7	63.1	63.9	63.5	63.6	63.7	63.9	63.1	63.5	63.6	63.8	64.3	64.8
South Carolina	309.0	311.3	311.2	311.7	310.1	310.3	312.8	312.2	312.1	311.6	312.7	317.6	315.0
South Dakota	71.5	71.1	71.4	71.3	71.2	71.0	71.1	71.5	71.1	70.8	71.1	71.9	73.8
Tennessee	384.5	395.4	383.6	383.9	384.6	384.1	382.4	383.9	383.8	383.0	382.5	391.3	386.4
Texas	1,506.5	1,510.9	1,510.9	1,525.8	1,529.9	1,529.9	1,531.6	1,534.7	1,538.2	1,539.2	1,542.8	1,541.6	1,540.8
Utah	177.4	177.5	180.9	177.9	179.1	179.9	176.2	177.1	177.4	177.7	177.4	177.7	177.9
Vermont	45.7	46.2	46.4	46.5	46.4	46.5	46.9	46.5	46.9	46.6	47.3	47.0	47.2
Virginia	602.5	603.0	604.2	603.5	602.5	605.0	602.9	605.2	606.8	609.2	609.1	609.9	613.9
Washington	469.0	469.5	465.2	466.0	466.2	466.8	470.9	469.6	471.4	473.1	471.7	470.6	476.7
West Virginia	138.3	140.7	141.2	140.0	139.7	140.0	141.2	140.1	140.1	140.5	139.9	141.0	138.6
Wisconsin	393.7	394.6	393.1	393.5	395.5	396.3	397.6	396.3	395.5	396.1	397.7	396.5	397.4
Wyoming	59.4	58.7	58.4	58.6	58.3	58.2	58.0	58.1	58.1	58.5	58.7	57.7	59.4

<sup>1</sup> Includes mining, not shown separately.

<sup>2</sup> Total nonfarm and government employment data have been revised from July 1998 through June 1999 as a result of a correction in local education employment for July and August 1998.

<sup>3</sup> Mining is combined with construction.

P = preliminary

NOTE: All data have been adjusted to March 1998 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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Total private</b> .....	34.6	34.5	34.6	34.6	34.6	34.6	34.6	34.5	34.4	34.4	34.5	34.5	34.6
<b>Goods-producing</b> .....	41.1	40.9	41.1	41.0	41.1	41.1	41.0	40.8	40.9	41.0	41.2	41.2	41.1
<b>Mining</b> .....	43.7	43.3	43.7	43.3	43.3	42.9	43.0	42.9	43.8	44.1	44.0	45.0	44.2
<b>Construction</b> .....	39.2	38.6	39.2	39.1	39.4	39.5	39.2	38.5	38.6	38.9	39.4	38.9	39.0
<b>Manufacturing</b> .....	41.7	41.6	41.7	41.7	41.7	41.6	41.6	41.5	41.6	41.7	41.7	41.9	41.7
<i>Overtime hours</i> .....	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.6	4.7	4.7	4.6
<b>Durable goods</b> .....	42.3	42.2	42.3	42.3	42.2	42.2	42.2	42.0	42.1	42.2	42.3	42.5	42.3
<i>Overtime hours</i> .....	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.3	4.7	4.8	4.9	4.7
Lumber and wood products .....	41.2	40.7	41.1	41.2	41.5	41.7	41.1	41.2	41.2	41.2	41.1	41.2	41.1
Furniture and fixtures .....	40.6	40.2	40.5	40.3	40.2	40.4	40.3	40.3	40.4	40.4	40.4	40.6	40.3
Stone, clay, and glass products .....	43.6	43.4	43.6	43.6	43.8	43.8	43.4	42.9	43.1	43.4	43.4	43.5	43.7
Primary metal industries .....	44.1	43.9	43.7	43.8	43.7	43.7	43.8	43.9	44.0	44.3	44.3	44.5	44.4
Blast furnaces and basic steel products .....	44.4	44.2	43.7	43.7	43.3	43.8	43.8	43.9	44.5	44.8	45.2	45.1	44.9
Fabricated metal products .....	42.3	42.2	42.3	42.2	42.2	42.1	42.1	42.1	41.8	42.1	42.1	42.3	42.4
Industrial machinery and equipment .....	42.9	42.6	42.6	42.4	42.1	42.1	42.1	41.9	41.9	42.1	42.0	42.4	42.5
Electronic and other electrical equipment .....	41.5	41.4	41.5	41.4	41.1	41.2	41.2	41.0	41.1	41.5	41.5	41.6	41.3
Transportation equipment .....	43.0	43.8	43.9	44.1	44.1	43.5	44.0	43.7	44.0	43.5	44.2	44.3	43.7
Motor vehicles and equipment .....	43.0	44.3	44.1	44.6	44.9	44.3	45.0	44.7	45.1	44.4	45.4	45.7	44.8
Instruments and related products .....	41.3	41.1	41.2	41.1	41.1	41.2	41.3	41.2	41.6	41.6	41.5	41.7	41.4
Miscellaneous manufacturing .....	40.0	39.5	39.7	39.4	39.6	39.6	39.7	39.8	39.6	40.2	40.0	40.0	40.2
<b>Nondurable goods</b> .....	40.9	40.8	40.9	40.8	40.9	40.8	40.8	40.8	40.9	41.0	41.0	41.0	40.9
<i>Overtime hours</i> .....	4.3	4.3	4.3	4.3	4.3	4.4	4.3	4.4	4.2	4.4	4.5	4.5	4.4
Food and kindred products .....	41.7	41.7	41.6	41.7	42.0	41.8	41.7	41.7	41.9	41.8	41.8	42.0	41.6
Tobacco products .....	39.2	37.7	38.5	38.5	36.6	38.1	38.5	38.8	38.6	39.9	39.1	41.0	38.4
Textile mill products .....	41.0	40.4	41.1	40.8	40.8	40.8	40.6	40.4	41.0	41.0	40.6	41.3	40.9
Apparel and other textile products .....	37.4	37.2	37.3	37.3	37.3	37.0	37.5	37.4	37.5	37.8	37.7	37.4	37.2
Paper and allied products .....	43.3	43.6	43.5	43.5	43.4	43.5	43.5	43.7	43.6	43.5	43.5	43.5	43.7
Printing and publishing .....	38.5	38.2	38.2	38.1	38.1	38.2	38.1	37.9	38.1	38.3	38.3	38.3	38.3
Chemicals and allied products .....	43.2	43.2	43.2	42.9	42.7	42.9	42.8	42.8	43.0	43.0	43.0	43.0	43.3
Petroleum and coal products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products .....	41.7	41.7	41.8	41.6	41.7	41.4	41.7	41.8	41.5	41.9	41.8	41.7	41.6
Leather and leather products .....	37.9	37.4	37.4	37.4	37.5	37.3	37.7	37.7	38.1	38.4	37.9	37.1	37.8
<b>Service-producing</b> .....	32.9	32.8	32.9	32.9	32.9	32.9	33.0	32.8	32.8	32.8	32.8	32.9	32.9
<b>Transportation and public utilities</b> .....	39.4	39.3	39.3	39.2	39.1	39.3	39.2	39.1	39.0	38.8	38.9	38.8	39.2
<b>Wholesale trade</b> .....	38.4	38.3	38.3	38.4	38.4	38.4	38.5	38.4	38.4	38.3	38.4	38.4	38.5
<b>Retail trade</b> .....	29.0	29.0	29.1	29.0	29.0	29.0	29.2	29.0	29.0	29.1	29.1	29.1	29.1
<b>Finance, insurance, and real estate</b> .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Services</b> .....	32.7	32.5	32.7	32.7	32.7	32.7	32.7	32.6	32.5	32.5	32.6	32.6	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.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Total private</b> .....	145.5	145.1	146.0	146.1	146.6	146.8	147.3	146.8	147.0	147.2	147.8	148.3	148.5
<b>Goods-producing</b> .....	115.4	114.7	115.2	115.0	115.5	115.2	115.0	114.2	114.2	114.4	114.6	115.1	114.3
<b>Mining</b> .....	55.3	54.6	54.6	53.7	53.4	51.8	51.0	50.5	50.4	50.1	49.7	51.0	50.1
<b>Construction</b> .....	165.4	162.7	166.4	167.5	171.3	171.9	171.9	169.1	169.2	170.0	172.8	170.8	170.2
<b>Manufacturing</b> .....	108.5	108.3	108.1	107.7	107.5	107.1	106.8	106.5	106.5	106.5	106.3	107.2	106.4
<b>Durable goods</b> .....	112.6	112.4	112.3	111.8	111.5	111.0	110.8	110.4	110.4	110.5	110.4	111.8	111.0
Lumber and wood products .....	145.5	144.0	145.6	146.6	148.1	149.5	147.6	147.9	147.5	147.3	146.9	147.5	147.3
Furniture and fixtures .....	135.3	134.0	134.6	134.3	134.6	135.3	134.9	135.2	135.6	135.9	136.2	138.8	136.8
Stone, clay, and glass products .....	116.0	115.7	116.5	116.8	118.1	117.8	117.0	115.4	116.2	117.0	116.8	117.5	117.3
Primary metal industries .....	93.3	92.7	91.4	90.8	90.4	89.9	90.0	90.0	89.9	90.3	89.8	91.1	90.4
Blast furnaces and basic steel products .....	71.3	70.6	69.0	68.3	68.0	68.0	68.0	68.2	69.1	69.2	69.4	69.6	69.3
Fabricated metal products .....	118.6	118.4	118.4	117.9	117.7	117.7	117.2	117.0	116.2	116.9	116.6	118.2	117.4
Industrial machinery and equipment .....	110.0	109.1	108.6	107.6	106.3	105.4	105.2	104.4	104.1	104.5	104.0	105.2	104.4
Electronic and other electrical equipment .....	109.1	108.6	108.1	106.9	105.9	105.9	105.2	105.1	105.6	106.2	105.9	107.9	106.6
Transportation equipment .....	125.1	127.2	127.8	127.6	127.3	125.1	125.9	125.3	125.5	123.4	125.0	127.1	126.1
Motor vehicles and equipment .....	157.3	162.3	161.8	163.0	163.6	161.0	162.7	162.7	164.8	162.4	165.9	171.6	169.1
Instruments and related products .....	76.3	75.7	75.7	75.2	75.0	75.0	75.2	74.7	75.8	75.6	75.2	75.8	74.7
Miscellaneous manufacturing .....	103.2	101.5	100.5	99.8	100.3	99.5	99.8	100.0	100.3	101.4	100.9	100.9	101.8
<b>Nondurable goods</b> .....	102.8	102.7	102.4	102.0	102.1	101.8	101.5	101.2	101.2	101.1	100.5	100.9	100.1
Food and kindred products .....	116.5	117.7	117.4	118.1	119.3	119.3	118.8	118.8	118.9	118.5	117.9	119.2	116.9
Tobacco products .....	60.2	57.9	59.1	59.1	56.2	58.5	57.2	55.7	55.4	55.3	56.2	58.9	49.4
Textile mill products .....	85.7	84.3	85.2	83.9	83.4	83.1	82.0	81.1	81.6	81.1	79.8	81.3	79.9
Apparel and other textile products .....	66.5	65.8	64.7	63.6	63.4	62.3	62.1	61.5	61.4	61.4	60.4	59.4	58.3
Paper and allied products .....	108.1	108.6	108.0	107.5	107.1	107.1	106.7	107.0	106.7	106.3	106.0	105.8	106.3
Printing and publishing .....	125.4	124.5	124.3	123.5	123.0	123.4	122.8	121.9	121.9	122.3	122.3	122.1	122.3
Chemicals and allied products .....	103.4	103.4	103.3	102.5	102.2	102.4	102.0	101.8	102.4	102.3	101.9	102.1	102.8
Petroleum and coal products .....	76.6	76.3	76.3	77.3	79.4	76.2	77.4	76.4	74.5	73.9	72.9	74.9	73.3
Rubber and misc. plastics products .....	147.7	147.9	148.1	147.5	148.1	147.8	148.5	148.8	148.5	149.5	148.6	149.6	149.4
Leather and leather products .....	35.5	34.5	34.5	33.9	33.4	32.7	33.0	32.4	32.8	32.4	32.0	30.2	30.8
<b>Service-producing</b> .....	159.0	158.8	159.8	160.1	160.5	161.0	161.8	161.5	161.6	161.9	162.7	163.2	163.8
<b>Transportation and public utilities</b> .....	132.6	132.5	132.9	132.9	133.0	134.1	134.1	133.8	133.6	133.0	133.7	133.6	135.5
<b>Wholesale trade</b> .....	129.2	129.3	129.3	130.0	130.2	130.6	131.3	131.3	131.6	131.5	132.0	132.3	132.6
<b>Retail trade</b> .....	140.1	140.2	140.8	140.6	140.9	141.3	142.9	141.9	142.6	143.3	143.6	144.4	144.2
<b>Finance, insurance, and real estate</b> .....	137.2	137.5	138.1	138.6	138.9	139.1	139.6	139.3	139.1	138.8	139.4	140.7	140.4
<b>Services</b> .....	195.4	194.7	196.6	197.2	197.8	198.3	198.9	198.8	198.9	199.3	200.7	201.0	202.2

<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.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 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		
	June 1999 <sup>r</sup>	July 1999 <sup>r</sup>	Aug. 1999 <sup>P</sup>	Aug. 1998 to Aug. 1999 <sup>P</sup>	June 1999 to July 1999 <sup>r</sup>	July 1999 To Aug. 1999 <sup>P</sup>
Total .....	236,002	235,638	236,114	2.0	-0.2	0.2
Private sector .....	197,341	197,930	198,143	2.1	.3	.1
Mining .....	1,196	1,234	1,206	-9.1	3.2	-2.3
Construction .....	12,821	12,687	12,661	3.4	-1.0	-2
Manufacturing .....	39,940	40,146	39,919	-1.9	.5	-6
Durable goods .....	24,052	24,241	24,104	-1.7	.8	-6
Nondurable goods .....	15,888	15,905	15,815	-2.3	.1	-6
Transportation and public utilities .....	13,771	13,764	13,879	2.4	.0	.8
Wholesale trade .....	13,964	14,000	14,076	3.0	.3	.5
Retail trade .....	34,495	34,645	34,640	2.8	.4	.0
Finance, insurance, and real estate .....	14,393	14,486	14,438	2.5	.6	-3
Services .....	66,761	66,968	67,324	4.0	.3	.5
Government .....	38,662	37,708	37,971	1.2	-2.5	.7

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

<sup>P</sup> = preliminary.

<sup>r</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.txt>

**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	1998					1999							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>	Aug. <sup>P</sup>
<b>Average hourly earnings</b>													
<b>Total private (in current dollars)</b> .....	\$12.85	\$12.88	\$12.91	\$12.94	\$12.98	\$13.04	\$13.06	\$13.11	\$13.14	\$13.18	\$13.24	\$13.28	\$13.30
<b>Goods-producing</b> .....	14.39	14.41	14.44	14.47	14.51	14.53	14.56	14.61	14.67	14.75	14.85	14.91	14.89
<b>Mining</b> .....	17.00	17.06	17.15	17.27	17.18	17.07	16.97	17.00	16.87	17.05	16.96	17.25	17.20
<b>Construction</b> .....	16.67	16.60	16.72	16.76	16.80	16.80	16.83	16.92	16.97	17.08	17.16	17.19	17.16
<b>Manufacturing</b> .....	13.53	13.58	13.57	13.58	13.60	13.64	13.67	13.71	13.79	13.85	13.95	14.02	14.01
<b>Excluding overtime<sup>2</sup></b> .....	12.82	12.86	12.87	12.88	12.90	12.93	12.97	13.00	13.09	13.13	13.20	13.27	13.27
<b>Service-producing</b> .....	12.35	12.38	12.41	12.45	12.49	12.56	12.58	12.63	12.65	12.68	12.73	12.77	12.80
<b>Transportation and public utilities</b> .....	15.33	15.37	15.38	15.41	15.47	15.49	15.51	15.53	15.60	15.65	15.65	15.77	15.69
<b>Wholesale trade</b> .....	14.17	14.18	14.23	14.27	14.30	14.36	14.36	14.42	14.44	14.48	14.56	14.60	14.62
<b>Retail trade</b> .....	8.80	8.84	8.83	8.85	8.89	8.93	8.95	8.98	9.03	9.04	9.06	9.10	9.12
<b>Finance, insurance, and real estate</b> .....	14.14	14.16	14.23	14.32	14.40	14.46	14.49	14.51	14.58	14.60	14.62	14.68	14.68
<b>Services</b> .....	12.94	12.98	13.02	13.05	13.08	13.17	13.22	13.27	13.28	13.33	13.38	13.42	13.47
<b>Total private (in constant (1982) dollars)<sup>3</sup></b> .....	7.78	7.80	7.80	7.80	7.81	7.83	7.84	7.86	7.83	7.85	7.89	7.88	(4)
<b>Goods-producing</b> .....	8.72	8.72	8.73	8.73	8.74	8.73	8.74	8.76	8.74	8.78	8.84	8.85	(4)
<b>Service-producing</b> .....	7.48	7.49	7.50	7.51	7.52	7.54	7.56	7.58	7.53	7.55	7.58	7.58	(4)
<b>Average weekly earnings</b>													
<b>Total private (in current dollars)</b> .....	444.61	444.36	446.69	447.72	449.11	451.18	451.88	452.30	452.02	453.39	456.78	458.16	460.18
<b>Goods-producing</b> .....	591.43	589.37	593.48	593.27	596.36	597.18	596.96	596.09	600.00	604.75	611.82	614.29	611.98
<b>Mining</b> .....	742.90	738.70	749.46	747.79	743.89	732.30	729.71	729.30	738.91	751.91	746.24	776.25	760.24
<b>Construction</b> .....	653.46	640.76	655.42	655.32	661.92	663.60	659.74	651.42	655.04	664.41	676.10	668.69	669.24
<b>Manufacturing</b> .....	564.20	564.93	565.87	566.29	567.12	567.42	568.67	568.97	573.66	577.55	581.72	587.44	584.22
<b>Service-producing</b> .....	406.32	406.06	408.29	409.61	410.92	413.22	415.14	414.26	414.92	415.90	417.54	420.13	421.12
<b>Transportation and public utilities</b> .....	604.00	604.04	604.43	604.07	604.88	608.76	607.99	607.22	608.40	607.22	608.79	611.88	615.05
<b>Wholesale trade</b> .....	544.13	543.09	545.01	547.97	549.12	551.42	552.86	553.73	554.50	554.58	559.10	560.64	562.87
<b>Retail trade</b> .....	255.20	256.36	256.95	256.65	257.81	258.97	261.34	260.42	261.87	263.06	263.65	264.81	265.39
<b>Finance, insurance, and real estate</b> .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<b>Services</b> .....	423.14	421.85	425.75	426.74	427.72	430.66	432.29	432.60	431.60	433.23	436.19	437.49	440.47
<b>Total private (in constant (1982) dollars)<sup>3</sup></b> .....	269.30	268.98	269.90	270.04	270.39	270.98	271.40	271.33	269.22	270.04	272.05	271.91	(4)
<b>Goods-producing</b> .....	358.23	356.76	358.60	357.82	359.04	358.67	358.53	357.58	357.36	360.18	364.40	364.56	(4)
<b>Service-producing</b> .....	246.11	245.80	246.70	247.05	247.39	248.18	249.33	248.51	247.12	247.71	248.68	249.34	(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 1998 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1995 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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Total</b> .....		125,762	125,966	129,593	128,768	128,721	-	-	-	-	-
<b>Total private</b> .....		107,010	107,290	109,415	109,675	109,724	87,679	87,910	89,625	89,833	89,838
<b>Mining</b> .....		598	597	533	538	536	456	454	401	405	406
Metal mining .....	10	51.1	50.9	49.3	49.0	47.4	39.1	38.8	37.6	37.3	-
Iron ores .....	101	8.6	8.6	8.2	8.2	-	7.1	7.1	6.9	6.9	-
Copper ores .....	102	15.1	14.9	14.6	14.2	-	11.3	11.1	11.0	10.7	-
Coal mining .....	12	90.0	90.9	84.8	84.4	84.2	74.1	74.7	70.5	69.7	-
Bituminous coal and lignite mining .....	122	83.8	84.7	78.8	78.3	-	68.7	69.4	65.2	64.4	-
Oil and gas extraction .....	13	344.3	342.1	286.3	290.5	291.7	256.3	254.6	206.5	211.4	-
Crude petroleum and natural gas .....	131	140.2	139.0	124.8	128.5	-	82.8	82.4	74.2	78.1	-
Oil and gas field services .....	138	199.3	198.2	158.0	158.7	-	169.2	168.0	129.2	130.4	-
Nonmetallic minerals, except fuels .....	14	112.7	113.3	112.9	113.7	113.0	86.1	86.3	86.2	86.8	-
Crushed and broken stone .....	142	43.5	43.8	44.6	44.6	-	34.1	34.2	35.1	35.1	-
Sand and gravel .....	144	38.3	38.4	37.9	38.7	-	-	-	-	-	-
Chemical and fertilizer minerals .....	147	11.7	11.7	11.7	11.7	-	-	-	-	-	-
<b>Construction</b> .....		6,326	6,363	6,499	6,622	6,617	4,958	4,989	5,059	5,168	5,162
General building contractors .....	15	1,444.8	1,447.6	1,475.8	1,506.5	1,497.1	1,026.4	1,027.9	1,038.2	1,063.2	-
Residential building construction .....	152	737.8	740.0	771.3	785.4	-	506.6	507.0	529.1	540.0	-
Operative builders .....	153	28.5	28.0	28.9	29.5	-	11.5	11.2	11.6	11.7	-
Nonresidential building construction .....	154	678.5	679.6	675.6	691.6	-	508.3	509.7	497.5	511.5	-
Heavy construction, except building .....	16	911.9	921.8	917.1	928.1	931.2	772.4	782.6	771.7	783.1	-
Highway and street construction .....	161	301.1	303.7	302.3	308.4	-	253.2	255.7	252.7	259.0	-
Heavy construction, except highway .....	162	610.8	618.1	614.8	619.7	-	519.2	526.9	519.0	524.1	-
Special trade contractors .....	17	3,969.1	3,993.2	4,106.1	4,187.5	4,189.1	3,159.6	3,178.4	3,248.8	3,321.4	-
Plumbing, heating, and air conditioning .....	171	851.6	853.7	879.6	892.3	-	630.9	633.2	649.3	660.2	-
Painting and paper hanging .....	172	222.5	224.5	227.1	233.8	-	187.2	189.3	189.6	196.4	-
Electrical work .....	173	744.7	748.7	771.9	788.6	-	592.1	595.0	607.5	622.1	-
Masonry, stonework, and plastering .....	174	519.9	527.2	547.4	555.1	-	452.5	459.4	476.3	483.0	-
Carpentry and floor work .....	175	286.7	289.7	292.9	299.3	-	220.1	221.1	220.3	225.3	-
Roofing, siding, and sheet metal work .....	176	271.2	273.1	273.9	283.2	-	218.9	220.1	217.2	225.9	-
<b>Manufacturing</b> .....		18,620	18,852	18,498	18,409	18,481	12,725	12,959	12,702	12,620	12,704
<b>Durable goods</b> .....		11,017	11,188	11,030	10,965	10,987	7,456	7,625	7,547	7,483	7,509
Lumber and wood products .....	24	824.1	826.7	833.6	838.4	840.7	678.2	680.8	684.5	687.4	690.5
Logging .....	241	82.0	82.9	77.3	79.3	-	65.0	65.9	61.8	63.4	-
Sawmills and planing mills .....	242	183.7	184.7	181.6	181.8	-	160.4	161.4	158.1	158.3	-
Sawmills and planing mills, general .....	2421	144.9	144.3	140.9	141.2	-	126.0	125.6	122.2	122.4	-
Hardwood dimension and flooring mills .....	2426	36.5	37.9	37.7	37.6	-	32.4	33.7	33.5	33.6	-
Millwork, plywood, and structural members .....	243	313.4	313.8	327.5	330.9	-	252.4	252.6	263.4	265.1	-
Millwork .....	2431	126.6	126.0	131.2	132.9	-	98.5	97.8	103.1	104.6	-
Wood kitchen cabinets .....	2434	87.8	88.6	94.1	95.2	-	71.4	72.0	76.1	76.0	-
Hardwood veneer and plywood .....	2435	27.6	27.9	28.9	28.7	-	23.3	23.7	24.6	24.3	-
Softwood veneer and plywood .....	2436	27.9	27.9	28.0	28.2	-	25.6	25.5	24.7	24.7	-
Wood containers .....	244	55.5	54.7	55.3	55.2	-	47.4	46.7	47.4	47.2	-
Wood buildings and mobile homes .....	245	101.1	101.4	102.9	102.8	-	81.2	81.3	81.2	81.1	-
Mobile homes .....	2451	77.2	77.8	78.2	77.4	-	64.9	65.2	64.9	64.0	-
Miscellaneous wood products .....	249	88.4	89.2	89.0	88.4	-	71.8	72.9	72.6	72.3	-
Furniture and fixtures .....	25	526.7	531.3	541.0	540.2	541.0	418.2	422.8	431.5	429.2	430.5
Household furniture .....	251	277.8	279.7	286.0	283.8	-	234.5	236.1	243.1	240.8	-
Wood household furniture .....	2511	127.4	128.4	130.0	129.1	-	110.2	111.1	113.0	112.0	-
Upholstered household furniture .....	2512	87.5	88.7	91.1	91.1	-	74.4	75.3	77.9	77.8	-
Metal household furniture .....	2514	16.7	16.0	18.1	17.1	-	13.4	12.8	15.0	14.1	-
Mattresses and bedsprings .....	2515	34.4	34.7	34.8	34.8	-	26.5	26.8	26.9	26.8	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Furniture and fixtures—Continued											
Office furniture .....	252	70.4	70.6	68.4	68.8	—	51.6	51.8	49.2	49.2	—
Public building and related furniture .....	253	44.9	46.5	48.8	48.9	—	34.9	36.5	38.1	37.9	—
Partitions and fixtures .....	254	93.4	94.0	95.7	96.4	—	69.9	70.6	72.3	72.6	—
Miscellaneous furniture and fixtures .....	259	40.2	40.5	42.1	42.3	—	27.3	27.8	28.8	28.7	—
Stone, clay, and glass products .....	32	569.7	575.4	579.3	577.4	578.7	444.0	449.8	455.1	452.3	454.1
Flat glass .....	321	16.5	16.6	16.9	16.8	—	13.1	13.0	13.6	13.6	—
Glass and glassware, pressed or blown .....	322	70.3	71.8	69.9	69.3	—	57.7	59.1	57.6	56.8	—
Glass containers .....	3221	25.5	25.6	24.3	24.0	—	22.5	22.5	21.1	20.8	—
Pressed and blown glass, nec .....	3229	44.8	46.2	45.6	45.3	—	35.2	36.6	36.5	36.0	—
Products of purchased glass .....	323	61.8	63.6	63.0	62.3	—	47.0	48.9	48.4	47.6	—
Cement, hydraulic .....	324	17.9	17.8	17.9	18.1	—	13.6	13.5	13.3	13.4	—
Structural clay products .....	325	33.7	33.4	33.7	33.4	—	26.2	25.6	26.2	26.0	—
Pottery and related products .....	326	37.5	37.9	37.6	37.1	—	29.0	29.8	29.4	28.9	—
Concrete, gypsum, and plaster products .....	327	238.4	239.7	245.8	246.5	—	185.0	186.7	193.3	193.4	—
Concrete block and brick .....	3271	19.8	19.5	20.8	20.8	—	12.6	12.4	13.9	13.9	—
Concrete products, nec .....	3272	77.9	78.9	83.4	83.1	—	60.3	61.2	65.0	64.5	—
Ready-mixed concrete .....	3273	122.5	123.1	123.4	124.5	—	97.8	98.8	99.9	100.6	—
Misc. nonmetallic mineral products .....	329	78.5	79.2	78.3	78.1	—	60.6	61.3	60.9	60.8	—
Abrasive products .....	3291	19.8	19.7	18.9	19.0	—	15.7	15.6	15.0	15.1	—
Asbestos products .....	3292	2.4	2.4	2.2	2.2	—	2.0	2.0	1.8	1.8	—
Mineral wool .....	3296	24.2	24.8	25.1	25.1	—	—	—	—	—	—
Primary metal industries .....	33	697.3	711.4	690.5	684.9	688.2	543.2	556.1	538.3	533.2	535.3
Blast furnaces and basic steel products .....	331	232.4	231.4	221.5	222.2	223.4	179.9	178.7	172.1	172.7	172.4
Blast furnaces and steel mills .....	3312	160.0	159.2	152.5	153.8	—	124.9	124.1	119.5	120.7	—
Steel pipe and tubes .....	3317	28.6	28.6	28.1	27.7	—	21.6	21.7	21.5	21.1	—
Iron and steel foundries .....	332	125.8	130.4	127.1	125.8	—	102.3	106.7	103.8	102.8	—
Gray and ductile iron foundries .....	3321	74.9	79.4	77.8	77.1	—	61.3	65.8	64.4	63.9	—
Malleable iron foundries .....	3322	4.2	4.6	4.8	4.7	—	3.1	3.4	3.6	3.6	—
Steel foundries, nec .....	3325	28.2	28.1	28.2	28.0	—	23.1	22.8	23.0	22.8	—
Primary nonferrous metals .....	333	39.1	39.2	37.5	37.5	—	30.4	30.7	28.9	28.8	—
Primary aluminum .....	3334	22.5	22.8	21.5	21.6	—	18.4	18.7	17.4	17.4	—
Nonferrous rolling and drawing .....	335	166.3	171.3	167.5	165.4	—	126.0	130.7	126.0	124.1	—
Copper rolling and drawing .....	3351	22.7	23.0	21.9	22.0	—	18.3	18.6	17.7	17.6	—
Aluminum sheet, plate, and foil .....	3353	21.1	21.1	19.7	19.3	—	15.7	15.7	14.4	13.8	—
Nonferrous wire drawing and insulating .....	3357	68.9	73.1	72.0	70.1	—	50.6	54.4	53.4	52.1	—
Nonferrous foundries (castings) .....	336	86.4	91.8	91.0	89.2	—	69.2	74.4	74.0	72.1	—
Aluminum foundries .....	3365	24.5	26.0	26.0	25.3	—	19.8	21.3	21.4	20.7	—
Fabricated metal products .....	34	1,474.9	1,500.2	1,492.2	1,476.5	1,482.7	1,105.9	1,127.1	1,121.9	1,106.6	1,112.1
Metal cans and shipping containers .....	341	36.4	36.6	35.6	35.4	—	30.8	31.1	30.3	30.1	—
Metal cans .....	3411	29.3	29.6	28.7	28.6	—	25.3	25.6	24.9	24.8	—
Cutlery, handtools, and hardware .....	342	124.4	125.9	124.8	123.4	—	95.1	96.7	96.2	95.0	—
Hand and edge tools, and blades and handsaws .....	3423.5	43.2	43.7	42.7	41.9	—	33.3	33.8	33.3	32.5	—
Hardware, nec .....	3429	68.4	69.3	69.2	69.0	—	52.1	53.1	53.1	53.1	—
Plumbing and heating, except electric .....	343	57.4	57.2	58.4	58.3	—	40.6	40.3	41.7	41.4	—
Plumbing fixture fittings and trim .....	3432	23.7	23.6	24.3	24.2	—	17.2	17.0	17.6	17.4	—
Heating equipment, except electric .....	3433	19.3	19.3	19.4	19.6	—	12.5	12.5	13.1	13.3	—
Fabricated structural metal products .....	344	464.1	467.9	468.5	468.9	—	339.8	340.7	341.9	341.6	—
Fabricated structural metal .....	3441	82.1	82.5	83.5	83.5	—	59.9	60.4	60.5	60.4	—
Metal doors, sash, and trim .....	3442	79.3	81.8	83.8	84.5	—	58.8	58.8	62.1	62.6	—
Fabricated plate work (boiler shops) .....	3443	102.0	102.1	98.2	97.5	—	73.8	73.5	70.5	69.8	—
Sheet metal work .....	3444	124.0	124.3	124.6	124.6	—	95.1	95.4	95.4	95.4	—
Architectural metal work .....	3446	31.8	32.1	33.4	33.4	—	23.4	23.6	24.2	24.1	—
Screw machine products, bolts, etc .....	345	104.8	105.5	104.2	102.0	—	81.8	82.7	81.2	79.3	—
Screw machine products .....	3451	53.5	53.7	53.3	51.7	—	43.6	44.0	43.2	41.9	—
Bolts, nuts, rivets, and washers .....	3452	51.3	51.8	50.9	50.3	—	38.2	38.7	38.0	37.4	—
Metal forgings and stampings .....	346	238.6	255.5	257.8	249.4	—	184.7	200.2	202.5	194.6	—
Iron and steel forgings .....	3462	33.0	32.9	31.2	30.5	—	25.2	25.0	23.2	22.6	—
Automotive stampings .....	3465	96.5	112.6	115.6	109.6	—	76.3	91.2	94.1	88.5	—
Metal stampings, nec .....	3469	95.3	96.2	97.3	96.1	—	72.6	73.4	74.7	73.5	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Metal services, nec .....	347	140.2	142.4	142.0	139.7	—	112.6	114.8	113.8	111.7	—
Plating and polishing .....	3471	85.6	86.7	86.2	84.5	—	69.8	70.7	69.8	68.3	—
Metal coating and allied services .....	3479	54.6	55.7	55.8	55.2	—	42.8	44.1	44.0	43.4	—
Ordnance and accessories, nec .....	348	40.7	40.8	39.6	39.9	—	23.7	24.0	23.8	23.8	—
Ammunition, except for small arms, nec .....	3483	19.6	19.6	18.5	18.6	—	8.9	8.9	9.0	9.1	—
Miscellaneous fabricated metal products .....	349	268.3	268.4	261.3	259.5	—	196.8	196.6	190.5	189.1	—
Valves and pipe fittings, nec .....	3494	24.8	24.8	24.1	23.9	—	18.1	18.0	17.6	17.5	—
Misc. fabricated wire products .....	3496	56.9	57.1	57.2	56.9	—	42.8	42.6	43.3	43.0	—
Industrial machinery and equipment .....	35	2,201.4	2,194.8	2,140.1	2,123.9	2,108.6	1,381.2	1,378.8	1,350.3	1,334.4	1,320.1
Engines and turbines .....	351	80.4	82.8	84.1	82.6	—	50.1	53.2	55.8	54.1	—
Turbines and turbine generator sets .....	3511	23.8	24.1	24.2	24.1	—	13.3	13.6	12.8	12.5	—
Internal combustion engines, nec .....	3519	56.6	58.7	59.9	58.5	—	36.8	39.6	43.0	41.6	—
Farm and garden machinery .....	352	100.8	100.4	96.0	90.9	—	70.7	70.8	67.7	62.4	—
Farm machinery and equipment .....	3523	78.0	78.4	70.9	68.7	—	55.3	56.1	49.5	47.4	—
Construction and related machinery .....	353	256.0	254.5	243.6	243.2	—	166.6	165.4	154.1	153.6	—
Construction machinery .....	3531	93.1	92.8	92.3	92.1	—	63.6	63.3	62.9	62.6	—
Mining machinery .....	3532	16.9	17.0	15.6	15.4	—	9.9	10.0	9.0	8.9	—
Oil and gas field machinery .....	3533	51.4	50.8	40.9	40.2	—	34.5	33.9	23.8	23.6	—
Conveyors and conveying equipment .....	3535	41.4	41.3	41.0	41.5	—	22.5	22.5	21.6	21.6	—
Industrial trucks and tractors .....	3537	34.0	34.0	34.3	34.6	—	23.6	23.7	23.7	23.8	—
Metalworking machinery .....	354	351.6	350.9	340.0	337.1	—	250.2	249.1	242.3	239.7	—
Machine tools, metal cutting types .....	3541	43.6	43.5	40.8	40.2	—	27.5	27.5	24.9	24.6	—
Machine tools, metal forming types .....	3542	17.4	17.4	16.7	16.7	—	10.9	10.9	10.2	10.1	—
Special dies, tools, jigs, and fixtures .....	3544	166.9	166.6	164.6	163.4	—	126.4	126.3	125.6	124.3	—
Machine tool accessories .....	3545	55.4	55.2	53.4	53.2	—	39.7	39.3	38.0	37.8	—
Power driven handtools .....	3546	21.2	21.2	20.3	19.9	—	15.2	15.1	15.2	14.9	—
Special industry machinery .....	355	179.3	178.1	169.6	169.4	—	96.0	96.0	91.4	91.2	—
Textile machinery .....	3552	14.1	14.3	13.6	13.4	—	9.1	9.2	8.5	8.6	—
Printing trades machinery .....	3555	22.2	22.0	20.7	20.9	—	12.5	12.5	11.8	11.9	—
Food products machinery .....	3556	24.9	24.7	24.9	24.8	—	14.7	14.7	14.9	14.8	—
General industrial machinery .....	356	269.6	269.1	261.6	260.1	—	170.3	170.5	165.8	164.8	—
Pumps and pumping equipment .....	3561	31.6	31.7	30.3	29.8	—	18.2	18.6	17.4	17.0	—
Ball and roller bearings .....	3562	41.0	41.5	39.9	39.6	—	31.4	31.8	30.4	30.4	—
Air and gas compressors .....	3563	26.6	26.3	27.7	27.8	—	14.8	14.6	15.5	15.5	—
Blowers and fans .....	3564	37.0	36.8	36.5	36.6	—	25.3	25.4	25.6	25.8	—
Speed changers, drives, and gears .....	3566	18.2	18.0	16.8	16.5	—	13.1	13.0	12.2	12.1	—
Power transmission equipment, nec .....	3568	22.3	22.3	21.4	21.2	—	15.7	15.7	14.8	14.7	—
Computer and office equipment .....	357	381.0	378.6	364.7	362.2	359.7	146.5	144.8	146.3	144.9	—
Electronic computers .....	3571	201.2	200.4	185.0	182.3	—	72.7	72.5	74.1	73.5	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	61.0	60.8	63.0	63.4	—	23.6	23.2	24.4	24.5	—
Refrigeration and service machinery .....	358	200.4	198.2	204.6	203.8	—	144.4	142.0	146.7	145.8	—
Refrigeration and heating equipment .....	3585	137.3	135.1	143.5	142.8	—	104.6	101.9	108.8	107.9	—
Misc. industrial and commercial machinery .....	359	382.3	382.2	375.9	374.6	—	286.4	287.0	280.2	277.9	—
Carburetors, pistons, rings, valves .....	3592	23.6	24.2	24.5	24.2	—	18.9	19.3	19.6	19.4	—
Scales, balances, and industrial machinery, nec .....	3596,9	310.0	309.5	304.7	304.2	—	237.1	237.4	231.2	229.7	—
Electronic and other electrical equipment .....	36	1,700.9	1,696.1	1,663.2	1,662.8	1,662.8	1,055.9	1,055.9	1,033.2	1,036.7	1,036.9
Electric distribution equipment .....	361	82.3	82.6	82.6	82.1	—	54.7	55.1	55.8	55.3	—
Transformers, except electronic .....	3612	37.7	38.0	37.6	37.5	—	24.9	25.2	26.1	26.1	—
Switchgear and switchboard apparatus .....	3613	44.6	44.6	45.0	44.6	—	29.8	29.9	29.7	29.2	—
Electrical industrial apparatus .....	362	152.2	151.5	147.0	145.7	—	105.1	104.1	101.2	99.6	—
Motors and generators .....	3621	74.2	73.9	72.0	70.9	—	57.1	56.5	55.7	54.6	—
Relays and industrial controls .....	3625	58.1	57.6	55.7	55.6	—	33.7	33.2	32.0	31.6	—
Household appliances .....	363	115.0	115.0	117.4	119.3	—	90.9	91.6	96.6	98.8	—
Household refrigerators and freezers .....	3632	26.6	27.3	27.1	28.8	—	21.2	22.0	23.2	25.4	—
Household laundry equipment .....	3633	16.1	14.4	18.3	18.3	—	13.0	11.7	16.2	16.3	—
Electric housewares and fans .....	3634	24.0	25.2	21.3	21.6	—	17.6	18.9	15.9	16.1	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
<b>Electronic and other electrical equipment—Continued</b>											
Electric lighting and wiring equipment .....	364	182.6	182.4	178.1	176.3	—	129.8	129.8	127.1	126.8	—
Electric lamps .....	3641	20.2	19.6	19.7	19.7	—	15.7	15.4	15.8	15.6	—
Current-carrying wiring devices .....	3643	63.7	62.9	58.0	56.2	—	41.5	41.0	38.9	38.8	—
Noncurrent-carrying wiring devices .....	3644	18.9	19.0	20.0	19.8	—	14.3	14.2	14.9	14.9	—
Residential ing fixtures .....	3645	20.6	21.2	21.0	20.7	—	15.3	15.8	15.4	15.2	—
Household audio and video equipment .....	365	81.2	81.9	82.0	82.2	—	51.4	52.2	52.7	53.3	—
Household audio and video equipment .....	3651	54.5	55.3	54.4	54.1	—	31.5	32.3	32.1	32.1	—
Communications equipment .....	366	283.5	282.2	273.8	275.4	—	128.2	128.8	121.5	125.1	—
Telephone and telegraph apparatus .....	3661	127.1	127.5	121.3	122.4	—	57.2	57.9	55.0	56.5	—
Electronic components and accessories .....	367	660.8	654.9	640.2	639.9	641.8	393.9	390.7	377.4	377.4	—
Electron tubes .....	3671	20.2	20.1	19.9	19.2	—	14.4	14.3	14.8	14.4	—
Semiconductors and related devices .....	3674	287.1	282.6	270.4	271.1	—	127.4	125.8	114.2	115.4	—
Electronic components, nec .....	3679	146.1	146.1	143.4	142.6	—	99.8	100.0	96.5	95.9	—
Misc. electrical equipment and supplies .....	369	143.3	145.6	142.1	141.9	—	101.9	103.6	100.9	100.4	—
Storage batteries .....	3691	25.4	25.7	26.1	25.9	—	19.6	20.0	20.4	20.3	—
Engine electrical equipment .....	3694	62.4	64.1	62.4	62.0	—	47.5	49.0	47.6	46.7	—
Transportation equipment .....	37	1,760.1	1,891.7	1,860.1	1,835.2	1,858.8	1,125.0	1,248.3	1,235.6	1,212.7	1,238.0
Motor vehicles and equipment .....	371	861.0	995.9	1,007.2	987.8	1,011.2	625.7	751.3	769.2	750.7	774.4
Motor vehicles and car bodies .....	3711	271.9	349.7	344.3	335.3	—	173.9	248.4	245.4	237.6	—
Truck and bus bodies .....	3713	41.2	42.7	45.6	46.0	—	32.4	33.7	36.3	36.1	—
Motor vehicle parts and accessories .....	3714	490.2	544.8	554.2	543.1	—	372.3	421.6	436.3	426.0	—
Truck trailers .....	3715	38.3	39.3	41.9	42.2	—	30.9	31.5	33.4	33.6	—
Aircraft and parts .....	372	525.2	523.7	489.9	486.9	482.0	264.2	262.9	243.6	241.0	—
Aircraft .....	3721	270.2	269.8	248.9	246.2	—	113.5	113.7	103.6	102.7	—
Aircraft engines and engine parts .....	3724	104.6	104.3	99.7	100.5	—	53.8	53.1	50.5	49.9	—
Aircraft parts and equipment, nec .....	3728	150.4	149.6	141.3	140.2	—	96.9	96.1	89.5	88.4	—
Ship and boat building and repairing .....	373	167.7	165.8	160.1	159.1	—	127.2	126.1	116.7	116.1	—
Ship building and repairing .....	3731	106.6	104.8	95.1	94.3	—	76.8	75.7	62.7	62.4	—
Boat building and repairing .....	3732	61.1	61.0	65.0	64.8	—	50.4	50.4	54.0	53.7	—
Railroad equipment .....	374	37.1	37.2	34.9	34.0	—	27.1	27.3	24.2	23.7	—
Guided missiles, space vehicles, and parts .....	376	92.5	92.1	87.5	87.3	—	24.8	24.5	22.9	22.7	—
Guided missiles and space vehicles .....	3761	63.9	63.5	60.3	60.3	—	15.6	15.3	14.0	13.9	—
Miscellaneous transportation equipment .....	379	54.9	55.2	57.6	57.3	—	40.4	40.7	43.0	42.6	—
Travel trailers and campers .....	3792	22.2	22.5	22.9	22.6	—	18.9	19.0	19.4	19.1	—
Instruments and related products .....	38	870.0	867.3	840.7	841.1	836.6	432.3	431.2	426.5	424.7	421.3
Search and navigation equipment .....	381	161.7	162.1	155.3	156.1	—	42.5	43.9	41.6	40.4	—
Measuring and controlling devices .....	382	306.7	304.9	294.4	295.0	—	156.9	155.2	149.7	148.8	—
Environmental controls .....	3822	39.9	39.3	38.8	39.3	—	27.3	27.2	26.0	26.0	—
Process control instruments .....	3823	67.2	67.0	64.5	64.7	—	34.4	33.9	33.1	33.1	—
Instruments to measure electricity .....	3825	77.9	77.7	73.5	73.3	—	31.9	31.7	29.2	28.4	—
Medical instruments and supplies .....	384	280.0	278.6	277.8	278.1	—	166.7	165.6	167.1	166.8	—
Surgical and medical instruments .....	3841	112.3	111.5	111.7	112.0	—	72.7	72.4	72.1	72.1	—
Surgical appliances and supplies .....	3842	95.3	94.9	96.2	96.0	—	59.2	58.7	60.5	60.4	—
Ophthalmic goods .....	385	35.2	35.1	33.8	33.3	—	24.3	24.1	24.2	24.0	—
Photographic equipment and supplies .....	386	80.6	80.1	73.2	72.8	—	37.2	37.1	38.8	40.0	—
Watches, clocks, watchcases, and parts .....	387	5.8	6.5	6.2	5.8	—	4.7	5.3	5.1	4.7	—
Miscellaneous manufacturing industries .....	39	391.7	393.0	389.1	384.9	389.0	272.5	274.3	269.7	266.0	269.8
Jewelry, silverware, and plated ware .....	391	49.1	51.0	48.8	47.2	—	33.5	35.1	33.1	31.6	—
Jewelry, precious metal .....	3911	36.7	37.8	35.9	34.7	—	24.6	25.5	23.7	22.6	—
Musical instruments .....	393	16.1	16.2	16.4	15.9	—	12.6	12.9	13.1	12.7	—
Toys and sporting goods .....	394	105.0	102.4	102.4	100.3	—	71.0	68.6	69.4	67.7	—
Dolls, games, toys, and children's vehicles .....	3942,4	33.1	33.6	31.0	30.1	—	20.9	21.3	20.1	19.4	—
Sporting and athletic goods, nec .....	3949	71.9	68.8	71.4	70.2	—	50.1	47.3	49.3	48.3	—
Pens, pencils, office, and art supplies .....	395	31.3	30.7	30.5	30.1	—	21.9	21.4	20.9	20.6	—
Costume jewelry and notions .....	396	21.5	22.4	20.7	20.0	—	15.2	16.0	15.1	14.5	—
Costume jewelry .....	3961	11.8	12.6	11.5	11.0	—	8.5	9.2	8.2	7.8	—
Miscellaneous manufactures .....	399	168.7	170.3	170.3	171.4	—	118.3	120.3	118.1	118.9	—
Signs and advertising specialties .....	3993	73.5	74.0	76.2	76.6	—	47.9	48.5	49.5	49.7	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods</b> .....		7,603	7,664	7,468	7,444	7,494	5,269	5,334	5,155	5,137	5,195
Food and kindred products .....	20	1,708.0	1,745.3	1,678.5	1,705.6	1,742.4	1,267.7	1,305.7	1,247.1	1,274.0	1,311.7
Meat products .....	201	495.0	496.3	499.9	502.1	—	418.4	420.7	425.7	427.9	—
Meat packing plants .....	2011	150.1	149.7	150.5	151.3	—	124.7	124.4	126.3	126.5	—
Sausages and other prepared meats .....	2013	99.0	99.5	100.7	101.3	—	77.3	78.2	79.9	80.4	—
Poultry slaughtering and processing .....	2015	245.9	247.1	248.7	249.5	—	216.4	218.1	219.5	221.0	—
Dairy products .....	202	142.2	141.7	143.7	143.2	—	96.9	96.4	99.0	98.9	—
Cheese, natural and processed .....	2022	39.7	39.5	39.2	40.0	—	32.3	31.9	32.0	33.0	—
Fluid milk .....	2026	61.9	62.0	63.0	62.2	—	36.2	36.4	37.6	37.2	—
Preserved fruits and vegetables .....	203	245.0	278.3	217.9	239.8	—	207.6	241.6	181.1	202.3	—
Canned specialties .....	2032	16.1	17.9	15.5	15.5	—	12.6	14.5	12.5	12.5	—
Canned fruits and vegetables .....	2033	78.6	106.2	62.6	76.6	—	66.2	94.0	51.7	65.1	—
Frozen fruits and vegetables .....	2037	52.9	57.6	45.3	50.9	—	46.2	51.1	38.7	44.3	—
Grain mill products .....	204	124.5	125.4	125.6	124.7	—	87.7	88.3	89.8	88.5	—
Flour and other grain mill products .....	2041	19.3	19.4	19.4	19.1	—	11.7	11.7	11.9	11.7	—
Prepared feeds, nec .....	2048	39.7	40.0	40.6	39.9	—	25.4	25.5	27.0	26.0	—
Bakery products .....	205	205.9	206.8	205.9	205.2	—	139.4	140.5	140.9	140.6	—
Bread, cake, and related products .....	2051	147.2	146.6	143.9	144.1	—	89.7	89.2	87.9	88.7	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	58.7	60.2	62.0	61.1	—	49.7	51.3	53.0	51.9	—
Sugar and confectionery products .....	206	91.5	94.5	89.8	88.6	—	70.8	72.9	69.9	68.5	—
Raw cane sugar .....	2061	2.6	4.0	4.0	3.4	—	1.8	2.8	3.2	2.6	—
Cane sugar refining .....	2062	3.8	3.8	3.8	4.0	—	2.9	2.8	2.7	2.5	—
Beet sugar .....	2063	6.8	6.9	7.7	7.2	—	5.8	5.9	6.6	6.1	—
Candy and other confectionery products .....	2064	52.0	53.5	48.2	48.4	—	40.6	41.7	37.9	38.3	—
Fats and oils .....	207	33.7	33.6	33.8	34.0	—	22.6	22.5	23.0	23.1	—
Beverages .....	208	185.2	185.2	185.1	186.2	—	88.9	89.0	90.1	91.4	—
Malt beverages .....	2082	33.2	33.0	32.6	32.6	—	20.8	20.6	20.2	20.3	—
Bottled and canned soft drinks .....	2086	99.2	99.4	99.2	99.7	—	40.6	40.9	40.8	41.7	—
Misc. food and kindred products .....	209	185.0	183.5	176.8	181.8	—	135.4	133.8	127.6	132.8	—
Tobacco products .....	21	36.8	40.4	35.7	35.5	36.0	27.3	31.1	25.6	25.1	26.1
Cigarettes .....	211	27.1	26.8	25.8	25.8	—	20.2	19.8	18.2	17.9	—
Textile mill products .....	22	593.7	594.7	564.1	556.5	556.9	501.3	502.5	476.3	470.4	470.3
Broadwoven fabric mills, cotton .....	221	69.9	70.2	64.6	63.7	—	62.5	62.7	57.5	56.8	—
Broadwoven fabric mills, synthetics .....	222	61.8	60.7	60.0	58.9	—	52.4	51.3	51.0	50.1	—
Broadwoven fabric mills, wool .....	223	12.8	12.4	10.2	9.8	—	10.3	10.3	8.7	8.2	—
Narrow fabric mills .....	224	20.4	21.3	21.3	20.8	—	16.6	17.3	17.4	16.9	—
Knitting mills .....	225	160.3	159.5	145.3	142.3	—	136.4	135.5	122.1	119.7	—
Women's hosiery, except socks .....	2251	17.2	17.1	16.2	16.0	—	14.9	14.8	13.6	13.9	—
Hosiery, nec .....	2252	37.0	37.1	35.7	35.1	—	32.2	32.3	31.0	30.5	—
Knit outerwear mills .....	2253	49.1	48.9	40.9	40.0	—	41.9	41.8	34.9	34.1	—
Knit underwear mills .....	2254	11.4	11.2	9.3	9.3	—	10.2	10.0	8.1	8.1	—
Weft knit fabric mills .....	2257	24.6	24.3	22.1	21.1	—	20.8	20.4	18.3	17.3	—
Textile finishing, except wool .....	226	63.2	63.2	61.0	59.9	—	51.8	51.9	50.8	50.0	—
Finishing plants, cotton .....	2261	28.6	28.7	28.5	28.4	—	23.3	23.5	23.9	23.7	—
Finishing plants, synthetics .....	2262	19.7	20.3	18.8	18.1	—	15.9	16.5	15.3	14.8	—
Carpets and rugs .....	227	62.9	64.4	64.5	65.7	—	51.6	53.2	53.3	54.7	—
Yarn and thread mills .....	228	87.6	87.4	82.7	82.2	—	77.3	77.1	73.3	72.9	—
Yarn spinning mills .....	2281	63.4	63.3	59.7	59.7	—	56.7	56.6	53.1	53.1	—
Throwing and winding mills .....	2282	17.3	17.4	16.5	16.1	—	14.6	14.7	14.4	14.1	—
Miscellaneous textile goods .....	229	54.8	55.6	54.5	53.2	—	42.4	43.2	42.2	41.1	—
Apparel and other textile products .....	23	751.5	759.3	692.6	672.6	674.2	601.8	608.8	551.3	533.1	535.8
Men's and boys' suits and coats .....	231	26.3	26.5	23.6	21.7	—	21.3	21.4	18.6	17.2	—
Men's and boys' furnishings .....	232	182.9	183.7	157.9	152.3	—	154.4	154.9	131.3	125.8	—
Men's and boys' shirts .....	2321	37.8	37.2	30.2	28.3	—	32.8	32.2	25.7	23.8	—
Men's and boys' trousers and slacks .....	2325	63.2	63.8	53.3	52.2	—	54.9	55.3	45.3	44.1	—
Men's and boys' work clothing .....	2326	28.5	28.0	25.9	25.1	—	24.5	24.2	22.3	21.3	—
Women's and misses' outerwear .....	233	227.4	226.1	205.7	199.8	—	178.7	177.1	159.5	153.0	—
Women's and misses' blouses and shirts .....	2331	20.4	20.7	18.1	17.5	—	15.6	15.8	13.2	12.6	—
Women's, juniors', and misses' dresses .....	2335	32.7	32.8	30.0	29.5	—	25.3	25.6	23.2	22.8	—
Women's and misses' suits and coats .....	2337	20.2	20.8	16.3	15.8	—	15.7	15.8	12.0	11.5	—
Women's and misses' outerwear, nec .....	2339	154.1	151.8	141.3	137.0	—	122.1	119.9	111.1	106.1	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Apparel and other textile products—Continued											
Women's and children's undergarments .....	234	30.4	30.8	28.2	27.0	—	23.4	24.1	22.7	21.8	—
Women's and children's underwear .....	2341	21.8	22.3	20.1	18.7	—	16.9	17.6	15.9	14.8	—
Brassieres, girdles, and allied garments .....	2342	8.6	8.5	8.1	8.3	—	6.5	6.5	6.8	7.0	—
Girls' and children's outerwear .....	236	25.7	25.6	21.0	20.6	—	20.8	20.8	17.0	16.7	—
Girls' and children's dresses and blouses .....	2361	9.4	9.1	7.8	7.9	—	8.1	7.8	6.8	6.9	—
Misc. apparel and accessories .....	238	32.2	32.1	30.7	28.8	—	25.6	25.4	24.4	22.7	—
Misc. fabricated textile products .....	239	210.3	217.2	209.7	207.1	—	164.8	171.4	165.4	163.9	—
Curtains and draperies .....	2391	18.4	19.0	17.8	17.9	—	14.2	14.7	14.0	14.2	—
House furnishings, nec .....	2392	53.0	54.3	52.9	52.8	—	44.5	45.7	44.6	44.8	—
Automotive and apparel trimmings .....	2396	57.0	61.9	60.0	59.5	—	43.3	47.9	46.0	45.8	—
Paper and allied products .....	26	675.6	675.0	663.5	660.8	660.8	514.4	515.0	503.3	500.5	501.8
Paper mills .....	262	156.2	155.5	150.5	150.8	—	122.5	122.2	117.7	117.7	—
Paperboard mills .....	263	48.4	48.2	47.6	47.2	—	37.2	37.1	36.6	36.2	—
Paperboard containers and boxes .....	265	217.9	218.8	215.1	213.8	—	168.8	170.0	166.8	165.6	—
Corrugated and solid fiber boxes .....	2653	132.4	132.3	131.1	130.8	—	98.8	98.9	98.1	97.8	—
Sanitary food containers .....	2656	17.7	17.6	17.2	17.1	—	15.9	15.9	15.6	15.4	—
Folding paperboard boxes .....	2657	46.3	46.9	46.1	45.2	—	37.5	38.1	37.2	36.5	—
Misc. converted paper products .....	267	241.1	240.6	238.4	237.5	—	176.3	176.3	172.7	171.8	—
Paper, coated and laminated, nec .....	2672	47.2	47.2	45.3	44.9	—	24.2	24.0	21.6	21.4	—
Bags: plastics, laminated, and coated .....	2673	39.1	38.9	38.0	37.8	—	30.6	30.6	29.6	29.3	—
Envelopes .....	2677	23.7	23.6	24.3	24.1	—	18.2	18.2	18.6	18.5	—
Printing and publishing .....	27	1,568.2	1,565.9	1,554.4	1,553.8	1,552.0	845.4	844.2	827.8	826.2	826.8
Newspapers .....	271	442.5	442.1	443.2	443.5	—	146.0	146.6	146.8	146.8	—
Periodicals .....	272	139.8	139.4	140.6	141.6	—	44.7	44.4	42.9	43.0	—
Books .....	273	128.2	127.8	122.0	121.5	—	63.6	63.2	56.0	55.7	—
Book publishing .....	2731	88.1	88.0	85.3	85.3	—	31.9	31.8	27.2	27.1	—
Book printing .....	2732	40.1	39.8	36.7	36.2	—	31.7	31.4	28.8	28.6	—
Miscellaneous publishing .....	274	91.4	91.3	91.7	91.4	—	43.5	43.2	44.5	44.6	—
Commercial printing .....	275	581.1	580.9	578.7	577.6	—	413.6	413.9	410.7	409.1	—
Commercial printing, lithographic .....	2752	377.5	377.7	375.8	374.9	—	268.4	269.3	267.2	266.2	—
Commercial printing, nec .....	2759	183.7	183.3	183.0	183.1	—	129.8	129.1	127.9	127.6	—
Manifold business forms .....	276	41.1	41.2	39.5	39.2	—	28.5	28.5	26.3	26.3	—
Blankbooks and bookbinding .....	278	64.6	64.1	61.4	61.7	—	49.5	48.6	46.7	47.3	—
Printing trade services .....	279	50.3	50.3	49.0	48.7	—	33.9	33.7	32.6	32.3	—
Chemicals and allied products .....	28	1,050.2	1,049.5	1,039.6	1,036.7	1,037.7	588.3	588.3	583.2	581.7	582.9
Industrial inorganic chemicals .....	281	116.9	116.3	111.5	111.3	—	63.0	63.3	58.6	59.5	—
Industrial inorganic chemicals, nec .....	2819	70.3	69.9	67.5	67.4	—	36.3	36.3	36.3	36.3	—
Plastics materials and synthetics .....	282	157.6	157.7	152.1	150.4	—	103.7	103.3	100.1	98.5	—
Plastics materials and resins .....	2821	79.7	80.1	78.5	78.4	—	48.9	48.4	47.3	47.0	—
Organic fibers, noncellulosic .....	2824	43.4	43.5	40.6	39.7	—	34.1	34.2	32.1	31.2	—
Drugs .....	283	281.8	282.6	290.8	291.1	—	127.7	127.4	133.0	132.9	—
Pharmaceutical preparations .....	2834	221.6	222.3	228.4	228.7	—	102.4	102.2	107.5	107.2	—
Soap, cleaners, and toilet goods .....	284	156.7	155.9	152.0	152.6	—	97.8	97.8	97.8	98.5	—
Soap and other detergents .....	2841	39.5	38.9	39.5	39.8	—	21.4	21.4	26.9	27.3	—
Polishing, sanitation, and finishing preparations .....	2842,3	40.5	40.8	40.2	39.9	—	23.2	23.4	22.5	22.4	—
Toilet preparations .....	2844	76.7	76.2	72.3	72.9	—	53.2	53.0	48.4	48.8	—
Paints and allied products .....	285	53.2	52.8	53.2	54.0	—	28.0	27.9	27.8	28.1	—
Industrial organic chemicals .....	286	138.5	138.2	135.7	134.2	—	80.4	80.2	78.0	77.1	—
Cyclic crudes and intermediates .....	2865	22.7	22.7	21.2	20.9	—	13.7	13.7	12.4	12.2	—
Industrial organic chemicals, nec .....	2869	113.5	113.2	112.1	110.9	—	65.0	64.8	63.9	63.2	—
Agricultural chemicals .....	287	51.8	51.7	52.3	51.5	—	31.1	31.0	31.5	31.1	—
Miscellaneous chemical products .....	289	93.7	94.3	92.0	91.6	—	56.6	57.4	56.4	56.0	—
Petroleum and coal products .....	29	143.4	143.0	139.8	141.1	140.5	95.3	95.3	92.1	93.7	93.8
Petroleum refining .....	291	96.6	96.0	91.9	92.7	—	62.9	62.7	58.5	59.5	—
Asphalt paving and roofing materials .....	295	32.3	32.5	32.9	33.4	—	24.5	24.7	25.4	26.0	—
Rubber and misc. plastics products .....	30	995.8	1,009.8	1,024.3	1,011.6	1,021.3	768.2	782.1	792.3	781.3	792.4
Tires and inner tubes .....	301	81.0	80.6	77.0	76.3	—	59.6	60.0	55.6	55.7	—
Rubber and plastics footwear .....	302	5.4	6.4	5.4	4.5	—	3.7	4.7	4.0	3.1	—
Hose, belting, gaskets, and packing .....	305	70.3	70.8	71.0	70.7	—	53.6	54.3	54.8	54.4	—
Rubber and plastics hose and belting .....	3052	29.0	29.3	30.0	29.5	—	22.5	22.9	23.8	23.2	—
Fabricated rubber products, nec .....	306	109.6	112.2	112.0	110.2	—	83.2	85.8	85.5	84.4	—
Miscellaneous plastics products, nec .....	308	729.5	739.8	758.9	749.9	—	568.1	577.3	592.4	583.7	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Leather and leather products .....	31	79.9	81.5	75.1	69.5	71.7	59.6	61.3	55.7	50.9	53.2
Leather tanning and finishing .....	311	11.8	11.8	10.8	9.6	—	9.6	9.6	8.8	7.7	—
Footwear, except rubber .....	314	34.5	35.4	32.0	29.3	—	27.4	28.3	25.4	22.9	—
Men's footwear, except athletic .....	3143	19.2	19.7	18.0	17.7	—	14.8	15.2	13.6	13.4	—
Women's footwear, except athletic .....	3144	8.5	8.8	7.5	7.0	—	6.6	7.0	6.1	5.8	—
Luggage .....	316	8.5	9.2	8.1	7.8	—	5.6	6.3	6.1	5.9	—
Handbags and personal leather goods .....	317	8.7	8.7	8.5	7.4	—	5.0	5.1	4.3	3.6	—
<b>Transportation and public utilities .....</b>		<b>6,592</b>	<b>6,610</b>	<b>6,816</b>	<b>6,782</b>	<b>6,795</b>	<b>5,464</b>	<b>5,485</b>	<b>5,653</b>	<b>5,619</b>	<b>5,632</b>
Transportation .....		4,253	4,278	4,445	4,409	4,419	—	—	—	—	—
Railroad transportation .....	40	232.9	232.9	234.1	231.7	231.9	—	—	—	—	—
Class I railroads plus Amtrak <sup>2</sup> .....	4011	207.0	207.0	206.8	204.7	—	—	—	—	—	—
Local and interurban passenger transit .....	41	407.8	409.6	482.0	421.0	416.5	367.3	369.3	440.8	381.0	—
Local and suburban transportation .....	411	236.2	236.2	244.9	244.5	—	213.6	214.0	221.9	221.8	—
Taxicabs .....	412	31.1	30.8	31.1	30.9	—	—	—	—	—	—
Intercity and rural bus transportation .....	413	25.9	25.7	27.6	27.6	—	23.3	22.8	24.5	24.5	—
School buses .....	415	79.3	82.1	142.8	83.7	—	—	—	—	—	—
Trucking and warehousing .....	42	1,771.2	1,786.6	1,827.3	1,840.9	1,850.6	1,554.0	1,569.9	1,604.1	1,617.8	—
Trucking and courier services, except air .....	421	1,601.2	1,613.8	1,647.6	1,662.7	—	1,412.5	1,425.4	1,454.3	1,469.3	—
Public warehousing and storage .....	422	164.6	167.5	174.0	172.7	—	136.7	139.8	144.6	143.5	—
Water transportation .....	44	191.1	192.0	187.9	192.9	194.1	—	—	—	—	—
Water transportation of freight, nec .....	444	14.6	15.0	14.8	15.0	—	—	—	—	—	—
Water transportation services .....	449	129.0	129.0	124.8	129.4	—	114.4	114.4	108.4	112.9	—
Transportation by air .....	45	1,181.1	1,186.2	1,230.4	1,238.4	1,239.3	—	—	—	—	—
Air transportation, scheduled .....	451	1,002.8	1,007.5	1,042.1	1,049.0	—	—	—	—	—	—
Air transportation, scheduled .....	4512	537.5	539.9	556.3	560.9	—	—	—	—	—	—
Airports, flying fields, and services .....	458	130	131	137	139	—	—	—	—	—	—
Pipelines, except natural gas .....	46	14.3	14.1	13.3	13.4	13.3	11.6	11.5	11.2	11.1	—
Transportation services .....	47	454.5	456.7	470.0	471.1	473.4	371.1	373.8	385.5	385.9	—
Passenger transportation arrangement .....	472	220.2	220.5	223.8	224.1	—	185.2	185.8	188.0	188.0	—
Travel agencies .....	4724	173.2	173.3	175.2	175.2	—	146.0	146.2	147.0	147.2	—
Freight transportation arrangement .....	473	181.8	183.1	194.3	195.8	—	142.3	143.9	154.9	156.0	—
Communications and public utilities .....		2,339	2,332	2,371	2,373	2,376	—	—	—	—	—
Communications .....	48	1,477.0	1,473.0	1,519.2	1,523.4	1,530.1	1,074.8	1,076.1	1,095.0	1,099.2	—
Telephone communications .....	481	1,011.7	1,005.1	1,045.8	1,049.7	—	708.3	707.3	724.7	727.4	—
Telephone communications, except radio .....	4813	853.3	846.8	886.0	889.3	—	590.5	588.2	600.8	603.9	—
Radio and television broadcasting .....	483	246.5	247.6	247.0	246.5	—	202.4	202.8	201.4	201.1	—
Radio broadcasting stations .....	4832	115.1	115.5	116.0	115.8	—	—	—	—	—	—
Television broadcasting stations .....	4833	131.4	132.1	131.0	130.7	—	—	—	—	—	—
Cable and other pay television services .....	484	183.1	184.2	188.9	189.3	—	149.9	150.6	153.7	154.1	—
Electric, gas, and sanitary services .....	49	862.4	858.8	851.6	849.2	846.2	692.4	689.9	685.3	682.9	—
Electric services .....	491	368.4	366.4	365.5	363.9	—	298.5	297.1	295.2	293.0	—
Gas production and distribution .....	492	138.5	137.2	133.0	132.5	—	107.7	106.6	105.0	104.6	—
Combination utility services .....	493	158.1	157.6	153.9	152.2	—	124.1	124.1	121.5	120.5	—
Sanitary services .....	495	163.5	163.9	164.6	165.8	—	135.1	135.2	136.3	137.3	—
<b>Wholesale trade .....</b>		<b>6,885</b>	<b>6,877</b>	<b>7,036</b>	<b>7,061</b>	<b>7,062</b>	<b>5,529</b>	<b>5,521</b>	<b>5,651</b>	<b>5,668</b>	<b>5,654</b>
Durable goods .....	50	4,074	4,070	4,165	4,183	4,184	3,217	3,214	3,297	3,309	—
Motor vehicles, parts, and supplies .....	501	523.1	520.3	536.8	539.3	—	416.3	413.8	421.2	425.2	—
Automobiles and other motor vehicles .....	5012	151.7	150.4	160.1	160.5	—	—	—	—	—	—
Motor vehicle supplies and new parts .....	5013	292.5	290.9	296.1	298.0	—	—	—	—	—	—
Furniture and home furnishings .....	502	165.2	166.7	169.3	170.6	—	131.4	132.7	133.8	134.9	—
Furniture .....	5021	80.1	80.8	82.0	82.8	—	—	—	—	—	—
Home furnishings .....	5023	85.1	85.9	87.3	87.8	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		July 1998	Aug. 1998	June 1999	July 1999 <sup>P</sup>	Aug. 1999 <sup>P</sup>	July 1998	Aug. 1998	June 1999	July 1999 <sup>P</sup>	Aug. 1999 <sup>P</sup>
<b>Wholesale trade—Continued</b>											
<b>Durable goods—Continued</b>											
Lumber and other construction materials .....	503	268.2	268.3	279.7	282.8	—	223.3	223.2	232.7	235.7	—
Lumber, plywood, and millwork .....	5031	134.4	134.6	140.6	141.8	—	—	—	—	—	—
Construction materials, nec .....	5039	40.6	40.2	42.8	43.3	—	—	—	—	—	—
Professional and commercial equipment .....	504	923.1	925.8	983.9	990.0	—	718.4	723.1	787.4	791.0	—
Office equipment .....	5044	201.7	201.2	211.6	211.5	—	—	—	—	—	—
Computers, peripherals and software .....	5045	387.9	390.7	418.7	421.1	—	—	—	—	—	—
Medical and hospital equipment .....	5047	190.0	189.8	203.9	205.7	—	153.1	153.1	165.5	166.6	—
Metals and minerals, except petroleum .....	505	152.7	153.4	154.6	155.0	—	123.2	123.9	123.9	124.0	—
Electrical goods .....	506	550.1	548.9	551.7	555.2	—	401.2	399.8	397.5	398.4	—
Electrical apparatus and equipment .....	5063	231.6	230.7	236.2	238.1	—	—	—	—	—	—
Electrical appliances, television and radio sets .....	5064	47.7	48.2	49.6	50.8	—	—	—	—	—	—
Electronic parts and equipment .....	5065	270.8	270.0	265.9	266.3	—	—	—	—	—	—
Hardware, plumbing, and heating equipment .....	507	307.3	308.7	309.5	310.4	—	251.7	252.1	254.1	254.4	—
Hardware .....	5072	112.2	112.8	111.1	111.2	—	—	—	—	—	—
Plumbing and hydronic heating supplies .....	5074	119.5	119.9	122.0	122.7	—	—	—	—	—	—
Machinery, equipment, and supplies .....	508	845.8	842.5	844.3	846.8	—	676.2	673.6	673.8	675.7	—
Construction and mining machinery .....	5082	92.4	92.1	95.0	95.3	—	—	—	—	—	—
Farm and garden machinery .....	5083	125.3	124.5	125.8	125.7	—	—	—	—	—	—
Industrial machinery and equipment .....	5084	337.7	336.9	333.3	333.5	—	—	—	—	—	—
Industrial supplies .....	5085	159.2	159.2	157.3	158.5	—	—	—	—	—	—
Misc. wholesale trade durable goods .....	509	338.4	335.2	335.6	333.2	—	274.8	271.3	272.9	269.2	—
Scrap and waste materials .....	5093	124.0	123.9	119.2	119.6	—	—	—	—	—	—
<b>Nondurable goods .....</b>	<b>51</b>	<b>2,811</b>	<b>2,807</b>	<b>2,871</b>	<b>2,878</b>	<b>2,878</b>	<b>2,312</b>	<b>2,307</b>	<b>2,354</b>	<b>2,359</b>	<b>—</b>
Paper and paper products .....	511	279.4	280.0	291.9	291.9	—	234.6	234.4	242.4	242.4	—
Stationery and office supplies .....	5112	164.2	164.7	170.7	170.3	—	—	—	—	—	—
Drugs, proprietaries, and sundries .....	512	240.2	240.3	257.4	257.5	—	201.6	201.3	212.9	212.4	—
Apparel, piece goods, and notions .....	513	226.2	228.8	226.9	227.5	—	185.1	187.8	186.0	186.8	—
Groceries and related products .....	514	926.8	923.7	936.7	943.4	—	779.2	776.8	786.8	792.7	—
Groceries, general line .....	5141	288.2	288.0	286.8	287.3	—	—	—	—	—	—
Meats and meat products .....	5147	56.0	55.9	57.1	57.3	—	—	—	—	—	—
Fresh fruits and vegetables .....	5148	110.3	105.8	104.8	106.4	—	—	—	—	—	—
Farm-product raw materials .....	515	106.6	109.7	108.0	107.8	—	86.5	89.1	87.3	87.2	—
Chemicals and allied products .....	516	156.7	156.4	162.5	162.5	—	114.5	114.2	117.6	117.7	—
Petroleum and petroleum products .....	517	156.5	156.3	153.7	153.6	—	129.4	129.0	126.5	126.4	—
Petroleum bulk stations and terminals .....	5171	64.4	64.3	63.0	63.0	—	—	—	—	—	—
Petroleum products, nec .....	5172	92.1	92.0	90.7	90.6	—	—	—	—	—	—
Beer, wine, and distilled beverages .....	518	158.0	157.4	164.5	165.7	—	128.8	128.3	133.1	134.2	—
Beer and ale .....	5181	101.1	100.6	104.3	105.8	—	—	—	—	—	—
Wine and distilled beverages .....	5182	56.9	56.8	60.2	59.9	—	—	—	—	—	—
Misc. wholesale trade nondurable goods .....	519	560.6	554.7	569.7	568.0	—	451.9	446.4	461.6	459.3	—
Farm supplies .....	5191	169.5	165.3	174.2	171.1	—	—	—	—	—	—
<b>Retail trade .....</b>		<b>22,457</b>	<b>22,507</b>	<b>22,992</b>	<b>23,035</b>	<b>23,045</b>	<b>19,750</b>	<b>19,782</b>	<b>20,244</b>	<b>20,287</b>	<b>20,290</b>
Building materials and garden supplies .....	52	983.2	970.5	1,032.7	1,023.6	1,010.9	825.0	809.9	865.9	856.4	—
Lumber and other building materials .....	521	596.1	589.7	623.5	623.7	—	507.5	499.7	530.9	532.1	—
Paint, glass, and wallpaper stores .....	523	65.2	66.6	67.5	68.6	—	51.0	51.6	50.1	50.5	—
Hardware stores .....	525	169.8	169.2	172.5	171.9	—	140.5	139.6	143.5	142.6	—
Retail nurseries and garden stores .....	526	106.3	99.2	121.1	111.7	—	89.6	82.8	104.6	94.7	—
General merchandise stores .....	53	2,671.3	2,684.7	2,718.6	2,722.7	2,737.0	2,480.4	2,494.3	2,537.0	2,546.6	—
Department stores .....	531	2,375.3	2,386.3	2,424.8	2,426.1	2,439.1	2,228.0	2,239.2	2,283.7	2,289.7	—
Variety stores .....	533	118.1	118.4	115.5	116.8	—	100.2	100.6	98.8	100.5	—
Miscellaneous general merchandise stores .....	539	177.9	180.0	178.3	179.8	—	152.2	154.5	154.5	156.4	—
Food stores .....	54	3,508.1	3,497.8	3,497.4	3,500.3	3,501.2	3,182.7	3,171.0	3,165.7	3,171.5	—
Grocery stores .....	541	3,089.4	3,078.3	3,066.2	3,071.6	—	2,824.2	2,811.9	2,797.0	2,803.7	—
Meat and fish markets .....	542	46.8	47.2	48.3	48.7	—	—	—	—	—	—
Dairy products stores .....	545	14.5	14.5	14.5	14.8	—	—	—	—	—	—
Retail bakeries .....	546	205.6	205.6	209.1	205.7	—	178.0	178.3	181.3	179.2	—
Automotive dealers and service stations .....	55	2,374.1	2,372.2	2,425.5	2,439.9	2,444.2	1,972.6	1,973.2	2,020.2	2,034.1	—
New and used car dealers .....	551	1,053.6	1,052.1	1,084.3	1,090.0	1,093.8	884.9	883.7	909.8	915.3	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Retail trade—Continued</b>											
Automotive dealers and service stations—Continued											
Auto and home supply stores .....	553	403.7	404.6	407.1	410.6	—	307.1	306.4	316.0	318.8	—
Gasoline service stations .....	554	703.6	702.6	708.6	714.3	—	609.2	611.1	612.1	618.7	—
Automotive dealers, nec .....	559	9.8	9.8	10.3	10.4	—	8.0	8.1	8.6	8.7	—
Apparel and accessory stores .....											
Men's and boys' clothing stores .....	561	1,141.4	1,152.0	1,167.0	1,180.0	1,184.7	956.5	965.1	979.1	990.5	—
Women's clothing stores .....	562	81.4	81.8	79.4	77.8	—	66.2	66.5	64.2	62.5	—
Family clothing stores .....	565	270.0	266.1	274.3	273.1	—	224.2	219.9	228.1	226.9	—
Shoe stores .....	566	381.2	384.4	395.3	411.3	—	341.0	344.7	350.1	363.7	—
Furniture and home furnishings stores .....	57	216.7	225.1	220.7	218.8	—	171.3	178.2	176.2	175.3	—
Furniture and home furnishings stores .....											
Furniture stores .....	5712	1,017.5	1,020.9	1,078.6	1,079.4	1,086.2	836.4	839.5	889.6	891.7	—
Household appliance stores .....	572	522.7	525.0	546.3	546.4	—	425.7	426.8	445.6	448.6	—
Radio, television, and computer stores .....	573	306.2	306.5	321.0	319.8	—	—	—	—	—	—
Radio, television, and electronic stores .....	5731	67.4	66.6	67.9	68.6	—	54.3	53.7	55.0	55.6	—
Record and prerecorded tape stores .....	5735	427.4	429.3	464.4	464.4	—	356.4	359.0	389.0	387.5	—
Eating and drinking places .....	58	183.7	184.7	198.0	198.9	—	153.1	154.2	165.2	164.9	—
Miscellaneous retail establishments .....	59	78.9	79.6	91.3	90.8	—	66.9	67.6	76.7	76.4	—
Drug stores and proprietary stores .....	591	7,938.4	7,969.6	8,148.0	8,161.5	8,142.1	7,146.8	7,167.4	7,335.5	7,343.9	—
Liquor stores .....	592	2,823.0	2,839.2	2,924.5	2,927.3	2,938.6	2,349.1	2,361.5	2,450.9	2,452.3	—
Used merchandise stores .....	593	641.6	644.0	674.0	673.7	—	537.9	537.7	576.4	575.8	—
Miscellaneous shopping goods stores .....	594	111.4	111.5	111.2	112.2	—	—	—	—	—	—
Sporting goods and bicycle shops .....	5941	120.4	119.3	126.3	127.4	—	100.7	99.4	105.5	106.4	—
Book stores .....	5942	982.7	994.4	1,017.3	1,022.3	—	817.5	828.6	851.5	856.6	—
Stationery stores .....	5943	187.3	188.4	193.5	195.8	—	—	—	—	—	—
Jewelry stores .....	5944	123.2	130.7	127.6	127.5	—	—	—	—	—	—
Gift, novelty, and souvenir shops .....	5947	94.3	95.8	95.4	96.3	—	—	—	—	—	—
Sewing, needlework, and piece goods .....	5949	140.9	140.9	147.1	146.4	—	—	—	—	—	—
Nonstore retailers .....	596	240.2	240.6	242.8	246.1	—	—	—	—	—	—
Catalog and mail-order houses .....	5961	46.7	46.7	46.1	45.4	—	—	—	—	—	—
Merchandising machine operators .....	5962	331.4	336.0	329.8	329.7	—	279.0	283.4	278.6	278.7	—
Fuel dealers .....	598	212.2	217.7	211.8	212.4	—	—	—	—	—	—
Retail stores, nec .....	599	66.4	66.1	67.2	66.8	—	—	—	—	—	—
Florists, tobacco stores, and newsstands .....	5992,3,4	92.5	92.9	94.9	94.4	—	76.3	76.4	77.2	76.6	—
Optical goods stores .....	5995	543.0	541.1	571.0	567.6	—	447.5	445.5	471.5	467.5	—
Miscellaneous retail stores, nec .....	5999	148.5	147.1	159.0	154.9	—	—	—	—	—	—
Finance, insurance, and real estate <sup>3</sup> .....		70.8	71.0	72.7	72.9	—	57.0	56.8	56.6	57.1	—
Finance .....		323.7	323.0	339.3	339.8	—	265.0	264.5	279.4	279.4	—
Depository institutions .....	60	7,526	7,526	7,707	7,745	7,738	5,558	5,550	5,661	5,695	5,679
Commercial banks .....	602	3,633	3,635	3,728	3,743	3,740	—	—	—	—	—
State commercial banks .....	6022	2,059.8	2,054.9	2,057.4	2,059.4	2,054.9	1,487.3	1,481.7	1,482.7	1,487.0	—
National and commercial banks, nec .....	6021,9	1,480.3	1,476.2	1,472.6	1,473.4	1,469.5	1,054.1	1,050.1	1,045.7	1,048.0	—
Savings institutions .....	603	584.7	584.4	600.1	601.6	—	421.2	420.2	433.3	435.0	—
Federal savings institutions .....	6035	895.6	891.8	872.5	871.8	—	632.9	629.9	612.4	613.0	—
Savings institutions, except federal .....	6036	260.7	259.2	257.9	258.2	257.0	—	—	—	—	—
Credit unions .....	606	153.2	151.9	150.0	150.3	—	—	—	—	—	—
Nondepository institutions .....	61	107.5	107.3	107.9	107.9	—	—	—	—	—	—
Personal credit institutions .....	614	180.2	180.5	186.6	186.7	—	143.7	143.8	148.5	148.7	—
Business credit institutions .....	615	665.5	670.9	723.4	724.3	724.0	459.8	461.8	490.4	491.3	—
Mortgage bankers and brokers .....	616	185.7	185.0	192.9	195.3	—	108.3	106.9	104.0	106.8	—
Security and commodity brokers .....	62	123.9	123.8	131.6	132.5	—	—	—	—	—	—
Security brokers and dealers .....	621	333.0	339.2	375.2	372.5	370.7	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges .....	622,3	656.6	658.1	678.9	689.5	691.5	—	—	—	—	—
Security and commodity services .....	628	491.0	491.7	505.8	513.7	—	—	—	—	—	—
Holding and other investment offices .....	67	27.0	26.8	25.7	25.9	—	—	—	—	—	—
Holding offices .....	671	138.6	139.6	147.4	149.9	—	94.0	94.4	99.8	101.8	—
		251.0	250.7	267.8	269.4	269.9	—	—	—	—	—
		107.0	107.7	116.0	116.3	—	—	—	—	—	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Finance, insurance, and real estate—Continued</b>											
Insurance .....	63,64	2,362	2,364	2,411	2,417	2,415	—	—	—	—	—
Insurance carriers .....	63	1,612.7	1,613.6	1,643.5	1,644.9	1,641.1	1,224.4	1,227.0	1,259.9	1,262.0	—
Life insurance .....	631	535.8	536.5	546.3	546.8	—	359.4	360.7	369.4	369.6	—
Medical service and health insurance .....	632	358.7	358.5	369.1	369.7	—	289.2	288.9	295.7	297.1	—
Hospital and medical service plans .....	6324	291.7	291.3	301.1	301.1	—	239.2	238.9	244.4	244.9	—
Fire, marine, and casualty insurance .....	633	554.7	553.3	555.5	556.8	—	443.6	443.1	451.7	453.2	—
Title insurance .....	636	87.4	88.5	94.3	92.8	—	—	—	—	—	—
Insurance agents, brokers, and service .....	64	749.2	749.9	767.0	772.2	773.5	—	—	—	—	—
Real estate .....	65	1,531	1,527	1,568	1,585	1,583	—	—	—	—	—
Real estate operators and lessors .....	651	598.9	596.3	595.5	598.4	—	—	—	—	—	—
Real estate agents and managers .....	653	762.9	761.9	790.5	807.4	—	—	—	—	—	—
Subdividers and developers .....	655	130.6	129.5	140.5	138.3	—	—	—	—	—	—
<b>Services .....</b>		<b>38,006</b>	<b>37,958</b>	<b>39,334</b>	<b>39,483</b>	<b>39,450</b>	<b>33,239</b>	<b>33,170</b>	<b>34,254</b>	<b>34,371</b>	<b>34,311</b>
Agricultural services .....	07	780.2	775.1	841.3	838.6	825.0	668.1	662.2	719.3	715.6	—
Veterinary services .....	074	198.1	197.8	206.6	206.0	—	167.7	167.4	175.0	174.8	—
Landscape and horticultural services .....	078	526.4	521.2	580.0	578.5	—	453.9	448.3	499.0	495.9	—
Hotels and other lodging places .....	70	1,926.0	1,920.2	1,898.3	1,953.8	1,948.7	—	—	—	—	—
Hotels and motels .....	701	1,833.4	1,829.2	1,813.1	1,850.0	—	1,618.1	1,613.8	1,596.3	1,631.8	—
Personal services .....	72	1,154.1	1,154.7	1,172.6	1,163.5	1,162.8	—	—	—	—	—
Laundry, cleaning, and garment services .....	721	437.2	434.9	435.7	435.6	—	385.8	383.3	383.7	383.1	—
Photographic studios, portrait .....	722	58.3	57.3	50.3	47.3	—	—	—	—	—	—
Beauty shops .....	723	408.7	412.7	418.0	418.3	—	361.2	364.1	367.8	368.5	—
Funeral service and crematories .....	726	100.9	100.0	101.2	100.4	—	—	—	—	—	—
Miscellaneous personal services .....	729	134.3	135.3	153.7	148.2	—	111.4	112.3	127.6	122.7	—
Business services .....	73	8,641.3	8,751.1	9,137.5	9,182.1	9,292.9	7,668.9	7,768.0	8,066.8	8,101.2	—
Advertising .....	731	271.6	272.0	280.7	283.2	—	195.0	195.3	199.2	200.4	—
Advertising agencies .....	7311	179.3	178.7	184.6	186.3	—	—	—	—	—	—
Credit reporting and collection .....	732	144.8	144.0	149.8	150.7	—	—	—	—	—	—
Mailing, reproduction, and stenographic services .....	733	314.4	315.1	326.5	324.1	—	—	—	—	—	—
Photocopying and duplicating services .....	7334	81.7	82.0	84.5	84.2	—	69.5	69.8	68.9	68.6	—
Services to buildings .....	734	959.6	960.5	994.6	997.7	1,004.3	860.0	860.2	883.7	887.1	—
Disinfecting and pest control services .....	7342	90.2	88.9	93.8	94.4	—	74.0	72.6	75.6	76.2	—
Building maintenance services, nec .....	7349	869.4	871.6	900.8	903.3	—	786.0	787.6	808.1	810.9	—
Miscellaneous equipment rental and leasing .....	735	266.0	265.1	276.0	277.0	—	213.2	212.2	222.4	224.7	—
Medical equipment rental .....	7352	39.5	39.5	39.4	39.5	—	28.8	28.9	31.5	31.8	—
Heavy construction equipment rental .....	7353	50.3	50.1	52.2	52.6	—	42.8	42.5	44.3	44.8	—
Equipment rental and leasing, nec .....	7359	176.2	175.5	184.4	184.9	—	141.6	140.8	146.6	148.1	—
Personnel supply services .....	736	3,236.6	3,333.9	3,403.2	3,418.7	3,507.2	—	—	—	—	—
Employment agencies .....	7361	355.5	362.9	385.9	388.6	—	—	—	—	—	—
Help supply services .....	7363	2,881.1	2,971.0	3,017.3	3,030.1	3,117.8	2,794.6	2,881.2	2,910.7	2,921.6	—
Computer and data processing services .....	737	1,615.0	1,626.9	1,781.5	1,796.0	1,808.6	1,294.7	1,303.1	1,428.0	1,437.3	—
Computer programming services .....	7371	372.4	375.1	408.0	410.7	—	317.7	321.2	347.2	349.1	—
Prepackaged software .....	7372	258.6	258.8	292.1	297.4	—	—	—	—	—	—
Computer integrated systems design .....	7373	179.4	181.1	199.6	199.0	—	126.9	128.1	142.7	142.5	—
Data processing and preparation .....	7374	254.0	254.3	277.6	279.3	—	—	—	—	—	—
Information retrieval services .....	7375	99.2	100.6	113.8	116.4	—	72.7	73.9	86.4	88.5	—
Computer maintenance and repair .....	7378	60.4	60.6	63.2	62.8	—	43.5	43.5	46.6	46.9	—
Miscellaneous business services .....	738	1,833.3	1,833.6	1,925.2	1,934.7	—	1,596.4	1,596.0	1,675.3	1,680.4	—
Detective and armored car services .....	7381	588.8	594.5	611.4	616.0	—	542.7	547.6	564.2	567.9	—
Security systems services .....	7382	62.3	61.1	62.1	62.0	—	50.6	49.7	51.3	51.5	—
Photofinishing laboratories .....	7384	76.9	77.0	77.8	78.2	—	—	—	—	—	—
Auto repair, services, and parking .....	75	1,153.9	1,157.0	1,192.3	1,193.4	1,193.2	936.7	937.7	970.4	973.1	—
Automotive rentals, without drivers .....	751	203.1	204.0	211.2	212.3	—	166.6	167.0	172.6	173.4	—
Passenger car rental .....	7514	134.5	134.8	139.8	141.5	—	111.4	111.4	115.3	116.4	—
Automobile parking .....	752	74.1	73.3	75.2	75.7	—	64.5	64.1	65.9	66.8	—
Automotive repair shops .....	753	640.6	643.7	666.6	670.2	—	504.0	505.4	526.6	530.9	—
Automotive and tire repair shops .....	7532,4	220.7	221.9	233.6	235.8	—	179.6	180.6	189.3	191.4	—
General automotive repair shops .....	7538	274.2	274.6	283.3	284.7	—	209.8	208.8	218.8	220.9	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Auto repair, services, and parking—Continued											
Automotive services, except repair .....	754	236.1	236.0	239.3	235.2	—	201.6	201.2	205.3	202.0	—
Carwashes .....	7542	126.6	125.5	136.3	134.1	—	112.2	111.1	121.1	118.7	—
Miscellaneous repair services .....	76	386.1	385.7	398.6	399.5	401.1	316.0	316.3	326.6	327.2	—
Electrical repair shops .....	762	115.5	115.4	119.5	120.6	—	—	—	—	—	—
Motion pictures .....	78	582.9	586.6	613.2	607.2	611.5	485.4	488.0	518.9	513.6	—
Motion picture production and services .....	781	249.3	254.3	263.0	258.5	—	207.1	210.8	224.8	220.6	—
Motion picture theaters .....	783	150.3	147.2	159.2	157.3	—	—	—	—	—	—
Video tape rental .....	784	165.2	167.0	170.3	170.3	—	130.9	132.2	136.3	136.5	—
Amusement and recreation services .....	79	1,893.2	1,862.2	1,949.3	2,006.4	1,981.1	1,692.0	1,662.9	1,724.4	1,782.9	—
Bowling centers .....	793	69.4	71.2	71.5	69.3	—	60.7	62.3	62.6	60.4	—
Misc. amusement and recreation services .....	799	1,444.4	1,422.5	1,500.3	1,557.1	—	1,293.7	1,273.3	1,337.2	1,393.7	—
Physical fitness facilities .....	7991	177.6	177.7	194.4	191.7	—	158.0	158.2	173.3	171.0	—
Membership sports and recreation clubs .....	7997	437.0	424.2	454.8	472.5	—	394.2	381.4	407.4	423.4	—
Health services .....	80	9,879.0	9,874.8	9,989.3	10,008.0	10,010.8	8,760.6	8,752.6	8,847.3	8,863.4	—
Offices and clinics of medical doctors .....	801	1,810.5	1,817.6	1,868.7	1,877.2	1,882.1	1,496.2	1,499.7	1,536.1	1,543.4	—
Offices and clinics of dentists .....	802	648.8	650.6	669.5	668.4	—	564.8	566.5	585.9	584.4	—
Offices and clinics of other health practitioners .....	804	449.0	448.3	452.6	452.6	—	374.1	373.6	377.2	377.2	—
Offices and clinics of chiropractors and optometrists .....	8041,2	167.0	166.2	167.3	168.7	—	—	—	—	—	—
Nursing and personal care facilities .....	805	1,767.6	1,765.4	1,756.9	1,759.1	1,760.0	1,590.7	1,588.2	1,578.5	1,581.1	—
Skilled nursing care facilities .....	8051	1,352.4	1,350.8	1,344.6	1,346.2	—	—	—	—	—	—
Intermediate care facilities .....	8052	201.6	201.3	202.3	202.4	—	181.5	181.0	180.7	180.7	—
Nursing and personal care, nec .....	8059	213.6	213.3	210.0	210.5	—	—	—	—	—	—
Hospitals .....	806	3,947.3	3,944.4	3,976.6	3,984.5	3,981.2	3,618.9	3,615.3	3,645.4	3,652.4	—
General medical and surgical hospitals .....	8062	3,643.8	3,641.5	3,666.9	3,673.1	—	—	—	—	—	—
Psychiatric hospitals .....	8063	79.9	79.5	82.3	81.8	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric .....	8069	223.6	223.4	227.4	229.6	—	—	—	—	—	—
Medical and dental laboratories .....	807	200.8	199.5	202.6	203.7	—	—	—	—	—	—
Home health care services .....	808	664.2	658.8	655.3	653.9	655.1	610.7	606.2	603.6	602.1	—
Legal services .....	81	991.0	983.3	1,016.4	1,018.0	1,010.4	795.2	788.4	815.3	814.9	—
Educational services .....	82	1,901.2	1,868.1	2,069.6	1,986.3	1,949.8	—	—	—	—	—
Elementary and secondary schools .....	821	605.7	596.3	675.9	634.8	—	—	—	—	—	—
Colleges and universities .....	822	1,022.5	998.4	1,090.9	1,042.0	—	—	—	—	—	—
Vocational schools .....	824	82.0	83.9	90.5	89.5	—	—	—	—	—	—
Social services .....	83	2,666.2	2,620.9	2,776.5	2,782.4	2,758.4	2,316.8	2,269.6	2,401.9	2,402.1	—
Individual and family services .....	832	723.8	722.2	752.3	763.3	—	628.3	626.8	653.5	662.7	—
Job training and related services .....	833	428.0	377.4	404.7	433.6	—	381.4	330.0	352.9	376.1	—
Child day care services .....	835	556.1	560.7	619.3	578.7	576.1	488.1	491.6	544.2	506.0	—
Residential care .....	836	752.5	753.3	782.9	786.8	788.3	652.8	653.4	678.1	681.5	—
Social services, nec .....	839	205.8	207.3	217.3	220.0	—	166.2	167.8	173.2	175.8	—
Museums and botanical and zoological gardens .....	84	100.6	99.4	101.2	102.6	101.2	—	—	—	—	—
Membership organizations .....	86	2,433.7	2,405.0	2,447.7	2,476.8	2,447.0	—	—	—	—	—
Business associations .....	861	111.3	110.2	112.1	112.3	—	—	—	—	—	—
Professional organizations .....	862	61.4	61.8	66.4	66.7	—	44.5	44.7	48.3	48.7	—
Labor organizations .....	863	138.6	140.4	150.5	140.4	—	—	—	—	—	—
Civic and social associations .....	864	522.3	491.4	508.1	545.1	—	—	—	—	—	—
Engineering and management services .....	87	3,226.2	3,224.3	3,435.1	3,468.8	3,462.5	2,475.2	2,469.3	2,581.4	2,604.4	—
Engineering and architectural services .....	871	923.7	926.3	955.4	963.7	963.4	762.8	763.8	784.0	791.3	—
Engineering services .....	8711	699.4	701.0	719.1	726.0	—	583.6	584.4	596.3	602.4	—
Architectural services .....	8712	162.2	163.2	171.6	172.9	—	127.8	128.4	135.1	136.2	—
Surveying services .....	8713	62.1	62.1	64.7	64.8	—	51.4	51.0	52.6	52.7	—
Accounting, auditing, and bookkeeping .....	872	623.8	623.4	660.3	663.9	—	441.9	441.8	454.4	460.3	—

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>				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Engineering and management services—Continued											
Research and testing services .....	873	629.5	623.8	656.8	664.7	—	484.8	478.7	485.9	487.8	—
Commercial physical research .....	8731	235.4	234.6	244.8	247.7	—	162.8	162.0	151.9	149.8	—
Commercial nonphysical research .....	8732	145.7	141.5	153.6	153.8	—	122.6	118.6	127.3	127.1	—
Noncommercial research organizations .....	8733	146.8	145.8	154.9	157.8	—	115.9	114.6	122.2	124.7	—
Management and public relations .....	874	1,049.2	1,050.8	1,162.6	1,176.5	1,180.8	785.7	785.0	857.1	865.0	—
Management services .....	8741	339.8	341.5	381.8	382.9	—	254.1	255.2	282.3	282.6	—
Management consulting services .....	8742	386.2	387.8	430.8	438.8	—	287.7	287.7	314.8	318.7	—
Public relations services .....	8743	42.1	42.2	47.6	48.2	—	28.3	28.4	31.3	31.3	—
Services, nec .....	89	52.7	52.5	57.4	58.3	56.5	41.5	41.3	45.2	46.1	—
<b>Government</b> .....		18,752	18,676	20,178	19,093	18,997	—	—	—	—	—
Federal Government <sup>4</sup> .....		2,689	2,695	2,682	2,669	2,665	—	—	—	—	—
Executive, by agency <sup>4</sup> .....		2,625.9	2,633.6	2,619.2	—	—	—	—	—	—	—
Department of Defense .....		672.0	666.5	648.2	—	—	—	—	—	—	—
Postal Service <sup>5</sup> .....		854.7	861.0	867.0	—	—	—	—	—	—	—
Other executive agencies .....		1,099.2	1,106.1	1,104.0	—	—	—	—	—	—	—
Legislative .....		31.6	30.2	31.3	—	—	—	—	—	—	—
Judicial .....		31.1	31.3	31.6	—	—	—	—	—	—	—
Federal Government, except Postal Service .....		1,833.9	1,834.1	1,815.1	1,800.9	1,793.5	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities .....		49.6	49.9	47.8	47.7	—	—	—	—	—	—
Ship building and repairing .....	3731	21.8	22.1	21.2	21.2	—	—	—	—	—	—
Transportation and public utilities, except Postal Service .....		13.7	13.6	13.6	13.6	—	—	—	—	—	—
Services .....		357.3	356.1	352.7	353.5	—	—	—	—	—	—
Hospitals .....	806	225.0	223.7	219.7	219.1	—	—	—	—	—	—
State government .....		4,391	4,379	4,533	4,458	4,443	—	—	—	—	—
Construction .....		90.4	89.9	90.6	90.8	—	—	—	—	—	—
Transportation and public utilities .....		53.2	53.1	53.6	54.3	—	—	—	—	—	—
Services .....		2,364.2	2,367.3	2,485.1	2,397.9	—	—	—	—	—	—
Hospitals .....	806	348.1	347.0	348.8	349.2	—	—	—	—	—	—
Education .....	82	1,638.0	1,641.9	1,758.8	1,666.1	1,667.6	—	—	—	—	—
Social services .....		210.8	210.7	213.5	215.5	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		167.3	167.7	164.0	167.1	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		1,882.9	1,868.7	1,904.1	1,915.4	—	—	—	—	—	—
State government, except education .....		2,752.7	2,737.1	2,774.6	2,792.3	2,775.4	—	—	—	—	—
Local government .....		11,672	11,602	12,963	11,966	11,889	—	—	—	—	—
Transportation and public utilities .....		457.3	455.8	460.8	463.7	—	—	—	—	—	—
Services .....		7,173.7	7,154.8	8,501.5	7,396.0	—	—	—	—	—	—
Hospitals .....	806	637.4	637.5	648.4	650.2	—	—	—	—	—	—
Education .....	82	5,937.5	5,940.0	7,266.1	6,111.3	6,111.6	—	—	—	—	—
Social services .....		146.4	142.2	142.5	155.8	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		452.4	435.1	444.5	478.7	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		4,041.4	3,991.5	4,000.4	4,105.9	—	—	—	—	—	—
Local government, except education .....		5,734.9	5,662.1	5,696.6	5,854.3	5,777.8	—	—	—	—	—

<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.

<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 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1998 forward are subject to revision.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	May 1998	June 1998	Apr. 1999	May 1999	June 1999
<b>Total</b> .....	60,984	61,045	62,082	62,373	62,495
<b>Total private</b> .....	49,654	49,990	50,520	50,801	51,179
<b>Goods-producing</b> .....	6,752	6,800	6,599	6,618	6,672
<b>Mining</b> .....	84	85	79	78	79
<b>Construction</b> .....	657	673	684	694	710
<b>Manufacturing</b> .....	6,011	6,042	5,836	5,846	5,883
<b>Durable goods</b> .....	2,995	3,006	2,922	2,925	2,945
Lumber and wood products .....	142.2	145.2	146.8	148.7	151.1
Furniture and fixtures .....	168.4	169.5	170.9	172.0	172.6
Stone, clay, and glass products .....	105.4	106.3	102.3	102.2	103.9
Primary metal industries .....	104.1	106.2	100.7	100.6	102.2
Fabricated metal products .....	336.8	338.7	337.2	338.0	340.6
Industrial machinery and equipment .....	488.5	488.8	465.8	466.9	469.5
Electronic and other electrical equipment .....	709.9	709.9	674.4	673.7	676.6
Transportation equipment .....	408.0	409.8	404.5	404.6	407.0
Instruments and related products .....	358.0	358.4	350.5	349.4	351.4
Miscellaneous manufacturing .....	173.5	173.4	169.1	168.6	170.2
<b>Nondurable goods</b> .....	3,016	3,036	2,914	2,921	2,938
Food and kindred products .....	539.2	548.4	532.6	540.8	549.7
Tobacco products .....	11.2	11.2	11.2	10.6	10.9
Textile mill products .....	279.9	280.1	263.2	261.7	261.3
Apparel and other textile products .....	567.6	566.9	502.0	500.0	499.0
Paper and allied products .....	164.3	166.0	159.2	159.8	161.9
Printing and publishing .....	705.3	709.4	699.2	698.0	701.0
Chemicals and allied products .....	333.8	337.1	334.3	336.9	338.9
Petroleum and coal products .....	24.3	25.0	24.5	24.6	24.9
Rubber and misc. plastics products .....	345.4	347.6	348.1	348.5	350.8
Leather and leather products .....	44.7	44.4	39.7	39.6	39.9
<b>Service-producing</b> .....	54,232	54,245	55,483	55,755	55,823
<b>Transportation and public utilities</b> .....	1,975	1,980	2,048	2,065	2,077
<b>Wholesale trade</b> .....	2,092	2,104	2,128	2,137	2,153
<b>Retail trade</b> .....	11,679	11,809	11,769	11,960	12,079
<b>Finance, insurance, and real estate</b> .....	4,631	4,681	4,742	4,751	4,803
<b>Services</b> .....	22,525	22,616	23,234	23,270	23,395
<b>Government</b> .....	11,330	11,055	11,562	11,572	11,316
Federal .....	1,141	1,151	1,131	1,126	1,135
State .....	2,387	2,279	2,479	2,445	2,333
Local .....	7,802	7,625	7,952	8,001	7,848

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1998 forward are subject to revision.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Alabama</b> .....	1,910.7	1,933.3	1,928.1	10.4	10.4	10.2	103.9	108.4	109.1
Birmingham.....	475.0	483.0	481.5	2.7	2.7	2.8	29.5	30.4	30.4
Huntsville.....	177.0	178.8	176.8	(1)	(1)	(1)	6.5	7.0	6.9
Mobile.....	228.2	234.3	234.9	(1)	(1)	(1)	18.0	19.1	19.3
Montgomery.....	161.6	166.7	166.8	(1)	(1)	(1)	8.9	8.9	9.0
Tuscaloosa.....	79.7	81.8	81.1	2.9	2.8	2.7	5.5	6.0	6.0
<b>Alaska</b> .....	295.1	289.3	296.7	10.8	9.2	9.0	16.3	15.4	16.6
Anchorage.....	132.7	134.4	135.0	2.7	2.4	2.3	8.3	8.1	8.7
<b>Arizona</b> .....	2,036.2	2,130.8	2,109.7	12.9	12.6	10.4	145.7	157.4	158.7
Phoenix-Mesa.....	1,435.1	1,495.2	1,485.1	5.6	5.5	3.3	106.8	114.7	115.6
Tucson.....	316.1	334.4	326.1	2.2	2.1	1.9	20.4	22.0	22.3
<b>Arkansas</b> .....	1,119.0	1,141.4	1,133.2	3.4	3.2	3.2	50.0	51.3	52.0
Fayetteville-Springdale-Rogers.....	141.9	145.6	145.5	(1)	(1)	(1)	5.9	5.9	6.0
Fort Smith.....	97.7	98.9	98.2	8	7	7	4.4	4.3	4.3
Little Rock-North Little Rock.....	307.4	310.4	307.9	(1)	(1)	(1)	14.9	14.6	14.6
Pine Bluff.....	36.1	36.1	36.1	(1)	(1)	(1)	1.2	1.0	1.0
<b>California</b> .....	13,573.4	14,025.4	13,947.9	25.7	23.6	23.6	624.3	662.2	681.7
Bakersfield.....	183.0	189.4	188.9	9.4	8.6	8.6	10.6	10.9	11.1
Fresno.....	280.7	290.3	290.3	4	3	3	15.1	15.7	16.1
Los Angeles-Long Beach.....	3,925.8	4,029.8	4,001.2	4.8	4.5	4.5	118.4	125.7	126.6
Modesto.....	139.5	140.0	142.0	(2)	(2)	(2)	8.4	8.4	8.5
Oakland.....	973.3	1,009.3	1,004.7	1.7	1.7	1.7	55.8	58.7	60.8
Orange County.....	1,295.4	1,341.3	1,331.9	9	9	9	64.9	68.3	69.7
Riverside-San Bernardino.....	868.3	911.5	903.9	1.0	1.0	1.0	60.0	63.7	64.6
Sacramento.....	647.9	671.3	669.1	2	2	2	38.1	40.8	41.8
Salinas.....	122.8	126.8	126.4	1	1	1	5.6	6.0	6.2
San Diego.....	1,102.5	1,124.4	1,116.3	3	3	3	63.5	62.9	63.6
San Francisco.....	1,022.3	1,034.3	1,033.6	5	5	5	39.6	41.1	42.1
San Jose.....	963.7	965.7	965.6	1	1	1	42.2	44.6	45.5
Santa Barbara-Santa Maria-Lompoc.....	154.6	157.6	155.6	8	7	7	6.8	6.9	7.0
Santa Rosa.....	171.1	179.7	176.7	5	5	5	10.4	10.9	11.2
Stockton-Lodi.....	171.9	174.6	175.5	1	1	1	9.2	9.8	9.7
Vallejo-Fairfield-Napa.....	156.3	162.3	161.0	5	5	5	11.0	11.3	11.5
Ventura.....	251.4	262.3	261.5	1.3	1.1	1.1	12.8	14.9	15.3
<b>Colorado</b> .....	2,061.3	2,103.7	2,106.5	14.6	13.0	13.3	139.5	142.1	146.0
Boulder-Longmont.....	162.8	167.4	166.6	(1)	(1)	(1)	7.8	8.3	8.6
Colorado Springs.....	227.3	232.4	231.7	(1)	(1)	(1)	13.6	13.7	14.3
Denver.....	1,101.6	1,132.2	1,131.4	7.1	6.0	6.1	71.6	74.6	77.1
<b>Connecticut</b> .....	1,644.6	1,679.9	1,665.9	8	9	9	62.3	63.6	65.0
Bridgeport.....	183.8	188.3	185.0	(2)	(2)	(2)	6.8	6.9	7.0
Danbury.....	87.7	88.8	87.8	(1)	(1)	(1)	4.0	4.0	4.1
Hartford.....	600.5	607.7	602.6	(1)	(1)	(1)	21.0	21.0	21.8
New Haven-Meriden.....	254.5	258.3	256.4	(1)	(1)	(1)	10.4	10.4	10.6
New London-Norwich.....	139.8	141.6	141.6	(1)	(1)	(1)	4.8	5.0	5.1
Stamford-Norwalk.....	209.0	209.4	208.7	(1)	(1)	(1)	6.4	6.0	6.0
Waterbury.....	86.7	87.1	86.1	(2)	(2)	(2)	3.5	3.5	3.6
<b>Delaware</b> .....	402.2	417.9	414.6	1	1	1	23.2	24.8	25.3
Dover.....	53.3	54.9	54.3	1	1	1	2.8	2.7	2.7
Wilmington-Newark.....	309.7	323.3	319.5	2	2	2	17.1	18.2	19.0
<b>District of Columbia</b> .....	626.3	618.5	628.4	.1	.1	.1	9.2	9.2	9.2
Washington PMSA.....	2,573.9	2,634.7	2,643.8	1.1	1.2	1.2	136.7	139.6	142.1
<b>Florida</b> .....	6,594.1	6,921.2	6,830.1	6.8	7.0	6.9	352.5	370.2	369.1
Daytona Beach.....	153.1	159.5	157.1	(2)	(2)	(2)	8.3	8.1	8.2
Fort Lauderdale.....	636.9	662.5	652.0	.1	.1	.1	35.7	36.5	36.6
Fort Myers-Cape Coral.....	154.9	162.1	159.1	(2)	(2)	(2)	14.0	14.3	13.9
Gainesville.....	112.5	116.1	116.0	(2)	(2)	(2)	4.8	4.8	4.8
Jacksonville.....	531.0	550.5	546.2	(2)	(2)	(2)	29.4	29.7	29.7
Lakeland-Winter Haven.....	171.8	180.6	177.1	3.2	3.1	3.2	10.0	9.9	9.9
Melbourne-Titusville-Palm Bay.....	181.5	187.6	186.0	(2)	(2)	(2)	9.5	10.2	10.1
Miami.....	967.7	996.7	986.7	3	3	3	34.6	36.4	36.6
Orlando.....	832.4	880.3	870.0	(2)	(2)	(2)	46.9	50.0	50.1
Pensacola.....	154.3	160.9	158.3	(2)	(2)	(2)	10.9	11.5	11.5
Sarasota-Bradenton.....	248.2	260.4	257.2	(2)	(2)	(2)	13.2	13.8	13.8
Tallahassee.....	149.9	154.4	154.4	(2)	(2)	(2)	6.1	6.3	6.3
Tampa-St. Petersburg-Clearwater.....	1,117.9	1,180.3	1,172.2	4	5	5	54.5	58.3	58.2
West Palm Beach-Boca Raton.....	464.0	499.1	490.6	(2)	(2)	(2)	27.0	28.4	28.4

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Alabama</b> .....	377.7	370.4	368.4	93.2	94.2	94.6	444.7	453.4	453.6
Birmingham .....	51.2	52.7	52.7	30.9	31.7	31.9	116.3	117.8	118.2
Huntsville .....	38.2	37.6	36.2	4.1	4.3	4.2	35.7	36.2	36.4
Mobile .....	27.6	27.4	27.5	12.9	13.1	13.3	61.3	63.5	63.8
Montgomery .....	18.1	18.5	18.4	6.8	7.0	7.0	38.2	39.7	39.6
Tuscaloosa .....	12.2	12.8	12.7	2.5	2.5	2.5	19.4	20.1	20.0
<b>Alaska</b> .....	22.0	15.8	22.0	27.5	28.2	28.5	61.7	61.4	62.2
Anchorage .....	2.2	2.2	2.3	13.9	14.8	15.0	32.3	32.5	32.7
<b>Arizona</b> .....	217.7	219.3	218.5	101.1	106.3	106.1	491.8	512.4	508.6
Phoenix-Mesa .....	170.9	170.7	170.2	74.5	79.6	79.3	347.6	362.3	360.1
Tucson .....	29.1	30.5	30.9	13.5	13.6	13.6	68.7	71.0	70.0
<b>Arkansas</b> .....	254.5	253.4	253.0	68.1	69.2	69.5	257.6	262.4	262.2
Fayetteville-Springdale-Rogers .....	34.2	34.3	34.5	9.9	10.4	10.5	40.4	41.7	42.1
Fort Smith .....	27.3	28.0	27.9	6.5	6.6	6.5	19.8	20.2	20.3
Little Rock-North Little Rock .....	33.7	33.6	33.3	21.6	21.7	21.8	70.7	72.3	72.0
Pine Bluff .....	8.6	8.4	8.6	1.8	1.8	1.8	7.1	7.2	7.2
<b>California</b> .....	1,974.2	1,949.3	1,953.6	699.5	716.4	720.5	3,127.4	3,165.9	3,168.7
Bakersfield .....	9.9	9.8	10.0	11.0	11.0	11.1	43.0	43.4	43.5
Fresno .....	30.6	30.8	32.6	14.2	14.4	14.7	67.5	68.0	68.3
Los Angeles-Long Beach .....	666.5	662.6	658.7	224.7	231.3	232.7	872.9	888.7	888.7
Modesto .....	28.9	26.7	30.2	5.4	5.4	5.5	34.6	34.5	34.6
Oakland .....	124.1	124.1	124.6	62.4	65.1	65.2	218.8	222.6	223.9
Orange County .....	237.5	240.8	240.4	46.5	49.2	49.2	321.3	324.8	325.7
Riverside-San Bernardino .....	111.1	116.1	116.3	46.0	47.8	48.1	221.1	228.2	227.9
Sacramento .....	47.1	46.8	47.1	26.2	27.0	27.0	140.3	141.5	142.0
Salinas .....	9.6	10.1	9.2	5.6	5.7	5.8	31.8	32.8	33.1
San Diego .....	128.7	125.8	125.9	44.9	46.3	46.3	248.1	251.6	252.1
San Francisco .....	77.9	76.9	77.0	81.9	81.2	81.4	213.2	215.7	216.6
San Jose .....	267.2	254.4	255.9	28.8	29.6	29.6	184.9	183.6	184.0
Santa Barbara-Santa Maria-Lompoc .....	18.2	17.5	18.0	5.3	5.4	5.4	37.9	38.4	38.3
Santa Rosa .....	28.4	28.7	29.1	6.6	6.8	6.9	43.1	43.7	43.7
Stockton-Lodi .....	24.4	23.7	25.9	12.4	12.3	13.0	41.2	40.8	40.9
Vallejo-Fairfield-Napa .....	19.3	19.8	19.9	6.9	6.6	6.5	40.0	41.2	41.2
Ventura .....	35.1	35.6	35.5	10.2	10.4	10.4	60.0	61.3	61.4
<b>Colorado</b> .....	208.5	206.2	205.8	129.8	132.4	134.1	496.3	509.7	512.4
Boulder-Longmont .....	32.5	32.8	32.3	4.1	4.5	4.5	35.7	35.3	35.7
Colorado Springs .....	27.0	27.1	27.2	11.6	12.0	12.1	51.0	51.8	52.1
Denver .....	93.4	92.5	92.3	92.2	95.1	96.5	260.8	274.4	275.0
<b>Connecticut</b> .....	277.3	275.6	271.5	75.9	76.4	75.5	355.7	361.6	359.1
Bridgeport .....	38.0	38.2	37.2	7.0	7.0	6.9	41.2	41.6	41.1
Danbury .....	19.3	18.8	18.5	2.5	2.7	2.7	21.8	22.1	22.0
Hartford .....	95.2	95.2	93.5	25.9	27.0	26.1	123.4	124.7	122.9
New Haven-Meriden .....	40.2	40.2	40.2	16.3	16.9	16.5	54.5	55.1	54.8
New London-Norwich .....	24.0	24.2	23.9	6.8	7.0	6.9	28.6	28.5	28.7
Stamford-Norwalk .....	27.2	26.9	26.7	10.8	10.0	9.9	44.4	43.6	43.0
Waterbury .....	18.6	18.7	18.4	3.5	3.7	3.4	17.7	18.3	18.0
<b>Delaware</b> .....	58.1	60.1	57.8	15.8	17.9	17.0	89.3	92.1	92.7
Dover .....	6.2	6.3	6.3	1.8	2.1	1.8	12.5	12.6	12.7
Wilmington-Newark .....	43.8	45.7	43.1	13.6	15.3	14.8	62.4	64.8	64.4
<b>District of Columbia</b> .....	12.5	12.1	12.2	16.3	15.8	15.7	49.2	49.2	49.7
Washington PMSA .....	103.2	104.8	105.5	119.2	124.1	124.6	476.5	481.6	481.4
<b>Florida</b> .....	495.7	497.9	494.7	335.7	351.3	350.4	1,658.7	1,720.7	1,702.7
Daytona Beach .....	14.0	14.6	14.5	4.9	5.1	5.2	42.7	43.2	43.2
Fort Lauderdale .....	40.0	39.4	39.1	30.4	30.8	30.9	178.5	185.8	183.5
Fort Myers-Cape Coral .....	7.2	7.2	7.3	7.4	7.9	7.9	42.8	45.0	44.3
Gainesville .....	5.4	5.3	5.3	2.4	2.6	2.6	22.7	23.4	23.2
Jacksonville .....	39.8	40.9	41.4	37.0	38.3	37.5	128.3	131.4	130.8
Lakeland-Winter Haven .....	20.1	20.2	20.1	8.9	9.1	8.9	48.0	50.3	49.8
Melbourne-Titusville-Palm Bay .....	27.0	27.0	26.7	5.8	6.1	6.2	42.9	45.0	44.5
Miami .....	75.5	75.7	75.5	86.9	89.5	90.0	252.0	259.0	257.3
Orlando .....	54.0	54.5	54.0	42.5	45.0	44.6	203.8	212.6	212.9
Pensacola .....	10.6	9.8	9.7	7.6	8.0	8.1	40.8	43.1	42.5
Sarasota-Bradenton .....	21.1	22.2	22.2	5.2	5.2	5.2	57.6	59.9	59.2
Tallahassee .....	4.9	5.0	5.1	4.1	4.2	4.1	30.0	31.0	30.7
Tampa-St. Petersburg-Clearwater .....	88.9	90.2	89.5	49.1	53.0	52.4	257.0	262.6	260.4
West Palm Beach-Boca Raton .....	31.3	31.8	31.2	16.1	16.3	16.3	115.3	125.4	122.5

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	Finance, insurance, and real estate			Services			Government		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Alabama</b> .....	88.2	89.7	90.2	452.6	462.3	461.8	340.0	344.5	340.2
Birmingham.....	35.6	36.9	37.1	143.4	143.5	143.1	65.4	67.3	65.3
Huntsville.....	4.8	4.7	4.7	49.8	51.4	51.7	37.9	37.6	36.7
Mobile.....	10.0	10.3	10.3	63.9	65.1	65.0	34.5	35.8	35.7
Montgomery.....	10.0	10.0	10.2	43.3	45.5	45.4	36.3	37.1	37.2
Tuscaloosa.....	2.5	2.5	2.5	14.3	14.7	14.6	20.4	20.4	20.1
<b>Alaska</b> .....	13.1	13.2	13.3	73.8	74.0	75.3	69.9	72.1	69.8
Anchorage.....	7.7	7.7	7.7	37.9	38.7	39.1	27.7	28.0	27.2
<b>Arizona</b> .....	141.0	145.4	146.0	626.1	648.7	645.5	299.9	328.7	315.9
Phoenix-Mesa.....	118.1	123.2	123.9	450.2	464.3	462.9	161.4	174.9	169.8
Tucson.....	13.4	13.4	13.4	106.4	110.1	109.4	62.4	71.7	64.6
<b>Arkansas</b> .....	45.4	46.0	46.0	266.8	271.1	272.5	173.2	184.8	174.8
Fayetteville-Springdale-Rogers.....	5.1	5.4	5.4	28.1	29.0	28.9	18.3	18.9	18.1
Fort Smith.....	3.2	3.2	3.2	26.8	26.3	26.3	8.9	9.6	9.0
Little Rock-North Little Rock.....	17.9	17.9	17.9	91.9	91.3	91.5	56.7	59.0	56.8
Pine Bluff.....	1.3	1.3	1.3	8.7	8.6	8.7	7.4	7.8	7.5
<b>California</b> .....	804.9	815.1	817.2	4,241.3	4,430.9	4,438.4	2,076.1	2,262.0	2,144.2
Bakersfield.....	7.3	7.6	7.6	46.3	48.2	48.6	45.5	52.9	48.4
Fresno.....	13.9	14.2	14.2	75.6	77.7	78.0	63.4	69.2	66.1
Los Angeles-Long Beach.....	227.4	231.3	231.4	1,288.2	1,325.9	1,323.3	522.9	559.8	535.3
Modesto.....	4.5	4.5	4.5	35.3	36.0	36.0	22.4	24.5	22.7
Oakland.....	55.8	56.8	57.0	294.7	303.8	305.1	160.0	176.5	166.4
Orange County.....	100.8	102.2	102.5	395.7	411.6	411.0	127.8	143.5	132.5
Riverside-San Bernardino.....	30.5	30.3	30.5	229.6	241.0	240.6	169.0	183.4	174.9
Sacramento.....	48.0	48.7	48.8	182.6	188.8	190.8	165.4	177.5	171.4
Salinas.....	6.0	6.1	6.1	34.6	36.1	36.5	29.5	29.9	29.4
San Diego.....	65.0	64.6	64.6	366.7	370.4	373.0	185.3	202.5	190.5
San Francisco.....	109.5	105.4	105.9	379.2	387.4	387.1	120.5	126.1	123.0
San Jose.....	32.5	32.7	32.8	320.2	329.1	327.3	87.8	91.6	90.4
Santa Barbara-Santa Maria-Lompoc.....	7.6	7.4	7.3	47.6	48.1	48.3	30.4	33.2	30.6
Santa Rosa.....	10.2	10.4	10.5	50.1	51.9	52.0	21.8	26.8	22.8
Stockton-Lodi.....	8.6	8.4	8.5	43.1	43.9	43.8	32.9	35.6	33.6
Vallejo-Fairfield-Napa.....	6.2	6.3	6.3	41.6	43.2	43.1	30.8	33.4	32.0
Ventura.....	13.7	13.8	13.6	76.8	80.5	80.5	41.5	44.7	43.7
<b>Colorado</b> .....	137.1	139.1	140.2	628.7	636.2	643.1	306.8	325.0	311.6
Boulder-Longmont.....	6.1	6.4	6.4	52.7	55.1	55.0	23.9	25.0	24.1
Colorado Springs.....	12.8	13.1	13.2	76.6	78.1	77.4	34.7	36.6	35.4
Denver.....	90.3	91.2	91.5	344.8	350.5	350.8	141.4	147.9	142.1
<b>Connecticut</b> .....	138.4	140.3	140.9	519.8	531.0	533.9	214.4	230.5	219.1
Bridgeport.....	10.6	10.9	10.7	60.7	61.8	61.6	19.5	21.9	20.5
Danbury.....	4.8	5.1	5.0	25.8	26.0	26.2	9.5	10.1	9.3
Hartford.....	71.0	70.4	70.5	176.2	176.8	177.9	87.8	92.6	89.9
New Haven-Meriden.....	13.8	13.8	13.8	89.0	90.9	90.3	30.3	31.0	30.2
New London-Norwich.....	3.8	3.9	3.9	36.2	36.7	36.7	35.6	36.3	36.4
Stamford-Norwalk.....	25.1	25.7	25.9	77.3	79.2	79.8	17.8	18.0	17.4
Waterbury.....	3.7	3.6	3.6	27.6	27.1	27.3	12.1	12.2	11.8
<b>Delaware</b> .....	49.2	51.1	51.2	113.6	117.1	116.7	52.9	54.7	53.8
Dover.....	2.2	2.2	2.1	12.2	13.1	12.9	15.6	15.9	15.8
Wilmington-Newark.....	42.9	44.9	44.6	92.2	95.5	95.6	37.5	38.7	37.8
<b>District of Columbia</b> .....	29.2	29.1	29.0	274.3	277.6	279.0	235.5	225.4	233.5
Washington PMSA.....	142.1	143.0	143.6	1,016.4	1,048.9	1,055.7	578.7	591.5	589.7
<b>Florida</b> .....	432.3	447.3	447.2	2,419.4	2,552.9	2,549.0	893.0	973.9	910.1
Daytona Beach.....	6.9	7.2	7.2	55.7	58.4	58.0	20.6	22.9	20.8
Fort Lauderdale.....	48.6	50.2	50.1	223.9	232.9	231.5	79.7	86.8	80.2
Fort Myers-Cape Coral.....	8.8	9.1	8.9	50.7	52.5	52.3	23.8	25.9	24.3
Gainesville.....	5.2	5.2	5.2	35.4	37.9	37.9	36.6	36.9	37.0
Jacksonville.....	56.8	57.2	57.9	178.4	185.7	186.5	60.9	66.8	61.9
Lakeland-Winter Haven.....	8.7	8.9	8.9	49.0	52.0	51.9	23.9	27.1	24.4
Melbourne-Titusville-Palm Bay.....	6.3	6.3	6.3	66.6	67.9	68.5	23.4	25.1	23.7
Miami.....	65.7	66.7	66.2	320.3	329.2	325.8	132.4	139.9	135.0
Orlando.....	50.2	52.0	52.7	356.2	376.0	374.2	78.3	89.7	81.0
Pensacola.....	6.1	6.2	6.2	51.7	53.3	53.7	26.4	28.8	26.4
Sarasota-Bradenton.....	12.3	12.8	12.7	116.9	122.3	122.2	21.8	24.1	21.8
Tallahassee.....	6.3	6.6	6.6	41.7	43.5	43.5	56.6	57.6	57.9
Tampa-St. Petersburg-Clearwater.....	83.4	87.7	87.8	458.1	490.0	494.6	126.5	138.0	128.8
West Palm Beach-Boca Raton.....	34.2	36.1	36.2	189.6	205.3	204.4	50.5	55.8	51.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Georgia</b> .....	3,730.3	3,865.3	3,844.9	7.8	7.9	7.9	186.7	197.5	198.3
Albany.....	58.9	59.8	59.8	(2)	(2)	(2)	3.2	3.3	3.3
Athens.....	71.1	73.7	71.4	(1)	(1)	(1)	3.1	3.0	3.1
Atlanta.....	2,032.3	2,111.4	2,104.9	1.5	1.6	1.5	103.6	108.9	109.5
Augusta-Aiken.....	195.2	199.9	197.5	.4	.4	.4	11.8	12.0	12.1
Columbus.....	118.5	122.6	122.2	(1)	(1)	(1)	5.5	5.6	5.6
Macon.....	147.5	150.5	148.1	1.1	1.0	1.0	6.4	6.0	5.9
Savannah.....	132.0	136.8	136.0	(1)	(1)	(1)	8.1	8.8	8.7
<b>Hawaii</b> .....	527.0	532.5	527.2	(1)	(1)	(1)	21.7	20.1	20.4
Honolulu.....	395.4	402.1	394.4	(1)	(1)	(1)	16.5	14.9	14.8
<b>Idaho</b> .....	523.8	538.4	533.6	3.1	3.0	2.6	34.9	35.0	35.8
Boise City.....	202.5	210.7	209.6	(1)	(1)	(1)	14.0	14.1	14.3
<b>Illinois</b> .....	5,922.5	6,019.0	5,986.4	11.0	11.0	11.0	256.9	260.0	264.7
Bloomington-Normal.....	82.2	82.8	82.3	(1)	(1)	(1)	3.5	3.4	3.5
Champaign-Urbana.....	95.4	96.2	96.1	(1)	(1)	(1)	3.8	3.7	3.9
Chicago.....	4,152.1	4,262.3	4,244.6	1.7	1.7	1.7	173.1	180.3	183.5
Davenport-Moline-Rock Island.....	184.1	183.9	182.4	(1)	(1)	(1)	10.2	10.4	10.4
Decatur.....	57.8	57.6	57.5	(1)	(1)	(1)	4.2	4.1	4.2
Kankakee.....	43.9	44.8	44.9	(1)	(1)	(1)	2.1	2.1	2.2
Peoria-Pekin.....	178.1	178.4	178.6	(1)	(1)	(1)	9.8	8.9	9.7
Rockford.....	180.2	180.3	178.3	(1)	(1)	(1)	7.8	7.9	8.0
Springfield.....	114.5	115.6	115.2	(1)	(1)	(1)	5.0	4.7	4.8
<b>Indiana</b> .....	2,881.0	2,960.5	2,924.1	7.0	7.2	7.2	156.5	153.6	155.9
Bloomington.....	59.3	61.1	59.5	(1)	(1)	(1)	3.3	3.1	3.3
Elkhart-Goshen.....	120.8	125.8	123.4	(1)	(1)	(1)	5.2	5.2	5.3
Evansville-Henderson.....	154.9	159.0	159.4	1.2	1.2	1.2	10.9	11.1	11.7
Fort Wayne.....	269.0	276.0	273.1	(1)	(1)	(1)	13.7	14.1	14.1
Gary.....	270.7	274.0	270.6	(1)	(1)	(1)	22.5	23.3	23.5
Indianapolis.....	847.3	871.3	861.6	7	8	8	49.4	50.3	51.1
Kokomo.....	49.5	53.2	52.4	(1)	(1)	(1)	2.0	2.0	1.9
Lafayette.....	90.3	93.3	92.0	(1)	(1)	(1)	4.3	4.1	4.4
Muncie.....	54.4	59.8	57.9	(1)	(1)	(1)	2.6	2.5	2.6
South Bend.....	135.6	138.4	136.1	(1)	(1)	(1)	7.6	7.7	7.9
Terre Haute.....	65.7	66.8	66.5	.2	(2)	(2)	3.3	3.5	3.5
<b>Iowa</b> .....	1,446.3	1,507.2	1,476.0	2.4	2.4	2.4	70.4	71.2	72.4
Cedar Rapids.....	116.1	118.8	118.4	(1)	(1)	(1)	6.6	6.4	6.8
Des Moines.....	282.1	291.0	287.7	(1)	(1)	(1)	13.7	13.7	14.1
Dubuque.....	51.4	51.5	50.9	(1)	(1)	(1)	2.2	2.1	2.1
Iowa City.....	65.0	67.9	65.3	(1)	(1)	(1)	2.7	2.6	2.7
Sioux City.....	66.5	68.2	67.1	(1)	(1)	(1)	3.6	3.5	3.5
Waterloo-Cedar Falls.....	72.7	72.7	71.6	(1)	(1)	(1)	3.0	2.9	2.9
<b>Kansas</b> .....	1,302.6	1,352.8	1,330.8	7.3	7.0	7.1	66.4	70.3	70.9
Lawrence.....	45.5	45.9	45.0	(1)	(1)	(1)	2.5	2.3	2.5
Topeka.....	101.6	103.6	102.6	(1)	(1)	(1)	5.0	5.2	5.3
Wichita.....	284.4	289.7	285.4	1.3	1.2	1.2	15.5	15.9	16.0
<b>Kentucky</b> .....	1,752.8	1,802.9	1,790.8	23.5	23.1	23.1	89.2	90.2	92.4
Lexington.....	273.2	283.3	279.9	.4	.3	.3	14.0	14.5	14.8
Louisville.....	568.7	586.0	584.1	.6	.7	.7	30.4	30.7	31.2
Owensboro.....	44.1	45.2	45.1	.3	.3	.3	3.5	3.7	3.8
<b>Louisiana</b> .....	1,900.0	1,923.2	1,910.7	58.5	53.4	52.6	130.7	134.1	132.6
Alexandria.....	55.2	56.6	56.3	.1	.1	.1	3.6	3.8	3.8
Baton Rouge.....	291.4	303.8	301.9	1.0	1.0	1.0	34.2	35.5	35.5
Houma.....	81.0	79.5	79.4	7.5	6.1	5.9	4.4	4.2	4.1
Lafayette.....	168.0	167.2	167.0	18.5	16.3	16.1	10.1	9.8	9.6
Lake Charles.....	88.5	86.8	86.9	1.3	1.2	1.2	11.6	10.9	10.9
Monroe.....	69.6	70.6	70.9	.2	.2	.2	3.8	3.6	3.7
New Orleans.....	623.0	624.0	622.4	15.6	14.1	13.8	34.4	35.9	35.7
Shreveport-Bossier City.....	172.7	177.5	176.7	2.9	2.3	2.3	10.4	9.8	9.7
<b>Maine</b> .....	577.5	597.0	591.7	.1	.1	.1	27.2	28.9	29.4
Lewiston-Auburn.....	41.8	44.4	42.9	(2)	(2)	(2)	1.7	1.7	1.7
Portland.....	146.9	152.2	152.5	(2)	(2)	(2)	7.0	8.0	8.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Georgia</b> .....	589.3	593.5	590.6	243.8	255.9	257.8	929.8	950.9	951.4
Albany .....	8.7	8.5	8.6	3.4	3.9	3.9	13.8	13.9	13.9
Athens .....	11.8	11.6	11.5	1.7	1.8	1.8	17.7	18.3	18.1
Atlanta .....	218.9	221.1	220.9	174.2	182.2	183.5	538.9	550.2	550.5
Augusta-Aiken .....	41.1	40.6	40.5	6.7	7.1	7.1	42.5	43.1	43.0
Columbus .....	21.2	21.0	20.6	4.2	4.4	4.4	26.3	26.7	26.7
Macon .....	19.6	19.4	19.4	5.5	5.4	5.4	33.6	34.2	34.0
Savannah .....	17.6	18.4	18.4	8.8	8.7	8.8	33.8	34.6	34.6
<b>Hawaii</b> .....	16.6	16.2	16.4	41.4	40.5	40.4	131.3	130.4	130.5
Honolulu .....	12.7	12.5	12.5	32.9	31.9	31.8	96.1	94.9	95.0
<b>Idaho</b> .....	77.9	76.2	77.4	25.5	26.1	26.1	133.7	135.2	134.8
Boise City .....	36.6	36.7	37.2	10.3	11.4	11.4	48.4	48.7	48.3
<b>Illinois</b> .....	981.3	975.5	970.5	344.1	352.9	350.0	1,338.3	1,357.7	1,354.1
Bloomington-Normal .....	8.8	8.4	8.3	3.2	3.1	3.1	17.5	17.7	17.6
Champaign-Urbana .....	11.3	11.5	11.4	2.7	2.5	2.6	20.4	20.6	20.7
Chicago .....	656.4	654.6	652.5	254.6	260.8	259.6	926.8	960.4	956.8
Davenport-Moline-Rock Island .....	32.1	31.1	30.7	9.9	10.0	10.1	48.7	47.9	48.3
Decatur .....	13.7	13.6	13.4	5.0	5.3	5.3	12.3	12.1	12.1
Kankakee .....	7.8	8.1	8.2	2.0	2.2	2.2	11.0	10.9	10.9
Peoria-Pekin .....	33.8	34.0	34.1	10.2	10.4	10.5	42.3	42.7	42.5
Rockford .....	53.3	53.1	51.0	9.0	9.0	9.0	37.4	37.1	37.2
Springfield .....	4.8	4.8	4.9	4.8	4.9	4.9	23.3	23.5	23.5
<b>Indiana</b> .....	672.5	690.8	685.7	146.0	146.3	146.9	694.6	696.8	695.7
Bloomington .....	9.2	9.1	9.5	1.9	1.9	1.9	14.3	14.4	14.3
Elkhart-Goshen .....	61.1	64.3	63.3	2.9	3.1	3.1	23.0	23.2	23.1
Evansville-Henderson .....	32.3	34.0	34.0	7.4	7.5	7.5	38.1	39.3	38.8
Fort Wayne .....	73.9	75.1	75.4	13.2	13.2	13.3	64.6	64.2	63.7
Gary .....	50.5	49.8	49.7	14.8	14.8	14.5	63.5	63.5	63.3
Indianapolis .....	126.3	130.8	130.5	53.0	54.5	54.6	220.5	224.8	224.3
Kokomo .....	18.4	20.7	20.5	1.2	1.1	1.1	11.5	11.7	11.6
Lafayette .....	22.3	22.4	22.4	2.4	2.4	2.4	18.8	19.3	19.1
Muncie .....	10.1	10.8	10.5	3.4	3.7	3.6	13.6	14.0	13.9
South Bend .....	22.6	22.4	21.5	5.8	5.8	5.8	34.6	34.6	34.2
Terre Haute .....	12.1	11.9	11.8	2.9	3.1	3.0	18.8	18.3	18.3
<b>Iowa</b> .....	264.5	269.3	268.5	69.9	72.6	72.4	358.1	366.4	365.5
Cedar Rapids .....	22.4	22.6	23.1	8.6	8.5	8.6	25.6	25.8	25.9
Des Moines .....	25.0	24.8	24.8	14.7	15.4	15.7	72.7	74.3	74.6
Dubuque .....	12.4	12.1	12.0	2.0	1.9	1.9	12.6	12.7	12.8
Iowa City .....	5.2	5.3	5.3	2.2	2.1	2.1	13.5	13.3	13.3
Sioux City .....	13.8	13.9	14.0	4.0	3.9	3.9	16.1	16.3	16.3
Waterloo-Cedar Falls .....	15.5	14.8	14.6	2.7	2.7	2.7	17.2	17.2	17.0
<b>Kansas</b> .....	211.9	214.0	212.7	74.0	76.7	76.4	319.9	329.6	330.0
Lawrence .....	5.4	5.3	5.4	1.3	1.3	1.3	11.7	11.7	11.8
Topeka .....	10.0	10.6	10.4	5.8	5.6	5.6	22.2	22.7	22.8
Wichita .....	74.2	74.0	73.3	10.6	10.8	10.5	64.0	64.8	64.8
<b>Kentucky</b> .....	320.3	317.5	319.4	102.2	105.7	105.8	418.6	431.7	429.2
Lexington .....	49.6	49.5	49.3	11.1	11.2	11.1	61.8	63.2	63.1
Louisville .....	89.1	88.0	89.7	42.3	43.3	43.0	138.5	144.0	143.1
Owensboro .....	6.9	6.9	6.8	2.4	2.5	2.5	11.1	11.4	11.3
<b>Louisiana</b> .....	190.9	191.5	190.9	114.4	116.3	116.2	442.3	448.0	446.2
Alexandria .....	3.6	3.4	3.4	2.8	2.9	2.9	13.1	13.5	13.5
Baton Rouge .....	24.4	24.6	24.5	13.3	13.7	13.8	69.4	70.6	70.6
Houma .....	8.8	8.5	8.5	8.9	9.0	9.1	18.5	18.9	18.9
Lafayette .....	14.8	14.7	14.6	10.2	10.3	10.3	43.5	44.1	44.2
Lake Charles .....	12.0	11.9	11.8	4.7	4.6	4.8	18.7	18.8	18.8
Monroe .....	7.6	7.9	7.9	3.8	3.7	3.8	17.3	17.7	17.7
New Orleans .....	49.7	50.0	50.0	42.0	41.5	41.0	154.3	153.1	151.6
Shreveport-Bossier City .....	17.0	19.1	19.3	8.4	8.8	8.8	39.7	40.8	40.8
<b>Maine</b> .....	85.9	85.6	84.1	23.9	24.7	24.7	150.8	151.3	154.3
Lewiston-Auburn .....	7.6	7.9	7.7	1.7	1.8	1.7	10.9	11.1	10.9
Portland .....	14.6	15.4	15.4	7.0	7.2	7.2	42.0	42.9	44.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Georgia</b> .....	202.0	209.4	211.6	1,005.7	1,054.4	1,052.4	565.2	595.8	574.9
Albany .....	2.0	2.1	2.1	15.1	15.3	15.3	12.7	12.8	12.7
Athens .....	2.4	2.4	2.4	16.4	16.6	16.6	18.0	20.0	17.9
Atlanta .....	136.2	141.4	142.9	612.7	646.0	646.2	246.3	260.0	249.9
Augusta-Aiken .....	6.4	6.5	6.4	47.5	49.3	48.3	38.8	40.9	39.7
Columbus .....	8.3	9.0	9.1	33.0	35.0	35.5	20.0	20.9	20.3
Macon .....	9.3	9.6	9.5	39.0	39.7	39.1	33.0	35.2	33.8
Savannah .....	4.7	4.6	4.6	38.9	41.1	41.0	20.1	20.6	19.9
<b>Hawaii</b> .....	35.9	35.1	35.2	173.0	176.2	176.7	107.1	114.0	107.6
Honolulu .....	28.7	28.1	28.1	123.4	127.8	127.1	85.1	92.0	85.1
<b>Idaho</b> .....	23.1	23.9	23.9	128.8	132.5	133.0	96.8	106.5	100.0
Boise City .....	11.1	11.5	11.5	52.1	55.5	55.4	30.0	32.8	31.5
<b>Illinois</b> .....	408.9	414.9	416.7	1,796.0	1,840.1	1,840.7	786.0	806.9	778.7
Bloomington-Normal .....	16.3	17.1	17.3	21.5	21.1	21.1	11.4	12.0	11.4
Champaign-Urbana .....	3.9	4.0	4.0	21.9	21.5	21.6	31.4	32.4	31.9
Chicago .....	317.3	323.7	324.9	1,338.2	1,389.8	1,388.1	484.0	491.0	477.5
Davenport-Moline-Rock Island .....	8.3	8.4	8.4	49.4	49.5	49.5	25.5	26.6	25.0
Decatur .....	2.1	2.1	2.1	13.8	13.5	13.4	6.7	6.9	7.0
Kankakee .....	1.7	1.7	1.7	12.6	12.8	12.9	6.7	7.0	6.8
Peoria-Pekin .....	7.8	8.1	8.1	55.2	54.8	54.9	19.0	19.5	18.8
Rockford .....	7.4	7.4	7.5	48.0	48.0	48.2	17.3	17.8	17.4
Springfield .....	8.0	7.9	7.9	35.4	35.9	35.9	33.2	33.9	33.3
<b>Indiana</b> .....	143.1	148.5	149.0	708.7	725.0	724.0	352.6	392.3	359.7
Bloomington .....	2.5	2.4	2.4	13.0	13.1	13.0	15.1	17.1	15.1
Elkhart-Goshen .....	2.8	3.0	3.0	18.3	18.8	18.9	7.5	8.2	6.7
Evansville-Henderson .....	7.2	7.7	7.7	43.9	43.3	43.7	13.9	14.9	14.8
Fort Wayne .....	15.0	15.2	15.2	66.7	69.1	69.2	21.9	25.1	22.2
Gary .....	9.3	9.3	9.4	74.7	74.9	75.2	35.4	38.4	35.0
Indianapolis .....	65.0	65.9	66.8	233.6	238.4	234.2	98.6	105.8	99.3
Kokomo .....	1.5	1.5	1.5	8.9	9.5	9.5	6.0	6.7	6.3
Lafayette .....	4.2	4.4	4.4	18.5	19.9	19.6	19.8	20.8	19.7
Muncie .....	1.8	2.0	2.0	15.6	16.2	16.2	7.3	10.6	9.1
South Bend .....	6.9	7.3	7.2	45.5	46.6	46.8	12.6	14.0	12.7
Terre Haute .....	2.3	2.3	2.3	16.7	17.0	16.9	9.3	10.7	10.7
<b>Iowa</b> .....	84.5	85.9	86.1	379.4	395.7	387.9	217.1	243.7	220.8
Cedar Rapids .....	6.3	6.5	6.5	35.8	36.3	36.2	10.8	12.7	11.3
Des Moines .....	40.5	40.4	40.4	82.7	87.8	86.0	32.8	34.6	32.1
Dubuque .....	1.9	1.9	1.9	17.2	16.8	17.1	3.1	4.0	3.1
Iowa City .....	2.2	2.3	2.2	14.9	15.2	14.5	24.3	27.1	25.2
Sioux City .....	2.7	2.8	2.8	19.1	19.8	19.4	7.2	8.0	7.2
Waterloo-Cedar Falls .....	3.3	3.0	3.0	20.7	21.1	20.9	10.3	11.0	10.5
<b>Kansas</b> .....	63.1	63.4	63.7	338.4	346.2	345.9	221.6	245.6	224.1
Lawrence .....	2.1	2.0	2.0	11.1	10.6	9.5	11.4	12.7	12.5
Topeka .....	6.9	6.7	6.7	30.1	30.9	31.1	21.6	21.9	20.7
Wichita .....	11.8	11.7	11.7	77.3	77.9	77.7	29.7	33.4	30.2
<b>Kentucky</b> .....	70.5	72.0	72.0	448.7	465.8	463.9	279.8	296.9	285.0
Lexington .....	10.3	10.7	10.7	76.2	78.9	78.7	49.8	55.0	51.9
Louisville .....	30.2	30.3	30.7	169.7	177.4	176.2	67.9	71.6	69.5
Owensboro .....	1.9	2.0	2.0	11.1	11.5	11.5	6.9	6.9	6.9
<b>Louisiana</b> .....	87.2	87.7	87.6	515.5	523.1	525.4	360.5	369.1	359.2
Alexandria .....	2.4	2.4	2.4	16.7	16.8	16.9	12.9	13.7	13.3
Baton Rouge .....	18.4	18.6	18.6	75.3	79.2	79.0	55.4	60.6	58.9
Houma .....	2.1	2.0	2.0	16.7	16.6	16.6	14.1	14.2	14.3
Lafayette .....	6.3	6.5	6.5	41.5	42.2	42.3	23.1	23.3	23.4
Lake Charles .....	2.6	2.5	2.5	24.0	23.5	23.4	13.6	13.4	13.5
Monroe .....	5.3	5.4	5.4	19.2	19.4	19.4	12.4	12.7	12.8
New Orleans .....	31.9	32.1	32.0	195.4	191.4	194.8	99.7	105.9	103.5
Shreveport-Bossier City .....	6.4	6.5	6.6	55.1	56.7	56.4	32.8	33.5	32.8
<b>Maine</b> .....	30.7	31.6	31.6	177.1	179.0	184.6	81.8	95.8	82.9
Lewiston-Auburn .....	2.3	2.4	2.4	13.8	14.5	14.8	3.8	5.0	3.7
Portland .....	13.2	13.3	13.2	45.8	46.2	46.6	17.3	19.2	17.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Maryland</b> .....	2,337.0	2,397.7	2,386.2	1.3	1.4	1.4	147.1	147.8	149.7
Baltimore PMSA .....	1,190.1	1,214.8	1,207.2	4	4	4	66.4	65.8	66.6
Baltimore City .....	401.3	409.7	409.6	(1)	(1)	(1)	12.5	13.3	13.6
Suburban Maryland-D.C. ....	860.7	886.2	885.7	(1)	(1)	(1)	64.6	65.5	66.2
<b>Massachusetts</b> .....	3,178.9	3,257.0	3,221.9	1.4	1.4	1.4	116.6	120.2	123.7
Barnstable-Yarmouth .....	66.9	66.1	70.0	(1)	(1)	(1)	2.8	2.9	3.0
Boston .....	1,948.4	1,993.0	1,975.3	5	4	4	66.2	68.3	70.5
Brockton .....	95.5	99.1	97.8	(2)	(2)	(2)	3.9	4.3	4.5
Fitchburg-Leominster .....	51.4	53.8	52.4	(2)	(2)	(2)	2.0	2.0	2.2
Lawrence .....	150.9	155.7	152.3	(2)	(2)	(2)	6.2	6.4	6.5
Lowell .....	117.1	123.0	120.8	(1)	(1)	(1)	5.5	5.8	5.9
New Bedford .....	65.0	67.6	66.7	(2)	(2)	(2)	2.7	2.7	2.9
Pittsfield .....	43.2	44.2	44.2	.1	.1	.1	2.0	2.0	2.0
Springfield .....	249.6	257.3	251.0	1	1	1	8.6	8.7	9.0
Worcester .....	228.1	231.9	228.1	2	2	2	7.7	7.8	8.0
<b>Michigan</b> .....	4,411.0	4,608.8	4,526.2	8.2	8.0	8.0	200.5	206.2	212.2
Ann Arbor .....	264.4	276.7	272.2	(1)	(1)	(1)	11.6	11.4	11.7
Benton Harbor .....	70.1	72.2	71.7	(1)	(1)	(1)	2.6	2.6	2.8
Detroit .....	2,062.5	2,168.0	2,125.0	9	10	10	88.7	94.2	97.2
Flint .....	155.1	177.9	172.1	(1)	(1)	(1)	8.6	9.0	9.6
Grand Rapids-Muskegon-Holland ..	556.3	589.2	581.8	(1)	(1)	(1)	29.0	30.4	31.0
Jackson .....	60.8	63.1	62.1	(1)	(1)	(1)	2.8	2.8	2.9
Kalamazoo-Battle Creek .....	206.3	212.6	209.4	(1)	(1)	(1)	9.7	9.5	9.8
Lansing-East Lansing .....	217.2	231.6	228.7	(1)	(1)	(1)	10.1	9.7	10.0
Saginaw-Bay City-Midland .....	171.8	182.7	180.9	(1)	(1)	(1)	9.7	9.3	9.9
<b>Minnesota</b> .....	2,566.8	2,648.6	2,616.1	8.7	8.4	8.5	115.2	120.4	124.4
Duluth-Superior .....	115.1	117.2	116.8	5.0	4.7	4.7	4.8	4.9	5.3
Minneapolis-St. Paul .....	1,660.7	1,722.1	1,707.1	(2)	(2)	(2)	70.5	75.1	76.7
Rochester .....	78.5	81.8	81.4	(1)	(1)	(1)	3.5	3.7	3.8
St. Cloud .....	85.2	88.0	86.7	(1)	(1)	(1)	4.9	5.1	5.1
<b>Mississippi</b> .....	1,127.4	1,133.3	1,125.9	6.4	6.1	6.2	56.4	57.6	57.9
Jackson .....	227.0	230.1	229.7	(2)	(2)	(2)	11.7	12.3	12.7
<b>Missouri</b> .....	2,674.2	2,727.5	2,705.6	4.9	5.1	5.2	138.1	138.0	143.0
Kansas City .....	941.0	973.3	966.8	(1)	(1)	(1)	51.2	53.5	53.8
St. Louis .....	1,297.7	1,330.1	1,325.3	(1)	(1)	(1)	72.4	73.3	75.5
Springfield .....	160.7	166.8	164.4	(1)	(1)	(1)	7.3	7.7	7.7
<b>Montana</b> .....	376.4	384.4	383.9	5.3	5.3	5.3	20.9	20.8	21.7
<b>Nebraska</b> .....	879.2	887.0	880.1	1.2	1.2	1.2	45.0	43.9	44.9
Lincoln .....	147.6	151.3	150.6	(1)	(1)	(1)	7.3	7.5	7.8
Omaha .....	405.7	409.1	406.6	(1)	(1)	(1)	21.6	20.9	21.2
<b>Nevada</b> .....	924.7	966.4	966.7	13.5	13.0	12.5	87.2	88.6	89.7
Las Vegas .....	657.3	694.8	696.2	2.2	2.2	2.1	68.7	70.1	71.0
Peno .....	183.7	187.6	186.9	5	5	5	14.0	13.7	13.9
<b>New Hampshire</b> .....	589.0	606.3	601.2	5	5	5	24.6	25.2	25.6
Manchester .....	98.7	102.2	100.5	(1)	(1)	(1)	4.8	4.8	4.9
Nashua .....	92.6	95.5	94.2	(1)	(1)	(1)	3.2	3.3	3.3
Portsmouth-Rochester .....	117.0	119.8	119.2	(1)	(1)	(1)	4.1	4.2	4.3
<b>New Jersey</b> .....	3,824.0	3,917.2	3,891.6	2.1	2.1	2.0	142.0	142.0	143.6
Atlantic-Cape May .....	198.0	194.6	199.1	(1)	(1)	(1)	6.7	6.8	6.3
Bergen-Passaic .....	651.9	672.1	662.9	(1)	(1)	(1)	24.6	24.2	24.6
Camden .....	482.5	499.5	492.6	(1)	(1)	(1)	23.4	23.5	23.2
Jersey City .....	243.5	249.1	246.2	(1)	(1)	(1)	5.5	5.4	5.4
Middlesex-Somerset-Hunterdon ..	618.5	637.7	630.7	5	5	5	20.3	20.6	20.8
Monmouth-Ocean .....	383.2	389.2	391.5	(1)	(1)	(1)	19.6	19.4	19.8
Newark .....	969.2	991.5	981.7	8	9	10	34.2	34.2	34.4
Trenton .....	197.2	201.5	199.8	(1)	(1)	(1)	4.9	5.0	5.0
Vineland-Millville-Bridgeton ..	58.7	60.0	58.5	2	3	3	2.3	2.1	2.2
<b>New Mexico</b> .....	719.6	734.2	729.3	15.1	13.7	13.5	45.2	44.5	44.9
Albuquerque .....	338.8	346.4	344.2	(1)	(1)	(1)	22.3	22.0	22.2
Las Cruces .....	50.8	52.1	51.0	(1)	(1)	(1)	3.4	3.3	3.3
Santa Fe .....	74.1	74.6	74.9	(1)	(1)	(1)	3.8	3.7	3.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Maryland</b> .....	175.9	177.9	178.1	107.5	113.3	112.1	547.8	552.6	552.8
Baltimore PMSA .....	97.9	100.0	100.1	57.2	59.5	59.4	273.4	273.9	273.0
Baltimore City .....	27.8	29.5	29.5	19.5	20.5	20.5	64.1	65.4	65.4
Suburban Maryland-D.C. ....	39.6	40.4	40.7	36.2	37.9	37.9	199.8	204.7	205.1
<b>Massachusetts</b> .....	446.8	438.7	432.3	134.0	140.1	134.7	729.5	743.7	745.2
Barnstable-Yarmouth .....	2.1	2.2	2.2	3.1	3.2	3.2	24.8	23.4	26.1
Boston .....	223.6	217.1	214.1	84.2	87.6	85.3	416.9	427.8	425.3
Brockton .....	10.3	10.2	9.8	4.6	4.7	4.4	32.4	33.2	33.4
Fitchburg-Leominster .....	13.6	13.6	13.3	1.8	2.0	1.9	12.2	12.8	12.7
Lawrence .....	38.2	37.6	37.0	4.9	5.6	5.2	35.6	37.2	37.0
Lowell .....	28.6	28.5	28.2	6.7	7.6	7.5	24.9	26.0	25.8
New Bedford .....	13.0	13.0	12.8	3.5	3.9	3.7	17.0	17.6	17.5
Pittsfield .....	7.4	7.4	7.4	1.2	1.3	1.3	10.6	10.8	10.8
Springfield .....	38.9	38.8	38.7	9.6	9.9	9.6	59.0	60.2	60.0
Worcester .....	41.0	40.9	40.8	9.5	9.6	9.4	52.1	52.5	52.0
<b>Michigan</b> .....	891.7	966.5	943.9	178.8	181.6	179.9	1,072.2	1,093.0	1,091.2
Ann Arbor .....	48.3	52.9	52.0	6.5	6.6	6.6	54.8	56.0	55.9
Benton Harbor .....	18.5	19.6	19.4	2.9	3.0	3.0	16.5	16.6	16.7
Detroit .....	399.9	439.1	423.1	95.7	96.8	96.0	495.2	507.9	509.1
Flint .....	20.2	36.6	35.4	5.5	6.0	6.1	44.6	45.0	44.8
Grand Rapids-Muskegon-Holland .....	151.2	161.6	160.2	19.4	19.8	20.0	141.1	147.7	146.7
Jackson .....	12.2	12.8	12.6	3.5	3.6	3.6	15.7	16.2	16.0
Kalamazoo-Battle Creek .....	47.6	49.8	49.1	7.4	7.6	7.6	47.1	47.6	47.5
Lansing-East Lansing .....	19.4	28.6	28.2	6.1	6.0	6.1	51.9	52.8	52.3
Saginaw-Bay City-Midland .....	33.6	40.4	39.8	6.9	7.3	7.2	45.7	45.8	46.0
<b>Minnesota</b> .....	449.7	445.7	448.1	127.1	131.4	129.0	621.2	634.5	633.3
Duluth-Superior .....	8.6	8.8	8.8	7.9	7.9	7.9	28.4	28.5	28.6
Minneapolis-St. Paul .....	280.0	284.1	284.5	90.8	95.7	94.9	396.6	407.6	408.5
Rochester .....	13.9	13.7	13.9	2.3	2.4	2.1	15.6	16.1	16.2
St. Cloud .....	16.2	16.1	16.3	3.3	3.5	3.4	25.9	26.3	26.2
<b>Mississippi</b> .....	243.9	241.8	239.6	54.0	54.8	54.5	246.6	245.7	244.7
Jackson .....	20.0	20.7	20.6	16.3	16.9	16.5	55.7	54.3	54.0
<b>Missouri</b> .....	410.7	415.8	412.8	164.3	166.5	165.3	635.6	642.3	641.1
Kansas City .....	102.4	109.7	109.7	75.3	78.6	78.5	232.3	235.5	235.5
St. Louis .....	187.5	192.9	192.2	82.0	83.3	82.2	310.5	315.0	316.8
Springfield .....	23.8	23.9	24.1	10.9	11.6	11.4	45.4	45.9	45.9
<b>Montana</b> .....	24.9	24.6	24.9	21.5	22.0	21.8	103.6	104.3	105.0
<b>Nebraska</b> .....	119.7	117.7	118.4	56.2	59.5	59.8	212.4	212.1	212.9
Lincoln .....	18.0	17.6	17.9	9.9	10.0	10.0	30.6	31.4	31.1
Omaha .....	40.5	39.4	39.2	29.6	31.3	31.3	96.9	98.6	98.7
<b>Nevada</b> .....	42.5	43.1	43.1	48.1	49.8	50.6	190.1	198.6	200.0
Las Vegas .....	22.7	23.6	23.6	34.8	36.0	36.5	138.6	144.0	144.9
Reno .....	13.9	13.9	13.9	11.6	12.3	12.6	41.0	43.0	43.4
<b>New Hampshire</b> .....	105.6	106.7	105.4	20.4	21.8	21.2	156.5	157.2	160.0
Manchester .....	14.7	15.1	15.1	5.8	6.1	6.1	24.3	25.4	25.4
Nashua .....	27.6	27.4	27.1	2.7	3.1	3.0	23.0	23.0	22.9
Portsmouth-Rochester .....	17.9	18.4	18.2	4.0	4.0	3.9	31.9	32.7	33.1
<b>New Jersey</b> .....	473.3	469.6	464.3	256.8	265.5	258.1	893.5	917.6	915.7
Atlantic-Cape May .....	6.3	6.2	6.0	6.7	6.9	6.6	46.5	43.9	46.7
Bergen-Passaic .....	104.0	103.8	100.7	35.7	37.4	36.9	176.1	181.8	177.9
Camden .....	54.5	54.3	54.3	22.6	22.9	22.5	126.7	131.9	130.8
Jersey City .....	27.3	27.6	26.8	29.4	30.4	29.7	56.7	58.2	57.0
Middlesex-Somerset-Hunterdon .....	93.7	91.4	89.4	48.7	48.9	47.3	142.2	146.8	145.1
Monmouth-Ocean .....	20.5	20.5	20.4	19.3	19.9	19.1	104.7	105.5	107.5
Newark .....	132.3	133.5	132.0	81.8	85.4	83.1	192.6	199.7	197.8
Trenton .....	17.7	16.4	16.7	7.2	7.4	7.3	32.2	33.5	33.2
Vineland-Millville-Bridgeton .....	13.1	12.6	13.0	2.6	2.8	2.6	11.7	11.7	11.5
<b>New Mexico</b> .....	44.4	43.6	43.3	32.4	33.5	33.2	172.2	174.7	174.9
Albuquerque .....	28.4	27.7	27.7	15.7	16.8	16.8	82.2	83.1	82.9
Las Cruces .....	2.9	2.9	2.9	1.8	2.1	1.9	11.0	10.9	10.9
Santa Fe .....	1.9	1.9	1.9	1.3	1.3	1.3	15.6	15.6	15.9

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		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Maryland</b> .....	136.2	138.2	139.4	803.2	822.1	828.7	418.0	444.4	424.0
Baltimore PMSA .....	74.5	75.9	76.1	411.5	420.3	422.8	208.8	219.0	208.8
Baltimore City .....	34.1	35.7	36.0	156.6	158.5	160.2	86.7	86.8	84.4
Suburban Maryland-D.C. ....	51.5	53.0	53.3	308.1	313.6	315.9	160.9	171.1	166.6
<b>Massachusetts</b> .....	219.2	223.6	224.0	1,141.3	1,166.8	1,169.1	390.1	422.5	391.5
Barnstable-Yarmouth .....	3.2	3.0	3.0	23.3	22.9	24.0	7.6	8.5	8.5
Boston .....	164.7	168.2	168.9	769.9	784.4	784.7	222.4	239.2	226.1
Brockton .....	3.1	3.2	3.2	25.7	26.3	25.9	15.5	17.2	16.6
Fitchburg-Leominster .....	1.5	1.5	1.5	13.1	13.2	13.2	7.2	8.7	7.6
Lawrence .....	4.7	4.8	4.8	44.3	44.6	44.4	17.0	19.5	17.4
Lowell .....	3.4	3.5	3.5	34.2	35.3	35.5	13.8	16.3	14.4
New Bedford .....	1.8	1.8	1.8	17.6	18.4	18.5	9.4	10.2	9.5
Pittsfield .....	1.9	2.0	2.0	15.2	15.2	15.7	4.8	5.4	4.9
Springfield .....	13.0	13.1	13.0	78.7	79.9	78.9	41.7	46.6	41.7
Worcester .....	14.3	14.2	14.0	68.6	71.9	72.0	34.7	34.8	31.7
<b>Michigan</b> .....	212.7	211.9	213.1	1,247.8	1,286.9	1,274.1	599.1	654.7	603.8
Ann Arbor .....	10.4	10.4	10.5	67.7	70.0	69.5	65.1	69.4	66.0
Benton Harbor .....	2.3	2.3	2.3	19.3	19.4	19.6	8.0	8.7	7.9
Detroit .....	114.3	113.7	115.0	656.6	676.4	669.2	211.2	238.9	214.4
Flint .....	6.6	6.7	6.7	48.4	49.1	48.4	21.2	25.5	21.1
Grand Rapids-Muskegon-Holland ..	23.7	25.3	25.2	144.3	148.9	148.8	47.6	55.5	49.9
Jackson .....	1.9	1.9	1.9	15.1	15.4	15.3	9.6	10.4	9.8
Kalamazoo-Battle Creek .....	10.5	10.1	10.2	53.6	55.1	54.4	30.4	32.9	30.8
Lansing-East Lansing .....	14.2	14.8	14.8	57.2	58.9	58.5	58.3	60.8	58.8
Saginaw-Bay City-Midland .....	6.8	7.0	7.2	48.5	50.5	50.2	20.6	22.4	20.6
<b>Minnesota</b> .....	158.9	160.3	160.9	736.2	757.0	757.0	349.8	390.9	354.9
Duluth-Superior .....	3.5	3.6	3.7	34.2	34.7	34.9	22.7	24.1	22.9
Minneapolis-St. Paul .....	125.4	129.5	130.3	492.3	505.7	508.1	204.5	223.8	203.5
Rochester .....	2.4	2.4	2.4	34.3	36.2	36.5	6.5	7.3	6.5
St. Cloud .....	3.3	3.4	3.4	20.8	21.9	21.5	10.8	11.7	10.8
<b>Mississippi</b> .....	42.8	42.5	42.8	263.4	263.9	264.1	213.9	220.9	216.1
Jackson .....	16.0	16.5	16.5	60.8	60.9	60.8	45.5	47.5	47.6
<b>Missouri</b> .....	163.5	167.6	168.7	769.2	770.4	771.3	387.9	421.8	398.2
Kansas City .....	68.1	69.8	70.0	284.0	287.5	287.9	127.7	138.7	131.4
St. Louis .....	83.4	83.8	84.8	421.3	432.3	432.8	140.6	149.5	141.0
Springfield .....	7.5	7.7	7.7	48.8	49.9	50.0	17.0	20.1	17.6
<b>Montana</b> .....	17.3	17.7	17.9	111.5	114.0	115.4	71.4	75.7	71.9
<b>Nebraska</b> .....	58.3	59.4	59.4	241.4	240.9	239.7	145.0	152.3	143.8
Lincoln .....	9.9	10.5	10.6	40.0	41.3	40.9	31.9	33.0	32.3
Omaha .....	34.2	34.5	34.5	134.8	134.1	133.1	48.1	50.3	48.6
<b>Nevada</b> .....	43.7	45.5	45.6	394.5	413.0	415.0	105.1	114.8	110.2
Las Vegas .....	32.8	34.4	34.6	291.8	311.8	312.9	65.7	72.7	70.6
Reno .....	8.4	8.6	8.6	72.5	71.6	71.9	21.8	24.0	22.1
<b>New Hampshire</b> .....	31.7	32.1	32.1	179.1	183.3	184.4	70.6	79.5	72.0
Manchester .....	7.3	7.0	7.0	32.1	32.5	31.5	9.7	11.3	10.5
Nashua .....	5.2	5.6	5.6	23.9	24.5	24.7	7.0	8.6	7.6
Portsmouth-Rochester .....	6.6	6.8	6.8	33.5	33.3	33.8	19.0	20.4	19.1
<b>New Jersey</b> .....	251.4	259.3	261.0	1,250.3	1,283.9	1,290.8	554.6	577.2	556.1
Atlantic-Cape May .....	6.2	6.3	6.4	96.6	95.3	97.8	29.0	29.2	29.3
Bergen-Passaic .....	37.7	38.4	38.8	205.9	215.4	214.2	67.9	71.1	69.8
Camden .....	25.3	27.4	27.4	156.0	158.9	160.2	74.0	80.6	74.2
Jersey City .....	27.0	28.3	28.5	58.8	60.7	59.9	38.8	38.5	38.9
Middlesex-Somerset-Hunterdon ..	46.2	47.8	47.9	192.8	203.2	203.2	74.1	78.5	76.5
Monmouth-Ocean .....	18.6	19.0	19.3	136.9	138.2	141.0	63.6	66.7	64.4
Newark .....	75.3	77.2	77.9	311.8	318.7	318.6	140.4	141.9	136.9
Trenton .....	11.5	11.3	11.5	73.7	76.2	75.8	50.0	51.7	50.3
Vineyard-Milville-Bridgeton .....	2.9	2.9	2.9	12.9	13.5	13.3	13.0	14.1	12.7
<b>New Mexico</b> .....	32.2	32.9	33.0	205.8	213.2	213.4	172.3	178.1	173.1
Albuquerque .....	17.0	17.5	17.6	108.4	112.5	111.8	64.8	66.8	65.2
Las Cruces .....	2.0	2.0	2.1	13.0	14.1	14.1	16.7	16.8	15.8
Santa Fe .....	3.6	3.6	3.6	22.7	22.8	22.8	25.2	25.7	25.7

See footnotes at end of table.



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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>New York<sup>3</sup></b>	8,230.3	8,448.1	8,381.7	4.9	4.8	4.8	300.7	314.3	322.3
Albany-Schenectady-Troy	437.8	447.5	439.5	6	6	6	17.7	17.7	18.4
Binghamton	113.3	116.4	114.1	(1)	(1)	(1)	4.5	4.5	4.8
Buffalo-Niagara Falls	534.9	552.3	544.7	(1)	(1)	(1)	21.9	21.9	22.7
Dutchess County	107.6	112.8	111.0	(1)	(1)	(1)	4.5	4.5	4.7
Elmira	43.5	44.4	43.3	(1)	(1)	(1)	2.1	2.0	2.1
Glens Falls	53.5	53.7	53.8	(1)	(1)	(1)	2.2	2.2	2.2
Nassau-Suffolk	1,148.6	1,196.7	1,175.3	(1)	(1)	(1)	56.1	60.5	61.7
New York PMSA <sup>3</sup>	4,062.7	4,154.1	4,153.5	(1)	(1)	(1)	130.5	138.2	141.1
New York City <sup>3</sup>	3,536.1	3,611.1	3,615.3	3	2	2	102.6	108.5	110.9
Newburgh	124.2	129.1	127.4	(1)	(1)	(1)	4.7	4.8	4.9
Rochester	532.2	548.9	539.1	4	4	4	20.6	20.1	20.8
Rockland County	105.0	109.7	107.7	(1)	(1)	(1)	4.5	5.2	5.3
Syracuse	337.6	346.1	341.2	(1)	(1)	(1)	14.9	14.9	15.6
Utica-Rome	131.5	133.0	133.6	(1)	(1)	(1)	4.2	3.9	4.3
Westchester County	399.6	410.6	407.8	(1)	(1)	(1)	21.3	22.5	22.9
<b>North Carolina</b>	3,748.8	3,840.8	3,789.4	4.0	4.1	4.1	220.2	219.7	219.3
Asheville	108.5	111.5	110.1	(1)	(1)	(1)	6.6	6.5	6.6
Charlotte-Gastonia-Rock Hill	779.4	795.0	788.8	(1)	(1)	(1)	49.7	50.8	50.9
Greensboro--Winston-Salem--High Point	645.2	658.6	646.2	(1)	(1)	(1)	34.1	33.8	33.6
Raleigh-Durham-Chapel Hill	647.6	671.7	664.6	(1)	(1)	(1)	39.0	41.1	41.1
<b>North Dakota</b>	315.7	320.8	317.2	4.2	3.9	4.0	17.9	18.0	18.6
Bismarck	49.8	51.4	50.4	(1)	(1)	(1)	3.0	3.1	3.1
Fargo-Moorhead	97.8	98.9	97.9	(1)	(1)	(1)	6.9	6.6	6.9
Grand Forks	47.0	48.2	47.6	(1)	(1)	(1)	3.6	3.7	3.9
<b>Ohio</b>	5,438.6	5,580.0	5,522.6	13.5	13.2	13.2	247.5	242.7	250.7
Akron	320.9	328.5	326.6	5	5	5	14.6	15.0	15.4
Canton-Massillon	183.2	188.3	188.0	6	5	5	9.3	10.0	10.3
Cincinnati	865.1	893.6	889.7	7	7	6	41.2	41.4	42.1
Cleveland-Lorain-Elyria	1,151.0	1,171.7	1,162.7	9	9	10	48.4	47.8	49.5
Columbus	837.4	854.3	850.1	6	5	5	37.6	37.7	38.6
Dayton-Springfield	464.4	482.0	473.7	4	4	4	18.6	18.7	19.2
Hamilton-Middletown	120.4	123.3	122.0	(1)	(1)	(1)	8.5	7.9	8.2
Lima	76.8	79.0	78.7	(1)	(1)	(1)	4.2	4.5	4.5
Mansfield	79.3	81.0	80.4	(1)	(1)	(1)	2.8	2.6	2.7
Steubenville-Weirton	51.5	52.5	51.7	4	4	4	1.9	1.8	1.9
Toledo	311.3	324.5	317.1	2	2	2	16.3	16.7	17.2
Youngstown-Warren	238.6	253.1	249.3	5	5	5	11.3	11.7	12.0
<b>Oklahoma</b>	1,432.6	1,480.2	1,464.8	32.2	30.0	30.0	55.4	57.4	57.0
Enid	24.7	25.0	24.8	8	7	7	1.0	9	9
Lawton	38.0	39.1	38.7	1	1	1	1.4	1.6	1.6
Oklahoma City	504.6	526.5	518.8	7.1	6.7	6.7	20.1	20.3	20.3
Tulsa	392.8	410.3	405.7	7.9	7.8	7.8	16.6	17.5	17.3
<b>Oregon</b>	1,552.9	1,595.3	1,581.8	1.9	2.0	2.1	87.5	85.1	88.6
Eugene-Springfield	137.2	144.8	140.9	2	2	2	7.8	7.3	7.8
Medford-Ashland	68.9	72.4	71.4	1	2	2	3.5	3.5	3.6
Portland-Vancouver	934.4	958.8	955.2	1.2	1.3	1.3	55.5	55.9	57.5
Salem	134.8	135.7	135.7	3	3	3	8.6	7.9	8.4
<b>Pennsylvania</b>	5,488.5	5,567.3	5,521.4	21.3	20.6	20.5	235.8	237.7	242.6
Allentown-Bethlehem-Easton	271.6	279.3	276.0	(1)	(1)	(1)	11.3	11.3	11.8
Altoona	58.7	60.7	60.1	(1)	(1)	(1)	2.9	2.8	2.8
Erie	131.2	133.0	132.5	(1)	(1)	(1)	5.3	4.9	5.2
Harrisburg-Lebanon-Carlisle	359.1	361.7	360.2	(1)	(1)	(1)	14.7	14.9	15.2
Johnstown	87.0	87.7	87.3	(1)	(1)	(1)	4.7	4.6	4.7
Lancaster	217.5	219.6	218.9	4	4	4	13.4	13.7	14.0
Philadelphia PMSA	2,306.8	2,343.7	2,325.3	(1)	(1)	(1)	95.2	96.2	97.9
Philadelphia City	666.6	674.2	671.8	(1)	(1)	(1)	11.8	10.9	11.1
Pittsburgh	1,093.5	1,117.5	1,106.0	4.8	4.3	4.3	53.9	54.1	55.2
Reading	162.6	168.3	165.9	(1)	(1)	(1)	7.7	7.7	7.8
Scranton--Wilkes-Barre--Hazleton	276.9	281.0	279.0	4	5	5	11.6	11.3	11.6
Sharon	48.7	48.1	47.7	(1)	(1)	(1)	1.8	1.8	1.9
State College	66.2	67.5	68.3	(1)	(1)	(1)	2.6	2.5	2.4
Williamsport	53.3	54.4	53.9	(1)	(1)	(1)	2.3	2.3	2.3
York	162.4	165.6	165.3	4	4	4	9.2	9.0	9.2

See footnotes at end of table

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>New York<sup>3</sup></b>	905.2	912.7	903.4	406.3	421.9	410.3	1,665.6	1,700.4	1,686.0
Albany-Schenectady-Troy	38.9	39.7	39.5	17.0	17.9	17.4	91.8	92.9	91.8
Binghamton	25.4	24.2	24.1	5.0	5.1	5.0	24.6	24.8	24.7
Buffalo-Niagara Falls	81.2	88.5	87.7	25.0	26.7	25.7	129.3	131.7	130.5
Dutchess County	17.9	18.7	18.7	4.0	4.3	4.2	20.6	21.2	20.9
Elmira	9.9	9.6	9.5	1.6	1.5	1.5	10.3	10.6	10.3
Glens Falls	8.2	8.2	8.0	1.8	1.7	1.8	12.8	12.7	13.0
Nassau-Suffolk	112.9	114.6	113.4	51.3	54.5	51.8	294.4	301.0	297.2
New York PMSA <sup>3</sup>	312.1	312.8	309.5	230.9	237.4	232.0	697.9	718.5	711.4
New York City <sup>3</sup>	260.6	259.9	256.7	204.7	209.6	205.7	583.2	600.4	594.5
Newburgh	12.2	12.3	12.3	6.9	7.5	7.2	35.0	35.3	35.5
Rochester	119.7	119.6	119.5	16.9	17.7	17.2	114.7	117.2	115.9
Rockland County	11.7	12.2	12.2	5.8	6.1	5.4	24.8	25.6	25.5
Syracuse	50.6	51.5	50.7	19.4	20.2	20.1	78.4	79.2	78.4
Utica-Rome	20.3	20.1	19.8	3.7	3.8	3.7	27.1	27.0	27.0
Westchester County	37.8	38.7	38.7	19.7	21.0	20.2	85.6	88.1	87.1
<b>North Carolina</b>	822.4	809.2	804.9	171.9	175.3	175.6	859.5	877.1	876.6
Asheville	19.6	18.5	18.3	4.8	5.0	5.0	27.1	27.8	27.9
Charlotte-Gastonia-Rock Hill	142.4	139.9	138.9	50.5	49.9	50.0	185.2	185.9	185.8
Greensboro-Winston-Salem-High Point	163.8	160.9	159.7	36.3	36.4	36.1	145.2	148.2	148.1
Raleigh-Durham-Chapel Hill	85.6	84.1	84.4	28.7	29.3	29.3	136.7	140.8	140.9
<b>North Dakota</b>	24.3	24.0	23.8	17.7	18.0	17.6	81.2	81.6	81.8
Bismarck	3.0	2.9	2.9	3.2	3.3	3.2	12.1	12.6	12.5
Fargo-Moorhead	8.2	7.9	7.9	5.1	5.0	5.0	27.7	27.7	27.5
Grand Forks	3.4	3.9	3.7	2.1	2.2	2.1	12.9	13.0	13.0
<b>Ohio</b>	1,056.9	1,091.0	1,081.0	241.8	244.7	244.7	1,329.7	1,349.3	1,342.4
Akron	64.3	64.1	62.8	15.0	15.2	15.3	80.6	82.8	83.0
Canton-Massillon	47.2	47.2	47.4	5.0	5.2	5.2	45.1	46.4	46.6
Cincinnati	142.8	143.6	143.5	47.1	47.6	47.6	222.0	227.3	228.8
Cleveland-Lorain-Elyria	219.4	220.5	220.1	46.2	46.8	46.8	275.3	277.3	277.1
Columbus	90.4	94.5	94.1	38.6	38.2	38.4	217.1	218.2	217.3
Dayton-Springfield	90.9	97.1	94.7	21.1	21.1	21.1	109.4	111.1	110.2
Hamilton-Middletown	21.7	21.6	21.5	4.8	4.8	4.9	32.2	32.6	32.7
Lima	19.6	19.8	20.0	3.4	3.3	3.3	18.2	18.6	18.5
Mansfield	22.2	23.1	22.9	3.5	3.2	3.2	18.5	18.3	18.3
Steubenville-Weirton	13.6	13.1	13.3	2.8	2.9	2.8	11.0	11.2	11.1
Toledo	54.0	59.9	54.6	14.7	15.4	15.6	78.9	80.6	80.8
Youngstown-Warren	47.1	55.9	55.2	10.7	11.1	11.0	63.4	64.8	64.7
<b>Oklahoma</b>	183.9	187.3	186.8	83.1	84.8	85.2	331.3	341.3	338.4
Enid	2.3	2.4	2.4	2.3	2.3	2.3	6.2	6.4	6.4
Lawton	3.8	3.8	3.8	1.7	1.6	1.6	9.0	9.2	9.1
Oklahoma City	52.2	55.0	54.7	24.1	24.6	24.8	120.4	124.0	123.1
Tulsa	58.1	58.4	58.2	32.2	34.8	34.8	91.0	95.2	94.6
<b>Oregon</b>	250.8	241.5	244.3	75.8	79.7	78.8	389.4	389.7	392.0
Eugene-Springfield	22.5	22.8	22.8	4.4	4.3	4.3	35.0	35.9	35.9
Medford-Ashland	9.5	9.2	9.3	3.4	3.6	3.5	20.0	20.7	21.1
Portland-Vancouver	151.0	145.9	146.4	53.7	55.5	55.4	235.7	237.2	238.9
Salem	19.2	16.8	19.2	3.9	3.8	3.8	28.7	28.9	29.0
<b>Pennsylvania</b>	947.6	937.6	934.4	278.9	290.0	282.5	1,238.4	1,252.5	1,249.2
Allentown-Bethlehem-Easton	55.7	56.2	55.7	15.5	16.5	16.1	58.4	59.5	59.4
Altoona	10.1	10.4	10.0	4.4	4.5	4.4	15.7	15.9	16.0
Erie	34.2	34.7	34.3	4.9	4.7	4.7	29.5	29.5	29.6
Harrisburg-Lebanon-Carlisle	47.7	44.4	44.6	23.6	24.5	24.2	80.2	81.8	81.6
Johnstown	13.2	13.3	13.4	4.8	4.9	4.8	20.6	21.0	21.2
Lancaster	57.9	56.8	56.8	7.7	7.8	7.6	54.5	55.1	55.2
Philadelphia PMSA	305.8	302.4	299.9	107.6	111.8	109.1	504.8	513.9	510.1
Philadelphia City	57.3	56.9	56.1	34.0	35.7	35.8	112.8	113.3	112.9
Pittsburgh	141.7	140.6	140.7	66.6	69.8	68.9	259.4	262.6	261.1
Reading	40.8	42.0	41.9	8.2	8.8	8.3	38.2	38.8	38.8
Scranton-Wilkes-Barre-Hazleton	55.1	55.3	55.2	15.5	16.5	15.8	66.3	67.8	67.2
Sharon	11.9	10.8	10.8	1.9	2.0	1.9	12.6	12.6	12.6
State College	9.0	9.2	9.2	1.8	2.1	1.8	12.7	13.1	13.5
Williamsport	13.7	13.7	13.6	2.1	2.2	2.1	13.2	13.4	13.5
York	47.6	46.7	46.8	7.7	8.9	8.4	39.6	41.2	41.5

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	Finance, insurance, and real estate			Services			Government		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>New York<sup>3</sup></b> .....	744.1	747.8	750.9	2,806.1	2,910.3	2,902.4	1,397.3	1,436.0	1,401.4
Albany-Schenectady-Troy .....	26.3	26.2	26.2	139.6	142.9	141.8	105.9	109.6	103.7
Binghamton .....	3.9	3.8	3.9	30.9	32.4	32.7	19.2	21.6	19.0
Buffalo-Niagara Falls .....	29.5	29.8	29.9	164.3	166.7	165.0	83.7	87.0	83.0
Dutchess County .....	4.8	5.2	5.3	35.0	35.2	35.9	20.8	23.8	21.2
Elmira .....	1.3	1.3	1.3	11.5	11.8	11.6	6.9	7.6	7.0
Glens Falls .....	2.3	2.3	2.4	17.2	16.2	17.2	9.1	10.5	9.1
Nassau-Suffolk .....	80.7	81.1	81.1	381.8	393.8	394.1	171.3	191.2	175.9
New York PMSA <sup>3</sup> .....	522.4	523.7	525.7	1,501.5	1,580.1	1,564.9	667.5	643.4	668.9
New York City <sup>3</sup> .....	488.4	489.5	491.4	1,310.6	1,386.0	1,369.5	585.7	557.1	586.4
Newburgh .....	6.1	5.8	5.9	34.1	33.9	34.9	25.3	29.4	26.7
Rochester .....	21.4	21.4	21.4	165.5	170.1	169.5	73.0	82.3	74.4
Rockland County .....	5.2	5.2	5.3	34.9	35.4	36.0	18.2	20.0	18.1
Syracuse .....	18.3	18.2	18.2	97.4	99.3	99.4	58.6	62.7	58.7
Utica-Rome .....	8.3	8.4	8.3	40.3	41.6	43.1	27.5	28.2	27.4
Westchester County .....	27.3	27.3	27.4	148.3	151.2	151.4	59.5	61.8	60.3
<b>North Carolina</b> .....	181.0	185.1	185.4	946.2	970.0	966.2	543.6	600.3	557.3
Asheville .....	3.7	3.8	3.8	33.2	34.4	34.3	13.5	15.5	14.2
Charlotte-Gastonia-Rock Hill .....	61.4	65.5	65.7	206.1	214.6	214.6	84.1	88.4	82.9
Greensboro--Winston-Salem--High Point .....	34.7	34.2	34.2	170.1	178.3	177.3	61.0	66.8	57.2
Raleigh-Durham-Chapel Hill .....	30.3	30.7	30.8	209.9	214.8	214.7	117.4	130.9	123.4
<b>North Dakota</b> .....	15.7	16.1	16.0	90.0	91.3	90.9	64.7	67.9	64.5
Bismarck .....	2.4	2.5	2.5	16.3	16.4	16.3	9.8	10.6	9.9
Fargo-Moorhead .....	6.8	7.0	7.1	30.2	30.7	30.7	12.9	14.0	12.8
Grand Forks .....	1.5	1.5	1.5	12.5	12.4	12.5	11.0	11.5	10.9
<b>Ohio</b> .....	302.5	307.0	308.2	1,529.3	1,560.7	1,554.7	717.4	771.4	727.7
Akron .....	13.3	13.6	13.8	90.6	92.7	93.1	42.0	44.6	42.7
Canton-Massillon .....	6.5	6.7	6.8	51.0	52.1	52.2	18.5	20.2	19.0
Cincinnati .....	55.7	56.9	56.7	261.2	272.0	272.8	94.4	104.1	97.6
Cleveland-Lorain-Elyria .....	76.4	77.7	78.0	347.7	352.4	351.2	136.7	148.3	139.0
Columbus .....	76.6	77.4	77.7	242.1	248.2	247.5	134.4	139.6	136.0
Dayton-Springfield .....	19.2	19.6	19.8	138.1	142.1	140.8	66.7	71.9	67.5
Hamilton-Middletown .....	6.6	7.1	7.2	29.9	30.8	31.0	16.7	18.5	16.5
Lima .....	2.0	2.0	2.0	19.4	20.0	20.0	10.0	10.8	10.4
Mansfield .....	2.6	2.5	2.5	19.0	19.7	19.5	10.7	11.6	11.3
Steubenville-Weirton .....	1.5	1.5	1.5	14.0	15.0	14.4	6.3	6.6	6.3
Toledo .....	11.2	11.2	11.2	94.8	96.2	95.9	41.2	44.3	41.6
Youngstown-Warren .....	9.4	9.3	9.4	67.1	67.6	67.2	29.1	32.2	29.3
<b>Oklahoma</b> .....	73.9	76.6	76.6	409.6	424.2	423.3	263.2	278.6	267.5
Enid .....	1.1	1.2	1.2	7.3	7.0	7.2	3.7	4.1	3.7
Lawton .....	1.8	1.9	1.9	8.6	8.6	8.7	11.6	12.3	11.9
Oklahoma City .....	30.2	31.1	31.1	156.4	161.9	161.7	94.1	102.9	96.4
Tulsa .....	21.4	22.9	22.7	125.4	130.9	129.5	39.2	42.8	40.8
<b>Oregon</b> .....	96.5	97.5	98.3	417.2	430.8	435.4	233.8	269.0	242.3
Eugene-Springfield .....	7.3	7.4	7.4	38.6	40.1	39.8	21.4	26.8	22.7
Medford-Ashland .....	3.1	3.1	3.1	19.7	20.2	20.5	9.6	11.9	10.1
Portland-Vancouver .....	67.7	69.6	69.8	258.7	269.5	271.0	110.9	123.9	114.9
Salem .....	6.7	6.8	6.8	31.5	32.2	32.0	35.9	39.0	36.2
<b>Pennsylvania</b> .....	323.4	328.3	330.3	1,785.1	1,803.7	1,800.4	658.0	696.9	661.5
Allentown-Bethlehem-Easton .....	14.0	14.4	14.5	88.0	88.9	88.9	28.7	32.5	29.6
Altoona .....	1.7	1.7	1.7	16.3	17.2	17.0	7.6	8.2	8.2
Erie .....	5.5	5.6	5.7	37.8	38.9	38.9	14.0	14.7	14.1
Harrisburg-Lebanon-Carlisle .....	25.5	25.5	25.5	104.0	105.1	106.4	63.4	65.5	62.7
Johnstown .....	4.2	4.2	4.2	26.0	25.7	25.6	13.5	14.0	13.4
Lancaster .....	9.8	10.0	10.0	57.1	57.9	58.2	16.7	17.9	16.7
Philadelphia PMSA .....	163.2	165.8	165.4	852.3	863.6	864.4	277.9	290.0	278.5
Philadelphia City .....	52.5	51.9	51.5	287.0	294.6	292.6	111.2	110.9	111.8
Pittsburgh .....	66.0	66.5	66.5	386.0	395.8	395.2	115.1	123.8	114.1
Reading .....	8.3	8.7	8.7	43.2	43.3	43.3	16.2	19.0	17.1
Scranton--Wilkes-Barre--Hazleton .....	14.0	14.5	14.5	80.7	80.9	80.7	33.3	34.2	33.5
Sharon .....	1.6	1.5	1.5	13.7	13.9	13.8	5.2	5.5	5.2
State College .....	2.1	2.2	2.2	15.1	15.0	15.3	22.9	23.4	23.9
Williamsport .....	2.1	2.2	2.2	14.2	14.4	14.5	5.7	6.2	5.7
York .....	5.2	5.2	5.2	38.5	39.0	39.4	14.2	15.2	14.4

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		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Rhode Island</b> .....	455.6	467.1	461.3	.2	.2	.2	16.6	17.0	17.6
Providence-Fall River-Warwick .....	509.5	525.5	517.4	.3	.3	.3	18.7	19.1	19.5
<b>South Carolina</b> .....	1,783.4	1,857.4	1,830.3	1.8	1.9	1.9	108.0	113.6	113.7
Charleston-North Charleston .....	234.2	247.4	244.4	(1)	(1)	(1)	17.2	19.0	19.1
Columbia .....	290.6	304.2	301.3	(1)	(1)	(1)	16.3	17.7	17.8
Greenville-Spartanburg-Anderson .....	466.8	484.8	478.4	(1)	(1)	(1)	31.6	33.2	33.4
<b>South Dakota</b> .....	365.4	374.3	369.8	1.7	1.6	1.7	18.3	18.5	18.8
Rapid City .....	49.9	50.0	50.0	(1)	(1)	(1)	3.2	3.5	3.6
Sioux Falls .....	106.6	111.7	111.8	(1)	(1)	(1)	5.9	6.4	6.5
<b>Tennessee</b> .....	2,632.7	2,678.0	2,664.7	4.3	4.2	4.2	128.6	132.8	136.1
Chattanooga .....	218.3	218.7	217.4	(1)	(1)	(1)	9.9	9.5	9.6
Johnson City-Kingsport-Bristol .....	192.8	193.9	191.8	(1)	(1)	(1)	11.5	11.3	11.4
Knoxville .....	326.5	328.5	325.2	6	6	6	17.0	16.7	16.7
Memphis .....	578.4	594.8	591.1	(1)	(1)	(1)	28.2	27.8	27.8
Nashville .....	646.2	658.8	657.0	(1)	(1)	(1)	33.6	34.2	34.2
<b>Texas</b> .....	8,930.9	9,196.8	9,173.7	168.1	153.0	153.7	507.4	530.3	534.3
Abilene .....	56.9	58.3	58.3	1.4	1.1	1.1	2.4	2.5	2.5
Amarillo .....	95.4	97.7	97.7	7	6	6	4.9	4.6	4.7
Austin-San Marcos .....	594.8	621.2	620.1	1.3	1.3	1.3	33.7	36.6	37.0
Beaumont-Port Arthur .....	160.7	164.6	163.3	9	8	8	17.1	18.1	18.3
Brazoria .....	74.8	75.2	74.8	1.5	1.5	1.5	11.5	11.3	11.4
Brownsville-Harlingen-San Benito .....	99.2	101.0	100.3	(1)	(1)	(1)	3.9	3.9	4.0
Bryan-College Station .....	68.6	69.7	70.6	9	8	8	3.1	3.4	3.4
Corpus Christi .....	157.1	159.1	157.8	2.4	2.1	2.1	12.0	11.5	11.5
Dallas .....	1,840.0	1,900.9	1,896.5	11.7	11.8	11.9	92.1	97.9	99.2
El Paso .....	242.0	250.3	249.5	(1)	(1)	(1)	11.3	12.1	11.7
Ft. Worth-Arlington .....	739.4	769.0	766.3	4.8	4.6	4.7	39.6	42.9	43.3
Galveston-Texas City .....	89.3	90.4	89.0	8	7	7	4.2	4.3	4.3
Houston .....	1,993.2	2,033.1	2,027.7	69.8	64.0	64.1	138.6	144.6	145.5
Killeen-Temple .....	99.3	101.1	100.5	(1)	(1)	(1)	4.4	4.5	4.5
Laredo .....	63.4	65.6	65.4	2.3	1.4	1.4	2.4	2.5	2.5
Longview-Marshall .....	89.8	91.9	91.3	3.6	3.2	3.1	4.3	4.3	4.4
Lubbock .....	113.6	115.5	115.6	1	1	1	4.2	4.4	4.5
McAllen-Edinburg-Mission .....	137.4	141.1	139.3	1.2	1.2	1.2	6.9	7.1	7.1
Odessa-Midland .....	106.1	103.8	103.2	13.1	11.3	11.3	7.8	7.2	7.3
San Angelo .....	44.2	45.0	44.8	6	5	5	2.0	2.1	2.2
San Antonio .....	679.2	706.4	700.8	1.8	1.8	1.8	36.1	37.5	37.7
Sherman-Denison .....	43.0	44.7	44.4	(1)	(1)	(1)	2.5	2.7	2.7
Texarkana .....	50.7	52.4	51.8	(1)	(1)	(1)	2.2	2.4	2.4
Tyler .....	78.7	82.2	81.4	1.7	1.5	1.6	3.4	3.6	3.6
Victoria .....	35.7	36.4	36.2	1.8	1.7	1.7	2.3	2.6	2.6
Waco .....	95.9	98.7	98.6	(1)	(1)	(1)	4.8	5.1	5.1
Wichita Falls .....	58.9	60.5	60.2	1.1	1.0	1.0	2.6	2.6	2.5
<b>Utah</b> .....	1,019.0	1,056.2	1,045.1	8.2	7.6	7.8	72.4	76.0	77.6
Provo-Orem .....	138.3	143.8	142.6	(1)	(1)	(1)	10.4	11.1	11.2
Salt Lake City-Ogden .....	685.9	708.3	702.3	2.8	2.8	2.8	47.7	49.8	51.0
<b>Vermont</b> .....	282.2	290.8	287.3	6	7	7	15.9	15.4	16.0
Barre-Montpelier .....	30.9	32.1	31.8	(1)	(1)	(1)	1.7	1.4	1.5
Burlington .....	99.8	103.4	100.8	(1)	(1)	(1)	5.4	5.9	6.0
<b>Virginia</b> .....	3,304.3	3,403.8	3,375.8	10.5	9.9	9.8	194.9	200.7	203.2
Bristol .....	38.0	40.2	39.7	(1)	(1)	(1)	1.6	1.8	1.8
Charlottesville .....	83.9	86.3	83.6	(1)	(1)	(1)	4.6	4.6	4.7
Danville .....	43.9	45.1	43.8	(1)	(1)	(1)	2.6	2.9	2.9
Lynchburg .....	97.0	99.6	98.6	(1)	(1)	(1)	6.2	6.1	6.3
Norfolk-Virginia Beach-Newport News .....	680.0	691.9	685.1	(1)	(1)	(1)	41.0	40.6	40.9
Northern Virginia .....	1,044.4	1,091.6	1,086.2	8	8	8	60.8	63.4	64.2
Richmond-Petersburg .....	529.6	549.4	545.9	8	8	8	33.6	34.0	34.4
Roanoke .....	143.2	148.7	146.9	(1)	(1)	(1)	9.0	9.0	8.9
<b>Washington</b> .....	2,605.6	2,672.8	2,656.2	3.5	3.4	3.5	149.6	152.7	158.2
Seattle-Bellevue-Everett .....	1,354.9	1,386.6	1,378.8	7	7	7	75.2	77.4	81.2
Spokane .....	188.6	190.8	187.3	(1)	(1)	(1)	11.2	10.7	11.2
Tacoma .....	236.0	240.8	239.9	2	2	2	13.9	14.4	14.7

See footnotes at end of table

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Rhode Island</b> .....	75.3	78.4	75.4	15.9	16.4	15.6	101.4	102.5	103.0
Providence-Fall River-Warwick .....	97.2	101.4	97.6	17.8	18.9	18.2	116.7	119.7	119.6
<b>South Carolina</b> .....	363.9	362.3	360.5	77.2	80.5	80.3	435.4	451.1	449.6
Charleston-North Charleston .....	22.3	22.7	22.4	13.2	12.8	13.0	59.4	62.3	62.4
Columbia .....	26.6	26.7	26.7	13.2	13.8	13.9	66.4	69.1	69.1
Greenville-Spartanburg-Anderson .....	121.3	121.3	121.0	20.8	21.2	21.4	119.9	124.3	123.7
<b>South Dakota</b> .....	50.0	49.3	49.5	16.6	16.5	16.4	91.2	92.5	91.8
Rapid City .....	4.7	4.4	4.3	2.0	2.0	2.0	15.0	14.7	15.1
Sioux Falls .....	14.4	14.7	14.9	6.8	6.8	6.9	26.8	28.2	28.2
<b>Tennessee</b> .....	511.1	507.3	504.8	158.8	162.7	162.5	626.3	639.4	640.8
Chattanooga .....	44.0	44.2	44.1	11.5	11.7	11.7	49.6	48.4	48.2
Johnson City-Kingsport-Bristol .....	49.1	47.0	46.8	7.7	7.8	7.8	45.3	45.7	45.8
Knoxville .....	47.4	46.7	46.4	14.4	14.2	14.1	89.1	89.2	89.2
Memphis .....	64.6	63.4	63.1	67.4	73.9	72.5	143.8	147.6	147.6
Nashville .....	94.6	95.6	95.8	32.6	33.0	33.2	157.7	161.6	161.9
<b>Texas</b> .....	1,106.5	1,103.1	1,101.7	545.1	562.5	564.5	2,112.2	2,159.0	2,155.0
Abilene .....	3.6	3.6	3.6	2.5	2.5	2.5	15.1	16.1	16.1
Amarillo .....	9.3	9.0	9.1	5.2	5.4	5.5	27.0	27.7	28.0
Austin-San Marcos .....	83.6	84.3	84.9	19.6	21.0	21.0	129.8	135.9	136.7
Beaumont-Port Arthur .....	25.9	25.7	25.6	8.1	8.1	8.1	36.3	37.3	37.2
Brazoria .....	15.4	14.7	14.6	2.9	2.8	2.8	14.8	15.6	15.6
Brownsville-Harlingen-San Benito .....	12.0	11.8	11.8	4.8	4.8	4.8	24.1	24.6	24.6
Bryan-College Station .....	4.6	5.2	5.3	1.5	1.6	1.6	15.0	15.1	15.2
Corpus Christi .....	13.5	13.5	13.5	6.7	6.7	6.7	36.9	36.8	36.7
Dallas .....	253.8	255.3	255.3	125.7	130.2	130.5	444.5	457.7	455.0
El Paso .....	41.5	41.4	41.8	13.8	14.9	14.9	59.2	59.9	60.4
Ft. Worth-Arlington .....	110.3	113.2	113.0	69.6	73.2	73.7	185.0	192.3	191.8
Galveston-Texas City .....	8.4	8.1	8.0	4.0	4.4	4.4	20.4	20.4	20.4
Houston .....	221.0	214.1	214.2	142.1	144.4	145.6	452.4	467.6	467.3
Killeen-Temple .....	9.5	9.7	9.7	3.5	3.4	3.4	23.5	23.5	23.6
Laredo .....	1.6	1.6	1.6	11.0	11.7	11.8	17.1	17.4	17.6
Longview-Marshall .....	19.4	19.6	19.5	4.0	4.0	4.0	23.1	23.7	23.8
Lubbock .....	7.9	7.4	7.3	5.7	5.8	5.8	31.8	32.5	32.4
McAllen-Edinburg-Mission .....	12.2	12.0	11.9	5.2	5.2	5.2	37.8	38.6	38.4
Odessa-Midland .....	7.5	6.7	6.7	4.0	3.9	3.9	28.7	27.9	27.9
San Angelo .....	4.8	4.9	4.9	2.9	3.1	3.1	10.4	10.4	10.4
San Antonio .....	51.9	52.8	53.0	32.6	32.4	32.5	165.7	169.4	169.9
Sherman-Denison .....	9.7	9.9	9.9	1.7	1.7	1.7	9.8	9.9	9.8
Texarkana .....	5.6	5.7	5.7	2.6	2.8	2.8	13.8	14.1	14.1
Tyler .....	10.2	10.8	10.4	3.8	3.9	3.8	20.4	21.7	21.7
Victoria .....	3.3	3.1	3.1	1.6	1.6	1.6	9.6	9.9	9.9
Waco .....	16.3	16.7	16.6	3.9	4.0	4.0	22.1	22.9	22.8
Wichita Falls .....	8.0	8.5	8.4	2.9	3.0	3.0	14.1	14.4	14.4
<b>Utah</b> .....	133.6	133.7	133.7	59.0	59.8	59.8	243.6	248.6	248.8
Provo-Orem .....	19.8	19.9	19.7	2.4	2.4	2.4	31.6	33.2	33.5
Salt Lake City-Ogden .....	82.7	82.8	82.9	46.9	47.3	47.1	165.5	168.1	168.0
<b>Vermont</b> .....	48.4	49.1	49.1	12.5	12.7	12.3	66.5	66.6	66.7
Barre-Montpelier .....	3.2	3.8	3.7	1.1	1.3	1.3	7.0	7.0	7.0
Burlington .....	19.2	18.8	18.9	4.8	4.9	4.9	22.5	22.6	22.3
<b>Virginia</b> .....	402.8	395.8	393.3	174.4	180.5	181.6	732.6	747.4	745.7
Bristol .....	9.2	9.2	9.2	1.4	1.3	1.3	10.7	11.4	11.6
Charlottesville .....	8.5	8.7	8.5	2.5	2.7	2.6	16.4	16.8	16.7
Danville .....	14.3	14.2	14.1	1.0	1.0	1.0	9.6	9.4	9.4
Lynchburg .....	25.4	25.3	25.3	3.6	3.6	3.6	20.2	20.2	20.1
Norfolk-Virginia Beach-Newport News .....	69.7	63.9	63.1	31.9	31.3	31.6	160.3	164.4	163.8
Northern Virginia .....	43.9	43.7	43.7	65.1	70.1	70.6	217.8	224.9	223.8
Richmond-Petersburg .....	61.4	60.7	60.8	28.3	29.7	29.9	123.4	128.7	128.2
Roanoke .....	18.6	19.0	18.8	8.7	9.0	9.0	36.3	37.4	37.5
<b>Washington</b> .....	383.6	367.4	365.7	136.7	140.3	140.9	632.9	646.8	649.8
Seattle-Bellevue-Everett .....	229.5	215.1	213.1	80.8	82.9	82.0	321.0	327.2	328.2
Spokane .....	22.6	21.0	21.1	8.2	8.2	8.2	49.2	49.6	49.7
Tacoma .....	26.4	24.4	24.6	9.5	10.0	9.8	58.8	59.1	59.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Rhode Island</b>	29.0	29.7	29.8	158.0	158.2	159.4	59.2	64.7	60.3
Providence-Fall River-Warwick	30.9	31.8	32.0	167.6	168.6	169.8	60.3	65.7	60.4
<b>South Carolina</b>	81.4	84.9	85.2	426.5	447.1	444.3	289.2	316.0	294.8
Charleston-North Charleston	8.7	8.9	8.9	65.4	70.8	70.1	48.0	50.9	48.5
Columbia	22.0	22.8	23.0	73.8	77.9	78.0	72.3	76.2	72.8
Greenville-Spartanburg-Anderson	16.3	16.3	16.4	102.1	108.4	107.2	54.8	60.1	55.3
<b>South Dakota</b>	22.6	23.8	23.9	97.8	98.7	99.4	67.2	73.4	68.3
Rapid City	2.8	2.9	2.9	15.7	15.1	15.1	6.5	7.4	7.0
Sioux Falls	11.8	12.4	12.5	31.9	32.8	33.3	9.0	10.4	9.5
<b>Tennessee</b>	126.7	128.1	128.1	713.1	723.6	722.1	363.8	379.9	366.1
Chattanooga	15.7	15.9	15.9	56.5	57.5	57.5	31.1	31.5	30.4
Johnson City-Kingsport-Bristol	6.1	6.2	6.3	47.8	47.3	47.3	25.3	28.6	26.4
Knoxville	14.9	15.2	15.2	90.8	91.0	90.7	52.3	54.9	52.3
Memphis	28.4	29.2	29.3	170.7	173.7	173.4	75.3	79.2	77.4
Nashville	42.2	42.6	42.5	208.4	209.6	209.9	77.1	82.2	79.5
<b>Texas</b>	500.8	516.3	519.9	2,544.2	2,657.9	2,664.1	1,446.6	1,514.7	1,480.5
Abilene	2.5	2.6	2.6	19.7	19.7	19.8	9.7	10.2	10.1
Amarillo	5.1	5.2	5.3	27.8	28.6	28.7	15.4	16.6	15.8
Austin-San Marcos	31.7	32.7	32.8	175.8	183.3	184.7	119.3	126.1	121.7
Beaumont-Port Arthur	5.2	5.3	5.3	42.5	43.0	43.1	24.7	26.3	24.9
Brazoria	1.9	1.9	1.9	13.7	13.8	13.8	13.1	13.6	13.2
Brownsville-Harlingen-San Benito	3.7	3.7	3.7	28.6	28.7	28.7	22.1	23.5	22.7
Bryan-College Station	2.7	2.8	2.8	15.5	15.8	15.7	25.3	25.0	25.8
Corpus Christi	6.6	6.6	6.6	49.5	51.7	51.7	29.5	30.2	29.0
Dallas	152.7	158.0	158.7	566.8	587.5	589.0	192.7	202.5	196.9
El Paso	9.7	9.8	9.8	58.1	60.3	60.7	48.4	51.9	50.2
Ft. Worth-Arlington	35.0	36.3	36.5	206.0	211.8	211.9	89.1	94.7	91.4
Galveston-Texas City	6.1	6.2	6.2	19.5	20.1	20.1	25.9	26.2	24.9
Houston	107.2	110.6	111.0	616.8	634.7	636.1	245.3	253.1	243.9
Killeen-Temple	4.2	4.3	4.4	27.6	27.9	28.0	26.6	27.8	26.9
Laredo	2.3	2.4	2.5	12.9	13.7	13.8	13.8	14.9	14.2
Longview-Marshall	3.6	3.9	3.9	21.4	21.8	21.8	10.4	11.4	10.8
Lubbock	5.8	5.9	5.9	34.7	35.4	35.7	23.4	24.0	23.9
McAllen-Edinburg-Mission	5.0	5.2	5.2	32.8	33.2	33.2	36.3	38.6	37.1
Odessa-Midland	3.9	3.9	3.9	25.0	25.6	25.6	16.1	17.3	16.6
San Angelo	1.8	2.0	2.0	12.6	12.7	12.8	9.1	9.3	8.9
San Antonio	45.9	47.2	47.2	218.8	233.4	233.6	126.4	131.9	125.1
Sherman-Denison	2.5	2.6	2.6	11.6	12.2	12.2	5.2	5.7	5.5
Texarkana	1.7	1.4	1.4	14.3	15.0	14.9	10.5	11.0	10.5
Tyler	4.0	4.0	4.1	24.6	25.4	25.5	10.6	11.3	10.7
Victoria	1.4	1.5	1.5	9.7	9.9	9.9	6.0	6.1	5.9
Waco	6.0	6.1	6.2	28.3	28.7	28.9	14.5	15.2	15.0
Wichita Falls	2.3	2.4	2.4	16.1	16.2	16.2	11.8	12.4	12.3
<b>Utah</b>	55.7	58.3	58.5	281.2	291.6	292.9	165.3	180.6	166.0
Provo-Orem	4.3	4.7	4.7	53.0	53.9	54.8	16.8	18.6	16.3
Salt Lake City-Ogden	45.8	47.3	47.7	186.4	192.4	193.0	108.1	117.8	109.8
<b>Vermont</b>	12.4	13.1	13.4	87.6	86.4	89.7	38.3	46.8	39.4
Barre-Montpelier	2.4	2.6	2.7	8.6	8.6	8.9	6.9	7.4	6.7
Burlington	4.9	4.8	4.9	30.1	30.3	30.7	12.9	16.1	13.1
<b>Virginia</b>	178.2	182.1	183.4	1,032.9	1,077.7	1,072.1	578.0	609.7	586.7
Bristol	1.3	1.4	1.5	8.4	9.0	8.8	5.4	6.1	5.5
Charlottesville	4.6	4.8	4.8	20.8	22.5	21.6	26.5	26.2	24.7
Danville	1.5	1.5	1.5	9.8	10.1	9.5	5.1	6.0	5.4
Lynchburg	4.4	4.4	4.3	24.6	26.5	26.0	12.6	13.5	13.0
Norfolk-Virginia Beach-Newport News	33.9	34.3	34.4	205.4	213.6	212.7	137.8	143.8	138.6
Northern Virginia	59.7	62.2	62.7	421.0	443.3	443.9	175.3	183.2	176.5
Richmond-Petersburg	45.0	47.0	47.3	138.9	145.3	143.8	98.2	103.2	100.7
Roanoke	9.9	10.6	10.6	43.5	45.6	45.4	17.2	18.1	16.7
<b>Washington</b>	137.3	141.8	142.6	714.3	738.9	739.8	447.7	481.5	455.7
Seattle-Bellevue-Everett	81.5	85.8	86.4	390.6	403.6	406.4	175.6	193.9	180.8
Spokane	11.2	11.6	11.7	58.2	57.4	57.3	28.0	32.3	28.1
Tacoma	12.7	13.1	13.1	67.3	69.3	69.1	47.2	50.3	48.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>
<b>West Virginia</b> .....	726.0	730.0	734.2	23.4	21.1	20.9	37.2	35.7	37.5
Charleston .....	134.8	134.8	136.0	1.9	1.8	1.8	7.5	7.0	7.3
Huntington-Ashland .....	120.4	123.0	122.6	1.4	1.5	1.5	6.1	5.3	5.4
Parkersburg-Marietta .....	69.9	71.0	70.9	.3	.3	.3	4.5	4.2	4.3
Wheeling .....	67.7	67.1	67.8	1.7	1.5	1.5	2.9	2.7	2.9
<b>Wisconsin</b> .....	2,724.8	2,779.7	2,754.3	3.1	2.9	2.9	124.4	126.3	128.8
Appleton-Oshkosh-Neenah .....	198.4	203.4	202.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	11.6	12.6	12.8
Eau Claire .....	73.9	75.6	74.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.6	3.6	3.7
Green Bay .....	137.5	140.7	139.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.3	7.6	7.6
Janesville-Beloit .....	65.8	71.2	68.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.9	3.1	3.1
Kenosha .....	52.0	54.4	52.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.4	2.4	2.5
La Crosse .....	69.0	71.3	70.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.1	3.4	3.4
Madison .....	275.2	284.0	282.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	14.1	14.6	14.9
Milwaukee-Waukesha .....	845.2	863.9	854.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	33.3	33.8	34.4
Racine .....	81.8	83.8	82.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.8	3.8	3.8
Sheboygan .....	60.1	62.0	61.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.6	2.5	2.6
Wausau .....	66.6	68.9	67.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.2	3.3	3.3
<b>Wyoming</b> .....	233.7	240.6	236.8	17.3	17.0	17.3	17.8	18.1	18.6
Casper .....	30.7	32.5	31.8	2.2	2.1	2.1	2.0	2.6	2.7
<b>Puerto Rico</b> .....	994.0	1,009.9	1,003.5	1.3	1.4	1.5	58.0	60.8	60.3
Caguas .....	68.3	70.5	68.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.1	2.4	2.3
Mayaguez .....	71.7	70.5	68.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.0	4.4	4.2
Ponce .....	77.6	79.2	80.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.1	5.8	6.1
San Juan-Bayamon .....	613.8	622.2	618.1	.6	.7	.7	40.7	42.3	42.3
<b>Virgin Islands</b> .....	42.5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.8	( <sup>2</sup> )	( <sup>2</sup> )

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>West Virginia</b> .....	82.7	81.8	82.5	39.2	39.6	39.4	164.4	168.7	169.0
Charleston .....	10.1	10.2	10.2	9.4	9.1	9.3	32.0	33.3	33.5
Huntington-Ashland .....	16.4	15.9	16.4	6.7	7.0	7.0	31.5	31.8	31.5
Parkersburg-Marietta .....	13.0	12.6	12.5	2.7	2.7	2.7	17.5	18.5	18.7
Wheeling .....	6.3	6.3	6.3	2.6	2.7	2.7	17.1	17.3	17.2
<b>Wisconsin</b> .....	620.7	617.3	616.7	125.1	128.9	125.9	617.4	623.6	620.4
Appleton-Oshkosh-Neenah .....	59.9	60.7	61.2	7.8	8.8	8.6	41.7	42.1	41.8
Eau Claire .....	13.7	14.0	13.9	3.5	3.6	3.5	19.8	20.2	20.0
Green Bay .....	29.8	29.1	29.6	10.0	10.4	10.2	31.7	32.5	32.5
Janesville-Beloit .....	17.4	20.2	18.1	2.6	3.1	2.9	16.4	17.2	17.1
Kenosha .....	11.2	11.8	10.5	1.7	1.9	1.7	12.9	13.2	13.2
La Crosse .....	11.8	11.9	11.6	3.2	3.6	3.6	18.4	19.3	19.1
Madison .....	29.9	30.0	30.0	9.0	9.6	9.4	59.2	60.7	60.6
Milwaukee-Waukesha .....	179.1	178.0	176.8	39.5	41.6	40.7	182.3	184.2	183.3
Racine .....	24.8	24.4	24.3	2.5	2.6	2.5	16.8	17.8	17.6
Sheboygan .....	25.5	26.0	26.3	1.7	1.7	1.7	10.7	11.2	11.0
Wausau .....	19.7	19.7	19.7	3.3	3.3	3.1	16.6	17.0	17.0
<b>Wyoming</b> .....	11.1	11.3	11.4	14.1	14.3	14.3	55.8	55.6	56.4
Casper .....	1.5	1.6	1.6	1.8	1.9	1.9	8.5	8.6	8.5
<b>Puerto Rico</b> .....	145.9	140.4	138.5	26.3	27.2	28.3	197.8	200.9	200.7
Caguas .....	15.7	15.4	15.3	1.1	1.2	1.2	15.1	16.0	15.7
Mayaguez .....	18.1	15.5	15.2	.7	.7	.7	12.0	12.2	12.1
Ponce .....	9.9	9.4	9.2	2.4	2.4	2.6	13.2	13.4	13.4
San Juan-Bayamon .....	66.5	65.5	64.7	19.9	19.7	20.5	130.1	132.2	132.6
<b>Virgin Islands</b> .....	2.5	( <sup>2</sup> )	( <sup>2</sup> )	2.3	( <sup>2</sup> )	( <sup>2</sup> )	8.9	( <sup>2</sup> )	( <sup>2</sup> )

See footnotes at end of table.



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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>
<b>West Virginia</b> .....	28.9	29.7	29.7	209.3	212.9	214.1	140.9	140.5	141.1
Charleston .....	8.0	8.0	8.1	41.5	41.2	41.5	24.4	24.2	24.3
Huntington-Ashland .....	3.9	4.7	4.8	35.5	36.3	36.2	18.9	20.5	19.8
Parkersburg-Marietta .....	2.6	2.7	2.7	20.3	20.6	20.8	9.0	9.4	8.9
Wheeling .....	2.7	2.7	2.7	24.0	23.4	24.2	10.4	10.5	10.3
<b>Wisconsin</b> .....	145.7	149.1	150.0	720.7	732.7	737.1	367.8	398.9	372.5
Appleton-Oshkosh-Neenah .....	9.7	10.2	10.2	45.4	45.9	45.7	22.2	23.1	22.0
Eau Claire .....	2.6	2.9	2.9	20.2	20.2	20.1	10.5	11.0	10.5
Green Bay .....	9.9	9.9	9.9	33.7	34.2	34.3	15.1	16.9	15.6
Janesville-Beloit .....	2.0	2.0	2.1	16.1	17.1	16.3	8.3	8.5	8.6
Kenosha .....	1.7	1.8	1.8	14.6	14.6	14.8	7.4	8.7	7.9
La Crosse .....	2.5	2.6	2.6	21.2	21.6	21.5	8.7	9.0	8.9
Madison .....	22.0	22.6	22.6	71.8	73.9	73.9	69.2	72.7	70.8
Milwaukee-Waukesha .....	59.1	59.1	59.5	267.9	274.2	275.2	83.9	93.0	84.8
Racine .....	2.4	2.6	2.6	21.9	22.5	22.5	9.6	10.1	9.6
Sheboygan .....	2.2	2.2	2.2	12.0	11.9	11.9	5.4	6.4	5.4
Wausau .....	5.0	5.4	5.4	12.1	12.8	12.7	6.5	7.5	6.7
<b>Wyoming</b> .....	8.9	8.9	9.0	56.6	56.1	57.5	52.1	59.3	52.3
Casper .....	1.3	1.3	1.3	8.7	8.8	8.9	4.7	5.6	4.8
<b>Puerto Rico</b> .....	47.4	45.9	47.1	192.0	197.8	194.9	325.3	335.5	332.2
Caguas .....	1.7	1.5	1.6	11.9	12.2	11.8	19.7	21.8	21.0
Mayaguez .....	2.1	2.1	2.1	11.1	11.7	10.8	23.7	23.9	23.1
Ponce .....	2.3	2.2	2.5	16.7	17.7	17.0	28.0	28.3	29.2
San Juan-Bayamon .....	37.0	35.7	36.5	128.3	131.0	128.7	190.7	195.1	192.1
<b>Virgin Islands</b> .....	1.9	( <sup>2</sup> )	( <sup>2</sup> )	10.1	( <sup>2</sup> )	( <sup>2</sup> )	15.0	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Combined with construction.

<sup>2</sup> Not available.

<sup>3</sup> Total nonfarm and government employment data have been revised for July and August 1998 as a result of a correction in local education employment for those months.

<sup>P</sup> = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1998 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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Total private</b> .....		34.8	35.2	34.6	34.7	35.1	-	-	-	-	-
<b>Goods-producing</b> .....		40.9	41.4	41.3	40.9	41.3	-	-	-	-	-
<b>Mining</b> .....		43.9	44.0	44.2	44.6	44.5	-	-	-	-	-
Metal mining .....	10	45.0	44.9	44.6	45.7	-	-	-	-	-	-
Iron ores .....	101	44.1	44.4	44.8	45.4	-	-	-	-	-	-
Copper ores .....	102	46.9	46.9	46.8	50.1	-	-	-	-	-	-
Coal mining .....	12	42.8	44.5	45.0	43.7	-	-	-	-	-	-
Bituminous coal and lignite mining .....	122	42.5	44.6	45.4	43.9	-	-	-	-	-	-
Oil and gas extraction .....	13	42.9	42.3	42.4	43.5	-	-	-	-	-	-
Crude petroleum and natural gas .....	131	42.5	41.7	40.4	41.8	-	-	-	-	-	-
Oil and gas field services .....	138	42.9	42.5	43.5	44.6	-	-	-	-	-	-
Nonmetallic minerals, except fuels .....	14	47.8	47.9	47.7	47.3	-	-	-	-	-	-
Crushed and broken stone .....	142	50.1	50.1	49.4	49.1	-	-	-	-	-	-
<b>Construction</b> .....		40.2	40.2	39.8	39.9	40.0	-	-	-	-	-
General building contractors .....	15	38.8	38.8	38.6	38.6	-	-	-	-	-	-
Residential building construction .....	152	37.3	37.4	37.3	37.3	-	-	-	-	-	-
Operative builders .....	153	38.6	37.7	39.2	38.5	-	-	-	-	-	-
Nonresidential building construction .....	154	40.2	40.2	39.9	40.0	-	-	-	-	-	-
Heavy construction, except building .....	16	44.6	44.7	44.1	44.0	-	-	-	-	-	-
Highway and street construction .....	161	46.7	46.9	45.6	45.7	-	-	-	-	-	-
Heavy construction, except highway .....	162	43.6	43.7	43.4	43.2	-	-	-	-	-	-
Special trade contractors .....	17	39.5	39.5	39.2	39.4	-	-	-	-	-	-
Plumbing, heating, and air conditioning .....	171	40.3	39.9	40.1	40.1	-	-	-	-	-	-
Painting and paper hanging .....	172	38.3	38.4	37.3	37.5	-	-	-	-	-	-
Electrical work .....	173	40.5	40.5	40.0	40.3	-	-	-	-	-	-
Masonry, stonework, and plastering .....	174	37.1	37.2	36.7	36.8	-	-	-	-	-	-
Carpentry and floor work .....	175	36.7	37.0	37.5	37.5	-	-	-	-	-	-
Roofing, siding, and sheet metal work .....	176	36.9	36.9	36.2	36.9	-	-	-	-	-	-
<b>Manufacturing</b> .....		41.1	41.7	41.8	41.2	41.7	4.4	4.7	4.7	4.4	4.7
<b>Durable goods</b> .....		41.5	42.2	42.4	41.6	42.2	4.4	4.8	4.8	4.5	4.7
Lumber and wood products .....	24	41.2	41.6	41.6	41.2	41.5	4.7	4.8	4.6	4.4	-
Logging .....	241	41.6	41.9	42.5	41.1	-	5.6	5.7	5.6	5.1	-
Sawmills and planing mills .....	242	42.0	42.9	43.1	42.4	-	5.0	5.4	5.4	5.3	-
Sawmills and planing mills, general .....	2421	42.4	43.4	43.7	42.9	-	5.5	5.9	5.9	5.8	-
Hardwood dimension and flooring mills .....	2426	40.9	41.3	41.3	41.0	-	3.3	3.5	3.8	3.6	-
Millwork, plywood, and structural members .....	243	41.5	41.8	41.9	41.4	-	5.2	5.1	4.7	4.5	-
Millwork .....	2431	41.2	41.4	41.5	40.8	-	4.1	4.2	4.0	3.9	-
Wood kitchen cabinets .....	2434	41.3	41.3	41.3	41.4	-	6.0	5.3	4.5	4.7	-
Hardwood veneer and plywood .....	2435	40.0	41.6	41.9	40.4	-	4.8	5.0	5.0	4.1	-
Softwood veneer and plywood .....	2436	42.2	43.4	43.5	42.3	-	5.6	6.2	6.1	5.7	-
Wood containers .....	244	38.6	38.7	39.4	39.2	-	3.1	3.3	3.8	3.3	-
Wood buildings and mobile homes .....	245	41.0	40.9	39.3	39.9	-	4.2	3.7	3.0	3.3	-
Mobile homes .....	2451	41.2	40.6	39.3	40.0	-	4.2	3.5	2.7	3.1	-
Miscellaneous wood products .....	249	39.6	40.3	40.5	40.2	-	3.2	3.5	3.7	3.6	-
Furniture and fixtures .....	25	40.3	41.0	40.3	40.2	40.7	3.8	4.1	3.7	3.9	-
Household furniture .....	251	39.0	39.8	39.0	38.6	-	2.9	3.1	2.8	2.8	-
Wood household furniture .....	2511	38.8	40.2	39.1	39.0	-	2.7	3.1	2.9	3.0	-
Upholstered household furniture .....	2512	38.5	38.7	38.3	37.8	-	2.5	2.4	2.3	2.4	-
Metal household furniture .....	2514	38.4	37.7	42.1	40.3	-	2.7	3.0	3.9	2.5	-
Mattresses and bedsprings .....	2515	40.8	41.5	39.7	39.5	-	4.9	4.8	3.8	4.3	-
Office furniture .....	252	41.2	42.0	42.7	43.1	-	4.2	4.8	4.9	4.9	-
Public building and related furniture .....	253	41.9	43.0	40.9	41.8	-	5.6	6.0	5.2	6.1	-
Partitions and fixtures .....	254	43.7	44.0	43.0	42.6	-	5.5	5.8	5.0	5.5	-
Miscellaneous furniture and fixtures .....	259	39.9	40.0	39.8	40.5	-	4.2	4.0	3.5	4.1	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Total private</b> .....		\$12.68	\$12.76	\$13.14	\$13.16	\$13.21	\$441.26	\$449.15	\$454.64	\$456.65	\$463.67
<b>Goods-producing</b> .....		14.35	14.41	14.83	14.91	14.92	586.92	596.57	612.48	609.82	616.20
<b>Mining</b> .....		16.76	16.88	16.93	17.14	17.08	735.76	742.72	748.31	764.44	760.06
Metal mining .....	10	18.21	18.31	18.05	18.23	—	819.45	822.12	805.03	833.11	—
Iron ores .....	101	19.78	20.02	19.67	20.13	—	872.30	888.89	881.22	913.90	—
Copper ores .....	102	16.40	16.40	16.38	16.44	—	769.16	769.16	766.58	823.64	—
Coal mining .....	12	18.95	19.01	19.35	19.51	—	811.06	845.95	870.75	852.59	—
Bituminous coal and lignite mining .....	122	19.24	19.28	19.61	19.79	—	817.70	859.89	890.29	868.78	—
Oil and gas extraction .....	13	16.61	16.76	16.68	17.03	—	712.57	708.95	707.23	740.81	—
Crude petroleum and natural gas .....	131	22.35	22.70	22.97	23.31	—	949.88	946.59	927.99	974.36	—
Oil and gas field services .....	138	13.76	13.84	13.29	13.47	—	590.30	588.20	578.12	600.76	—
Nonmetallic minerals, except fuels .....	14	14.85	14.88	15.11	15.16	—	709.83	712.75	720.75	717.07	—
Crushed and broken stone .....	142	14.14	14.20	14.52	14.56	—	708.41	711.42	717.29	714.90	—
<b>Construction</b> .....		16.66	16.77	17.08	17.23	17.27	669.73	674.15	679.78	687.48	690.80
General building contractors .....	15	15.84	15.99	16.31	16.39	—	614.59	620.41	629.57	632.65	—
Residential building construction .....	152	14.71	14.91	15.18	15.13	—	548.68	557.63	566.21	564.35	—
Operative builders .....	153	14.79	15.35	14.90	15.03	—	570.89	578.70	584.08	578.66	—
Nonresidential building construction .....	154	16.90	16.99	17.48	17.67	—	679.38	683.00	697.45	706.80	—
Heavy construction, except building .....	16	16.46	16.55	16.87	17.09	—	734.12	739.79	743.97	751.96	—
Highway and street construction .....	161	16.85	17.06	17.27	17.65	—	786.90	800.11	787.51	806.61	—
Heavy construction, except highway .....	162	16.26	16.29	16.67	16.79	—	708.94	711.87	723.48	725.33	—
Special trade contractors .....	17	16.98	17.08	17.38	17.53	—	670.71	674.66	681.30	690.68	—
Plumbing, heating, and air conditioning .....	171	17.27	17.34	17.64	17.74	—	695.98	691.87	707.36	711.37	—
Painting and paper hanging .....	172	14.97	15.33	15.47	15.38	—	573.35	588.67	577.03	576.75	—
Electrical work .....	173	18.63	18.70	19.09	19.20	—	754.52	757.35	763.60	773.76	—
Masonry, stonework, and plastering .....	174	16.77	16.91	17.12	17.22	—	622.17	629.05	628.30	633.70	—
Carpentry and floor work .....	175	16.42	16.70	17.13	17.24	—	602.61	617.90	642.38	646.50	—
Roofing, siding, and sheet metal work .....	176	15.05	15.22	15.18	15.46	—	555.35	561.62	549.52	570.47	—
<b>Manufacturing</b> .....		13.38	13.45	13.91	13.92	13.93	549.92	560.87	581.44	573.50	580.88
<b>Durable goods</b> .....		13.77	13.92	14.40	14.38	14.44	571.46	587.42	610.56	598.21	609.37
Lumber and wood products .....	24	11.17	11.18	11.45	11.51	11.55	460.20	465.09	476.32	474.21	479.33
Logging .....	241	12.60	12.74	13.29	13.33	—	524.16	533.81	564.83	547.86	—
Sawmills and planing mills .....	242	11.12	11.13	11.36	11.48	—	467.04	477.48	489.62	486.75	—
Sawmills and planing mills, general .....	2421	11.58	11.62	11.81	11.95	—	490.99	504.31	516.10	512.66	—
Hardwood dimension and flooring mills .....	2426	9.35	9.34	9.68	9.76	—	382.42	385.74	399.78	400.16	—
Millwork, plywood, and structural members .....	243	11.34	11.31	11.55	11.62	—	470.61	472.76	483.95	481.07	—
Millwork .....	2431	11.28	11.34	11.51	11.53	—	464.74	469.48	477.67	470.42	—
Wood kitchen cabinets .....	2434	11.42	11.14	11.61	11.67	—	471.65	460.08	479.49	483.14	—
Hardwood veneer and plywood .....	2435	10.11	10.04	10.29	10.33	—	404.40	417.66	431.15	417.33	—
Softwood veneer and plywood .....	2436	13.45	13.62	13.85	14.25	—	567.59	591.11	602.48	602.78	—
Wood containers .....	244	8.86	8.92	9.24	9.21	—	342.00	345.20	364.06	361.03	—
Wood buildings and mobile homes .....	245	11.41	11.41	11.69	11.56	—	467.81	466.67	459.42	461.24	—
Mobile homes .....	2451	11.57	11.56	11.90	11.75	—	476.68	469.34	467.67	470.00	—
Miscellaneous wood products .....	249	10.51	10.48	10.82	10.95	—	416.20	422.34	438.21	440.19	—
Furniture and fixtures .....	25	10.91	10.96	11.16	11.25	11.28	439.67	449.36	449.75	452.25	459.10
Household furniture .....	251	10.32	10.32	10.62	10.64	—	402.48	410.74	414.18	410.70	—
Wood household furniture .....	2511	9.91	9.86	10.16	10.19	—	384.51	396.37	397.26	397.41	—
Upholstered household furniture .....	2512	10.99	10.99	11.38	11.30	—	423.12	425.31	435.85	427.14	—
Metal household furniture .....	2514	9.71	9.97	9.89	9.94	—	372.86	375.87	416.37	400.58	—
Mattresses and bedsprings .....	2515	10.94	10.89	11.37	11.46	—	446.35	451.94	451.39	452.67	—
Office furniture .....	252	11.76	11.82	11.78	11.87	—	484.51	496.44	503.01	511.60	—
Public building and related furniture .....	253	11.71	12.14	12.42	12.60	—	490.65	522.02	507.98	526.68	—
Partitions and fixtures .....	254	11.67	11.67	11.71	11.91	—	509.98	513.48	503.53	507.37	—
Miscellaneous furniture and fixtures .....	259	10.98	10.99	11.27	11.38	—	438.10	439.60	448.55	460.89	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	43.8	44.2	43.9	43.7	44.3	6.6	7.0	6.7	6.7	—
Flat glass .....	321	41.5	43.9	43.4	42.5	—	5.3	6.5	6.3	4.3	—
Glass and glassware, pressed or blown .....	322	41.9	42.1	41.6	42.1	—	4.7	5.2	5.2	5.8	—
Glass containers .....	3221	44.6	45.2	44.2	45.6	—	6.9	7.5	6.6	7.1	—
Pressed and blown glass, nec .....	3229	40.2	40.2	40.1	40.1	—	3.3	3.8	4.4	5.1	—
Products of purchased glass .....	323	40.5	43.4	42.4	41.3	—	3.7	5.2	5.0	4.2	—
Cement, hydraulic .....	324	44.9	44.2	43.7	44.5	—	5.6	5.5	5.0	5.6	—
Structural clay products .....	325	41.9	41.4	41.9	42.1	—	4.9	5.0	5.2	5.3	—
Pottery and related products .....	326	40.4	40.7	41.3	40.3	—	5.3	4.8	4.5	4.4	—
Concrete, gypsum, and plaster products .....	327	47.0	46.9	46.2	46.1	—	9.3	9.5	8.8	8.7	—
Concrete block and brick .....	3271	48.3	48.8	49.1	48.7	—	9.8	10.4	10.9	10.4	—
Concrete products, nec .....	3272	45.6	45.8	45.3	44.6	—	7.9	8.4	7.8	7.5	—
Ready-mixed concrete .....	3273	47.5	47.1	46.1	46.3	—	10.1	10.1	9.1	9.2	—
Misc. nonmetallic mineral products .....	329	42.2	42.3	43.1	42.7	—	5.1	5.4	5.6	5.7	—
Abrasive products .....	3291	40.5	40.9	42.5	41.5	—	2.5	2.7	3.1	3.0	—
Asbestos products .....	3292	49.0	46.7	49.8	49.5	—	11.1	9.5	11.8	12.3	—
Primary metal industries .....	33	43.1	43.8	44.4	43.6	44.1	6.0	6.2	6.5	6.4	—
Blast furnaces and basic steel products .....	331	43.9	44.2	45.2	44.6	44.7	6.2	6.0	6.4	6.6	—
Blast furnaces and steel mills .....	3312	44.7	44.7	45.6	45.2	—	6.6	6.2	6.7	7.1	—
Steel pipe and tubes .....	3317	42.0	43.6	44.3	43.0	—	5.6	6.1	5.6	5.5	—
Iron and steel foundries .....	332	42.8	44.0	44.6	42.8	—	5.5	5.9	6.7	5.7	—
Gray and ductile iron foundries .....	3321	43.0	44.8	46.2	44.1	—	6.2	6.8	8.0	6.7	—
Malleable iron foundries .....	3322	44.4	45.1	42.2	42.5	—	3.1	5.4	5.4	5.7	—
Steel foundries, nec .....	3325	41.9	42.8	42.0	39.6	—	4.9	4.8	4.9	4.0	—
Primary nonferrous metals .....	333	42.9	42.8	43.7	44.1	—	5.8	6.0	6.2	6.7	—
Primary aluminum .....	3334	43.7	44.0	44.3	44.1	—	6.1	6.5	6.7	7.1	—
Nonferrous rolling and drawing .....	335	43.9	44.4	44.2	44.1	—	7.3	7.4	7.4	7.8	—
Copper rolling and drawing .....	3351	42.7	42.5	42.1	42.9	—	7.0	6.9	7.3	8.2	—
Aluminum sheet, plate, and foil .....	3353	44.9	44.7	44.9	45.1	—	9.9	9.6	9.8	10.0	—
Nonferrous wire drawing and insulating .....	3357	42.8	44.2	44.2	43.6	—	6.3	7.1	7.0	7.4	—
Nonferrous foundries (castings) .....	336	40.5	42.6	43.8	41.8	—	4.2	5.0	5.3	4.6	—
Aluminum foundries .....	3365	41.1	43.5	45.0	42.7	—	5.0	5.3	5.7	4.8	—
Fabricated metal products .....	34	41.6	42.2	42.3	41.5	42.3	4.5	4.8	4.7	4.4	—
Metal cans and shipping containers .....	341	43.4	44.3	45.2	45.5	—	7.1	7.5	7.5	7.5	—
Metal cans .....	3411	43.1	44.3	45.2	45.7	—	6.6	7.3	7.4	7.6	—
Cutlery, handtools, and hardware .....	342	41.1	42.0	41.9	40.4	—	3.9	4.3	4.1	3.7	—
Hand and edge tools, and blades and handsaws .....	3423.5	41.8	43.0	41.8	41.1	—	4.1	4.6	3.5	3.4	—
Hardware, nec .....	3429	41.4	41.8	42.7	40.5	—	4.1	4.3	4.7	4.1	—
Plumbing and heating, except electric .....	343	41.4	42.4	43.1	42.1	—	3.6	4.0	4.6	4.7	—
Plumbing fixture fittings and trim .....	3432	40.9	41.0	42.5	40.5	—	3.4	3.1	4.6	4.3	—
Heating equipment, except electric .....	3433	41.4	41.9	41.4	41.7	—	3.9	4.4	3.1	3.4	—
Fabricated structural metal products .....	344	42.6	42.6	41.9	41.9	—	5.3	5.2	4.6	4.9	—
Fabricated structural metal .....	3441	43.7	43.7	43.1	42.9	—	6.8	6.9	5.8	6.0	—
Metal doors, sash, and trim .....	3442	41.8	41.7	40.7	41.0	—	4.5	4.3	3.6	4.1	—
Fabricated plate work (boiler shops) .....	3443	43.0	43.1	42.0	41.7	—	5.5	5.5	4.6	4.8	—
Sheet metal work .....	3444	41.6	41.5	41.4	41.8	—	4.4	4.3	4.0	4.3	—
Architectural metal work .....	3446	42.0	42.3	41.5	41.1	—	4.7	4.6	4.3	4.1	—
Screw machine products, bolts, etc .....	345	41.4	42.8	42.7	41.0	—	4.4	5.0	4.8	4.2	—
Screw machine products .....	3451	41.5	41.7	41.0	40.5	—	4.3	4.6	3.8	3.5	—
Bolts, nuts, rivets, and washers .....	3452	41.3	44.0	44.6	41.5	—	4.6	5.5	6.0	4.9	—
Metal forgings and stampings .....	346	40.4	42.4	43.4	41.2	—	3.9	5.1	5.5	4.1	—
Iron and steel forgings .....	3462	41.5	43.2	40.7	40.8	—	5.7	6.0	4.4	4.4	—
Automotive stampings .....	3465	39.4	42.5	45.2	41.7	—	2.4	4.8	6.7	4.0	—
Metal stampings, nec .....	3469	40.2	41.4	41.4	40.5	—	4.0	4.5	4.2	3.8	—
Metal services, nec .....	347	41.3	41.5	41.9	41.2	—	4.8	4.9	4.9	4.5	—
Plating and polishing .....	3471	40.9	41.0	41.2	40.7	—	4.8	4.9	4.6	4.3	—
Metal coating and allied services .....	3479	41.9	42.2	43.1	42.0	—	4.9	5.0	5.4	4.8	—
Ordnance and accessories, nec .....	348	39.7	39.7	42.0	41.8	—	3.4	3.5	3.8	3.8	—
Ammunition, except for small arms, nec .....	3483	41.9	43.2	43.3	43.0	—	3.6	3.9	2.9	3.0	—
Misc. fabricated metal products .....	349	41.3	41.5	41.7	41.2	—	3.9	4.0	4.1	4.0	—
Valves and pipe fittings, nec .....	3494	41.5	41.7	40.6	40.3	—	4.4	4.4	2.9	3.3	—
Misc. fabricated wire products .....	3496	40.1	40.3	41.4	41.1	—	3.6	3.6	4.1	4.2	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	\$13.59	\$13.63	\$13.94	\$14.01	\$13.91	\$595.24	\$602.45	\$611.97	\$612.24	\$616.21
Flat glass .....	321	17.60	17.87	18.64	18.40	—	730.40	784.49	808.98	782.00	—
Glass and glassware, pressed or blown .....	322	15.66	15.54	15.87	15.91	—	656.15	654.23	660.19	669.81	—
Glass containers .....	3221	16.52	16.55	17.02	16.98	—	736.79	748.06	752.28	774.29	—
Pressed and blown glass, nec .....	3229	15.05	14.85	15.14	15.20	—	605.01	596.97	607.11	609.52	—
Products of purchased glass .....	323	11.71	11.88	12.63	12.39	—	474.26	515.59	535.51	511.71	—
Cement, hydraulic .....	324	18.15	18.20	18.74	18.85	—	814.94	804.44	818.94	838.83	—
Structural clay products .....	325	11.89	11.89	12.36	12.33	—	498.19	492.25	517.88	519.09	—
Pottery and related products .....	326	12.06	12.12	11.99	12.21	—	487.22	493.28	495.19	492.06	—
Concrete, gypsum, and plaster products .....	327	13.26	13.32	13.55	13.69	—	623.22	624.71	626.01	631.11	—
Concrete block and brick .....	3271	12.63	12.62	13.29	13.37	—	610.03	615.86	652.54	651.12	—
Concrete products, nec .....	3272	11.78	11.88	12.04	12.17	—	537.17	544.10	545.41	542.78	—
Ready-mixed concrete .....	3273	14.12	14.18	14.46	14.57	—	670.70	667.88	666.61	674.59	—
Misc. nonmetallic mineral products .....	329	13.78	13.79	14.14	14.22	—	581.52	583.32	609.43	607.19	—
Abrasive products .....	3291	12.25	12.27	13.10	13.35	—	496.13	501.84	556.75	554.03	—
Asbestos products .....	3292	15.80	15.50	14.63	14.76	—	774.20	723.85	728.57	730.62	—
Primary metal industries .....	33	15.56	15.45	15.91	16.04	15.97	670.64	676.71	706.40	699.34	704.28
Blast furnaces and basic steel products .....	331	18.50	18.46	19.05	19.19	18.97	812.15	815.93	861.06	855.87	847.96
Blast furnaces and steel mills .....	3312	20.12	20.13	20.86	20.95	—	899.36	899.81	951.22	946.94	—
Steel pipe and tubes .....	3317	14.24	14.17	14.15	14.23	—	598.08	617.81	626.85	611.89	—
Iron and steel foundries .....	332	13.79	13.83	14.97	14.64	—	590.21	608.52	667.66	626.59	—
Gray and ductile iron foundries .....	3321	14.43	14.52	15.71	15.22	—	620.49	650.50	725.80	671.20	—
Malleable iron foundries .....	3322	15.80	15.38	15.19	14.81	—	701.52	693.64	641.02	629.43	—
Steel foundries, nec .....	3325	13.30	13.30	14.00	13.97	—	557.27	569.24	588.00	553.21	—
Primary nonferrous metals .....	333	17.19	17.15	17.43	18.07	—	737.45	734.02	761.69	796.89	—
Primary aluminum .....	3334	17.13	17.01	17.56	18.43	—	748.58	748.44	777.91	812.76	—
Nonferrous rolling and drawing .....	335	14.63	14.51	14.38	14.60	—	642.26	644.24	635.60	643.86	—
Copper rolling and drawing .....	3351	15.07	15.17	15.45	15.72	—	643.49	644.73	650.45	674.39	—
Aluminum sheet, plate, and foil .....	3353	17.05	16.99	17.13	17.72	—	765.55	759.45	769.14	799.17	—
Nonferrous wire drawing and insulating .....	3357	14.78	14.55	14.02	14.15	—	632.58	643.11	619.68	616.94	—
Nonferrous foundries (castings) .....	336	12.31	12.32	12.75	12.82	—	498.56	524.83	558.45	535.88	—
Aluminum foundries .....	3365	11.82	11.77	12.11	12.31	—	485.80	512.00	544.95	525.64	—
Fabricated metal products .....	34	12.88	13.04	13.46	13.46	13.52	535.81	550.29	569.36	558.59	571.90
Metal cans and shipping containers .....	341	16.81	16.70	16.82	16.83	—	729.55	739.81	760.26	765.77	—
Metal cans .....	3411	17.98	17.74	17.88	17.78	—	774.94	785.88	808.18	812.55	—
Cutlery, handtools, and hardware .....	342	12.36	12.28	12.38	12.48	—	508.00	515.76	518.72	504.19	—
Hand and edge tools, and blades and handsaws .....	3423,5	12.27	12.21	12.67	12.81	—	512.89	525.03	529.61	526.49	—
Hardware, nec .....	3429	12.60	12.44	12.25	12.33	—	521.64	519.99	523.08	499.37	—
Plumbing and heating, except electric .....	343	11.77	11.91	12.10	12.15	—	487.28	504.98	521.51	511.52	—
Plumbing fixture fittings and trim .....	3432	11.47	11.47	11.60	11.79	—	469.12	470.27	493.00	477.50	—
Heating equipment, except electric .....	3433	12.15	12.47	12.40	12.24	—	503.01	522.49	513.36	510.41	—
Fabricated structural metal products .....	344	12.50	12.54	12.88	13.01	—	532.50	534.20	539.67	545.12	—
Fabricated structural metal .....	3441	12.88	12.91	13.27	13.36	—	562.86	564.17	571.94	573.14	—
Metal doors, sash, and trim .....	3442	10.66	10.63	10.79	10.95	—	445.59	443.27	439.15	448.95	—
Fabricated plate work (boiler shops) .....	3443	13.71	13.80	14.22	14.36	—	589.53	594.78	597.24	598.81	—
Sheet metal work .....	3444	12.78	12.85	13.28	13.42	—	531.65	533.28	549.79	560.96	—
Architectural metal work .....	3446	11.71	11.70	12.34	12.47	—	491.82	494.91	512.11	512.52	—
Screw machine products, bolts, etc .....	345	13.24	13.32	13.74	13.81	—	548.14	570.10	586.70	566.21	—
Screw machine products .....	3451	12.68	12.66	12.96	13.06	—	526.22	527.92	531.36	528.93	—
Bolts, nuts, rivets, and washers .....	3452	13.88	14.04	14.55	14.63	—	573.24	617.76	648.93	607.15	—
Metal forgings and stampings .....	346	14.39	15.07	15.92	15.63	—	581.36	638.97	690.93	643.96	—
Iron and steel forgings .....	3462	14.47	14.64	15.13	15.13	—	600.51	632.45	615.79	617.30	—
Automotive stampings .....	3465	15.99	17.16	18.21	17.73	—	630.01	729.30	823.09	739.34	—
Metal stampings, nec .....	3469	12.62	12.62	13.13	13.23	—	507.32	522.47	543.58	535.82	—
Metal services, nec .....	347	11.18	11.14	11.51	11.56	—	461.73	462.31	482.27	476.27	—
Plating and polishing .....	3471	10.97	10.98	11.38	11.42	—	448.67	450.18	468.86	464.79	—
Metal coating and allied services .....	3479	11.52	11.39	11.71	11.77	—	482.69	480.66	504.70	494.34	—
Ordnance and accessories, nec .....	348	15.57	15.46	15.17	15.31	—	618.13	613.76	637.14	639.96	—
Ammunition, except for small arms, nec .....	3483	16.50	16.45	16.02	16.01	—	691.35	710.64	693.67	688.43	—
Misc. fabricated metal products .....	349	12.54	12.54	12.90	12.98	—	517.90	520.41	537.93	534.78	—
Valves and pipe fittings, nec .....	3494	12.94	12.86	13.13	13.28	—	537.01	536.26	533.08	535.18	—
Misc. fabricated wire products .....	3496	11.25	11.24	11.49	11.60	—	451.13	452.97	475.69	476.76	—

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				
		July 1998	Aug. 1998	June 1999	July 1999 <sup>P</sup>	Aug. 1999 <sup>P</sup>	July 1998	Aug. 1998	June 1999	July 1999 <sup>P</sup>	Aug. 1999 <sup>P</sup>
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	42.3	42.6	42.1	41.7	42.1	4.8	4.9	4.7	4.6	—
Engines and turbines .....	351	43.5	44.1	43.9	42.6	—	5.1	5.5	6.4	5.7	—
Turbines and turbine generator sets .....	3511	42.0	42.5	44.7	45.3	—	3.3	4.1	6.1	5.8	—
Internal combustion engines, nec .....	3519	44.0	44.6	43.6	41.8	—	5.7	6.0	6.5	5.6	—
Farm and garden machinery .....	352	39.9	41.2	40.0	39.6	—	2.9	3.3	2.3	2.1	—
Farm machinery and equipment .....	3523	41.0	41.7	40.7	40.3	—	3.4	3.5	2.7	2.6	—
Construction and related machinery .....	353	43.5	43.6	42.6	42.1	—	5.6	5.6	4.9	4.8	—
Construction machinery .....	3531	42.4	42.4	43.1	42.3	—	4.8	4.7	4.9	4.7	—
Mining machinery .....	3532	41.0	40.6	40.4	39.9	—	3.8	3.8	2.8	2.9	—
Oil and gas field machinery .....	3533	47.8	48.4	44.0	43.9	—	8.9	9.2	7.9	7.4	—
Conveyors and conveying equipment .....	3535	42.1	42.7	41.7	42.0	—	5.1	5.1	4.4	4.6	—
Industrial trucks and tractors .....	3537	41.3	41.0	41.6	41.2	—	4.1	4.1	3.6	3.4	—
Metalworking machinery .....	354	42.5	42.9	42.9	42.3	—	5.3	5.3	5.3	5.2	—
Machine tools, metal cutting types .....	3541	43.3	43.0	42.1	42.1	—	4.9	5.1	4.4	3.9	—
Machine tools, metal forming types .....	3542	43.6	43.4	43.0	43.2	—	5.4	5.4	5.1	5.1	—
Special dies, tools, jigs, and fixtures .....	3544	42.8	43.4	43.5	43.1	—	5.8	6.0	5.9	5.9	—
Machine tool accessories .....	3545	41.9	42.3	41.2	40.3	—	4.2	4.0	3.9	4.2	—
Power driven handtools .....	3546	42.2	42.3	42.3	41.1	—	4.9	4.1	3.8	3.3	—
Special industry machinery .....	355	41.4	41.6	41.7	41.0	—	4.2	4.3	4.2	4.1	—
Textile machinery .....	3552	40.4	39.6	40.9	39.5	—	3.3	2.8	3.8	3.8	—
Printing trades machinery .....	3555	40.8	42.4	40.3	39.2	—	4.2	5.0	3.2	3.2	—
Food products machinery .....	3556	41.4	41.8	42.1	41.8	—	4.2	4.1	4.2	4.2	—
General industrial machinery .....	356	41.7	42.0	41.7	41.3	—	4.4	4.6	4.3	4.4	—
Pumps and pumping equipment .....	3561	40.4	40.7	40.7	39.6	—	4.0	4.4	3.9	3.9	—
Ball and roller bearings .....	3562	41.8	43.3	41.6	40.8	—	5.4	6.1	5.2	5.3	—
Air and gas compressors .....	3563	42.1	42.3	42.2	41.4	—	3.8	4.0	4.0	4.1	—
Blowers and fans .....	3564	43.1	43.3	43.1	42.7	—	4.4	4.5	3.7	4.2	—
Speed changers, drives, and gears .....	3566	41.1	41.8	40.6	41.1	—	4.6	5.0	3.9	4.2	—
Power transmission equipment, nec .....	3568	41.8	40.7	41.1	41.2	—	4.8	3.9	3.9	4.2	—
Computer and office equipment .....	357	40.8	41.7	41.0	40.8	—	3.6	3.6	3.4	3.7	—
Electronic computers .....	3571	41.4	42.0	40.9	40.4	—	4.4	4.2	3.4	3.6	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	41.2	40.6	40.8	41.4	—	3.4	3.2	3.7	4.2	—
Refrigeration and service machinery .....	358	44.8	44.3	42.6	42.3	—	6.1	6.0	5.5	5.6	—
Refrigeration and heating equipment .....	3585	46.1	45.2	43.1	43.0	—	7.0	6.7	6.2	6.3	—
Misc. industrial and commercial machinery .....	359	41.7	42.1	42.1	41.9	—	4.8	5.1	4.8	4.6	—
Carburetors, pistons, rings, valves .....	3592	38.8	40.6	40.9	40.6	—	4.2	5.2	5.6	5.3	—
Scales, balances, and industrial machinery, nec ..	3596,9	41.8	42.2	42.3	42.1	—	4.9	5.1	4.9	4.7	—
Electronic and other electrical equipment .....	36	40.6	41.5	41.5	40.8	41.2	3.5	3.8	3.9	3.8	—
Electric distribution equipment .....	361	40.0	41.2	42.2	42.1	—	3.4	4.2	4.8	5.0	—
Transformers, except electronic .....	3612	40.7	41.5	43.3	42.9	—	2.5	3.3	4.8	4.8	—
Switchgear and switchboard apparatus .....	3613	39.4	41.0	41.1	41.3	—	4.2	4.9	4.9	5.2	—
Electrical industrial apparatus .....	362	41.1	41.0	41.7	41.5	—	3.6	3.4	3.7	3.6	—
Motors and generators .....	3621	41.7	41.2	42.8	42.7	—	3.8	3.7	4.1	3.9	—
Relays and industrial controls .....	3625	39.5	40.2	40.0	39.4	—	2.9	2.7	3.1	3.0	—
Household appliances .....	363	40.0	41.1	40.0	39.3	—	2.6	2.7	1.7	2.5	—
Household refrigerators and freezers .....	3632	42.9	43.4	39.9	39.6	—	3.3	2.9	1.1	2.4	—
Household laundry equipment .....	3633	37.4	38.1	39.0	36.4	—	1.3	1.2	2.1	2.4	—
Electric housewares and fans .....	3634	40.2	40.2	40.1	39.8	—	2.2	2.9	1.3	2.1	—
Electric lighting and wiring equipment .....	364	40.1	40.9	41.5	40.7	—	3.4	4.0	4.3	3.8	—
Electric lamps .....	3641	38.5	40.6	42.5	42.3	—	3.0	4.1	4.4	4.1	—
Current-carrying wiring devices .....	3643	40.2	39.9	40.5	40.7	—	3.4	3.7	3.8	3.9	—
Noncurrent-carrying wiring devices .....	3644	41.8	41.5	41.9	40.3	—	3.4	3.8	4.6	3.6	—
Residential lighting fixtures .....	3645	39.2	38.3	40.5	40.1	—	2.6	3.2	3.1	3.9	—
Household audio and video equipment .....	365	39.2	40.9	38.7	38.1	—	4.0	4.5	4.6	4.7	—
Household audio and video equipment .....	3651	38.1	40.5	39.1	38.2	—	3.1	3.6	3.4	2.7	—
Communications equipment .....	366	42.6	43.3	41.4	40.9	—	3.4	3.8	3.3	3.2	—
Telephone and telegraph apparatus .....	3661	45.2	45.7	43.1	43.1	—	4.7	4.4	3.9	4.0	—
Electronic components and accessories .....	367	40.4	41.3	41.9	41.3	—	3.6	3.8	4.2	4.1	—
Electron tubes .....	3671	41.5	42.7	44.0	38.2	—	3.4	4.0	3.6	3.1	—
Semiconductors and related devices .....	3674	41.8	42.7	42.6	42.6	—	4.6	4.6	4.9	5.0	—
Electronic components, nec .....	3679	40.6	41.0	41.7	40.6	—	3.2	3.4	3.9	3.6	—
Misc. electrical equipment and supplies .....	369	40.5	42.2	42.1	40.1	—	3.3	4.6	4.5	3.6	—
Storage batteries .....	3691	41.8	43.9	42.9	41.6	—	4.5	5.0	5.4	5.1	—
Engine electrical equipment .....	3694	40.9	42.5	42.8	40.0	—	3.5	5.4	5.3	3.8	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	\$14.43	\$14.46	\$14.99	\$15.06	\$15.14	\$610.39	\$616.00	\$631.08	\$628.00	\$637.39
Engines and turbines .....	351	17.54	17.13	17.91	17.92	—	762.99	755.43	786.25	763.39	—
Turbines and turbine generator sets .....	3511	19.26	19.05	20.78	21.04	—	808.92	809.63	928.87	953.11	—
Internal combustion engines, nec .....	3519	16.95	16.50	17.04	16.91	—	745.80	735.90	742.94	706.84	—
Farm and garden machinery .....	352	14.13	13.98	13.86	14.00	—	563.79	575.98	554.40	554.40	—
Farm machinery and equipment .....	3523	14.62	14.47	14.65	14.68	—	599.42	603.40	596.26	591.60	—
Construction and related machinery .....	353	13.63	13.74	14.11	14.22	—	592.91	599.06	601.09	598.66	—
Construction machinery .....	3531	13.87	13.90	14.05	14.26	—	588.09	589.36	605.56	603.20	—
Mining machinery .....	3532	14.53	14.73	14.65	14.49	—	595.73	598.04	591.86	578.15	—
Oil and gas field machinery .....	3533	13.66	13.81	14.73	14.70	—	652.95	668.40	648.12	645.33	—
Conveyors and conveying equipment .....	3535	13.60	13.84	14.40	14.60	—	572.56	590.97	600.48	613.20	—
Industrial trucks and tractors .....	3537	12.78	12.98	13.08	13.02	—	527.81	532.18	544.13	536.42	—
Metalworking machinery .....	354	15.32	15.27	15.80	15.99	—	651.10	655.08	677.82	676.38	—
Machine tools, metal cutting types .....	3541	15.08	15.02	15.67	15.77	—	652.96	645.86	659.71	663.92	—
Machine tools, metal forming types .....	3542	15.73	15.71	16.26	16.22	—	685.83	681.81	699.18	700.70	—
Special dies, tools, jigs, and fixtures .....	3544	16.08	15.98	16.51	16.77	—	688.22	693.53	718.19	722.79	—
Machine tool accessories .....	3545	13.38	13.37	13.95	14.13	—	560.62	565.55	574.74	569.44	—
Power driven handtools .....	3546	12.61	12.51	12.65	12.68	—	532.14	529.17	535.10	521.15	—
Special industry machinery .....	355	15.01	15.08	15.64	15.67	—	621.41	627.33	652.19	642.47	—
Textile machinery .....	3552	13.07	13.13	13.54	13.71	—	528.03	519.95	553.79	541.55	—
Printing trades machinery .....	3555	16.21	16.51	15.99	16.01	—	661.37	700.02	644.40	627.59	—
Food products machinery .....	3556	14.77	14.76	15.12	15.22	—	611.48	616.97	636.55	636.20	—
General industrial machinery .....	356	13.99	14.03	14.30	14.36	—	583.38	589.26	596.31	593.07	—
Pumps and pumping equipment .....	3561	14.63	14.82	15.23	15.03	—	591.05	603.17	619.86	595.19	—
Ball and roller bearings .....	3562	14.96	15.01	15.27	15.31	—	625.33	649.93	635.23	624.65	—
Air and gas compressors .....	3563	14.85	14.89	14.55	14.54	—	625.19	629.85	614.01	601.96	—
Blowers and fans .....	3564	11.73	11.67	11.78	11.91	—	505.56	505.31	507.72	508.56	—
Speed changers, drives, and gears .....	3566	14.86	14.95	15.72	16.04	—	610.75	624.91	638.23	659.24	—
Power transmission equipment, nec .....	3568	13.63	13.61	14.02	14.17	—	569.73	553.93	576.22	583.80	—
Computer and office equipment .....	357	15.44	15.48	16.49	16.66	—	629.95	645.52	676.09	679.73	—
Electronic computers .....	3571	16.78	17.02	18.52	18.66	—	694.69	714.84	757.47	753.86	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	14.09	13.80	14.33	14.47	—	580.51	560.28	584.66	599.06	—
Refrigeration and service machinery .....	358	12.92	13.01	13.72	13.66	—	578.82	576.34	584.47	577.82	—
Refrigeration and heating equipment .....	3585	13.21	13.29	14.06	13.99	—	608.98	600.71	605.99	601.57	—
Misc. industrial and commercial machinery .....	359	14.04	14.06	14.51	14.54	—	585.47	591.93	610.87	609.23	—
Carburetors, pistons, rings, valves .....	3592	14.48	14.56	15.15	14.72	—	561.82	591.14	619.64	597.63	—
Scales, balances, and industrial machinery, nec .....	3596,9	13.91	13.92	14.38	14.47	—	581.44	587.42	608.27	609.19	—
Electronic and other electrical equipment .....	36	13.13	13.10	13.40	13.49	13.42	533.08	543.65	556.10	550.39	552.90
Electric distribution equipment .....	361	13.00	13.14	13.08	13.03	—	520.00	541.37	551.98	548.56	—
Transformers, except electronic .....	3612	12.04	12.10	12.07	12.00	—	490.03	502.15	522.63	514.80	—
Switchgear and switchboard apparatus .....	3613	13.82	14.03	14.02	13.99	—	544.51	575.23	576.22	577.79	—
Electrical industrial apparatus .....	362	12.43	12.53	12.91	12.96	—	510.87	513.73	538.35	537.84	—
Motors and generators .....	3621	11.56	11.61	11.80	11.98	—	482.05	478.33	505.04	511.55	—
Relays and industrial controls .....	3625	14.10	14.21	14.89	14.71	—	556.95	571.24	595.60	579.57	—
Household appliances .....	363	12.50	12.56	12.81	13.20	—	500.00	516.22	512.40	518.76	—
Household refrigerators and freezers .....	3632	13.49	13.70	14.20	14.92	—	578.72	594.58	566.58	590.83	—
Household laundry equipment .....	3633	14.21	13.79	13.84	14.13	—	531.45	525.40	539.76	514.33	—
Electric housewares and fans .....	3634	11.08	11.21	11.16	11.28	—	445.42	450.64	447.52	448.94	—
Electric lighting and wiring equipment .....	364	12.69	12.68	12.99	13.09	—	508.87	518.61	539.09	532.76	—
Electric lamps .....	3641	17.01	17.04	17.10	17.75	—	654.89	691.82	726.75	750.83	—
Current-carrying wiring devices .....	3643	13.03	13.10	13.47	13.43	—	523.81	522.69	545.54	546.60	—
Noncurrent-carrying wiring devices .....	3644	11.73	11.80	12.16	12.12	—	490.31	489.70	509.50	488.44	—
Residential lighting fixtures .....	3645	9.43	9.41	9.92	9.99	—	369.66	360.40	401.76	400.60	—
Household audio and video equipment .....	365	12.29	12.05	12.69	13.03	—	481.77	492.85	491.10	496.44	—
Household audio and video equipment .....	3651	11.65	11.61	12.18	12.30	—	443.87	470.21	476.24	469.86	—
Communications equipment .....	366	14.00	13.99	14.03	14.06	—	596.40	605.77	580.84	575.05	—
Telephone and telegraph apparatus .....	3661	14.64	14.81	14.52	14.65	—	661.73	676.82	625.81	631.42	—
Electronic components and accessories .....	367	13.37	13.28	13.65	13.77	—	540.15	548.46	571.94	568.70	—
Electron tubes .....	3671	14.79	14.85	14.88	15.20	—	613.79	634.10	654.72	580.64	—
Semiconductors and related devices .....	3674	17.61	17.54	18.00	18.33	—	736.10	748.96	766.80	780.86	—
Electronic components, nec .....	3679	10.80	10.76	11.33	11.36	—	438.48	441.16	472.46	461.22	—
Misc. electrical equipment and supplies .....	369	13.39	13.37	13.80	13.53	—	542.30	564.21	580.98	542.55	—
Storage batteries .....	3691	14.96	15.17	15.63	15.81	—	625.33	665.96	670.53	657.70	—
Engine electrical equipment .....	3694	13.30	13.11	13.57	12.97	—	543.97	557.18	580.80	518.80	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	41.0	42.8	44.1	42.1	43.5	4.1	5.0	5.9	4.3	—
Motor vehicles and equipment .....	371	39.6	42.5	45.4	42.5	44.3	3.4	4.9	7.0	4.6	—
Motor vehicles and car bodies .....	3711	39.1	41.2	45.5	43.0	—	2.8	4.6	6.9	4.8	—
Truck and bus bodies .....	3713	42.0	42.8	46.6	45.8	—	4.9	4.3	7.4	7.0	—
Motor vehicle parts and accessories .....	3714	39.3	43.3	45.6	42.0	—	3.6	5.3	7.4	4.3	—
Truck trailers .....	3715	41.4	42.2	43.0	43.1	—	3.4	4.3	4.4	4.2	—
Aircraft and parts .....	372	43.5	44.1	42.7	41.8	—	5.9	6.0	4.2	4.4	—
Aircraft .....	3721	43.5	44.3	42.5	41.3	—	6.0	5.9	4.1	4.5	—
Aircraft engines and engine parts .....	3724	44.1	44.3	44.1	44.0	—	5.9	6.0	5.2	5.2	—
Aircraft parts and equipment, nec .....	3728	43.2	43.8	42.1	41.1	—	5.9	6.1	3.9	3.9	—
Ship and boat building and repairing .....	373	42.3	42.6	40.6	40.2	—	4.4	4.4	4.1	3.2	—
Ship building and repairing .....	3731	43.6	44.1	41.6	41.0	—	5.0	4.9	4.7	3.2	—
Boat building and repairing .....	3732	40.3	40.4	39.4	39.3	—	3.4	3.6	3.4	3.3	—
Railroad equipment .....	374	42.6	42.6	41.3	41.3	—	3.9	4.4	3.8	3.8	—
Guided missiles, space vehicles, and parts .....	376	41.6	41.8	41.2	41.1	—	3.2	3.7	3.5	3.4	—
Guided missiles and space vehicles .....	3761	40.8	41.0	40.2	40.1	—	3.0	3.5	2.9	3.1	—
Misc. transportation equipment .....	379	40.8	40.5	41.5	41.8	—	3.7	3.4	3.6	3.8	—
Travel trailers and campers .....	3792	40.0	38.5	40.5	41.1	—	2.5	2.3	2.2	2.8	—
Instruments and related products .....	38	40.7	41.2	41.5	41.0	41.2	2.9	3.1	3.2	3.1	—
Search and navigation equipment .....	381	41.8	41.7	41.2	41.7	—	3.2	3.2	3.0	2.9	—
Measuring and controlling devices .....	382	40.3	40.8	41.4	41.0	—	2.6	2.9	3.2	3.2	—
Environmental controls .....	3822	38.0	39.8	44.2	42.1	—	3.3	3.8	5.0	4.7	—
Process control instruments .....	3823	40.5	40.7	40.6	40.1	—	2.7	2.7	3.0	2.8	—
Instruments to measure electricity .....	3825	41.2	41.3	40.6	40.9	—	1.4	1.7	2.3	2.4	—
Medical instruments and supplies .....	384	40.5	41.1	41.4	40.5	—	3.1	3.3	3.4	3.1	—
Surgical and medical instrument .....	3841	40.9	40.9	40.8	39.8	—	3.0	3.0	3.3	2.9	—
Surgical appliances and supplies .....	3842	39.7	40.7	41.7	40.3	—	3.2	3.7	3.4	3.1	—
Ophthalmic goods .....	385	40.0	41.0	40.6	40.0	—	2.2	2.4	2.2	2.2	—
Photographic equipment and supplies .....	386	42.4	42.7	43.2	43.4	—	4.0	4.1	3.3	3.7	—
Watches, clocks, watchcases, and parts .....	387	39.6	39.1	41.8	39.1	—	2.3	2.1	1.8	1.7	—
Miscellaneous manufacturing industries .....	39	39.2	40.0	39.9	39.2	40.1	2.6	3.1	2.9	2.7	—
Jewelry, silverware, and plated ware .....	391	38.0	39.6	38.6	38.4	—	1.6	3.1	2.3	2.2	—
Jewelry, precious metal .....	3911	37.2	38.9	37.6	37.5	—	1.6	3.1	2.2	2.2	—
Musical instruments .....	393	40.4	41.3	40.4	38.0	—	3.3	3.4	2.5	1.7	—
Toys and sporting goods .....	394	39.5	39.9	40.4	39.5	—	2.0	2.2	2.7	2.5	—
Dolls, games, toys, and children's vehicles .....	3942,4	39.0	40.0	38.1	38.2	—	1.6	2.5	1.3	1.5	—
Sporting and athletic goods, nec .....	3949	39.7	39.8	41.4	40.1	—	2.1	2.1	3.2	2.8	—
Pens, pencils, office, and art supplies .....	395	37.8	38.2	39.0	38.5	—	3.4	3.3	2.5	2.4	—
Costume jewelry and notions .....	396	36.7	38.0	38.1	36.8	—	1.6	2.6	1.9	1.5	—
Costume jewelry .....	3961	36.6	36.8	36.2	35.5	—	1.1	2.6	1.2	0.9	—
Miscellaneous manufactures .....	399	39.9	40.5	40.3	39.8	—	3.2	3.5	3.4	3.2	—
Signs and advertising specialties .....	3993	40.5	41.3	40.4	40.2	—	3.9	4.2	3.8	3.5	—
<b>Nondurable goods .....</b>		<b>40.6</b>	<b>41.0</b>	<b>41.0</b>	<b>40.6</b>	<b>41.0</b>	<b>4.3</b>	<b>4.5</b>	<b>4.4</b>	<b>4.4</b>	<b>4.6</b>
Food and kindred products .....	20	41.6	42.0	41.6	41.8	41.9	5.4	5.8	5.4	5.7	—
Meat products .....	201	40.8	41.6	41.7	41.8	—	4.8	5.3	5.4	5.4	—
Meat packing plants .....	2011	42.7	44.0	43.3	43.2	—	5.7	6.7	6.6	6.4	—
Sausages and other prepared meats .....	2013	42.7	42.1	44.2	44.3	—	6.4	6.1	6.9	7.3	—
Poultry slaughtering and processing .....	2015	39.0	40.0	39.9	40.1	—	3.7	4.1	4.1	4.2	—
Dairy products .....	202	42.1	42.0	43.4	43.8	—	5.3	5.3	5.9	5.8	—
Cheese, natural and processed .....	2022	41.5	41.5	43.6	44.5	—	4.6	4.7	5.4	5.5	—
Fluid milk .....	2026	41.4	41.6	42.8	42.9	—	4.9	5.1	5.2	5.4	—
Preserved fruits and vegetables .....	203	41.4	41.9	40.6	40.7	—	5.8	6.9	5.2	6.3	—
Canned specialties .....	2032	42.4	42.5	44.5	41.5	—	5.6	7.4	6.4	5.6	—
Canned fruits and vegetables .....	2033	41.0	42.6	38.5	40.4	—	7.0	9.2	4.6	7.1	—
Frozen fruits and vegetables .....	2037	39.8	40.0	38.9	38.6	—	4.7	5.2	4.7	5.2	—
Grain mill products .....	204	46.5	45.4	44.1	44.8	—	8.3	7.8	6.7	7.2	—
Flour and other grain mill products .....	2041	46.6	46.2	44.8	45.1	—	8.1	8.0	7.0	7.8	—
Prepared feeds, nec .....	2048	44.9	44.0	42.5	43.4	—	7.5	7.1	6.5	6.5	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	\$16.86	\$17.29	\$18.20	\$17.94	\$18.09	\$691.26	\$740.01	\$802.62	\$755.27	\$786.92
Motor vehicles and equipment .....	371	16.79	17.52	18.68	18.23	18.39	664.88	744.60	848.07	774.78	814.68
Motor vehicles and car bodies .....	3711	21.56	21.70	22.59	22.12	—	843.00	894.04	1,027.85	951.16	—
Truck and bus bodies .....	3713	15.17	15.06	15.71	15.60	—	637.14	644.57	732.09	714.48	—
Motor vehicle parts and accessories .....	3714	15.41	16.00	17.48	17.03	—	605.61	692.80	797.09	715.26	—
Truck trailers .....	3715	11.20	11.52	11.30	11.27	—	463.68	486.14	485.90	485.74	—
Aircraft and parts .....	372	19.15	19.13	19.57	19.81	—	833.03	843.63	835.64	828.06	—
Aircraft .....	3721	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Aircraft engines and engine parts .....	3724	18.95	18.86	19.55	19.78	—	835.70	835.50	862.16	870.32	—
Aircraft parts and equipment, nec .....	3728	17.09	16.97	17.37	17.51	—	738.29	743.29	731.28	719.66	—
Ship and boat building and repairing .....	373	13.96	13.37	13.74	13.82	—	565.13	569.56	557.84	555.56	—
Ship building and repairing .....	3731	14.59	14.52	15.18	15.29	—	636.12	640.33	631.49	626.89	—
Boat building and repairing .....	3732	11.34	11.48	11.97	12.05	—	457.00	463.79	471.62	473.57	—
Railroad equipment .....	374	16.87	16.65	16.65	16.80	—	718.66	709.29	687.65	693.84	—
Guided missiles, space vehicles, and parts .....	376	20.00	20.04	20.14	20.18	—	832.00	837.67	829.77	829.40	—
Guided missiles and space vehicles .....	3761	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Misc. transportation equipment .....	379	11.77	11.86	12.64	12.46	—	480.22	480.33	524.56	520.83	—
Travel trailers and campers .....	3792	11.77	12.08	13.01	12.49	—	470.80	465.08	526.91	513.34	—
Instruments and related products .....	38	13.78	13.79	14.13	14.26	14.34	560.85	568.15	586.40	584.66	590.81
Search and navigation equipment .....	381	17.58	17.40	17.48	17.34	—	734.84	725.58	720.18	723.08	—
Measuring and controlling devices .....	382	13.82	13.91	14.25	14.31	—	556.95	567.53	589.95	586.71	—
Environmental controls .....	3822	12.12	12.09	12.22	12.09	—	460.56	481.18	540.12	508.99	—
Process control instruments .....	3823	13.76	13.89	14.29	14.41	—	557.28	565.32	580.17	577.84	—
Instruments to measure electricity .....	3825	16.07	16.28	16.65	16.75	—	662.08	672.36	675.99	685.08	—
Medical instruments and supplies .....	384	12.71	12.71	12.81	12.96	—	514.76	522.38	530.33	524.88	—
Surgical and medical instrument .....	3841	11.89	11.83	12.20	12.49	—	486.30	483.85	497.76	497.10	—
Surgical appliances and supplies .....	3842	11.94	12.04	12.06	12.14	—	474.02	490.03	502.90	489.24	—
Ophthalmic goods .....	385	10.21	10.15	10.94	11.13	—	408.40	416.15	444.16	445.20	—
Photographic equipment and supplies .....	386	16.48	16.51	18.01	18.24	—	698.75	704.98	778.03	791.62	—
Watches, clocks, watchcases, and parts .....	387	10.80	10.43	10.55	10.84	—	427.68	407.81	440.99	423.84	—
Miscellaneous manufacturing industries .....	39	10.85	10.85	11.30	11.30	11.29	425.32	434.00	450.87	442.96	452.73
Jewelry, silverware, and plated ware .....	391	11.28	11.41	11.91	12.01	—	428.64	451.84	459.73	461.18	—
Jewelry, precious metal .....	3911	11.36	11.49	11.77	11.80	—	422.59	446.96	442.55	442.50	—
Musical instruments .....	393	11.04	11.14	11.80	12.01	—	446.02	460.08	476.72	456.38	—
Toys and sporting goods .....	394	10.49	10.43	10.89	10.99	—	414.36	416.16	439.96	434.11	—
Dolls, games, toys, and children's vehicles .....	3942.4	10.07	10.15	10.47	10.45	—	392.73	406.00	398.91	399.19	—
Sporting and athletic goods, nec .....	3949	10.67	10.56	11.05	11.20	—	423.60	420.29	457.47	449.12	—
Pens, pencils, office, and art supplies .....	395	11.44	11.36	11.49	11.44	—	432.43	433.95	448.11	440.44	—
Costume jewelry and notions .....	396	9.69	9.55	10.08	10.18	—	355.62	362.90	384.05	374.62	—
Costume jewelry .....	3961	8.69	8.52	8.95	9.09	—	318.05	313.54	323.99	322.70	—
Miscellaneous manufactures .....	399	10.96	10.98	11.43	11.32	—	437.30	444.69	460.63	450.54	—
Signs and advertising specialties .....	3993	11.52	11.57	12.36	12.14	—	466.56	477.84	499.34	488.03	—
<b>Nondurable goods .....</b>		<b>12.81</b>	<b>12.75</b>	<b>13.15</b>	<b>13.22</b>	<b>13.18</b>	<b>520.09</b>	<b>522.75</b>	<b>539.15</b>	<b>536.73</b>	<b>540.38</b>
Food and kindred products .....	20	11.80	11.76	12.16	12.15	12.09	490.88	493.92	505.86	507.87	506.57
Meat products .....	201	9.71	9.66	9.93	10.03	—	396.17	401.86	414.08	419.25	—
Meat packing plants .....	2011	10.26	10.36	10.77	10.93	—	438.10	455.84	466.34	472.18	—
Sausages and other prepared meats .....	2013	11.03	10.95	11.11	11.17	—	470.98	461.00	491.06	494.83	—
Poultry slaughtering and processing .....	2015	8.84	8.72	8.93	9.02	—	344.76	348.80	356.31	361.70	—
Dairy products .....	202	13.58	13.67	14.07	14.07	—	571.72	574.14	610.64	616.27	—
Cheese, natural and processed .....	2022	12.54	12.62	12.81	12.97	—	520.41	523.73	558.52	577.17	—
Fluid milk .....	2026	14.16	14.21	14.78	14.83	—	586.22	591.14	632.58	636.21	—
Preserved fruits and vegetables .....	203	11.16	11.25	11.64	11.53	—	462.02	471.38	472.58	469.27	—
Canned specialties .....	2032	14.66	14.69	15.43	15.34	—	621.58	624.33	686.64	636.61	—
Canned fruits and vegetables .....	2033	11.99	11.92	12.52	12.12	—	491.59	507.79	482.02	489.65	—
Frozen fruits and vegetables .....	2037	10.46	10.30	11.02	11.04	—	416.31	412.00	428.68	426.14	—
Grain mill products .....	204	15.05	14.78	15.08	15.20	—	699.83	671.01	665.03	680.96	—
Flour and other grain mill products .....	2041	13.04	13.11	13.59	13.34	—	607.66	605.68	608.83	601.63	—
Prepared feeds, nec .....	2048	11.73	11.76	12.23	12.37	—	526.68	517.44	519.78	536.86	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	41.0	41.6	41.0	41.2	—	5.3	5.5	5.2	5.3	—
Bread, cake, and related products .....	2051	40.7	41.0	41.5	41.4	—	5.4	5.6	5.8	5.7	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	41.6	42.7	40.1	40.7	—	5.2	5.4	4.2	4.7	—
Sugar and confectionery products .....	206	40.0	41.9	39.7	40.1	—	3.8	4.8	4.0	4.6	—
Raw cane sugar .....	2061	50.9	48.5	39.9	42.7	—	7.7	7.5	5.0	6.3	—
Cane sugar refining .....	2062	48.1	49.4	54.0	56.2	—	9.2	10.3	13.2	12.0	—
Beet sugar .....	2063	42.0	42.5	38.4	40.8	—	3.0	4.4	2.0	3.9	—
Candy and other confectionery products .....	2064	39.2	41.8	39.3	39.5	—	3.7	5.0	4.0	4.7	—
Fats and oils .....	207	42.5	42.8	41.8	41.9	—	6.1	6.1	5.6	5.8	—
Beverages .....	208	44.5	43.7	44.4	43.3	—	6.1	5.9	6.2	5.6	—
Malt beverages .....	2082	47.3	45.9	46.0	45.0	—	8.0	7.4	7.6	6.6	—
Bottled and canned soft drinks .....	2086	45.4	44.3	46.3	44.7	—	6.9	6.4	7.3	6.8	—
Misc. food and kindred products .....	209	40.6	40.0	39.7	40.2	—	5.4	5.2	4.4	5.4	—
Tobacco products .....	21	39.3	39.3	40.1	40.3	38.5	3.0	3.0	3.0	4.1	—
Cigarettes .....	211	39.0	39.6	40.4	41.4	—	3.0	3.4	3.3	4.8	—
Textile mill products .....	22	40.4	41.2	41.0	40.6	41.1	4.4	4.5	4.4	4.3	—
Broadwoven fabric mills, cotton .....	221	40.8	42.8	42.3	41.9	—	5.2	5.9	5.8	5.5	—
Broadwoven fabric mills, synthetics .....	222	40.9	40.8	41.9	42.6	—	4.9	4.9	4.8	5.3	—
Broadwoven fabric mills, wool .....	223	39.6	39.3	37.7	36.8	—	3.9	3.6	2.6	3.2	—
Narrow fabric mills .....	224	40.5	40.8	40.7	39.0	—	2.9	3.0	2.8	2.6	—
Knitting mills .....	225	39.8	40.5	39.2	38.6	—	3.6	3.6	3.5	3.6	—
Women's hosiery, except socks .....	2251	38.3	38.7	37.9	35.7	—	2.5	3.1	2.5	2.5	—
Hosiery, nec .....	2252	38.7	38.9	38.3	37.4	—	3.6	3.1	3.0	3.0	—
Knit outerwear mills .....	2253	42.1	42.0	38.8	39.8	—	3.6	4.0	3.1	3.6	—
Knit underwear mills .....	2254	36.7	38.6	41.1	37.1	—	1.5	1.2	2.4	1.4	—
Weft knit fabric mills .....	2257	38.0	40.2	39.9	40.0	—	4.7	4.4	5.1	5.4	—
Textile finishing, except wool .....	226	41.2	42.1	41.2	39.7	—	5.2	5.3	4.7	3.6	—
Finishing plants, cotton .....	2261	43.0	42.3	41.4	39.6	—	5.6	5.5	4.6	3.4	—
Finishing plants, synthetics .....	2262	39.3	43.7	41.9	39.9	—	5.0	5.7	5.1	3.4	—
Carpets and rugs .....	227	40.4	41.3	41.9	42.3	—	5.2	5.0	4.7	4.7	—
Yarn and thread mills .....	228	40.2	40.7	41.6	40.9	—	4.4	4.3	4.7	4.6	—
Yarn spinning mills .....	2281	41.8	41.5	41.8	41.7	—	4.9	4.6	4.9	4.7	—
Throwing and winding mills .....	2282	34.9	37.9	40.4	37.9	—	3.1	3.4	3.7	3.9	—
Miscellaneous textile goods .....	229	40.3	41.6	42.0	41.3	—	4.2	4.5	4.8	4.3	—
Apparel and other textile products .....	23	36.9	37.6	38.1	36.9	37.4	1.9	2.1	2.5	2.0	—
Men's and boys' suits and coats .....	231	38.1	37.1	36.5	35.3	—	0.9	1.2	0.9	0.9	—
Men's and boys' furnishings .....	232	36.9	37.3	36.7	36.4	—	1.7	1.7	1.6	1.5	—
Men's and boys' shirts .....	2321	35.7	36.1	35.4	34.7	—	1.2	1.4	1.5	1.1	—
Men's and boys' trousers and slacks .....	2325	36.6	36.8	36.8	35.8	—	1.8	1.7	1.8	1.5	—
Men's and boys' work clothing .....	2326	36.0	36.8	37.6	38.7	—	1.5	1.9	1.9	2.0	—
Women's and misses' outerwear .....	233	35.7	36.6	37.4	36.5	—	1.4	1.5	2.1	1.6	—
Women's and misses' blouses and shirts .....	2331	35.4	35.9	36.7	36.2	—	1.6	2.1	2.3	1.8	—
Women's, juniors', and misses' dresses .....	2335	36.7	36.3	38.8	37.4	—	2.2	1.8	3.3	3.0	—
Women's and misses' suits and coats .....	2337	37.0	38.5	37.4	36.1	—	1.3	1.6	2.1	2.3	—
Women's and misses' outerwear, nec .....	2339	35.3	36.5	37.2	36.3	—	1.3	1.4	1.8	1.2	—
Women's and children's undergarments .....	234	36.8	36.8	35.5	35.2	—	1.6	1.8	1.6	1.8	—
Women's and children's underwear .....	2341	37.1	37.3	36.4	35.9	—	1.4	1.6	1.3	1.6	—
Brassieres, girdles, and allied garments .....	2342	35.8	35.6	33.2	33.7	—	2.2	2.4	2.4	2.1	—
Girls' and children's outerwear .....	236	36.6	37.4	37.6	36.5	—	2.7	3.7	3.4	2.3	—
Girls' and children's dresses and blouses .....	2361	38.9	39.1	38.4	38.1	—	4.2	5.0	3.7	3.6	—
Misc. apparel and accessories .....	238	36.1	36.8	37.0	35.6	—	0.9	1.1	1.0	0.8	—
Misc. fabricated textile products .....	239	38.3	39.4	40.6	38.4	—	2.8	3.4	3.9	3.1	—
Curtains and draperies .....	2391	34.6	35.4	37.3	36.7	—	1.1	1.6	2.2	1.9	—
House furnishings, nec .....	2392	39.8	41.0	40.4	39.5	—	4.1	4.4	4.2	3.9	—
Automotive and apparel trimmings .....	2396	37.1	39.9	43.1	38.1	—	1.8	3.2	4.8	2.6	—
Paper and allied products .....	26	43.1	43.1	43.5	43.0	43.4	5.6	5.6	5.6	5.6	—
Paper mills .....	262	43.9	43.7	45.0	44.2	—	6.4	6.4	6.8	6.5	—
Paperboard mills .....	263	44.1	43.7	45.1	43.5	—	7.3	7.0	7.6	7.2	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	\$12.78	\$12.83	\$13.33	\$13.25	—	\$523.98	\$533.73	\$546.53	\$545.90	—
Bread, cake, and related products .....	2051	12.88	12.85	13.46	13.39	—	524.22	526.85	558.59	554.35	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	12.61	12.80	13.11	13.01	—	524.58	546.56	525.71	529.51	—
Sugar and confectionery products .....	206	13.43	13.33	13.98	14.30	—	537.20	558.53	555.01	573.43	—
Raw cane sugar .....	2061	9.98	10.82	11.51	11.46	—	507.98	524.77	459.25	489.34	—
Cane sugar refining .....	2062	18.38	18.25	18.39	18.79	—	884.08	901.55	993.06	1,056.00	—
Beet sugar .....	2063	14.59	14.80	14.90	15.27	—	612.78	629.00	572.16	623.02	—
Candy and other confectionery products .....	2064	12.60	12.47	13.38	13.66	—	493.92	521.25	525.83	539.57	—
Fats and oils .....	207	12.89	12.91	13.53	13.77	—	547.83	552.55	565.55	576.96	—
Beverages .....	208	15.85	15.88	16.26	16.21	—	705.33	693.96	721.94	701.89	—
Malt beverages .....	2082	22.13	22.18	23.58	23.43	—	1,046.75	1,018.06	1,084.68	1,054.35	—
Bottled and canned soft drinks .....	2086	13.35	13.55	13.55	13.53	—	606.09	600.27	627.37	604.79	—
Misc. food and kindred products .....	209	10.62	10.59	10.98	10.80	—	431.17	423.60	435.91	434.16	—
Tobacco products .....	21	20.59	18.96	20.79	21.22	\$20.51	809.19	745.13	833.68	855.17	\$789.64
Cigarettes .....	211	24.18	24.49	24.56	24.78	—	943.02	969.80	992.22	1,025.89	—
Textile mill products .....	22	10.36	10.37	10.76	10.71	10.72	418.54	427.24	441.16	434.83	440.59
Broadwoven fabric mills, cotton .....	221	10.91	10.94	11.13	11.05	—	445.13	468.23	470.80	463.00	—
Broadwoven fabric mills, synthetics .....	222	11.29	11.23	11.46	11.58	—	461.76	458.18	480.17	493.31	—
Broadwoven fabric mills, wool .....	223	11.00	10.83	11.33	11.22	—	435.60	425.62	427.14	412.90	—
Narrow fabric mills .....	224	9.64	9.61	9.81	9.77	—	390.42	392.09	399.27	381.03	—
Knitting mills .....	225	9.46	9.49	9.96	9.98	—	376.51	384.35	390.43	385.23	—
Women's hosiery, except socks .....	2251	8.86	8.95	8.92	9.06	—	339.34	346.37	338.07	323.44	—
Hosiery, nec .....	2252	9.57	9.57	9.77	9.79	—	370.36	372.27	374.19	366.15	—
Knit outerwear mills .....	2253	8.77	8.80	9.53	9.51	—	369.22	369.60	369.76	378.50	—
Knit underwear mills .....	2254	10.06	9.64	10.31	10.16	—	369.20	372.10	423.74	376.94	—
Weft knit fabric mills .....	2257	10.15	10.26	10.57	10.57	—	385.70	412.45	421.74	422.80	—
Textile finishing, except wool .....	226	10.61	10.65	10.97	10.73	—	437.13	448.37	451.96	425.98	—
Finishing plants, cotton .....	2261	10.48	10.50	10.56	10.48	—	450.64	444.15	437.18	415.01	—
Finishing plants, synthetics .....	2262	11.11	11.21	11.73	11.27	—	436.62	489.88	491.49	449.67	—
Carpets and rugs .....	227	10.16	10.17	10.86	10.56	—	410.46	420.02	455.03	446.69	—
Yarn and thread mills .....	228	10.06	10.12	10.43	10.51	—	404.41	411.88	433.89	429.86	—
Yarn spinning mills .....	2281	10.04	10.18	10.44	10.48	—	419.67	422.47	436.39	437.02	—
Throwing and winding mills .....	2282	10.16	9.94	10.41	10.62	—	354.58	376.73	420.56	402.50	—
Miscellaneous textile goods .....	229	11.88	11.81	12.02	11.93	—	478.76	491.30	504.84	492.71	—
Apparel and other textile products .....	23	8.48	8.54	8.89	8.83	8.87	312.91	321.10	338.71	325.83	331.74
Men's and boys' suits and coats .....	231	8.68	8.74	8.84	8.89	—	330.71	324.25	322.66	313.82	—
Men's and boys' furnishings .....	232	7.97	7.91	8.37	8.26	—	294.09	295.04	307.18	300.66	—
Men's and boys' shirts .....	2321	7.74	7.80	8.21	8.04	—	276.32	281.58	290.63	278.99	—
Men's and boys' trousers and slacks .....	2325	8.25	8.06	8.66	8.44	—	301.95	296.61	318.69	302.15	—
Men's and boys' work clothing .....	2326	7.72	7.78	8.16	8.05	—	277.92	286.30	306.82	311.54	—
Women's and misses' outerwear .....	233	8.20	8.21	8.50	8.51	—	292.74	300.49	317.90	310.62	—
Women's and misses' blouses and shirts .....	2331	7.47	7.45	8.02	7.91	—	264.44	267.46	294.33	286.34	—
Women's, juniors', and misses' dresses .....	2335	9.47	9.43	9.93	10.09	—	347.55	342.31	385.28	377.37	—
Women's and misses' suits and coats .....	2337	8.07	8.01	8.55	8.56	—	298.59	308.39	319.77	309.02	—
Women's and misses' outerwear, nec .....	2339	8.04	8.08	8.25	8.23	—	283.81	294.92	306.90	298.75	—
Women's and children's undergarments .....	234	8.17	8.16	8.55	8.52	—	300.66	300.29	303.53	299.90	—
Women's and children's underwear .....	2341	7.91	7.97	8.40	8.41	—	293.46	297.28	305.76	301.92	—
Brassieres, girdles, and allied garments .....	2342	8.86	8.71	8.93	8.77	—	317.19	310.08	296.48	295.55	—
Girls' and children's outerwear .....	236	8.22	8.30	8.37	8.34	—	300.85	310.42	314.71	304.41	—
Girls' and children's dresses and blouses .....	2361	8.04	8.24	8.07	8.16	—	312.76	322.18	309.89	310.90	—
Misc. apparel and accessories .....	238	8.10	8.08	8.19	8.30	—	292.41	297.34	303.03	295.48	—
Misc. fabricated textile products .....	239	9.28	9.47	9.74	9.60	—	355.42	373.12	395.44	368.64	—
Curtains and draperies .....	2391	8.18	8.30	8.38	8.28	—	283.03	293.82	312.57	303.88	—
House furnishings, nec .....	2392	9.03	9.01	9.62	9.51	—	359.39	369.41	388.65	375.65	—
Automotive and apparel trimmings .....	2396	10.79	11.04	11.03	10.67	—	400.31	440.50	475.39	406.53	—
Paper and allied products .....	26	15.64	15.54	15.98	16.07	16.01	674.08	669.77	695.13	691.01	694.83
Paper mills .....	262	20.08	19.87	20.43	20.60	—	881.51	868.32	919.35	910.52	—
Paperboard mills .....	263	19.58	19.55	20.21	20.78	—	863.48	854.34	911.47	903.93	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Paper and allied products—Continued											
Paperboard containers and boxes .....	265	42.8	43.2	43.3	43.0	—	5.6	5.7	5.4	5.5	—
Corrugated and solid fiber boxes .....	2653	43.3	44.1	44.0	43.4	—	5.7	6.2	5.8	5.9	—
Sanitary food containers .....	2656	42.4	42.1	42.7	42.5	—	5.7	5.2	5.1	5.0	—
Folding paperboard boxes .....	2657	42.4	42.0	42.3	43.0	—	6.0	5.6	4.7	5.2	—
Misc. converted paper products .....	267	42.5	42.3	42.4	42.1	—	4.8	4.7	4.7	4.7	—
Paper, coated and laminated, nec .....	2672	43.1	42.2	43.1	42.7	—	4.2	3.7	4.0	3.6	—
Bags: plastics, laminated, and coated .....	2673	42.7	42.6	42.5	41.9	—	5.5	5.1	5.3	5.1	—
Envelopes .....	2677	39.7	41.0	40.9	40.9	—	3.2	3.9	3.5	3.8	—
Printing and publishing .....											
Printing and publishing .....	27	38.1	38.6	37.9	38.0	38.4	3.1	3.4	2.8	2.9	—
Newspapers .....	271	32.8	33.0	33.1	32.6	—	1.3	1.4	1.5	1.4	—
Periodicals .....	272	35.8	36.6	36.4	37.1	—	2.1	2.9	2.6	2.4	—
Books .....	273	38.9	40.1	40.3	41.6	—	3.9	4.5	3.5	3.7	—
Book publishing .....	2731	36.9	37.0	37.6	37.9	—	2.6	2.9	1.7	1.8	—
Book printing .....	2732	40.9	43.3	42.9	45.1	—	5.2	6.1	5.1	5.5	—
Miscellaneous publishing .....	274	37.1	37.8	35.2	35.0	—	2.1	2.6	2.0	2.0	—
Commercial printing .....	275	39.5	40.1	39.1	39.3	—	3.8	4.1	3.2	3.5	—
Commercial printing, lithographic .....	2752	39.4	39.9	38.7	39.0	—	3.7	4.0	3.1	3.3	—
Commercial printing, nec .....	2759	39.8	40.3	39.8	39.9	—	3.7	4.0	3.5	3.8	—
Manifold business forms .....	276	42.1	41.5	41.8	42.0	—	4.3	3.8	4.3	4.9	—
Blankbooks and bookbinding .....	278	39.8	40.3	39.1	39.5	—	3.2	3.6	2.5	3.0	—
Printing trade services .....	279	40.1	39.9	39.8	40.2	—	4.3	4.0	3.7	3.8	—
Chemicals and allied products .....											
Chemicals and allied products .....	28	42.7	43.0	43.0	42.6	43.1	5.0	5.1	5.0	4.9	—
Industrial inorganic chemicals .....	281	44.9	44.5	42.4	42.6	—	6.1	5.8	5.3	5.3	—
Industrial inorganic chemicals, nec .....	2819	44.8	44.7	42.9	43.0	—	5.7	5.7	5.6	5.5	—
Plastics materials and synthetics .....	282	43.1	43.0	43.8	43.4	—	5.6	5.4	5.0	4.8	—
Plastics materials and resins .....	2821	44.0	43.4	43.8	43.6	—	5.3	5.1	5.2	5.0	—
Organic fibers, noncellulosic .....	2824	42.9	43.3	44.8	44.5	—	5.1	4.8	4.9	5.2	—
Drugs .....	283	41.7	42.3	41.5	40.9	—	4.2	4.4	4.8	4.7	—
Pharmaceutical preparations .....	2834	41.6	42.4	41.6	40.9	—	3.8	4.3	4.6	4.4	—
Soap, cleaners, and toilet goods .....	284	40.4	41.5	42.2	41.8	—	3.5	4.3	4.3	4.3	—
Soap and other detergents .....	2841	43.4	45.0	45.0	45.2	—	5.3	6.5	6.2	6.7	—
Polishing, sanitation, and finishing preparations .....	2842,3	40.2	40.6	41.5	41.5	—	3.7	4.0	3.9	3.9	—
Toilet preparations .....	2844	39.3	40.5	41.0	40.1	—	2.7	3.5	3.5	3.2	—
Paints and allied products .....	285	42.2	41.8	42.9	42.6	—	4.6	4.2	5.0	5.3	—
Industrial organic chemicals .....	286	44.5	44.5	45.3	45.1	—	6.2	6.3	6.2	6.1	—
Cyclic crudes and intermediates .....	2865	43.9	45.0	45.3	44.7	—	5.7	7.0	6.3	6.3	—
Industrial organic chemicals, nec .....	2869	44.6	44.3	45.3	45.2	—	6.3	6.1	6.2	6.0	—
Agricultural chemicals .....	287	44.8	44.6	45.1	44.4	—	6.5	6.5	5.9	5.8	—
Miscellaneous chemical products .....	289	42.3	43.1	42.6	42.1	—	4.5	4.9	4.4	4.2	—
Petroleum and coal products .....											
Petroleum and coal products .....	29	44.8	44.0	43.0	43.6	42.6	7.2	7.2	6.9	6.8	—
Petroleum refining .....	291	44.4	42.9	41.2	42.3	—	6.0	5.9	5.5	5.2	—
Asphalt paving and roofing materials .....	295	46.4	46.9	47.1	46.9	—	10.8	10.9	10.6	11.0	—
Rubber and misc. plastics products .....											
Rubber and misc. plastics products .....	30	41.1	41.5	41.9	41.0	41.4	4.2	4.3	4.6	4.2	—
Tires and inner tubes .....	301	42.8	42.8	41.9	42.8	—	5.2	5.5	5.3	5.6	—
Rubber and plastics footwear .....	302	43.0	39.6	40.5	41.9	—	3.0	3.0	3.3	3.5	—
Hose, belting, gaskets, and packing .....	305	40.8	41.7	43.2	41.9	—	4.1	4.0	4.9	4.3	—
Rubber and plastics hose and belting .....	3052	43.5	44.0	43.1	42.0	—	6.0	5.6	4.7	4.4	—
Fabricated rubber products, nec .....	306	39.9	41.3	42.9	40.9	—	3.4	4.0	4.6	3.6	—
Miscellaneous plastics products, nec .....	308	41.1	41.3	41.7	40.8	—	4.3	4.3	4.5	4.2	—
Leather and leather products .....											
Leather and leather products .....	31	36.9	38.4	38.4	36.7	38.2	1.8	2.3	1.9	1.9	—
Leather tanning and finishing .....	311	34.6	40.7	44.2	43.4	—	3.2	3.9	5.3	5.2	—
Footwear, except rubber .....	314	37.0	37.6	37.9	34.6	—	1.6	2.0	1.1	1.0	—
Men's footwear, except athletic .....	3143	36.8	37.6	37.4	33.6	—	1.3	2.1	0.9	1.3	—
Women's footwear, except athletic .....	3144	38.2	38.2	38.3	36.2	—	2.1	1.7	0.8	0.0	—
Luggage .....	316	35.9	37.5	34.6	35.9	—	1.4	1.4	1.5	1.5	—
Handbags and personal leather goods .....	317	38.6	39.0	37.9	37.5	—	1.4	2.0	1.2	1.1	—
<b>Service-producing .....</b>		<b>33.2</b>	<b>33.5</b>	<b>32.9</b>	<b>33.1</b>	<b>33.5</b>	—	—	—	—	—
<b>Transportation and public utilities .....</b>		<b>39.7</b>	<b>39.9</b>	<b>39.0</b>	<b>39.0</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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Nondurable goods—Continued</b>											
Paper and allied products—Continued											
Paperboard containers and boxes .....	265	\$13.23	\$13.23	\$13.39	\$13.48	—	\$566.24	\$571.54	\$579.79	\$579.64	—
Corrugated and solid fiber boxes .....	2653	13.20	13.22	13.39	13.48	—	571.56	583.00	589.16	585.03	—
Sanitary food containers .....	2656	13.43	13.52	13.47	13.49	—	569.43	569.19	575.17	573.33	—
Folding paperboard boxes .....	2657	14.05	13.95	14.07	14.16	—	595.72	585.90	595.16	608.88	—
Misc. converted paper products .....	267	13.63	13.56	14.07	14.04	—	579.28	573.59	596.57	591.08	—
Paper, coated and laminated, nec .....	2672	15.64	15.42	16.65	16.03	—	674.08	650.72	717.62	684.48	—
Bags: plastics, laminated, and coated .....	2673	12.37	12.21	12.76	12.79	—	528.20	520.15	542.30	535.90	—
Envelopes .....	2677	12.59	12.56	12.82	13.04	—	499.82	514.96	524.34	533.34	—
Printing and publishing .....	27	13.44	13.47	13.73	13.80	\$13.81	512.06	519.94	520.37	524.40	\$530.30
Newspapers .....	271	13.24	13.21	13.59	13.68	—	434.27	435.93	449.83	445.97	—
Periodicals .....	272	14.83	15.12	15.48	15.29	—	530.91	553.39	563.47	567.26	—
Books .....	273	12.77	12.90	13.39	13.40	—	496.75	517.29	539.62	557.44	—
Book publishing .....	2731	12.13	12.31	12.66	12.72	—	447.60	455.47	476.02	482.09	—
Book printing .....	2732	13.36	13.41	14.00	13.94	—	546.42	580.65	600.60	628.69	—
Miscellaneous publishing .....	274	12.72	12.77	12.96	12.97	—	471.91	482.71	456.19	453.95	—
Commercial printing .....	275	13.72	13.74	13.88	14.00	—	541.94	550.97	542.71	550.20	—
Commercial printing, lithographic .....	2752	13.98	13.95	14.31	14.40	—	550.81	556.61	553.80	561.60	—
Commercial printing, nec .....	2759	12.95	13.00	12.84	13.01	—	515.41	523.90	511.03	519.10	—
Manifold business forms .....	276	14.49	14.36	14.45	14.67	—	610.03	595.94	604.01	616.14	—
Blankbooks and bookbinding .....	278	10.49	10.51	10.73	10.75	—	417.50	423.55	419.54	424.63	—
Printing trade services .....	279	16.69	16.86	16.90	17.02	—	669.27	672.71	672.62	684.20	—
Chemicals and allied products .....	28	17.19	17.14	17.35	17.48	17.46	734.01	737.02	746.05	744.65	752.53
Industrial inorganic chemicals .....	281	19.08	18.98	19.48	19.66	—	856.69	844.61	825.95	837.52	—
Industrial inorganic chemicals, nec .....	2819	19.55	19.45	20.07	20.35	—	875.84	869.42	861.00	875.05	—
Plastics materials and synthetics .....	282	18.00	17.93	18.17	18.39	—	775.80	770.99	795.85	798.13	—
Plastics materials and resins .....	2821	19.76	19.83	20.55	20.69	—	869.44	860.62	900.09	902.08	—
Organic fibers, noncellulosic .....	2824	15.18	15.00	15.41	15.61	—	651.22	649.50	690.37	694.65	—
Drugs .....	283	17.08	17.14	17.04	17.09	—	712.24	725.02	707.16	698.98	—
Pharmaceutical preparations .....	2834	16.87	17.04	16.89	16.94	—	701.79	722.50	702.62	692.85	—
Soap, cleaners, and toilet goods .....	284	13.79	13.88	14.73	14.86	—	557.12	576.02	621.61	621.15	—
Soap and other detergents .....	2841	17.48	17.79	18.70	18.96	—	758.63	800.55	841.50	856.99	—
Polishing, sanitation, and finishing preparations .....	2842,3	13.50	13.41	13.97	13.95	—	542.70	544.45	579.76	578.93	—
Toilet preparations .....	2844	12.27	12.33	12.67	12.71	—	482.21	499.37	519.47	509.67	—
Paints and allied products .....	285	14.48	14.43	14.91	15.01	—	611.06	603.17	639.64	639.43	—
Industrial organic chemicals .....	286	20.61	20.52	20.30	20.42	—	917.15	913.14	919.59	920.94	—
Cyclic crudes and intermediates .....	2865	20.32	20.35	20.39	20.65	—	892.05	915.75	923.67	923.06	—
Industrial organic chemicals, nec .....	2869	20.79	20.68	20.39	20.48	—	927.23	916.12	923.67	925.70	—
Agricultural chemicals .....	287	17.18	17.33	17.30	17.50	—	769.66	772.92	780.23	777.00	—
Miscellaneous chemical products .....	289	15.51	15.30	15.76	15.86	—	656.07	659.43	671.38	667.71	—
Petroleum and coal products .....	29	20.83	20.80	21.14	21.37	21.29	933.18	915.20	909.02	931.73	906.95
Petroleum refining .....	291	23.43	23.51	24.27	24.33	—	1,040.29	1,008.58	999.92	1,029.16	—
Asphalt paving and roofing materials .....	295	16.01	16.01	16.42	16.82	—	742.86	750.87	773.38	788.86	—
Rubber and misc. plastics products .....	30	11.91	11.84	12.25	12.36	12.30	489.50	491.36	513.28	506.76	509.22
Tires and inner tubes .....	301	18.53	18.43	19.27	19.46	—	793.08	788.80	807.41	832.89	—
Rubber and plastics footwear .....	302	10.14	10.15	10.46	10.24	—	436.02	401.94	423.63	429.06	—
Hose, belting, gaskets, and packing .....	305	11.86	11.83	12.43	12.58	—	483.89	493.31	536.98	527.10	—
Rubber and plastics hose and belting .....	3052	12.13	11.95	12.40	12.73	—	527.66	525.80	534.44	534.66	—
Fabricated rubber products, nec .....	306	11.57	11.60	12.06	12.13	—	461.64	479.08	517.37	496.12	—
Miscellaneous plastics products, nec .....	308	11.25	11.18	11.61	11.68	—	462.38	461.73	484.14	476.54	—
Leather and leather products .....	31	9.14	9.28	9.57	9.56	9.67	337.27	356.35	367.49	350.85	369.39
Leather tanning and finishing .....	311	12.15	11.91	12.20	12.65	—	420.39	484.74	539.24	549.01	—
Footwear, except rubber .....	314	8.86	8.92	9.26	9.01	—	327.82	335.39	350.95	311.75	—
Men's footwear, except athletic .....	3143	9.53	9.59	10.00	9.53	—	350.70	360.58	374.00	320.21	—
Women's footwear, except athletic .....	3144	7.72	7.75	7.90	7.86	—	294.90	296.05	302.57	284.53	—
Luggage .....	316	9.28	9.40	9.05	9.00	—	333.15	352.50	313.13	323.10	—
Handbags and personal leather goods .....	317	8.26	8.42	8.25	8.66	—	318.84	328.38	312.68	324.75	—
<b>Service-producing .....</b>		<b>12.14</b>	<b>12.22</b>	<b>12.60</b>	<b>12.61</b>	<b>12.67</b>	<b>403.05</b>	<b>409.37</b>	<b>414.54</b>	<b>417.39</b>	<b>424.45</b>
<b>Transportation and public utilities .....</b>		<b>15.27</b>	<b>15.30</b>	<b>15.56</b>	<b>15.73</b>	<b>15.66</b>	<b>606.22</b>	<b>610.47</b>	<b>606.84</b>	<b>613.47</b>	<b>621.70</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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	47.4	46.5	46.6	47.1	-	-	-	-	-	-
Local and interurban passenger transit .....	41	35.7	35.3	34.3	35.7	-	-	-	-	-	-
Local and suburban transportation .....	411	38.9	39.1	38.6	39.2	-	-	-	-	-	-
Intercity and rural bus transportation .....	413	38.9	39.1	40.4	40.0	-	-	-	-	-	-
Trucking and warehousing .....	42	40.4	40.7	40.6	40.3	-	-	-	-	-	-
Trucking and courier services, except air .....	421	40.5	40.7	40.6	40.3	-	-	-	-	-	-
Public warehousing and storage .....	422	40.2	40.7	40.5	40.2	-	-	-	-	-	-
Water transportation:											
Water transportation services .....	449	37.2	38.2	36.0	35.1	-	-	-	-	-	-
Pipelines, except natural gas .....	46	43.7	45.8	43.2	43.0	-	-	-	-	-	-
Transportation services .....	47	37.5	38.4	38.5	38.0	-	-	-	-	-	-
Passenger transportation arrangement .....	472	37.2	38.0	38.2	37.9	-	-	-	-	-	-
Travel agencies .....	4724	37.4	38.5	38.5	38.1	-	-	-	-	-	-
Freight transportation arrangement .....	473	37.6	38.5	38.4	37.8	-	-	-	-	-	-
Communications .....	48	41.3	40.4	40.6	40.6	-	-	-	-	-	-
Telephone communications .....	481	43.3	41.8	42.2	41.7	-	-	-	-	-	-
Telephone communications, except radio .....	4813	43.9	42.2	42.7	42.3	-	-	-	-	-	-
Radio and television broadcasting .....	483	35.9	36.1	35.5	36.0	-	-	-	-	-	-
Cable and other pay television services .....	484	39.5	39.9	40.1	41.4	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	42.0	42.3	42.3	42.3	-	-	-	-	-	-
Electric services .....	491	41.3	42.0	41.7	41.8	-	-	-	-	-	-
Gas production and distribution .....	492	42.0	42.7	42.2	41.6	-	-	-	-	-	-
Combination utility services .....	493	42.5	42.2	42.7	43.7	-	-	-	-	-	-
Sanitary services .....	495	43.0	42.9	43.8	43.3	-	-	-	-	-	-
<b>Wholesale trade</b> .....		<b>38.3</b>	<b>38.7</b>	<b>38.4</b>	<b>38.4</b>	<b>38.8</b>	-	-	-	-	-
Durable goods .....	50	39.0	39.5	39.0	39.0	-	-	-	-	-	-
Motor vehicles, parts, and supplies .....	501	37.8	37.9	37.4	37.5	-	-	-	-	-	-
Furniture and home furnishings .....	502	37.5	37.7	37.9	37.5	-	-	-	-	-	-
Lumber and other construction materials .....	503	40.2	40.4	40.7	40.8	-	-	-	-	-	-
Professional and commercial equipment .....	504	39.5	40.5	39.4	39.3	-	-	-	-	-	-
Medical and hospital equipment .....	5047	39.1	40.1	39.3	39.1	-	-	-	-	-	-
Metals and minerals, except petroleum .....	505	41.0	41.3	40.8	40.9	-	-	-	-	-	-
Electrical goods .....	506	38.9	39.8	39.2	39.3	-	-	-	-	-	-
Hardware, plumbing, and heating equipment .....	507	38.9	39.3	39.3	39.0	-	-	-	-	-	-
Machinery, equipment, and supplies .....	508	39.5	40.0	39.4	39.4	-	-	-	-	-	-
Misc. wholesale trade durable goods .....	509	37.0	37.4	37.4	37.8	-	-	-	-	-	-
Nondurable goods .....	51	37.5	37.5	37.6	37.6	-	-	-	-	-	-
Paper and paper products .....	511	36.6	37.2	36.5	36.4	-	-	-	-	-	-
Drugs, proprietaries, and sundries .....	512	36.2	36.5	36.8	36.8	-	-	-	-	-	-
Apparel, piece goods, and notions .....	513	36.8	37.2	36.3	36.4	-	-	-	-	-	-
Groceries and related products .....	514	38.5	38.5	38.8	39.0	-	-	-	-	-	-
Farm-product raw materials .....	515	34.1	34.4	34.4	34.4	-	-	-	-	-	-
Chemicals and allied products .....	516	39.9	40.1	40.0	39.8	-	-	-	-	-	-
Petroleum and petroleum products .....	517	38.1	38.1	38.0	38.0	-	-	-	-	-	-
Beer, wine, and distilled beverages .....	518	38.2	38.5	37.9	38.3	-	-	-	-	-	-
Misc. wholesale trade nondurable goods .....	519	36.6	36.1	36.9	36.4	-	-	-	-	-	-
<b>Retail trade</b> .....		<b>29.8</b>	<b>29.9</b>	<b>29.4</b>	<b>29.8</b>	<b>30.0</b>	-	-	-	-	-
Building materials and garden supplies .....	52	35.5	35.6	35.8	36.1	-	-	-	-	-	-
Lumber and other building materials .....	521	37.0	37.3	37.5	37.9	-	-	-	-	-	-
Paint, glass, and wallpaper stores .....	523	35.9	35.2	35.3	35.7	-	-	-	-	-	-
Hardware stores .....	525	31.9	31.6	30.9	31.5	-	-	-	-	-	-
Retail nurseries and garden stores .....	526	32.5	32.3	33.7	33.1	-	-	-	-	-	-

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	\$17.93	\$17.70	\$17.96	\$18.02	—	\$849.88	\$823.05	\$836.94	\$848.74	—
Local and interurban passenger transit .....	41	11.39	11.41	11.61	11.78	—	406.62	402.77	398.22	420.55	—
Local and suburban transportation .....	411	11.76	11.78	12.02	12.15	—	457.46	460.60	463.97	476.28	—
Intercity and rural bus transportation .....	413	13.61	13.43	13.19	13.48	—	529.43	525.11	532.88	539.20	—
Trucking and warehousing .....	42	13.58	13.58	13.93	13.91	—	548.63	552.71	565.56	560.57	—
Trucking and courier services, except air .....	421	13.80	13.82	14.14	14.11	—	558.90	562.47	574.08	568.63	—
Public warehousing and storage .....	422	11.15	11.01	11.68	11.77	—	448.23	448.11	473.04	473.15	—
Water transportation:											
Water transportation services .....	449	19.81	19.07	18.59	18.91	—	736.93	728.47	669.24	663.74	—
Pipelines, except natural gas .....	46	20.28	20.49	21.74	21.45	—	886.24	938.44	939.17	922.35	—
Transportation services .....	47	13.41	13.57	13.88	14.00	—	502.88	521.09	534.38	532.00	—
Passenger transportation arrangement .....	472	13.66	13.90	14.20	14.32	—	508.15	528.20	542.44	542.73	—
Travel agencies .....	4724	13.87	14.15	14.49	14.63	—	518.74	544.78	557.87	557.40	—
Freight transportation arrangement .....	473	13.44	13.55	13.91	14.03	—	505.34	521.68	534.14	530.33	—
Communications .....	48	17.19	17.36	17.36	17.45	—	709.95	701.34	704.82	708.47	—
Telephone communications .....	481	17.52	17.79	17.62	17.81	—	758.62	743.62	743.56	742.68	—
Telephone communications, except radio .....	4813	17.99	18.26	18.13	18.40	—	789.76	770.57	774.15	778.32	—
Radio and television broadcasting .....	483	17.87	17.85	18.27	18.31	—	641.53	644.39	648.59	659.16	—
Cable and other pay television services .....	484	14.46	14.48	14.80	14.54	—	571.17	577.75	593.48	601.96	—
Electric, gas, and sanitary services .....	49	19.82	19.96	20.33	20.84	—	832.44	844.31	859.96	881.53	—
Electric services .....	491	20.89	20.91	21.58	21.98	—	862.76	878.22	899.89	918.76	—
Gas production and distribution .....	492	18.30	18.42	18.54	18.59	—	768.60	786.53	782.39	773.34	—
Combination utility services .....	493	24.19	24.61	24.08	25.56	—	1,028.08	1,038.54	1,028.22	1,116.97	—
Sanitary services .....	495	15.59	15.77	16.57	16.82	—	670.37	676.53	725.77	728.31	—
<b>Wholesale trade .....</b>		<b>14.04</b>	<b>14.18</b>	<b>14.44</b>	<b>14.54</b>	<b>\$14.64</b>	<b>537.73</b>	<b>548.77</b>	<b>554.50</b>	<b>558.34</b>	<b>\$568.03</b>
Durable goods .....	50	14.69	14.83	15.12	15.27	—	572.91	585.79	589.68	595.53	—
Motor vehicles, parts, and supplies .....	501	13.09	13.03	13.43	13.49	—	494.80	493.84	502.28	505.88	—
Furniture and home furnishings .....	502	13.15	13.15	13.02	13.15	—	493.13	495.76	493.46	493.13	—
Lumber and other construction materials .....	503	13.19	13.34	13.57	13.70	—	530.24	538.94	552.30	558.96	—
Professional and commercial equipment .....	504	17.39	17.64	18.00	18.19	—	686.91	714.42	709.20	714.87	—
Medical and hospital equipment .....	5047	17.15	17.16	17.54	17.46	—	670.57	688.12	689.32	682.69	—
Metals and minerals, except petroleum .....	505	13.91	14.06	14.26	14.23	—	570.31	580.68	581.81	582.01	—
Electrical goods .....	506	15.60	15.82	15.69	15.88	—	606.84	629.64	615.05	624.08	—
Hardware, plumbing, and heating equipment .....	507	13.82	13.90	14.10	14.36	—	537.60	546.27	554.13	560.04	—
Machinery, equipment, and supplies .....	508	14.71	14.85	15.24	15.38	—	581.05	594.00	600.46	605.97	—
Misc. wholesale trade durable goods .....	509	11.39	11.38	11.71	11.82	—	421.43	425.61	437.95	446.80	—
Nondurable goods .....	51	13.10	13.24	13.45	13.49	—	491.25	496.50	505.72	507.22	—
Paper and paper products .....	511	13.60	13.76	13.53	13.62	—	497.76	511.87	493.85	495.77	—
Drugs, proprietaries, and sundries .....	512	16.96	17.50	18.14	18.20	—	613.95	638.75	667.55	669.76	—
Apparel, piece goods, and notions .....	513	12.66	12.57	13.01	12.89	—	465.89	467.60	472.26	469.20	—
Groceries and related products .....	514	13.21	13.39	13.50	13.48	—	508.59	515.52	523.80	525.72	—
Farm-product raw materials .....	515	10.01	9.96	10.30	10.31	—	341.34	342.62	354.32	354.66	—
Chemicals and allied products .....	516	15.09	15.25	15.79	15.96	—	602.09	611.53	631.60	635.21	—
Petroleum and petroleum products .....	517	11.90	11.85	12.13	12.28	—	453.39	451.49	460.94	466.64	—
Beer, wine, and distilled beverages .....	518	15.40	15.27	15.52	15.56	—	588.28	587.90	588.21	595.95	—
Misc. wholesale trade nondurable goods .....	519	10.81	10.85	11.01	11.07	—	395.65	391.69	406.27	402.95	—
<b>Retail trade .....</b>		<b>8.69</b>	<b>8.72</b>	<b>9.02</b>	<b>9.02</b>	<b>9.03</b>	<b>258.96</b>	<b>260.73</b>	<b>265.19</b>	<b>268.80</b>	<b>270.90</b>
Building materials and garden supplies .....	52	10.22	10.29	10.63	10.69	—	362.81	366.32	380.55	385.91	—
Lumber and other building materials .....	521	10.69	10.73	11.12	11.16	—	395.53	400.23	417.00	422.96	—
Paint, glass, and wallpaper stores .....	523	10.57	10.63	10.73	10.76	—	379.46	374.18	378.77	384.13	—
Hardware stores .....	525	8.50	8.54	8.81	8.84	—	271.15	269.86	272.23	278.46	—
Retail nurseries and garden stores .....	526	9.01	9.27	9.59	9.74	—	292.83	299.42	323.18	322.39	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	31.3	30.3	30.6	30.8	-	-	-	-	-	-
Department stores .....	531	31.4	30.3	30.8	30.9	-	-	-	-	-	-
Variety stores .....	533	28.8	28.7	27.9	28.2	-	-	-	-	-	-
Misc. general merchandise stores .....	539	31.0	30.9	30.3	30.9	-	-	-	-	-	-
Food stores .....	54	30.8	30.8	30.6	30.9	-	-	-	-	-	-
Grocery stores .....	541	31.0	31.0	30.7	31.1	-	-	-	-	-	-
Retail bakeries .....	546	29.6	29.8	29.0	29.2	-	-	-	-	-	-
Automotive dealers and service stations .....	55	35.9	35.9	35.7	35.9	-	-	-	-	-	-
New and used car dealers .....	551	37.1	37.3	37.0	37.1	-	-	-	-	-	-
Auto and home supply stores .....	553	38.7	38.8	38.6	38.9	-	-	-	-	-	-
Gasoline service stations .....	554	32.5	32.3	32.3	32.5	-	-	-	-	-	-
Automotive dealers, nec .....	559	35.5	37.0	34.1	34.5	-	-	-	-	-	-
Apparel and accessory stores .....	56	27.5	28.2	26.6	27.1	-	-	-	-	-	-
Men's and boys' clothing stores .....	561	28.9	29.2	28.7	29.5	-	-	-	-	-	-
Women's clothing stores .....	562	24.9	25.2	24.3	24.3	-	-	-	-	-	-
Family clothing stores .....	565	28.4	29.3	27.4	27.8	-	-	-	-	-	-
Shoe stores .....	566	27.6	28.6	27.0	27.6	-	-	-	-	-	-
Furniture and home furnishings stores .....	57	33.7	33.8	33.0	33.3	-	-	-	-	-	-
Furniture and home furnishings stores .....	571	33.3	33.5	33.2	33.4	-	-	-	-	-	-
Household appliance stores .....	572	34.7	34.9	34.2	34.6	-	-	-	-	-	-
Radio, television, and computer stores .....	573	33.9	34.1	32.7	33.0	-	-	-	-	-	-
Radio, television, and electronic stores .....	5731	33.5	33.5	32.5	33.1	-	-	-	-	-	-
Record and prerecorded tape stores .....	5735	27.5	27.2	26.2	26.7	-	-	-	-	-	-
Eating and drinking places <sup>4</sup> .....	58	26.3	26.7	25.9	26.4	-	-	-	-	-	-
Miscellaneous retail establishments .....	59	30.2	30.3	29.7	30.1	-	-	-	-	-	-
Drug stores and proprietary stores .....	591	29.6	29.4	29.0	29.6	-	-	-	-	-	-
Used merchandise stores .....	593	30.3	30.9	30.2	30.7	-	-	-	-	-	-
Miscellaneous shopping goods stores .....	594	28.9	29.1	28.0	28.7	-	-	-	-	-	-
Nonstore retailers .....	596	32.7	32.9	33.3	33.6	-	-	-	-	-	-
Fuel dealers .....	598	36.8	36.9	36.5	36.7	-	-	-	-	-	-
Retail stores, nec .....	599	31.2	31.3	30.7	30.6	-	-	-	-	-	-
Optical goods stores .....	5995	33.9	34.5	33.9	33.8	-	-	-	-	-	-
Miscellaneous retail stores, nec .....	5999	31.9	31.8	31.1	31.0	-	-	-	-	-	-
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		<b>36.1</b>	<b>36.9</b>	<b>35.9</b>	<b>36.1</b>	<b>36.8</b>	-	-	-	-	-
Depository institutions .....	60	35.4	36.3	35.4	35.7	-	-	-	-	-	-
Commercial banks .....	602	35.1	36.2	35.3	35.6	-	-	-	-	-	-
State commercial banks .....	6022	35.2	36.2	35.1	35.4	-	-	-	-	-	-
National and commercial banks, nec .....	6021,9	35.1	36.3	35.4	35.7	-	-	-	-	-	-
Credit unions .....	606	35.9	36.5	35.7	35.8	-	-	-	-	-	-
Nondepository institutions .....	61	38.2	39.5	37.6	37.9	-	-	-	-	-	-
Personal credit institutions .....	614	38.2	40.0	38.2	38.4	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services .....	628	37.8	39.4	37.9	37.7	-	-	-	-	-	-
Insurance carriers .....	63	38.8	39.2	38.3	38.5	-	-	-	-	-	-
Life insurance .....	631	38.8	39.0	38.5	38.5	-	-	-	-	-	-
Medical service and health insurance .....	632	38.7	38.9	38.1	38.5	-	-	-	-	-	-
Hospital and medical service plans .....	6324	39.2	39.2	38.5	39.0	-	-	-	-	-	-
Fire, marine, and casualty insurance .....	633	39.0	39.2	38.2	38.6	-	-	-	-	-	-
<b>Services</b> .....		<b>32.9</b>	<b>33.2</b>	<b>32.6</b>	<b>32.8</b>	<b>33.2</b>	-	-	-	-	-
Agricultural services .....	07	35.9	35.6	36.0	35.5	-	-	-	-	-	-

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	\$8.53	\$8.61	\$8.96	\$8.92	—	\$266.99	\$260.88	\$274.18	\$274.74	—
Department stores .....	531	8.58	8.67	9.02	8.97	—	269.41	262.70	277.82	277.17	—
Variety stores .....	533	7.59	7.60	7.97	7.88	—	218.59	218.12	222.36	222.22	—
Misc. general merchandise stores .....	539	8.36	8.31	8.62	8.69	—	259.16	256.78	261.19	268.52	—
Food stores .....	54	8.97	9.00	9.29	9.24	—	276.28	277.20	284.27	285.52	—
Grocery stores .....	541	9.06	9.09	9.39	9.34	—	280.86	281.79	288.27	290.47	—
Retail bakeries .....	546	8.10	8.17	8.42	8.37	—	239.76	243.47	244.18	244.40	—
Automotive dealers and service stations .....	55	12.21	12.27	12.54	12.66	—	438.34	440.49	447.68	454.49	—
New and used car dealers .....	551	15.53	15.63	15.88	16.10	—	576.16	583.00	587.56	597.31	—
Auto and home supply stores .....	553	10.08	10.11	10.35	10.40	—	390.10	392.27	399.51	404.56	—
Gasoline service stations .....	554	7.86	7.87	8.15	8.20	—	255.45	254.20	263.25	266.50	—
Automotive dealers, nec .....	559	13.92	13.34	13.67	13.43	—	494.16	493.58	466.15	463.34	—
Apparel and accessory stores .....	56	8.40	8.37	8.87	8.79	—	231.00	236.03	235.94	238.21	—
Men's and boys' clothing stores .....	561	10.20	10.08	10.49	10.31	—	294.78	294.34	301.06	304.15	—
Women's clothing stores .....	562	8.28	8.40	8.90	8.79	—	206.17	211.68	216.27	213.60	—
Family clothing stores .....	565	8.28	8.20	8.62	8.56	—	235.15	240.26	236.19	237.97	—
Shoe stores .....	566	8.12	8.07	8.51	8.33	—	224.11	230.80	229.77	229.91	—
Furniture and home furnishings stores .....	57	11.78	11.99	12.06	12.21	—	396.99	405.26	397.98	406.59	—
Furniture and home furnishings stores .....	571	11.14	11.25	11.48	11.55	—	370.96	376.88	381.14	385.77	—
Household appliance stores .....	572	11.27	11.49	11.44	11.52	—	391.07	401.00	391.25	398.59	—
Radio, television, and computer stores .....	573	12.61	12.93	12.83	13.09	—	427.48	440.91	419.54	431.97	—
Radio, television, and electronic stores .....	5731	11.53	11.87	11.98	12.04	—	386.26	397.65	389.35	398.52	—
Record and prerecorded tape stores .....	5735	7.17	7.04	7.44	7.50	—	197.18	191.49	194.93	200.25	—
Eating and drinking places <sup>4</sup> .....	58	6.33	6.37	6.58	6.58	—	166.48	170.08	170.42	173.71	—
Miscellaneous retail establishments .....	59	9.44	9.44	9.77	9.78	—	285.09	286.03	290.17	294.38	—
Drug stores and proprietary stores .....	591	10.01	10.00	10.31	10.35	—	296.30	294.00	298.99	306.36	—
Used merchandise stores .....	593	7.91	7.87	8.12	8.19	—	239.67	243.18	245.22	251.43	—
Miscellaneous shopping goods stores .....	594	8.70	8.73	9.06	9.00	—	251.43	254.04	253.68	258.30	—
Nonstore retailers .....	596	10.10	10.02	10.53	10.55	—	330.27	329.66	350.65	354.48	—
Fuel dealers .....	598	12.51	12.49	12.80	12.85	—	460.37	460.88	467.20	471.60	—
Retail stores, nec .....	599	9.61	9.66	9.93	9.99	—	299.83	302.36	304.85	305.69	—
Optical goods stores .....	5995	11.13	11.26	11.64	11.65	—	377.31	388.47	394.60	393.77	—
Miscellaneous retail stores, nec .....	5999	9.96	9.99	10.27	10.31	—	317.72	317.68	319.40	319.61	—
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		13.94	14.12	14.50	14.53	\$14.66	503.23	521.03	520.55	524.53	\$539.49
Depository institutions .....	60	10.73	10.89	11.19	11.15	—	379.84	395.31	396.13	398.06	—
Commercial banks .....	602	10.34	10.51	10.76	10.69	—	362.93	380.46	379.83	380.56	—
State commercial banks .....	6022	10.05	10.16	10.37	10.39	—	353.76	367.79	363.99	367.81	—
National and commercial banks, nec .....	6021,9	10.53	10.74	11.04	10.90	—	369.60	389.86	390.82	389.13	—
Credit unions .....	606	10.53	10.60	10.94	10.97	—	378.03	386.90	390.56	392.73	—
Nondepository institutions .....	61	14.59	14.79	15.40	15.40	—	557.34	584.21	579.04	583.66	—
Personal credit institutions .....	614	12.27	12.39	12.50	12.38	—	468.71	495.60	477.50	475.39	—
Security and commodity brokers:											
Security and commodity services .....	628	20.91	21.01	21.58	21.75	—	790.40	827.79	817.88	819.98	—
Insurance carriers .....	63	16.62	16.82	16.97	17.07	—	644.86	659.34	649.95	657.20	—
Life insurance .....	631	15.10	15.15	15.46	15.44	—	585.88	590.85	595.21	594.44	—
Medical service and health insurance .....	632	15.60	16.07	16.20	16.39	—	603.72	625.12	617.22	631.02	—
Hospital and medical service plans .....	6324	15.95	16.50	16.63	16.79	—	625.24	646.80	640.26	654.81	—
Fire, marine, and casualty insurance .....	633	18.08	18.25	18.44	18.53	—	705.12	715.40	704.41	715.26	—
<b>Services</b> .....		12.68	12.75	13.23	13.20	13.28	417.17	423.30	431.30	432.96	440.90
Agricultural services .....	07	9.87	9.89	10.12	10.18	—	354.33	352.08	364.32	361.39	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	29.6	29.8	29.2	29.5	-	-	-	-	-	-
Landscape and horticultural services .....	078	38.5	38.0	38.5	37.7	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	32.1	32.8	31.1	31.6	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services .....	721	34.0	34.2	34.6	34.3	-	-	-	-	-	-
Beauty shops <sup>4</sup> .....	723	27.9	28.5	28.1	27.8	-	-	-	-	-	-
Miscellaneous personal services .....	729	26.8	27.5	28.5	28.2	-	-	-	-	-	-
Business services											
Advertising .....	731	36.3	37.2	36.7	36.6	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	37.0	36.8	36.6	36.4	-	-	-	-	-	-
Services to buildings .....	734	28.3	28.9	29.0	28.8	-	-	-	-	-	-
Disinfecting and pest control services .....	7342	37.6	39.3	37.7	37.8	-	-	-	-	-	-
Building maintenance services, nec .....	7349	27.5	27.9	28.2	27.9	-	-	-	-	-	-
Miscellaneous equipment rental and leasing .....	735	39.1	39.5	39.4	38.8	-	-	-	-	-	-
Medical equipment rental .....	7352	36.2	37.1	35.6	35.5	-	-	-	-	-	-
Heavy construction equipment rental .....	7353	41.8	41.6	41.5	41.6	-	-	-	-	-	-
Equipment rental and leasing, nec .....	7359	38.8	39.3	39.6	38.7	-	-	-	-	-	-
Personnel supply services:											
Help supply services .....	7363	32.7	33.0	32.4	32.2	-	-	-	-	-	-
Computer and data processing services .....	737	38.3	39.1	38.4	38.4	-	-	-	-	-	-
Computer programming services .....	7371	37.8	38.5	37.5	37.7	-	-	-	-	-	-
Computer integrated systems design .....	7373	39.5	40.7	39.6	39.5	-	-	-	-	-	-
Information retrieval services .....	7375	38.4	38.8	39.0	39.6	-	-	-	-	-	-
Computer maintenance and repair .....	7378	39.5	40.3	38.4	39.2	-	-	-	-	-	-
Miscellaneous business services .....	738	33.2	33.3	33.2	33.5	-	-	-	-	-	-
Detective and armored car services .....	7381	34.9	35.2	35.1	35.5	-	-	-	-	-	-
Security systems services .....	7382	36.5	37.1	36.9	36.9	-	-	-	-	-	-
Auto repair, services, and parking											
Automotive rentals, without drivers .....	751	37.6	37.5	36.6	36.3	-	-	-	-	-	-
Passenger car rental .....	7514	37.8	37.6	36.4	36.1	-	-	-	-	-	-
Automobile parking .....	752	32.6	33.1	33.1	33.1	-	-	-	-	-	-
Automotive repair shops .....	753	38.3	38.4	38.0	37.9	-	-	-	-	-	-
Automotive and tire repair shops .....	7532,4	38.3	38.3	38.0	38.1	-	-	-	-	-	-
General automotive repair shops .....	7538	38.2	38.2	37.5	37.6	-	-	-	-	-	-
Automotive services, except repair .....	754	32.6	32.7	30.7	31.5	-	-	-	-	-	-
Carwashes .....	7542	30.1	30.2	28.0	28.8	-	-	-	-	-	-
Miscellaneous repair services .....	76	38.7	38.7	38.2	38.1	-	-	-	-	-	-
Motion pictures											
Motion picture production and services .....	781	38.9	39.7	38.3	39.0	-	-	-	-	-	-
Video tape rental .....	784	24.9	24.4	23.5	24.4	-	-	-	-	-	-
Amusement and recreation services											
Bowling centers .....	793	24.8	25.6	25.0	25.6	-	-	-	-	-	-
Misc. amusement and recreation services .....	799	29.0	28.8	27.2	28.8	-	-	-	-	-	-
Physical fitness facilities .....	7991	19.9	20.2	18.6	19.1	-	-	-	-	-	-
Membership sports and recreation clubs .....	7997	29.6	29.2	28.6	29.6	-	-	-	-	-	-
Health services											
Offices and clinics of medical doctors .....	801	32.6	33.0	32.7	32.7	-	-	-	-	-	-
Offices and clinics of dentists .....	802	28.3	28.4	27.7	27.6	-	-	-	-	-	-
Offices and clinics of other health practitioners .....	804	30.0	30.4	30.1	30.0	-	-	-	-	-	-
Nursing and personal care facilities .....	805	32.9	32.9	32.5	32.9	-	-	-	-	-	-
Intermediate care facilities .....	8052	32.0	31.9	31.8	32.3	-	-	-	-	-	-
Hospitals .....	806	34.9	35.0	34.6	34.6	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	\$9.90	\$9.90	\$10.04	\$10.14	—	\$293.04	\$295.02	\$293.17	\$299.13	—
Landscape and horticultural services .....	078	9.92	9.95	10.14	10.21	—	381.92	378.10	390.39	384.92	—
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	8.73	8.74	9.10	9.01	—	280.23	286.67	283.01	284.72	—
Personal services:											
Laundry, cleaning, and garment services .....	721	8.44	8.42	8.73	8.74	—	286.96	287.96	302.06	299.78	—
Beauty shops <sup>4</sup> .....	723	9.54	9.48	9.95	9.94	—	266.17	270.18	279.60	276.33	—
Miscellaneous personal services .....	729	9.15	9.05	9.60	9.54	—	245.22	248.88	273.60	269.03	—
Business services											
Advertising .....	731	12.57	12.60	13.16	13.17	—	422.35	428.40	443.49	442.51	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	11.15	11.21	11.63	11.92	—	412.55	412.53	425.66	433.89	—
Services to buildings .....	734	8.28	8.29	8.63	8.61	—	234.32	239.58	250.27	247.97	—
Disinfecting and pest control services .....	7342	11.46	11.54	12.05	11.98	—	430.90	453.52	454.29	452.84	—
Building maintenance services, nec .....	7349	7.87	7.86	8.21	8.18	—	216.43	219.29	231.52	228.22	—
Miscellaneous equipment rental and leasing .....	735	12.69	12.83	13.07	13.20	—	496.18	506.79	514.96	512.16	—
Medical equipment rental .....	7352	12.53	12.65	13.06	13.33	—	453.59	469.32	464.94	473.22	—
Heavy construction equipment rental .....	7353	16.53	16.80	17.42	17.64	—	690.95	698.88	722.93	733.82	—
Equipment rental and leasing, nec .....	7359	11.47	11.59	11.70	11.73	—	445.04	455.49	463.32	453.95	—
Personnel supply services:											
Help supply services .....	7363	10.23	10.13	10.51	10.46	—	334.52	334.29	340.52	336.81	—
Computer and data processing services .....	737	21.24	21.50	22.31	22.26	—	813.49	840.65	856.70	854.78	—
Computer programming services .....	7371	24.35	24.69	25.53	25.04	—	920.43	950.57	957.38	944.01	—
Computer integrated systems design .....	7373	20.80	20.88	21.36	21.37	—	821.60	849.82	845.86	844.12	—
Information retrieval services .....	7375	15.84	15.63	15.71	15.82	—	608.26	606.44	612.69	626.47	—
Computer maintenance and repair .....	7378	16.37	16.64	17.15	17.27	—	646.62	670.59	658.56	676.98	—
Miscellaneous business services .....	738	10.16	10.10	10.45	10.52	—	337.31	336.33	346.94	352.42	—
Detective and armored car services .....	7381	8.29	8.21	8.64	8.82	—	289.32	288.99	303.26	313.11	—
Security systems services .....	7382	13.46	13.54	13.84	14.03	—	491.29	502.33	510.70	517.71	—
Auto repair, services, and parking											
Automotive rentals, without drivers .....	751	10.53	10.59	10.83	10.99	—	395.93	397.13	396.38	398.94	—
Passenger car rental .....	7514	9.57	9.62	9.98	10.18	—	361.75	361.71	363.27	367.50	—
Automobile parking .....	752	8.27	8.20	8.51	8.60	—	269.60	271.42	281.68	284.66	—
Automotive repair shops .....	753	12.51	12.53	12.81	12.89	—	479.13	481.15	486.78	488.53	—
Automotive and tire repair shops .....	7532,4	13.04	13.17	13.33	13.40	—	499.43	504.41	506.54	510.54	—
General automotive repair shops .....	7538	12.48	12.46	12.75	12.77	—	476.74	475.97	478.13	480.15	—
Automotive services, except repair .....	754	8.37	8.42	8.53	8.49	—	272.86	275.33	261.87	267.44	—
Carwashes .....	7542	7.44	7.39	7.52	7.55	—	223.94	223.18	210.56	217.44	—
Miscellaneous repair services											
Motion pictures .....	78	14.07	14.47	15.60	15.03	—	434.76	448.57	464.88	461.42	—
Motion picture production and services .....	781	19.83	20.09	22.03	21.21	—	771.39	797.57	843.75	827.19	—
Video tape rental .....	784	7.25	7.21	7.21	7.48	—	180.53	175.92	169.44	182.51	—
Amusement and recreation services											
Bowling centers .....	793	7.83	7.80	7.84	7.85	—	194.18	199.68	196.00	200.96	—
Misc. amusement and recreation services .....	799	8.34	8.37	8.72	8.54	—	241.86	241.06	237.18	245.95	—
Physical fitness facilities .....	7991	8.57	8.57	9.22	9.27	—	170.54	173.11	171.49	177.06	—
Membership sports and recreation clubs .....	7997	8.94	8.96	9.26	9.11	—	264.62	261.63	264.84	269.66	—
Health services											
Offices and clinics of medical doctors .....	801	14.22	14.31	14.73	14.80	—	463.57	472.23	481.67	483.96	—
Offices and clinics of dentists .....	802	14.07	14.20	14.70	14.72	—	398.18	403.28	407.19	406.27	—
Offices and clinics of other health practitioners .....	804	13.17	13.16	12.93	12.98	—	395.10	400.06	389.19	389.40	—
Nursing and personal care facilities .....	805	9.78	9.77	10.12	10.20	—	321.76	321.43	328.90	335.58	—
Intermediate care facilities .....	8052	9.34	9.31	9.66	9.78	—	298.88	296.99	307.19	315.89	—
Hospitals .....	806	15.44	15.50	15.90	15.97	—	538.86	542.50	550.14	552.56	—

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	29.1	29.2	29.1	29.2	-	-	-	-	-	-
Legal services .....	81	34.8	35.5	34.7	34.9	-	-	-	-	-	-
Social services .....	83	31.3	31.7	31.2	31.3	-	-	-	-	-	-
Individual and family services .....	832	31.3	31.6	31.2	31.1	-	-	-	-	-	-
Job training and related services .....	833	30.5	30.8	30.7	30.1	-	-	-	-	-	-
Child day care services .....	835	30.8	30.8	29.8	30.4	-	-	-	-	-	-
Residential care .....	836	32.3	32.8	32.5	32.9	-	-	-	-	-	-
Social services, nec .....	839	31.4	32.2	31.7	31.5	-	-	-	-	-	-
Membership organizations:											
Professional organizations .....	862	35.0	35.7	34.9	34.9	-	-	-	-	-	-
Engineering and management services .....	87	37.2	37.7	37.0	37.1	-	-	-	-	-	-
Engineering and architectural services .....	871	39.3	39.6	39.1	39.4	-	-	-	-	-	-
Engineering services .....	8711	39.6	39.8	39.5	39.9	-	-	-	-	-	-
Architectural services .....	8712	38.2	38.9	38.0	37.8	-	-	-	-	-	-
Surveying services .....	8713	38.7	38.8	37.8	38.0	-	-	-	-	-	-
Accounting, auditing, and bookkeeping .....	872	35.7	36.5	35.8	36.0	-	-	-	-	-	-
Research and testing services .....	873	36.5	36.9	36.3	36.6	-	-	-	-	-	-
Commercial physical research .....	8731	39.9	40.2	39.3	39.3	-	-	-	-	-	-
Commercial nonphysical research .....	8732	30.3	30.5	31.6	32.2	-	-	-	-	-	-
Noncommercial research organizations .....	8733	36.1	36.6	35.9	36.2	-	-	-	-	-	-
Management and public relations .....	874	36.3	36.8	36.0	36.0	-	-	-	-	-	-
Management services .....	8741	35.9	36.1	35.4	35.3	-	-	-	-	-	-
Management consulting services .....	8742	36.3	37.2	36.5	36.2	-	-	-	-	-	-
Public relations services .....	8743	35.2	36.0	34.7	35.6	-	-	-	-	-	-
Services, nec .....	89	34.3	35.4	35.1	34.8	-	-	-	-	-	-

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				
		July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	\$11.49	\$11.51	\$11.97	\$12.09	—	\$334.36	\$336.09	\$348.33	\$353.03	—
Legal services .....	81	18.05	18.18	18.97	19.00	—	628.14	645.39	658.26	663.10	—
Social services .....	83	9.14	9.22	9.51	9.53	—	286.08	292.27	296.71	298.29	—
Individual and family services .....	832	9.67	9.74	10.05	10.08	—	302.67	307.78	313.56	313.49	—
Job training and related services .....	833	8.87	9.00	9.18	9.19	—	270.54	277.20	281.83	276.62	—
Child day care services .....	835	7.69	7.76	8.14	8.03	—	236.85	239.01	242.57	244.11	—
Residential care .....	836	9.32	9.34	9.68	9.73	—	301.04	306.35	314.60	320.12	—
Social services, nec .....	839	11.11	11.30	11.60	11.57	—	348.85	363.86	367.72	364.46	—
Membership organizations:											
Professional organizations .....	862	18.25	18.23	18.56	18.57	—	638.75	650.81	647.74	648.09	—
Engineering and management services .....	87	17.72	17.95	18.28	18.42	—	659.18	676.72	676.36	683.38	—
Engineering and architectural services .....	871	19.28	19.49	19.76	20.05	—	757.70	771.80	772.62	789.97	—
Engineering services .....	8711	20.19	20.39	20.61	20.97	—	799.52	811.52	814.10	836.70	—
Architectural services .....	8712	17.25	17.56	18.00	18.12	—	658.95	683.08	684.00	684.94	—
Surveying services .....	8713	13.63	13.75	14.12	14.01	—	527.48	533.50	533.74	532.38	—
Accounting, auditing, and bookkeeping .....	872	15.38	15.71	15.77	15.79	—	549.07	573.42	564.57	568.44	—
Research and testing services .....	873	18.10	18.34	18.28	18.12	—	660.65	676.75	663.56	663.19	—
Commercial physical research .....	8731	19.90	20.17	20.18	20.18	—	794.01	810.83	793.07	793.07	—
Commercial nonphysical research .....	8732	14.98	15.29	14.62	14.43	—	453.89	466.35	461.99	464.65	—
Noncommercial research organizations .....	8733	21.39	21.60	21.88	21.57	—	772.18	790.56	785.49	780.83	—
Management and public relations .....	874	17.15	17.34	18.14	18.37	—	622.55	638.11	653.04	661.32	—
Management services .....	8741	15.55	15.71	15.92	16.30	—	558.25	567.13	563.57	575.39	—
Management consulting services .....	8742	19.25	19.57	21.13	21.25	—	698.78	728.00	771.25	769.25	—
Public relations services .....	8743	15.90	16.01	16.46	16.67	—	559.68	576.36	571.16	593.45	—
Services, nec .....	89	17.79	18.03	18.21	18.16	—	610.20	638.26	639.17	631.97	—

<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.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1998 forward are subject to revision.

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

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

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

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

Series	Aircraft (SIC 3721)				Guided missiles and space vehicles (SIC 3761)			
	June 1998	July 1998	June 1999	July 1999 <sup>P</sup>	June 1998	July 1998	June 1999	July 1999 <sup>P</sup>
Average hourly earnings, excluding lump-sum payments .....	\$20.88	\$20.99	\$21.46	\$21.80	\$21.66	\$21.55	\$21.75	\$21.77
Average hourly earnings, including lump-sum payments .....	20.95	21.08	21.47	21.81	21.86	21.76	21.85	21.86

<sup>P</sup> = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

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

Industry	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Manufacturing</b> .....	\$12.70	\$12.74	\$13.17	\$13.21	\$13.19
<b>Durable goods</b> .....	13.07	13.18	13.63	13.65	13.68
Lumber and wood products .....	10.56	10.57	10.86	10.92	(2)
Furniture and fixtures .....	10.42	10.44	10.67	10.73	(2)
Stone, clay, and glass products .....	12.64	12.63	12.94	13.02	(2)
Primary metal industries .....	14.55	14.43	14.83	14.95	(2)
Fabricated metal products .....	12.22	12.34	12.75	12.78	(2)
Industrial machinery and equipment .....	13.66	13.67	14.20	14.27	(2)
Electronic and other electrical equipment .....	12.59	12.52	12.80	12.89	(2)
Transportation equipment .....	16.05	16.33	17.06	17.06	(2)
Instruments and related products .....	13.30	13.29	13.61	13.74	(2)
Miscellaneous manufacturing .....	10.50	10.45	10.90	10.93	(2)
<b>Nondurable goods</b> .....	12.16	12.08	12.48	12.55	\$12.47
Food and kindred products .....	11.08	11.00	11.43	11.38	(2)
Tobacco products .....	19.83	18.28	20.04	20.18	(2)
Textile mill products .....	9.82	9.84	10.21	10.17	(2)
Apparel and other textile products .....	8.27	8.31	8.61	8.59	(2)
Paper and allied products .....	14.69	14.59	15.02	15.09	(2)
Printing and publishing .....	12.91	12.90	13.24	13.29	(2)
Chemicals and allied products .....	16.24	16.18	16.39	16.52	(2)
Petroleum and coal products .....	19.28	19.23	19.57	19.82	(2)
Rubber and misc. plastics products .....	11.33	11.25	11.61	11.76	(2)
Leather and leather products .....	8.92	9.01	9.34	9.31	(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.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1998 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				
	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P	July 1998	Aug. 1998	June 1999	July 1999P	Aug. 1999P
<b>Total private:</b>										
Current dollars .....	\$12.68	\$12.76	\$13.14	\$13.16	\$13.21	\$441.26	\$449.15	\$454.64	\$456.65	\$463.67
Constant (1982) dollars .....	7.69	7.73	7.82	7.81	(2)	267.59	272.05	270.62	271.01	(2)
<b>Mining:</b>										
Current dollars .....	16.76	16.88	16.93	17.14	\$17.08	735.76	742.72	748.31	764.44	\$760.06
Constant (1982) dollars .....	10.16	10.22	10.08	10.17	(2)	446.19	449.86	445.42	453.67	(2)
<b>Construction:</b>										
Current dollars .....	16.66	16.77	17.08	17.23	\$17.27	669.73	674.15	679.78	687.48	\$690.80
Constant (1982) dollars .....	10.10	10.16	10.17	10.23	(2)	406.14	408.33	404.63	408.00	(2)
<b>Manufacturing:</b>										
Current dollars .....	13.38	13.45	13.91	13.92	\$13.93	549.92	560.87	581.44	573.50	\$580.88
Constant (1982) dollars .....	8.11	8.15	8.28	8.26	(2)	333.49	339.72	346.10	340.36	(2)
<b>Transportation and public utilities:</b>										
Current dollars .....	15.27	15.30	15.56	15.73	\$15.66	606.22	610.47	606.84	613.47	\$621.70
Constant (1982) dollars .....	9.26	9.27	9.26	9.34	(2)	367.63	369.76	361.21	364.08	(2)
<b>Wholesale trade:</b>										
Current dollars .....	14.04	14.18	14.44	14.54	\$14.64	537.73	548.77	554.50	558.34	\$568.03
Constant (1982) dollars .....	8.51	8.59	8.60	8.63	(2)	326.09	332.39	330.06	331.36	(2)
<b>Retail trade:</b>										
Current dollars .....	8.69	8.72	9.02	9.02	\$9.03	258.96	260.73	265.19	268.80	\$270.90
Constant (1982) dollars .....	5.27	5.28	5.37	5.35	(2)	157.04	157.92	157.85	159.53	(2)
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	13.94	14.12	14.50	14.53	\$14.66	503.23	521.03	520.55	524.53	\$539.49
Constant (1982) dollars .....	8.45	8.55	8.63	8.62	(2)	305.17	315.58	309.85	311.29	(2)
<b>Services:</b>										
Current dollars .....	12.68	12.75	13.23	13.20	\$13.28	417.17	423.30	431.30	432.96	\$440.90
Constant (1982) dollars .....	7.69	7.72	7.88	7.83	(2)	252.98	256.39	256.73	256.95	(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 1998 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1998 forward are subject to revision.



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

**B-18. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas**

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Alabama</b>	41.9	42.1	41.5	\$12.03	\$12.58	\$12.53	\$504.06	\$529.62	\$520.00
Birmingham	43.1	42.4	41.2	12.83	13.15	13.26	552.97	557.56	546.31
Mobile	43.4	45.1	43.6	13.97	14.51	14.29	606.30	654.40	623.04
<b>Alaska</b>	51.9	46.0	51.9	10.57	12.45	11.73	548.58	572.70	608.79
<b>Arizona</b>	39.9	40.3	40.7	12.38	12.63	12.68	493.96	508.99	516.08
<b>Arkansas</b>	41.7	42.1	41.5	11.17	11.41	11.50	465.79	480.36	477.25
Fayetteville-Springdale-Rogers	41.0	42.4	41.7	10.87	11.04	11.12	445.67	468.10	463.70
Fort Smith	42.2	40.9	40.6	11.31	11.33	11.31	477.28	463.40	459.19
Little Rock-North Little Rock	42.3	43.0	42.4	11.63	12.22	12.15	491.95	525.46	515.16
Pine Bluff	39.6	39.0	39.0	13.15	13.67	13.78	520.74	533.13	537.42
<b>California</b>	41.7	41.9	41.7	13.69	13.92	13.99	570.87	583.25	583.38
Bakersfield	41.7	41.7	42.4	13.87	13.85	13.90	578.38	577.55	589.36
Fresno	40.2	41.1	41.0	12.16	12.12	12.06	488.83	498.13	494.46
Los Angeles-Long Beach	42.4	42.4	42.0	12.87	12.99	13.08	545.69	550.78	549.36
Modesto	40.7	42.1	42.5	13.96	14.02	14.12	568.17	590.24	600.10
Oakland	41.3	42.8	42.8	15.62	15.76	15.76	645.11	674.53	674.53
Orange County	43.7	43.3	43.4	13.02	13.46	13.53	568.97	582.82	587.20
Riverside-San Bernardino	42.8	42.7	43.0	12.13	12.41	12.38	519.16	529.91	532.34
Sacramento	40.9	41.3	41.2	14.73	15.04	15.13	602.46	621.15	623.36
Salinas	42.3	43.1	42.4	14.15	13.63	14.07	598.55	587.45	596.57
San Diego	39.6	40.6	40.0	13.56	13.63	13.67	536.98	553.38	546.80
San Francisco	41.5	40.1	40.4	14.68	14.74	14.83	609.22	591.07	599.13
San Jose	41.9	42.5	42.7	16.81	17.25	17.30	704.34	733.13	738.71
Santa Barbara-Santa Maria-Lompoc	42.5	41.0	41.3	13.81	14.35	14.23	586.93	588.35	587.70
Santa Rosa	39.3	39.7	39.6	15.03	15.54	15.54	590.68	616.94	615.38
Stockton-Lodi	41.8	40.5	40.1	13.35	13.42	13.58	558.03	543.51	544.56
Vallejo-Fairfield-Napa	42.0	42.1	41.9	15.45	15.79	15.89	648.90	664.76	665.79
Ventura	42.4	42.5	42.0	12.42	12.59	12.66	526.61	535.08	531.72
<b>Colorado</b>	41.2	41.6	41.0	13.72	14.27	14.30	565.26	593.63	586.30
Denver	43.0	40.8	40.5	12.82	13.76	13.57	551.26	561.41	549.59
<b>Connecticut</b>	42.2	42.4	42.5	14.89	15.23	15.28	628.36	645.75	649.40
Bridgeport	40.8	41.5	40.4	15.48	15.20	15.62	631.58	630.80	631.05
Danbury	43.4	42.0	41.5	14.77	14.82	14.97	641.02	622.44	621.26
Hartford	43.2	42.8	42.5	15.65	16.20	16.17	676.08	693.36	687.23
New Haven-Meriden	41.7	42.8	41.9	14.61	14.66	14.84	609.24	627.45	621.80
New London-Norwich	42.5	42.5	42.1	15.56	15.76	16.03	661.30	669.80	674.86
Stamford-Norwalk	39.3	39.6	39.9	13.88	13.47	13.74	545.48	533.41	548.23
Waterbury	42.8	44.0	43.2	14.03	14.31	14.38	600.48	629.64	621.22
<b>Delaware</b>	41.7	42.8	43.1	15.13	15.92	15.73	630.92	681.38	677.96
Dover	42.2	41.9	41.9	13.69	14.29	14.10	577.72	598.75	590.79
Wilmington-Newark	42.9	43.2	43.7	18.57	19.28	19.00	796.65	832.90	830.30
<b>District of Columbia:</b>									
Washington PMSA	39.3	39.6	39.1	14.52	15.27	15.33	570.64	604.69	599.40
<b>Florida</b>	41.4	42.4	41.9	11.52	11.78	11.83	476.93	499.47	495.68
<b>Georgia</b>	41.9	41.9	41.6	11.94	12.42	12.44	500.29	520.40	517.50
Atlanta	42.4	41.1	41.1	12.54	13.39	13.40	531.70	550.33	550.74
Savannah	47.3	47.9	48.2	15.72	16.09	16.17	743.56	770.71	779.39
<b>Hawaii</b>	36.5	37.0	38.0	12.87	13.24	13.33	469.76	489.88	506.54
Honolulu	40.0	39.5	40.2	12.99	13.10	13.29	519.60	517.45	534.26
<b>Idaho</b>	38.3	39.7	39.6	12.72	13.32	13.46	487.18	528.80	533.02
<b>Illinois</b>	41.6	41.9	41.8	13.80	14.02	14.06	574.08	587.44	587.71
Bloomington-Normal	40.9	41.8	40.1	17.91	18.92	18.51	732.52	790.86	742.25
Champaign-Urbana	41.7	41.2	41.5	11.10	12.04	11.93	462.87	496.05	495.10
Chicago	42.0	42.2	41.7	13.50	13.77	13.84	567.00	581.09	577.13
Davenport-Moline-Rock Island	43.4	41.6	41.7	15.67	15.45	15.58	680.08	642.72	649.69
Decatur	42.3	42.6	42.8	16.84	16.83	16.82	712.33	716.96	719.90
Kankakee	41.2	41.3	41.7	15.48	15.61	15.68	637.78	644.69	653.86
Peoria-Pekin	42.5	40.9	40.3	16.49	16.56	16.52	700.83	677.30	665.76
Rockford	42.7	44.0	41.7	15.50	16.79	16.00	661.85	738.76	667.20
Springfield	40.5	40.9	40.6	12.42	12.48	12.62	503.01	510.43	512.37

See footnotes at end of table

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

**B-18. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas — Continued**

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>Indiana</b> .....	41.6	42.9	41.7	\$14.80	\$15.23	\$15.16	\$615.68	\$653.37	\$632.17
Bloomington .....	40.6	40.6	39.3	11.83	12.53	13.10	480.30	508.72	514.83
Eikhart-Goshen .....	39.8	40.7	40.6	12.32	13.04	12.95	490.34	530.73	525.77
Evansville-Henderson .....	43.1	44.0	44.0	14.44	14.94	15.23	622.36	657.36	670.12
Fort Wayne .....	40.7	40.6	40.0	14.58	15.77	15.52	593.41	640.26	620.80
Gary .....	41.3	42.9	41.6	19.01	19.84	19.90	785.11	851.14	827.84
Indianapolis .....	43.6	44.3	44.1	15.12	15.56	15.54	659.23	689.31	685.31
Kokomo .....	51.4	47.7	47.7	20.61	23.22	23.27	1,059.35	1,107.59	1,109.98
Lafayette .....	44.4	42.1	41.8	15.99	16.15	16.23	709.96	679.92	678.41
Muncie .....	45.3	45.6	45.5	14.58	14.98	14.96	660.47	683.09	680.68
South Bend .....	40.9	41.2	40.8	12.65	12.43	12.49	517.39	512.12	509.59
Terre Haute .....	42.4	45.1	45.0	14.53	13.60	13.61	616.07	613.36	612.45
<b>Iowa</b> .....	41.6	41.8	40.7	13.84	14.03	14.20	575.74	586.45	577.94
Cedar Rapids .....	41.8	41.5	38.6	17.59	17.18	18.94	735.26	712.97	731.08
Des Moines .....	41.6	37.9	37.3	14.25	14.70	15.44	592.80	557.13	575.91
Dubuque .....	41.0	41.8	41.3	15.34	14.93	15.18	628.94	624.07	626.93
Sioux City .....	39.7	39.6	38.0	11.90	12.17	12.40	472.43	481.93	471.20
<b>Kansas</b> .....	41.7	41.1	40.7	13.53	14.27	14.24	564.20	586.50	579.57
Topeka .....	41.9	38.8	39.6	16.45	16.55	16.73	689.26	642.14	662.51
Wichita .....	42.8	41.0	40.3	15.94	16.46	16.56	682.23	674.86	667.37
<b>Kentucky</b> .....	40.9	41.5	41.6	13.85	14.22	14.39	566.47	590.13	598.62
Lexington .....	42.2	41.9	41.1	14.07	14.25	14.41	593.75	597.08	592.25
Louisville .....	41.7	42.7	42.5	15.64	15.93	16.05	652.19	680.21	682.13
<b>Louisiana</b> .....	44.3	43.2	42.8	14.57	15.14	15.35	645.45	654.05	656.98
Baton Rouge .....	43.1	42.8	43.1	17.56	17.59	18.01	756.84	752.85	776.23
New Orleans .....	44.0	44.2	43.2	14.82	14.71	14.79	652.08	650.18	638.93
Shreveport-Bossier City .....	41.9	42.6	42.9	13.52	14.83	14.85	566.49	631.76	637.07
<b>Maine</b> .....	39.6	40.7	39.9	13.77	13.84	13.89	545.29	563.29	554.21
Lewiston-Auburn .....	40.7	41.5	40.6	12.24	12.50	12.49	498.17	518.75	507.09
Portland .....	41.0	42.9	42.1	11.49	11.55	10.96	471.09	495.50	461.42
<b>Maryland</b> .....	41.6	41.7	42.1	14.32	14.70	14.85	595.71	612.99	625.19
Baltimore PMSA .....	41.4	41.6	41.5	14.97	15.77	15.72	619.76	656.03	652.38
<b>Massachusetts</b> .....	41.6	42.0	41.9	13.81	14.24	14.30	574.50	598.08	599.17
Boston .....	40.8	40.9	40.9	14.95	15.61	15.68	609.96	638.45	641.31
Springfield .....	40.6	41.4	40.8	13.55	13.81	13.83	550.13	571.73	564.26
Worcester .....	41.6	41.9	42.0	14.14	14.49	14.53	588.22	607.13	610.26
<b>Michigan</b> .....	40.7	44.4	42.6	15.93	18.43	18.06	648.35	818.29	769.36
Ann Arbor .....	42.3	45.0	43.9	17.12	19.88	19.20	724.18	894.60	842.88
Detroit .....	42.4	46.1	44.1	18.05	20.55	20.14	765.32	947.36	888.17
Flint .....	40.7	43.5	43.6	19.54	26.02	23.37	795.28	1,131.87	1,018.93
Grand Rapids-Muskegon-Holland .....	41.4	41.4	41.0	14.04	15.02	15.05	581.26	621.83	617.05
Jackson .....	38.1	41.2	41.2	12.79	13.14	13.47	487.30	541.37	554.96
Kalamazoo-Battle Creek .....	41.7	41.6	42.0	15.08	15.24	15.06	628.84	633.98	632.52
Lansing East Lansing .....	41.6	43.7	41.9	15.63	19.73	18.88	650.21	862.20	791.07
Saginaw-Bay City-Midland .....	42.0	45.6	42.9	18.80	22.47	20.81	789.60	1,024.63	892.75
<b>Minnesota</b> .....	41.0	41.0	41.0	13.81	14.34	14.35	566.21	587.94	588.35
Duluth-Superior .....	39.2	38.5	37.3	12.70	12.81	13.00	497.84	493.19	484.90
Minneapolis-St. Paul .....	41.8	41.9	41.8	14.68	15.41	15.42	613.62	645.68	644.56
St. Cloud .....	41.2	42.7	42.8	13.07	13.11	13.18	538.48	559.80	564.10
<b>Mississippi</b> .....	41.0	41.2	40.9	10.70	11.12	11.14	438.70	458.14	455.63
Jackson .....	40.3	41.2	42.4	11.83	13.06	12.81	476.75	538.07	543.14
<b>Missouri</b> .....	40.7	41.6	40.4	13.01	13.85	13.76	529.51	576.16	555.90
Kansas City .....	42.8	43.0	42.5	13.88	14.50	14.52	594.06	623.50	617.10
St. Louis .....	41.3	42.7	40.5	15.19	15.86	15.90	627.35	677.22	643.95
Springfield .....	40.2	40.9	41.5	11.57	11.74	11.90	465.11	480.17	493.85
<b>Montana</b> .....	38.5	39.7	39.8	13.86	14.10	14.57	533.61	559.77	579.89
<b>Nebraska</b> .....	41.3	41.7	41.2	12.37	12.73	12.77	510.88	530.84	526.12
Lincoln .....	42.9	45.9	44.2	13.86	14.65	14.66	594.59	672.44	647.97
Omaha .....	42.9	43.5	42.1	13.91	13.83	13.86	596.74	601.61	583.51
<b>Nevada</b> .....	43.2	41.1	41.1	14.86	13.94	13.68	641.95	572.93	562.25
Las Vegas .....	41.0	39.0	38.2	16.91	13.94	14.33	693.31	543.66	547.41

See footnotes at end of table.

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

**B-18. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas — Continued**

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P	July 1998	June 1999	July 1999P
<b>New Hampshire</b> .....	40.2	41.2	39.8	\$12.90	\$12.84	\$13.13	\$518.58	\$529.01	\$522.57
Manchester .....	39.2	40.3	37.8	13.45	13.66	13.90	527.24	550.50	525.42
Nashua .....	41.8	41.0	41.9	14.39	14.25	13.92	601.50	584.25	583.25
Portsmouth-Rochester .....	38.6	40.3	40.0	12.63	12.75	12.92	487.52	513.83	516.80
<b>New Jersey</b> .....	41.2	41.6	41.4	14.54	15.07	15.05	599.05	626.91	623.07
<b>New Mexico</b> .....	37.6	38.4	39.2	12.67	12.27	12.75	476.39	471.17	499.80
Albuquerque .....	37.0	38.4	41.4	13.70	14.37	15.29	506.90	551.81	633.01
<b>New York</b> .....	40.6	41.3	40.9	13.30	14.06	14.08	539.98	580.68	575.87
Albany-Schenectady-Troy .....	42.0	42.6	43.3	14.48	15.22	15.25	608.16	648.37	660.33
Binghamton .....	39.6	41.8	41.0	10.72	11.00	11.00	424.51	459.80	451.00
Buffalo-Niagara Falls .....	42.5	43.2	43.2	16.10	18.06	18.12	684.25	780.19	782.78
Dutchess County .....	40.0	38.8	39.7	12.01	12.02	12.04	480.40	466.38	477.99
Elmira .....	41.5	40.7	41.4	12.49	12.75	12.82	518.34	518.93	530.75
Nassau-Suffolk .....	39.7	40.3	40.0	12.53	13.06	13.12	497.44	526.32	524.80
New York PMSA .....	39.0	39.4	39.0	12.37	12.81	12.87	482.43	504.71	501.93
New York City .....	38.7	39.0	38.4	12.09	12.57	12.62	467.88	490.23	484.61
Newburgh .....	39.7	42.0	41.5	11.07	11.66	11.37	439.48	489.72	471.86
Rochester .....	41.7	42.8	42.4	14.87	15.97	16.05	620.08	683.52	680.52
Rockland County .....	41.7	44.0	43.8	15.89	15.86	16.08	662.61	697.84	704.30
Syracuse .....	42.4	41.4	41.4	14.36	14.92	14.96	608.86	617.69	619.34
Utica-Rome .....	38.8	40.7	39.9	11.66	12.14	12.15	452.41	494.10	484.79
Westchester County .....	40.3	41.5	41.9	13.17	13.17	13.22	530.75	546.56	553.92
<b>North Carolina</b> .....	40.6	41.1	40.5	11.86	12.28	12.32	481.52	504.71	498.96
Asheville .....	41.8	42.3	41.9	11.40	11.82	11.72	476.52	499.99	491.07
Charlotte-Gastonia-Rock Hill .....	40.6	41.0	40.8	12.72	13.37	13.47	516.43	548.17	549.58
Greensboro-Winston-Salem-High Point .....	39.7	39.9	39.5	12.10	12.49	12.54	480.37	498.35	495.33
Raleigh-Durham-Chapel Hill .....	41.6	42.3	41.7	12.92	13.35	13.35	537.47	564.71	556.70
<b>North Dakota</b> .....	40.0	38.9	38.9	11.23	11.77	11.86	449.20	457.85	461.35
Fargo-Moorhead .....	41.0	40.9	39.7	10.66	11.34	11.61	437.06	463.81	460.92
<b>Ohio</b> .....	41.8	43.0	41.8	15.26	16.40	16.15	637.87	705.20	675.07
Akron .....	42.2	42.4	41.7	13.25	13.48	13.64	559.15	571.55	568.79
Canton-Massillon .....	40.3	41.0	39.8	14.01	14.46	14.47	564.60	592.86	575.91
Cincinnati .....	41.7	43.5	43.4	14.89	15.83	15.85	620.91	688.61	687.89
Cleveland-Lorain-Elyria .....	42.0	43.9	43.0	15.18	16.09	15.82	637.56	706.35	680.26
Columbus .....	41.0	41.7	41.9	14.49	15.17	15.01	594.09	632.59	628.92
Dayton-Springfield .....	41.9	42.8	40.7	15.88	17.33	16.98	665.37	741.72	691.09
Hamilton-Middletown .....	46.5	46.9	45.2	17.57	17.77	17.88	817.01	833.41	808.18
Lima .....	42.4	42.2	42.7	16.01	16.75	16.95	678.82	706.85	723.77
Mansfield .....	41.9	43.8	41.8	15.92	16.97	16.14	667.05	743.29	674.65
Steubenville-Weirton .....	39.4	40.6	40.2	17.49	18.59	18.75	689.11	754.75	753.75
Toledo .....	42.3	44.4	42.2	16.51	18.19	17.68	698.37	807.64	746.10
Youngstown-Warren .....	41.8	41.5	40.1	15.50	18.34	17.95	647.90	761.11	719.80
<b>Oklahoma</b> .....	41.0	41.3	40.8	12.53	12.77	12.78	513.73	527.40	521.42
Oklahoma City .....	42.3	40.6	41.7	12.91	14.46	14.55	546.09	587.08	606.74
Tulsa .....	41.9	42.1	41.8	13.22	13.28	13.45	553.92	559.09	562.21
<b>Oregon</b> .....	40.5	40.4	39.7	13.94	14.53	14.52	564.57	587.01	576.44
Eugene-Springfield .....	39.2	41.6	33.8	13.38	14.29	14.80	524.50	594.46	500.24
Medford-Ashland .....	40.0	39.3	39.3	13.21	13.77	13.74	528.40	541.16	539.98
Portland-Vancouver .....	40.1	40.3	40.0	14.53	15.05	15.09	582.65	606.52	603.60
Salem .....	39.3	40.2	39.2	11.66	12.94	12.33	458.24	520.19	483.34
<b>Pennsylvania</b> .....	41.6	42.1	41.5	14.05	14.27	14.33	584.48	600.77	594.70
Allentown-Bethlem-Easton .....	42.1	41.6	41.5	14.52	14.51	14.67	611.29	603.62	608.81
Altoona .....	39.5	40.3	39.7	12.14	12.32	12.45	479.53	496.50	494.27
Erie .....	43.6	44.8	43.3	14.46	14.48	14.72	630.46	648.70	637.38
Harrisburg-Lebanon-Carlisle .....	40.1	40.0	40.3	13.73	14.26	14.53	550.57	570.40	585.56
Johnstown .....	39.7	39.6	38.6	10.35	10.68	10.59	410.90	422.93	408.77
Lancaster .....	40.4	40.9	40.1	12.86	13.29	13.20	519.54	543.56	529.32
Philadelphia PMSA .....	41.2	41.1	40.8	15.26	15.39	15.54	628.71	632.53	634.03
Pittsburgh .....	42.2	42.7	42.7	14.97	15.39	15.34	631.73	657.15	655.02
Reading .....	42.7	42.3	42.3	14.84	15.26	15.08	633.67	645.50	637.88
Scranton-Wilkes-Barre-Hazleton .....	40.3	41.3	40.3	12.71	13.10	13.10	512.21	541.03	527.93
Sharon .....	41.3	41.2	40.4	13.73	14.12	13.95	567.05	581.74	563.58
State College .....	41.0	41.8	42.6	12.09	12.54	12.72	495.69	524.17	541.87
Williamsport .....	40.3	40.3	40.0	11.38	11.78	11.60	458.61	474.73	464.00
York .....	42.2	43.7	41.9	14.29	14.92	14.57	603.04	652.00	610.48

See footnotes at end of table.

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

**B-18. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas — Continued**

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>	July 1998	June 1999	July 1999 <sup>P</sup>
<b>Rhode Island</b> .....	40.5	40.0	39.9	\$11.57	\$11.93	\$11.97	\$468.59	\$477.20	\$477.60
Providence-Fall River-Warwick .....	41.0	40.9	40.7	11.88	12.21	12.24	487.08	499.39	498.17
<b>South Carolina</b> .....	42.5	42.6	42.6	10.55	10.78	10.81	448.38	459.23	460.51
<b>South Dakota</b> .....	42.7	43.7	43.4	10.22	10.49	10.61	436.39	458.41	460.47
Rapid City .....	40.9	39.9	41.9	10.44	10.83	11.25	427.00	432.12	471.38
Sioux Falls .....	44.1	45.7	44.5	10.68	11.01	11.05	470.99	503.16	491.73
<b>Tennessee</b> .....	39.8	40.9	40.0	12.12	12.44	12.51	482.38	508.80	500.40
Chattanooga .....	41.2	41.8	41.6	11.25	11.58	11.83	463.50	484.04	492.13
Johnson City-Kingsport-Bristol .....	37.7	40.0	39.7	13.07	12.87	12.50	492.74	514.80	496.25
Knoxville .....	40.3	41.1	39.4	12.21	12.30	12.43	492.06	505.53	489.74
Memphis .....	41.5	39.5	40.2	13.68	13.31	13.44	567.72	525.75	540.29
Nashville .....	40.3	40.1	39.5	12.85	13.31	13.18	517.86	533.73	520.61
<b>Texas</b> .....	43.6	43.5	43.3	12.13	12.22	12.23	528.87	531.57	529.56
Dallas .....	43.2	42.7	42.2	12.50	12.48	12.42	540.00	532.90	524.12
Ft. Worth-Arlington .....	43.1	43.5	43.6	12.88	13.37	13.36	555.13	581.60	582.50
Houston .....	45.5	44.7	44.6	14.31	13.98	14.20	651.11	624.91	633.32
San Antonio .....	42.6	42.5	42.1	9.85	9.97	10.02	419.61	423.73	421.84
<b>Utah</b> .....	40.8	40.5	40.5	13.05	13.57	13.58	532.44	549.59	549.99
Salt Lake City-Ogden .....	40.5	40.5	40.7	12.91	13.16	13.27	522.86	532.98	540.09
<b>Vermont</b> .....	39.3	39.2	38.0	12.93	13.45	13.52	508.15	527.24	513.76
Burlington .....	45.5	41.6	41.2	13.51	14.52	14.24	614.71	604.03	586.69
<b>Virginia</b> .....	41.4	42.8	42.1	12.91	13.32	13.22	534.47	570.10	556.56
Bristol .....	38.0	50.9	48.6	10.60	12.47	12.32	402.80	634.72	598.75
Charlottesville .....	43.0	41.9	38.8	10.50	10.63	10.75	451.50	445.40	417.10
Danville .....	40.1	43.2	43.0	13.24	13.86	13.77	530.92	598.75	592.11
Lynchburg .....	40.8	46.1	45.1	12.58	12.99	13.02	513.26	598.84	587.20
Norfolk-Virginia Beach-Newport News .....	42.7	44.3	43.1	14.90	14.51	14.15	636.23	642.79	609.87
Northern Virginia .....	40.5	41.7	40.6	13.33	13.94	13.93	539.87	581.30	565.56
Richmond-Petersburg .....	41.7	43.8	45.9	16.45	16.91	16.40	685.97	740.66	752.76
Roanoke .....	39.6	40.6	37.7	13.62	14.24	13.91	539.35	578.14	524.41
<b>Washington</b> .....	40.6	40.9	40.3	15.83	15.96	16.23	642.70	652.76	654.07
<b>West Virginia</b> .....	40.6	41.1	41.3	13.58	13.96	14.17	551.35	573.76	585.22
Charleston .....	45.1	47.3	46.7	15.48	16.17	16.32	698.15	764.84	762.14
Huntington-Ashland .....	43.2	38.7	39.1	15.71	15.27	15.57	678.67	590.95	608.79
Parkersburg-Marietta .....	43.1	41.3	42.4	16.86	17.43	17.29	726.67	719.86	733.10
Wheeling .....	37.9	40.2	38.1	17.13	16.91	17.34	649.23	679.78	660.65
<b>Wisconsin</b> .....	40.7	41.8	41.5	13.73	14.54	14.43	558.81	607.77	598.85
Appleton-Oshkosh-Neenah .....	43.1	43.6	43.2	15.53	15.93	15.97	669.34	694.55	689.90
Eau Claire .....	41.6	40.9	40.5	12.71	12.66	12.89	528.74	517.79	522.05
Green Bay .....	40.4	42.3	42.8	15.72	15.24	15.14	635.09	644.65	647.99
Janesville-Beloit .....	44.8	42.8	41.9	15.37	18.73	17.61	688.58	801.64	737.86
Kenosha .....	38.0	40.1	39.0	13.42	16.45	14.90	509.96	659.65	581.10
La Crosse .....	41.3	41.5	39.5	12.49	12.82	12.63	515.84	532.03	498.89
Madison .....	38.9	39.4	37.6	13.14	13.56	13.49	511.15	534.26	507.22
Milwaukee-Waukesha .....	40.0	40.9	41.6	14.81	15.62	15.56	592.40	638.86	647.30
Racine .....	36.8	43.3	43.9	13.93	15.15	15.06	512.62	656.00	661.13
Sheboygan .....	41.2	43.6	42.2	14.01	14.63	14.54	577.21	637.87	613.59
Wausau .....	43.4	42.9	43.4	13.59	14.15	14.35	589.81	607.04	622.79
<b>Wyoming</b> .....	40.6	38.9	39.5	14.63	14.99	14.74	593.98	583.11	582.23
<b>Puerto Rico</b> .....	39.6	40.8	41.0	8.36	8.93	8.88	331.06	364.34	364.08
<b>Virgin Islands</b> .....	39.1	( <sup>1</sup> )	( <sup>1</sup> )	18.26	( <sup>1</sup> )	( <sup>1</sup> )	713.97	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</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 1998 benchmarks.

**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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>NORTHEAST</b>													
Civilian labor force .....	26,024.4	26,035.0	26,081.6	26,092.3	26,115.2	26,147.6	26,178.3	26,245.8	26,241.0	26,255.0	26,292.8	26,291.6	26,321.7
Employed .....	24,838.3	24,851.8	24,883.0	24,910.0	24,944.2	24,988.5	25,043.3	25,118.7	25,123.9	25,153.8	25,175.4	25,125.3	25,175.2
Unemployed .....	1,186.1	1,183.2	1,198.6	1,182.3	1,171.0	1,159.2	1,135.0	1,127.1	1,117.1	1,101.3	1,117.4	1,166.3	1,146.5
Unemployment rate .....	4.6	4.5	4.6	4.5	4.5	4.4	4.3	4.3	4.3	4.2	4.2	4.4	4.4
<b>New England</b>													
Civilian labor force .....	7,104.3	7,107.4	7,125.5	7,135.9	7,140.1	7,149.3	7,159.3	7,162.0	7,162.9	7,185.1	7,191.5	7,178.8	7,184.8
Employed .....	6,866.4	6,865.9	6,876.3	6,891.8	6,905.1	6,919.5	6,930.2	6,942.3	6,948.5	6,967.9	6,954.9	6,944.6	6,959.5
Unemployed .....	237.9	241.5	249.3	244.0	235.0	229.7	229.1	219.8	214.3	217.2	236.5	234.2	225.3
Unemployment rate .....	3.3	3.4	3.5	3.4	3.3	3.2	3.2	3.1	3.0	3.0	3.3	3.3	3.1
<b>Middle Atlantic</b>													
Civilian labor force .....	18,920.1	18,927.6	18,956.0	18,956.4	18,975.1	18,998.4	19,019.0	19,083.8	19,078.1	19,070.0	19,101.3	19,112.7	19,136.8
Employed .....	17,971.9	17,985.8	18,006.7	18,018.2	18,039.2	18,068.9	18,113.1	18,176.4	18,175.4	18,185.9	18,220.5	18,180.7	18,215.7
Unemployed .....	948.2	941.8	949.3	938.3	935.9	929.4	905.9	907.4	902.7	884.1	880.8	932.1	921.2
Unemployment rate .....	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.7	4.6	4.6	4.9	4.8
<b>SOUTH</b>													
Civilian labor force .....	47,867.6	47,944.9	48,056.0	48,192.6	48,312.9	48,458.9	48,631.6	48,639.5	48,606.0	48,714.8	48,775.0	48,723.9	48,744.1
Employed .....	45,751.7	45,835.6	45,956.7	46,114.1	46,247.0	46,409.3	46,608.6	46,609.5	46,582.0	46,685.5	46,737.5	46,801.4	46,852.5
Unemployed .....	2,115.9	2,109.2	2,099.3	2,078.6	2,065.9	2,049.6	2,023.0	2,030.0	2,024.1	2,029.3	2,037.5	1,922.5	1,891.5
Unemployment rate .....	4.4	4.4	4.4	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	3.9	3.9
<b>South Atlantic</b>													
Civilian labor force .....	24,698.6	24,745.3	24,813.9	24,902.2	24,979.1	25,072.6	25,170.3	25,178.7	25,144.2	25,236.3	25,267.9	25,228.9	25,243.1
Employed .....	23,699.7	23,750.9	23,830.3	23,919.4	24,006.0	24,111.5	24,223.7	24,215.0	24,180.7	24,273.5	24,303.5	24,326.2	24,347.9
Unemployed .....	998.9	994.4	983.6	982.7	973.1	961.1	946.5	963.7	963.5	962.8	964.5	902.7	895.2
Unemployment rate .....	4.0	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.6	3.5
<b>East South Central</b>													
Civilian labor force .....	8,108.2	8,114.5	8,128.1	8,147.8	8,160.1	8,181.9	8,207.9	8,195.7	8,220.5	8,210.1	8,212.6	8,197.3	8,222.1
Employed .....	7,756.9	7,757.9	7,769.7	7,793.3	7,809.1	7,831.2	7,853.8	7,850.5	7,853.3	7,852.2	7,856.2	7,867.8	7,899.8
Unemployed .....	351.3	356.7	358.3	354.5	351.0	350.7	354.1	345.2	367.2	357.9	356.5	329.5	322.3
Unemployment rate .....	4.3	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.5	4.4	4.3	4.0	3.9
<b>West South Central</b>													
Civilian labor force .....	15,060.8	15,085.0	15,114.0	15,142.7	15,173.7	15,204.5	15,253.4	15,265.0	15,241.3	15,268.4	15,294.4	15,297.7	15,278.9
Employed .....	14,295.1	14,326.8	14,356.6	14,401.4	14,431.9	14,466.6	14,531.1	14,543.9	14,548.0	14,559.7	14,577.9	14,607.4	14,604.8
Unemployed .....	765.8	758.2	757.4	741.3	741.8	737.8	722.4	721.1	693.3	708.6	716.6	690.3	674.1
Unemployment rate .....	5.1	5.0	5.0	4.9	4.9	4.9	4.7	4.7	4.5	4.6	4.7	4.5	4.4

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>MIDWEST</b>													
Civilian labor force .....	33,109.8	33,149.1	33,250.3	33,358.5	33,442.1	33,524.7	33,585.8	33,609.3	33,576.6	33,610.4	33,598.8	33,662.4	33,741.1
Employed .....	31,802.2	31,909.8	32,005.1	32,131.7	32,229.2	32,342.5	32,426.9	32,443.4	32,456.6	32,457.5	32,392.3	32,423.9	32,531.9
Unemployed .....	1,307.6	1,239.3	1,245.3	1,226.7	1,212.8	1,182.2	1,159.0	1,165.9	1,119.9	1,152.9	1,206.5	1,238.5	1,209.2
Unemployment rate .....	3.9	3.7	3.7	3.7	3.6	3.5	3.5	3.5	3.3	3.4	3.6	3.7	3.6
<b>East North Central</b>													
Civilian labor force .....	22,937.8	22,965.2	23,035.6	23,107.8	23,154.2	23,210.4	23,267.8	23,294.3	23,276.9	23,301.5	23,280.8	23,321.5	23,363.6
Employed .....	21,966.0	22,053.3	22,117.7	22,196.9	22,253.3	22,323.7	22,385.9	22,401.4	22,433.3	22,432.0	22,378.3	22,394.5	22,470.8
Unemployed .....	971.8	911.8	917.9	910.8	900.9	886.7	881.9	892.9	843.6	869.5	902.5	927.1	892.8
Unemployment rate .....	4.2	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.6	3.7	3.9	4.0	3.8
<b>West North Central</b>													
Civilian labor force .....	10,172.0	10,184.0	10,214.8	10,250.7	10,287.9	10,314.3	10,318.0	10,315.0	10,299.7	10,308.9	10,318.0	10,340.9	10,377.5
Employed .....	9,836.3	9,856.5	9,887.4	9,934.8	9,976.0	10,018.8	10,041.0	10,042.0	10,023.3	10,025.5	10,014.0	10,029.4	10,061.1
Unemployed .....	335.8	327.5	327.4	315.9	311.9	295.5	277.1	273.0	276.4	283.4	304.0	311.4	316.4
Unemployment rate .....	3.3	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.7	2.7	2.9	3.0	3.0
<b>WEST</b>													
Civilian labor force .....	30,819.4	30,831.4	30,921.5	30,971.5	31,038.5	31,055.4	31,134.3	31,155.3	31,250.0	31,272.7	31,268.2	31,316.3	31,364.4
Employed .....	29,163.7	29,173.7	29,250.9	29,326.2	29,402.6	29,423.7	29,537.4	29,575.6	29,634.9	29,676.5	29,727.5	29,752.5	29,837.7
Unemployed .....	1,655.7	1,657.7	1,670.5	1,645.3	1,635.9	1,631.7	1,596.8	1,579.8	1,615.1	1,596.2	1,540.7	1,563.7	1,526.7
Unemployment rate .....	5.4	5.4	5.4	5.3	5.3	5.3	5.1	5.1	5.2	5.1	4.9	5.0	4.9
<b>Mountain</b>													
Civilian labor force .....	8,728.8	8,746.3	8,780.2	8,810.5	8,837.7	8,862.0	8,903.9	8,911.9	8,931.0	8,963.0	8,972.3	8,960.6	8,976.7
Employed .....	8,338.4	8,359.7	8,396.7	8,433.4	8,468.0	8,502.0	8,553.9	8,568.8	8,576.9	8,596.2	8,595.2	8,587.0	8,615.0
Unemployed .....	390.4	386.6	383.4	377.0	369.7	360.0	350.0	343.2	354.1	366.9	377.0	373.6	361.8
Unemployment rate .....	4.5	4.4	4.4	4.3	4.2	4.1	3.9	3.9	4.0	4.1	4.2	4.2	4.0
<b>Pacific</b>													
Civilian labor force .....	22,090.5	22,085.1	22,141.3	22,161.0	22,200.8	22,193.4	22,230.4	22,243.4	22,319.0	22,309.7	22,295.9	22,355.6	22,387.7
Employed .....	20,825.2	20,814.0	20,854.2	20,892.7	20,934.6	20,921.7	20,983.5	21,006.8	21,058.0	21,080.4	21,132.2	21,165.5	21,222.8
Unemployed .....	1,265.3	1,271.1	1,287.1	1,268.3	1,266.2	1,271.7	1,246.8	1,236.6	1,261.0	1,229.3	1,163.7	1,190.2	1,164.9
Unemployment rate .....	5.7	5.8	5.8	5.7	5.7	5.7	5.6	5.6	5.6	5.5	5.2	5.3	5.2

<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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>Alabama</b>													
Civilian labor force .....	2,152.0	2,150.3	2,150.4	2,152.1	2,154.2	2,158.7	2,162.3	2,161.7	2,176.1	2,173.3	2,174.0	2,164.4	2,169.8
Employed .....	2,064.8	2,061.8	2,061.4	2,063.3	2,065.9	2,071.5	2,077.0	2,076.4	2,079.8	2,073.2	2,071.9	2,067.8	2,082.4
Unemployed .....	87.3	88.5	89.0	88.7	88.3	87.3	85.3	85.3	96.3	100.1	102.1	96.6	87.4
Unemployment rate .....	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.9	4.4	4.6	4.7	4.5	4.0
<b>Alaska</b>													
Civilian labor force .....	317.3	317.2	317.1	317.3	316.4	315.7	316.6	318.6	318.1	315.8	317.7	317.5	316.7
Employed .....	299.4	299.5	299.2	299.6	298.9	298.0	297.9	298.2	298.0	297.3	296.8	297.7	297.6
Unemployed .....	18.0	17.7	17.8	17.7	17.5	17.7	18.7	20.5	20.1	18.5	20.9	19.7	19.1
Unemployment rate .....	5.7	5.6	5.6	5.6	5.5	5.6	5.9	6.4	6.3	5.9	6.6	6.2	6.0
<b>Arizona</b>													
Civilian labor force .....	2,276.2	2,288.5	2,303.1	2,311.2	2,326.1	2,341.6	2,362.1	2,378.2	2,383.3	2,401.0	2,397.2	2,397.0	2,400.8
Employed .....	2,182.0	2,193.5	2,208.8	2,218.9	2,233.3	2,249.5	2,269.3	2,283.9	2,283.5	2,295.9	2,285.9	2,293.6	2,298.8
Unemployed .....	94.3	95.0	94.3	92.3	92.8	92.2	92.9	94.3	99.8	105.1	111.3	103.5	102.0
Unemployment rate .....	4.1	4.2	4.1	4.0	4.0	3.9	3.9	4.0	4.2	4.4	4.6	4.3	4.2
<b>Arkansas</b>													
Civilian labor force .....	1,207.7	1,215.4	1,224.5	1,235.4	1,246.0	1,255.0	1,255.7	1,252.7	1,248.1	1,248.6	1,251.0	1,258.5	1,257.8
Employed .....	1,143.0	1,148.7	1,156.3	1,166.1	1,177.6	1,189.6	1,191.2	1,193.5	1,193.3	1,194.2	1,195.8	1,198.4	1,199.7
Unemployed .....	64.7	66.7	68.2	69.3	68.4	65.4	64.5	59.3	54.8	54.3	55.2	60.1	58.0
Unemployment rate .....	5.4	5.5	5.6	5.6	5.5	5.2	5.1	4.7	4.4	4.4	4.4	4.8	4.6
<b>California</b>													
Civilian labor force .....	16,380.9	16,370.6	16,404.3	16,401.1	16,437.1	16,421.3	16,456.9	16,447.4	16,532.8	16,546.1	16,523.7	16,592.5	16,593.5
Employed .....	15,415.3	15,400.7	15,425.6	15,438.3	15,473.0	15,452.9	15,509.3	15,521.8	15,569.0	15,601.9	15,648.1	15,700.6	15,724.1
Unemployed .....	965.6	969.9	978.6	962.8	964.1	968.4	947.6	925.5	963.8	944.2	875.6	891.9	869.3
Unemployment rate .....	5.9	5.9	6.0	5.9	5.9	5.9	5.8	5.6	5.8	5.7	5.3	5.4	5.2
<b>Colorado</b>													
Civilian labor force .....	2,256.6	2,254.2	2,261.8	2,265.3	2,264.0	2,261.1	2,272.0	2,257.1	2,265.5	2,275.3	2,279.5	2,270.0	2,287.6
Employed .....	2,166.3	2,165.1	2,172.6	2,179.1	2,182.3	2,183.7	2,201.8	2,197.3	2,204.7	2,207.4	2,212.5	2,199.8	2,219.3
Unemployed .....	90.4	89.1	89.2	86.3	81.7	77.4	70.1	59.8	60.8	68.0	67.0	70.2	68.2
Unemployment rate .....	4.0	4.0	3.9	3.8	3.6	3.4	3.1	2.7	2.7	3.0	2.9	3.1	3.0
<b>Connecticut</b>													
Civilian labor force .....	1,706.7	1,710.0	1,715.8	1,714.2	1,718.0	1,722.0	1,729.5	1,722.8	1,718.6	1,732.6	1,731.2	1,719.2	1,706.5
Employed .....	1,655.2	1,655.6	1,657.2	1,658.7	1,662.3	1,666.9	1,677.4	1,669.6	1,664.4	1,674.5	1,672.6	1,660.6	1,661.8
Unemployed .....	51.5	54.4	58.6	55.5	55.7	55.1	52.2	53.3	54.2	58.1	58.6	58.5	44.7
Unemployment rate .....	3.0	3.2	3.4	3.2	3.2	3.2	3.0	3.1	3.2	3.4	3.4	3.4	2.6
<b>Delaware</b>													
Civilian labor force .....	393.6	392.9	394.4	396.3	397.5	398.8	400.4	397.5	399.2	398.1	397.8	396.8	398.3
Employed .....	377.4	378.5	380.4	382.4	384.2	386.1	387.9	385.1	386.6	384.9	383.5	382.1	385.0
Unemployed .....	16.2	14.5	14.0	13.9	13.3	12.7	12.5	12.4	12.6	13.2	14.3	14.7	13.2
Unemployment rate .....	4.1	3.7	3.6	3.5	3.4	3.2	3.1	3.1	3.2	3.3	3.6	3.7	3.3
<b>District of Columbia</b>													
Civilian labor force .....	268.5	269.0	267.5	266.8	265.7	264.2	266.0	270.2	268.3	269.1	271.6	273.3	271.5
Employed .....	244.5	245.3	244.2	244.1	243.9	243.6	245.7	250.1	249.1	250.6	254.0	256.7	255.3
Unemployed .....	24.0	23.7	23.3	22.7	21.9	20.6	20.3	20.1	19.2	18.5	17.6	16.6	16.2
Unemployment rate .....	8.9	8.8	8.7	8.5	8.2	7.8	7.6	7.4	7.2	6.9	6.5	6.1	6.0
<b>Florida</b>													
Civilian labor force .....	7,221.1	7,242.6	7,276.3	7,309.9	7,346.0	7,386.5	7,424.5	7,433.4	7,414.2	7,455.1	7,462.7	7,470.5	7,464.5
Employed .....	6,920.7	6,941.6	6,972.3	7,001.6	7,035.2	7,075.5	7,107.9	7,115.4	7,105.6	7,138.0	7,153.2	7,181.3	7,181.2
Unemployed .....	300.3	301.0	303.9	308.3	310.8	310.9	316.6	318.0	308.6	317.1	309.5	289.2	283.3
Unemployment rate .....	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.2	4.3	4.1	3.9	3.8

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>Georgia</b>													
Civilian labor force .....	4,031.3	4,030.3	4,034.2	4,032.1	4,031.5	4,026.0	4,040.1	4,038.7	4,041.2	4,063.5	4,068.3	4,064.0	4,059.6
Employed .....	3,858.6	3,863.8	3,868.8	3,870.0	3,871.9	3,869.7	3,881.8	3,873.7	3,870.9	3,903.2	3,916.0	3,917.1	3,911.2
Unemployed .....	172.8	166.5	165.4	162.1	159.7	156.3	158.2	165.0	170.3	160.3	152.3	147.0	148.3
Unemployment rate .....	4.3	4.1	4.1	4.0	4.0	3.9	3.9	4.1	4.2	3.9	3.7	3.6	3.7
<b>Hawaii</b>													
Civilian labor force .....	596.9	597.8	600.6	600.7	601.4	602.5	600.4	597.6	598.9	598.0	601.0	597.2	596.7
Employed .....	559.5	560.8	562.5	563.3	564.6	565.7	563.7	562.0	563.3	565.0	568.2	563.9	564.8
Unemployed .....	37.3	37.0	38.1	37.3	36.8	36.9	36.7	35.6	35.6	33.0	32.8	33.3	32.0
Unemployment rate .....	6.3	6.2	6.3	6.2	6.1	6.1	6.1	6.0	5.9	5.5	5.5	5.6	5.4
<b>Idaho</b>													
Civilian labor force .....	653.3	655.6	658.8	661.3	663.5	665.8	662.2	662.0	662.5	659.3	658.2	656.3	659.5
Employed .....	620.9	623.5	625.9	628.5	631.0	632.9	632.2	631.4	631.3	628.2	626.2	621.4	626.3
Unemployed .....	32.5	32.1	32.9	32.8	32.4	32.9	30.0	30.6	31.2	31.1	32.0	34.9	33.2
Unemployment rate .....	5.0	4.9	5.0	5.0	4.9	4.9	4.5	4.6	4.7	4.7	4.9	5.3	5.0
<b>Illinois</b>													
Civilian labor force .....	6,229.1	6,224.1	6,239.9	6,249.0	6,246.4	6,248.0	6,283.6	6,284.4	6,296.4	6,312.0	6,319.8	6,347.6	6,386.6
Employed .....	5,947.8	5,946.0	5,958.3	5,970.7	5,971.3	5,983.3	6,030.6	6,031.2	6,058.1	6,065.1	6,043.0	6,057.5	6,093.9
Unemployed .....	281.2	278.1	281.6	278.3	275.1	264.7	253.0	253.2	238.3	246.9	276.8	290.2	292.7
Unemployment rate .....	4.5	4.5	4.5	4.5	4.4	4.2	4.0	4.0	3.8	3.9	4.4	4.6	4.6
<b>Indiana</b>													
Civilian labor force .....	3,076.4	3,084.8	3,097.5	3,107.2	3,116.5	3,127.3	3,124.8	3,138.4	3,130.7	3,109.9	3,101.9	3,103.1	3,081.8
Employed .....	2,981.1	2,991.3	3,000.9	3,014.5	3,022.1	3,034.1	3,028.7	3,048.4	3,048.8	3,031.5	3,009.6	3,007.4	3,009.0
Unemployed .....	95.3	93.5	96.7	92.7	94.4	93.2	96.1	90.0	81.8	78.5	92.3	95.7	72.8
Unemployment rate .....	3.1	3.0	3.1	3.0	3.0	3.0	3.1	2.9	2.6	2.5	3.0	3.1	2.4
<b>Iowa</b>													
Civilian labor force .....	1,564.6	1,568.4	1,572.3	1,572.7	1,576.5	1,580.8	1,589.6	1,585.2	1,579.0	1,588.4	1,584.0	1,592.1	1,596.4
Employed .....	1,522.6	1,526.0	1,529.9	1,531.0	1,534.5	1,538.9	1,543.4	1,543.4	1,536.8	1,546.0	1,542.4	1,550.1	1,553.8
Unemployed .....	42.0	42.4	42.4	41.7	42.1	41.9	46.2	41.9	42.2	42.4	41.6	42.0	42.6
Unemployment rate .....	2.7	2.7	2.7	2.7	2.7	2.7	2.9	2.6	2.7	2.7	2.6	2.6	2.7
<b>Kansas</b>													
Civilian labor force .....	1,413.5	1,416.2	1,420.0	1,427.4	1,434.2	1,436.4	1,444.8	1,446.3	1,446.8	1,446.1	1,447.6	1,447.5	1,449.1
Employed .....	1,357.3	1,361.5	1,365.3	1,373.4	1,380.4	1,384.6	1,395.4	1,398.5	1,396.6	1,397.4	1,398.3	1,400.1	1,401.0
Unemployed .....	56.2	54.7	54.7	54.0	53.8	51.8	49.4	47.9	50.1	48.7	49.2	47.3	48.0
Unemployment rate .....	4.0	3.9	3.8	3.8	3.8	3.6	3.4	3.3	3.5	3.4	3.4	3.3	3.3
<b>Kentucky</b>													
Civilian labor force .....	1,920.6	1,924.1	1,926.4	1,930.6	1,932.6	1,936.1	1,941.0	1,942.5	1,944.9	1,945.6	1,952.5	1,958.1	1,957.3
Employed .....	1,833.9	1,836.1	1,839.4	1,845.5	1,849.9	1,855.9	1,859.3	1,860.1	1,860.4	1,862.9	1,866.5	1,870.7	1,877.6
Unemployed .....	86.7	88.0	87.0	85.1	82.8	80.2	81.7	82.4	84.5	82.7	86.0	87.4	79.7
Unemployment rate .....	4.5	4.6	4.5	4.4	4.3	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.1
<b>Louisiana</b>													
Civilian labor force .....	2,076.8	2,073.0	2,066.4	2,065.9	2,061.8	2,061.3	2,068.3	2,065.9	2,051.7	2,056.6	2,033.3	2,042.2	2,053.9
Employed .....	1,950.3	1,949.7	1,947.9	1,956.1	1,951.6	1,952.4	1,960.5	1,950.4	1,947.0	1,951.8	1,943.6	1,955.9	1,957.3
Unemployed .....	126.5	123.3	118.5	109.8	110.3	108.9	107.8	115.5	104.6	104.8	89.7	86.3	96.6
Unemployment rate .....	6.1	5.9	5.7	5.3	5.3	5.3	5.2	5.6	5.1	5.1	4.4	4.2	4.7
<b>Maine</b>													
Civilian labor force .....	648.6	650.4	653.1	658.6	662.2	664.7	660.5	663.8	662.8	663.0	668.1	668.5	670.2
Employed .....	619.8	621.4	624.7	630.1	635.5	639.5	637.7	641.8	640.2	639.4	639.4	639.1	642.3
Unemployed .....	28.8	28.9	28.3	28.5	26.7	25.2	22.8	22.0	22.6	23.6	28.7	29.4	27.9
Unemployment rate .....	4.4	4.4	4.3	4.3	4.0	3.8	3.5	3.3	3.4	3.6	4.3	4.4	4.2

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
<b>Maryland</b>													
Civilian labor force .....	2,750.1	2,754.6	2,760.0	2,774.8	2,788.6	2,806.7	2,805.9	2,813.2	2,808.7	2,812.9	2,811.8	2,802.3	2,818.2
Employed .....	2,619.8	2,629.1	2,641.6	2,659.7	2,676.1	2,696.7	2,705.0	2,706.9	2,704.8	2,704.3	2,704.5	2,700.2	2,709.7
Unemployed .....	130.3	125.5	118.4	115.2	112.5	109.9	100.9	106.3	103.9	108.6	107.3	102.1	108.5
Unemployment rate .....	4.7	4.6	4.3	4.2	4.0	3.9	3.6	3.8	3.7	3.9	3.8	3.6	3.8
<b>Massachusetts</b>													
Civilian labor force .....	3,274.4	3,270.0	3,274.2	3,272.7	3,264.4	3,259.5	3,264.6	3,265.2	3,264.7	3,272.8	3,278.6	3,277.1	3,286.1
Employed .....	3,169.0	3,164.6	3,164.9	3,166.5	3,163.1	3,159.2	3,161.7	3,170.8	3,172.8	3,178.3	3,174.6	3,178.1	3,181.2
Unemployed .....	105.4	105.5	109.3	106.3	101.3	100.4	102.9	94.5	91.8	94.5	104.0	99.0	104.9
Unemployment rate .....	3.2	3.2	3.3	3.2	3.1	3.1	3.2	2.9	2.8	2.9	3.2	3.0	3.2
<b>Michigan</b>													
Civilian labor force .....	5,011.5	5,027.0	5,038.8	5,054.1	5,057.3	5,057.8	5,059.6	5,066.2	5,071.7	5,076.6	5,070.5	5,085.0	5,085.1
Employed .....	4,796.2	4,836.0	4,846.7	4,861.9	4,867.2	4,864.5	4,869.4	4,862.3	4,870.9	4,875.6	4,874.0	4,890.5	4,910.9
Unemployed .....	215.3	191.0	192.1	192.2	190.2	193.2	190.2	203.9	200.8	201.0	196.5	194.5	174.3
Unemployment rate .....	4.3	3.8	3.8	3.8	3.8	3.8	3.8	4.0	4.0	4.0	3.9	3.8	3.4
<b>Minnesota</b>													
Civilian labor force .....	2,683.4	2,689.2	2,695.9	2,704.0	2,712.5	2,715.6	2,716.3	2,711.6	2,705.8	2,704.1	2,718.5	2,722.2	2,740.5
Employed .....	2,617.6	2,623.9	2,623.5	2,637.4	2,644.1	2,650.7	2,650.7	2,647.8	2,645.7	2,647.4	2,649.4	2,651.3	2,660.1
Unemployed .....	65.8	65.2	72.3	66.6	68.3	64.9	65.6	63.9	60.1	56.6	69.0	70.9	80.4
Unemployment rate .....	2.5	2.4	2.7	2.5	2.5	2.4	2.4	2.4	2.2	2.1	2.5	2.6	2.9
<b>Mississippi</b>													
Civilian labor force .....	1,268.1	1,266.7	1,272.3	1,276.6	1,281.1	1,287.4	1,290.9	1,276.5	1,289.1	1,276.0	1,273.2	1,273.6	1,281.1
Employed .....	1,200.9	1,199.5	1,204.4	1,210.4	1,214.7	1,219.9	1,223.3	1,221.8	1,223.1	1,216.9	1,212.2	1,215.9	1,220.9
Unemployed .....	67.3	67.2	68.0	66.2	66.4	67.5	67.6	54.7	66.0	59.0	61.0	57.7	60.2
Unemployment rate .....	5.3	5.3	5.3	5.2	5.2	5.2	5.2	4.3	5.1	4.6	4.8	4.5	4.7
<b>Missouri</b>													
Civilian labor force .....	2,846.8	2,846.1	2,858.7	2,874.0	2,886.6	2,900.1	2,885.6	2,892.4	2,891.8	2,896.6	2,895.8	2,909.2	2,917.6
Employed .....	2,724.1	2,729.3	2,747.6	2,766.3	2,784.5	2,806.1	2,811.5	2,815.0	2,809.1	2,802.7	2,795.3	2,799.4	2,814.5
Unemployed .....	122.6	116.8	111.1	107.6	102.0	94.1	74.1	77.4	82.7	93.8	100.5	109.8	103.1
Unemployment rate .....	4.3	4.1	3.9	3.7	3.5	3.2	2.6	2.7	2.9	3.2	3.5	3.8	3.5
<b>Montana</b>													
Civilian labor force .....	468.4	468.3	469.3	471.3	472.8	472.8	476.2	475.3	472.9	474.8	476.0	472.5	475.2
Employed .....	442.5	442.5	443.0	444.7	446.2	447.1	451.4	449.5	447.2	449.0	451.7	449.3	452.7
Unemployed .....	25.9	25.8	26.2	26.6	26.6	25.7	24.8	25.7	25.7	25.8	24.3	23.2	22.5
Unemployment rate .....	5.5	5.5	5.6	5.6	5.6	5.4	5.2	5.4	5.4	5.4	5.1	4.9	4.7
<b>Nebraska</b>													
Civilian labor force .....	918.4	919.1	922.5	927.4	932.6	936.9	935.2	932.4	930.8	931.1	929.8	929.6	932.3
Employed .....	892.2	893.6	897.6	902.7	907.8	913.4	912.9	910.3	909.5	908.0	905.6	906.3	910.1
Unemployed .....	26.3	25.5	24.9	24.8	24.8	23.5	22.4	22.2	21.3	23.1	24.3	23.3	22.2
Unemployment rate .....	2.9	2.8	2.7	2.7	2.7	2.5	2.4	2.4	2.3	2.5	2.6	2.5	2.4
<b>Nevada</b>													
Civilian labor force .....	922.2	923.6	925.5	930.3	932.3	933.5	937.9	940.8	942.0	949.4	956.3	957.3	955.4
Employed .....	881.3	884.6	889.0	895.6	899.1	903.0	906.5	908.3	906.3	910.2	914.6	917.1	918.8
Unemployed .....	40.9	39.1	36.5	34.7	33.2	30.5	31.4	32.4	35.8	39.2	41.7	40.2	36.6
Unemployment rate .....	4.4	4.2	3.9	3.7	3.6	3.3	3.3	3.4	3.8	4.1	4.4	4.2	3.8
<b>New Hampshire</b>													
Civilian labor force .....	647.8	648.9	652.4	658.3	661.9	666.5	669.6	673.7	674.3	672.8	671.6	671.3	672.5
Employed .....	630.6	631.5	634.2	639.0	642.9	648.0	651.2	653.8	654.3	656.5	654.7	654.1	655.8
Unemployed .....	17.3	17.4	18.3	19.3	19.0	18.5	18.3	19.9	20.0	16.4	16.9	17.2	16.6
Unemployment rate .....	2.7	2.7	2.8	2.9	2.9	2.8	2.7	3.0	3.0	2.4	2.5	2.6	2.5

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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>P</sup>
<b>New Jersey</b>													
Civilian labor force .....	4,138.4	4,141.9	4,153.4	4,162.4	4,173.2	4,193.7	4,216.3	4,219.1	4,217.2	4,232.8	4,244.8	4,239.2	4,248.6
Employed .....	3,948.0	3,953.4	3,963.6	3,975.6	3,987.1	4,009.1	4,031.9	4,047.3	4,027.7	4,042.6	4,046.3	4,031.8	4,044.0
Unemployed .....	190.4	188.5	189.7	186.7	186.1	184.6	184.5	171.9	189.5	190.2	198.5	207.4	204.6
Unemployment rate .....	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.1	4.5	4.5	4.7	4.9	4.8
<b>New Mexico</b>													
Civilian labor force .....	831.1	832.4	833.5	836.0	838.2	839.4	838.6	839.7	837.9	837.0	835.2	838.4	832.6
Employed .....	779.6	780.1	780.7	782.5	784.3	785.4	786.6	786.4	785.9	784.5	783.8	786.6	782.4
Unemployed .....	51.5	52.3	52.7	53.5	53.9	53.9	52.0	53.3	52.1	52.5	51.4	51.8	50.2
Unemployment rate .....	6.2	6.3	6.3	6.4	6.4	6.4	6.2	6.3	6.2	6.3	6.2	6.2	6.0
<b>New York</b>													
Civilian labor force .....	8,850.1	8,854.9	8,870.5	8,868.0	8,873.5	8,874.4	8,857.0	8,878.1	8,860.8	8,848.9	8,865.1	8,884.5	8,910.2
Employed .....	8,365.8	8,374.6	8,383.5	8,385.5	8,389.3	8,391.8	8,394.7	8,403.6	8,413.5	8,404.3	8,411.2	8,419.5	8,448.5
Unemployed .....	484.3	480.3	487.0	482.4	484.2	482.6	462.3	474.6	447.2	444.6	453.9	465.0	461.7
Unemployment rate .....	5.5	5.4	5.5	5.4	5.5	5.4	5.2	5.3	5.0	5.0	5.1	5.2	5.2
<b>North Carolina</b>													
Civilian labor force .....	3,784.8	3,791.7	3,797.8	3,812.6	3,820.0	3,833.8	3,858.3	3,846.4	3,850.0	3,856.7	3,853.3	3,826.0	3,845.8
Employed .....	3,658.6	3,659.1	3,669.0	3,683.5	3,696.1	3,713.9	3,740.3	3,727.4	3,728.3	3,746.9	3,734.7	3,724.1	3,732.5
Unemployed .....	126.2	132.6	128.9	129.1	124.0	119.9	118.0	119.0	121.7	109.9	118.6	101.9	113.3
Unemployment rate .....	3.3	3.5	3.4	3.4	3.2	3.1	3.1	3.1	3.2	2.8	3.1	2.7	2.9
<b>North Dakota</b>													
Civilian labor force .....	346.8	346.5	346.1	345.6	345.4	345.1	346.5	345.9	344.9	343.3	343.4	341.6	341.2
Employed .....	335.3	334.7	335.0	335.2	335.5	336.0	337.3	336.3	334.8	334.2	334.0	333.0	331.4
Unemployed .....	11.5	11.8	11.0	10.4	9.9	9.1	9.2	9.7	10.0	9.0	9.4	8.6	9.8
Unemployment rate .....	3.3	3.4	3.2	3.0	2.9	2.6	2.6	2.8	2.9	2.6	2.7	2.5	2.9
<b>Ohio</b>													
Civilian labor force .....	5,665.4	5,676.3	5,699.3	5,728.1	5,754.6	5,791.1	5,802.5	5,820.1	5,802.1	5,834.4	5,814.9	5,832.4	5,847.8
Employed .....	5,392.1	5,429.2	5,455.9	5,487.2	5,520.8	5,561.7	5,565.8	5,574.6	5,575.5	5,583.4	5,578.3	5,570.3	5,582.7
Unemployed .....	273.3	247.1	243.4	240.9	233.8	229.4	236.7	245.5	226.7	251.1	236.6	262.1	265.1
Unemployment rate .....	4.8	4.4	4.3	4.2	4.1	4.0	4.1	4.2	3.9	4.3	4.1	4.5	4.5
<b>Oklahoma</b>													
Civilian labor force .....	1,633.2	1,630.2	1,634.6	1,639.0	1,642.6	1,647.9	1,644.9	1,646.9	1,648.0	1,645.7	1,646.7	1,662.2	1,661.0
Employed .....	1,551.5	1,555.4	1,559.7	1,564.1	1,569.1	1,574.7	1,580.5	1,579.2	1,577.5	1,577.0	1,587.7	1,603.1	1,603.8
Unemployed .....	81.7	74.9	74.8	74.9	73.5	73.2	64.3	67.8	70.5	68.7	59.0	59.1	57.2
Unemployment rate .....	5.0	4.6	4.6	4.6	4.5	4.4	3.9	4.1	4.3	4.2	3.6	3.6	3.4
<b>Oregon</b>													
Civilian labor force .....	1,756.8	1,759.7	1,768.6	1,777.5	1,778.0	1,775.7	1,775.3	1,790.4	1,786.7	1,766.5	1,764.5	1,753.7	1,762.6
Employed .....	1,658.3	1,659.7	1,667.5	1,676.8	1,679.4	1,677.5	1,676.0	1,687.7	1,686.9	1,672.8	1,674.3	1,657.5	1,665.4
Unemployed .....	98.5	99.9	101.2	100.7	98.7	98.2	99.3	102.7	99.8	93.7	90.2	96.2	97.2
Unemployment rate .....	5.6	5.7	5.7	5.7	5.5	5.5	5.6	5.7	5.6	5.3	5.1	5.5	5.5
<b>Pennsylvania</b>													
Civilian labor force .....	5,931.5	5,930.8	5,932.1	5,926.1	5,928.4	5,930.2	5,945.7	5,986.5	6,000.2	5,988.3	5,991.4	5,989.0	5,978.1
Employed .....	5,658.1	5,657.8	5,659.6	5,657.0	5,662.8	5,668.0	5,686.5	5,725.6	5,734.2	5,739.0	5,763.0	5,729.4	5,723.2
Unemployed .....	273.5	273.0	272.6	269.1	265.7	262.2	259.2	260.9	266.0	249.3	228.4	259.6	254.9
Unemployment rate .....	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.4	4.2	3.8	4.3	4.3
<b>Rhode Island</b>													
Civilian labor force .....	496.8	497.1	498.7	499.2	499.2	500.7	499.0	497.7	502.8	505.3	503.2	503.9	509.7
Employed .....	472.9	472.8	474.9	475.8	477.1	480.1	476.6	478.3	487.7	489.5	484.4	484.0	489.0
Unemployed .....	23.9	24.3	23.9	23.4	22.1	20.6	22.4	19.4	15.1	15.8	18.8	19.9	20.7
Unemployment rate .....	4.8	4.9	4.8	4.7	4.4	4.1	4.5	3.9	3.0	3.1	3.7	4.0	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	1998						1999						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	JulyP
<b>South Carolina</b>													
Civilian labor force .....	1,967.3	1,965.0	1,962.8	1,966.7	1,967.2	1,966.9	1,973.4	1,981.7	1,969.0	1,985.5	2,000.3	1,996.3	1,980.2
Employed .....	1,890.1	1,887.9	1,887.3	1,889.1	1,889.4	1,890.2	1,900.3	1,899.0	1,895.2	1,903.0	1,916.8	1,918.3	1,913.5
Unemployed .....	77.2	77.1	75.5	77.6	77.8	76.7	73.1	82.7	73.8	82.5	83.5	78.0	66.7
Unemployment rate .....	3.9	3.9	3.8	3.9	4.0	3.9	3.7	4.2	3.7	4.2	4.2	3.9	3.4
<b>South Dakota</b>													
Civilian labor force .....	398.5	398.4	399.3	399.7	400.1	399.5	400.0	401.1	400.6	399.4	398.9	398.7	400.4
Employed .....	387.1	387.5	388.3	388.8	389.1	389.3	389.7	390.8	390.8	389.8	388.9	389.2	390.2
Unemployed .....	11.5	11.0	10.9	10.9	11.1	10.2	10.3	10.1	9.9	9.7	10.0	9.5	10.2
Unemployment rate .....	2.9	2.8	2.7	2.7	2.8	2.6	2.6	2.5	2.5	2.4	2.5	2.4	2.6
<b>Tennessee</b>													
Civilian labor force .....	2,767.5	2,773.4	2,779.0	2,788.6	2,792.2	2,799.6	2,813.6	2,815.1	2,810.4	2,815.2	2,812.9	2,801.1	2,814.0
Employed .....	2,657.5	2,660.5	2,664.6	2,674.1	2,678.6	2,683.9	2,694.2	2,692.2	2,690.0	2,699.2	2,705.6	2,713.3	2,719.0
Unemployed .....	110.0	112.9	114.4	114.5	113.6	115.7	119.4	122.8	120.4	116.0	107.3	87.9	95.0
Unemployment rate .....	4.0	4.1	4.1	4.1	4.1	4.1	4.2	4.4	4.3	4.1	3.8	3.1	3.4
<b>Texas</b>													
Civilian labor force .....	10,143.0	10,166.3	10,188.5	10,202.4	10,223.3	10,240.3	10,284.5	10,299.4	10,293.6	10,317.6	10,363.4	10,334.9	10,306.2
Employed .....	9,650.3	9,673.1	9,692.6	9,715.0	9,733.6	9,749.9	9,798.8	9,820.8	9,830.2	9,836.7	9,850.8	9,850.0	9,844.0
Unemployed .....	492.8	493.3	495.9	487.4	489.7	490.3	485.6	478.6	463.4	480.8	512.7	484.8	462.2
Unemployment rate .....	4.9	4.9	4.9	4.8	4.8	4.8	4.7	4.6	4.5	4.7	4.9	4.7	4.5
<b>Utah</b>													
Civilian labor force .....	1,062.1	1,064.7	1,069.1	1,075.2	1,081.0	1,088.1	1,094.5	1,098.5	1,106.3	1,105.3	1,107.6	1,107.1	1,104.2
Employed .....	1,019.4	1,023.8	1,029.9	1,036.7	1,044.2	1,052.5	1,057.7	1,063.4	1,068.9	1,071.8	1,071.2	1,069.9	1,067.1
Unemployed .....	42.7	40.9	39.2	38.4	36.8	35.6	36.7	35.0	37.4	33.5	36.5	37.1	37.2
Unemployment rate .....	4.0	3.8	3.7	3.6	3.4	3.3	3.4	3.2	3.4	3.0	3.3	3.4	3.4
<b>Vermont</b>													
Civilian labor force .....	330.0	331.1	331.4	332.8	334.3	335.8	336.1	338.7	339.7	338.5	338.7	338.8	339.9
Employed .....	318.9	320.0	320.4	321.7	324.0	325.8	325.6	328.0	329.1	329.7	329.2	328.6	329.3
Unemployed .....	11.1	11.1	11.0	11.0	10.3	10.0	10.5	10.7	10.6	8.8	9.5	10.2	10.6
Unemployment rate .....	3.4	3.3	3.3	3.3	3.1	3.0	3.1	3.2	3.1	2.6	2.8	3.0	3.1
<b>Virginia</b>													
Civilian labor force .....	3,481.0	3,499.9	3,521.3	3,540.5	3,560.3	3,585.9	3,589.3	3,587.5	3,581.1	3,584.0	3,593.8	3,587.2	3,591.5
Employed .....	3,383.8	3,400.2	3,419.8	3,438.4	3,456.7	3,480.2	3,494.6	3,493.6	3,481.8	3,486.1	3,486.8	3,486.7	3,495.7
Unemployed .....	97.2	99.8	101.4	102.1	103.6	105.6	94.7	93.9	99.3	97.8	107.0	100.6	95.8
Unemployment rate .....	2.8	2.9	2.9	2.9	2.9	2.9	2.6	2.6	2.8	2.7	3.0	2.8	2.7
<b>Washington</b>													
Civilian labor force .....	3,038.7	3,039.9	3,050.7	3,064.5	3,068.0	3,078.2	3,081.1	3,089.4	3,082.6	3,083.3	3,089.0	3,094.9	3,118.1
Employed .....	2,892.7	2,893.3	2,899.4	2,914.7	2,918.8	2,927.6	2,936.6	2,937.1	2,940.8	2,943.3	2,944.8	2,945.8	2,970.9
Unemployed .....	146.0	146.5	151.3	149.8	149.2	150.6	144.5	152.3	141.7	140.0	144.2	149.1	147.2
Unemployment rate .....	4.8	4.8	5.0	4.9	4.9	4.9	4.7	4.9	4.6	4.5	4.7	4.8	4.7
<b>West Virginia</b>													
Civilian labor force .....	800.8	799.2	799.5	802.3	802.1	803.8	812.4	810.2	812.5	811.3	808.3	812.4	813.6
Employed .....	746.2	745.4	746.8	750.7	752.5	755.5	760.1	763.8	758.3	756.5	753.9	759.7	763.8
Unemployed .....	54.6	53.7	52.7	51.7	49.6	48.4	52.3	46.4	54.3	54.9	54.4	52.7	49.8
Unemployment rate .....	6.8	6.7	6.6	6.4	6.2	6.0	6.4	5.7	6.7	6.8	6.7	6.5	6.1
<b>Wisconsin</b>													
Civilian labor force .....	2,955.5	2,952.9	2,960.0	2,969.4	2,979.3	2,986.2	2,997.3	2,985.2	2,976.0	2,968.6	2,973.8	2,953.4	2,962.2
Employed .....	2,848.7	2,850.8	2,856.0	2,862.6	2,872.0	2,879.9	2,891.3	2,884.8	2,880.1	2,876.5	2,873.5	2,868.8	2,874.4
Unemployed .....	106.8	102.1	104.1	106.8	107.4	106.3	105.9	100.4	95.9	92.1	100.3	84.5	87.8
Unemployment rate .....	3.6	3.5	3.5	3.6	3.6	3.6	3.5	3.4	3.2	3.1	3.4	2.9	3.0
<b>Wyoming</b>													
Civilian labor force .....	259.0	259.0	259.1	259.8	259.9	259.6	260.5	260.4	260.5	260.8	262.2	262.1	261.4
Employed .....	246.6	246.6	246.7	247.5	247.6	247.9	248.4	248.4	249.1	249.2	249.3	249.3	249.6
Unemployed .....	12.4	12.4	12.4	12.4	12.3	11.7	12.1	12.0	11.3	11.6	13.0	12.8	11.8
Unemployment rate .....	4.8	4.8	4.8	4.8	4.7	4.5	4.6	4.6	4.4	4.5	4.9	4.9	4.5

P = preliminary.

revised when new benchmark and population information becomes available.

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

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
<b>Alabama</b> .....	2,181.9	2,194.1	2,165.7	2,184.0	112.3	118.1	98.0	98.8	5.1	5.4	4.5	4.5
Anniston .....	55.3	55.5	55.2	55.4	3.0	3.0	2.7	2.4	5.5	5.5	4.9	4.4
Birmingham .....	478.1	482.4	474.0	480.9	16.3	16.6	14.4	13.4	3.4	3.4	3.0	2.8
Decatur .....	74.1	75.1	74.8	74.8	3.5	4.2	4.3	3.4	4.7	5.6	5.8	4.5
Dothan .....	66.9	67.7	66.2	67.0	2.7	3.1	2.3	2.5	4.1	4.5	3.5	3.7
Florence .....	69.5	70.3	68.6	69.5	5.9	5.6	5.0	4.3	8.5	8.0	7.3	6.3
Gadsden .....	51.1	51.1	50.3	50.3	2.9	4.0	2.5	3.6	5.6	7.9	4.9	7.1
Huntsville .....	173.2	173.6	172.2	174.1	5.9	6.4	5.8	7.5	3.4	3.7	3.4	4.3
Mobile .....	275.0	282.6	273.0	282.2	13.3	14.6	11.1	11.8	4.8	5.2	4.1	4.2
Montgomery .....	163.1	168.6	162.8	168.5	6.6	7.0	5.5	5.7	4.1	4.1	3.4	3.4
Tuscaloosa .....	83.3	85.0	82.9	84.5	3.0	3.0	2.7	2.6	3.6	3.6	3.3	3.0
<b>Alaska</b> .....	327.2	325.9	331.3	330.5	18.9	19.6	15.8	16.8	5.8	6.0	4.8	5.1
Anchorage .....	142.9	143.4	143.3	143.6	6.1	6.3	5.3	5.6	4.2	4.4	3.7	3.9
<b>Arizona</b> .....	2,280.2	2,415.3	2,294.4	2,418.7	104.1	112.5	109.3	117.6	4.6	4.7	4.8	4.9
Flagstaff .....	60.7	63.0	61.5	67.0	4.9	4.5	5.1	4.8	8.1	7.2	8.3	7.2
Phoenix-Mesa .....	1,506.1	1,597.3	1,519.2	1,602.1	42.3	50.4	42.3	51.0	2.8	3.2	2.9	3.2
Tucson .....	373.8	394.9	370.1	391.7	10.9	11.1	10.8	13.5	2.9	2.8	2.9	3.4
Yuma .....	69.1	75.3	71.3	74.5	23.4	25.3	25.6	26.3	33.9	33.6	35.9	35.3
<b>Arkansas</b> .....	1,221.2	1,277.4	1,230.3	1,278.5	64.7	59.9	69.4	62.4	5.3	4.7	5.6	4.9
Fayetteville-Springdale-Rogers .....	139.5	149.3	141.8	150.5	4.6	4.0	5.2	4.2	3.3	2.6	3.7	2.8
Fort Smith .....	95.7	99.9	97.1	100.0	4.8	4.1	4.9	3.8	5.0	4.1	5.1	3.8
Jonesboro .....	41.2	43.9	41.7	43.8	1.8	1.6	1.8	1.6	4.3	3.7	4.4	3.7
Little Rock-North Little Rock .....	298.2	311.0	300.2	311.7	12.1	10.3	12.5	10.6	4.1	3.3	4.2	3.4
Pine Bluff .....	36.3	37.8	36.8	38.2	3.2	2.9	3.3	3.1	8.8	7.8	9.0	8.0
<b>California</b> .....	16,328.2	16,599.2	16,557.7	16,778.3	960.4	887.2	1,039.6	939.8	5.9	5.3	6.3	5.6
Bakersfield .....	282.7	290.0	291.6	296.6	31.8	31.9	36.3	34.3	11.2	11.0	12.5	11.6
Chico-Paradise .....	85.0	86.9	86.3	87.1	7.7	6.5	7.5	6.6	9.0	7.5	8.7	7.6
Fresno .....	435.4	450.3	448.5	457.0	59.6	60.2	59.3	57.8	13.7	13.4	13.2	12.6
Los Angeles-Long Beach .....	4,592.9	4,583.3	4,711.1	4,703.3	302.0	265.1	341.6	291.7	6.6	5.8	7.2	6.2
Merced .....	88.4	90.0	86.5	87.6	13.1	12.1	12.4	11.0	14.8	13.4	14.3	12.6
Modesto .....	206.4	207.3	208.8	210.4	27.0	24.6	25.4	23.3	13.1	11.9	12.2	11.1
Oakland .....	1,190.2	1,225.5	1,199.5	1,235.5	48.5	43.8	51.8	46.5	4.1	3.6	4.3	3.8
Orange County .....	1,434.9	1,483.8	1,447.8	1,491.4	43.3	42.8	46.3	45.5	3.0	2.9	3.2	3.1
Redding .....	72.5	71.7	71.0	70.7	6.6	5.3	6.2	5.0	9.1	7.4	8.7	7.1
Riverside-San Bernardino .....	1,383.6	1,439.0	1,389.9	1,440.1	87.1	80.3	97.7	90.2	6.3	5.6	7.0	6.3
Sacramento .....	758.5	780.9	766.0	788.6	38.6	35.0	39.9	36.2	5.1	4.5	5.2	4.6
Salinas .....	185.2	190.1	187.3	192.1	14.1	13.5	13.3	12.4	7.6	7.1	7.1	6.5
San Diego .....	1,322.5	1,344.3	1,333.8	1,350.1	47.6	46.5	51.3	47.6	3.6	3.5	3.8	3.5
San Francisco .....	950.1	963.4	970.2	970.6	29.8	26.0	32.0	27.4	3.1	2.7	3.3	2.8
San Jose .....	963.5	971.6	977.1	981.6	30.5	33.1	33.7	32.6	3.2	3.4	3.5	3.3
San Luis Obispo-Atascadero-Paso Robles .....	110.8	112.3	109.3	108.0	4.6	3.9	4.7	4.0	4.1	3.5	4.3	3.7
Santa Barbara-Santa Maria-Lompoc .....	197.1	198.6	197.8	197.5	7.4	7.1	7.4	6.9	3.8	3.6	3.8	3.5
Santa Cruz-Watsonville .....	145.9	146.8	142.3	142.8	8.0	7.8	8.0	6.9	5.5	5.3	5.6	4.8
Santa Rosa .....	249.5	255.2	248.0	252.7	8.4	7.4	8.5	7.5	3.4	2.9	3.4	3.0
Stockton-Lodi .....	252.9	254.2	254.5	255.0	26.6	23.0	27.3	24.0	10.5	9.0	10.7	9.4
Vallejo-Fairfield-Napa .....	244.9	252.1	246.5	253.0	12.9	11.1	13.0	11.6	5.3	4.4	5.3	4.6
Ventura .....	386.2	400.6	390.2	403.6	19.4	18.0	23.0	23.2	5.0	4.5	5.9	5.7
Visalia-Tulare-Porterville .....	164.2	172.2	168.8	175.2	22.4	27.0	28.0	30.0	13.7	15.7	16.6	17.1
Yolo .....	88.4	89.5	87.6	88.6	4.2	3.6	4.2	3.8	4.7	4.0	4.8	4.3
Yuba City .....	57.8	58.9	58.2	61.0	8.6	7.5	7.8	7.0	14.8	12.7	13.4	11.4
<b>Colorado</b> .....	2,286.4	2,305.4	2,285.0	2,318.7	109.2	86.6	91.5	70.0	4.8	3.8	4.0	3.0
Boulder-Longmont .....	174.4	177.3	173.5	177.8	7.6	6.1	6.5	5.2	4.3	3.5	3.7	2.9
Colorado Springs .....	261.7	264.2	260.4	264.6	14.9	11.5	12.5	9.5	5.7	4.4	4.8	3.6
Denver .....	1,144.9	1,164.1	1,147.7	1,171.6	44.2	35.9	38.4	29.6	3.9	3.1	3.3	2.5
Fort Collins-Loveland .....	144.1	144.5	143.4	145.0	6.6	5.6	5.6	4.4	4.6	3.9	3.9	3.0
Grand Junction .....	60.1	59.3	60.2	59.8	3.7	2.8	3.1	2.3	6.2	4.8	5.1	3.8
Greeley .....	85.7	84.3	85.7	85.1	4.8	4.1	4.1	3.4	5.6	4.8	4.8	4.0
Pueblo .....	64.7	61.6	63.5	62.1	6.7	3.6	4.8	3.0	10.3	5.8	7.6	4.9
<b>Connecticut</b> .....	1,731.6	1,747.1	1,757.9	1,756.1	60.0	63.2	61.2	54.4	3.5	3.6	3.5	3.1
Bridgeport .....	220.7	223.2	221.5	221.5	9.3	10.3	9.4	8.6	4.2	4.6	4.2	3.9
Danbury .....	111.3	111.8	112.9	112.3	2.6	2.9	2.8	2.7	2.3	2.6	2.5	2.4
Hartford .....	585.9	591.1	594.8	593.3	21.0	22.1	21.1	18.9	3.6	3.7	3.6	3.2
New Haven-Meriden .....	273.4	278.3	278.6	280.8	9.2	10.0	9.7	8.8	3.4	3.6	3.5	3.1
New London-Norwich .....	154.5	156.8	158.4	159.9	6.2	5.6	6.3	5.1	4.0	3.5	4.0	3.2
Stamford-Norwalk .....	197.5	198.2	201.4	201.0	4.5	4.8	4.5	4.0	2.3	2.4	2.3	2.0
Waterbury .....	117.9	118.2	119.3	117.8	4.8	5.1	4.9	4.4	4.0	4.3	4.1	3.7
<b>Delaware</b> .....	395.7	401.2	399.6	403.9	16.2	15.3	16.5	13.5	4.1	3.8	4.1	3.3
Dover .....	68.3	69.1	69.0	69.3	3.3	3.1	2.7	2.5	4.8	4.6	4.0	3.6
Wilmington-Newark .....	296.3	298.4	298.5	300.8	14.4	11.2	15.9	12.3	4.9	3.7	5.3	4.1

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA  
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
District of Columbia .....	275.2	278.8	279.6	282.7	27.2	19.4	26.7	18.7	9.9	6.9	9.6	6.6
Washington .....	2,583.3	2,679.4	2,622.8	2,714.8	92.1	79.0	85.2	72.7	3.6	2.9	3.2	2.7
Florida .....	7,268.4	7,537.0	7,313.6	7,553.8	333.6	312.6	321.8	300.8	4.6	4.1	4.4	4.0
Daytona Beach .....	190.0	196.4	192.0	196.3	6.7	6.1	6.1	5.6	3.5	3.1	3.2	2.8
Fort Lauderdale .....	763.5	782.0	764.8	780.4	36.3	33.7	33.1	30.2	4.8	4.3	4.3	3.9
Fort Myers-Cape Coral .....	174.9	180.2	175.1	179.0	5.4	5.2	5.3	4.6	3.1	2.9	3.0	2.6
Fort Pierce-Port St. Lucie .....	123.9	125.7	124.0	124.6	11.9	11.2	13.8	12.3	9.6	8.9	11.1	9.9
Fort Walton Beach .....	83.6	86.7	83.4	88.2	2.7	2.7	2.3	2.6	3.2	3.1	2.8	3.0
Gainesville .....	101.7	105.1	103.3	106.4	3.0	2.5	2.6	2.3	3.0	2.4	2.6	2.2
Jacksonville .....	540.3	557.7	546.2	562.4	18.1	17.8	16.8	16.7	3.3	3.2	3.1	3.0
Lakeland-Winter Haven .....	198.2	204.5	199.9	204.9	12.4	11.8	14.7	13.5	6.3	5.8	7.4	6.6
Melbourne-Titusville-Palm Bay .....	206.1	211.9	208.6	213.3	9.5	8.2	8.3	7.7	4.6	3.9	4.0	3.6
Miami .....	1,041.5	1,060.5	1,047.9	1,064.8	72.0	67.5	64.9	61.0	6.9	6.4	6.2	5.7
Naples .....	90.0	97.3	90.2	97.3	4.1	3.6	5.1	5.0	4.6	3.7	5.7	5.1
Ocala .....	96.2	99.9	96.5	99.1	4.4	3.9	4.3	3.4	4.6	3.9	4.4	3.5
Oriando .....	849.1	889.2	854.9	892.0	27.4	26.6	26.1	24.7	3.2	3.0	3.1	2.8
Panama City .....	67.7	71.0	67.9	70.9	3.4	3.8	3.0	3.5	5.1	5.3	4.4	4.9
Pensacola .....	175.7	179.9	175.7	180.3	7.7	7.0	6.7	6.7	4.4	3.9	3.8	3.7
Punta Gorda .....	44.8	46.2	44.2	45.7	1.5	1.5	1.5	1.5	3.3	3.2	3.5	3.4
Sarasota-Bradenton .....	260.9	271.6	263.0	272.5	6.7	5.8	6.8	6.3	2.6	2.1	2.6	2.3
Tallahassee .....	144.8	149.3	146.9	151.2	5.0	4.4	4.4	4.3	3.5	2.9	3.0	2.8
Tampa-St. Petersburg-Clearwater .....	1,173.9	1,235.7	1,187.8	1,244.2	37.5	34.1	35.5	32.8	3.2	2.8	3.0	2.6
West Palm Beach-Boca Raton .....	509.6	538.5	513.6	538.8	30.1	28.1	31.8	29.2	5.9	5.2	6.2	5.4
Georgia .....	4,060.7	4,098.3	4,057.0	4,085.5	195.8	169.5	191.2	166.5	4.8	4.1	4.7	4.1
Albany .....	58.8	56.2	58.3	56.4	5.6	4.3	5.0	4.2	9.5	7.6	8.5	7.4
Athens .....	73.8	71.6	72.5	69.6	2.5	2.0	2.4	2.0	3.4	2.8	3.3	2.8
Atlanta .....	2,133.5	2,126.3	2,145.9	2,134.6	81.1	70.0	83.5	70.2	3.8	3.3	3.9	3.3
Augusta-Aiken .....	210.7	206.6	209.3	205.5	14.1	11.8	12.9	11.4	6.7	5.7	6.1	5.6
Columbus .....	126.2	126.6	126.5	126.5	6.9	6.5	6.7	6.1	5.4	5.1	5.3	4.9
Macon .....	153.8	149.5	152.7	147.5	9.3	7.7	8.2	7.1	6.1	5.1	5.4	4.8
Savannah .....	135.2	133.7	133.9	133.1	7.0	6.5	6.3	6.1	5.2	4.8	4.7	4.6
Hawaii .....	599.5	600.9	604.6	604.2	42.1	37.5	40.5	35.0	7.0	6.2	6.7	5.8
Honolulu .....	429.8	430.7	430.6	429.7	25.1	23.0	24.4	21.6	5.8	5.3	5.7	5.0
Idaho .....	663.2	667.6	664.2	669.8	29.9	31.5	28.8	29.7	4.5	4.7	4.3	4.4
Boise City .....	223.5	229.0	221.5	230.8	8.0	8.3	7.7	8.1	3.6	3.6	3.5	3.5
Pocatello .....	38.9	38.6	39.9	38.2	1.8	2.0	1.7	1.9	4.6	5.1	4.3	4.9
Illinois .....	6,307.9	6,439.4	6,318.7	6,482.7	295.8	303.2	282.3	297.4	4.7	4.7	4.5	4.6
Bloomington-Normal .....	85.1	85.4	85.0	85.9	2.2	2.2	1.9	2.1	2.6	2.6	2.3	2.5
Champaign-Urbana .....	92.3	93.1	92.8	94.1	2.9	3.0	3.1	2.9	3.1	3.2	3.3	3.1
Chicago .....	4,211.7	4,334.9	4,228.9	4,369.7	187.5	193.3	179.1	184.7	4.5	4.5	4.2	4.2
Davenport-Moline-Rock Island .....	188.0	189.8	188.4	192.7	6.3	8.3	5.5	9.8	3.4	4.4	2.9	5.1
Decatur .....	59.2	59.1	59.4	59.4	3.8	3.5	3.5	3.3	6.4	6.0	5.8	5.5
Kankakee .....	53.5	54.1	53.2	54.3	3.3	3.2	3.0	2.9	6.2	6.0	5.7	5.4
Peoria-Pekin .....	188.3	190.4	189.2	193.6	6.8	8.3	6.5	10.4	3.6	4.3	3.4	5.4
Rockford .....	200.0	201.1	203.2	203.6	8.6	9.8	11.7	12.4	4.3	4.9	5.7	6.1
Springfield .....	109.3	109.4	108.5	109.8	4.5	4.4	4.1	4.1	4.1	4.0	3.7	3.7
Indiana .....	3,117.1	3,148.0	3,127.0	3,130.4	86.3	92.5	99.8	78.3	2.8	2.9	3.2	2.5
Bloomington .....	58.5	57.8	57.1	56.6	1.7	1.4	1.6	1.1	3.0	2.5	2.8	1.9
Elkhart-Goshen .....	96.7	98.8	96.6	97.9	2.1	2.0	2.0	1.9	2.2	2.1	2.0	2.0
Evansville-Henderson .....	157.9	159.6	158.6	160.9	6.1	5.3	5.5	4.1	3.9	3.3	3.5	2.6
Fort Wayne .....	268.7	269.5	268.5	268.9	6.3	7.5	9.4	7.3	2.3	2.8	3.5	2.7
Gary .....	309.6	308.7	309.4	305.5	10.3	11.9	9.6	8.8	3.3	3.9	3.1	2.9
Indianapolis .....	842.1	851.8	849.6	850.6	18.9	20.1	24.4	16.8	2.3	2.4	2.9	2.0
Kokomo .....	51.2	51.6	51.7	51.1	1.4	1.3	3.8	1.0	2.8	2.5	7.4	1.9
Lafayette .....	85.8	89.0	87.5	88.1	1.9	2.2	1.6	1.5	2.3	2.5	1.9	1.7
Muncie .....	59.4	61.3	58.2	60.0	2.4	1.9	2.9	1.6	4.1	3.2	5.0	2.7
South Bend .....	137.7	138.2	138.0	137.6	3.3	3.8	3.8	3.9	2.4	2.8	2.8	2.9
Terre Haute .....	69.1	68.8	68.7	68.6	3.2	2.9	2.7	2.2	4.6	4.2	3.9	3.2
Iowa .....	1,587.5	1,614.3	1,579.7	1,610.8	43.2	41.8	37.2	37.6	2.7	2.6	2.4	2.3
Cedar Rapids .....	111.0	112.5	111.0	114.0	2.1	2.2	1.8	1.8	1.9	2.0	1.6	1.6
Des Moines .....	258.4	265.5	258.7	267.3	5.3	5.2	4.3	4.2	2.1	2.0	1.6	1.6
Dubuque .....	48.7	48.5	48.6	48.8	1.5	1.3	1.2	1.1	3.1	2.7	2.5	2.3
Iowa City .....	66.6	65.9	63.6	64.9	1.7	1.6	1.7	1.6	2.5	2.4	2.6	2.4
Sioux City .....	65.8	67.0	65.8	66.8	2.1	1.7	1.8	1.5	3.2	2.5	2.7	2.3
Waterloo-Cedar Falls .....	68.6	68.5	68.7	70.1	2.4	2.6	2.0	3.6	3.5	3.8	2.9	5.2

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1998	1999	1998	1999 <sup>P</sup>	1998	1999	1998	1999 <sup>P</sup>	1998	1999	1998	1999 <sup>P</sup>
<b>Kansas</b> .....	1,433.4	1,473.2	1,436.9	1,473.0	58.8	50.7	54.9	46.8	4.1	3.4	3.8	3.2
Lawrence .....	53.4	53.8	53.7	53.7	3.0	2.2	2.6	2.1	5.5	4.2	4.9	3.9
Topeka .....	91.3	93.7	92.7	94.5	3.9	2.9	3.6	2.8	4.2	3.1	3.9	2.9
Wichita .....	290.5	299.3	292.7	301.2	9.8	11.3	8.9	11.1	3.4	3.8	3.0	3.7
<b>Kentucky</b> .....	1,962.4	1,997.6	1,958.1	1,994.6	96.9	92.6	87.4	80.7	4.9	4.6	4.5	4.0
Lexington .....	255.7	262.8	254.9	262.4	6.1	5.6	5.3	5.7	2.4	2.1	2.1	2.2
Louisville .....	558.0	577.8	559.6	579.1	19.9	22.9	17.3	18.1	3.6	4.0	3.1	3.1
Owensboro .....	49.9	51.6	50.2	51.8	2.5	2.9	2.2	2.4	5.0	5.6	4.4	4.6
<b>Louisiana</b> .....	2,124.5	2,090.7	2,123.2	2,099.4	147.1	110.9	141.5	111.5	6.9	5.3	6.7	5.3
Alexandria .....	61.6	61.1	61.8	61.5	4.3	2.9	4.2	3.1	6.9	4.8	6.8	5.1
Baton Rouge .....	304.6	310.9	304.3	311.9	17.3	13.2	16.3	13.6	5.7	4.2	5.3	4.4
Houma .....	98.1	96.9	98.7	97.6	3.8	4.2	3.5	4.2	3.8	4.4	3.5	4.3
Lafayette .....	186.1	183.5	186.4	184.5	12.0	10.7	10.8	10.4	6.4	5.9	5.8	5.6
Lake Charles .....	94.1	91.8	94.8	92.6	5.7	5.0	5.6	5.1	6.1	5.5	5.9	5.5
Monroe .....	73.1	71.2	73.3	72.0	5.0	3.0	5.3	2.9	6.8	4.2	7.2	4.1
New Orleans .....	638.2	623.5	636.4	629.0	38.0	28.6	35.6	29.7	6.0	4.6	5.6	4.7
Shreveport-Bossier City .....	198.6	189.9	197.8	190.7	19.6	9.5	19.3	9.1	9.9	5.0	9.8	4.8
<b>Maine</b> .....	660.3	682.8	668.1	690.3	27.5	28.3	23.1	22.9	4.2	4.1	3.5	3.3
Bangor .....	48.5	50.6	48.9	51.2	1.4	1.3	1.2	1.1	3.0	2.6	2.4	2.1
Lewiston-Auburn .....	51.2	52.9	51.1	52.6	2.3	2.2	2.2	1.8	4.5	4.2	4.3	3.4
Portland .....	132.4	138.2	135.4	142.9	3.2	3.1	2.3	2.6	2.4	2.2	1.7	1.8
<b>Maryland</b> .....	2,782.5	2,848.3	2,818.6	2,885.2	139.6	114.1	133.0	111.5	5.0	4.0	4.7	3.9
Baltimore .....	1,308.4	1,336.6	1,325.9	1,349.1	75.3	62.0	75.9	60.9	5.8	4.6	5.7	4.5
Cumberland .....	46.1	47.0	45.6	46.6	3.5	3.2	3.8	3.0	7.7	6.9	8.2	6.5
Hagerstown .....	71.0	71.9	70.5	72.5	3.0	2.3	2.6	2.3	4.2	3.3	3.6	3.2
<b>Massachusetts</b> .....	3,321.7	3,324.0	3,324.5	3,334.6	115.6	104.6	106.6	105.7	3.5	3.1	3.2	3.2
Barnstable-Yarmouth .....	79.1	80.8	83.6	86.5	2.6	2.1	2.2	2.0	3.3	2.6	2.7	2.3
Boston .....	1,834.8	1,837.5	1,842.4	1,846.5	54.7	49.9	50.3	50.4	3.0	2.7	2.7	2.7
Brockton .....	133.0	133.9	132.1	133.9	5.4	4.9	5.1	5.1	4.1	3.6	3.9	3.8
Fitchburg-Leominster .....	70.3	70.2	68.9	69.4	2.8	2.7	2.9	3.0	4.0	3.9	4.2	4.3
Lawrence .....	201.0	202.5	199.5	200.9	9.8	9.2	8.7	8.7	4.9	4.5	4.4	4.3
Lowell .....	166.9	169.7	165.5	169.1	5.9	5.8	5.7	5.8	3.5	3.4	3.4	3.5
New Bedford .....	82.6	83.5	83.0	84.0	5.0	4.6	5.1	4.8	6.0	5.5	6.1	5.7
Pittsfield .....	41.0	41.3	41.0	41.5	1.8	1.7	1.6	1.6	4.4	4.0	3.8	3.7
Springfield .....	285.5	283.2	281.8	280.1	11.8	10.1	10.5	10.0	4.1	3.5	3.7	3.6
Worcester .....	257.2	253.9	255.8	253.2	9.0	8.2	8.4	8.3	3.5	3.2	3.3	3.3
<b>Michigan</b> .....	5,102.2	5,154.6	5,087.6	5,161.0	203.9	205.4	255.9	215.7	4.0	4.0	5.0	4.2
Ann Arbor .....	296.0	299.9	296.6	300.4	6.3	6.7	9.8	8.2	2.1	2.2	3.3	2.7
Benton Harbor .....	83.6	83.9	83.3	84.5	4.2	3.7	3.7	3.5	5.1	4.4	4.4	4.2
Detroit .....	2,289.0	2,304.9	2,270.2	2,305.8	87.9	86.3	108.5	104.2	3.8	3.7	4.8	4.5
Flint .....	206.9	201.3	206.9	199.1	15.4	12.1	26.9	13.4	7.4	6.0	13.0	6.7
Grand Rapids-Muskegon-Holland .....	603.5	621.0	601.3	621.3	19.5	22.7	22.1	20.9	3.2	3.7	3.7	3.4
Jackson .....	77.8	78.5	77.7	78.0	3.0	2.9	3.0	2.7	3.8	3.7	3.8	3.5
Kalamazoo-Battle Creek .....	233.2	232.7	233.0	234.7	8.4	8.9	8.8	8.8	3.6	3.8	3.8	3.8
Lansing-East Lansing .....	240.5	240.1	239.8	240.5	6.7	6.8	15.3	6.1	2.8	2.9	6.4	2.5
Saginaw-Bay City-Midland .....	202.3	203.9	200.4	203.1	8.2	9.1	12.9	7.7	4.0	4.5	6.4	3.8
<b>Minnesota</b> .....	2,719.8	2,762.6	2,715.7	2,772.8	77.8	81.6	58.2	73.4	2.9	3.0	2.1	2.6
Duluth-Superior .....	128.5	128.1	128.8	128.7	6.0	5.5	4.5	4.5	4.6	4.3	3.5	3.5
Minneapolis-St. Paul .....	1,692.5	1,719.2	1,698.9	1,737.2	39.4	42.5	29.6	39.0	2.3	2.5	1.7	2.2
Rochester .....	71.0	72.8	71.6	74.0	1.4	1.6	1.0	1.4	2.0	2.2	1.4	1.9
St. Cloud .....	94.1	94.2	93.3	95.0	3.0	3.0	2.3	2.5	3.2	3.2	2.4	2.6
<b>Mississippi</b> .....	1,277.5	1,288.3	1,280.9	1,292.9	80.1	70.8	71.5	63.9	6.3	5.5	5.6	4.9
Biloxi-Gulfport-Pascagoula .....	167.3	173.5	167.4	174.1	8.0	6.5	6.8	5.7	4.8	3.7	4.0	3.3
Hattiesburg .....	51.0	50.3	51.3	49.4	2.0	1.8	1.9	1.5	3.8	3.6	3.8	3.1
Jackson .....	227.6	230.4	228.2	232.6	9.3	8.6	8.2	7.8	4.1	3.7	3.6	3.4
<b>Missouri</b> .....	2,893.0	2,955.6	2,894.9	2,963.5	129.0	114.0	131.9	115.0	4.5	3.9	4.6	3.9
Columbia .....	82.9	82.1	84.0	83.3	1.5	1.3	1.3	1.4	1.8	1.6	1.6	1.7
Joplin .....	84.2	83.8	83.3	83.7	3.7	3.0	3.3	3.5	4.3	3.6	3.9	4.1
Kansas City .....	978.6	1,016.1	986.7	1,025.1	41.8	34.6	44.4	33.4	4.3	3.4	4.5	3.3
St. Joseph .....	49.3	49.4	50.1	50.4	2.2	2.1	1.9	2.0	4.5	4.3	3.9	3.9
St. Louis LMA .....	1,332.0	1,374.7	1,337.0	1,385.6	63.7	58.6	68.3	58.1	4.8	4.3	5.1	4.2
Springfield .....	164.4	172.0	162.6	171.2	5.5	4.8	4.6	4.5	3.4	2.8	2.8	2.7
<b>Montana</b> .....	474.0	478.7	480.8	487.6	26.1	22.8	24.1	20.7	5.5	4.8	5.0	4.2
Billings .....	71.6	74.2	71.7	76.1	3.5	3.1	3.2	2.8	4.8	4.2	4.4	3.7
Great Falls .....	38.5	38.8	39.9	39.1	2.2	2.0	2.0	1.8	5.6	5.1	5.1	4.6
Missoula .....	52.2	52.4	53.2	54.2	2.0	1.6	2.0	1.6	3.8	3.0	3.8	2.9

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							
	June		July		Number				Percent of labor force			
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
<b>Nebraska</b> .....	926.5	943.8	938.7	952.2	28.1	26.6	30.0	26.2	3.0	2.8	3.2	2.7
Lincoln .....	141.9	148.6	143.6	150.1	3.8	3.5	3.7	3.5	2.6	2.4	2.6	2.3
Omaha .....	388.4	398.1	391.4	401.5	11.1	10.5	10.8	10.0	2.9	2.6	2.8	2.5
<b>Nevada</b> .....	928.5	964.6	936.0	969.1	48.5	45.4	45.3	41.5	5.2	4.7	4.8	4.3
Las Vegas .....	702.5	740.5	707.9	745.7	35.6	35.8	34.7	33.8	5.1	4.8	4.9	4.5
Reno .....	176.7	180.3	179.0	179.9	7.8	6.5	6.7	5.5	4.4	3.6	3.8	3.0
<b>New Hampshire</b> .....	656.5	680.4	662.1	686.4	18.9	17.6	15.8	15.0	2.9	2.6	2.4	2.2
Manchester .....	102.8	106.9	103.5	106.9	2.7	2.6	2.2	2.0	2.6	2.4	2.2	1.9
Nashua .....	103.0	106.3	102.7	106.7	2.8	3.1	2.3	2.6	2.7	2.9	2.2	2.4
Portsmouth-Rochester .....	124.1	127.7	126.8	130.3	3.0	2.6	3.1	2.8	2.4	2.1	2.4	2.1
<b>New Jersey</b> .....	4,199.2	4,298.1	4,210.4	4,321.3	197.0	211.3	213.4	229.6	4.7	4.9	5.1	5.3
Atlantic-Cape May .....	181.0	183.6	186.3	188.8	13.9	13.5	13.8	13.4	7.7	7.3	7.4	7.1
Bergen-Passaic .....	678.7	696.2	674.5	696.5	30.4	34.3	33.0	37.5	4.5	4.9	4.9	5.4
Jersey City .....	283.3	290.9	283.6	290.2	22.4	23.9	22.6	24.5	7.9	8.2	8.0	8.4
Middlesex-Somerset-Hunterdon .....	635.7	653.5	635.8	655.7	21.1	22.5	24.4	25.8	3.3	3.4	3.8	3.9
Monmouth-Ocean .....	528.5	545.4	537.3	554.9	22.0	23.2	24.7	25.7	4.2	4.3	4.6	4.6
Newark .....	1,019.1	1,042.2	1,018.8	1,045.5	46.3	51.3	51.1	55.1	4.5	4.9	5.0	5.3
Trenton .....	168.0	170.2	166.8	170.7	7.1	7.2	7.9	7.9	4.2	4.2	4.7	4.6
Vineland-Millville-Bridgeton .....	66.0	66.1	65.2	65.5	6.0	6.0	6.2	6.1	9.1	9.0	9.5	9.4
<b>New Mexico</b> .....	841.2	849.1	839.1	840.4	62.0	62.1	54.9	53.7	7.4	7.3	6.5	6.4
Albuquerque .....	364.3	368.4	363.3	365.7	20.4	19.3	18.6	17.0	5.6	5.2	5.1	4.6
Las Cruces .....	68.2	69.2	66.7	66.8	6.8	7.0	5.7	5.7	9.9	10.1	8.5	8.6
Santa Fe .....	75.5	76.1	76.7	76.2	3.0	2.6	2.6	2.4	3.9	3.4	3.4	3.1
<b>New York</b> .....	8,939.6	8,961.0	9,033.6	9,092.0	470.4	448.6	504.8	482.6	5.3	5.0	5.6	5.3
Albany-Schenectady-Troy .....	457.3	456.3	458.7	458.0	15.1	14.4	14.3	14.9	3.3	3.2	3.1	3.3
Binghamton .....	124.7	125.5	125.2	125.5	4.4	4.9	4.2	4.6	3.5	3.9	3.3	3.6
Buffalo-Niagara Falls .....	580.7	579.7	587.5	585.0	29.4	30.9	41.5	32.5	5.1	5.3	7.1	5.6
Dutchess County .....	118.7	122.2	119.6	122.6	3.8	3.9	3.6	3.9	3.2	3.2	3.0	3.1
Elmira .....	45.5	45.6	45.4	45.3	1.9	2.1	1.7	2.1	4.2	4.7	3.8	4.6
Glens Falls .....	63.7	63.6	65.4	64.9	2.8	2.4	2.4	2.2	4.3	3.8	3.6	3.4
Jamestown .....	68.6	68.5	69.2	69.1	3.3	3.2	3.2	3.3	4.9	4.7	4.6	4.7
Nassau-Suffolk .....	1,423.1	1,451.2	1,428.2	1,460.1	45.4	49.0	46.3	54.9	3.2	3.4	3.2	3.8
New York .....	4,097.4	4,073.8	4,152.1	4,167.1	280.6	247.7	303.6	277.6	6.8	6.1	7.3	6.7
New York City .....	3,439.4	3,404.0	3,487.3	3,489.0	258.6	224.2	281.8	253.0	7.5	6.6	8.1	7.3
Newburgh .....	176.1	181.1	178.3	182.4	6.4	6.6	6.1	6.8	3.7	3.7	3.4	3.7
Rochester .....	583.7	583.9	585.5	586.0	21.5	23.8	25.4	23.1	3.7	4.1	4.3	3.9
Syracuse .....	365.9	368.2	368.3	370.3	13.7	14.6	13.3	14.5	3.7	4.0	3.6	3.9
Utica-Rome .....	144.3	144.9	147.0	148.0	6.2	5.8	5.4	5.5	4.3	4.0	3.7	3.7
<b>North Carolina</b> .....	3,816.9	3,876.1	3,863.6	3,924.1	140.5	114.7	138.8	124.4	3.7	3.0	3.6	3.2
Asheville .....	109.9	110.8	110.6	112.7	3.1	2.3	3.1	2.5	2.8	2.0	2.8	2.2
Charlotte-Gastonia-Rock Hill .....	752.5	766.8	765.1	781.6	22.9	19.2	22.7	21.6	3.0	2.5	3.0	2.8
Fayetteville .....	113.2	115.9	112.3	114.7	5.4	4.2	5.1	4.5	4.8	3.6	4.5	3.9
Goldensboro .....	48.2	48.4	48.0	48.9	2.2	1.8	2.3	1.9	4.6	3.7	4.7	3.9
Greensboro-Winston-Salem-High Point .....	634.7	645.2	643.7	650.9	17.9	14.6	17.7	16.2	2.8	2.3	2.8	2.5
Greenville .....	62.2	64.3	62.7	63.4	3.5	2.9	3.5	2.9	5.6	4.5	5.6	4.6
Hickory-Morganton-Lenoir .....	168.2	172.4	170.2	175.2	4.8	3.3	4.4	3.7	2.8	1.9	2.6	2.1
Jacksonville .....	45.1	46.3	45.8	46.9	1.6	1.6	1.6	1.6	3.6	3.4	3.5	3.4
Raleigh-Durham-Chapel Hill .....	619.4	643.3	631.5	653.8	12.0	9.5	12.0	10.4	1.9	1.5	1.9	1.6
Rocky Mount .....	67.3	66.3	67.8	67.5	5.5	4.2	5.2	3.9	8.1	6.3	7.6	5.8
Wilmington .....	107.9	109.9	108.4	110.5	4.5	3.4	4.4	3.5	4.1	3.1	4.1	3.1
<b>North Dakota</b> .....	362.0	355.4	358.8	352.9	14.6	10.6	11.3	9.6	4.0	3.0	3.2	2.7
Bismarck .....	56.5	56.3	55.7	55.4	2.0	1.4	1.5	1.1	3.5	2.6	2.7	2.0
Fargo-Moorhead .....	105.0	103.9	104.9	103.9	2.1	1.9	1.6	2.0	2.0	1.8	1.5	1.9
Grand Forks .....	54.3	53.7	54.3	53.5	2.0	1.4	1.7	1.5	3.7	2.7	3.1	2.7
<b>Ohio</b> .....	5,717.3	5,902.1	5,770.3	5,951.3	250.9	265.0	275.1	268.1	4.4	4.5	4.8	4.5
Akron .....	354.9	369.2	360.5	375.0	14.3	15.5	13.5	15.8	4.0	4.2	3.7	4.2
Canton-Massillon .....	200.9	211.3	203.0	213.3	8.7	10.4	7.2	9.3	4.3	4.9	3.6	4.4
Cincinnati .....	846.8	885.3	850.9	892.6	32.1	32.4	26.1	29.0	3.8	3.7	3.1	3.3
Cleveland-Lorain-Elyria .....	1,114.2	1,149.1	1,121.4	1,155.5	48.0	53.2	49.4	49.5	4.3	4.6	4.4	4.3
Columbus .....	816.1	846.3	824.9	854.3	24.0	24.5	19.8	21.8	2.9	2.9	2.4	2.6
Dayton-Springfield .....	473.6	485.8	476.8	487.3	21.4	20.6	29.5	21.3	4.5	4.2	6.2	4.4
Hamilton-Middletown .....	177.3	181.9	177.7	183.4	6.2	6.7	5.5	6.0	3.5	3.7	3.1	3.3
Lima .....	74.0	76.8	74.4	77.9	3.3	3.7	3.4	3.8	4.4	4.8	4.6	4.9
Mansfield .....	83.5	85.9	86.2	85.8	5.0	5.6	7.7	4.9	5.9	6.5	8.9	5.7
Steubenville-Weirton .....	58.1	59.2	57.4	58.7	3.4	3.9	3.1	3.2	5.9	6.5	5.3	5.5
Toledo .....	314.7	325.6	319.9	333.7	16.4	16.8	24.0	26.1	5.2	5.2	7.5	7.8
Youngstown-Warren .....	285.9	292.8	291.7	295.9	16.2	15.9	30.0	18.2	5.7	5.4	10.3	6.2

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
<b>Oklahoma</b> .....	1,637.1	1,673.9	1,654.4	1,682.8	77.7	61.2	81.0	56.5	4.7	3.7	4.9	3.4
Enid .....	28.5	28.3	28.9	28.7	1.2	0.9	1.1	0.8	4.4	3.1	3.9	2.9
Lawton .....	41.5	42.0	42.1	42.2	2.1	1.6	2.0	1.4	5.1	3.8	4.6	3.3
Oklahoma City .....	533.6	544.6	549.4	548.2	20.9	15.4	28.4	14.4	3.9	2.8	5.2	2.6
Tulsa .....	416.8	433.2	426.0	438.1	15.6	14.1	13.8	14.1	3.7	3.3	3.2	3.2
<b>Oregon</b> .....	1,775.7	1,775.7	1,780.7	1,782.9	101.8	98.3	94.2	93.0	5.7	5.5	5.3	5.2
Eugene-Springfield .....	162.4	163.7	159.7	161.2	8.8	9.0	8.3	8.5	5.4	5.5	5.2	5.3
Medford-Ashland .....	88.0	88.9	86.9	88.2	6.4	6.1	5.8	5.7	7.2	6.8	6.7	6.4
Portland-Vancouver .....	1,047.7	1,056.6	1,057.9	1,067.3	46.6	47.9	46.0	46.6	4.5	4.5	4.3	4.4
Salem .....	174.2	173.9	172.7	175.0	9.9	10.5	8.8	9.9	5.7	6.0	5.1	5.6
<b>Pennsylvania</b> .....	5,989.5	6,049.9	6,044.6	6,091.5	275.0	259.5	290.3	271.7	4.6	4.3	4.8	4.5
Allentown-Bethlehem-Easton .....	314.0	319.3	314.4	320.0	14.1	13.0	15.2	13.4	4.5	4.1	4.8	4.2
Altoona .....	63.4	64.4	63.7	64.5	3.3	2.8	3.3	2.7	5.2	4.3	5.2	4.2
Erie .....	139.5	142.1	142.2	143.6	7.2	7.1	7.7	7.1	5.1	5.0	5.4	4.9
Harrisburg-Lebanon-Carlisle .....	353.9	357.2	357.7	360.8	11.0	12.0	10.8	12.4	3.1	3.4	3.0	3.5
Johnstown .....	104.0	103.0	104.9	104.2	7.0	5.3	6.9	6.0	6.7	5.2	6.6	5.7
Lancaster .....	245.2	246.1	248.2	249.2	7.6	6.7	7.4	6.9	3.1	2.7	3.0	2.8
Philadelphia .....	2,504.2	2,538.8	2,530.9	2,555.3	110.3	108.1	119.0	117.2	4.4	4.3	4.7	4.6
Pittsburgh .....	1,166.3	1,182.1	1,173.6	1,186.8	52.1	48.9	53.2	51.1	4.5	4.1	4.5	4.3
Reading .....	185.3	186.7	184.2	186.4	8.2	8.2	9.4	7.9	4.4	4.4	5.1	4.3
Scranton—Wilkes-Barre—Hazleton .....	310.1	311.0	313.4	313.8	18.5	16.1	19.6	17.3	6.0	5.2	6.2	5.5
Sharon .....	57.2	57.5	58.2	57.6	2.5	3.3	2.9	3.4	4.4	5.8	4.9	5.9
State College .....	63.7	65.2	65.1	67.0	1.7	1.5	1.8	1.7	2.6	2.3	2.8	2.6
Williamsport .....	57.2	57.6	57.1	58.0	3.2	2.9	3.0	2.9	5.6	5.1	5.3	4.9
York .....	193.1	194.3	193.2	196.8	7.8	7.0	7.6	7.4	4.0	3.6	3.9	3.7
<b>Rhode Island</b> .....	496.2	504.4	499.8	513.0	21.7	17.4	22.2	19.1	4.4	3.5	4.4	3.7
Providence-Fall River-Warwick .....	569.4	576.7	572.0	584.3	25.6	21.0	25.8	23.1	4.5	3.6	4.5	3.9
<b>South Carolina</b> .....	2,001.0	2,038.5	2,015.1	2,027.3	82.8	86.7	94.9	84.5	4.1	4.3	4.7	4.2
Charleston-North Charleston .....	272.0	282.8	274.7	280.0	9.4	9.9	11.0	9.7	3.5	3.5	4.0	3.4
Columbia .....	283.3	293.7	285.4	294.4	6.8	7.2	7.2	6.6	2.4	2.4	2.5	2.3
Florence .....	65.4	65.3	65.0	63.6	3.5	4.1	3.6	3.2	5.4	6.3	5.5	5.0
Greenville-Spartanburg-Anderson .....	504.5	515.5	506.4	517.0	15.6	16.3	18.0	17.5	3.1	3.2	3.6	3.4
Myrtle Beach .....	109.2	110.3	110.7	109.2	3.1	2.7	3.1	2.4	2.8	2.5	2.8	2.2
Sumter .....	48.4	48.5	47.6	47.5	2.6	2.5	2.7	2.9	5.3	5.2	5.7	6.0
<b>South Dakota</b> .....	409.7	410.0	411.6	413.4	12.1	10.1	10.8	9.6	3.0	2.5	2.6	2.3
Rapid City .....	48.8	48.5	49.3	49.2	1.2	1.0	1.0	0.9	2.4	2.1	2.0	1.9
Sioux Falls .....	101.4	104.5	101.9	106.2	1.7	1.5	1.4	1.4	1.7	1.4	1.4	1.3
<b>Tennessee</b> .....	2,787.0	2,830.8	2,799.3	2,843.4	124.5	101.0	122.4	104.8	4.5	3.6	4.4	3.7
Chattanooga .....	222.2	219.2	222.6	220.2	10.3	7.8	8.9	7.1	4.6	3.6	4.0	3.2
Clarksville-Hopkinsville .....	82.1	85.1	84.1	85.6	3.5	2.7	3.5	2.5	4.3	3.2	4.1	2.9
Jackson .....	56.2	57.4	57.3	57.9	2.4	1.8	2.1	1.6	4.2	3.1	3.6	2.8
Johnson City-Kingsport-Bristol .....	226.3	226.8	225.1	226.2	10.7	10.1	10.3	9.3	4.7	4.4	4.6	4.1
Knoxville .....	350.5	351.9	353.7	354.6	11.3	9.3	12.1	9.8	3.2	2.7	3.4	2.8
Memphis .....	556.7	576.2	561.4	579.2	23.3	19.6	21.4	18.4	4.2	3.4	3.8	3.2
Nashville .....	647.6	662.2	652.3	669.0	19.9	16.0	17.9	15.9	3.1	2.4	2.7	2.4
<b>Texas</b> .....	10,263.3	10,477.3	10,300.6	10,460.7	582.2	568.2	541.4	508.5	5.7	5.4	5.3	4.9
Abilene .....	61.8	63.1	62.7	63.4	2.6	2.6	2.4	2.3	4.3	4.1	3.9	3.7
Amarillo .....	114.3	116.8	115.2	116.7	5.0	5.4	4.8	4.9	4.4	4.6	4.2	4.2
Austin-San Marcos .....	683.2	707.9	688.4	712.8	21.3	18.6	19.7	16.7	3.1	2.6	2.9	2.3
Beaumont-Port Arthur .....	187.3	194.7	187.0	192.9	15.7	20.0	14.3	17.4	8.4	10.3	7.7	9.0
Brazoria .....	108.2	108.8	108.1	108.1	8.0	8.9	7.3	8.1	7.4	8.2	6.8	7.5
Brownsville-Harlingen-San Benito .....	132.3	127.7	131.2	126.5	19.1	13.7	18.0	12.4	14.4	10.7	13.7	9.8
Bryan-College Station .....	70.3	72.7	72.1	74.0	1.6	1.7	1.4	1.5	2.2	2.3	2.0	2.1
Corpus Christi .....	181.1	182.4	181.8	182.1	15.0	13.8	13.6	13.2	8.3	7.5	7.5	7.3
Dallas .....	1,896.1	1,948.1	1,909.3	1,959.6	74.4	69.5	67.6	63.9	3.9	3.6	3.5	3.3
El Paso .....	293.6	297.5	293.5	294.4	33.2	32.4	33.1	28.0	11.3	10.9	11.3	9.5
Fort Worth-Arlington .....	893.8	922.2	901.3	923.9	34.8	33.1	36.6	30.1	3.9	3.6	4.1	3.3
Galveston-Texas City .....	128.8	128.4	127.0	126.6	10.3	10.2	9.0	9.0	8.0	8.0	7.1	7.1
Houston .....	2,164.0	2,213.0	2,181.4	2,212.1	107.0	119.8	97.6	108.5	4.9	5.4	4.5	4.9
Killeen-Temple .....	116.7	116.9	116.5	116.7	6.0	4.7	5.3	4.1	5.2	4.1	4.6	3.5
Laredo .....	74.1	76.7	73.8	75.5	7.8	7.9	7.0	6.6	10.6	10.3	9.5	8.8
Longview-Marshall .....	107.3	108.7	106.8	108.2	8.4	8.7	8.0	8.2	7.9	8.0	7.5	7.6
Lubbock .....	124.3	125.1	125.3	125.2	6.2	5.2	5.5	4.7	5.0	4.1	4.4	3.7
McAllen-Edinburg-Mission .....	198.7	194.8	191.9	188.8	36.5	29.7	32.7	26.3	18.4	15.2	17.0	14.0
Odessa-Midland .....	130.5	131.2	129.9	129.5	8.0	13.6	7.6	11.7	6.1	10.4	5.8	9.0
San Angelo .....	52.1	53.7	53.8	53.8	2.1	2.7	2.8	2.3	4.0	5.0	5.2	4.3
San Antonio .....	769.9	787.8	773.8	785.0	35.6	28.3	32.4	25.9	4.6	3.6	4.2	3.3
Sherman-Denison .....	50.4	51.4	51.3	51.3	2.6	2.6	3.2	2.3	5.2	5.0	6.2	4.6
Texarkana .....	57.4	57.9	57.0	57.2	4.9	3.4	4.3	2.9	8.5	5.8	7.6	5.1
Tyler .....	91.2	93.0	91.0	93.2	5.3	4.3	5.1	3.9	5.8	4.7	5.6	4.2

See footnotes at end of table.



STATE AND AREA LABOR FORCE DATA  
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	June		July		June		July		June		July	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
<b>Texas—Continued</b>												
Victoria .....	44.0	44.0	44.1	44.2	2.6	2.2	2.3	2.1	5.9	5.1	5.2	4.7
Waco .....	102.1	103.3	102.1	103.6	5.7	4.2	5.1	3.9	5.6	4.0	4.9	3.8
Wichita Falls .....	66.7	67.0	66.1	67.0	3.7	3.4	3.5	3.2	5.6	5.1	5.3	4.7
<b>Utah</b> .....	1,070.7	1,120.7	1,076.1	1,117.4	48.4	43.3	44.1	38.6	4.5	3.9	4.1	3.5
Provo-Orem .....	157.6	166.0	158.1	165.8	6.1	5.6	5.2	4.8	3.9	3.4	3.3	2.9
Salt Lake City-Ogden .....	686.6	718.5	692.6	718.8	29.6	26.3	27.4	23.9	4.3	3.7	4.0	3.3
<b>Vermont</b> .....	329.1	339.2	332.4	342.1	10.0	9.1	10.0	9.5	3.0	2.7	3.0	2.8
Burlington .....	98.7	101.1	99.4	103.5	2.1	1.8	2.2	2.0	2.1	1.8	2.2	2.0
<b>Virginia</b> .....	3,530.1	3,646.8	3,550.3	3,660.0	117.5	118.3	102.4	101.4	3.3	3.2	2.9	2.8
Charlottesville .....	76.9	78.0	76.4	76.9	1.3	1.2	1.0	1.1	1.6	1.5	1.3	1.4
Danville .....	57.9	58.2	56.0	56.5	4.1	4.9	3.5	3.9	7.0	8.4	6.3	7.0
Lynchburg .....	102.4	104.8	103.1	104.8	3.1	2.6	3.1	2.3	3.0	2.5	3.0	2.2
Norfolk-Virginia Beach-Newport News .....	746.4	767.0	748.0	769.6	30.6	29.7	25.4	27.3	4.1	3.9	3.4	3.5
Richmond-Petersburg .....	510.7	527.6	511.0	531.1	15.8	14.9	13.4	12.6	3.1	2.8	2.6	2.4
Roanoke .....	130.7	135.0	130.6	135.1	3.3	2.9	3.0	2.6	2.5	2.1	2.3	1.9
<b>Washington</b> .....	3,048.5	3,114.1	3,087.2	3,166.6	139.6	144.2	143.1	144.6	4.6	4.6	4.6	4.6
Bellingham .....	78.8	81.9	82.3	83.1	4.4	3.8	4.6	4.2	5.5	4.7	5.6	5.1
Bremerton .....	91.1	93.5	92.1	95.3	4.8	4.8	4.8	4.8	5.2	5.1	5.2	5.1
Olympia .....	99.1	102.4	99.4	103.4	4.8	4.6	5.1	4.7	4.9	4.5	5.2	4.6
Richland-Kennewick-Pasco .....	101.6	104.8	97.5	99.6	6.9	6.9	6.7	6.1	6.8	6.6	6.9	6.1
Seattle-Bellevue-Everett .....	1,370.3	1,397.8	1,386.8	1,426.1	42.2	47.5	43.8	49.3	3.1	3.4	3.2	3.5
Spokane .....	207.0	211.0	207.4	211.9	9.0	10.9	9.2	11.2	4.4	5.2	4.4	5.3
Tacoma .....	330.2	336.2	334.7	343.2	15.3	15.3	15.5	15.8	4.6	4.6	4.6	4.6
Yakima .....	124.5	127.4	123.3	124.0	10.9	11.1	11.0	10.1	8.8	8.8	8.9	8.1
<b>West Virginia</b> .....	812.0	825.2	816.0	828.5	53.9	51.2	53.5	48.9	6.6	6.2	6.6	5.9
Charleston .....	132.6	136.2	134.3	137.9	6.2	6.0	6.0	5.7	4.7	4.4	4.5	4.1
Huntington-Ashland .....	137.6	142.1	135.5	141.5	9.5	9.7	7.7	8.6	6.9	6.8	5.7	6.1
Parkersburg-Marietta .....	77.1	80.0	77.5	80.4	4.7	4.8	4.3	4.3	6.2	5.9	5.6	5.4
Wheeling .....	73.8	75.7	74.9	76.5	4.1	4.0	3.4	3.4	5.5	5.3	4.5	4.4
<b>Wisconsin</b> .....	3,015.5	3,022.4	3,026.0	3,029.4	106.4	93.3	108.9	88.9	3.5	3.1	3.6	2.9
Appleton-Oshkosh-Neenah .....	227.8	228.2	228.7	228.8	6.9	5.9	5.7	5.0	3.0	2.6	2.5	2.2
Eau Claire .....	83.5	84.1	84.1	84.3	2.8	2.6	2.3	2.2	3.4	3.1	2.8	2.6
Green Bay .....	134.1	134.4	134.4	134.4	4.1	3.4	3.6	3.0	3.1	2.5	2.7	2.3
Janesville-Beloit .....	81.3	80.5	85.0	80.0	3.5	2.9	11.6	4.8	4.3	3.6	13.6	6.1
Kenosha .....	82.2	81.8	81.9	80.4	3.2	2.8	4.5	3.5	3.8	3.4	5.4	4.3
La Crosse .....	72.0	72.7	71.7	73.0	2.1	2.2	1.8	1.9	3.0	3.0	2.5	2.6
Madison .....	264.7	267.8	265.5	268.6	4.3	3.8	4.2	3.5	1.6	1.4	1.6	1.3
Milwaukee-Waukesha .....	823.8	819.5	823.3	818.0	30.4	27.3	30.7	26.9	3.7	3.3	3.7	3.3
Racine .....	96.1	95.4	95.9	95.7	4.0	4.3	4.9	4.7	4.1	4.5	5.1	4.9
Sheboygan .....	63.5	62.9	63.1	63.1	1.6	1.4	2.0	1.6	2.5	2.2	3.2	2.5
Wausau .....	74.9	75.8	75.2	75.9	2.7	2.2	2.3	2.0	3.7	2.9	3.1	2.6
<b>Wyoming</b> .....	264.2	267.9	265.1	267.8	12.1	12.2	11.3	10.9	4.6	4.5	4.3	4.1
Casper .....	33.5	34.4	33.3	34.4	1.7	1.9	1.7	1.6	5.2	5.5	5.1	4.7
Cheyenne .....	39.5	39.8	40.0	40.5	1.4	1.3	1.3	1.3	3.4	3.2	3.2	3.1
<b>Puerto Rico</b> .....	1,341.0	1,315.4	1,316.9	1,284.5	183.5	152.3	178.3	139.5	13.7	11.6	13.5	10.9
Aguadilla .....	53.2	50.1	52.5	48.9	9.9	8.3	9.9	7.6	18.6	16.5	18.9	15.6
Arecibo .....	53.5	53.9	51.7	51.4	8.9	6.9	8.6	6.4	16.6	12.8	16.6	12.5
Caguas .....	122.1	121.5	119.8	118.2	15.1	13.3	15.1	12.4	12.4	10.9	12.6	10.5
Mayaguez .....	96.2	93.5	94.3	90.3	14.8	13.6	14.2	13.0	15.4	14.5	15.1	14.4
Ponce .....	113.7	111.2	112.2	109.8	19.5	15.6	18.9	14.2	17.2	14.0	16.9	13.0
San Juan-Bayamon .....	729.1	718.0	716.4	704.6	81.8	67.6	78.8	60.6	11.2	9.4	11.0	8.6

P = preliminary.

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

when new benchmark and population information becomes available.

# 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 United States, 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 payroll survey, production or nonsupervisory employees on paid vacation, paid holiday, or paid sick leave are included and assigned the number of hours for which they were paid during the reporting period.

### Earnings

The household survey measures 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 unemploy-

ment, see "Measuring Total and State Insured Unemployment" by Gloria P. Green in the June 1971 issue of the *Monthly Labor Review*.

**Agricultural employment estimates of the 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; "Data" 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.

- Beginning in 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.

Also beginning in January 1998, 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.

- Beginning in January 1999, the population controls used in the survey were revised to reflect newly updated information on immigration. As a result, the civilian noninstitutional population 16 years and over was raised by about 310,000. The impact of the changes varied for different demographic groups. The civilian noninstitutional population for men 16 years and over was lowered by about 185,000 while that for women was increased by about 490,000. The Hispanic-origin population was lowered by about 165,000 while that of persons of non-Hispanic origin was raised by about 470,000. Overall labor force and employment levels were increased by about 60,000 each while the Hispanic labor and employment estimates were reduced by about 225,000 and 215,000, respectively. The changes had only a small impact on overall and subgroup unemployment rates and other percentages of labor market participation. An explanation of the changes and their effect on national labor force estimates appear in "Revisions in the Current Population Survey Effective January 1999" in the February 1999 issue of this publication.

### **Changes in the occupational and industrial classification systems**

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 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 (SMSAs), 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 1990s. 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 (PSUs). 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 50 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 unemploy-

ment 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 (PSUs). In most States, a PSU consists of a county or a number of contiguous counties. 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 PSUs. Outside of metropolitan areas, counties normally are combined except when the geographic area of an individual county is too large. Combining counties to form PSUs 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 PSUs 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 PSUs in strata by themselves. These strata are self-representing and are generally the most populous PSUs in each State. The 326 remaining strata are formed by combining PSUs 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 mobile 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 ad-

ditional 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.

## 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;

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.

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 PSUs 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 PSUs 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 PSUs and 2) the race distribution of all PSUs (both 1 and 2 exclude self-representing PSUs).

*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 per-

sonnel 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.

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

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

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

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-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 quar-

terly 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.

**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-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-E column titled "Labor force data other than agricultural employment and unemployment, Total," it is necessary to find the standard errors corresponding to the two monthly level entries between which the value 116,150,000 lies. The standard error corresponding to 100,000,000 is given as 274,000, and the standard error corresponding to 120,000,000 is given as 246,000. Use linear interpolation to find the approximate standard error on month-to-month change corresponding to the level 116,150,000; one method of calculation is given below.

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

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

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

Table 1-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

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total <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
Agricultural employment:		
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
Unemployment:		
Total or white .....	-.000017962	2957.13
Black .....	-.000212109	3149.77
Hispanic origin .....	-.000101820	3576.47

<sup>1</sup> Excludes not-in-labor-force data.

data other than agricultural employment and unemployment: Total, Women"). Apply the formula to obtain:

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

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.

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

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

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.

formula for  $s_x$  to compute an approximate standard error for a monthly estimate of 11,600,000.

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

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

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

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

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

Step 3. Multiply this result by the factor .84 from table 1-H (column labeled "Change in quarterly averages" and row labeled "Labor force and not-in-labor-force data other than agricultural employment and unemployment, Black"). This gives an approximate standard error of 118,000 on the estimated change of 400,000 from one quarter to the next.

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

Table 1-H. Factors to be used with tables 1-B, 1-C, 1-D, and 1-F to compute the approximate standard errors for levels, rates, and percentages for year-to-year change of monthly estimates, quarterly averages, change in quarterly averages, yearly averages, and change in yearly averages

Characteristic	Factor				
	Year-to year change of monthly estimate	Quarterly averages	Change in quarterly averages	Yearly averages	Change in yearly averages
Agricultural employment:					
Total or men .....	1.30	0.92	0.70	0.79	0.70
Women .....	1.30	.82	.84	.57	.70
Both sexes, 16 to 19 years .....	1.30	.78	.88	.49	.70
Part time .....	1.40	.80	.80	.59	.70
Unemployment:					
Total .....	1.40	.74	.88	.46	.65
Part time .....	1.40	.67	.88	.42	.54
Labor force and not-in-labor-force data other than agricultural employment and unemployment:					
Total or white .....	1.30	.87	.85	.65	.70
Black .....	1.30	.87	.84	.65	.70
Hispanic origin .....	1.30	.87	.80	.65	.70
Both sexes, 16 to 19 years .....	1.30	.79	.88	.54	.70
Part time .....	1.40	.82	.90	.51	.60

# Establishment Data ("B" tables)

## COLLECTION

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

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

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

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

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

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

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

graphic stratification and differences in the timing of benchmark adjustments.

## CONCEPTS

### Industrial classification

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

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

### Industry employment

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

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

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

### *Indexes of diffusion of employment change (table B-6).*

These indexes measure the dispersion among industries of the change in employment over the specified time span.

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

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

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

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

### **Industry hours and earnings**

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

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

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

by members of the construction trades.

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

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

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

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

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

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

ures for 1982. For basic industries, the hours aggregates are the product of average weekly hours and production worker or nonsupervisory worker employment. At all higher levels of industry aggregation, hours aggregates are the sum of the component aggregates.

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

Because overtime hours are premium hours by definition, weekly hours and overtime hours do not necessarily move in the same direction from month to month. Such factors as work stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on average hours. Diverse trends at the industry group level also may be caused by a marked change in hours for a component industry where little or no overtime was worked in both the previous and current months.

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

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

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

For each sample establishment in SIC 3721 and SIC 3761

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

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

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

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

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

**Real earnings.** These earnings are in constant dollars and are calculated from the earnings averages for the current month using a deflator derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). The reference year for these series is 1982.



## ESTIMATING METHODS

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

### Benchmarks

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

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

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

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

sample versus the full universe counts derived from the UI.

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

### Monthly estimation

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

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

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

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

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

**Table 2-A. Summary of methods for computing industry statistics on employment, hours, and earnings**

Employment, hours, and earnings	Basic estimating cell (industry, region, size or region/size cell)	Aggregate industry level (division and, where stratified, industry)
<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 1960s. 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 using 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 1988-98 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 1998 is listed as 150,000; this represents the average of bias adjustments made each month over the period April 1997 through March 1998. 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

Table 2-B. **March employment benchmarks and bias adjustments for total private industries, March 1988-98**  
(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>	
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
1998 .....	103,965	85	150	157	2,925

<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.

of the 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 volume of these corrections has often been quite large and had substantial effects on universe employment distributions at the industry levels, but effects on total nonfarm employment have been minimal. In 1999, BLS and its State partners completed a multi-year conversion to a new refiling schedule, which uses a random selection method to target one-third

Table 2-C. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1998

Industry	Bench- marks (thou- sands)	Sample coverage <sup>1</sup>		
		Number of establish- ments	Employees	
			Number (thou- sands)	Percent of bench- marks
Total .....	124,050	304,495	42,498	34
Mining .....	592	2,853	212	36
Construction .....	5,474	24,798	994	18
Manufacturing .....	18,805	51,168	8,287	44
Transportation and public utilities .....	6,497	<sup>2</sup> 15,925	2,071	32
Wholesale trade ..	6,742	23,106	1,072	16
Retail trade .....	21,724	56,653	4,469	21
Finance, insurance, and real estate ...	7,269	21,510	1,981	27
Services .....	36,862	72,329	8,057	22
Government:				
Federal .....	2,662	<sup>3</sup> 7,566	2,662	100
State .....	4,702	8,140	4,004	85
Local .....	12,721	20,447	8,689	68

<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. Hours and earnings estimates are derived from a sample.

<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 62 percent of employment in Federal establishments.

Table 2-D. Current (March 1998) and historical benchmark revisions

(Numbers in thousands)

Industry	March 1998 benchmark revision		10-year average mean percent revision	
	Level	Percent	Actual	Absolute
Total .....	44	(1)	0.1	0.3
Total private .....	85	0.1	.1	.3
Goods-producing .....	91	.4	.2	.7
Mining .....	15	2.5	-2	1.8
Metal mining .....	0	0	-1.9	3.1
Coal mining .....	1	1.1	-7	2.5
Oil and gas extraction .....	14	4.1	.3	2.5
Nonmetallic minerals, except fuels .....	1	1.0	-4	1.6
Construction .....	15	.3	-2	1.1
General building contractors .....	-22	-1.7	-6	2.4
Heavy construction, except building .....	12	1.7	.9	2.1
Special trade contractors .....	25	.7	-2	1.0
Manufacturing .....	61	.3	.3	.7
Durable goods .....	75	.7	.4	.8
Lumber and wood products .....	9	1.1	.2	1.8
Furniture and fixtures .....	7	1.3	.5	1.1
Stone, clay, and glass products .....	1	.2	.3	.7
Primary metal industries .....	0	0	.1	.7
Blast furnaces and basic steel products .....	-1	-.4	.7	1.1
Fabricated metal products .....	12	.8	.4	.6
Industrial machinery and equipment .....	14	.6	.3	1.0
Computer and office equipment .....	4	1.0	.3	1.3
Electronic and other electrical equipment .....	6	.3	.2	.7
Electronic components and accessories .....	-6	-.9	.4	1.6
Transportation equipment .....	11	.6	1.0	1.0
Motor vehicles and equipment .....	1	.1	1.2	1.2
Aircraft and parts .....	1	.2	.9	1.4
Instruments and related products .....	9	1.0	(1)	1.6
Miscellaneous manufacturing .....	7	1.8	.4	1.5
Nondurable goods .....	-14	-.2	.2	.7
Food and kindred products .....	-18	-1.1	.2	.9
Tobacco products .....	0	0	-.2	3.4
Textile mill products .....	1	.2	.1	.9
Apparel and other textile products .....	-6	-.8	.3	1.4
Paper and allied products .....	-7	-1.0	.4	.7
Printing and publishing .....	-1	-.1	-.2	.8
Chemicals and allied products .....	6	.6	.1	.9
Petroleum and coal products .....	5	3.6	.2	1.7
Rubber and miscellaneous plastics products .....	3	.3	1.0	1.1
Leather and leather products .....	1	1.2	.1	2.2
Service-producing .....	-47	(1)	.1	.3
Transportation and public utilities .....	41	.6	-.2	1.0
Transportation .....	54	1.3	-.4	1.5
Railroad transportation .....	-1	-.4	-1.0	1.0
Local and interurban passenger transit .....	5	1.0	-.4	2.1
Trucking and warehousing .....	31	1.8	-1.6	3.0
Water transportation .....	-6	-3.5	.4	3.5
Transportation by air .....	19	1.6	2.2	5.2
Pipelines, except natural gas .....	0	0	-.6	4.2
Transportation services .....	6	1.3	-.8	2.8
Communications and public utilities .....	-13	-.6	.2	1.1
Communications .....	-13	-.9	.3	1.8
Electric, gas, and sanitary services .....	0	0	-.1	.7
Wholesale trade .....	-2	(1)	-.3	1.1
Durable goods .....	-25	-.6	-.3	1.3
Nondurable goods .....	23	.8	-.3	1.0

See footnotes at end of table.

Table 2-D. Current (March 1998) and historical benchmark revisions—Continued

(Numbers in thousands)

Industry	March 1998 benchmark revision		10-year average mean percent revision	
	Level	Percent	Actual	Absolute
Retail trade .....	-99	-0.5	0.3	0.6
Building materials and garden supplies .....	-25	-2.8	-.3	1.6
General merchandise stores .....	-55	-2.1	1.8	2.9
Department stores .....	-29	-1.3	2.5	3.4
Food stores .....	-57	-1.7	-.4	.9
Automotive dealers and service stations .....	-10	-.4	-1.2	1.2
New and used car dealers .....	-16	-1.5	-1.0	1.0
Apparel and accessory stores .....	34	3.1	.9	1.4
Furniture and home furnishings stores .....	-32	-3.2	-.8	1.5
Eating and drinking places .....	77	1.0	.9	1.3
Miscellaneous retail establishments .....	-33	-1.2	-.1	1.0
Finance, insurance, and real estate .....	56	.8	-.2	1.2
Finance .....	34	1.0	-.6	1.3
Depository institutions .....	0	0	-1.1	1.4
Commercial banks .....	8	.5	-.5	.9
Savings institutions .....	-6	-2.3	-3.5	5.8
Nondepository institutions .....	33	5.2	1.9	3.3
Mortgage bankers and brokers .....	33	10.7	2.9	5.9
Security and commodity brokers .....	-3	-.5	.2	1.1
Holding and other investment offices .....	5	2.1	-3.0	4.8
Insurance .....	14	.6	.4	1.4
Insurance carriers .....	11	.7	.5	1.6
Insurance agents, brokers, and service .....	3	.4	.3	1.1
Real estate .....	8	.6	-.4	1.5
Services <sup>2</sup> .....	-2	(1)	.1	.6
Agricultural services .....	-2	-.3	1.5	1.7
Hotels and other lodging places .....	5	.3	.7	1.2
Personal services .....	13	1.0	.9	1.3
Business services .....	15	.2	.5	1.8
Services to buildings .....	-23	-2.5	.4	1.3
Personnel supply services .....	53	1.7	1.4	3.3
Help supply services .....	34	1.2	1.9	2.9
Computer and data processing services .....	-4	-.3	.5	2.5
Auto repair, services, and parking .....	-15	-1.3	-1.3	1.6
Miscellaneous repair services .....	-6	-1.6	-1.3	4.7
Motion pictures .....	8	1.4	-1.6	3.8
Amusement and recreation services .....	-66	-4.6	.3	3.1
Health services .....	-53	-.5	-.7	.8
Offices and clinics of medical doctors .....	-12	-.7	-.9	1.5
Nursing and personal care facilities .....	5	.3	-.5	.8
Hospitals .....	-27	-.7	-.8	.8
Home health care services .....	-7	-1.0	1.2	2.6
Legal services .....	-9	-.9	-.9	1.0
Educational services .....	-33	-1.4	.7	2.6
Social services .....	12	.5	-.3	1.5
Child day care services .....	21	3.4	-2.2	5.0
Residential care .....	-4	-.5	-.2	1.3
Museums and botanical and zoological gardens .....	1	1.1	1.8	2.4
Membership organizations .....	91	3.9	2.4	3.0
Engineering and management services .....	-54	-1.7	-.1	1.5
Engineering and architectural services .....	-12	-1.4	-.6	1.1
Management and public relations .....	-16	-1.6	.5	3.1
Services, nec .....	-1	-2.0	1.4	2.8
Government .....	-41	-.2	(1)	.3
Federal .....	0	0	0	0
Federal, except Postal Service .....	0	0	0	0
State .....	-39	-.8	.1	.6
Education .....	-25	-1.2	.2	1.2
Other State government .....	-14	-.5	.1	.5
Local .....	-2	(1)	(1)	.2
Education .....	16	.2	(1)	.3
Other local government .....	-18	-.3	(1)	.4

<sup>1</sup> Less than 0.05 percent.<sup>2</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.

of all UI universe units for refiling in a given year. Previously, refiling procedures called for each major industry division to be refiled every third year. The refiling schedule refinement was made because of large benchmark revisions and corresponding distortions in over-the-year employment trend measurement for specific industries.

**Revisions between preliminary and final data.** First preliminary estimates of employment, hours, and earnings, based on less than the total sample, are published immedi-

ately 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	1.0
Total private .....	47,800	0	0
Goods-producing .....	13,900	0	0
Mining .....	1,800	0	0.2
Metal mining .....	300	-0.1	.4
Coal mining .....	700	.2	.6
Oil and gas extraction .....	1,700	-.1	.4
Nonmetallic minerals, except fuels .....	300	.1	.2
Construction .....	8,100	.1	.1
General building contractors .....	4,100	.1	.3
Heavy construction, except building .....	3,300	.1	.3
Special trade contractors .....	5,000	0	.1
Manufacturing .....	9,500	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 .....	1,200	0	.2
Primary metal industries .....	1,700	0	.2
Blast furnaces and basic steel products .....	1,300	0	.3
Fabricated metal products .....	2,200	0	.1
Industrial machinery and equipment .....	2,600	.1	.1
Computer and office equipment .....	1,800	.3	.4
Electronic and other electrical equipment .....	2,200	0	.1
Electronic components and accessories .....	1,400	0	.2
Transportation equipment .....	4,200	0	.2
Motor vehicles and equipment .....	3,600	.1	.3
Aircraft and parts .....	1,600	0	.2
Instruments and related products .....	1,600	0	.1
Miscellaneous manufacturing .....	900	.1	.2
Nondurable goods .....	4,800	0	.1
Food and kindred products .....	2,700	0	.1
Tobacco products .....	500	.6	1.0
Textile mill products .....	1,200	0	.2
Apparel and other textile products .....	2,700	.1	.2
Paper and allied products .....	1,100	0	.1
Printing and publishing .....	1,700	0	.1
Chemicals and allied products .....	1,700	-.1	.1
Petroleum and coal products .....	1,000	-.1	.4
Rubber and miscellaneous plastics products .....	1,400	0	.1
Leather and leather products .....	600	0	.4
Service-producing .....	54,500	0	0
Transportation and public utilities .....	9,800	-.1	.1
Transportation .....	9,400	-.1	.2
Railroad transportation .....	2,100	-.1	.7
Local and interurban passenger transit .....	3,700	-.2	.5
Trucking and warehousing .....	5,800	-.1	.2
Water transportation .....	1,400	-.3	.7
Transportation by air .....	6,400	-.1	.4
Pipelines, except natural gas .....	200	-.2	.7
Transportation services .....	1,100	-.1	.2
Communications and public utilities .....	4,100	.1	.1
Communications .....	3,800	.1	.2
Electric, gas, and sanitary services .....	1,600	0	.1
Wholesale trade .....	7,600	.1	.1
Durable goods .....	4,300	.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 .....	31,100	0	0.1
Building materials and garden supplies .....	2,800	0	.2
General merchandise stores .....	19,400	.1	.5
Department stores .....	18,500	.1	.6
Food stores .....	5,800	0	.1
Automotive dealers and service stations .....	3,000	-.1	.1
New and used car dealers .....	1,200	-.1	.1
Apparel and accessory stores .....	5,700	.1	.4
Furniture and home furnishings stores .....	3,100	0	.2
Eating and drinking places .....	9,400	0	.1
Miscellaneous retail establishments .....	7,900	.1	.2
Finance, insurance, and real estate .....	6,200	0	.1
Finance .....	3,800	0	.1
Depository institutions .....	2,500	-.1	.1
Commercial banks .....	2,100	-.1	.1
Savings institutions .....	1,100	-.1	.3
Nondepository institutions .....	1,500	0	.2
Mortgage bankers and brokers .....	1,100	.1	.4
Security and commodity brokers .....	1,100	0	.2
Holding and other investment offices .....	1,700	0	.5
Insurance .....	2,700	0	.1
Insurance carriers .....	2,400	0	.1
Insurance agents, brokers, and service .....	1,200	.1	.1
Real estate .....	2,800	0	.2
Services <sup>2</sup> .....	28,700	0	.1
Agricultural services .....	2,700	.1	.3
Hotels and other lodging places .....	6,000	.1	.2
Personal services .....	5,800	-.1	.3
Business services .....	12,300	.1	.1
Services to buildings .....	2,500	0	.2
Personnel supply services .....	10,500	.1	.3
Help supply services .....	10,300	.1	.3
Computer and data processing services .....	2,800	0	.2
Auto repair, services, and parking .....	2,000	0	.1
Miscellaneous repair services .....	1,000	0	.2
Motion pictures .....	6,200	.1	.8
Amusement and recreation services .....	9,400	.2	.5
Health services .....	5,500	0	0
Offices and clinics of medical doctors .....	2,500	0	.1
Nursing and personal care facilities .....	1,600	0	.1
Hospitals .....	3,300	0	.1
Home health care services .....	2,000	.1	.3
Legal services .....	1,400	0	.1
Educational services .....	12,600	.1	.5
Social services .....	9,700	0	.3
Child day care services .....	4,400	.1	.6
Residential care .....	1,400	-.1	.2
Museums and botanical and zoological gardens .....	600	0	.5
Membership organizations .....	3,200	0	.1
Engineering and management services .....	5,100	0	.1
Engineering and architectural services .....	2,300	-.1	.2
Management and public relations .....	3,400	.1	.3
Services, nec .....	500	.1	.8
Government .....	19,500	0	.1
Federal .....	8,300	.1	.2
Federal, except Postal Service .....	7,600	0	.3
State .....	11,800	0	.2
Education .....	9,900	0	.4
Other State government .....	4,800	0	.1
Local .....	16,800	0	.1
Education .....	14,200	0	.1
Other local government .....	11,300	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 1994 through December 1998.

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

## FEDERAL-STATE COOPERATIVE PROGRAM

Labor force and unemployment estimates for States, labor market areas (LMAs), 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 LMAs, 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 LMAs, 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 LMAs 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 LMAs 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 non-seasonal 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

Effective in June 1996, with the release of the March 1995 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—a calendar effect.

REGARIMA modeling also is used to identify, measure, and remove this 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; additive models are not considered. 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 by production or nonsupervisory workers 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 higher 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.

The standard procedure for seasonal adjustment for the local education employment series was improved with the 1997 benchmark. In the past, the seasonal factors for this industry were derived using the standard seasonal adjustment procedure of a logarithmic transformation of the data as input for the multiplicative decomposition of the series. However, in recent years, the forecasted seasonal factors have failed to adequately reflect the changing behavior of this industry in the summer months. The factors for this industry are now derived using a square-root transformation of the data as input for an additive decomposition of the series. These modifications produce seasonal factors that better reflect current industry seasonal patterns. However, the annual averages of seasonally adjusted and unadjusted series will not be equal.

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 1999, new seasonal adjustment factors for March-October 1999, and a description of the current seasonal adjustment procedure appear in the June 1999 issue of *Employment and Earnings*. Revised factors for the September 1999-April 2000 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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