

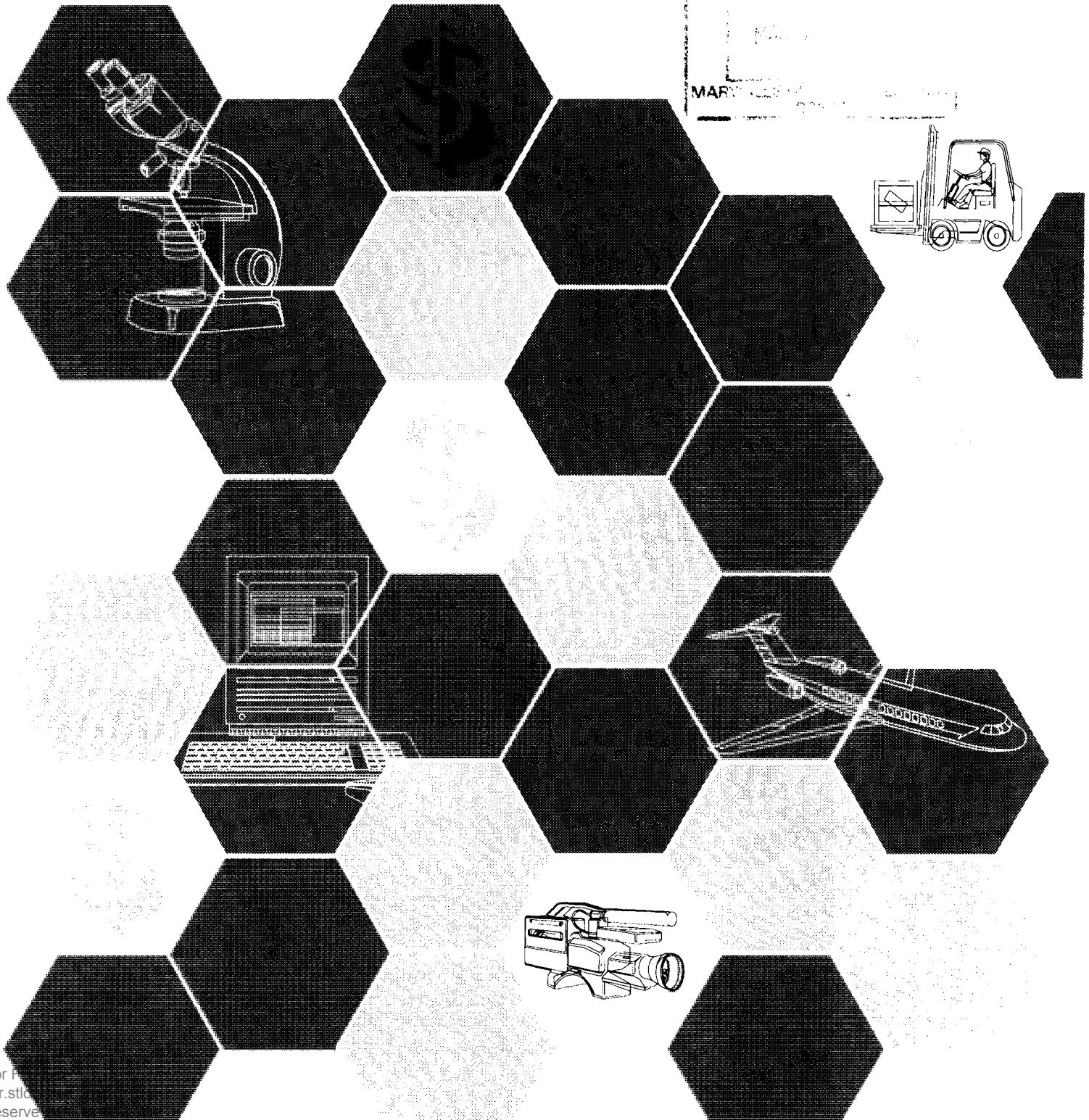
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EMPLOYMENT AND EARNINGS

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

In this issue: Revisions in the Current
Population Survey Effective
January 1998





U.S. DEPARTMENT OF LABOR
Alexis M. Herman, *Secretary*

BUREAU OF LABOR STATISTICS
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February 1998
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Calendar of Features

In addition to the monthly data appearing regularly in *Employment and Earnings*, special features appear in most of the issues as shown below.

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Revised historical national data	Internet ¹
State and area annual revisions	March
State and area annual averages	May
Area definitions	May

State and area labor force data

Annual revisions	March
Annual averages	May

¹ They can be accessed from <http://stats.bls.gov/cgi-bin/dsrv?ee> or through the Current Employment Statistics homepage at <http://stats.bls.gov/ceshome.htm>.

Employment and Earnings

Editors: Gloria Peterson Green, Eugene H. Becker

Editors' Note

Effective with the publication of January 1998 data, household survey data shown in table A and tables A-1 through A-38 incorporate new composite estimation procedures and revised population controls. For additional information, see the article beginning on page 3. This issue also introduces new tables (A-5 and A-17) on persons 25 years and over by educational attainment. All subsequent tables have been renumbered sequentially.

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Employment and Unemployment Developments, January 1998

Employment rose substantially in January, and the unemployment rate remained at 4.7 percent. Nonfarm payroll employment grew by 358,000, with large gains occurring in construction and manufacturing.

Unemployment

Both the number of unemployed persons, 6.4 million, and the unemployment rate, 4.7 percent, were essentially unchanged in January, after seasonal adjustment. Among the major worker groups, the jobless rate for adult women (4.4 percent) rose by 0.4 percentage point in January, while the rate for adult men (3.8 percent) declined to its lowest level in nearly 20 years. Unemployment rates for teenagers (14.1 percent), whites (4.0 percent), blacks (9.3 percent), and Hispanics (6.9 percent) showed little or no change over the month. (See tables A-3 and A-4.)

Among the major educational attainment categories, the jobless rate for persons 25 years and over who had not completed high school (7.2 percent) continued its year-long decline. Rates for those with higher levels of educational attainment—including high school graduates with no college experience (3.9 percent), high school graduates with some college experience but no bachelor's degree (3.2 percent), and college graduates (1.9 percent)—were essentially unchanged over the month. (See table A-5.)

Total employment and the labor force

Total employment, as measured by the household survey, at 131.1 million (seasonally adjusted), rose by 641,000 over the month, after adjusting for changes in the composite estimation procedure. The employment-population ratio rose to 64.2 percent, an all-time high. Employment-population ratios for workers 25 years and over at all levels of educational attainment—less than a high school diploma (39.3 percent), high school graduates with no college experience (63.0 percent), high school graduates with some college experience but no bachelor's degree (72.9 percent), and college graduates (78.7 percent)—showed little or no movement over the month. The ratio is low for persons without a high school diploma in part because a very high proportion are age 65 and over. (See tables A-3 and A-5.)

About 7.7 million persons (not seasonally adjusted) held more than one job in January. These multiple jobholders comprised 6.0 percent of all employed persons. (See table A-37.)

The civilian labor force, at 137.5 million (seasonally adjusted), increased by 624,000 in January, after adjusting for changes in the composite estimation procedure, and the labor force participation rate rose to a record 67.3 percent. (See table A-3.)

Persons not in the labor force

About 1.5 million persons (not seasonally adjusted) were marginally attached to the labor force in January. These were people who wanted and were available for work and had looked for a job sometime in the prior 12 months but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey.

The number of discouraged workers—a subset of the marginally attached who were not currently looking for jobs specifically because they believed no jobs were available for them—was 374,000 in January, little changed from a year earlier. (See table A-36.)

Industry payroll employment

Nonfarm payroll employment rose by 358,000 in January to 124.2 million, after seasonal adjustment. Since September, payroll employment has risen by 1.4 million. Over the month, job gains continued in most major industry groups, with particularly strong growth in construction and manufacturing. (See table B-3.)

Construction employment rose by 92,000 in January, after seasonal adjustment. Since October, the industry has added 184,000 jobs. Several factors contributed to January's gain: The weather was warmer than usual over much of the country, there was considerable cleanup and repair activity following ice storms in the Northeast, and the housing market remained strong due to low mortgage rates and the healthy economy.

Manufacturing added 43,000 jobs in January, the fourth month in a row with a gain of about this magnitude. Since September, factory employment has risen by 162,000. Several durable goods industries that have made steady job gains for more than a year continued to grow in January. These include fabricated metals (8,000), industrial machinery (7,000), electronic components (4,000), and aircraft (2,000). Among nondurable goods industries, employment in rubber and miscellaneous plastics increased by 6,000, while apparel and textiles continued to decline.

Within the service-producing sector, employment in the services industry rose by 89,000 in January, after 2 months of larger gains. Employment in help supply services decreased by 16,000, following strong growth in November and December. Since October, net job growth in this industry has totaled 71,000. In January, health services added 14,000 jobs; large gains continued in hospitals, but nursing homes and home health care agencies showed declines. Computer services and engineering and management services continued their strong job growth.

Employment in transportation and public utilities rose by 49,000 in January, after seasonal adjustment. Light holiday hiring in air transportation led to fewer post-holiday layoffs than normal, resulting in a large job gain in January, after seasonal adjustment. Employment in communications rose by 10,000 over the month, primarily in telephone communications, where growth has accelerated since September.

Strength in both the durable and nondurable goods components of wholesale trade lead to a relatively large job gain of 30,000 in January. Retail trade employment increased by 24,000 in January, about half the average monthly gain for 1997. Following robust holiday hiring, there were large seasonal layoffs in miscellaneous retail establishments, such as toy stores, book stores, and catalog sales operations.

Elsewhere in the service-producing sector, employment continued to rise in finance (12,000), with the largest in-

crease in security brokerages (5,000). Real estate added 10,000 jobs over the month. Local government employment rose by 18,000 in January, as both the education and noneducation components continued their long-term growth. Federal Government employment continued to decline.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls increased by 0.2 hour in January to 34.8 hours, seasonally adjusted. The manufacturing workweek decreased by 0.1 hour to 42.1 hours, while factory overtime was 4.9 hours for the third straight month. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls increased by 0.6 percent to 143.4 (1982=100), seasonally adjusted. The manufacturing index edged down by 0.1 percent to 109.8. (See table B-9.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls increased 4 cents in January to \$12.51, seasonally adjusted. Average weekly earnings increased by 0.9 percent to \$435.35. Since January 1997, average hourly earnings have risen by 3.8 percent and average weekly earnings by 5.0 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>
February	March 6	May	June 5
March	April 3	June	July 2
April	May 8	July	August 7

Revisions in the Current Population Survey Effective January 1998

Martha Duff, Janice Lent, Stephen M. Miller, Patrick J. Cantwell

Effective with the release of January 1998 data, BLS implemented a new composite estimation procedure for the Current Population Survey (CPS). The new procedure simplifies processing of the monthly labor force data, allows optimization of compositing coefficients for different labor force categories, and enables microdata users to develop composite estimates more easily. This article discusses the old and new composite estimation procedures and the effect of the new procedure on major labor force series. The effect of new population controls, which also were introduced in January, also is briefly discussed.

New Compositing Procedure

Overview

The national unemployment rate is among the most closely watched economic indicators produced by the Federal statistical system. Bureau of the Census interviewers collect data used to estimate the rate, as well as a wealth of other labor force statistics, through the CPS, a monthly survey of about 50,000 households, sponsored by the Bureau of Labor Statistics. The target population of the CPS is the civilian noninstitutional population of the United States. For estimation purposes, a separate weight for each *person* in the sample is computed. The base weight for a CPS sample person—the inverse of the probability of selection—is ratio adjusted through a sequence of weighting steps to account for sample households not interviewed and for coverage error relative to independently derived population estimates for specific demographic groups. After the ratio adjustments are applied to CPS person weights, the sum of the weights of sample persons in any one of these demographic control groups closely approximates the independent population estimate. These adjustments are followed by a composite estimation step that improves the accuracy of current estimates by incorporating information gathered in previous months, taking advantage of the fact that 75 percent of sample households are common in each pair of consecutive months.

Under the old procedure, composite estimation was per-

formed at the “macro” level. The composite estimator for each tabulated cell was a function of aggregated weights for sample persons contributing to that cell in current and prior months. The different months of data were combined using compositing coefficients. Thus microdata users needed several months of CPS data to compute composite estimates. To ensure consistency, the same coefficients had to be used for all estimates. The values of the coefficients selected were much closer to optimal for unemployment than for employment or labor force totals.

The new composite weighting method involves two steps. The first step involves computation of composite estimates for the main labor force categories, classified by important demographic characteristics. The second adjusts person weights, through a series of ratio adjustments, to agree with the composite estimates, thus incorporating the effect of composite estimation into the person weights. Under this procedure, the sum of the “composite weights” of all sample persons in a particular labor force category equals the composite estimate of the level for that category. To produce a composite estimate for a particular month, a data user may simply access the microdata file for that month and compute a weighted sum. The new composite weighting approach also allows us to improve the accuracy of labor force estimates by using different compositing coefficients for different labor force categories. The weighting adjustment method assures additivity while allowing this variation in compositing coefficients.

Composite estimation in the CPS

The CPS employs a “four-eight-four” sample rotation scheme. Each sample household entering the CPS remains in sample for 4 months, leaves the sample for 8 months, and then reenters for an additional 4 months—the same 4 calendar months it spent in the sample a year earlier. Eight panels or “rotation groups,” approximately equal in size, make up each monthly CPS sample. The eight rotation groups in sample for a given month also can be considered “month-in-sample” groups: One group is in sample for the first time, another for the second time, etc. Due to the four-eight-four rotation pattern, six of these groups—three quarters of the sample—continue in sample the following month and half of the households in a given month’s sample will be back in the sample for the same calendar month 1 year later. The sample overlap improves estimates of change over time.

Martha Duff is a mathematical statistician in the Statistical Methods Division, Bureau of Labor Statistics. Janice Lent and Stephen M. Miller are mathematical statisticians in the Office of Survey Methods Research, Bureau of Labor Statistics. Patrick J. Cantwell is Chief of the Program Research and Development Branch, Services Division, Bureau of the Census.

Through composite estimation, the positive correlation among CPS estimators for different months is increased. This increase in correlation improves the accuracy of monthly labor force estimates.

Let $S = \{2,3,4,6,7,8\}$, the set of indicators of the month-in-sample groups in the CPS sample for a given month h that also was in sample in month $h-1$. The CPS "AK" composite estimator for a labor force statistic (e.g., the number of persons unemployed) in month h is given by

$$Y_h'' = (1-K)Y_h + K(Y_{h-1}'' + \Delta_h) + A\beta_h,$$

where

$x_{h,i}$ is the ratio estimator for month h ; based on data from persons completing their i th monthly interview in month h ;

$$Y_h = \frac{1}{8} \sum_{i=1}^8 x_{h,i};$$

Y_{h-1}'' is the previous month's composite estimator

$$\Delta_h = \frac{1}{6} \sum_{i \in S} (x_{h,i} - x_{h-1,i-1});$$

$$\beta_h = \frac{1}{8} \left\{ \sum_{i \in S} x_{h,i} - \frac{1}{3} \sum_{i \in S} x_{h,i} \right\};$$

$K = 0.4$; and

$A = 0.2$.

The values given above for the constant coefficients A and K are close to optimal—with respect to variance—for monthly estimates of unemployment level. The coefficient K determines the weight, in the weighted average, of each of two estimators for the current month: (1) the current month's ratio estimator Y_h (given a weight of $1-K$) and (2) the sum of the previous month's composite estimator and an estimator of the change since the previous month. The estimate of change is based on data from sample households common to months h and $h-1$. The coefficient A determines the weight of β_h , an adjustment term that reduces both the variance of the composite estimator and the bias associated with time in sample. (See Breau and Ernst¹, Bailar.²)

Under the old methodology, the composite estimator, with the above values of K and A , was used to produce all CPS estimates. Optimal values of the coefficients, however, depend on the correlation structure of the characteristic to be estimated. Research has shown, for example, that higher values of K and A result in more reliable estimates for

employment levels because the ratio estimators for employment are more strongly correlated across time than are those for unemployment. But, the same coefficients were used for all characteristics in order to ensure additivity of estimates and maintain consistency with independently derived population estimates. The new composite weighting approach allows variation in compositing coefficients, thus improving the accuracy of labor force estimates, while ensuring the additivity of estimates.

Computing composite weights

Composite weights are produced only for sample persons age 16 or older. The CPS estimation process begins with the computation of a "base weight" for each adult in the survey.

The base weight—the inverse of the probability of selection—is adjusted for nonresponse, and two successive stages of ratio adjustments to population controls are applied. The final or "second stage" raking procedure is performed independently for each of the eight sample rotation groups. This ensures that sample weights add to independent controls for States (51 totals, including the District of Columbia), as well as for 9 age/sex/ethnicity groups, and 66 age/sex/race groups, specified at the national level. The new method of computing composite weights for the CPS imitates the "second stage" ratio adjustment: Sample person weights are raked to force their sums to equal population totals. However, composite labor force estimates are used in place of independent population estimates, and the raking process is performed separately within each of the three major labor force categories: Employed, unemployed, and those not in the labor force.

Adjustment of person weights to the composite estimates for each labor force category proceeds as follows. For simplicity, the method for estimating the number of people unemployed (UE) is described; analogous procedures are used to estimate the number of people employed and the number not in the labor force. Data from all eight rotation groups are combined for the purpose of computing composite weights.

1. For each State j , the direct (optimal) composite estimate of UE, $\text{comp}(\text{UE}_j)$, is computed as described above. Similarly, direct composite estimates of UE are computed for each age/sex/ethnicity group and each age/sex/race group.
2. Sample records are classified by State. Within each State j , a simple estimate of UE, $\text{simp}(\text{UE}_j)$, is computed by adding the weights of all unemployed sample persons in the State.
3. Within each State j , the weight of each unemployed sample person in the State is multiplied by the following ratio: $\text{comp}(\text{UE}_j) / \text{simp}(\text{UE}_j)$.
4. Sample records are cross-classified by age, sex, and ethnicity. Within each cross-classification cell, a

¹ Breau, P. and Ernst, L. (1983). "Alternative Estimators to the Current Composite Estimator." *Proceedings of the Section on Survey Research Methods*, American Statistical Association, 397-402.

² Bailar, B. (1975). "The Effects of Rotation Group Bias on Estimates from Panel Surveys." *Journal of the American Statistical Association*, 70, 23-30.

simple estimate of UE is computed by adding the weights of all unemployed sample persons in the cell.

5. Weights are adjusted within each age/sex/ethnicity cell in a manner analogous to step 3.
6. Steps 4 and 5 are repeated for age/sex/race cells.
7. Steps 2-6 are repeated five more times—a total of six iterations.

Note that, when applying this procedure to estimate the number of people employed, different optimal coefficients are used in step 1 to compute the direct composite estimate. Then, for a given State, the composite estimate of the number not in the labor force is obtained as the residual from the State population control total. The demographic group cells are treated similarly. During computation of composite weights for persons who are unemployed, some further collapsing of cells is needed where cells contain insufficient sample.

Optimal compositing parameters

The new method of computing composite weights allows the assigning of different pairs of K,A compositing parameters for measuring different characteristics. The parameters chosen are still a compromise selection since they must produce variances and biases that are acceptably small for several types of estimates. A K,A pair that works well for estimating a monthly level may not perform as well for month-to-month change or annual averages. Researchers from the BLS and Bureau of the Census selected and studied coefficients designed to meet certain optimality criteria and selected those that were optimal with respect to variance. The (K,A) parameters selected were $(.4,.3)$ for unemployed and $(.7,.4)$ for employed. For a more detailed description of the selection of compositing parameters. (See Lent et al.³)

³ Lent, J., Miller, S., and Cantwell, P., Duff, M. (1997). "Effect of Composite Weights on Some Estimates from the Current Population Survey." Submitted: *Journal of the American Statistical Association*.

Differences in the estimates

Table 1, displays major labor force estimates for all months of 1997, as published and as computed using the new composite estimation procedure. The official estimates for 1997 and earlier years were not revised. Generally, the new parameters cause slight increases in unemployment estimates; the difference for total unemployment are considered to be statistically significant. The standard errors of the unemployment estimates are essentially the same under the old and new methods. For estimates of employment and civilian labor force levels, the new parameters provide gains in reliability while decreasing the estimated totals. The average drop in the total estimated employment level is about 0.2 percent, which is statistically significant. Data users must therefore expect a slight break in the time series for employment and civilian labor force due to the implementation of the new composite estimator.

New Population Controls

Also effective with the release of January 1998 data, minor revisions were introduced into the population projections that are used as population controls in CPS estimation. (CPS estimates prior to January 1998 are unaffected.) Such revisions are periodically introduced into the CPS controls to incorporate the latest information available on population growth trends. The new population projections 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. The revisions were generally small compared to those experienced in recent years. The civilian noninstitutional population 16 years of age and older was essentially unchanged. However, there was a decrease of about 51,000 in the Asian and Pacific Islander population and an increase of about 57,000 in the Hispanic-origin population. Although published 1997 CPS estimates of the civilian noninstitutional population, employment, etc. would change slightly if they were reestimated using revised population controls, estimates of most unemployment rates and other ratios and proportions would be unaffected.

Table 1. Labor force estimates using old and new composite weights, January-December 1997, not seasonally adjusted

(Numbers in thousands)

Characteristic	January			February			March			April		
	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference
Civilian labor force												
Total, 16 years and over	134,317	134,226	-91	134,535	134,443	-92	135,524	135,384	-140	135,181	135,000	-181
16 to 19 years	7,251	7,243	-8	7,368	7,359	-9	7,428	7,413	-15	7,453	7,428	-25
20 to 24 years	13,229	13,276	47	13,232	13,241	9	13,338	13,298	-40	13,273	13,244	-29
25 to 54 years	97,636	97,623	-13	97,709	97,698	-11	98,102	98,080	-22	97,972	97,964	-8
55 years and over	16,202	16,084	-118	16,225	16,146	-79	16,657	16,593	-64	16,483	16,364	-119
Men, 16 years and over	72,117	72,112	-5	72,214	72,220	6	72,731	72,712	-19	72,755	72,625	-130
20 years and over	68,429	68,423	-6	68,447	68,461	14	68,937	68,920	-17	68,933	68,811	-122
Women, 16 years and over	62,200	62,113	-87	62,321	62,224	-97	62,794	62,671	-123	62,426	62,375	-51
20 years and over	58,637	58,560	-77	58,720	58,624	-96	59,160	59,051	-109	58,794	58,761	-33
White	113,338	113,194	-144	113,484	113,358	-126	114,135	113,983	-152	113,867	113,704	-163
Black	15,141	15,167	26	15,170	15,200	30	15,325	15,344	19	15,265	15,256	-9
Hispanic origin	13,600	13,585	-15	13,529	13,530	1	13,620	13,623	3	13,427	13,459	32
Employed												
Total, 16 years and over	126,384	126,249	-135	126,887	126,778	-109	128,125	127,961	-164	128,629	128,414	-215
16 to 19 years	5,952	5,929	-23	6,032	6,015	-17	6,182	6,159	-23	6,285	6,247	-38
20 to 24 years	11,833	11,876	43	11,979	11,983	4	12,094	12,048	-46	12,156	12,112	-44
25 to 54 years	92,955	92,920	-35	93,170	93,153	-17	93,774	93,748	-26	94,174	94,161	-13
55 years and over	15,644	15,523	-121	15,706	15,628	-78	16,076	16,006	-70	16,014	15,893	-121
Men, 16 years and over	67,640	67,612	-28	67,981	67,975	-6	68,573	68,543	-30	69,105	68,966	-139
20 years and over	64,693	64,668	-25	64,923	64,928	5	65,502	65,476	-26	65,957	65,830	-127
Women, 16 years and over	58,744	58,637	-107	58,906	58,802	-104	59,552	59,418	-134	59,525	59,448	-77
20 years and over	55,739	55,651	-88	55,931	55,835	-96	56,442	56,326	-116	56,388	56,336	-52
White	107,425	107,254	-171	107,863	107,728	-135	108,745	108,575	-170	109,177	108,990	-187
Black	13,474	13,485	11	13,465	13,490	25	13,677	13,692	15	13,801	13,786	-15
Hispanic origin	12,349	12,325	-24	12,337	12,337	0	12,381	12,380	-1	12,358	12,384	26
Multiple jobholders	7,572	7,708	136	7,869	7,994	125	7,862	8,002	140	7,874	8,105	231
Unemployed												
Total, 16 years and over	7,933	7,977	44	7,647	7,666	19	7,399	7,423	24	6,551	6,586	35
16 to 19 years	1,299	1,313	14	1,336	1,345	9	1,246	1,254	8	1,169	1,180	11
20 to 24 years	1,395	1,400	5	1,253	1,258	5	1,244	1,251	7	1,117	1,131	14
25 to 54 years	4,681	4,703	22	4,540	4,545	5	4,328	4,332	4	3,797	3,803	6
55 years and over	558	561	3	519	518	-1	581	586	5	468	472	4
Men, 16 years and over	4,477	4,501	24	4,233	4,244	11	4,158	4,169	11	3,650	3,659	9
20 years and over	3,736	3,755	19	3,523	3,533	10	3,435	3,444	9	2,976	2,981	5
Women, 16 years and over	3,457	3,476	19	3,415	3,421	6	3,241	3,254	13	2,901	2,927	26
20 years and over	2,898	2,909	11	2,788	2,788	0	2,718	2,725	7	2,406	2,425	19
White	5,913	5,940	27	5,621	5,630	9	5,389	5,408	19	4,690	4,715	25
Black	1,667	1,682	15	1,705	1,710	5	1,649	1,652	3	1,463	1,470	7
Hispanic origin	1,251	1,260	9	1,192	1,192	0	1,239	1,244	5	1,069	1,075	6
Less than 5 weeks	3,352	3,421	69	2,440	2,522	82	2,313	2,406	93	2,131	2,231	100
5 to 14 weeks	2,329	2,320	-9	2,902	2,856	-46	2,663	2,630	-33	1,981	1,957	-24
15 weeks and over	2,252	2,236	-16	2,305	2,287	-18	2,423	2,386	-37	2,439	2,398	-41
Unemployment rate												
Total, 16 years and over	5.9	5.9	0	5.7	5.7	0	5.5	5.5	0	4.8	4.9	0.1
16 to 19 years	17.9	18.1	0.2	18.1	18.3	0.2	16.8	16.9	0.1	15.7	15.9	.2
20 to 24 years	10.5	10.5	0	9.5	9.5	0	9.3	9.4	.1	8.4	8.5	.1
25 to 54 years	4.8	4.8	0	4.6	4.7	.1	4.4	4.4	0	3.9	3.9	0
55 years and over	3.4	3.5	.1	3.2	3.2	0	3.5	3.5	0	2.8	2.9	.1
Men, 16 years and over	6.2	6.2	0	5.9	5.9	0	5.7	5.7	0	5.0	5.0	0
20 years and over	5.5	5.5	0	5.1	5.2	.1	5.0	5.0	0	4.3	4.3	0
Women, 16 years and over	5.6	5.6	0	5.5	5.5	0	5.2	5.2	0	4.6	4.7	.1
20 years and over	4.9	5.0	.1	4.7	4.8	.1	4.6	4.6	0	4.1	4.1	0
White	5.2	5.2	0	5.0	5.0	0	4.7	4.7	0	4.1	4.1	0
Black	11.0	11.1	.1	11.2	11.3	.1	10.8	10.8	0	9.6	9.6	0
Hispanic origin	9.2	9.3	.1	8.8	8.8	0	9.1	9.1	0	8.0	8.0	0

See note at end of table.

Table 1. Labor force estimates using old and new composite weights, January-December 1997, not seasonally adjusted—Continued

(Numbers in thousands)

Characteristic	May			June			July			August		
	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference
Civilian labor force												
Total, 16 years and over	135,963	135,727	-236	137,557	137,332	-225	138,331	138,117	-214	137,460	137,157	-303
16 to 19 years	7,832	7,799	-33	9,100	9,019	-81	9,764	9,631	-133	8,765	8,617	-148
20 to 24 years	13,564	13,552	-12	14,020	14,041	21	14,167	14,173	6	13,761	13,722	-39
25 to 54 years	97,974	97,965	-9	98,130	98,097	-33	98,211	98,172	-39	98,518	98,439	-79
55 years and over	16,592	16,412	-180	16,308	16,175	-133	16,189	16,141	-48	16,415	16,378	-37
Men, 16 years and over	73,191	73,017	-174	74,312	74,130	-182	74,674	74,481	-193	74,149	73,969	-180
20 years and over	69,146	68,994	-152	69,549	69,419	-130	69,614	69,512	-102	69,571	69,485	-86
Women, 16 years and over	62,772	62,710	-62	63,245	63,202	-43	63,656	63,636	-20	63,311	63,188	-123
20 years and over	58,984	58,935	-49	58,908	58,894	-14	58,952	58,974	22	59,123	59,055	-68
White	114,486	114,331	-155	115,832	115,689	-143	116,265	116,094	-171	115,365	115,149	-216
Black	15,370	15,316	-54	15,605	15,532	-73	15,877	15,822	-55	15,953	15,871	-82
Hispanic origin	13,630	13,690	60	13,839	13,867	28	14,057	14,044	-13	14,028	13,999	-29
Employed												
Total, 16 years and over	129,565	129,305	-260	130,463	130,217	-246	131,350	131,113	-237	130,865	130,544	-321
16 to 19 years	6,537	6,494	-43	7,372	7,288	-84	8,145	8,008	-137	7,554	7,405	-149
20 to 24 years	12,426	12,402	-24	12,832	12,848	16	13,052	13,054	2	12,654	12,613	-41
25 to 54 years	94,485	94,468	-17	94,447	94,399	-48	94,476	94,422	-54	94,777	94,680	-97
55 years and over	16,118	15,941	-177	15,812	15,682	-130	15,677	15,630	-47	15,882	15,846	-36
Men, 16 years and over	69,968	69,786	-182	70,619	70,428	-191	71,157	70,953	-204	70,890	70,705	-185
20 years and over	66,564	66,407	-157	66,828	66,692	-136	66,962	66,855	-107	67,000	66,908	-92
Women, 16 years and over	59,597	59,519	-78	59,843	59,789	-54	60,193	60,160	-33	59,976	59,839	-137
20 years and over	56,464	56,404	-60	56,263	56,237	-26	56,243	56,250	7	56,311	56,231	-80
White	110,004	109,821	-183	110,839	110,677	-162	111,323	111,133	-190	110,654	110,419	-235
Black	13,825	13,773	-52	13,854	13,778	-76	14,218	14,158	-60	14,409	14,328	-81
Hispanic origin	12,666	12,724	58	12,820	12,845	25	12,909	12,885	-24	13,014	12,977	-37
Multiple jobholders	8,197	8,502	305	8,214	8,481	267	8,053	8,252	199	7,583	7,754	171
Unemployed												
Total, 16 years and over	6,398	6,422	24	7,094	7,116	22	6,981	7,004	23	6,594	6,612	18
16 to 19 years	1,296	1,305	9	1,728	1,731	3	1,620	1,623	3	1,212	1,211	-1
20 to 24 years	1,139	1,150	11	1,188	1,194	6	1,115	1,120	5	1,108	1,110	2
25 to 54 years	3,489	3,497	8	3,683	3,698	15	3,735	3,750	15	3,741	3,759	18
55 years and over	475	471	-4	495	493	-2	511	511	0	534	532	-2
Men, 16 years and over	3,223	3,231	8	3,693	3,703	10	3,517	3,528	11	3,259	3,264	5
20 years and over	2,582	2,586	4	2,721	2,728	7	2,653	2,657	4	2,571	2,577	6
Women, 16 years and over	3,175	3,191	16	3,401	3,413	12	3,463	3,476	13	3,335	3,348	13
20 years and over	2,520	2,531	11	2,645	2,657	12	2,708	2,723	15	2,811	2,824	13
White	4,481	4,510	29	4,994	5,013	19	4,942	4,961	19	4,711	4,730	19
Black	1,545	1,543	-2	1,751	1,754	3	1,659	1,664	5	1,544	1,543	-1
Hispanic origin	964	967	3	1,019	1,023	4	1,149	1,159	10	1,014	1,021	7
Less than 5 weeks	2,535	2,650	115	3,210	3,352	142	2,643	2,750	107	2,409	2,519	110
5 to 14 weeks	1,691	1,677	-14	1,895	1,858	-37	2,284	2,271	-13	2,322	2,279	-43
15 weeks and over	2,172	2,095	-77	1,989	1,905	-84	2,053	1,983	-70	1,863	1,813	-50
Unemployment rate												
Total, 16 years and over	4.7	4.7	0	5.2	5.2	0	5.0	5.1	0.1	4.8	4.8	0
16 to 19 years	16.5	16.7	0.2	19.0	19.2	0.2	16.6	16.9	.3	13.8	14.1	0.3
20 to 24 years	8.4	8.5	.1	8.5	8.5	0	7.9	7.9	0	8.0	8.1	.1
25 to 54 years	3.6	3.6	0	3.8	3.8	0	3.8	3.8	0	3.8	3.8	0
55 years and over	2.9	2.9	0	3.0	3.1	.1	3.2	3.2	0	3.3	3.2	-.1
Men, 16 years and over	4.4	4.4	0	5.0	5.0	0	4.7	4.7	0	4.4	4.4	0
20 years and over	3.7	3.7	0	3.9	3.9	0	3.8	3.8	0	3.7	3.7	0
Women, 16 years and over	5.1	5.1	0	5.4	5.4	0	5.4	5.5	.1	5.3	5.3	0
20 years and over	4.3	4.3	0	4.5	4.5	0	4.6	4.6	0	4.8	4.8	0
White	3.9	3.9	0	4.3	4.3	0	4.3	4.3	0	4.1	4.1	0
Black	10.0	10.1	.1	11.2	11.3	.1	10.4	10.5	.1	9.7	9.7	0
Hispanic origin	7.1	7.1	0	7.4	7.4	0	8.2	8.3	.1	7.2	7.3	.1

See note at end of table.

Table 1. Labor force estimates using old and new composite weights, January-December 1997, not seasonally adjusted—Continued

(Numbers in thousands)

Characteristic	September			October			November			December		
	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference	Old weights	New weights	Difference
Civilian labor force												
Total, 16 years and over	136,375	136,074	-301	136,665	136,329	-336	136,912	136,588	-324	136,742	136,443	-299
16 to 19 years	7,466	7,337	-129	7,528	7,443	-85	7,670	7,618	-52	7,558	7,542	-16
20 to 24 years	13,395	13,366	-29	13,401	13,339	-62	13,499	13,435	-64	13,505	13,474	-31
25 to 54 years	98,887	98,807	-80	98,890	98,811	-79	98,671	98,638	-33	98,664	98,618	-46
55 years and over	16,627	16,564	-63	16,846	16,736	-110	17,072	16,897	-175	17,015	16,810	-205
Men 16 years and over	73,068	72,946	-122	73,345	73,271	-74	73,426	73,308	-118	73,153	73,025	-128
20 years and over	69,204	69,161	-43	69,361	69,328	-33	69,455	69,368	-87	69,350	69,226	-124
Women, 16 years and over	63,307	63,128	-179	63,321	63,058	-263	63,486	63,280	-206	63,589	63,418	-171
20 years and over	59,705	59,576	-129	59,777	59,558	-219	59,787	59,602	-185	59,834	59,675	-159
White	114,614	114,365	-249	114,963	114,707	-256	115,098	114,810	-288	114,867	114,575	-292
Black	15,706	15,651	-55	15,624	15,538	-86	15,627	15,604	-23	15,685	15,669	-16
Hispanic origin	13,864	13,833	-31	14,002	13,986	-16	13,964	13,942	-22	13,986	13,979	-7
Employed												
Total, 16 years and over	129,972	129,645	-327	130,671	130,310	-361	130,999	130,639	-360	130,785	130,452	-333
16 to 19 years	6,285	6,151	-134	6,419	6,337	-82	6,552	6,489	-63	6,614	6,582	-32
20 to 24 years	12,293	12,261	-32	12,345	12,275	-70	12,431	12,360	-71	12,461	12,427	-34
25 to 54 years	95,258	95,163	-95	95,494	95,397	-97	95,398	95,345	-53	95,122	95,064	-58
55 years and over	16,135	16,070	-65	16,412	16,301	-111	16,618	16,445	-173	16,588	16,379	-209
Men, 16 years and over	69,890	69,753	-137	70,215	70,127	-88	70,328	70,192	-136	69,849	69,704	-145
20 years and over	66,648	66,591	-57	66,855	66,804	-51	66,951	66,849	-102	66,524	66,391	-133
Women, 16 years and over	60,082	59,892	-190	60,456	60,183	-273	60,670	60,447	-223	60,936	60,748	-188
20 years and over	57,038	56,903	-135	57,397	57,169	-228	57,495	57,302	-193	57,647	57,479	-168
White	110,018	109,753	-265	110,653	110,387	-266	110,913	110,602	-311	110,662	110,339	-323
Black	14,220	14,156	-64	14,208	14,112	-96	14,232	14,198	-34	14,248	14,230	-18
Hispanic origin	12,882	12,844	-38	12,953	12,935	-18	13,050	13,024	-26	12,998	12,977	-21
Multiple jobholders	7,838	8,031	193	8,139	8,332	193	8,156	8,428	272	8,108	8,379	271
Unemployed												
Total, 16 years and over	6,403	6,429	26	5,995	6,019	24	5,914	5,949	35	5,957	5,991	34
16 to 19 years	1,181	1,186	5	1,108	1,107	-1	1,118	1,129	11	944	959	15
20 to 24 years	1,102	1,105	3	1,057	1,064	7	1,068	1,075	7	1,044	1,047	3
25 to 54 years	3,628	3,644	16	3,396	3,414	18	3,273	3,293	20	3,542	3,554	12
55 years and over	492	494	2	433	434	1	454	452	-2	427	431	4
Men, 16 years and over	3,178	3,193	15	3,130	3,144	14	3,098	3,115	17	3,304	3,321	17
20 years and over	2,556	2,570	14	2,506	2,523	17	2,504	2,520	16	2,826	2,835	9
Women, 16 years and over	3,225	3,236	11	2,865	2,875	10	2,816	2,833	17	2,653	2,670	17
20 years and over	2,666	2,673	7	2,380	2,389	9	2,292	2,300	8	2,187	2,196	9
White	4,596	4,611	15	4,309	4,320	11	4,186	4,208	22	4,205	4,235	30
Black	1,487	1,495	8	1,416	1,427	11	1,395	1,406	11	1,437	1,438	1
Hispanic origin	982	989	7	1,049	1,051	2	914	918	4	987	1,002	15
Less than 5 weeks	2,525	2,629	104	2,362	2,457	95	2,295	2,409	114	2,243	2,327	84
5 to 14 weeks	1,896	1,885	-11	1,802	1,781	-21	1,943	1,922	-21	1,949	1,950	1
15 weeks and over	1,982	1,915	-67	1,830	1,781	-49	1,675	1,618	-57	1,765	1,713	-52
Unemployment rate												
Total, 16 years and over	4.7	4.7	0	4.4	4.4	0	4.3	4.4	0.1	4.4	4.4	0
16 to 19 years	15.8	16.2	0.4	14.7	14.9	0.2	14.6	14.8	.2	12.5	12.7	0.2
20 to 24 years	8.2	8.3	.1	7.9	8.0	.1	7.9	8.0	.1	7.7	7.8	.1
25 to 54 years	3.7	3.7	0	3.4	3.5	.1	3.3	3.3	0	3.6	3.6	0
55 years and over	3.0	3.0	0	2.6	2.6	0	2.7	2.7	0	2.5	2.6	.1
Men, 16 years and over	4.3	4.4	.1	4.3	4.3	0	4.2	4.2	0	4.5	4.5	0
20 years and over	3.7	3.7	0	3.6	3.6	0	3.6	3.6	0	4.1	4.1	0
Women, 16 years and over	5.1	5.1	0	4.5	4.6	.1	4.4	4.5	.1	4.2	4.2	0
20 years and over	4.5	4.5	0	4.0	4.0	0	3.8	3.9	.1	3.7	3.7	0
White	4.0	4.0	0	3.7	3.8	.1	3.6	3.7	.1	3.7	3.7	0
Black	9.5	9.6	.1	9.1	9.2	.1	8.9	9.0	.1	9.2	9.2	0
Hispanic origin	7.1	7.1	0	7.5	7.5	0	6.5	6.6	.1	7.1	7.2	.1

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. Detail may not sum to totals due to rounding.

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

(Numbers in thousands)

Category	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Labor force status													
Civilian noninstitutional population	202,285	202,389	202,513	202,674	202,832	203,000	203,166	203,364	203,570	203,767	203,941	204,098	204,238
Civilian labor force	135,729	135,689	136,115	136,043	136,060	136,206	136,294	136,404	136,439	136,406	136,864	137,169	137,493
Percent of population	67.1	67.0	67.2	67.1	67.1	67.1	67.1	67.1	67.0	66.9	67.1	67.2	67.3
Employed	128,541	128,515	129,035	129,275	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083
Percent of population	63.5	63.5	63.7	63.8	63.8	63.7	63.8	63.8	63.7	63.8	64.0	64.1	64.2
Unemployed	7,188	7,174	7,080	6,768	6,566	6,814	6,633	6,657	6,678	6,496	6,289	6,392	6,409
Not in labor force	66,556	66,700	66,398	66,631	66,772	66,794	66,872	66,960	67,131	67,361	67,077	66,929	66,745
Unemployment rates													
All workers	5.3	5.3	5.2	5.0	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7
Men, 20 years and over	4.5	4.4	4.4	4.2	3.9	4.2	4.1	4.1	4.1	4.1	3.9	4.1	3.8
Women, 20 years and over	4.7	4.7	4.7	4.4	4.5	4.4	4.3	4.3	4.3	4.1	4.0	4.0	4.4
Both sexes, 16 to 19 years	16.9	17.3	16.5	15.6	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1
White	4.5	4.5	4.4	4.2	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0
Black	10.7	11.0	10.5	9.9	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3
Hispanic origin	8.2	8.1	8.3	8.0	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9

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

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

(Numbers in thousands)

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P	Jan. ^P
Employment													
Total	120,909	121,162	121,344	121,671	121,834	122,056	122,440	122,492	122,792	123,083	123,512	123,867	124,225
Total private	101,380	101,615	101,799	102,092	102,269	102,417	102,721	102,688	103,078	103,334	103,749	104,095	104,444
Goods-producing industries	24,581	24,653	24,670	24,667	24,702	24,714	24,713	24,765	24,771	24,814	24,888	24,988	25,123
Mining	574	574	572	573	576	574	573	576	576	574	572	574	574
Construction	5,542	5,604	5,609	5,599	5,628	5,622	5,625	5,637	5,642	5,650	5,682	5,742	5,834
Manufacturing	18,465	18,475	18,489	18,495	18,498	18,518	18,514	18,555	18,553	18,590	18,634	18,672	18,715
Service-producing industries	96,328	96,509	96,674	97,004	97,132	97,342	97,727	97,727	98,021	98,269	98,624	98,879	99,102
Transportation and public utilities	6,351	6,376	6,405	6,421	6,431	6,434	6,443	6,289	6,473	6,497	6,495	6,470	6,519
Wholesale trade	6,570	6,593	6,611	6,622	6,630	6,634	6,664	6,675	6,687	6,712	6,729	6,746	6,776
Retail trade	21,917	21,922	21,945	22,029	22,026	22,079	22,159	22,189	22,215	22,258	22,403	22,472	22,496
Finance, insurance, and real estate	6,971	6,980	6,992	7,019	7,029	7,034	7,058	7,068	7,082	7,108	7,132	7,154	7,176
Services	34,990	35,091	35,176	35,334	35,451	35,522	35,684	35,702	35,850	35,945	36,102	36,265	36,354
Government	19,529	19,547	19,545	19,579	19,565	19,639	19,719	19,804	19,714	19,749	19,763	19,772	19,781
Over-the-month change													
Total	250	253	182	327	163	222	384	52	300	291	429	355	358
Total private	235	235	184	293	177	148	304	-33	390	256	415	346	349
Goods-producing industries	41	72	17	-3	35	12	-1	52	6	43	74	100	135
Mining	3	0	-2	1	3	-2	0	-1	3	-2	-2	2	0
Construction	21	62	5	-10	29	-6	3	12	5	8	32	60	92
Manufacturing	17	10	14	6	3	20	-4	41	-2	37	44	38	43
Service-producing industries	209	181	165	330	128	210	385	0	294	248	355	255	223
Transportation and public utilities	63	25	29	16	10	3	9	-154	184	24	-2	-25	49
Wholesale trade	11	23	18	11	8	4	30	11	12	25	17	17	30
Retail trade	5	5	23	84	-3	53	80	30	26	43	145	69	24
Finance, insurance, and real estate	9	9	12	27	10	5	24	10	14	26	24	22	22
Services	106	101	85	158	117	71	162	18	148	95	157	163	89
Government	15	18	-2	34	-14	74	80	85	-90	35	14	9	9
Hours of work¹													
Total private	34.4	34.8	34.8	34.5	34.5	34.6	34.4	34.6	34.5	34.5	34.8	34.6	34.8
Manufacturing	41.8	41.9	42.1	42.1	42.0	41.8	41.8	41.8	41.9	42.0	42.1	42.2	42.1
Overtime	4.7	4.7	4.9	4.9	4.8	4.6	4.7	4.7	4.7	4.8	4.9	4.9	4.9
Indexes of aggregate weekly hours (1982=100)¹													
Total private	138.2	140.0	140.2	139.6	140.0	140.6	140.2	140.8	140.9	141.2	142.9	142.5	143.4
Manufacturing	107.4	107.9	108.3	108.5	108.3	107.8	107.8	108.1	108.3	108.7	109.4	109.9	109.8
Earnings¹													
Average hourly earnings, total private:													
Current dollars	\$12.05	\$12.10	\$12.14	\$12.14	\$12.19	\$12.23	\$12.24	\$12.31	\$12.35	\$12.40	\$12.48	\$12.47	\$12.51
Constant (1982) dollars ²	7.46	7.47	7.49	7.49	7.52	7.54	7.53	7.56	7.56	7.58	7.62	7.61	N.A.
Average weekly earnings, total private	414.52	421.08	422.47	418.83	420.56	423.16	421.06	425.93	426.08	427.80	434.30	431.46	435.35

¹ Data relate to private production or nonsupervisory workers. N.A. = not available.
² The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series. ^P = preliminary.

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

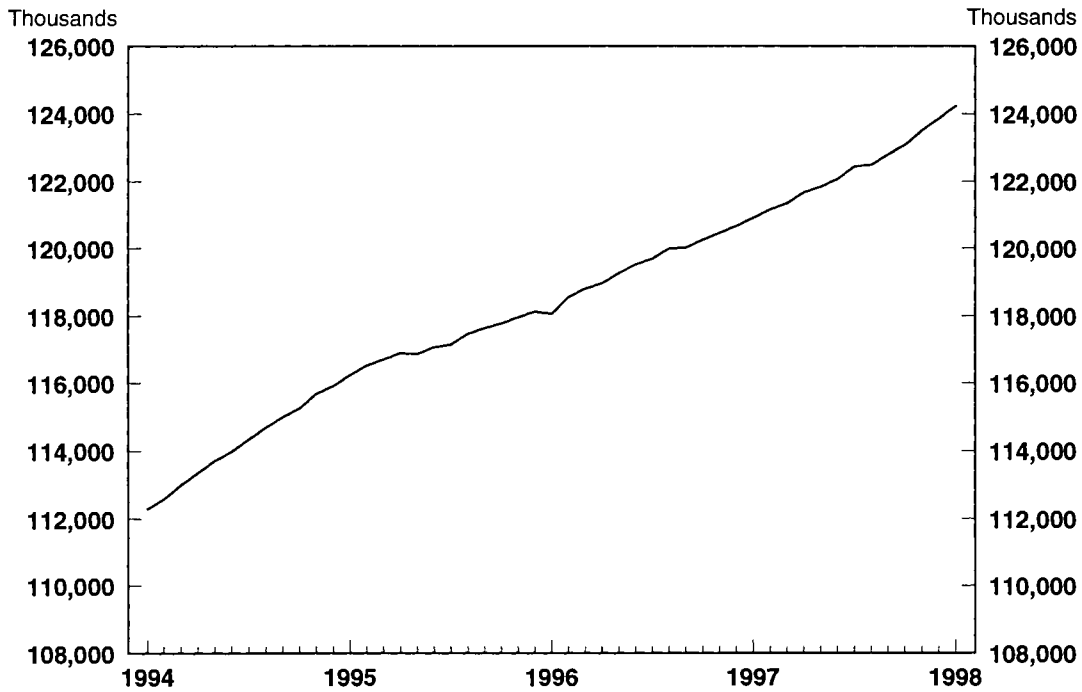
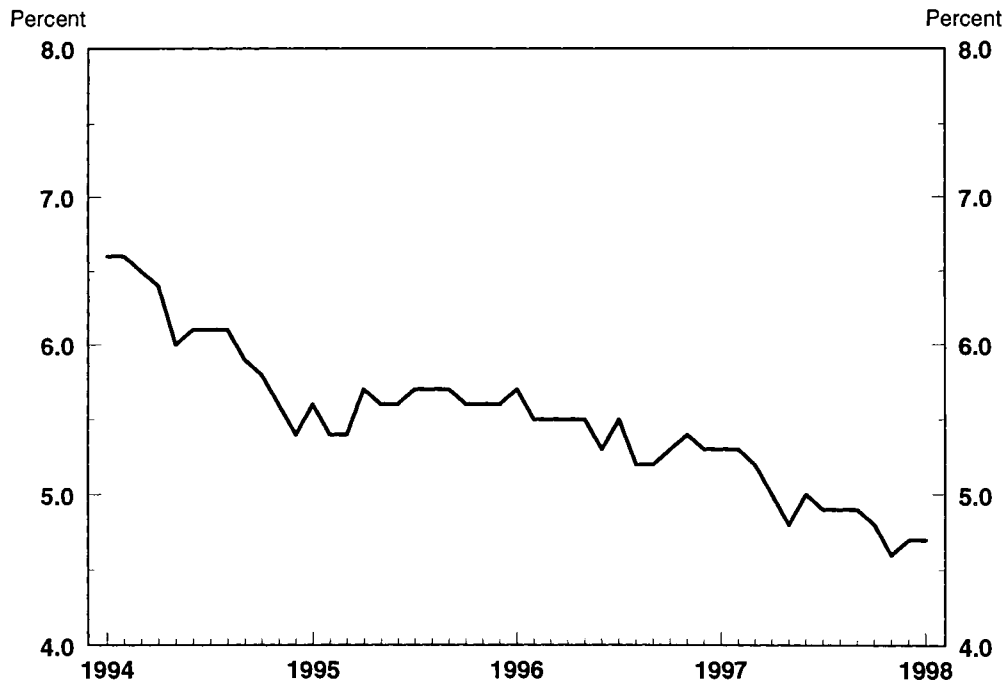


Chart 2. Unemployment rate, seasonally adjusted, 1994-98



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

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

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
1964	124,485	73,091	58.7	69,305	55.7	4,523	64,782	3,786	5.2	51,394
1965	126,513	74,455	58.9	71,088	56.2	4,361	66,726	3,366	4.5	52,058
1966	128,058	75,770	59.2	72,895	56.9	3,979	68,915	2,875	3.8	52,288
1967	129,874	77,347	59.6	74,372	57.3	3,844	70,527	2,975	3.8	52,527
1968	132,028	78,737	59.6	75,920	57.5	3,817	72,103	2,817	3.6	53,291
1969	134,335	80,734	60.1	77,902	58.0	3,606	74,296	2,832	3.5	53,602
1970	137,085	82,771	60.4	78,678	57.4	3,463	75,215	4,093	4.9	54,315
1971	140,216	84,382	60.2	79,367	56.6	3,394	75,972	5,016	5.9	55,834
1972 ¹	144,126	87,034	60.4	82,153	57.0	3,484	78,669	4,882	5.6	57,091
1973 ¹	147,096	89,429	60.8	85,064	57.8	3,470	81,594	4,365	4.9	57,667
1974	150,120	91,949	61.3	86,794	57.8	3,515	83,279	5,156	5.6	58,171
1975	153,153	93,775	61.2	85,846	56.1	3,408	82,438	7,929	8.5	59,377
1976	156,150	96,158	61.6	88,752	56.8	3,331	85,421	7,406	7.7	59,991
1977	159,033	99,009	62.3	92,017	57.9	3,283	88,734	6,991	7.1	60,025
1978 ¹	161,910	102,251	63.2	96,048	59.3	3,387	92,661	6,202	6.1	59,659
1979	164,863	104,962	63.7	98,824	59.9	3,347	95,477	6,137	5.8	59,900
1980	167,745	106,940	63.8	99,303	59.2	3,364	95,938	7,637	7.1	60,806
1981	170,130	108,670	63.9	100,397	59.0	3,368	97,030	8,273	7.6	61,460
1982	172,271	110,204	64.0	99,526	57.8	3,401	96,125	10,678	9.7	62,067
1983	174,215	111,550	64.0	100,834	57.9	3,383	97,450	10,717	9.6	62,665
1984	176,383	113,544	64.4	105,005	59.5	3,321	101,685	8,539	7.5	62,839
1985	178,206	115,461	64.8	107,150	60.1	3,179	103,971	8,312	7.2	62,744
1986 ¹	180,587	117,834	65.3	109,597	60.7	3,163	106,434	8,237	7.0	62,752
1987	182,753	119,865	65.6	112,440	61.5	3,208	109,232	7,425	6.2	62,888
1988	184,613	121,669	65.9	114,968	62.3	3,169	111,800	6,701	5.5	62,944
1989	186,393	123,869	66.5	117,342	63.0	3,199	114,142	6,528	5.3	62,523
1990 ¹	189,164	125,840	66.5	118,793	62.8	3,223	115,570	7,047	5.6	63,324
1991	190,925	126,346	66.2	117,718	61.7	3,269	114,449	8,628	6.8	64,578
1992	192,805	128,105	66.4	118,492	61.5	3,247	115,245	9,613	7.5	64,700
1993	194,838	129,200	66.3	120,259	61.7	3,115	117,144	8,940	6.9	65,638
1994 ¹	196,814	131,056	66.6	123,060	62.5	3,409	119,651	7,996	6.1	65,758
1995	198,584	132,304	66.6	124,900	62.9	3,440	121,460	7,404	5.6	66,280
1996	200,591	133,943	66.8	126,708	63.2	3,443	123,264	7,236	5.4	66,647
1997 ¹	203,133	136,297	67.1	129,558	63.8	3,399	126,159	6,739	4.9	66,837
Monthly data, seasonally adjusted ²										
1997:										
January	202,285	135,729	67.1	128,541	63.5	3,453	125,088	7,188	5.3	66,556
February	202,389	135,689	67.0	128,515	63.5	3,340	125,175	7,174	5.3	66,700
March	202,513	136,115	67.2	129,035	63.7	3,387	125,648	7,080	5.2	66,398
April	202,674	136,043	67.1	129,275	63.8	3,462	125,813	6,768	5.0	66,631
May	202,832	136,060	67.1	129,494	63.8	3,418	126,076	6,566	4.8	66,772
June	203,000	136,206	67.1	129,392	63.7	3,389	126,003	6,814	5.0	66,794
July	203,166	136,294	67.1	129,661	63.8	3,452	126,209	6,633	4.9	66,872
August	203,364	136,404	67.1	129,747	63.8	3,379	126,368	6,657	4.9	66,960
September	203,570	136,439	67.0	129,761	63.7	3,422	126,339	6,678	4.9	67,131
October	203,767	136,406	66.9	129,910	63.8	3,327	126,583	6,496	4.8	67,361
November	203,941	136,864	67.1	130,575	64.0	3,384	127,191	6,289	4.6	67,077
December	204,098	137,169	67.2	130,777	64.1	3,385	127,392	6,392	4.7	66,929
1998:										
January ³	204,238	137,493	67.3	131,083	64.2	3,319	127,764	6,409	4.7	66,745

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

² The population figures are not adjusted for seasonal variation.

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

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

**HOUSEHOLD DATA
HISTORICAL**

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

(Numbers in thousands)

Sex, year, and month	Civilian noninsti- tutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Number	Percent of labor force	
				Number	Percent of population	Agriculture	Nonagricultural industries			
Annual averages										
MEN										
1986 ¹	85,798	65,422	76.3	60,892	71.0	2,511	58,381	4,530	6.9	20,376
1987	86,899	66,207	76.2	62,107	71.5	2,543	59,564	4,101	6.2	20,692
1988	87,857	66,927	76.2	63,273	72.0	2,493	60,780	3,655	5.5	20,930
1989	88,762	67,840	76.4	64,315	72.5	2,513	61,802	3,525	5.2	20,923
1990 ¹	90,377	69,011	76.4	65,104	72.0	2,546	62,559	3,906	5.7	21,367
1991	91,278	69,168	75.8	64,223	70.4	2,589	61,634	4,946	7.2	22,110
1992	92,270	69,964	75.8	64,440	69.8	2,575	61,866	5,523	7.9	22,306
1993	93,332	70,404	75.4	65,349	70.0	2,478	62,871	5,055	7.2	22,927
1994 ¹	94,355	70,817	75.1	66,450	70.4	2,554	63,896	4,367	6.2	23,538
1995	95,178	71,360	75.0	67,377	70.8	2,559	64,818	3,983	5.6	23,818
1996	96,206	72,087	74.9	68,207	70.9	2,573	65,634	3,880	5.4	24,119
1997 ¹	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
Monthly data, seasonally adjusted ²										
1997:										
January	97,264	73,052	75.1	69,209	71.2	2,612	66,597	3,843	5.3	24,212
February	97,320	73,001	75.0	69,248	71.2	2,521	66,727	3,753	5.1	24,319
March	97,387	73,164	75.1	69,415	71.3	2,577	66,838	3,749	5.1	24,223
April	97,474	73,184	75.1	69,565	71.4	2,641	66,924	3,619	4.9	24,290
May	97,559	73,089	74.9	69,765	71.5	2,610	67,155	3,324	4.5	24,470
June	97,649	73,225	75.0	69,586	71.3	2,583	67,003	3,639	5.0	24,424
July	97,733	73,218	74.9	69,711	71.3	2,572	67,139	3,507	4.8	24,515
August	97,838	73,265	74.9	69,748	71.3	2,504	67,244	3,517	4.8	24,573
September	97,946	73,192	74.7	69,656	71.1	2,552	67,104	3,536	4.8	24,754
October	98,050	73,311	74.8	69,785	71.2	2,468	67,317	3,526	4.8	24,739
November	98,141	73,682	75.1	70,352	71.7	2,503	67,849	3,330	4.5	24,459
December	98,225	73,662	75.0	70,195	71.5	2,497	67,698	3,467	4.7	24,563
1998:										
January ³	98,241	73,852	75.2	70,518	71.8	2,463	68,056	3,333	4.5	24,389
Annual averages										
WOMEN										
1986 ¹	94,789	52,413	55.3	48,706	51.4	652	48,054	3,707	7.1	42,376
1987	95,853	53,658	56.0	50,334	52.5	666	49,668	3,324	6.2	42,195
1988	96,758	54,742	56.6	51,696	53.4	676	51,020	3,046	5.6	42,014
1989	97,630	56,030	57.4	53,027	54.3	687	52,341	3,003	5.4	41,601
1990 ¹	98,787	56,829	57.5	53,689	54.3	678	53,011	3,140	5.5	41,957
1991	99,646	57,178	57.4	53,496	53.7	680	52,815	3,683	6.4	42,468
1992	100,535	58,141	57.8	54,052	53.8	672	53,380	4,090	7.0	42,394
1993	101,506	58,795	57.9	54,910	54.1	637	54,273	3,885	6.6	42,711
1994 ¹	102,460	60,239	58.8	56,610	55.3	855	55,755	3,629	6.0	42,221
1995	103,408	60,944	58.9	57,523	55.6	881	56,642	3,421	5.6	42,462
1996	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997 ¹	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
Monthly data, seasonally adjusted ²										
1997:										
January	105,022	62,677	59.7	59,332	56.5	841	58,491	3,345	5.3	42,345
February	105,068	62,688	59.7	59,267	56.4	819	58,448	3,421	5.5	42,380
March	105,127	62,951	59.9	59,620	56.7	810	58,810	3,331	5.3	42,176
April	105,200	62,859	59.8	59,710	56.8	821	58,889	3,149	5.0	42,341
May	105,274	62,971	59.8	59,729	56.7	808	58,921	3,242	5.1	42,303
June	105,351	62,981	59.8	59,806	56.8	806	59,000	3,175	5.0	42,370
July	105,433	63,076	59.8	59,950	56.9	880	59,070	3,126	5.0	42,357
August	105,527	63,139	59.8	59,999	56.9	875	59,124	3,140	5.0	42,388
September	105,623	63,247	59.9	60,105	56.9	870	59,235	3,142	5.0	42,376
October	105,718	63,095	59.7	60,125	56.9	859	59,266	2,970	4.7	42,623
November	105,799	63,182	59.7	60,223	56.9	881	59,342	2,959	4.7	42,617
December	105,873	63,507	60.0	60,582	57.2	888	59,694	2,925	4.6	42,366
1998:										
January ³	105,997	63,641	60.0	60,565	57.1	856	59,709	3,076	4.8	42,356

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

² The population figures are not adjusted for seasonal variation.

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

earlier years because of the introduction of new composite estimation procedures and revisions in the population controls used in the household survey. For additional information, see "Revisions in the Current Population Survey Effective January 1998" in the February 1996 issue of this publication.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
WHITE													
Civilian noninstitutional population ¹ ..	169,436	169,492	169,569	169,675	169,782	169,897	170,010	170,148	170,290	170,427	170,545	170,649	170,810
Civilian labor force	114,311	114,326	114,597	114,567	114,562	114,659	114,622	114,669	114,758	114,784	115,073	115,263	115,253
Percent of population	67.5	67.5	67.6	67.5	67.5	67.5	67.4	67.4	67.4	67.4	67.5	67.5	67.5
Employed	109,154	109,211	109,528	109,721	109,906	109,779	109,851	109,832	109,904	110,063	110,604	110,729	110,698
Employment-population ratio	64.4	64.4	64.6	64.7	64.7	64.6	64.6	64.6	64.5	64.6	64.9	64.9	64.8
Unemployed	5,157	5,115	5,069	4,846	4,656	4,880	4,771	4,837	4,854	4,721	4,469	4,534	4,555
Unemployment rate	4.5	4.5	4.4	4.2	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0
Men, 20 years and over													
Civilian labor force	58,999	58,961	59,083	59,123	59,001	59,086	59,096	59,118	59,110	59,098	59,355	59,389	59,262
Percent of population	77.6	77.5	77.6	77.6	77.4	77.5	77.4	77.4	77.3	77.2	77.5	77.5	77.3
Employed	56,681	56,713	56,867	56,976	57,033	56,967	57,011	57,011	56,989	56,966	57,363	57,272	57,336
Employment-population ratio	74.5	74.6	74.7	74.8	74.8	74.7	74.7	74.6	74.5	74.4	74.9	74.7	74.8
Unemployed	2,318	2,248	2,216	2,147	1,968	2,119	2,085	2,107	2,121	2,132	1,992	2,117	1,926
Unemployment rate	3.9	3.8	3.8	3.6	3.3	3.6	3.5	3.6	3.6	3.6	3.4	3.6	3.3
Women, 20 years and over													
Civilian labor force	48,626	48,625	48,793	48,686	48,845	48,877	48,790	48,910	48,955	48,976	48,906	49,134	49,077
Percent of population	59.8	59.8	60.0	59.8	60.0	60.0	59.9	60.0	60.0	60.0	59.9	60.1	60.0
Employed	46,731	46,743	46,885	46,896	47,022	47,077	47,072	47,122	47,165	47,284	47,265	47,474	47,250
Employment-population ratio	57.5	57.5	57.6	57.6	57.8	57.8	57.8	57.8	57.8	57.9	57.8	58.1	57.7
Unemployed	1,895	1,882	1,908	1,790	1,823	1,800	1,718	1,788	1,790	1,692	1,641	1,660	1,827
Unemployment rate	3.9	3.9	3.9	3.7	3.7	3.7	3.5	3.7	3.7	3.5	3.4	3.4	3.7
Both sexes, 16 to 19 years													
Civilian labor force	6,686	6,740	6,721	6,758	6,716	6,696	6,736	6,641	6,693	6,710	6,812	6,740	6,914
Percent of population	55.1	55.6	55.4	55.7	55.3	55.0	55.3	54.4	54.8	54.9	55.6	55.0	56.3
Employed	5,742	5,755	5,776	5,849	5,851	5,735	5,768	5,699	5,750	5,813	5,976	5,983	6,113
Employment-population ratio	47.4	47.5	47.6	48.2	48.2	47.1	47.3	46.7	47.0	47.5	48.8	48.8	49.8
Unemployed	944	985	945	909	865	961	968	942	943	897	836	757	802
Unemployment rate	14.1	14.6	14.1	13.5	12.9	14.4	14.4	14.2	14.1	13.4	12.3	11.2	11.6
Men	15.1	14.8	15.1	14.6	13.0	15.8	15.0	15.1	14.4	14.3	12.8	11.3	14.2
Women	13.1	14.4	13.0	12.2	12.7	12.8	13.7	13.1	13.7	12.3	11.6	11.1	8.8
BLACK													
Civilian noninstitutional population ¹ ..	23,847	23,872	23,895	23,923	23,950	23,978	24,006	24,043	24,081	24,117	24,149	24,180	24,196
Civilian labor force	15,380	15,420	15,438	15,389	15,424	15,426	15,524	15,728	15,691	15,555	15,638	15,709	15,788
Percent of population	64.5	64.6	64.6	64.3	64.4	64.3	64.7	65.4	65.2	64.5	64.8	65.0	65.3
Employed	13,736	13,722	13,816	13,864	13,837	13,836	14,040	14,237	14,180	14,067	14,128	14,149	14,316
Employment-population ratio	57.6	57.5	57.8	58.0	57.8	57.7	58.5	59.2	58.9	58.3	58.5	58.5	59.2
Unemployed	1,644	1,698	1,622	1,525	1,587	1,590	1,484	1,491	1,511	1,488	1,510	1,560	1,472
Unemployment rate	10.7	11.0	10.5	9.9	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3
Men, 20 years and over													
Civilian labor force	6,839	6,794	6,823	6,832	6,851	6,925	6,946	7,035	6,978	6,945	6,965	6,957	7,012
Percent of population	71.9	71.3	71.8	71.7	71.7	72.4	72.5	73.3	72.6	72.3	72.1	72.0	72.6
Employed	6,225	6,194	6,214	6,256	6,273	6,305	6,371	6,480	6,424	6,367	6,420	6,356	6,456
Employment-population ratio	65.5	65.0	65.4	65.7	65.7	65.9	66.5	67.5	66.8	66.3	66.5	65.8	66.9
Unemployed	614	600	609	576	578	620	575	555	554	578	545	601	556
Unemployment rate	9.0	8.8	8.9	8.4	8.4	9.0	8.3	7.9	7.9	8.3	7.8	8.6	7.9
Women, 20 years and over													
Civilian labor force	7,580	7,635	7,636	7,641	7,671	7,617	7,691	7,771	7,790	7,680	7,731	7,791	7,799
Percent of population	63.5	63.9	63.8	63.8	63.9	63.5	64.1	64.6	64.6	63.6	63.9	64.4	64.3
Employed	6,878	6,870	6,937	6,984	6,968	6,932	7,048	7,115	7,135	7,044	7,080	7,163	7,178
Employment-population ratio	57.6	57.5	58.0	58.3	58.1	57.8	58.7	59.1	59.2	58.3	58.6	59.2	59.2
Unemployed	702	765	699	657	703	685	643	656	655	636	651	628	621
Unemployment rate	9.3	10.0	9.2	8.6	9.2	9.0	8.4	8.4	8.4	8.3	8.4	8.1	8.0

See footnotes at end of table.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	961	991	979	916	902	884	887	922	923	930	942	961	977
Percent of population	40.1	41.4	40.4	37.9	37.5	36.5	36.7	38.3	38.3	38.2	39.2	39.8	40.5
Employed	633	658	665	624	596	599	621	642	621	656	628	630	683
Employment-population ratio	26.4	27.5	27.4	25.8	24.8	24.7	25.7	26.6	25.8	26.9	26.1	26.1	28.3
Unemployed	328	333	314	292	306	285	266	280	302	274	314	331	294
Unemployment rate	34.1	33.6	32.1	31.9	33.9	32.2	30.0	30.4	32.7	29.5	33.3	34.4	30.1
Men	40.9	36.8	40.5	37.7	34.5	39.1	34.6	33.9	37.6	30.1	35.0	36.2	31.8
Women	27.7	30.4	24.6	26.3	33.3	25.5	25.9	27.2	28.6	28.8	31.9	33.1	28.5
HISPANIC ORIGIN													
Civilian noninstitutional population ¹ ..	20,013	20,067	20,119	20,180	20,236	20,293	20,351	20,407	20,464	20,519	20,575	20,629	20,741
Civilian labor force	13,669	13,634	13,666	13,601	13,760	13,814	13,861	13,886	13,861	13,896	13,880	13,973	13,954
Percent of population	68.3	67.9	67.9	67.4	68.0	68.1	68.1	68.0	67.7	67.7	67.5	67.7	67.3
Employed	12,554	12,529	12,533	12,514	12,713	12,751	12,772	12,867	12,807	12,806	12,921	12,921	12,988
Employment-population ratio	62.7	62.4	62.3	62.0	62.8	62.8	63.1	62.6	62.4	62.8	62.8	62.6	62.6
Unemployed	1,115	1,105	1,133	1,087	1,047	1,063	1,089	1,019	1,054	1,090	959	1,052	966
Unemployment rate	8.2	8.1	8.3	8.0	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9

¹ The population figures are not adjusted for seasonal variation.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics

are included in both the white and black population groups. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**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	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Less than a high school diploma													
Civilian noninstitutional population ¹	30,477	30,140	30,190	30,086	30,198	29,924	29,288	29,314	29,350	29,046	29,505	29,566	29,981
Civilian labor force	12,666	12,530	12,629	12,543	12,590	12,608	12,554	12,534	12,555	12,468	12,511	12,555	12,682
Percent of population	41.6	41.6	41.8	41.7	41.7	42.1	42.9	42.8	42.8	42.9	42.4	42.5	42.3
Employed	11,533	11,433	11,572	11,513	11,556	11,575	11,579	11,573	11,548	11,502	11,575	11,606	11,771
Employment-population ratio	37.8	37.9	38.3	38.3	38.3	38.7	39.5	39.5	39.3	39.6	39.2	39.3	39.3
Unemployed	1,133	1,097	1,057	1,030	1,034	1,033	975	961	1,007	966	936	949	911
Unemployment rate	8.9	8.8	8.4	8.2	8.2	8.2	7.8	7.7	8.0	7.7	7.5	7.6	7.2
High school graduates, no college²													
Civilian noninstitutional population ¹	57,422	57,172	57,148	57,239	57,392	57,643	57,581	57,607	57,483	57,459	57,310	57,631	57,606
Civilian labor force	37,832	37,778	37,776	37,687	37,669	37,826	37,987	37,842	37,585	37,759	37,641	37,827	37,787
Percent of population	65.9	66.1	66.1	65.8	65.6	65.6	66.0	65.7	65.4	65.7	65.7	65.6	65.6
Employed	36,157	36,075	36,115	36,098	36,097	36,174	36,382	36,225	36,003	36,179	36,193	36,287	36,303
Employment-population ratio	63.0	63.1	63.2	63.1	62.9	62.8	63.2	62.9	62.6	63.0	63.2	63.0	63.0
Unemployed	1,675	1,703	1,661	1,589	1,572	1,652	1,605	1,617	1,582	1,580	1,448	1,540	1,485
Unemployment rate	4.4	4.5	4.4	4.2	4.2	4.4	4.2	4.3	4.2	4.2	3.8	4.1	3.9
Less than a bachelor's degree³													
Civilian noninstitutional population ¹	41,145	41,699	41,675	41,528	41,648	41,747	42,322	42,401	42,075	42,613	42,417	42,085	41,718
Civilian labor force	31,229	31,240	31,306	31,192	31,279	31,333	31,227	31,445	31,401	31,328	31,544	31,506	31,440
Percent of population	75.9	74.9	75.1	75.1	75.1	75.1	73.8	74.2	74.6	73.5	74.4	74.9	75.4
Employed	30,125	30,153	30,179	30,153	30,342	30,316	30,239	30,438	30,382	30,410	30,574	30,484	30,429
Employment-population ratio	73.2	72.3	72.4	72.6	72.9	72.6	71.4	71.8	72.2	71.4	72.1	72.4	72.9
Unemployed	1,104	1,087	1,127	1,039	937	1,017	988	1,007	1,019	918	970	1,022	1,011
Unemployment rate	3.5	3.5	3.6	3.3	3.0	3.2	3.2	3.2	3.2	2.9	3.1	3.2	3.2
College graduates													
Civilian noninstitutional population ¹	40,447	40,682	40,874	41,099	40,909	40,955	41,171	41,232	41,769	41,696	41,739	41,822	41,974
Civilian labor force	32,558	32,604	32,817	33,135	32,971	33,036	33,159	33,290	33,577	33,510	33,505	33,678	33,685
Percent of population	80.5	80.1	80.3	80.6	80.6	80.7	80.5	80.7	80.4	80.4	80.3	80.5	80.3
Employed	31,868	31,919	32,138	32,477	32,265	32,356	32,474	32,592	32,891	32,868	32,916	33,083	33,040
Employment-population ratio	78.8	78.5	78.6	79.0	78.9	79.0	78.9	79.0	78.7	78.8	78.9	79.1	78.7
Unemployed	690	685	679	658	706	680	685	698	686	642	589	595	645
Unemployment rate	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.8	1.9

¹ The population figures are not adjusted for seasonal variation.

² Includes high school diploma or equivalent.

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Full- and part-time status, sex, and age	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
EMPLOYED													
Full-time workers	105,116	105,111	105,631	105,862	106,095	106,343	106,548	106,672	106,926	106,824	107,491	107,452	107,777
Men, 16 years and over	61,620	61,813	61,728	62,055	62,160	62,245	62,332	62,376	62,487	62,439	63,014	62,829	62,909
Men, 20 years and over	60,397	60,589	60,423	60,767	60,863	60,976	61,038	61,101	61,197	61,142	61,672	61,505	61,652
Women, 16 years and over	43,420	43,243	43,867	43,778	43,912	44,146	44,304	44,375	44,436	44,369	44,452	44,589	44,741
Women, 20 years and over	42,578	42,375	42,952	42,943	43,085	43,281	43,364	43,468	43,518	43,479	43,546	43,691	43,856
Both sexes, 16 to 19 years	2,141	2,147	2,256	2,152	2,147	2,086	2,146	2,103	2,211	2,203	2,273	2,256	2,268
Part-time workers	23,458	23,281	23,411	23,322	23,327	22,987	23,016	23,061	23,004	23,163	23,244	23,422	23,373
Men, 16 years and over	7,474	7,333	7,640	7,439	7,487	7,323	7,375	7,436	7,348	7,401	7,432	7,459	7,469
Men, 20 years and over	5,393	5,150	5,532	5,378	5,326	5,260	5,323	5,355	5,278	5,255	5,226	5,257	5,273
Women, 16 years and over	15,943	15,947	15,802	15,899	15,816	15,689	15,628	15,623	15,652	15,766	15,802	16,014	15,833
Women, 20 years and over	13,584	13,610	13,369	13,405	13,400	13,280	13,290	13,291	13,366	13,432	13,447	13,559	13,258
Both sexes, 16 to 19 years	4,481	4,521	4,510	4,539	4,601	4,447	4,403	4,415	4,360	4,476	4,571	4,606	4,842
UNEMPLOYED													
Looking for full-time work	5,774	5,662	5,670	5,375	5,300	5,480	5,329	5,305	5,309	5,215	4,987	5,203	5,075
Men, 16 years and over	3,197	3,099	3,110	2,986	2,855	3,164	2,961	2,958	2,984	2,991	2,834	2,994	2,645
Men, 20 years and over	2,829	2,759	2,746	2,651	2,487	2,669	2,585	2,568	2,571	2,600	2,466	2,689	2,438
Women, 16 years and over	2,522	2,521	2,521	2,410	2,472	2,395	2,344	2,369	2,361	2,254	2,205	2,220	2,296
Women, 20 years and over	2,229	2,226	2,262	2,140	2,162	2,125	2,102	2,116	2,069	1,979	1,905	1,914	2,102
Both sexes, 16 to 19 years	716	677	662	584	651	686	642	621	669	636	616	600	536
Looking for part-time work	1,415	1,463	1,411	1,394	1,303	1,296	1,305	1,346	1,328	1,288	1,329	1,238	1,339
Men, 16 years and over	592	582	585	639	519	542	558	577	561	570	551	502	549
Men, 20 years and over	261	249	259	256	193	227	219	233	245	263	226	220	206
Women, 16 years and over	809	903	805	768	788	772	766	752	751	705	779	753	760
Women, 20 years and over	520	541	483	486	496	474	445	459	458	440	499	462	505
Both sexes, 16 to 19 years	634	673	669	652	614	595	641	654	625	585	604	556	627
UNEMPLOYMENT RATES¹													
Full-time workers	5.2	5.1	5.1	4.8	4.8	4.9	4.8	4.7	4.7	4.7	4.4	4.6	4.5
Men, 16 years and over	4.9	4.8	4.8	4.6	4.4	4.8	4.5	4.5	4.6	4.6	4.3	4.5	4.0
Men, 20 years and over	4.5	4.4	4.3	4.2	3.9	4.2	4.1	4.0	4.0	4.1	3.8	4.2	3.8
Women, 16 years and over	5.5	5.5	5.4	5.2	5.3	5.1	5.0	5.1	5.0	4.8	4.7	4.7	4.9
Women, 20 years and over	5.0	5.0	5.0	4.7	4.8	4.7	4.6	4.6	4.5	4.4	4.2	4.2	4.6
Both sexes, 16 to 19 years	25.1	24.0	22.7	21.3	23.3	24.7	23.0	22.8	23.2	22.4	21.3	21.0	19.1
Part-time workers	5.7	5.9	5.7	5.6	5.3	5.3	5.4	5.5	5.5	5.3	5.4	5.0	5.4
Men, 16 years and over	7.3	7.4	7.1	7.9	6.5	6.9	7.0	7.2	7.1	7.2	6.9	6.3	6.8
Men, 20 years and over	4.6	4.6	4.5	4.5	3.5	4.1	4.0	4.2	4.4	4.8	4.1	4.0	3.8
Women, 16 years and over	4.8	5.4	4.8	4.6	4.7	4.7	4.7	4.6	4.6	4.3	4.7	4.5	4.6
Women, 20 years and over	3.7	3.8	3.5	3.5	3.6	3.4	3.2	3.3	3.3	3.2	3.6	3.3	3.7
Both sexes, 16 to 19 years	12.4	13.0	12.9	12.6	11.8	11.8	12.7	12.9	12.5	11.6	11.7	10.8	11.5

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Category	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
MARITAL STATUS													
Total	128,541	128,515	129,035	129,275	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083
Married men, spouse present	42,815	42,489	42,502	42,426	42,375	42,476	42,582	42,680	42,648	42,771	42,967	42,952	42,977
Married women, spouse present	32,717	32,597	32,690	32,549	32,520	32,654	32,813	32,861	32,846	32,978	32,840	32,975	32,793
Women who maintain families	7,536	7,585	7,696	7,790	7,820	7,820	7,875	7,892	7,876	7,865	7,726	7,822	7,784
OCCUPATION													
Managerial and professional specialty	37,416	37,462	37,618	37,571	37,356	37,549	37,598	37,765	37,860	37,844	37,986	38,205	38,099
Technical, sales, and administrative support	38,082	38,073	38,153	38,143	38,304	38,188	38,240	38,334	38,535	38,537	38,540	38,562	38,382
Service occupations	17,206	17,239	17,319	17,326	17,418	17,450	17,550	17,713	17,746	17,723	17,827	17,890	18,162
Precision production, craft, and repair	13,878	14,068	14,138	14,216	14,279	14,282	14,234	14,038	13,859	14,051	14,191	14,299	14,285
Operators, fabricators, and laborers	18,304	18,220	18,267	18,382	18,593	18,540	18,476	18,452	18,302	18,385	18,467	18,394	18,622
Farming, forestry, and fishing	3,519	3,439	3,513	3,572	3,612	3,502	3,531	3,442	3,483	3,438	3,512	3,472	3,355
CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,955	1,912	1,901	1,952	1,917	1,912	1,897	1,853	1,889	1,815	1,855	1,844	1,949
Self-employed workers	1,444	1,373	1,433	1,438	1,442	1,429	1,478	1,477	1,495	1,475	1,493	1,496	1,348
Unpaid family workers	60	18	59	62	52	47	52	50	44	55	49	54	44
Nonagricultural industries:													
Wage and salary workers	115,431	115,949	116,413	116,515	116,874	116,642	117,146	117,372	117,303	117,635	118,083	118,403	118,529
Private industries	97,184	97,805	98,346	98,467	99,011	98,529	98,843	99,169	99,194	99,560	99,913	100,155	100,108
Private households	985	894	882	923	948	888	911	935	877	877	910	946	985
Other industries	96,199	96,911	97,464	97,544	98,063	97,641	97,932	98,234	98,317	98,683	99,003	99,209	99,123
Government	18,247	18,144	18,067	18,048	17,863	18,113	18,303	18,203	18,109	18,075	18,170	18,248	18,421
Self-employed workers	9,399	9,112	9,219	9,124	9,098	9,089	8,927	8,955	8,949	8,930	9,004	8,886	8,964
Unpaid family workers	168	136	109	133	142	128	129	126	83	92	97	99	131
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	4,319	4,250	4,162	4,360	4,060	4,049	4,019	3,988	3,928	3,913	3,890	3,855	4,082
Slack work or business conditions	2,391	2,365	2,340	2,402	2,295	2,347	2,236	2,164	2,187	2,211	2,221	2,230	2,282
Could only find part-time work	1,564	1,550	1,519	1,625	1,440	1,373	1,489	1,487	1,455	1,406	1,386	1,323	1,400
Part time for noneconomic reasons	18,210	18,061	18,144	18,155	18,218	18,205	18,055	18,096	17,901	18,113	18,083	18,386	18,515
Nonagricultural industries:													
Part time for economic reasons	4,099	4,075	3,957	4,204	3,853	3,819	3,858	3,832	3,739	3,732	3,689	3,654	3,865
Slack work or business conditions	2,273	2,259	2,210	2,279	2,166	2,202	2,121	2,066	2,067	2,103	2,100	2,113	2,162
Could only find part-time work	1,527	1,521	1,484	1,599	1,402	1,320	1,462	1,455	1,417	1,378	1,346	1,291	1,373
Part time for noneconomic reasons	17,575	17,461	17,559	17,588	17,654	17,577	17,452	17,521	17,381	17,537	17,486	17,791	17,898

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

holidays, illness, and bad weather.

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total, 16 years and over	128,541	128,515	129,035	129,275	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083
16 to 24 years	18,920	18,965	19,022	19,069	19,191	18,919	19,017	18,855	19,013	19,002	19,257	19,304	19,574
16 to 19 years	6,607	6,634	6,682	6,720	6,697	6,559	6,607	6,572	6,580	6,654	6,798	6,846	7,035
16 to 17 years	2,644	2,672	2,648	2,702	2,615	2,628	2,622	2,567	2,640	2,680	2,680	2,676	2,843
18 to 19 years	3,943	3,966	4,025	4,010	4,105	3,943	3,982	3,976	3,936	3,976	4,118	4,176	4,193
20 to 24 years	12,313	12,331	12,340	12,349	12,494	12,360	12,410	12,283	12,433	12,348	12,459	12,458	12,539
25 years and over	109,644	109,492	110,007	110,241	110,337	110,487	110,610	110,858	110,831	110,964	111,251	111,445	111,463
25 to 54 years	93,876	93,759	94,009	94,225	94,225	94,540	94,717	94,910	94,772	94,707	94,859	94,941	95,125
55 years and over	15,780	15,772	15,999	15,929	16,031	15,892	15,934	16,063	16,104	16,220	16,417	16,523	16,367
Men, 16 years and over	69,209	69,248	69,415	69,565	69,765	69,586	69,711	69,748	69,656	69,785	70,352	70,195	70,518
16 to 24 years	9,926	9,938	9,918	9,943	10,134	9,904	9,929	9,895	9,880	9,889	10,070	10,010	10,178
16 to 19 years	3,353	3,388	3,384	3,367	3,456	3,328	3,350	3,362	3,358	3,448	3,528	3,519	3,510
16 to 17 years	1,319	1,371	1,343	1,349	1,338	1,338	1,331	1,339	1,360	1,398	1,401	1,377	1,472
18 to 19 years	2,019	2,019	2,034	2,016	2,126	2,001	2,007	1,996	1,980	2,075	2,128	2,151	2,041
20 to 24 years	6,573	6,550	6,534	6,576	6,678	6,576	6,579	6,533	6,522	6,441	6,542	6,491	6,668
25 years and over	59,270	59,293	59,479	59,599	59,639	59,671	59,781	59,850	59,877	59,952	60,234	60,168	60,288
25 to 54 years	50,468	50,488	50,549	50,652	50,680	50,772	50,858	50,906	50,871	50,867	51,125	51,034	51,235
55 years and over	8,795	8,786	8,928	8,921	8,958	8,858	8,932	9,007	9,009	9,060	9,152	9,151	9,048
Women, 16 years and over	59,332	59,267	59,620	59,710	59,729	59,806	59,950	59,999	60,105	60,125	60,223	60,582	60,565
16 to 24 years	8,994	9,027	9,104	9,126	9,057	9,015	9,088	8,960	9,133	9,113	9,187	9,294	9,396
16 to 19 years	3,254	3,246	3,298	3,353	3,241	3,231	3,257	3,210	3,222	3,206	3,270	3,327	3,525
16 to 17 years	1,325	1,301	1,305	1,353	1,277	1,290	1,291	1,228	1,280	1,282	1,279	1,299	1,371
18 to 19 years	1,924	1,947	1,991	1,994	1,979	1,942	1,975	1,980	1,956	1,901	1,990	2,025	2,152
20 to 24 years	5,740	5,781	5,806	5,773	5,816	5,784	5,831	5,750	5,911	5,907	5,917	5,967	5,871
25 years and over	50,374	50,199	50,528	50,642	50,698	50,816	50,829	51,008	50,954	51,012	51,017	51,277	51,175
25 to 54 years	43,408	43,271	43,460	43,573	43,545	43,768	43,859	44,004	43,901	43,840	43,734	43,907	43,890
55 years and over	6,985	6,986	7,071	7,008	7,073	7,034	7,002	7,056	7,095	7,160	7,265	7,372	7,319

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total, 16 years and over	7,188	7,174	7,080	6,768	6,566	6,814	6,633	6,657	6,678	6,496	6,289	6,392	6,409
16 to 24 years	2,591	2,578	2,522	2,434	2,361	2,426	2,350	2,393	2,408	2,375	2,360	2,300	2,371
16 to 19 years	1,341	1,392	1,323	1,241	1,244	1,295	1,284	1,272	1,291	1,221	1,218	1,138	1,154
16 to 17 years	571	648	622	610	586	550	571	559	631	568	574	576	596
18 to 19 years	762	713	705	632	664	743	729	722	669	654	646	555	549
20 to 24 years	1,250	1,186	1,199	1,193	1,117	1,131	1,066	1,121	1,117	1,154	1,142	1,162	1,218
25 years and over	4,564	4,592	4,547	4,287	4,249	4,371	4,245	4,296	4,304	4,122	3,923	4,149	4,019
25 to 54 years	4,084	4,101	4,014	3,767	3,787	3,867	3,750	3,778	3,791	3,636	3,461	3,659	3,588
55 years and over	504	497	538	479	480	509	488	504	512	472	472	480	459
Men, 16 years and over	3,843	3,753	3,749	3,619	3,324	3,639	3,507	3,517	3,536	3,526	3,330	3,467	3,333
16 to 24 years	1,440	1,371	1,370	1,334	1,209	1,337	1,293	1,334	1,347	1,350	1,325	1,250	1,278
16 to 19 years	750	741	740	710	643	740	697	705	698	670	654	582	689
16 to 17 years	336	337	354	341	304	328	309	295	314	311	312	310	330
18 to 19 years	412	377	390	371	345	421	385	417	381	360	349	268	357
20 to 24 years	690	630	630	624	566	597	596	629	649	680	671	668	588
25 years and over	2,393	2,381	2,359	2,272	2,156	2,292	2,201	2,220	2,182	2,176	2,005	2,213	2,050
25 to 54 years	2,124	2,095	2,052	1,994	1,878	2,007	1,928	1,921	1,901	1,887	1,727	1,896	1,785
55 years and over	293	298	313	262	264	285	274	284	276	277	278	325	289
Women, 16 years and over	3,345	3,421	3,331	3,149	3,242	3,175	3,126	3,140	3,142	2,970	2,959	2,925	3,076
16 to 24 years	1,151	1,207	1,152	1,100	1,152	1,089	1,057	1,059	1,061	1,025	1,035	1,050	1,094
16 to 19 years	591	651	583	531	601	555	587	567	593	551	564	556	464
16 to 17 years	235	311	268	269	282	222	262	264	317	257	262	266	266
18 to 19 years	350	336	315	261	319	322	344	305	288	294	297	287	191
20 to 24 years	560	556	569	569	551	534	470	492	468	474	471	494	629
25 years and over	2,171	2,211	2,188	2,015	2,093	2,079	2,044	2,076	2,122	1,946	1,918	1,936	1,969
25 to 54 years	1,960	2,006	1,962	1,773	1,909	1,860	1,822	1,857	1,890	1,749	1,734	1,763	1,802
55 years and over	211	199	225	217	216	224	214	220	236	195	194	155	170

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

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

(Percent)

Age and sex	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total, 16 years and over	5.3	5.3	5.2	5.0	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7
16 to 24 years	12.0	12.0	11.7	11.3	11.0	11.4	11.0	11.3	11.2	11.1	10.9	10.6	10.8
16 to 19 years	16.9	17.3	16.5	15.6	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1
16 to 17 years	17.8	19.5	19.0	18.4	18.3	17.3	17.9	17.9	19.3	17.5	17.6	17.7	17.3
18 to 19 years	16.2	15.2	14.9	13.6	13.9	15.9	15.5	15.4	14.5	14.1	13.6	11.7	11.6
20 to 24 years	9.2	8.8	8.9	8.8	8.2	8.4	7.9	8.4	8.2	8.5	8.4	8.5	8.9
25 years and over	4.0	4.0	4.0	3.7	3.7	3.8	3.7	3.7	3.7	3.6	3.4	3.6	3.5
25 to 54 years	4.2	4.2	4.1	3.8	3.9	3.9	3.8	3.8	3.8	3.7	3.5	3.7	3.6
55 years and over	3.1	3.1	3.3	2.9	2.9	3.1	3.0	3.0	3.1	2.8	2.8	2.8	2.7
Men, 16 years and over	5.3	5.1	5.1	4.9	4.5	5.0	4.8	4.8	4.8	4.8	4.5	4.7	4.5
16 to 24 years	12.7	12.1	12.1	11.8	10.7	11.9	11.5	11.9	12.0	12.0	11.6	11.1	11.2
16 to 19 years	18.3	17.9	17.9	17.4	15.7	18.2	17.2	17.3	17.2	16.3	15.6	14.2	16.4
16 to 17 years	20.3	19.7	20.9	20.2	18.5	19.7	18.8	18.1	18.8	18.2	18.2	18.4	18.3
18 to 19 years	16.9	15.7	16.1	15.5	14.0	17.4	16.1	17.3	16.1	14.8	14.1	11.1	14.9
20 to 24 years	9.5	8.8	8.8	8.7	7.8	8.3	8.3	8.8	9.1	9.5	9.3	9.3	8.1
25 years and over	3.9	3.9	3.8	3.7	3.5	3.7	3.6	3.6	3.5	3.5	3.2	3.5	3.3
25 to 54 years	4.0	4.0	3.9	3.8	3.6	3.8	3.7	3.6	3.6	3.6	3.3	3.6	3.4
55 years and over	3.2	3.3	3.4	2.9	2.9	3.1	3.0	3.1	3.0	3.0	2.9	3.4	3.1
Women, 16 years and over	5.3	5.5	5.3	5.0	5.1	5.0	5.0	5.0	5.0	4.7	4.7	4.6	4.8
16 to 24 years	11.3	11.8	11.2	10.8	11.3	10.8	10.4	10.6	10.4	10.1	10.1	10.2	10.4
16 to 19 years	15.4	16.7	15.0	13.7	15.6	14.7	15.3	15.0	15.5	14.7	14.7	14.3	11.6
16 to 17 years	15.1	19.3	17.0	16.6	18.1	14.7	16.9	17.7	19.8	16.7	17.0	17.0	16.3
18 to 19 years	15.4	14.7	13.7	11.6	13.9	14.2	14.8	13.3	12.8	13.4	13.0	12.4	8.2
20 to 24 years	8.9	8.8	8.9	9.0	8.7	8.5	7.5	7.9	7.3	7.4	7.4	7.6	9.7
25 years and over	4.1	4.2	4.2	3.8	4.0	3.9	3.9	3.9	4.0	3.7	3.6	3.6	3.7
25 to 54 years	4.3	4.4	4.3	3.9	4.2	4.1	4.0	4.0	4.1	3.8	3.8	3.9	3.9
55 years and over	2.9	2.8	3.1	3.0	3.0	3.1	3.0	3.0	3.2	2.7	2.6	2.1	2.3

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Percent)

Category	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
CHARACTERISTIC													
Total	5.3	5.3	5.2	5.0	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7
Men, 20 years and over	4.5	4.4	4.4	4.2	3.9	4.2	4.1	4.1	4.1	4.1	3.9	4.1	3.8
Women, 20 years and over	4.7	4.7	4.7	4.4	4.5	4.4	4.3	4.3	4.3	4.1	4.0	4.0	4.4
Both sexes, 16 to 19 years	16.9	17.3	16.5	15.6	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1
White	4.5	4.5	4.4	4.2	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0
Black and other	9.3	9.5	9.3	8.9	9.2	8.9	8.4	8.4	8.4	8.2	8.4	8.6	8.3
Black	10.7	11.0	10.5	9.9	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3
Hispanic origin	8.2	8.1	8.3	8.0	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9
Married men, spouse present	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.4	2.6	2.6
Married women, spouse present	3.3	3.4	3.3	3.2	3.2	3.2	3.1	3.0	3.1	2.8	2.8	2.8	3.1
Women who maintain families	8.7	8.8	8.7	7.9	7.9	8.0	7.6	8.0	7.8	7.8	8.1	7.7	7.6
OCCUPATION¹													
Managerial and professional specialty	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	1.8	1.7	1.9	2.0
Technical, sales, and administrative support	4.4	4.3	4.3	4.2	3.9	4.2	4.1	4.1	4.0	3.9	3.9	4.0	4.2
Precision production, craft, and repair	5.1	4.8	4.9	4.8	4.7	4.8	4.9	4.7	4.8	5.3	4.5	4.7	4.6
Operators, fabricators, and laborers	7.9	8.0	8.0	7.4	7.2	7.4	7.4	7.6	7.8	7.1	7.1	7.0	5.9
Farming, forestry, and fishing	7.3	7.4	7.3	6.8	6.6	7.9	6.5	7.2	6.7	7.3	6.6	7.2	6.8
INDUSTRY													
Nonagricultural private wage and salary workers ...	5.4	5.3	5.2	5.0	5.0	5.0	4.9	5.0	5.0	4.8	4.7	4.8	4.7
Goods-producing industries	5.8	5.6	5.5	5.4	5.3	5.2	5.3	5.3	5.2	5.0	4.6	5.0	4.8
Mining	5.3	4.0	3.9	2.3	3.3	2.8	4.1	4.9	3.4	4.5	3.3	3.3	4.0
Construction	9.8	9.1	9.4	8.8	8.6	8.8	8.7	9.0	8.7	8.7	7.9	8.9	7.9
Manufacturing	4.6	4.5	4.3	4.4	4.3	4.2	4.3	4.1	4.1	3.8	3.6	3.8	3.9
Durable goods	4.3	4.0	3.7	3.6	3.6	3.6	3.5	3.5	3.3	3.1	3.1	3.1	3.4
Nondurable goods	5.0	5.3	5.3	5.5	5.3	5.0	5.4	5.0	5.3	4.8	4.4	4.9	4.5
Service-producing industries	5.2	5.2	5.1	4.9	4.9	4.9	4.8	4.9	4.9	4.7	4.7	4.7	4.7
Transportation and public utilities	4.0	4.1	3.9	2.9	3.6	3.0	3.4	3.7	3.8	3.3	3.1	3.3	3.8
Wholesale and retail trade	6.4	6.4	6.3	6.2	6.1	6.4	6.1	6.2	6.2	6.1	6.2	5.8	5.9
Finance, insurance, and real estate	3.4	3.1	3.2	3.3	3.1	2.5	3.1	3.0	3.0	2.9	2.4	2.8	2.6
Services	4.9	4.9	4.9	4.6	4.7	4.7	4.4	4.5	4.6	4.3	4.4	4.5	4.3
Government workers	2.9	2.9	2.8	2.4	2.5	2.8	2.7	2.6	2.6	2.4	2.3	2.1	2.4
Agricultural wage and salary workers	8.7	9.0	9.3	9.5	7.6	10.4	8.4	8.9	9.0	9.6	8.6	9.7	10.6

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

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

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

(Numbers in thousands)

Reason	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
NUMBER OF UNEMPLOYED													
Job losers and persons who completed temporary jobs	3,191	3,147	3,148	3,038	2,961	3,094	2,954	3,010	3,007	2,934	2,886	2,991	2,807
On temporary layoff	953	949	993	958	909	928	894	891	893	963	815	961	860
Not on temporary layoff	2,238	2,198	2,155	2,080	2,052	2,166	2,060	2,119	2,114	1,971	2,071	2,030	1,947
Job leavers	861	804	797	776	808	827	812	894	853	732	655	692	808
Reentrants	2,499	2,608	2,497	2,422	2,338	2,333	2,263	2,173	2,263	2,247	2,229	2,170	2,229
New entrants	596	623	617	569	573	510	564	554	560	555	560	552	518
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers and persons who completed temporary jobs	44.6	43.8	44.6	44.6	44.3	45.7	44.8	45.4	45.0	45.4	45.6	46.7	44.1
On temporary layoff	13.3	13.2	14.1	14.1	13.6	13.7	13.6	13.4	13.4	14.9	12.9	15.0	13.5
Not on temporary layoff	31.3	30.6	30.5	30.6	30.7	32.0	31.2	32.0	31.6	30.5	32.7	31.7	30.6
Job leavers	12.0	11.2	11.3	11.4	12.1	12.2	12.3	13.5	12.8	11.3	10.3	10.8	12.7
Reentrants	35.0	36.3	35.4	35.6	35.0	34.5	34.3	32.8	33.9	34.7	35.2	33.9	35.0
New entrants	8.3	8.7	8.7	8.4	8.6	7.5	8.6	8.4	8.4	8.6	8.8	8.6	8.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers and persons who completed temporary jobs	2.4	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.0
Job leavers .....	.6	.6	.6	.6	.6	.6	.6	.7	.6	.5	.5	.5	.6
Reentrants	1.8	1.9	1.8	1.8	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6
New entrants .....	.4	.5	.5	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4

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

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

(Numbers in thousands)

Duration	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
NUMBER OF UNEMPLOYED													
Less than 5 weeks	2,678	2,580	2,618	2,471	2,542	2,541	2,446	2,564	2,484	2,558	2,423	2,531	2,488
5 to 14 weeks	2,251	2,341	2,325	2,177	2,067	2,188	2,097	2,121	2,115	1,912	2,048	1,922	1,971
15 weeks and over	2,150	2,158	2,079	2,088	2,076	2,069	2,128	2,027	2,109	1,990	1,865	1,964	1,811
15 to 26 weeks	964	1,031	1,003	1,033	1,054	1,031	1,061	950	1,031	919	899	936	773
27 weeks and over	1,186	1,127	1,076	1,055	1,022	1,038	1,067	1,077	1,078	1,071	966	1,028	1,038
Average (mean) duration, in weeks	15.9	15.9	15.4	15.4	15.3	15.3	16.5	15.8	15.9	16.3	15.6	16.3	15.6
Median duration, in weeks	7.9	8.2	7.9	8.1	7.8	7.9	8.2	7.9	8.1	7.7	7.8	7.7	7.4
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	37.8	36.4	37.3	36.7	38.0	37.4	36.7	38.2	37.0	39.6	38.2	39.4	39.7
5 to 14 weeks	31.8	33.1	33.1	32.3	30.9	32.2	31.4	31.6	31.5	29.6	32.3	30.0	31.4
15 weeks and over	30.4	30.5	29.6	31.0	31.1	30.4	31.9	30.2	31.4	30.8	29.4	30.6	28.9
15 to 26 weeks	13.6	14.6	14.3	15.3	15.8	15.2	15.9	14.2	15.4	14.2	14.2	14.6	12.3
27 weeks and over	16.8	15.9	15.3	15.7	15.3	15.3	16.0	16.0	16.1	16.6	15.2	16.0	16.6

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	January 1998									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
			Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force		
TOTAL										
16 years and over	204,238	135,951	66.6	128,882	63.1	2,938	125,944	7,069	5.2	68,287
16 to 19 years	15,427	7,513	48.7	6,396	41.5	156	6,241	1,117	14.9	7,914
16 to 17 years	7,873	3,032	38.5	2,486	31.6	99	2,387	546	18.0	4,841
18 to 19 years	7,554	4,481	59.3	3,910	51.8	56	3,854	571	12.7	3,073
20 to 24 years	17,532	13,411	76.5	12,070	68.8	233	11,837	1,340	10.0	4,121
25 to 54 years	117,202	98,301	83.9	94,196	80.4	1,965	92,230	4,106	4.2	18,901
25 to 34 years	39,053	32,974	84.4	31,390	80.4	647	30,743	1,585	4.8	6,079
25 to 29 years	18,735	15,786	84.3	14,953	79.8	280	14,673	834	5.3	2,949
30 to 34 years	20,317	17,188	84.6	16,437	80.9	366	16,070	751	4.4	3,130
35 to 44 years	44,155	37,348	84.6	35,760	81.0	725	35,035	1,588	4.3	6,807
35 to 39 years	22,501	18,864	83.8	17,972	79.9	413	17,559	892	4.7	3,638
40 to 44 years	21,653	18,484	85.4	17,788	82.2	313	17,476	696	3.8	3,169
45 to 54 years	33,994	27,979	82.3	27,046	79.6	593	26,452	933	3.3	6,015
45 to 49 years	18,623	15,697	84.3	15,221	81.7	324	14,898	476	3.0	2,926
50 to 54 years	15,371	12,282	79.9	11,825	76.9	270	11,555	458	3.7	3,088
55 to 64 years	21,900	12,910	58.9	12,518	57.2	332	12,186	392	3.0	8,990
55 to 59 years	11,931	8,242	69.1	7,973	66.8	199	7,774	269	3.3	3,689
60 to 64 years	9,969	4,668	46.8	4,545	45.6	132	4,413	123	2.6	5,301
65 years and over	32,177	3,816	11.9	3,702	11.5	252	3,450	114	3.0	28,361
65 to 69 years	9,429	2,087	22.1	2,014	21.4	129	1,885	74	3.5	7,341
70 to 74 years	8,540	1,061	12.4	1,027	12.0	68	960	34	3.2	7,479
75 years and over	14,208	667	4.7	661	4.7	56	605	6	.9	13,541
Men										
16 years and over	98,241	72,815	74.1	68,932	70.2	2,178	66,755	3,882	5.3	25,426
16 to 19 years	7,850	3,801	48.4	3,121	39.8	122	2,999	680	17.9	4,049
16 to 17 years	4,063	1,553	38.2	1,234	30.4	78	1,157	318	20.5	2,510
18 to 19 years	3,787	2,249	59.4	1,887	49.8	44	1,842	362	16.1	1,538
20 to 24 years	8,799	7,069	80.3	6,350	72.2	177	6,173	719	10.2	1,730
25 to 54 years	57,550	52,671	91.5	50,515	87.8	1,448	49,067	2,155	4.1	4,880
25 to 34 years	19,228	17,876	93.0	17,061	88.7	476	16,585	815	4.6	1,351
25 to 29 years	9,182	8,451	92.0	8,025	87.4	204	7,821	426	5.0	730
30 to 34 years	10,046	9,425	93.8	9,036	90.0	273	8,763	389	4.1	621
35 to 44 years	21,756	20,037	92.1	19,231	88.4	573	18,659	805	4.0	1,719
35 to 39 years	11,067	10,204	92.2	9,718	87.8	329	9,389	486	4.8	863
40 to 44 years	10,689	9,833	92.0	9,514	89.0	244	9,270	319	3.2	856
45 to 54 years	16,567	14,758	89.1	14,223	85.8	399	13,824	535	3.6	1,810
45 to 49 years	9,116	8,254	90.5	7,978	87.5	227	7,751	276	3.3	862
50 to 54 years	7,452	6,504	87.3	6,245	83.8	172	6,072	259	4.0	948
55 to 64 years	10,461	7,053	67.4	6,797	65.0	233	6,564	255	3.6	3,409
55 to 59 years	5,756	4,497	78.1	4,320	75.1	136	4,184	177	3.9	1,258
60 to 64 years	4,705	2,555	54.3	2,477	52.6	97	2,380	78	3.0	2,150
65 years and over	13,580	2,221	16.4	2,149	15.8	198	1,951	72	3.2	11,359
65 to 69 years	4,326	1,186	27.4	1,142	26.4	94	1,048	44	3.7	3,140
70 to 74 years	3,757	625	16.6	603	16.0	54	549	22	3.6	3,131
75 years and over	5,497	409	7.4	404	7.4	49	355	5	1.2	5,088
Women										
16 years and over	105,997	63,136	59.6	59,949	56.6	760	59,190	3,186	5.0	42,861
16 to 19 years	7,577	3,711	49.0	3,275	43.2	34	3,241	436	11.8	3,866
16 to 17 years	3,811	1,480	38.8	1,252	32.8	22	1,230	228	15.4	2,331
18 to 19 years	3,767	2,232	59.3	2,023	53.7	12	2,011	208	9.3	1,535
20 to 24 years	8,733	6,342	72.6	5,720	65.5	56	5,664	621	9.8	2,391
25 to 54 years	59,651	45,631	76.5	43,680	73.2	517	43,163	1,950	4.3	14,021
25 to 34 years	19,825	15,098	76.2	14,328	72.3	170	14,158	769	5.1	4,727
25 to 29 years	9,553	7,335	76.8	6,928	72.5	76	6,851	407	5.6	2,218
30 to 34 years	10,272	7,763	75.6	7,401	72.0	94	7,307	362	4.7	2,509
35 to 44 years	22,399	17,311	77.3	16,529	73.8	153	16,376	782	4.5	5,088
35 to 39 years	11,435	8,660	75.7	8,254	72.2	84	8,170	406	4.7	2,775
40 to 44 years	10,964	8,651	78.9	8,275	75.5	69	8,206	376	4.3	2,314
45 to 54 years	17,427	13,222	75.9	12,823	73.6	194	12,629	399	3.0	4,205
45 to 49 years	9,508	7,443	78.3	7,243	76.2	97	7,147	200	2.7	2,065
50 to 54 years	7,919	5,779	73.0	5,580	70.5	98	5,482	199	3.4	2,141
55 to 64 years	11,439	5,857	51.2	5,721	50.0	98	5,622	137	2.3	5,581
55 to 59 years	6,175	3,744	60.6	3,653	59.2	63	3,590	91	2.4	2,431
60 to 64 years	5,264	2,113	40.1	2,068	39.3	35	2,033	45	2.1	3,151
65 years and over	18,597	1,595	8.6	1,553	8.3	54	1,498	42	2.6	17,002
65 to 69 years	5,103	901	17.7	872	17.1	34	837	30	3.3	4,202
70 to 74 years	4,783	436	9.1	424	8.9	14	411	11	2.6	4,347
75 years and over	8,711	258	3.0	257	2.9	6	250	1	.4	8,453

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	January 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
WHITE										
16 years and over	170,810	114,193	66.9	108,967	63.8	2,767	106,200	5,226	4.6	56,617
16 to 19 years	12,275	6,410	52.2	5,573	45.4	155	5,417	838	13.1	5,864
16 to 17 years	6,244	2,662	42.6	2,223	35.6	99	2,124	439	16.5	3,583
18 to 19 years	6,030	3,749	62.2	3,350	55.6	56	3,294	399	10.6	2,281
20 to 24 years	14,057	10,959	78.0	10,033	71.4	218	9,815	926	8.5	3,098
25 to 54 years	96,955	82,097	84.7	79,049	81.5	1,835	77,213	3,048	3.7	14,858
25 to 34 years	31,633	26,962	85.2	25,839	81.7	621	25,217	1,123	4.2	4,671
25 to 29 years	15,128	12,938	85.5	12,340	81.6	271	12,069	597	4.6	2,191
30 to 34 years	16,505	14,024	85.0	13,499	81.8	350	13,148	526	3.7	2,480
35 to 44 years	36,488	31,150	85.4	29,973	82.1	667	29,306	1,177	3.8	5,338
35 to 39 years	18,550	15,723	84.8	15,052	81.1	376	14,676	671	4.3	2,827
40 to 44 years	17,938	15,428	86.0	14,922	83.2	292	14,630	506	3.3	2,511
45 to 54 years	28,833	23,984	83.2	23,237	80.6	547	22,690	748	3.1	4,849
45 to 49 years	15,684	13,290	84.7	12,933	82.5	304	12,629	357	2.7	2,394
50 to 54 years	13,149	10,694	81.3	10,304	78.4	243	10,061	391	3.7	2,455
55 to 64 years	18,892	11,309	59.9	10,996	58.2	318	10,679	312	2.8	7,583
55 to 59 years	10,288	7,232	70.3	7,025	68.3	192	6,834	207	2.9	3,056
60 to 64 years	8,603	4,076	47.4	3,971	46.2	126	3,845	105	2.6	4,527
65 years and over	28,633	3,418	11.9	3,316	11.8	240	3,076	102	3.0	25,214
65 to 69 years	8,255	1,863	22.6	1,800	21.8	120	1,679	63	3.4	6,392
70 to 74 years	7,601	973	12.8	940	12.4	68	872	33	3.4	6,628
75 years and over	12,776	582	4.6	577	4.5	52	525	5	.9	12,194
Men										
16 years and over	82,982	62,187	74.9	59,242	71.4	2,045	57,197	2,945	4.7	20,795
16 to 19 years	6,301	3,301	52.4	2,766	43.9	122	2,644	535	16.2	3,000
16 to 17 years	3,224	1,375	42.7	1,113	34.5	77	1,036	262	19.1	1,849
18 to 19 years	3,077	1,926	62.6	1,653	53.7	44	1,609	273	14.2	1,151
20 to 24 years	7,125	5,813	81.6	5,323	74.7	171	5,152	490	8.4	1,312
25 to 54 years	48,307	44,826	92.8	43,175	89.4	1,342	41,834	1,650	3.7	3,481
25 to 34 years	15,812	14,931	94.4	14,329	90.6	459	13,870	603	4.0	881
25 to 29 years	7,557	7,102	94.0	6,797	89.9	200	6,597	306	4.3	455
30 to 34 years	8,255	7,829	94.8	7,532	91.2	259	7,273	297	3.8	426
35 to 44 years	18,244	17,047	93.4	16,437	90.1	517	15,919	610	3.6	1,197
35 to 39 years	9,285	8,697	93.7	8,317	89.6	295	8,023	379	4.4	588
40 to 44 years	8,959	8,350	93.2	8,119	90.6	223	7,896	231	2.8	609
45 to 54 years	14,251	12,847	90.2	12,410	87.1	365	12,045	437	3.4	1,403
45 to 49 years	7,784	7,098	91.2	6,882	88.4	213	6,669	216	3.0	686
50 to 54 years	6,467	5,750	88.9	5,528	85.5	152	5,376	222	3.9	717
55 to 64 years	9,118	6,248	68.5	6,042	66.3	222	5,820	205	3.3	2,870
55 to 59 years	5,000	3,987	79.7	3,848	77.0	130	3,718	139	3.5	1,013
60 to 64 years	4,118	2,261	54.9	2,195	53.3	93	2,102	66	2.9	1,857
65 years and over	12,132	2,000	16.5	1,936	16.0	188	1,748	64	3.2	10,132
65 to 69 years	3,827	1,064	27.8	1,027	26.8	88	939	37	3.5	2,763
70 to 74 years	3,386	576	17.0	554	16.4	54	500	22	3.8	2,810
75 years and over	4,919	359	7.3	355	7.2	46	309	5	1.4	4,559
Women										
16 years and over	87,829	52,006	59.2	49,725	56.6	722	49,003	2,281	4.4	35,822
16 to 19 years	5,974	3,109	52.0	2,806	47.0	34	2,773	303	9.7	2,865
16 to 17 years	3,020	1,286	42.6	1,109	36.7	22	1,088	177	13.7	1,734
18 to 19 years	2,953	1,823	61.7	1,697	57.5	12	1,885	126	6.9	1,130
20 to 24 years	6,932	5,147	74.2	4,711	68.0	47	4,664	436	8.5	1,785
25 to 54 years	48,648	37,271	76.6	35,874	73.7	494	35,380	1,398	3.7	11,377
25 to 34 years	15,821	12,031	76.0	11,510	72.8	163	11,348	520	4.3	3,790
25 to 29 years	7,571	5,835	77.1	5,543	73.2	71	5,472	292	5.0	1,736
30 to 34 years	8,250	6,195	75.1	5,967	72.3	91	5,875	229	3.7	2,055
35 to 44 years	18,244	14,104	77.3	13,537	74.2	150	13,387	567	4.0	4,141
35 to 39 years	9,265	7,026	75.8	6,734	72.7	81	6,653	292	4.2	2,239
40 to 44 years	8,979	7,078	78.8	6,803	75.8	69	6,734	275	3.9	1,902
45 to 54 years	14,582	11,137	76.4	10,827	74.2	181	10,645	310	2.8	3,446
45 to 49 years	7,900	6,192	78.4	6,051	76.6	91	5,960	141	2.3	1,708
50 to 54 years	6,683	4,945	74.0	4,776	71.5	90	4,685	169	3.4	1,738
55 to 64 years	9,774	5,061	51.8	4,954	50.7	95	4,859	107	2.1	4,713
55 to 59 years	5,289	3,245	61.4	3,178	60.1	62	3,116	68	2.1	2,043
60 to 64 years	4,485	1,815	40.5	1,776	39.6	33	1,743	39	2.2	2,670
65 years and over	16,501	1,418	8.6	1,381	8.4	52	1,328	38	2.7	15,082
65 to 69 years	4,429	799	18.0	773	17.5	32	741	27	3.3	3,629
70 to 74 years	4,215	397	9.4	386	9.1	14	372	11	2.8	3,819
75 years and over	7,857	223	2.8	222	2.8	6	216	-	.2	7,635

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	January 1998									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
BLACK										
16 years and over	24,196	15,535	64.2	14,045	58.0	98	13,948	1,490	9.6	8,660
16 to 19 years	2,414	849	35.2	609	25.2	-	609	240	28.3	1,564
16 to 17 years	1,245	283	22.7	190	15.3	-	190	93	32.8	962
18 to 19 years	1,169	567	48.5	419	35.8	-	419	148	26.1	602
20 to 24 years	2,531	1,816	71.8	1,474	58.3	9	1,465	342	18.8	714
25 to 54 years	14,373	11,480	79.9	10,632	74.0	76	10,555	848	7.4	2,893
25 to 34 years	5,246	4,276	81.5	3,885	74.1	15	3,870	391	9.1	970
25 to 29 years	2,555	2,012	78.8	1,815	71.0	3	1,812	198	9.8	542
30 to 34 years	2,691	2,264	84.1	2,070	76.9	12	2,058	193	8.5	427
35 to 44 years	5,464	4,392	80.4	4,067	74.4	34	4,033	326	7.4	1,072
35 to 39 years	2,832	2,243	79.2	2,061	72.8	27	2,034	182	8.1	589
40 to 44 years	2,633	2,149	81.6	2,005	76.2	7	1,999	144	6.7	483
45 to 54 years	3,663	2,812	76.8	2,680	73.2	28	2,652	132	4.7	851
45 to 49 years	2,163	1,765	81.6	1,675	77.5	12	1,663	89	5.1	398
50 to 54 years	1,500	1,047	69.8	1,005	67.0	16	989	42	4.0	453
55 to 64 years	2,204	1,120	50.8	1,066	48.4	5	1,060	54	4.8	1,084
55 to 59 years	1,215	718	59.1	679	55.9	3	676	40	5.5	496
60 to 64 years	989	401	40.6	387	39.1	2	384	14	3.6	588
65 years and over	2,675	270	10.1	265	9.9	7	259	5	1.9	2,405
65 to 69 years	854	137	16.1	132	15.5	4	128	5	3.5	717
70 to 74 years	730	68	9.4	68	9.3	-	68	-	-	661
75 years and over	1,091	65	5.9	65	5.9	2	62	-	-	1,027
Men										
16 years and over	10,842	7,300	67.3	6,551	60.4	73	6,478	749	10.3	3,542
16 to 19 years	1,185	390	32.9	264	22.2	-	264	127	32.4	795
16 to 17 years	624	132	21.2	83	13.3	-	83	49	37.0	492
18 to 19 years	561	258	46.0	180	32.2	-	180	78	30.1	303
20 to 24 years	1,159	892	77.0	703	60.7	-	703	189	21.2	267
25 to 54 years	6,489	5,361	82.6	4,961	76.4	64	4,897	400	7.5	1,128
25 to 34 years	2,345	1,978	84.4	1,811	77.2	12	1,799	167	8.4	367
25 to 29 years	1,129	909	80.5	814	72.1	3	811	95	10.4	220
30 to 34 years	1,216	1,069	87.9	997	82.0	9	987	72	6.8	147
35 to 44 years	2,497	2,065	82.7	1,901	76.2	31	1,870	163	7.9	432
35 to 39 years	1,288	1,058	82.1	964	74.8	24	939	94	8.9	230
40 to 44 years	1,209	1,007	83.3	938	77.6	7	931	69	6.9	202
45 to 54 years	1,648	1,319	80.0	1,249	75.8	20	1,229	70	5.3	329
45 to 49 years	976	836	85.6	792	81.1	9	782	44	5.3	140
50 to 54 years	672	483	71.9	457	68.0	31	447	26	5.3	189
55 to 64 years	956	522	54.6	491	51.4	5	486	31	5.9	434
55 to 59 years	549	322	62.2	319	58.1	3	316	22	6.6	208
60 to 64 years	407	180	44.3	172	42.3	2	169	8	4.7	226
65 years and over	1,052	134	12.8	132	12.6	4	128	2	1.3	918
65 to 69 years	350	61	17.6	60	17.1	2	58	2	(1)	288
70 to 74 years	282	35	12.4	35	12.4	-	35	-	-	247
75 years and over	420	38	9.0	38	9.0	2	35	-	-	383
Women										
16 years and over	13,354	8,235	61.7	7,494	56.1	24	7,470	741	9.0	5,118
16 to 19 years	1,228	459	37.4	345	28.1	-	345	114	24.8	769
16 to 17 years	620	150	24.2	107	17.2	-	107	44	29.1	470
18 to 19 years	608	309	50.8	239	39.3	-	239	70	22.7	299
20 to 24 years	1,372	924	67.4	771	56.2	9	762	153	16.6	447
25 to 54 years	7,883	6,119	77.6	5,671	71.9	13	5,658	448	7.3	1,765
25 to 34 years	2,901	2,298	79.2	2,074	71.5	2	2,071	224	9.8	603
25 to 29 years	1,426	1,103	77.4	1,000	70.1	-	1,000	103	9.3	323
30 to 34 years	1,475	1,195	81.0	1,074	72.8	2	1,071	121	10.1	280
35 to 44 years	2,967	2,328	78.4	2,165	73.0	3	2,163	162	7.0	640
35 to 39 years	1,543	1,185	76.8	1,098	71.1	3	1,095	87	7.4	358
40 to 44 years	1,424	1,143	80.2	1,068	75.0	-	1,068	75	6.5	281
45 to 54 years	2,015	1,493	74.1	1,431	71.0	8	1,423	62	4.1	522
45 to 49 years	1,187	929	78.3	884	74.5	3	881	45	4.9	258
50 to 54 years	828	564	68.1	548	66.1	5	542	16	2.9	264
55 to 64 years	1,248	598	47.9	574	46.0	-	574	23	3.9	650
55 to 59 years	665	377	56.6	359	54.0	-	359	17	4.6	289
60 to 64 years	582	221	37.9	215	36.9	-	215	6	2.7	361
65 years and over	1,623	136	8.4	133	8.2	2	130	3	2.5	1,487
65 to 69 years	504	76	15.0	73	14.4	2	70	3	4.0	428
70 to 74 years	448	33	7.4	33	7.3	-	33	-	-	414
75 years and over	671	27	4.0	27	4.0	-	27	-	-	644

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

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

and revised population controls used in the household survey.

A-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	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
TOTAL								
Civilian noninstitutional population	202,285	204,238	89,446	90,391	97,520	98,420	15,318	15,427
Civilian labor force	134,317	135,951	68,429	69,013	58,637	59,425	7,251	7,513
Percent of population	66.4	66.6	76.5	76.3	60.1	60.4	47.3	48.7
Employed	126,384	128,882	64,693	65,811	55,739	56,674	5,952	6,396
Agriculture	3,036	2,938	2,132	2,056	703	726	202	156
Nonagricultural industries	123,348	125,944	62,561	63,756	55,036	55,948	5,750	6,241
Unemployed	7,933	7,069	3,736	3,202	2,898	2,750	1,299	1,117
Unemployment rate	5.9	5.2	5.5	4.6	4.9	4.6	17.9	14.9
Not in labor force	67,968	68,287	21,018	21,377	38,883	38,996	8,067	7,914
White								
Civilian noninstitutional population	169,436	170,810	76,034	76,681	81,279	81,855	12,124	12,275
Civilian labor force	113,338	114,193	58,691	58,885	48,473	48,897	6,174	6,410
Percent of population	66.9	66.9	77.2	76.8	59.6	59.7	50.9	52.2
Employed	107,425	108,967	55,803	56,476	46,423	46,919	5,198	5,573
Agriculture	2,859	2,767	1,988	1,923	678	689	192	155
Nonagricultural industries	104,566	106,200	53,815	54,553	45,745	46,230	5,006	5,417
Unemployed	5,913	5,226	2,888	2,410	2,050	1,979	976	838
Unemployment rate	5.2	4.6	4.9	4.1	4.2	4.0	15.8	13.1
Not in labor force	56,098	56,617	17,343	17,795	32,806	32,958	5,950	5,864
Black								
Civilian noninstitutional population	23,847	24,196	9,511	9,657	11,940	12,125	2,397	2,414
Civilian labor force	15,141	15,535	6,749	6,910	7,560	7,776	833	849
Percent of population	63.5	64.2	71.0	71.6	63.3	64.1	34.8	35.2
Employed	13,474	14,045	6,061	6,288	6,852	7,149	560	609
Agriculture	93	98	76	73	10	24	7	-
Nonagricultural industries	13,381	13,948	5,985	6,214	6,842	7,125	553	609
Unemployed	1,667	1,490	687	622	708	628	272	240
Unemployment rate	11.0	9.6	10.2	9.0	9.4	8.1	32.7	28.3
Not in labor force	8,706	8,660	2,762	2,747	4,380	4,349	1,564	1,564

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-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	January 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time	Part time	Total	Looking for full-time work	Looking for part-time work	
TOTAL ENROLLED										
Total, 16 to 24 years	18,090	8,709	48.1	7,780	1,387	6,393	929	147	782	10.7
16 to 19 years	12,427	5,336	42.9	4,626	429	4,197	710	91	619	13.3
20 to 24 years	5,663	3,373	59.6	3,154	958	2,197	219	56	164	6.5
High school	9,454	3,739	39.5	3,135	211	2,924	603	71	532	16.1
College	8,637	4,970	57.5	4,645	1,175	3,469	326	76	250	6.6
Full-time students	7,414	3,950	53.3	3,673	567	3,107	277	43	234	7.0
Part-time students	1,223	1,020	83.4	971	609	363	49	33	16	4.8
Men, 16 to 24 years	9,048	4,104	45.4	3,581	688	2,893	522	75	448	12.7
16 to 19 years	6,263	2,548	40.7	2,126	201	1,925	422	51	371	16.5
20 to 24 years	2,785	1,556	55.9	1,455	487	968	101	24	77	6.5
High school	4,954	1,918	38.7	1,561	127	1,434	357	42	315	18.6
College	4,094	2,186	53.4	2,020	561	1,459	166	33	133	7.6
Full-time students	3,592	1,765	49.1	1,621	279	1,343	144	18	126	8.2
Part-time students	501	420	83.8	399	282	116	22	15	7	5.2
Women, 16 to 24 years	9,043	4,605	50.9	4,199	698	3,501	407	72	334	8.8
16 to 19 years	6,164	2,788	45.2	2,500	228	2,272	288	40	248	10.3
20 to 24 years	2,878	1,817	63.1	1,699	470	1,229	119	32	87	6.5
High school	4,500	1,821	40.5	1,574	84	1,490	246	29	217	13.5
College	4,543	2,785	61.3	2,624	614	2,010	160	43	117	5.8
Full-time students	3,822	2,185	57.2	2,052	288	1,764	133	25	108	6.1
Part-time students	721	600	83.2	573	326	246	27	18	9	4.5
White										
Total, 16 to 24 years	14,449	7,410	51.3	6,672	1,162	5,511	738	107	631	10.0
16 to 19 years	9,885	4,598	46.5	4,031	364	3,667	568	63	504	12.3
20 to 24 years	4,564	2,812	61.6	2,642	798	1,843	170	44	126	6.1
Men	7,293	3,539	48.5	3,115	585	2,530	425	62	363	12.0
Women	7,156	3,871	54.1	3,558	577	2,981	313	45	268	8.1
High school	7,493	3,259	43.5	2,780	181	2,599	479	49	429	14.7
College	6,956	4,151	59.7	3,892	981	2,912	259	58	201	6.2
Full-time students	5,982	3,330	55.7	3,109	481	2,628	221	36	185	6.6
Part-time students	973	821	84.4	783	499	284	38	22	16	4.6
Black										
Total, 16 to 24 years	2,587	895	34.6	733	172	561	162	39	123	18.1
16 to 19 years	1,906	544	28.6	415	45	370	129	27	102	23.7
20 to 24 years	681	351	51.5	318	127	191	33	12	21	9.4
Men	1,208	376	31.1	298	79	219	78	13	65	20.8
Women	1,379	519	37.6	435	93	342	84	26	58	16.1
High school	1,507	366	24.3	253	16	238	112	20	92	30.7
College	1,080	530	49.0	480	156	324	50	18	31	9.4
Full-time students	898	372	41.4	333	69	265	39	8	31	10.5
Part-time students	182	158	86.5	147	88	59	11	11	-	6.8
Hispanic origin										
Total, 16 to 24 years	2,081	775	37.2	628	158	470	147	35	112	19.0
16 to 19 years	1,579	475	30.1	364	53	311	111	24	87	23.5
20 to 24 years	502	300	59.7	264	106	159	36	11	24	11.9
Men	1,034	389	37.6	302	81	221	87	22	65	22.4
Women	1,047	386	36.9	326	78	248	60	13	47	15.6
High school	1,345	375	27.8	263	40	222	112	27	84	29.8
College	736	401	54.4	365	118	248	35	8	28	8.8
Full-time students	601	293	48.7	260	46	215	32	8	24	11.0
Part-time students	135	108	79.9	105	72	33	3	-	3	2.9

See footnotes at end of table.

HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	January 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time	Part time	Total	Looking for full-time work	Looking for part-time work	
TOTAL NOT ENROLLED										
Total, 16 to 24 years	14,869	12,215	82.1	10,686	8,839	1,847	1,528	1,392	136	12.5
16 to 19 years	3,000	2,177	72.6	1,770	1,265	505	407	342	66	18.7
20 to 24 years	11,869	10,037	84.6	8,916	7,574	1,342	1,121	1,050	71	11.2
Less than a high school diploma	3,753	2,479	66.1	1,919	1,571	347	561	498	63	22.6
High school graduates, no college	6,290	5,324	84.6	4,662	3,724	938	662	611	51	12.4
Less than a bachelor's degree	3,400	3,055	89.8	2,797	2,348	449	257	238	20	8.4
College graduates	1,426	1,357	95.1	1,309	1,196	113	48	45	3	3.5
Men, 16 to 24 years	7,602	6,767	89.0	5,890	5,203	686	877	824	53	13.0
16 to 19 years	1,587	1,254	79.0	995	807	188	259	216	43	20.6
20 to 24 years	6,015	5,513	91.7	4,895	4,396	499	618	608	10	11.2
Less than a high school diploma	2,122	1,708	80.5	1,332	1,182	150	375	344	32	22.0
High school graduates, no college	3,239	2,944	90.9	2,579	2,238	340	365	345	20	12.4
Less than a bachelor's degree	1,657	1,546	93.3	1,428	1,273	156	118	117	1	7.6
College graduates	584	569	97.5	551	510	40	19	19	—	3.3
Women, 16 to 24 years	7,268	5,448	75.0	4,797	3,636	1,161	651	568	83	12.0
16 to 19 years	1,413	924	65.4	775	458	317	148	126	23	16.1
20 to 24 years	5,854	4,524	77.3	4,021	3,178	844	503	442	61	11.1
Less than a high school diploma	1,631	772	47.3	586	389	197	185	154	31	24.0
High school graduates, no college	3,052	2,380	78.0	2,083	1,485	598	297	267	31	12.5
Less than a bachelor's degree	1,743	1,508	86.5	1,369	1,075	294	139	121	19	9.2
College graduates	842	787	93.5	758	686	73	29	26	3	3.7
White										
Total, 16 to 24 years	11,883	9,960	83.8	8,934	7,429	1,505	1,026	933	93	10.3
16 to 19 years	2,390	1,812	75.8	1,542	1,107	435	270	222	48	14.9
20 to 24 years	9,493	8,148	85.8	7,392	6,322	1,069	756	711	45	9.3
Men	6,133	5,575	90.9	4,974	4,425	549	600	559	41	10.8
Women	5,750	4,385	76.3	3,959	3,004	956	426	374	52	9.7
Less than a high school diploma	2,915	2,002	68.7	1,641	1,359	282	361	316	45	18.0
High school graduates, no college	4,973	4,268	85.8	3,835	3,074	761	433	403	29	10.1
Less than a bachelor's degree	2,802	2,548	90.9	2,351	1,980	371	197	180	16	7.7
College graduates	1,193	1,142	95.7	1,106	1,016	90	36	33	3	3.1
Black										
Total, 16 to 24 years	2,357	1,770	75.1	1,350	1,074	275	420	386	34	23.8
16 to 19 years	507	305	60.1	193	130	64	111	100	12	36.5
20 to 24 years	1,849	1,465	79.2	1,156	945	212	309	287	23	21.1
Men	1,136	906	79.7	669	565	104	237	229	9	26.2
Women	1,220	864	70.8	681	510	171	183	158	25	21.2
Less than a high school diploma	705	398	56.4	232	171	61	166	154	12	41.6
High school graduates, no college	1,080	860	79.7	660	518	143	200	181	19	23.3
Less than a bachelor's degree	450	394	87.4	342	288	53	52	49	4	13.2
College graduates	121	118	97.5	116	97	18	3	3	—	2.3
Hispanic origin										
Total, 16 to 24 years	2,732	2,129	77.9	1,845	1,578	267	284	245	39	13.3
16 to 19 years	589	393	66.7	333	268	65	60	38	22	15.2
20 to 24 years	2,143	1,736	81.0	1,512	1,309	203	224	207	17	12.9
Men	1,514	1,362	90.0	1,201	1,085	117	161	147	14	11.8
Women	1,218	766	62.9	644	493	151	123	97	26	16.0
Less than a high school diploma	1,314	933	71.1	782	695	87	151	122	29	16.2
High school graduates, no college	932	762	81.8	658	528	130	105	102	3	13.7
Less than a bachelor's degree	419	367	87.4	347	298	50	19	15	5	5.2
College graduates	66	66	(¹)	57	57	—	9	6	3	(¹)

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

NOTE: In the summer months, the educational attainment levels of youth not enrolled in school are increased by the temporary movement of high school and college students into that group. Detail for the above race and Hispanic-origin groups

will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**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	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
TOTAL												
Civilian noninstitutional population ...	169,492	171,278	80,691	81,591	88,801	89,687	143,357	144,479	18,944	19,251	15,276	15,928
Civilian labor force	113,837	115,027	61,345	61,944	52,492	53,083	96,268	96,823	12,624	12,870	10,716	10,976
Percent of population	67.2	67.2	76.0	75.9	59.1	59.2	67.2	67.0	66.6	66.9	70.1	68.9
Employed	108,599	110,416	58,452	59,461	50,147	50,954	92,329	93,361	11,575	11,962	9,932	10,320
Employment-population ratio	64.1	64.5	72.4	72.9	56.5	56.8	64.4	64.6	61.1	62.1	65.0	64.8
Unemployed	5,239	4,611	2,893	2,483	2,346	2,129	3,939	3,462	1,048	908	784	656
Unemployment rate	4.6	4.0	4.7	4.0	4.5	4.0	4.1	3.6	8.3	7.1	7.3	6.0
Less than a high school diploma												
Civilian noninstitutional population ...	30,477	29,981	14,415	14,264	16,062	15,717	24,398	23,908	4,740	4,724	6,877	7,064
Civilian labor force	12,693	12,695	7,835	7,793	4,858	4,902	10,275	10,214	1,825	1,857	4,055	4,033
Percent of population	41.6	42.3	54.3	54.6	30.2	31.2	42.1	42.7	38.5	39.3	59.0	57.1
Employed	11,371	11,630	7,033	7,185	4,339	4,445	9,325	9,448	1,520	1,616	3,641	3,717
Employment-population ratio	37.3	38.8	48.8	50.4	27.0	28.3	38.2	39.5	32.1	34.2	52.9	52.6
Unemployed	1,321	1,065	802	608	519	457	949	766	305	241	414	316
Unemployment rate	10.4	8.4	10.2	7.8	10.7	9.3	9.2	7.5	16.7	13.0	10.2	7.8
High school graduates, no college												
Civilian noninstitutional population ...	57,422	57,606	25,976	26,192	31,446	31,414	48,775	48,840	6,807	6,860	4,069	4,358
Civilian labor force	37,724	37,649	19,798	19,903	17,926	17,746	31,758	31,586	4,724	4,733	3,060	3,301
Percent of population	65.7	65.4	76.2	76.0	57.0	56.5	65.1	64.7	69.4	69.0	75.2	75.7
Employed	35,718	35,867	18,673	18,948	17,045	16,919	30,293	30,242	4,263	4,373	2,863	3,097
Employment-population ratio	62.2	62.3	71.9	72.3	54.2	53.9	62.1	61.9	62.6	63.7	70.4	71.1
Unemployed	2,006	1,782	1,125	955	881	826	1,465	1,344	461	361	197	204
Unemployment rate	5.3	4.7	5.7	4.8	4.9	4.7	4.6	4.3	9.8	7.6	6.4	6.2
Less than a bachelor's degree¹												
Civilian noninstitutional population ...	41,145	41,718	19,039	19,339	22,106	22,379	34,864	35,316	4,811	4,890	2,745	2,698
Civilian labor force	30,862	31,012	15,613	15,711	15,250	15,301	25,875	25,909	3,896	3,947	2,286	2,140
Percent of population	75.0	74.3	82.0	81.2	69.0	68.4	74.2	73.4	81.0	80.7	83.3	79.3
Employed	29,663	29,911	15,019	15,183	14,645	14,729	24,930	25,079	3,692	3,735	2,170	2,045
Employment-population ratio	72.1	71.7	78.9	78.5	66.2	65.8	71.5	71.0	76.7	76.4	79.0	75.8
Unemployed	1,199	1,101	594	528	605	573	946	829	204	212	116	94
Unemployment rate	3.9	3.5	3.8	3.4	4.0	3.7	3.7	3.2	5.2	5.4	5.1	4.4
Some college, no degree												
Civilian noninstitutional population ...	29,054	29,368	13,821	13,997	15,233	15,371	24,490	24,690	3,589	3,661	2,021	1,957
Civilian labor force	21,212	21,141	11,073	11,088	10,138	10,053	17,654	17,514	2,854	2,864	1,664	1,532
Percent of population	73.0	72.0	80.1	79.2	66.6	65.4	72.1	70.9	79.5	78.2	82.3	78.2
Employed	20,341	20,284	10,635	10,653	9,707	9,631	16,974	16,875	2,705	2,689	1,575	1,450
Employment-population ratio	70.0	69.1	76.9	76.1	63.7	62.7	69.3	68.3	75.4	73.4	77.9	74.1
Unemployed	871	857	439	435	432	422	680	639	148	175	89	82
Unemployment rate	4.1	4.1	4.0	3.9	4.3	4.2	3.9	3.6	5.2	6.1	5.3	5.3
Associate degree												
Civilian noninstitutional population ...	12,092	12,350	5,218	5,343	6,873	7,008	10,373	10,626	1,222	1,229	724	741
Civilian labor force	9,650	9,871	4,539	4,623	5,111	5,249	8,221	8,395	1,042	1,084	622	608
Percent of population	79.8	79.9	87.0	86.5	74.4	74.9	79.3	79.0	85.3	88.2	85.9	82.1
Employed	9,322	9,627	4,384	4,529	4,938	5,098	7,956	8,204	987	1,046	595	596
Employment-population ratio	77.1	78.0	84.0	84.8	71.8	72.8	76.7	77.2	80.7	85.1	82.1	80.4
Unemployed	329	244	156	93	173	151	266	190	55	38	28	12
Unemployment rate	3.4	2.5	3.4	2.0	3.4	2.9	3.2	2.3	5.3	3.5	4.4	2.0
College graduates												
Civilian noninstitutional population ...	40,447	41,974	21,260	21,796	19,187	20,178	35,320	36,415	2,586	2,778	1,586	1,808
Civilian labor force	32,558	33,671	18,099	18,537	14,459	15,134	28,360	29,115	2,179	2,332	1,315	1,503
Percent of population	80.5	80.2	85.1	85.0	75.4	75.0	80.3	80.0	84.3	84.0	82.9	83.1
Employed	31,846	33,007	17,727	18,146	14,119	14,861	27,780	28,592	2,100	2,239	1,258	1,460
Employment-population ratio	78.7	78.6	83.4	83.3	73.6	73.7	78.7	78.5	81.2	80.6	79.3	80.8
Unemployed	712	664	372	391	340	273	579	523	79	93	57	43
Unemployment rate	2.2	2.0	2.1	2.1	2.4	1.8	2.0	1.8	3.6	4.0	4.3	2.8

¹ Includes the categories, some college, no degree; and associate degree.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are

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

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

(In thousands)

Age, sex, and race	January 1998									
	Employed ¹								Unemployed	
	Full-time workers				Part-time workers				Looking for full-time work	Looking for part-time work
	Total	At work		Not at work	Total	At work ²		Not at work		
35 hours or more		1 to 34 hours for economic or noneconomic reasons	Part time for economic reasons			Part time for noneconomic reasons				
TOTAL										
Total, 16 years and over	105,276	92,881	9,557	2,838	23,606	2,723	19,470	1,412	5,567	1,501
16 to 19 years	1,694	1,397	248	49	4,702	236	4,258	209	433	684
16 to 17 years	209	152	41	17	2,277	36	2,143	97	93	453
18 to 19 years	1,485	1,245	207	32	2,425	200	2,114	111	339	231
20 years and over	103,582	91,484	9,309	2,789	18,904	2,487	15,212	1,204	5,135	817
20 to 24 years	8,531	7,387	931	213	3,539	466	2,845	228	1,106	234
25 years and over	95,051	84,097	8,378	2,576	15,365	2,022	12,368	976	4,029	583
25 to 54 years	82,980	73,688	7,156	2,136	11,215	1,793	8,760	662	3,652	453
55 years and over	12,071	10,410	1,222	439	4,149	228	3,608	313	376	130
Men, 16 years and over	61,304	54,704	4,940	1,660	7,628	1,176	5,984	468	3,211	671
16 to 19 years	1,008	830	153	26	2,113	115	1,892	106	266	414
20 years and over	60,296	53,875	4,787	1,634	5,515	1,061	4,092	363	2,945	257
20 to 24 years	4,884	4,248	530	105	1,466	216	1,166	84	632	87
25 years and over	55,412	49,626	4,257	1,529	4,049	844	2,926	279	2,312	170
25 to 54 years	48,143	43,289	3,598	1,256	2,372	757	1,472	144	2,047	109
55 years and over	7,269	6,337	660	273	1,677	88	1,454	135	266	62
Women, 16 years and over	43,972	38,177	4,617	1,178	15,977	1,548	13,486	944	2,356	830
16 to 19 years	686	567	95	23	2,589	121	2,365	103	166	270
20 years and over	43,286	37,610	4,522	1,155	13,388	1,427	11,120	841	2,190	560
20 to 24 years	3,648	3,138	401	108	2,073	250	1,679	144	474	147
25 years and over	39,639	34,471	4,120	1,047	11,315	1,177	9,441	697	1,716	413
25 to 54 years	34,837	30,398	3,558	881	8,843	1,037	7,288	519	1,605	345
55 years and over	4,801	4,073	562	167	2,472	141	2,153	178	111	68
White										
Men, 16 years and over	52,711	46,988	4,290	1,433	6,531	913	5,230	387	2,406	538
16 to 19 years	898	743	134	21	1,868	95	1,685	88	197	338
20 years and over	51,813	46,245	4,156	1,412	4,662	818	3,545	299	2,209	201
20 to 24 years	4,112	3,553	471	88	1,211	178	970	63	424	66
25 years and over	47,701	42,692	3,685	1,324	3,452	640	2,576	236	1,785	134
25 to 54 years	41,247	37,078	3,107	1,062	1,928	576	1,241	112	1,572	78
55 years and over	6,455	5,614	578	263	1,523	64	1,334	125	213	56
Women, 16 years and over	35,851	31,150	3,756	944	13,875	1,112	11,940	822	1,613	669
16 to 19 years	572	479	74	20	2,234	101	2,048	85	88	215
20 years and over	35,278	30,672	3,682	925	11,640	1,011	9,892	738	1,525	454
20 to 24 years	3,008	2,604	333	71	1,702	178	1,408	116	331	105
25 years and over	32,270	28,068	3,349	853	9,938	833	8,484	621	1,194	349
25 to 54 years	28,119	24,549	2,853	718	7,755	728	6,571	456	1,109	288
55 years and over	4,151	3,519	496	136	2,183	106	1,913	165	84	60
Black										
Men, 16 years and over	5,836	5,218	452	166	716	198	469	49	645	103
16 to 19 years	86	71	11	4	178	16	150	12	62	65
20 years and over	5,750	5,147	441	162	538	181	320	37	584	38
20 to 24 years	557	506	46	5	146	36	103	6	180	9
25 years and over	5,192	4,641	395	157	392	145	217	31	404	29
25 to 54 years	4,679	4,188	342	149	282	125	134	23	376	24
55 years and over	513	453	53	8	110	20	82	8	27	5
Women, 16 years and over	6,018	5,171	649	198	1,476	374	1,007	95	609	132
16 to 19 years	89	72	13	3	256	15	224	17	65	49
20 years and over	5,929	5,099	635	195	1,220	359	783	78	544	83
20 to 24 years	514	426	55	34	257	64	173	20	119	34
25 years and over	5,415	4,673	581	161	963	296	610	58	426	49
25 to 54 years	4,929	4,266	529	134	741	270	424	47	406	42
55 years and over	485	407	52	27	222	25	186	11	20	7

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

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

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

**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	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
Total	126,384	128,882	67,640	68,932	64,693	65,811	58,744	59,949	55,739	56,674
Managerial and professional specialty	37,357	38,036	19,233	19,390	19,123	19,298	18,124	18,646	17,990	18,505
Executive, administrative, and managerial	17,979	18,434	10,112	10,103	10,077	10,062	7,866	8,331	7,811	8,281
Officials and administrators, public administration	695	663	381	372	381	368	314	291	314	291
Other executive, administrative, and managerial	12,841	13,030	7,825	7,717	7,800	7,682	5,016	5,313	4,979	5,270
Management-related occupations	4,442	4,741	1,907	2,014	1,896	2,011	2,536	2,727	2,517	2,720
Professional specialty	19,378	19,602	9,121	9,287	9,046	9,236	10,257	10,315	10,180	10,224
Engineers	2,033	2,104	1,822	1,874	1,822	1,874	211	230	211	230
Mathematical and computer scientists	1,455	1,635	1,009	1,187	1,004	1,182	446	448	446	444
Natural scientists	534	467	378	316	378	316	156	151	156	151
Health diagnosing occupations	984	1,055	757	809	757	809	227	246	227	246
Health assessment and treating occupations	2,753	2,876	366	386	366	386	2,387	2,490	2,386	2,490
Teachers, college and university	928	905	517	501	511	500	411	404	400	401
Teachers, except college and university	4,999	5,006	1,265	1,266	1,249	1,251	3,734	3,740	3,693	3,704
Lawyers and judges	940	888	701	657	701	657	238	230	238	230
Other professional specialty occupations	4,751	4,665	2,305	2,290	2,257	2,259	2,446	2,375	2,422	2,327
Technical, sales, and administrative support	37,744	38,037	13,525	13,565	12,805	12,793	24,219	24,471	22,622	22,757
Technicians and related support	4,055	4,216	1,999	2,023	1,960	1,987	2,055	2,193	2,039	2,149
Health technologists and technicians	1,655	1,694	356	320	352	314	1,299	1,374	1,292	1,358
Engineering and science technicians	1,192	1,301	941	1,009	916	984	251	291	241	277
Technicians, except health, engineering, and science	1,208	1,222	702	694	692	689	506	528	505	514
Sales occupations	15,251	15,388	7,632	7,617	7,160	7,092	7,619	7,771	6,600	6,649
Supervisors and proprietors	4,494	4,507	2,779	2,681	2,738	2,670	1,715	1,826	1,697	1,793
Sales representatives, finance and business services	2,487	2,626	1,386	1,445	1,374	1,434	1,101	1,181	1,078	1,165
Sales representatives, commodities, except retail	1,504	1,527	1,150	1,128	1,146	1,121	354	399	348	392
Sales workers, retail and personal services	6,860	6,641	2,301	2,347	1,886	1,852	4,379	4,294	3,409	3,235
Sales-related occupations	86	87	16	15	16	15	70	71	68	63
Administrative support, including clerical	18,438	18,433	3,894	3,925	3,686	3,715	14,544	14,508	13,983	13,959
Supervisors	717	702	294	308	294	308	423	395	420	391
Computer equipment operators	404	397	163	156	158	153	241	242	234	238
Secretaries, stenographers, and typists	3,730	3,684	94	67	86	57	3,637	3,617	3,537	3,493
Financial records processing	2,257	2,233	178	187	178	179	2,079	2,046	2,046	2,021
Mail and message distributing	944	948	566	594	549	569	378	353	362	348
Other administrative support, including clerical	10,386	10,469	2,600	2,614	2,422	2,448	7,787	7,855	7,384	7,469
Service occupations	16,793	17,708	6,581	7,105	5,763	6,214	10,212	10,603	9,176	9,412
Private household	827	829	35	42	22	34	792	787	691	699
Protective service	2,095	2,427	1,714	2,005	1,675	1,973	381	422	361	407
Service, except private household and protective	13,871	14,451	4,832	5,057	4,067	4,208	9,039	9,394	8,124	8,306
Food service	5,731	5,995	2,383	2,549	1,776	1,854	3,348	3,446	2,683	2,708
Health service	2,416	2,545	273	291	271	275	2,142	2,253	2,073	2,132
Cleaning and building service	2,959	3,088	1,680	1,753	1,588	1,648	1,279	1,334	1,240	1,250
Personal service	2,766	2,823	495	464	433	431	2,270	2,360	2,129	2,216
Precision production, craft, and repair	13,610	14,027	12,413	12,847	12,165	12,536	1,197	1,180	1,170	1,171
Mechanics and repairers	4,445	4,782	4,289	4,581	4,223	4,446	156	201	151	201
Construction trades	5,218	5,327	5,105	5,228	4,967	5,092	113	99	110	96
Other precision production, craft, and repair	3,947	3,919	3,018	3,038	2,975	2,998	929	881	909	874
Operators, fabricators, and laborers	17,854	18,179	13,433	13,679	12,559	12,785	4,421	4,501	4,246	4,305
Machine operators, assemblers, and inspectors	7,882	8,121	4,945	5,155	4,780	4,983	2,937	2,966	2,858	2,892
Transportation and material moving occupations	5,135	5,275	4,626	4,724	4,536	4,609	509	551	497	540
Motor vehicle operators	3,928	4,108	3,472	3,622	3,391	3,550	455	486	444	475
Other transportation and material moving occupations	1,207	1,167	1,154	1,102	1,145	1,059	54	65	54	65
Handlers, equipment cleaners, helpers, and laborers	4,837	4,783	3,863	3,800	3,243	3,193	975	984	891	873
Construction laborers	685	751	648	725	616	677	37	26	37	26
Other handlers, equipment cleaners, helpers, and laborers	4,152	4,032	3,215	3,075	2,627	2,516	938	957	854	847
Farming, forestry, and fishing	3,027	2,895	2,456	2,346	2,276	2,185	571	549	535	525
Farm operators and managers	1,190	1,115	929	881	917	872	261	234	259	234
Other farming, forestry, and fishing occupations	1,837	1,780	1,527	1,465	1,359	1,313	310	315	276	291

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
TOTAL						
Total, 16 years and over (thousands)	126,384	128,882	67,640	68,932	58,744	59,949
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	29.6	29.5	28.4	28.1	30.9	31.1
Executive, administrative, and managerial	14.2	14.3	15.0	14.7	13.4	13.9
Professional specialty	15.3	15.2	13.5	13.5	17.5	17.2
Technical, sales, and administrative support	29.9	29.5	20.0	19.7	41.2	40.8
Technicians and related support	3.2	3.3	3.0	2.9	3.5	3.7
Sales occupations	12.1	11.9	11.3	11.0	13.0	13.0
Administrative support, including clerical	14.6	14.3	5.8	5.7	24.8	24.2
Service occupations	13.3	13.7	9.7	10.3	17.4	17.7
Private household .....	.7	.6	.1	.1	1.3	1.3
Protective service	1.7	1.9	2.5	2.9	.6	.7
Service, except private household and protective	11.0	11.2	7.1	7.3	15.4	15.7
Precision production, craft, and repair	10.8	10.9	18.4	18.6	2.0	2.0
Operators, fabricators, and laborers	14.1	14.1	19.9	19.8	7.5	7.5
Machine operators, assemblers, and inspectors	6.2	6.3	7.3	7.5	5.0	4.9
Transportation and material moving occupations	4.1	4.1	6.8	6.9	.9	.9
Handlers, equipment cleaners, helpers, and laborers	3.8	3.7	5.7	5.5	1.7	1.6
Farming, forestry, and fishing	2.4	2.2	3.6	3.4	1.0	.9
White						
Total, 16 years and over (thousands)	107,425	108,967	58,442	59,242	48,983	49,725
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	30.6	30.6	29.3	29.0	32.2	32.5
Executive, administrative, and managerial	15.0	15.0	15.8	15.4	14.1	14.6
Professional specialty	15.6	15.6	13.5	13.6	18.2	17.9
Technical, sales, and administrative support	29.9	29.5	20.0	19.7	41.7	41.3
Technicians and related support	3.2	3.3	3.0	3.0	3.6	3.6
Sales occupations	12.4	12.3	11.8	11.5	13.3	13.3
Administrative support, including clerical	14.2	13.9	5.3	5.2	24.9	24.3
Service occupations	12.2	12.6	8.9	9.2	16.0	16.5
Private household .....	.6	.6	.1	.0	1.3	1.3
Protective service	1.5	1.7	2.4	2.7	.5	.6
Service, except private household and protective	10.0	10.2	6.4	6.5	14.3	14.7
Precision production, craft, and repair	11.2	11.4	19.0	19.5	2.0	1.8
Operators, fabricators, and laborers	13.4	13.4	18.9	19.0	6.9	6.9
Machine operators, assemblers, and inspectors	5.9	5.9	7.1	7.1	4.5	4.4
Transportation and material moving occupations	4.0	4.0	6.6	6.6	.8	.9
Handlers, equipment cleaners, helpers, and laborers	3.5	3.6	5.3	5.3	1.5	1.5
Farming, forestry, and fishing	2.6	2.5	3.9	3.7	1.1	1.0
Black						
Total, 16 years and over (thousands)	13,474	14,045	6,277	6,551	7,197	7,494
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	20.2	20.2	17.6	17.9	22.5	22.2
Executive, administrative, and managerial	8.5	9.1	8.0	8.4	9.0	9.7
Professional specialty	11.7	11.1	9.6	9.5	13.5	12.6
Technical, sales, and administrative support	29.6	29.5	19.1	18.3	38.8	39.4
Technicians and related support	2.8	2.9	2.9	2.3	2.8	3.5
Sales occupations	8.8	9.0	6.8	7.0	10.6	10.8
Administrative support, including clerical	17.9	17.6	9.5	9.0	25.3	25.1
Service occupations	21.6	21.8	16.5	18.1	26.1	25.0
Private household	1.1	1.0	(¹)	.1	2.1	1.8
Protective service	2.7	3.3	4.2	5.0	1.4	1.9
Service, except private household and protective	17.8	17.5	12.3	12.9	22.6	21.4
Precision production, craft, and repair	8.0	7.9	15.1	14.2	1.8	2.4
Operators, fabricators, and laborers	19.7	19.7	29.9	30.1	10.8	10.7
Machine operators, assemblers, and inspectors	8.1	9.3	9.4	11.4	7.0	7.4
Transportation and material moving occupations	5.6	5.7	10.5	10.6	1.4	1.3
Handlers, equipment cleaners, helpers, and laborers	6.0	4.8	10.0	8.1	2.4	2.0
Farming, forestry, and fishing .....	.8	.8	1.7	1.5	.1	.3

¹ Less than 0.05 percent.

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-21. Employed persons by industry and occupation

(In thousands)

Industry	January 1998												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service ¹		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture	2,938	148	79	35	18	179	-	25	29	23	35	1	2,366
Mining	633	96	63	20	7	53	-	6	247	30	89	18	3
Construction	7,861	1,263	131	31	53	396	-	22	4,612	104	429	808	11
Manufacturing	20,870	2,890	2,050	636	796	1,999	-	314	3,902	6,438	786	987	72
Durable goods	12,585	1,742	1,403	402	299	1,164	-	145	2,760	3,722	398	483	67
Nondurable goods	8,286	1,148	647	234	497	835	-	169	1,142	2,716	388	504	6
Transportation and public utilities	9,333	1,298	583	313	288	2,385	-	305	1,271	163	2,224	494	9
Wholesale and retail trade	26,260	2,414	545	219	10,993	2,149	-	4,974	1,486	360	1,047	1,991	82
Wholesale trade	4,808	579	87	44	1,962	696	-	36	329	128	509	385	53
Retail trade	21,452	1,835	458	175	9,031	1,453	-	4,938	1,157	231	537	1,606	30
Finance, insurance, and real estate	8,414	2,469	339	175	2,092	2,753	-	343	165	15	7	17	39
Services	46,625	6,544	14,946	2,568	1,110	7,114	829	9,090	2,103	952	621	445	303
Private households	949	4	4	2	3	2	829	74	3	-	3	10	15
Other service industries	45,676	6,540	14,942	2,567	1,107	7,112	-	9,016	2,100	952	618	436	288
Professional services	31,464	4,134	13,097	2,169	186	5,207	-	5,501	414	277	329	69	80
Public administration	5,948	1,312	865	219	29	1,406	-	1,800	213	36	36	22	9

¹ Includes protective service, not shown separately.

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

procedures and revised population controls used in the household survey.

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

(In thousands)

Age and sex	January 1998									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Wage and salary workers					Self-employed workers	Unpaid family workers
				Total	Private industries			Government		
Total					Private household workers	Other private industries				
Total, 16 years and over	1,651	1,247	40	117,028	98,533	945	97,588	18,495	8,803	114
16 to 19 years	138	8	9	6,192	5,907	115	5,793	284	48	1
16 to 17 years	85	8	6	2,361	2,287	74	2,213	74	25	1
18 to 19 years	53	-	4	3,830	3,620	41	3,580	210	23	-
20 to 24 years	208	22	3	11,604	10,506	71	10,434	1,099	223	10
25 to 34 years	459	175	13	29,280	25,513	137	25,376	3,767	1,442	21
35 to 44 years	422	300	4	32,311	27,021	239	26,781	5,290	2,692	32
45 to 54 years	282	310	1	24,067	18,632	189	18,443	5,435	2,354	31
55 to 64 years	111	219	1	10,807	8,653	112	8,540	2,155	1,368	11
65 years and over	31	213	8	2,767	2,302	81	2,221	465	674	9
Men, 16 years and over	1,219	934	24	61,338	53,052	71	52,982	8,285	5,394	23
16 to 19 years	104	8	9	2,975	2,867	19	2,848	108	24	-
16 to 17 years	64	8	6	1,143	1,106	9	1,097	37	13	1
18 to 19 years	41	-	4	1,832	1,761	11	1,750	71	10	-
20 to 24 years	160	14	3	6,037	5,541	1	5,541	496	132	4
25 to 34 years	339	128	9	15,708	13,948	4	13,944	1,760	870	7
35 to 44 years	326	246	-	17,089	14,774	21	14,753	2,315	1,566	4
45 to 54 years	192	207	-	12,388	10,040	15	10,024	2,349	1,432	3
55 to 64 years	77	156	-	5,658	4,624	3	4,621	1,034	902	3
65 years and over	21	174	3	1,483	1,258	7	1,251	224	468	1
Women, 16 years and over	431	313	15	55,690	45,480	875	44,606	10,209	3,409	91
16 to 19 years	34	-	-	3,217	3,040	95	2,945	177	25	-
16 to 17 years	22	-	-	1,218	1,181	65	1,116	37	12	-
18 to 19 years	12	-	-	1,999	1,859	30	1,830	139	13	-
20 to 24 years	49	8	-	5,567	4,964	71	4,894	603	91	6
25 to 34 years	120	47	4	13,572	11,565	133	11,432	2,007	572	14
35 to 44 years	96	54	4	15,222	12,247	219	12,028	2,975	1,127	27
45 to 54 years	90	103	1	11,679	8,592	174	8,419	3,087	922	28
55 to 64 years	34	63	1	5,149	4,028	109	3,919	1,120	466	8
65 years and over	10	39	5	1,284	1,043	74	969	240	206	8

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Hours of work	January 1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	124,632	2,705	121,926	100.0	100.0	100.0
1 to 34 hours	30,902	992	29,909	24.8	36.7	24.5
1 to 4 hours	1,323	89	1,235	1.1	3.3	1.0
5 to 14 hours	5,176	221	4,955	4.2	8.2	4.1
15 to 29 hours	15,571	488	15,083	12.5	18.0	12.4
30 to 34 hours	8,831	194	8,637	7.1	7.2	7.1
35 hours and over	93,730	1,713	92,017	75.2	63.3	75.5
35 to 39 hours	8,866	159	8,706	7.1	5.9	7.1
40 hours	45,670	624	45,046	36.6	23.1	36.9
41 hours and over	39,195	930	38,265	31.4	34.4	31.4
41 to 48 hours	14,662	220	14,442	11.8	8.1	11.8
49 to 59 hours	14,675	335	14,340	11.8	12.4	11.8
60 hours and over	9,858	375	9,483	7.9	13.8	7.8
Average hours, total at work	39.2	38.0	39.2	-	-	-
Average hours, persons who usually work full time	43.3	44.4	43.3	-	-	-

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

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

(Numbers in thousands)

Reason for working less than 35 hours	January 1998					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over	30,902	9,557	21,345	29,909	9,194	20,715
Economic reasons	4,299	1,710	2,589	4,090	1,577	2,513
Slack work or business conditions	2,611	1,395	1,216	2,476	1,305	1,170
Could only find part-time work	1,315	-	1,315	1,295	-	1,295
Seasonal work	191	133	58	137	90	48
Job started or ended during week	182	182	-	181	181	-
Noneconomic reasons	26,603	7,847	18,756	25,820	7,618	18,202
Child-care problems	967	111	856	954	110	844
Other family or personal obligations	5,748	823	4,925	5,558	805	4,753
Health or medical limitations	717	-	717	688	-	688
In school or training	6,760	61	6,699	6,643	61	6,581
Retired or Social Security limit on earnings	1,768	-	1,768	1,689	-	1,689
Vacation or personal day	1,943	1,943	-	1,895	1,895	-
Holiday, legal or religious	196	196	-	194	194	-
Weather-related curtailment	1,337	1,337	-	1,236	1,236	-
All other reasons	7,167	3,376	3,791	6,963	3,317	3,646
Average hours:						
Economic reasons	22.8	23.5	22.3	22.9	23.7	22.3
Other reasons	21.1	25.5	19.2	21.2	25.6	19.3

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and 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	January 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over	121,926	29,909	4,090	7,618	18,202	92,017	39.2	43.3
Wage and salary workers	113,595	27,003	3,664	6,956	16,383	86,592	39.3	43.1
Mining	581	47	7	31	9	534	48.7	49.1
Construction	6,183	1,434	432	619	383	4,749	39.0	40.9
Manufacturing	19,976	2,375	416	1,204	755	17,601	42.4	43.4
Durable goods	12,082	1,212	169	688	355	10,870	42.9	43.7
Nondurable goods	7,894	1,163	247	516	400	6,731	41.6	43.0
Transportation and public utilities	8,593	1,241	200	503	537	7,352	42.5	44.3
Wholesale and retail trade	23,937	8,341	1,241	1,047	6,054	15,596	36.6	43.4
Finance, insurance, and real estate	7,614	1,341	79	522	740	6,273	40.5	42.7
Service industries	40,907	11,453	1,254	2,552	7,647	29,454	38.0	42.9
Private households	911	541	96	39	407	370	28.5	43.4
All other industries	39,997	10,912	1,158	2,514	7,240	29,085	38.2	42.9
Public administration	5,804	771	35	477	259	5,033	41.8	42.9
Self-employed workers	8,217	2,849	419	662	1,768	5,368	38.7	45.5
Unpaid family workers	114	58	6	-	52	56	33.0	(¹)

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

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

procedures and revised population controls used in the household survey.

**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	January 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
TOTAL								
Total, 16 years and over	121,926	29,909	4,090	7,618	18,202	92,017	39.2	43.3
16 to 19 years	5,990	4,530	300	161	4,069	1,460	23.0	38.6
16 to 17 years	2,278	2,126	47	28	2,051	152	16.6	36.0
18 to 19 years	3,712	2,404	253	133	2,017	1,308	26.9	38.9
20 years and over	115,936	25,380	3,790	7,457	14,133	90,557	40.1	43.3
20 to 24 years	11,415	4,036	664	683	2,689	7,378	35.6	41.3
25 years and over	104,521	21,343	3,125	6,773	11,445	83,178	40.6	43.5
25 to 54 years	89,584	16,692	2,755	5,787	8,150	72,893	41.1	43.6
55 years and over	14,937	4,652	370	986	3,295	10,285	37.0	42.8
Men, 16 years and over	64,791	11,175	2,037	3,672	5,466	53,616	42.0	44.6
16 to 19 years	2,871	2,022	155	96	1,771	849	24.5	38.6
16 to 17 years	1,099	1,004	32	17	954	95	17.5	35.8
18 to 19 years	1,772	1,018	122	79	817	754	28.8	39.0
20 years and over	61,920	9,153	1,883	3,575	3,695	52,767	42.8	44.7
20 to 24 years	5,999	1,804	338	375	1,092	4,195	37.4	42.1
25 years and over	55,920	7,348	1,545	3,200	2,603	48,572	43.4	44.9
25 to 54 years	47,777	5,373	1,366	2,695	1,311	42,404	44.1	45.1
55 years and over	8,144	1,976	178	505	1,292	6,168	39.6	44.0
Women, 16 years and over	57,135	18,735	2,052	3,946	12,736	38,401	36.0	41.4
16 to 19 years	3,119	2,508	145	65	2,297	611	21.7	38.6
16 to 17 years	1,179	1,122	14	11	1,097	57	15.9	(¹)
18 to 19 years	1,940	1,385	131	54	1,200	555	25.2	38.8
20 years and over	54,016	16,227	1,907	3,881	10,439	37,789	36.9	41.4
20 to 24 years	5,416	2,232	327	309	1,597	3,184	33.6	40.2
25 years and over	48,601	13,995	1,580	3,573	8,842	34,606	37.2	41.5
25 to 54 years	41,808	11,319	1,388	3,092	6,839	30,489	37.8	41.6
55 years and over	6,793	2,676	192	481	2,003	4,117	34.0	41.0
Race								
White, 16 years and over	102,817	25,551	3,217	6,339	15,995	77,266	39.3	43.5
Men	55,513	9,573	1,680	3,150	4,743	45,941	42.2	44.8
Women	47,303	15,978	1,537	3,190	11,252	31,325	35.9	41.6
Black, 16 years and over	13,460	3,047	682	959	1,406	10,413	38.3	41.3
Men	6,283	1,085	272	366	448	5,198	40.4	42.8
Women	7,177	1,962	410	594	958	5,215	36.5	39.9
Marital status								
Men, 16 years and over:								
Married, spouse present	39,915	4,814	855	2,282	1,677	35,101	44.0	45.3
Widowed, divorced, or separated	7,775	1,188	312	475	401	6,587	42.7	44.5
Single (never married)	17,101	5,173	870	915	3,388	11,928	37.2	42.7
Women, 16 years and over:								
Married, spouse present	30,850	9,929	842	2,187	6,900	20,921	36.1	41.2
Widowed, divorced, or separated	11,727	3,042	505	928	1,609	8,685	38.4	41.9
Single (never married)	14,558	5,763	706	831	4,227	8,795	33.9	41.3

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

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

and 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	January 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over ¹	121,983	29,942	4,087	7,618	18,237	92,041	39.2	43.3
Managerial and professional specialty	36,968	6,539	526	2,222	3,791	30,429	42.1	45.0
Executive, administrative, and managerial	17,993	2,469	212	1,011	1,246	15,524	43.8	45.7
Professional specialty	18,975	4,070	314	1,211	2,545	14,905	40.6	44.2
Technical, sales, and administrative support	36,908	10,495	1,115	2,301	7,079	26,413	37.5	42.2
Technicians and related support	4,127	840	74	291	475	3,287	39.5	42.2
Sales occupations	14,882	4,691	649	702	3,339	10,192	38.0	44.3
Administrative support, including clerical	17,899	4,964	391	1,308	3,265	12,934	36.6	40.6
Service occupations	17,039	6,907	1,003	878	5,025	10,132	34.5	42.3
Private household	798	477	78	28	371	321	28.0	42.9
Protective service	2,340	336	31	104	201	2,004	43.4	46.1
Service, except private household and protective	13,901	6,094	894	746	4,454	7,807	33.3	41.4
Precision production, craft, and repair	13,508	2,103	542	1,038	524	11,404	41.6	42.9
Operators, fabricators, and laborers	17,561	3,898	901	1,179	1,818	13,663	39.6	42.5
Machine operators, assemblers, and inspectors	7,905	1,316	278	538	500	6,589	40.3	41.8
Transportation and material moving occupations	5,031	1,005	239	294	471	4,026	42.2	45.2
Handlers, equipment cleaners, helpers, and laborers	4,625	1,577	383	347	846	3,048	35.4	40.4
Men, 16 years and over ¹	64,647	11,099	2,030	3,664	5,405	53,548	42.1	44.6
Managerial and professional specialty	18,924	2,302	259	973	1,070	16,622	45.0	46.8
Executive, administrative, and managerial	9,875	994	131	474	389	8,881	46.1	47.3
Professional specialty	9,049	1,308	128	499	681	7,741	43.9	46.2
Technical, sales, and administrative support	13,225	2,349	288	612	1,450	10,876	41.7	44.9
Technicians and related support	1,981	280	27	132	121	1,701	41.7	43.5
Sales occupations	7,418	1,394	197	291	905	6,024	42.6	46.4
Administrative support, including clerical	3,826	675	64	188	424	3,150	40.0	42.8
Service occupations	6,875	1,873	293	288	1,292	5,002	38.4	44.0
Private household	38	21	8	-	13	17	(²)	(²)
Protective service	1,937	238	26	83	130	1,699	44.4	46.6
Service, except private household and protective	4,900	1,614	259	205	1,150	3,286	36.1	42.6
Precision production, craft, and repair	12,402	1,901	515	958	428	10,501	41.8	43.0
Operators, fabricators, and laborers	13,222	2,674	677	833	1,164	10,548	40.4	43.0
Machine operators, assemblers, and inspectors	5,034	674	147	300	227	4,360	41.4	42.6
Transportation and material moving occupations	4,504	814	215	270	329	3,690	42.8	45.2
Handlers, equipment cleaners, helpers, and laborers	3,685	1,187	315	263	609	2,498	36.0	40.6
Women, 16 years and over ¹	57,336	18,843	2,056	3,954	12,832	38,493	36.0	41.4
Managerial and professional specialty	18,044	4,237	267	1,249	2,721	13,807	39.1	42.8
Executive, administrative, and managerial	8,118	1,475	81	536	857	6,643	41.0	43.6
Professional specialty	9,926	2,762	186	713	1,863	7,164	37.6	42.2
Technical, sales, and administrative support	23,683	8,146	827	1,690	5,630	15,537	35.1	40.5
Technicians and related support	2,146	560	48	159	354	1,585	37.4	40.9
Sales occupations	7,464	3,297	452	411	2,434	4,168	33.4	41.5
Administrative support, including clerical	14,073	4,289	327	1,120	2,842	9,784	35.6	40.0
Service occupations	10,164	5,034	710	590	3,733	5,130	31.8	40.8
Private household	760	456	70	28	358	304	28.0	42.9
Protective service	403	97	6	21	71	306	38.8	43.3
Service, except private household and protective	9,001	4,480	635	542	3,304	4,520	31.8	40.5
Precision production, craft, and repair	1,106	202	27	79	96	904	39.6	41.7
Operators, fabricators, and laborers	4,339	1,224	225	346	654	3,115	37.2	40.6
Machine operators, assemblers, and inspectors	2,871	643	131	238	274	2,229	38.4	40.3
Transportation and material moving occupations	527	191	25	24	142	336	37.0	44.6
Handlers, equipment cleaners, helpers, and laborers	940	391	69	84	238	550	33.4	39.5

¹ Excludes farming, forestry, and fishing occupations.

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

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

**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	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
Total, 16 years and over	4,477	3,882	6.2	5.3	3,457	3,186	5.6	5.0
Married, spouse present	1,532	1,408	3.5	3.2	1,203	1,097	3.6	3.3
Widowed, divorced, or separated	666	508	7.8	5.7	709	768	5.6	5.9
Single (never married)	2,279	1,967	11.5	9.8	1,544	1,322	9.8	8.0
White, 16 years and over	3,438	2,945	5.6	4.7	2,475	2,281	4.8	4.4
Married, spouse present	1,285	1,147	3.3	3.0	995	906	3.4	3.1
Widowed, divorced, or separated	520	404	7.3	5.5	508	579	5.1	5.7
Single (never married)	1,633	1,393	10.2	8.5	973	796	8.2	6.4
Black, 16 years and over	851	749	11.9	10.3	816	741	10.2	9.0
Married, spouse present	180	183	5.5	5.4	136	117	5.4	4.5
Widowed, divorced, or separated	111	87	9.9	7.4	167	153	7.5	6.8
Single (never married)	560	478	20.5	17.5	513	472	15.7	14.0
Total, 25 years and over	2,893	2,483	4.7	4.0	2,346	2,129	4.5	4.0
Married, spouse present	1,429	1,345	3.4	3.2	1,090	969	3.4	3.0
Widowed, divorced, or separated	639	485	7.7	5.7	656	709	5.3	5.7
Single (never married)	825	652	7.8	6.1	600	451	7.4	5.4
White, 25 years and over	2,251	1,920	4.3	3.6	1,688	1,542	3.9	3.5
Married, spouse present	1,189	1,089	3.2	2.9	903	808	3.2	2.9
Widowed, divorced, or separated	496	389	7.2	5.5	468	527	4.8	5.3
Single (never married)	566	442	6.8	5.2	318	207	5.6	3.5
Black, 25 years and over	513	433	8.6	7.2	535	475	8.0	6.9
Married, spouse present	179	180	5.6	5.5	122	100	5.0	4.0
Widowed, divorced, or separated	110	81	9.9	7.1	154	147	7.1	6.7
Single (never married)	223	172	13.4	10.8	260	228	12.7	10.6

NOTE: Beginning in 1998, data reflect new composite estimation procedures and 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	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
Total, 16 years and over ¹	7,933	7,069	5.9	5.2	6.2	5.3	5.6	5.0
Managerial and professional specialty	845	801	2.2	2.1	2.0	2.0	2.4	2.1
Executive, administrative, and managerial	399	394	2.2	2.1	2.1	2.0	2.3	2.2
Professional specialty	446	407	2.2	2.0	1.9	2.1	2.6	2.0
Technical, sales, and administrative support	1,927	1,845	4.9	4.6	4.3	4.2	5.2	4.9
Technicians and related support	135	102	3.2	2.4	3.3	2.2	3.2	2.5
Sales occupations	979	872	6.0	5.4	4.3	4.1	7.7	6.6
Administrative support, including clerical	812	870	4.2	4.5	4.7	5.3	4.1	4.3
Service occupations	1,370	1,226	7.5	6.5	8.2	6.8	7.1	6.2
Private household	95	80	10.3	8.8	(²)	(²)	9.2	8.3
Protective service	90	130	4.1	5.1	3.9	5.4	4.8	3.7
Service, except private household and protective	1,186	1,016	7.9	6.6	9.4	7.3	7.0	6.2
Precision production, craft, and repair	941	869	6.5	5.8	6.6	5.9	5.3	5.6
Mechanics and repairers	225	161	4.8	3.2	4.6	3.4	10.2	.0
Construction trades	553	548	9.6	9.3	9.6	9.2	7.6	15.1
Other precision production, craft, and repair	163	161	4.0	3.9	3.9	3.5	4.1	5.6
Operators, fabricators, and laborers	1,915	1,509	9.7	7.7	9.5	7.3	10.2	8.7
Machine operators, assemblers, and inspectors	639	550	7.5	6.3	6.1	5.3	9.7	8.1
Transportation and material moving occupations	457	326	8.2	5.8	8.6	5.8	4.4	6.2
Handlers, equipment cleaners, helpers, and laborers	819	633	14.5	11.7	14.5	11.6	14.3	12.0
Construction laborers	255	157	27.2	17.3	27.4	17.0	(²)	(²)
Other handlers, equipment cleaners, helpers, and laborers	563	476	11.9	10.6	11.3	10.2	14.0	11.6
Farming, forestry, and fishing	376	336	11.0	10.4	11.4	9.2	9.5	15.2
No previous work experience	523	449	-	-	-	-	-	-
16 to 19 years	332	270	-	-	-	-	-	-
20 to 24 years	89	101	-	-	-	-	-	-
25 years and over	102	77	-	-	-	-	-	-

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

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

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-30. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
Total, 16 years and over	7,933	7,069	5.9	5.2	6.2	5.3	5.6	5.0
Nonagricultural private wage and salary workers	6,270	5,616	6.2	5.4	6.3	5.5	5.9	5.3
Mining	40	34	6.9	5.4	7.0	5.4	6.6	4.8
Construction	966	800	14.3	11.8	14.9	12.4	8.6	5.2
Manufacturing	1,042	886	4.9	4.2	4.3	3.5	6.4	5.7
Durable goods	593	468	4.6	3.7	4.2	3.4	5.8	4.4
Lumber and wood products	56	45	7.3	5.9	7.5	5.2	6.2	9.1
Furniture and fixtures	48	33	6.7	5.0	6.7	4.4	6.6	6.2
Stone, clay, and glass products	32	24	5.4	4.0	6.0	3.5	3.5	6.4
Primary metal industries	41	21	4.9	2.8	4.2	3.3	9.2	-
Fabricated metal products	52	49	3.8	3.6	3.9	4.2	3.5	1.8
Machinery and computing equipment	98	84	4.0	3.2	3.7	3.3	4.7	2.9
Electrical machinery, equipment, and supplies	85	66	3.9	3.2	3.7	2.6	4.3	4.1
Transportation equipment	98	75	4.2	3.0	3.3	2.7	7.1	4.2
Automobiles	58	50	4.4	3.6	3.6	3.0	7.0	5.4
Other transportation equipment	40	25	3.9	2.3	3.0	2.3	7.3	2.3
Professional and photographic equipment	15	32	1.9	3.7	1.0	3.2	3.3	4.5
Other durable goods industries	67	39	9.5	5.9	7.0	3.8	13.2	9.1
Nondurable goods	450	418	5.4	4.9	4.3	3.5	6.9	7.1
Food and kindred products	132	121	7.5	6.6	5.3	5.4	12.1	9.2
Textile mill products	38	35	5.8	6.0	3.9	5.1	8.3	7.1
Apparel and other textile products	90	89	9.4	9.0	10.1	4.5	9.0	11.1
Paper and allied products	18	10	2.8	1.4	3.3	1.6	1.6	.7
Printing and publishing	74	88	4.2	5.1	4.0	4.4	4.4	6.4
Chemicals and allied products	26	30	1.9	2.3	1.5	1.8	2.6	3.2
Rubber and miscellaneous plastics products	46	37	5.5	3.7	5.3	2.4	6.1	6.3
Other nondurable goods industries	25	7	6.3	2.1	3.3	.8	11.3	4.7
Transportation and public utilities	322	336	4.6	4.4	4.9	4.2	3.8	4.7
Transportation	257	256	5.9	5.5	6.3	5.5	4.7	5.5
Communications and other public utilities	65	80	2.4	2.7	2.3	2.1	2.7	3.7
Wholesale and retail trade	1,849	1,755	7.2	6.7	6.6	6.0	7.8	7.4
Wholesale trade	169	218	3.6	4.6	3.8	4.2	3.2	5.2
Retail trade	1,680	1,538	8.0	7.1	7.5	6.6	8.4	7.7
Finance, insurance, and real estate	264	218	3.6	2.8	3.0	2.3	3.9	3.1
Service industries	1,785	1,587	5.4	4.7	5.6	5.1	5.2	4.5
Professional services	624	619	3.2	3.1	2.5	2.9	3.5	3.1
Other service industries	1,161	968	8.6	7.2	8.2	7.0	9.0	7.4
Agricultural wage and salary workers	245	301	13.0	15.4	13.7	14.4	10.8	18.2
Government, self-employed, and unpaid family workers	895	703	3.0	2.4	3.5	2.5	2.4	2.3
No previous work experience	523	449	-	-	-	-	-	-

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
NUMBER OF UNEMPLOYED												
Total unemployed	7,933	7,069	3,736	3,202	2,898	2,750	1,299	1,117	5,913	5,226	1,667	1,490
Job losers and persons who completed temporary jobs	4,027	3,556	2,524	2,123	1,250	1,217	253	216	3,115	2,737	744	656
On temporary layoff	1,502	1,362	982	827	406	422	114	113	1,300	1,168	150	147
Not on temporary layoff	2,526	2,195	1,543	1,296	844	795	139	103	1,815	1,569	594	509
Permanent job losers	1,666	1,485	1,042	859	569	568	55	58	1,241	1,130	342	280
Persons who completed temporary jobs	860	709	500	437	275	227	84	45	574	438	251	229
Job leavers	858	811	396	334	369	412	93	65	706	622	126	145
Reentrants	2,525	2,253	744	682	1,159	1,007	622	565	1,749	1,605	656	539
New entrants	523	449	72	64	119	115	332	270	343	262	143	149
PERCENT DISTRIBUTION												
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers and persons who completed temporary jobs	50.8	50.3	67.6	66.3	43.2	44.3	19.4	19.4	52.7	52.4	44.6	44.1
On temporary layoff	18.9	19.3	26.3	25.8	14.0	15.3	8.8	10.1	22.0	22.3	9.0	9.9
Not on temporary layoff	31.8	31.0	41.3	40.5	29.1	28.9	10.7	9.2	30.7	30.0	35.6	34.2
Job leavers	10.8	11.5	10.6	10.4	12.7	15.0	7.1	5.9	11.9	11.9	7.5	9.7
Reentrants	31.8	31.9	19.9	21.3	40.0	36.6	47.8	50.6	29.6	30.7	39.3	36.2
New entrants	6.6	6.3	1.9	2.0	4.1	4.2	25.6	24.2	5.8	5.0	8.6	10.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers and persons who completed temporary jobs	3.0	2.6	3.7	3.1	2.1	2.0	3.5	2.9	2.7	2.4	4.9	4.2
Job leavers .....	.6	.6	.6	.5	.6	.7	1.3	.9	.6	.5	.8	.9
Reentrants	1.9	1.7	1.1	1.0	2.0	1.7	8.6	7.5	1.5	1.4	4.3	3.5
New entrants .....	.4	.3	.1	.1	.2	.2	4.6	3.6	.3	.2	.9	1.0

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Reason, sex, and age	January 1998						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over	7,069	100.0	44.3	28.8	26.9	11.7	15.2
Job losers and persons who completed temporary jobs	3,556	100.0	46.5	30.2	23.3	11.5	11.8
On temporary layoff	1,362	100.0	61.1	29.2	9.6	6.9	2.7
Not on temporary layoff	2,195	100.0	37.4	30.8	31.8	14.4	17.5
Permanent job losers	1,485	100.0	35.8	30.6	33.6	15.0	18.6
Persons who completed temporary jobs	709	100.0	40.7	31.2	28.1	13.1	15.0
Job leavers	811	100.0	48.7	25.8	25.6	9.1	16.5
Reentrants	2,253	100.0	42.7	25.4	31.8	12.3	19.5
New entrants	449	100.0	27.3	40.6	32.1	14.3	17.8
Men, 20 years and over	3,202	100.0	40.5	31.3	28.2	11.1	17.1
Job losers and persons who completed temporary jobs	2,123	100.0	41.1	34.1	24.8	11.5	13.4
On temporary layoff	827	100.0	56.2	33.6	10.2	7.2	3.0
Not on temporary layoff	1,296	100.0	31.5	34.3	34.2	14.2	20.0
Permanent job losers	859	100.0	29.5	33.5	37.0	15.5	21.5
Persons who completed temporary jobs	437	100.0	35.4	36.0	28.6	11.6	17.0
Job leavers	334	100.0	43.0	28.2	28.8	8.1	20.7
Reentrants	682	100.0	39.5	24.1	36.4	10.0	26.4
New entrants	64	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 20 years and over	2,750	100.0	45.8	25.8	28.3	13.5	14.9
Job losers and persons who completed temporary jobs	1,217	100.0	51.8	25.0	23.1	12.7	10.5
On temporary layoff	422	100.0	65.9	24.2	9.9	7.0	2.9
Not on temporary layoff	795	100.0	44.3	25.5	30.2	15.7	14.5
Permanent job losers	568	100.0	42.8	26.5	30.7	15.7	15.0
Persons who completed temporary jobs	227	100.0	48.1	23.0	28.9	15.8	13.2
Job leavers	412	100.0	49.1	24.3	26.6	10.9	15.6
Reentrants	1,007	100.0	40.3	25.8	33.9	15.1	18.9
New entrants	115	100.0	19.1	40.3	40.7	16.6	24.1
Both sexes, 16 to 19 years	1,117	100.0	51.6	29.2	19.2	8.9	10.3
Job losers and persons who completed temporary jobs	216	100.0	69.2	21.4	9.3	5.4	4.0
On temporary layoff	113	100.0	79.5	16.1	4.3	4.3	.0
Not on temporary layoff	103	100.0	58.0	27.2	14.8	6.5	8.3
Permanent job losers	58	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Persons who completed temporary jobs	45	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Job leavers	65	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Reentrants	565	100.0	50.9	26.4	22.7	10.2	12.5
New entrants	270	100.0	33.4	42.7	23.9	10.4	13.5

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

procedures and revised population controls used in the household survey.

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

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

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
Total, 16 years and over	7,933	7,069	100.0	100.0	6,343	5,567	100.0	100.0
Less than 5 weeks	3,352	3,132	42.3	44.3	2,440	2,223	38.5	39.9
5 to 14 weeks	2,329	2,038	29.4	28.8	1,935	1,665	30.5	29.9
5 to 10 weeks	1,537	1,379	19.4	19.5	1,257	1,118	19.8	20.1
11 to 14 weeks	792	660	10.0	9.3	678	547	10.7	9.8
15 weeks and over	2,252	1,898	28.4	26.9	1,967	1,679	31.0	30.2
15 to 26 weeks	1,029	825	13.0	11.7	874	708	13.8	12.7
27 weeks and over	1,223	1,074	15.4	15.2	1,093	972	17.2	17.5
27 to 51 weeks	579	477	7.3	6.8	523	453	8.2	8.1
52 weeks and over	644	596	8.1	8.4	570	518	9.0	9.3
Average (mean) duration, in weeks	15.3	14.9	-	-	16.5	16.3	-	-
Median duration, in weeks	7.4	6.9	-	-	8.4	8.0	-	-

NOTE: Beginning in 1998, data reflect new composite estimation

procedures and 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	January 1998							
	Thousands of persons						Weeks	
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over			Average (mean) duration	Median duration
				Total	15 to 26 weeks	27 weeks and over		
TOTAL								
Total, 16 years and over	7,069	3,132	2,038	1,898	825	1,074	14.9	6.9
16 to 19 years	1,117	576	326	215	99	115	11.0	4.4
20 to 24 years	1,340	626	406	309	143	166	11.9	5.6
25 to 34 years	1,585	734	439	412	173	238	14.8	6.6
35 to 44 years	1,588	619	475	493	203	290	16.8	8.2
45 to 54 years	933	386	239	308	151	157	17.2	7.9
55 to 64 years	392	148	113	131	46	84	23.7	8.6
65 years and over	114	42	39	32	8	24	16.8	9.2
Men, 16 years and over	3,882	1,649	1,203	1,030	410	620	15.3	7.2
16 to 19 years	680	354	202	125	54	71	11.3	4.3
20 to 24 years	719	289	262	168	78	90	12.0	7.0
25 to 34 years	815	370	231	214	70	144	16.1	6.7
35 to 44 years	805	307	253	246	94	152	16.7	8.3
45 to 54 years	535	219	156	159	70	90	16.6	7.7
55 to 64 years	255	86	77	92	36	56	25.2	9.9
65 years and over	72	24	23	25	8	17	(¹)	(¹)
Women, 16 years and over	3,186	1,483	835	869	415	454	14.5	6.5
16 to 19 years	436	223	124	89	45	45	10.5	4.4
20 to 24 years	621	336	145	140	65	75	11.8	4.1
25 to 34 years	769	364	208	198	103	94	13.5	6.3
35 to 44 years	782	313	223	247	109	138	16.9	8.0
45 to 54 years	399	167	83	149	81	67	18.0	8.1
55 to 64 years	137	63	36	38	10	28	21.1	6.6
65 years and over	42	18	17	7	-	7	(¹)	(¹)
Race								
White, 16 years and over	5,226	2,499	1,476	1,252	586	665	13.5	5.5
Men	2,945	1,333	889	722	317	405	14.2	6.4
Women	2,281	1,165	586	530	269	261	12.5	4.4
Black, 16 years and over	1,490	497	467	526	188	338	19.3	9.6
Men	749	247	254	247	71	176	18.6	9.4
Women	741	250	212	279	117	163	19.9	9.9
Marital status								
Men, 16 years and over:								
Married, spouse present	1,408	561	433	414	177	237	16.5	7.8
Widowed, divorced, or separated	508	207	167	134	48	86	17.3	7.3
Single (never married)	1,967	882	603	482	185	296	13.9	6.8
Women, 16 years and over:								
Married, spouse present	1,097	529	268	300	154	146	13.9	5.4
Widowed, divorced, or separated	768	318	220	229	116	114	17.0	8.1
Single (never married)	1,322	636	347	339	145	194	13.5	5.6

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

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Occupation and industry	January 1998							Average (mean) duration	Median duration
	Thousands of persons								
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
OCCUPATION									
Managerial and professional specialty	801	362	175	264	116	148	17.7	7.0	
Technical, sales, and administrative support	1,845	862	487	496	237	259	13.9	6.8	
Service occupations	1,226	597	299	331	149	182	15.0	5.3	
Precision production, craft, and repair	869	372	311	186	81	105	14.2	6.8	
Operators, fabricators, and laborers	1,509	674	460	375	126	249	14.9	6.5	
Farming, forestry, and fishing	336	136	121	79	50	29	11.2	7.4	
INDUSTRY¹									
Agriculture	301	132	108	61	33	28	10.8	6.3	
Construction	810	335	290	185	92	93	13.2	7.2	
Manufacturing	886	376	254	257	100	156	17.6	7.6	
Durable goods	468	207	135	126	50	76	16.1	6.9	
Nondurable goods	418	168	119	130	50	80	19.3	8.2	
Transportation and public utilities	1,094	159	91	124	48	76	16.0	7.2	
Wholesale and retail trade	5,317	908	464	385	175	209	12.3	4.4	
Finance, insurance, and real estate	684	88	63	76	37	40	18.6	8.2	
Services	3,414	840	453	534	232	302	15.7	6.7	
Public administration	387	53	27	49	17	32	20.8	9.7	
No previous work experience	449	123	182	144	64	80	17.2	9.2	

¹ Includes wage and salary workers only.

procedures and revised population controls used in the household survey.

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

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

(In thousands)

Category	Total		Age						Sex			
	Jan. 1997	Jan. 1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
	Total not in the labor force	67,968	68,287	12,314	12,036	18,712	18,901	36,942	37,351	25,147	25,426	42,821	42,861
Do not want a job now ¹	62,804	63,261	10,433	10,219	16,286	16,539	36,085	36,502	22,943	23,236	39,861	40,025
Want a job ¹	5,164	5,026	1,881	1,816	2,426	2,362	857	848	2,204	2,190	2,960	2,836
Did not search for work in previous year	2,962	2,953	994	968	1,328	1,355	640	630	1,195	1,168	1,767	1,785
Searched for work in previous year ²	2,202	2,073	887	848	1,098	1,007	217	218	1,009	1,022	1,193	1,051
Not available to work now	587	594	241	287	322	272	23	35	191	288	396	306
Available to work now	1,615	1,479	646	561	775	735	194	183	818	734	797	745
Reason not currently looking:												
Discouragement over job prospects ³	397	374	123	137	198	164	76	74	268	232	129	142
Reasons other than discouragement	1,218	1,105	523	425	577	571	118	109	550	502	668	603
Family responsibilities	156	141	47	21	100	110	9	9	20	27	136	113
In school or training	260	225	226	181	33	44	1	-	147	103	112	122
Ill health or disability	164	132	23	13	106	84	35	36	89	69	75	64
Other ⁴	638	607	227	210	338	333	73	64	294	303	344	305

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

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

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

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

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

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

(Numbers in thousands)

Characteristic	Both sexes				Men				Women			
	Number		Rate ¹		Number		Rate ¹		Number		Rate ¹	
	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
AGE												
Total, 16 years and over ²	7,572	7,702	6.0	6.0	4,076	3,995	6.0	5.8	3,496	3,707	6.0	6.2
16 to 19 years	278	267	4.7	4.2	144	104	4.9	3.3	134	163	4.5	5.0
20 years and over	7,294	7,435	6.1	6.1	3,932	3,891	6.1	5.9	3,362	3,544	6.0	6.3
20 to 24 years	738	747	6.2	6.2	323	318	5.2	5.0	415	429	7.4	7.5
25 years and over	6,556	6,689	6.0	6.1	3,609	3,573	6.2	6.0	2,947	3,115	5.9	6.1
25 to 54 years	5,886	5,905	6.3	6.3	3,220	3,092	6.5	6.1	2,666	2,812	6.2	6.4
55 years and over	671	784	4.3	4.8	389	481	4.5	5.4	281	303	4.1	4.2
55 to 64 years	551	673	4.6	5.4	314	403	4.8	5.9	237	270	4.4	4.7
65 years and over	120	111	3.2	3.0	76	79	3.4	3.7	44	33	2.8	2.1
RACE AND HISPANIC ORIGIN												
White	6,610	6,697	6.2	6.1	3,573	3,465	6.1	5.8	3,037	3,232	6.2	6.5
Black	749	712	5.6	5.1	384	349	6.1	5.3	365	363	5.1	4.8
Hispanic origin	429	539	3.5	4.2	252	316	3.4	4.1	177	222	3.6	4.4
MARITAL STATUS												
Married, spouse present	4,240	4,435	5.7	5.9	2,581	2,679	6.1	6.3	1,658	1,756	5.1	5.4
Widowed, divorced, or separated	1,348	1,333	6.8	6.5	501	462	6.4	5.5	847	870	7.1	7.2
Single (never married)	1,984	1,935	6.3	5.8	994	854	5.7	4.7	991	1,081	7.0	7.1
FULL- OR PART-TIME STATUS												
Primary job full time, secondary job part time	4,270	4,236	-	-	2,540	2,446	-	-	1,730	1,790	-	-
Primary and secondary jobs both part time	1,638	1,644	-	-	526	469	-	-	1,113	1,175	-	-
Primary and secondary jobs both full time	210	269	-	-	154	200	-	-	56	69	-	-
Hours vary on primary or secondary job	1,427	1,514	-	-	845	861	-	-	582	653	-	-

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

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

NOTE: Detail for the above race and Hispanic-origin groups will not sum to

totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**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							
	Jan. 1997	Jan. 1998	Total		Employed		Unemployed			
			Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998	Number		Percent of labor force	
							Jan. 1997	Jan. 1998	Jan. 1997	Jan. 1998
VIETNAM-ERA VETERANS										
Total, 40 years and over	7,785	7,800	6,663	6,577	6,406	6,357	257	220	3.9	3.3
40 to 54 years	6,418	6,117	5,783	5,478	5,549	5,299	234	179	4.0	3.3
40 to 44 years	1,132	850	1,031	766	975	750	56	16	5.4	2.1
45 to 49 years	2,898	2,424	2,609	2,184	2,530	2,121	80	62	3.1	2.8
50 to 54 years	2,388	2,843	2,142	2,528	2,044	2,427	98	100	4.6	4.0
55 years and over	1,367	1,683	881	1,099	858	1,057	23	41	2.6	3.8
NONVETERANS										
Total, 40 to 54 years	18,877	19,949	17,052	18,033	16,262	17,390	790	642	4.6	3.6
40 to 44 years	8,778	9,183	8,067	8,457	7,689	8,173	378	285	4.7	3.4
45 to 49 years	5,965	6,553	5,382	5,943	5,146	5,737	236	205	4.4	3.5
50 to 54 years	4,135	4,212	3,603	3,632	3,427	3,480	176	152	4.9	4.2

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces. Beginning in January 1998, data

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

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.54	531.70	37.8	12.71	480.44
1988	34.7	9.28	322.02	42.3	12.80	541.44	37.9	13.08	495.73
1989	34.6	9.66	334.24	43.0	13.26	570.18	37.9	13.54	513.17
1990	34.5	10.01	345.35	44.1	13.68	603.29	38.2	13.77	526.01
1991	34.3	10.32	353.98	44.4	14.19	630.04	38.1	14.00	533.40
1992	34.4	10.57	363.61	43.9	14.54	638.31	38.0	14.15	537.70
1993	34.5	10.83	373.64	44.3	14.60	646.78	38.5	14.38	553.63
1994	34.7	11.12	385.86	44.8	14.88	666.62	38.9	14.73	573.00
1995	34.5	11.43	394.34	44.7	15.30	683.91	38.9	15.09	587.00
1996	34.4	11.81	406.26	45.3	15.61	707.13	39.0	15.46	602.94
1997P	34.6	12.26	424.20	45.4	16.13	732.30	38.9	16.00	622.40
Monthly data, not seasonally adjusted									
1997:									
January	33.9	\$12.11	\$410.53	44.2	\$16.18	\$715.16	36.4	\$15.73	\$572.57
February	34.5	12.14	418.83	45.6	16.06	732.34	37.5	15.69	588.38
March	34.6	12.17	421.08	45.7	15.98	730.29	38.4	15.67	601.73
April	34.4	12.17	418.65	45.1	16.05	723.86	38.7	15.75	609.53
May	34.5	12.17	419.87	45.8	15.98	731.88	39.7	15.83	628.45
June	34.9	12.17	424.73	45.8	16.11	737.84	39.5	15.88	627.26
July	34.7	12.15	421.61	45.2	16.03	724.56	40.1	16.00	641.60
August	35.0	12.21	427.35	45.6	15.94	726.86	39.7	16.09	638.77
September	34.7	12.39	429.93	45.6	16.23	740.09	40.0	16.27	650.80
October	34.6	12.43	430.08	45.4	16.19	735.03	39.7	16.30	647.11
November	34.8	12.51	435.35	45.7	16.38	748.57	37.8	16.25	614.25
December ^P	34.7	12.51	434.10	45.1	16.47	742.80	38.4	16.34	627.46
1998:									
January ^P	34.2	12.58	430.24	44.9	16.70	749.83	37.3	16.24	605.75

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Manufacturing				Transportation and public utilities			Wholesale trade		
	Weekly hours	Hourly earnings	Hourly earnings, excluding overtime	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages										
1964	40.7	\$2.53	\$2.43	\$102.97	41.1	\$2.89	\$118.78	40.7	\$2.52	\$102.56
1965	41.2	2.61	2.50	107.53	41.3	3.03	125.14	40.8	2.60	106.08
1966	41.4	2.71	2.59	112.19	41.2	3.11	128.13	40.7	2.73	111.11
1967	40.6	2.82	2.71	114.49	40.5	3.23	130.82	40.3	2.87	115.66
1968	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.04	121.90
1969	40.6	3.19	3.05	129.51	40.7	3.63	147.74	40.2	3.23	129.85
1970	39.8	3.35	3.23	133.33	40.5	3.85	155.93	39.9	3.43	136.86
1971	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.4	3.64	143.42
1972	40.5	3.82	3.66	154.71	40.4	4.65	187.86	39.4	3.85	151.69
1973	40.7	4.09	3.91	166.46	40.5	5.02	203.31	39.2	4.07	159.54
1974	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.38	169.94
1975	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.6	4.72	182.19
1976	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.02	194.27
1977	40.3	5.68	5.44	228.90	39.9	6.99	278.90	38.8	5.39	209.13
1978	40.4	6.17	5.91	249.27	40.0	7.57	302.80	38.8	5.88	228.14
1979	40.2	6.70	6.43	269.34	39.9	8.16	325.58	38.8	6.39	247.93
1980	39.7	7.27	7.02	288.62	39.6	8.87	351.25	38.4	6.95	266.88
1981	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.55	290.68
1982	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.08	309.46
1983	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.54	328.79
1984	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.88	341.88
1985	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.15	351.36
1986	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.34	357.72
1987	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
1988	41.1	10.19	9.73	418.81	38.2	12.24	467.57	38.1	9.98	380.24
1989	41.0	10.48	10.02	429.68	38.3	12.57	481.43	38.0	10.39	394.82
1990	40.8	10.83	10.37	441.86	38.4	12.92	496.13	38.1	10.79	411.10
1991	40.7	11.18	10.71	455.03	38.1	13.20	502.92	38.1	11.15	424.82
1992	41.0	11.46	10.95	469.86	38.3	13.43	514.37	38.2	11.39	435.10
1993	41.4	11.74	11.18	486.04	39.3	13.55	532.52	38.2	11.74	448.47
1994	42.0	12.07	11.43	506.94	39.7	13.78	547.07	38.4	12.06	463.10
1995	41.6	12.37	11.74	514.59	39.4	14.13	556.72	38.3	12.43	476.07
1996	41.6	12.78	12.12	531.65	39.6	14.44	571.82	38.3	12.87	492.92
1997P	42.0	13.17	12.46	553.14	39.7	14.89	591.13	38.4	13.43	515.71
Monthly data, not seasonally adjusted										
1997:										
January	41.5	\$13.04	\$12.38	\$541.16	38.8	\$14.71	\$570.75	37.9	\$13.18	\$499.52
February	41.6	13.02	12.36	541.63	39.5	14.66	579.07	38.5	13.26	510.51
March	42.0	13.08	12.39	549.36	39.5	14.70	580.65	38.5	13.28	511.28
April	41.8	13.09	12.40	547.16	39.2	14.77	578.98	38.3	13.33	510.54
May	41.9	13.09	12.40	548.47	39.3	14.72	578.50	38.5	13.32	512.82
June	42.0	13.10	12.41	550.20	39.8	14.78	588.24	38.7	13.36	517.03
July	41.2	13.11	12.43	540.13	39.4	14.95	589.03	38.3	13.37	512.07
August	42.0	13.15	12.42	552.30	40.5	15.00	607.50	38.5	13.47	518.60
September	42.4	13.24	12.47	561.38	40.2	15.01	603.40	38.4	13.52	519.17
October	42.2	13.29	12.54	560.84	39.8	15.04	598.59	38.4	13.56	520.70
November	42.6	13.37	12.61	569.56	40.3	15.14	610.14	38.7	13.74	531.74
DecemberP	43.1	13.48	12.69	580.99	39.8	15.12	601.78	38.4	13.71	526.46
1998:										
JanuaryP	41.8	13.42	12.71	560.96	39.5	15.16	598.82	38.1	13.77	524.64

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976	32.1	3.57	114.60	36.4	4.27	155.43	33.3	4.31	143.52
1977	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987	29.2	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988	29.1	6.31	183.62	35.9	9.06	325.25	32.6	8.88	289.49
1989	28.9	6.53	188.72	35.8	9.53	341.17	32.6	9.38	305.79
1990	28.8	6.75	194.40	35.8	9.97	356.93	32.5	9.83	319.48
1991	28.6	6.94	198.48	35.7	10.39	370.92	32.4	10.23	331.45
1992	28.8	7.12	205.06	35.8	10.82	387.36	32.5	10.54	342.55
1993	28.8	7.29	209.95	35.8	11.35	406.33	32.5	10.78	350.35
1994	28.9	7.49	216.46	35.8	11.83	423.51	32.5	11.04	358.80
1995	28.8	7.69	221.47	35.9	12.32	442.29	32.4	11.39	369.04
1996	28.8	7.99	230.11	35.9	12.79	459.16	32.4	11.79	382.00
1997 ^P	28.9	8.34	241.03	36.1	13.30	480.13	32.6	12.28	400.33
Monthly data, not seasonally adjusted									
1997:									
January	28.0	\$8.24	\$230.72	35.7	\$12.99	\$463.74	32.0	\$12.19	\$390.08
February	28.7	8.24	236.49	36.7	13.15	482.61	32.7	12.24	400.25
March	28.7	8.27	237.35	36.5	13.20	481.80	32.6	12.24	399.02
April	28.6	8.28	236.81	35.9	13.09	469.93	32.4	12.20	395.28
May	28.8	8.27	238.18	35.9	13.18	473.16	32.4	12.17	394.31
June	29.4	8.27	243.14	36.6	13.23	484.22	32.8	12.15	398.52
July	29.6	8.27	244.79	35.8	13.18	471.84	32.8	12.07	395.90
August	29.7	8.29	246.21	36.1	13.35	481.94	32.9	12.12	398.75
September	29.0	8.45	245.05	35.8	13.45	481.51	32.5	12.36	401.70
October	28.8	8.47	243.94	35.9	13.53	485.73	32.6	12.42	404.89
November	28.8	8.51	245.09	36.7	13.69	502.42	32.8	12.58	412.62
December ^P	29.2	8.50	248.20	35.8	13.58	486.16	32.6	12.62	411.41
1998:									
January ^P	28.1	8.61	241.94	35.9	13.63	489.32	32.4	12.68	410.83

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

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1996 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P	Jan.P
Total	120,909	121,162	121,344	121,671	121,834	122,056	122,440	122,492	122,792	123,083	123,512	123,867	124,225
Total private	101,380	101,615	101,799	102,092	102,269	102,417	102,721	102,688	103,078	103,334	103,749	104,095	104,444
Goods-producing	24,581	24,653	24,670	24,667	24,702	24,714	24,713	24,765	24,771	24,814	24,888	24,988	25,123
Mining	574	574	572	573	576	574	574	573	576	574	572	574	574
Metal mining	55	54	54	54	54	54	54	54	54	53	54	54	53
Coal mining	94	93	93	93	93	92	91	91	91	91	90	90	90
Oil and gas extraction	317	319	317	319	321	320	321	321	323	323	322	322	324
Nonmetallic minerals, except fuels	108	108	108	107	108	108	108	107	108	107	106	108	107
Construction	5,542	5,604	5,609	5,599	5,628	5,622	5,625	5,637	5,642	5,650	5,682	5,742	5,834
General building contractors	1,287	1,298	1,298	1,297	1,300	1,302	1,308	1,306	1,305	1,311	1,327	1,342	1,360
Heavy construction, except building	774	791	777	767	777	766	761	764	762	758	759	772	780
Special trade contractors	3,481	3,515	3,534	3,535	3,551	3,554	3,556	3,567	3,575	3,581	3,596	3,628	3,694
Manufacturing	18,465	18,475	18,489	18,495	18,498	18,518	18,514	18,555	18,553	18,590	18,634	18,672	18,715
Durable goods	10,821	10,836	10,848	10,856	10,864	10,891	10,910	10,957	10,952	10,985	11,020	11,047	11,089
Lumber and wood products	789	793	797	799	800	797	796	798	798	800	800	807	810
Furniture and fixtures	506	507	507	506	508	508	510	506	508	509	511	513	515
Stone, clay, and glass products	543	543	542	541	540	538	541	541	541	543	542	544	546
Primary metal industries	708	708	709	710	708	709	708	711	713	716	716	717	718
Fabricated metal products	1,460	1,462	1,463	1,468	1,468	1,470	1,468	1,475	1,477	1,482	1,485	1,488	1,496
Industrial machinery and equipment	2,126	2,132	2,136	2,142	2,146	2,152	2,155	2,165	2,168	2,176	2,184	2,186	2,193
Computer and office equipment	367	370	372	375	378	379	381	385	384	386	384	386	387
Electronic and other electrical equipment	1,645	1,645	1,645	1,643	1,644	1,651	1,658	1,661	1,663	1,666	1,673	1,678	1,686
Electronic components and accessories	610	612	614	618	622	628	632	637	639	644	647	651	655
Transportation equipment	1,802	1,804	1,810	1,804	1,809	1,824	1,826	1,855	1,840	1,849	1,868	1,867	1,873
Motor vehicles and equipment	966	964	969	957	960	967	965	985	973	977	995	987	991
Aircraft and parts	483	487	491	495	498	505	510	514	515	518	521	525	527
Instruments and related products	854	854	853	855	854	856	859	858	858	859	860	862	864
Miscellaneous manufacturing	388	388	386	388	387	386	389	387	386	385	381	385	388
Nondurable goods	7,644	7,639	7,641	7,639	7,634	7,627	7,604	7,598	7,601	7,605	7,614	7,625	7,626
Food and kindred products	1,695	1,694	1,698	1,699	1,693	1,692	1,684	1,679	1,688	1,690	1,701	1,705	1,707
Tobacco products	41	42	42	41	41	41	41	40	40	41	42	40	39
Textile mill products	615	612	612	609	609	607	608	604	605	604	602	604	601
Apparel and other textile products	835	831	827	822	818	816	810	810	803	800	796	795	790
Paper and allied products	678	678	677	677	677	675	675	675	675	675	676	677	678
Printing and publishing	1,534	1,534	1,535	1,541	1,546	1,550	1,549	1,547	1,547	1,548	1,551	1,554	1,556
Chemicals and allied products	1,028	1,028	1,028	1,029	1,030	1,027	1,023	1,024	1,026	1,028	1,028	1,028	1,028
Petroleum and coal products	139	139	140	140	139	138	138	138	138	137	137	138	138
Rubber and misc. plastics products	985	987	988	988	988	989	986	991	990	993	992	996	1,002
Leather and leather products	94	94	94	93	93	92	90	90	89	89	89	88	87
Service-producing	96,328	96,509	96,674	97,004	97,132	97,342	97,727	97,727	98,021	98,269	98,624	98,879	99,102
Transportation and public utilities	6,351	6,376	6,405	6,421	6,431	6,434	6,443	6,289	6,473	6,497	6,495	6,470	6,519
Transportation	4,121	4,142	4,164	4,179	4,187	4,193	4,202	4,049	4,232	4,247	4,243	4,213	4,253
Railroad transportation	228	227	226	225	226	230	229	225	227	226	229	230	233
Local and interurban passenger transit	452	453	455	460	458	457	461	464	457	458	459	461	463
Trucking and warehousing	1,656	1,664	1,671	1,676	1,687	1,686	1,692	1,703	1,708	1,710	1,702	1,697	1,707
Water transportation	175	175	175	177	176	178	176	179	176	178	177	175	172
Transportation by air	1,168	1,178	1,191	1,192	1,192	1,192	1,193	1,025	1,211	1,221	1,222	1,196	1,223
Pipelines, except natural gas	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services	428	431	432	435	434	436	437	439	439	440	440	440	441
Communications and public utilities	2,230	2,234	2,241	2,242	2,244	2,241	2,241	2,240	2,241	2,250	2,252	2,257	2,266
Communications	1,354	1,358	1,364	1,369	1,372	1,372	1,372	1,376	1,376	1,385	1,390	1,395	1,405
Electric, gas, and sanitary services	876	876	877	873	872	869	869	864	865	865	862	862	861
Wholesale trade	6,570	6,593	6,611	6,622	6,630	6,634	6,664	6,675	6,687	6,712	6,729	6,746	6,776
Durable goods	3,863	3,879	3,889	3,900	3,909	3,917	3,938	3,957	3,962	3,978	3,993	4,006	4,024
Nondurable goods	2,707	2,714	2,722	2,722	2,721	2,717	2,726	2,718	2,725	2,734	2,736	2,740	2,752

See footnotes at end of table.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1996		1997										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Total	58,340	58,464	58,539	58,618	58,740	58,904	58,987	59,125	59,332	59,378	59,452	59,576	59,774
Total private	47,564	47,661	47,729	47,791	47,907	48,048	48,130	48,215	48,370	48,343	48,487	48,582	48,771
Goods-producing	6,613	6,619	6,621	6,618	6,622	6,632	6,634	6,651	6,650	6,649	6,655	6,672	6,683
Mining	78	78	78	78	78	78	79	79	79	79	79	80	79
Construction	613	615	616	618	619	624	628	629	631	631	635	639	642
Manufacturing	5,922	5,926	5,927	5,922	5,925	5,930	5,927	5,943	5,940	5,939	5,941	5,953	5,962
Durable goods	2,845	2,849	2,856	2,857	2,861	2,867	2,868	2,884	2,890	2,899	2,901	2,914	2,925
Lumber and wood products	136	136	137	137	137	138	138	138	139	139	139	139	140
Furniture and fixtures	158	158	158	158	159	159	160	160	160	160	159	160	160
Stone, clay, and glass products	101	102	102	102	102	102	101	101	102	101	101	102	103
Primary metal industries	101	101	102	102	103	102	101	103	102	103	103	103	104
Fabricated metal products	321	322	323	322	322	324	324	326	325	327	327	327	328
Industrial machinery and equipment	459	461	463	465	467	469	471	473	475	477	478	481	482
Electronic and other electrical equipment	680	679	678	677	677	677	677	681	683	682	687	690	694
Transportation equipment	369	370	373	374	376	377	378	384	383	392	390	394	397
Instruments and related products	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing	171	171	172	172	171	171	171	171	172	170	169	169	167
Nondurable goods	3,077	3,077	3,071	3,065	3,064	3,063	3,059	3,059	3,050	3,040	3,040	3,039	3,037
Food and kindred products	555	557	558	557	558	558	557	558	554	551	553	555	559
Tobacco products	13	13	13	13	13	12	13	12	13	12	13	13	13
Textile mill products	287	288	287	286	286	285	285	285	285	282	283	282	280
Apparel and other textile products	628	625	621	617	614	611	605	603	603	599	593	590	583
Paper and allied products	164	165	164	164	164	164	164	164	163	163	164	165	165
Printing and publishing	693	692	691	691	690	694	696	700	699	698	699	699	700
Chemicals and allied products	326	326	326	326	327	327	327	327	325	325	326	326	326
Petroleum and coal products	25	25	25	25	25	25	25	24	25	24	24	24	24
Rubber and misc. plastics products	335	335	335	336	336	337	337	337	335	338	338	338	340
Leather and leather products	51	51	51	50	51	50	50	49	48	48	47	47	47
Service-producing	51,727	51,845	51,918	52,000	52,118	52,272	52,353	52,474	52,682	52,729	52,797	52,904	53,091
Transportation and public utilities	1,921	1,905	1,927	1,931	1,936	1,941	1,944	1,943	1,940	1,893	1,944	1,946	1,946
Wholesale trade	2,023	2,025	2,033	2,036	2,043	2,045	2,049	2,050	2,054	2,056	2,053	2,061	2,061
Retail trade	11,513	11,550	11,536	11,523	11,562	11,603	11,609	11,633	11,679	11,687	11,700	11,719	11,799
Finance, insurance, and real estate	4,383	4,392	4,395	4,400	4,406	4,418	4,429	4,437	4,445	4,454	4,462	4,475	4,486
Services	21,111	21,170	21,217	21,283	21,338	21,409	21,465	21,501	21,602	21,604	21,673	21,709	21,796
Government	10,776	10,803	10,810	10,827	10,833	10,856	10,857	10,910	10,962	11,035	10,965	10,994	11,003
Federal	1,157	1,165	1,155	1,151	1,149	1,147	1,147	1,144	1,141	1,142	1,136	1,142	1,148
State	2,342	2,342	2,341	2,348	2,350	2,354	2,364	2,368	2,391	2,390	2,385	2,396	2,400
Local	7,277	7,296	7,314	7,328	7,334	7,355	7,346	7,398	7,430	7,503	7,444	7,456	7,455

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

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1993 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P	Jan.P
Total private	83,043	83,318	83,476	83,664	83,865	83,965	84,243	84,097	84,447	84,624	84,986	85,253	85,398
Goods-producing	17,495	17,578	17,561	17,542	17,592	17,573	17,577	17,610	17,618	17,643	17,712	17,793	17,917
Mining	430	432	432	432	437	435	435	434	436	435	432	436	436
Construction	4,307	4,384	4,358	4,336	4,365	4,347	4,350	4,361	4,364	4,357	4,398	4,444	4,538
Manufacturing	12,758	12,762	12,771	12,774	12,790	12,791	12,792	12,815	12,818	12,851	12,882	12,913	12,943
Durable goods	7,417	7,427	7,437	7,440	7,454	7,466	7,482	7,525	7,518	7,545	7,570	7,592	7,622
Lumber and wood products	652	652	656	658	659	656	655	656	657	658	659	667	670
Furniture and fixtures	400	401	402	402	403	404	405	403	404	405	407	408	411
Stone, clay, and glass products	423	424	422	420	420	419	422	422	422	424	424	425	426
Primary metal industries	553	553	553	553	553	555	554	558	558	561	562	562	563
Fabricated metal products	1,099	1,101	1,103	1,107	1,107	1,109	1,106	1,116	1,115	1,119	1,121	1,125	1,131
Industrial machinery and equipment	1,331	1,336	1,342	1,349	1,350	1,354	1,356	1,361	1,361	1,371	1,376	1,377	1,384
Electronic and other electrical equipment	1,042	1,043	1,043	1,041	1,040	1,043	1,048	1,054	1,055	1,056	1,060	1,065	1,070
Transportation equipment	1,222	1,222	1,225	1,220	1,231	1,234	1,243	1,265	1,256	1,261	1,274	1,270	1,270
Motor vehicles and equipment	762	759	761	752	758	766	768	784	774	775	789	782	779
Instruments and related products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing	273	273	271	271	272	271	272	271	269	269	266	270	271
Nondurable goods	5,341	5,335	5,334	5,334	5,336	5,325	5,310	5,290	5,300	5,306	5,312	5,321	5,321
Food and kindred products	1,260	1,257	1,261	1,263	1,257	1,256	1,248	1,242	1,252	1,255	1,263	1,265	1,268
Tobacco products	32	32	32	31	31	31	32	31	31	32	33	31	32
Textile mill products	522	519	519	517	516	515	516	512	513	513	511	512	509
Apparel and other textile products	683	680	675	671	670	667	665	658	654	652	648	647	641
Paper and allied products	517	517	516	516	517	515	514	513	514	514	515	517	520
Printing and publishing	834	834	834	839	846	847	846	842	841	842	844	845	840
Chemicals and allied products	567	567	567	567	568	566	565	566	569	571	573	575	577
Petroleum and coal products	91	92	92	92	92	91	91	91	91	90	90	91	91
Rubber and misc. plastics products	763	765	766	767	768	767	764	767	768	769	768	772	777
Leather and leather products	72	72	72	71	71	70	69	68	67	68	67	66	66
Service-producing	65,548	65,740	65,915	66,122	66,273	66,392	66,666	66,487	66,829	66,981	67,274	67,460	67,481
Transportation and public utilities	5,349	5,372	5,397	5,412	5,420	5,421	5,419	5,226	5,417	5,427	5,415	5,392	5,424
Wholesale trade	5,307	5,323	5,340	5,339	5,348	5,347	5,368	5,374	5,377	5,396	5,407	5,418	5,440
Retail trade	19,282	19,298	19,338	19,384	19,398	19,434	19,497	19,513	19,538	19,576	19,724	19,774	19,750
Finance, insurance, and real estate	5,088	5,099	5,103	5,124	5,135	5,137	5,154	5,161	5,171	5,196	5,217	5,232	5,252
Services	30,522	30,648	30,737	30,863	30,972	31,053	31,228	31,213	31,326	31,386	31,511	31,644	31,615

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

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

cannot be separated with sufficient precision.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1993 forward are subject to revision.

**ESTABLISHMENT DATA
DIFFUSION INDEXES
SEASONALLY ADJUSTED**

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

(Percent)

Time span	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Private nonfarm payrolls, 356 industries ¹												
Over 1-month span:												
1994	57.6	61.9	67.1	64.5	57.7	63.9	62.5	62.6	61.4	60.3	63.8	62.4
1995	62.4	60.1	54.5	55.6	48.0	53.9	54.1	59.8	57.0	54.9	57.2	57.9
1996	103.4	128.6	120.2	109.8	125.8	121.0	113.0	118.6	108.8	125.2	116.2	122.0
1997	59.3	59.1	59.0	61.1	57.4	50.7	58.8	58.7	56.5	64.2	61.7	P 60.8
1998	P 62.5											
Over 3-month span:												
1994	65.3	69.5	70.4	68.7	67.1	67.0	69.1	69.7	65.7	65.6	67.0	66.2
1995	65.4	62.5	58.7	53.2	54.6	52.4	57.9	59.6	59.7	59.0	57.0	56.3
1996	125.2	127.2	125.2	122.4	124.2	126.2	125.2	117.6	125.6	120.8	129.4	130.0
1997	64.6	62.2	64.2	65.6	59.7	58.7	59.1	65.0	65.3	67.3	P 68.3	P 67.3
1998												
Over 6-month span:												
1994	71.1	69.8	69.8	70.9	70.1	69.8	69.7	69.4	69.4	67.4	67.7	66.2
1995	66.9	61.4	58.1	56.6	58.1	58.1	56.7	59.8	60.3	59.1	61.5	63.3
1996	124.4	127.0	127.0	127.0	125.2	122.4	130.6	127.2	125.2	129.0	128.4	134.8
1997	67.6	66.6	64.5	64.6	64.3	66.7	67.0	68.3	P 69.5	P 71.2		
1998												
Over 12-month span:												
1994	70.2	71.6	71.8	71.8	72.1	71.8	71.5	72.1	70.1	69.5	66.6	65.0
1995	63.6	62.4	62.6	63.3	61.7	61.9	58.7	62.2	62.2	61.1	62.2	63.3
1996	127.0	129.4	124.8	125.8	129.4	128.4	130.0	126.2	127.6	133.4	131.4	130.0
1997	67.3	66.2	69.4	70.4	70.1	P 69.5	P 70.4					
1998												
Manufacturing payrolls, 139 industries ¹												
Over 1-month span:												
1994	55.8	59.0	60.4	58.6	52.9	58.6	59.4	56.1	52.9	55.0	58.6	58.3
1995	54.3	56.1	44.2	51.4	42.1	42.8	43.5	52.2	47.1	50.0	47.5	50.7
1996	91.4	108.6	95.6	78.4	104.4	104.4	88.4	105.8	88.4	101.4	99.2	104.4
1997	54.0	50.4	52.9	52.9	51.4	49.3	51.8	49.6	54.3	57.6	59.4	P 55.4
1998	P 60.1											
Over 3-month span:												
1994	61.9	64.7	65.5	59.7	57.6	60.1	62.2	57.9	55.0	55.4	60.1	59.4
1995	59.7	50.4	47.5	40.3	42.4	36.3	38.5	43.9	49.3	46.4	45.3	43.9
1996	95.0	95.6	84.2	77.0	86.4	90.0	97.8	86.4	100.8	92.8	105.0	105.0
1997	53.2	51.4	50.7	52.5	48.6	48.9	48.6	53.6	55.8	62.9	P 62.9	P 65.1
1998												
Over 6-month span:												
1994	62.2	62.2	62.6	63.3	59.4	56.5	56.5	58.6	58.6	55.0	58.3	55.0
1995	55.8	48.6	43.9	38.8	39.2	39.6	38.8	39.6	43.9	45.0	44.2	44.6
1996	82.8	83.4	82.0	76.2	79.2	81.2	95.0	93.6	90.6	100.8	96.4	106.4
1997	53.2	53.2	50.4	49.3	48.6	52.2	55.0	58.3	P 59.0	P 62.9		
1998												
Over 12-month span:												
1994	57.9	58.6	60.8	60.8	60.8	63.3	59.4	60.1	57.2	56.5	50.4	49.6
1995	46.0	44.2	46.0	47.8	41.0	41.7	38.5	38.8	36.3	37.4	38.1	39.9
1996	79.2	85.6	78.4	79.2	84.8	80.6	87.0	80.6	87.0	93.6	92.8	94.2
1997	51.4	47.8	52.2	55.0	57.6	P 56.5	P 56.1					
1998												

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

P = preliminary.

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

where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1996) and all seasonally adjusted data (beginning January 1993) are subject to revision.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997												
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Total ¹												
Alabama	1,836.5	1,837.3	1,839.6	1,847.3	1,844.0	1,847.5	1,841.8	1,845.2	1,846.4	1,847.5	1,852.7	1,854.4	1,857.2
Alaska	263.0	262.6	262.6	263.2	264.4	265.4	265.1	267.0	266.7	266.7	265.8	266.8	266.2
Arizona	1,937.1	1,934.5	1,950.2	1,956.9	1,960.4	1,972.1	1,974.7	1,980.5	1,982.2	1,991.8	2,008.6	2,020.3	2,025.8
Arkansas	1,092.7	1,090.0	1,092.5	1,094.6	1,095.7	1,097.9	1,099.1	1,095.6	1,096.0	1,098.9	1,099.3	1,103.1	1,105.8
California	12,944.5	12,960.1	13,004.1	13,052.6	13,070.3	13,107.3	13,128.5	13,143.0	13,150.2	13,206.6	13,236.2	13,268.8	13,309.4
Colorado	1,921.5	1,922.0	1,933.3	1,938.6	1,933.5	1,935.8	1,938.9	1,940.3	1,938.9	1,949.7	1,953.4	1,958.9	1,968.2
Connecticut	1,596.5	1,593.6	1,597.4	1,598.6	1,602.6	1,607.0	1,613.2	1,620.5	1,620.5	1,622.7	1,622.3	1,628.3	1,632.8
Delaware	382.1	381.5	383.9	385.0	386.1	387.6	388.1	388.5	389.5	392.6	394.2	394.6	396.1
District of Columbia	620.7	618.0	621.3	619.6	615.8	613.2	614.9	618.1	614.1	611.9	610.8	609.0	608.5
Florida	6,283.3	6,297.4	6,316.7	6,330.6	6,358.5	6,384.0	6,399.1	6,404.6	6,414.9	6,449.7	6,460.5	6,488.6	6,509.8
Georgia	3,571.0	3,555.0	3,558.1	3,567.7	3,573.9	3,584.4	3,588.9	3,609.4	3,622.8	3,644.7	3,666.5	3,681.3	3,703.5
Hawaii	528.2	532.3	530.9	528.8	529.0	528.1	528.1	527.1	529.0	529.7	528.2	527.2	525.2
Idaho	498.0	497.2	499.0	500.5	501.3	503.5	501.2	502.9	502.1	503.8	504.1	505.8	502.9
Illinois	5,714.4	5,699.8	5,708.8	5,721.7	5,733.2	5,743.3	5,752.1	5,752.9	5,753.4	5,766.3	5,769.7	5,781.7	5,788.9
Indiana	2,825.7	2,814.9	2,823.2	2,833.8	2,839.1	2,852.2	2,855.1	2,842.9	2,850.6	2,847.7	2,857.0	2,856.0	2,862.4
Iowa	1,392.1	1,391.4	1,393.3	1,395.5	1,400.7	1,403.2	1,407.2	1,404.4	1,403.0	1,403.9	1,411.6	1,412.6	1,416.0
Kansas	1,247.4	1,247.6	1,250.5	1,258.8	1,257.8	1,263.2	1,263.4	1,266.7	1,263.7	1,268.6	1,273.3	1,276.1	1,275.6
Kentucky	1,688.6	1,689.2	1,691.9	1,701.6	1,704.3	1,709.7	1,708.7	1,711.2	1,706.4	1,715.1	1,710.5	1,716.1	1,724.2
Louisiana	1,829.6	1,828.2	1,831.0	1,833.1	1,837.9	1,835.8	1,839.2	1,838.9	1,837.0	1,842.6	1,847.8	1,849.7	1,849.6
Maine	540.8	545.2	545.7	546.5	546.3	546.4	548.0	549.8	551.2	553.2	553.0	555.9	556.5
Maryland	2,223.1	2,225.6	2,238.1	2,243.5	2,238.5	2,244.7	2,254.2	2,253.8	2,246.7	2,249.9	2,254.8	2,263.2	2,266.4
Massachusetts	3,075.9	3,071.4	3,075.7	3,083.3	3,090.7	3,103.1	3,107.3	3,115.0	3,117.6	3,130.5	3,140.4	3,149.6	3,158.6
Michigan	4,376.2	4,377.9	4,398.1	4,401.4	4,398.6	4,409.8	4,406.2	4,401.1	4,402.0	4,417.1	4,421.3	4,429.2	4,449.1
Minnesota	2,453.7	2,455.6	2,465.5	2,474.1	2,468.4	2,478.7	2,487.7	2,489.4	2,489.4	2,492.3	2,494.3	2,503.3	2,510.9
Mississippi	1,096.5	1,093.2	1,093.8	1,097.2	1,099.1	1,101.7	1,097.7	1,099.9	1,104.6	1,104.8	1,107.2	1,108.4	1,106.5
Missouri	2,592.8	2,584.1	2,599.8	2,599.6	2,597.9	2,609.0	2,611.9	2,601.5	2,610.5	2,611.3	2,612.6	2,622.1	2,626.0
Montana	360.6	359.6	361.5	362.3	363.1	365.1	364.4	364.4	364.4	364.6	365.6	366.6	368.7
Nebraska	843.4	846.6	848.6	852.5	848.7	847.5	848.7	853.2	847.4	855.5	856.9	861.3	864.1
Nevada	869.9	874.1	879.4	882.8	886.8	890.6	898.3	898.8	896.9	904.7	904.7	910.5	911.8
New Hampshire	566.6	566.1	566.4	568.0	568.0	572.8	574.4	579.5	576.2	573.0	573.6	573.6	576.0
New Jersey	3,668.7	3,678.2	3,686.1	3,691.0	3,692.0	3,694.5	3,701.0	3,706.1	3,697.7	3,717.9	3,724.6	3,733.4	3,746.8
New Mexico	700.6	699.0	700.1	701.1	701.6	702.8	707.8	708.2	707.1	708.6	709.5	711.1	712.8
New York	7,963.4	7,942.0	7,958.0	7,977.3	7,984.4	7,994.4	8,001.4	8,015.0	8,018.1	8,042.0	8,062.3	8,072.8	8,086.0
North Carolina	3,615.8	3,619.8	3,617.1	3,628.4	3,629.9	3,636.8	3,634.0	3,628.0	3,631.4	3,647.0	3,653.9	3,669.3	3,674.1
North Dakota	312.5	312.6	314.3	314.0	312.6	315.3	318.0	318.0	318.4	318.5	319.1	320.3	321.4
Ohio	5,329.7	5,326.9	5,335.6	5,339.0	5,335.3	5,347.7	5,357.9	5,351.6	5,360.1	5,362.0	5,358.5	5,371.1	5,382.5
Oklahoma	1,376.6	1,377.7	1,380.3	1,384.2	1,378.9	1,386.4	1,387.8	1,391.8	1,402.1	1,400.2	1,404.2	1,408.8	1,410.2
Oregon	1,501.6	1,504.2	1,512.6	1,510.8	1,519.6	1,523.5	1,526.1	1,529.6	1,527.3	1,533.3	1,536.4	1,537.8	1,550.2
Pennsylvania	5,361.4	5,367.8	5,388.2	5,393.0	5,407.7	5,422.2	5,420.4	5,421.7	5,414.6	5,451.4	5,460.0	5,470.9	5,467.6
Rhode Island	445.6	442.6	442.5	444.1	444.9	445.1	444.3	443.9	445.9	448.1	449.6	450.2	452.1
South Carolina	1,684.1	1,680.2	1,685.1	1,691.0	1,696.7	1,703.3	1,706.5	1,707.9	1,708.3	1,713.0	1,715.9	1,723.6	1,731.5
South Dakota	351.4	350.1	351.8	349.9	349.5	354.4	352.4	353.9	353.2	354.5	354.1	354.9	356.4
Tennessee	2,556.2	2,553.3	2,558.6	2,554.9	2,552.0	2,550.1	2,555.5	2,547.2	2,550.5	2,559.6	2,565.5	2,571.0	2,576.3
Texas	8,353.0	8,329.1	8,374.7	8,391.5	8,415.5	8,442.2	8,447.0	8,465.2	8,486.1	8,517.8	8,523.9	8,556.5	8,580.7
Utah	973.6	974.9	979.0	980.3	982.8	989.2	994.7	996.8	997.6	1,002.6	1,004.3	1,011.3	1,013.9
Vermont	275.9	277.1	277.6	277.2	278.0	278.5	279.3	279.0	278.2	278.2	280.3	279.6	279.6
Virginia	3,175.8	3,184.9	3,193.9	3,199.3	3,194.9	3,200.9	3,200.8	3,212.9	3,219.5	3,227.3	3,238.7	3,251.2	3,263.0
Washington	2,448.3	2,452.8	2,456.6	2,467.4	2,473.8	2,485.0	2,499.6	2,508.7	2,512.9	2,520.0	2,526.8	2,530.7	2,536.7
West Virginia	701.5	701.5	703.7	708.2	708.5	707.9	709.9	709.5	711.2	710.6	709.8	712.4	711.7
Wisconsin	2,629.0	2,624.4	2,627.8	2,635.0	2,637.3	2,645.1	2,651.1	2,647.6	2,651.6	2,661.4	2,670.3	2,678.1	2,684.0
Wyoming	221.7	221.0	221.4	222.1	221.0	221.7	220.2	221.7	221.2	222.0	224.1	222.1	222.0

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	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Construction												
Alabama	96.5	97.8	98.2	99.9	98.9	100.3	98.8	98.8	98.5	98.3	98.1	97.9	97.9
Alaska	12.8	12.6	12.1	11.8	12.2	12.5	12.5	12.6	12.6	12.4	12.3	12.4	12.7
Arizona	129.2	126.4	127.0	127.8	129.3	132.0	132.6	133.9	133.0	133.3	134.5	134.0	134.2
Arkansas	48.3	47.4	48.1	49.1	49.4	49.5	49.7	49.7	50.0	50.3	49.7	49.6	49.8
California	527.4	537.8	548.1	549.5	548.5	552.4	553.3	559.7	564.6	568.5	571.8	571.9	579.6
Colorado	114.7	111.7	115.8	115.9	116.4	116.7	116.2	116.3	116.5	117.6	117.6	114.1	117.7
Connecticut	51.7	51.9	52.6	53.1	53.7	54.7	55.7	55.7	55.9	56.6	56.8	57.1	56.3
Delaware	21.9	21.6	22.1	22.1	22.1	22.3	22.8	22.6	22.8	23.0	23.3	23.0	23.1
District of Columbia	8.5	8.5	9.1	9.0	8.6	8.7	8.8	8.9	8.4	8.2	8.2	8.3	8.4
Florida	324.9	325.9	329.2	328.9	329.7	331.4	335.1	335.6	335.9	337.0	336.9	338.4	339.9
Georgia	165.8	164.1	165.2	164.0	165.5	164.8	164.7	165.4	166.8	168.6	169.5	169.8	170.8
Hawaii ²	22.7	22.4	22.4	21.8	21.5	21.3	21.4	21.1	20.9	21.0	21.3	21.3	20.9
Idaho	30.4	30.2	30.7	31.5	32.2	33.0	33.0	33.1	33.4	33.7	33.4	33.0	32.4
Illinois	223.2	220.5	219.1	220.0	225.8	222.3	224.2	225.0	225.4	225.2	224.9	226.7	228.1
Indiana	132.9	131.0	132.9	133.9	137.6	138.5	137.3	135.4	135.0	134.5	134.1	133.4	134.7
Iowa	61.3	59.1	60.7	60.9	63.0	62.5	62.0	61.9	61.2	61.3	61.8	62.4	64.3
Kansas	58.2	56.7	58.1	60.2	60.0	60.6	60.3	60.6	60.7	61.4	61.8	61.9	61.1
Kentucky	77.8	79.8	78.7	79.0	78.6	78.9	77.0	78.0	77.7	78.1	78.5	78.7	79.3
Louisiana	113.6	112.8	114.1	111.6	114.2	113.6	114.1	114.3	115.8	114.3	114.5	113.1	112.8
Maine	23.6	23.8	23.5	23.7	23.4	23.6	24.0	24.2	24.5	24.4	24.2	24.7	24.7
Maryland	133.3	137.6	139.2	140.7	139.0	138.5	138.9	138.1	138.3	137.9	138.6	139.1	140.0
Massachusetts	97.0	97.2	98.3	98.2	98.4	99.9	98.7	98.9	98.9	98.5	99.4	100.8	102.2
Michigan	172.9	173.3	179.7	180.5	183.4	184.8	186.6	187.0	188.8	187.5	188.9	190.2	189.3
Minnesota	89.7	92.3	92.3	92.3	91.3	92.6	93.1	92.5	92.9	93.1	93.1	94.0	94.0
Mississippi	49.6	48.5	48.1	48.0	48.7	49.1	48.4	48.9	50.2	50.0	50.8	50.1	50.0
Missouri	120.5	117.7	121.7	118.5	116.0	117.8	117.1	116.8	118.7	121.4	120.3	121.2	118.6
Montana	17.5	16.8	17.4	17.3	17.2	18.4	18.0	18.4	19.0	18.1	18.2	18.7	19.5
Nebraska	37.1	38.3	38.6	39.0	38.0	38.2	37.8	37.8	37.5	37.7	37.7	38.1	38.9
Nevada	80.0	80.2	81.5	81.4	83.2	83.4	84.5	84.5	84.5	85.2	84.5	85.4	86.3
New Hampshire	21.6	21.2	21.1	21.2	21.0	22.1	21.6	21.0	21.3	21.6	21.5	21.1	21.4
New Jersey	124.0	125.0	125.4	126.3	125.7	126.6	126.5	126.3	127.6	128.4	128.3	128.1	128.8
New Mexico	41.5	41.4	41.9	42.0	41.3	41.7	41.8	42.2	42.3	42.5	42.2	41.8	42.0
New York	261.4	251.2	253.9	257.9	259.4	260.8	262.0	263.8	267.3	269.2	269.1	270.3	270.6
North Carolina	194.6	198.2	200.3	200.5	199.7	199.2	197.8	198.2	199.4	201.6	201.8	203.2	203.3
North Dakota	15.5	15.6	15.9	15.8	14.8	15.7	16.9	16.9	16.8	16.4	16.2	16.5	16.7
Ohio	217.2	215.4	217.7	217.7	219.9	220.8	222.4	219.6	218.7	219.9	221.3	220.7	222.6
Oklahoma	51.5	51.0	51.7	52.2	51.5	51.7	51.7	51.6	52.1	52.4	52.3	52.6	52.9
Oregon	81.5	81.8	81.9	79.5	81.7	83.5	85.6	85.6	86.2	86.9	84.5	84.7	87.0
Pennsylvania	205.8	211.6	214.2	213.0	214.4	214.2	218.2	215.5	215.5	217.2	218.4	220.6	221.0
Rhode Island	13.3	13.9	14.3	14.8	15.1	14.8	14.2	14.5	14.9	14.8	14.5	14.9	15.0
South Carolina	95.2	95.8	96.3	96.6	96.1	97.3	98.9	98.5	98.9	98.9	99.7	100.0	101.3
South Dakota	14.8	14.8	14.7	14.3	14.1	15.0	14.9	15.0	15.1	15.2	15.0	15.1	15.7
Tennessee	114.7	115.1	115.8	114.5	114.5	118.0	117.8	118.7	119.2	120.0	120.2	120.9	122.8
Texas	445.1	437.1	447.3	449.2	451.1	456.0	458.8	457.7	460.5	461.3	460.2	463.2	465.2
Utah	61.9	62.0	62.1	61.5	61.4	63.9	65.1	66.3	66.2	66.2	66.5	67.1	66.9
Vermont	12.8	12.8	12.6	12.2	12.3	12.2	12.1	12.2	12.3	12.2	12.3	12.5	12.5
Virginia	178.2	183.1	184.5	184.5	183.0	183.0	182.5	182.4	182.8	182.4	185.3	186.5	187.6
Washington	130.1	130.6	130.6	131.1	132.4	132.5	133.0	133.3	134.3	134.8	135.2	136.9	136.3
West Virginia	35.2	35.4	35.7	36.8	36.2	35.0	35.5	36.0	36.5	35.8	35.1	35.0	35.3
Wisconsin	108.9	107.8	106.8	109.0	110.0	111.4	113.0	112.9	112.7	111.0	111.1	111.2	111.1
Wyoming	14.6	14.6	14.3	14.2	13.9	14.2	13.7	14.0	14.5	14.8	15.2	14.9	14.2

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Manufacturing												
Alabama	381.5	382.5	382.1	383.1	380.9	380.4	378.2	378.4	378.8	375.9	376.1	375.7	377.0
Alaska	16.0	16.2	15.9	16.6	16.8	16.6	15.3	15.0	14.9	15.2	15.5	15.7	15.1
Arizona	200.7	201.6	202.6	203.2	203.4	203.9	204.6	206.0	207.0	208.2	209.3	211.3	212.8
Arkansas	252.3	251.5	252.9	251.9	252.7	253.0	252.8	250.6	250.4	251.4	250.8	251.2	252.1
California	1,871.5	1,870.4	1,875.5	1,882.7	1,888.0	1,891.0	1,895.8	1,897.8	1,897.4	1,900.8	1,903.1	1,909.6	1,911.6
Colorado	197.0	196.8	197.5	197.6	197.6	197.3	197.1	198.4	199.6	200.3	200.4	201.3	202.7
Connecticut	275.2	274.1	274.6	273.6	274.4	273.9	274.5	275.5	276.2	273.6	274.5	274.9	275.4
Delaware	56.8	57.6	57.9	58.1	58.2	58.4	58.7	58.4	58.8	59.4	60.0	59.9	60.1
District of Columbia	13.3	13.0	13.1	13.2	13.2	13.5	13.6	13.6	13.6	13.7	13.7	13.7	13.9
Florida	493.0	492.4	492.4	492.4	491.8	493.0	493.9	494.0	493.0	493.1	493.7	493.6	494.1
Georgia	587.9	587.6	588.6	588.8	587.6	588.9	587.7	587.0	586.6	586.3	586.6	588.7	589.4
Hawaii	16.5	16.5	16.5	16.4	16.5	16.4	16.4	16.3	16.2	15.9	16.1	16.1	16.1
Idaho	73.0	73.3	73.2	73.1	73.8	73.7	72.8	72.9	73.7	74.2	75.3	75.9	76.2
Illinois	976.5	977.0	980.8	979.2	978.8	978.3	978.7	979.0	979.2	977.3	977.2	977.6	976.4
Indiana	671.6	671.9	673.3	673.6	672.4	672.9	670.6	670.4	673.5	670.7	674.0	674.6	675.6
Iowa	248.1	248.7	247.1	247.0	248.9	249.0	248.9	248.7	249.2	249.4	250.6	251.1	251.4
Kansas	199.3	199.3	199.7	200.9	201.8	202.1	203.8	204.4	205.3	206.0	206.5	207.4	207.9
Kentucky	310.8	313.4	312.5	315.6	314.4	312.9	315.1	315.2	315.5	316.6	311.8	312.4	313.5
Louisiana	188.4	188.0	188.6	187.6	189.2	187.9	190.0	190.1	189.3	189.0	187.7	188.2	188.8
Maine	87.4	87.8	87.7	87.9	87.7	88.0	87.7	87.0	88.3	88.0	87.7	88.1	88.6
Maryland	173.3	173.6	174.1	174.1	173.7	173.2	173.6	172.9	173.2	171.4	171.1	174.6	174.9
Massachusetts	443.4	445.0	445.1	445.5	445.5	446.4	447.1	448.5	448.8	448.5	448.3	450.5	450.9
Michigan	962.0	964.3	963.9	962.8	956.6	957.7	952.4	952.1	957.1	950.7	954.6	963.5	958.2
Minnesota	429.7	432.4	433.0	433.9	435.6	436.8	436.7	436.5	435.7	435.3	436.8	439.1	440.7
Mississippi	241.6	242.0	242.0	243.0	242.4	243.3	242.2	243.2	240.1	239.5	240.1	241.3	240.8
Missouri	410.6	411.0	412.9	411.8	408.7	410.8	409.7	404.4	413.0	408.4	411.7	412.4	411.0
Montana	23.7	23.7	23.9	23.9	24.0	24.1	24.1	24.1	24.3	24.1	23.9	24.0	23.9
Nebraska	114.8	114.1	114.5	114.9	114.6	114.9	115.0	116.6	114.6	114.8	115.1	115.4	115.4
Nevada	39.5	39.5	39.6	39.7	39.7	39.9	39.9	39.9	39.9	40.3	40.3	40.7	40.8
New Hampshire	105.0	105.3	106.1	106.5	106.4	106.9	107.0	107.9	106.9	107.1	106.8	106.7	107.2
New Jersey	483.3	487.1	485.3	484.4	485.5	482.8	482.5	481.9	481.4	480.1	480.3	481.9	483.0
New Mexico	45.8	45.9	46.1	46.1	46.2	46.2	46.7	46.8	46.6	46.7	46.6	46.7	46.8
New York	916.3	915.3	913.7	915.2	915.4	916.0	917.3	919.8	920.0	919.1	918.6	920.2	922.8
North Carolina	844.4	844.1	841.5	842.6	840.6	841.4	842.6	842.7	839.4	840.6	841.3	842.0	842.0
North Dakota	22.1	22.1	22.2	22.2	22.5	22.9	23.0	23.0	23.3	22.7	22.9	23.2	23.2
Ohio	1,088.2	1,086.5	1,085.1	1,090.4	1,085.6	1,084.3	1,083.5	1,073.4	1,084.7	1,081.4	1,078.1	1,081.1	1,084.3
Oklahoma	176.7	176.9	177.0	177.0	173.7	174.4	177.9	178.4	179.6	180.2	179.9	180.1	180.7
Oregon	238.6	240.3	240.8	242.0	243.5	245.5	245.0	245.3	243.5	245.3	246.9	247.1	247.6
Pennsylvania	930.4	931.3	932.6	932.8	934.1	933.9	933.7	932.0	932.7	935.2	935.6	933.7	934.5
Rhode Island	81.5	81.2	80.5	80.3	80.7	81.5	81.1	80.0	80.5	80.9	80.4	79.9	80.7
South Carolina	359.3	359.7	360.7	361.5	360.3	360.8	360.3	359.5	358.2	356.8	357.7	358.0	358.2
South Dakota	48.5	48.6	49.0	49.0	49.1	49.6	49.7	50.3	49.0	48.8	49.1	49.0	49.5
Tennessee	520.5	520.0	520.9	516.9	518.1	514.8	514.9	512.8	513.7	511.6	513.3	515.7	515.1
Texas	1,061.6	1,058.9	1,061.9	1,063.5	1,067.2	1,069.0	1,069.3	1,069.5	1,071.8	1,073.8	1,074.4	1,078.1	1,081.3
Utah	130.9	131.0	130.9	130.4	130.9	131.4	131.8	131.4	131.9	131.8	132.4	133.0	133.5
Vermont	46.0	46.1	46.3	46.2	46.0	46.6	46.5	46.8	46.6	46.9	47.1	47.0	47.1
Virginia	399.1	398.0	398.5	398.4	397.8	397.4	397.0	395.6	395.3	394.1	394.7	395.6	397.6
Washington	356.5	357.6	359.0	360.8	361.4	364.4	367.0	370.2	372.2	373.0	374.7	375.2	376.7
West Virginia	81.2	81.7	81.1	81.7	81.8	82.3	82.0	82.0	82.0	82.7	83.2	83.2	83.6
Wisconsin	599.5	599.4	600.5	600.1	602.6	603.4	603.5	602.2	605.4	604.5	605.8	608.4	610.4
Wyoming	10.7	10.7	10.8	10.7	10.8	11.1	10.9	10.9	10.8	10.6	10.7	10.7	10.6

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	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
Transportation and public utilities													
Alabama	90.0	90.0	90.0	90.5	90.5	90.3	90.0	90.3	88.7	90.8	90.7	90.3	90.0
Alaska	22.6	22.7	22.9	22.9	23.3	23.8	23.5	23.4	23.3	23.5	23.7	23.8	23.6
Arizona	94.9	94.8	95.0	95.1	95.4	95.7	95.2	96.0	93.3	96.7	98.0	99.5	99.2
Arkansas	64.8	65.4	65.3	65.8	65.9	66.1	65.8	65.5	64.0	65.1	65.1	65.6	66.1
California	645.4	651.6	654.1	654.4	655.8	659.7	660.5	659.7	635.6	661.7	663.2	664.5	663.9
Colorado	117.8	118.0	117.9	117.1	117.2	115.7	116.6	115.3	112.4	115.5	116.4	116.9	118.6
Connecticut	73.0	73.4	73.7	74.0	74.7	75.5	76.0	76.1	73.4	75.1	75.1	75.1	75.1
Delaware	15.7	15.7	15.9	15.7	15.8	15.8	15.9	16.4	16.0	16.3	16.3	16.2	16.3
District of Columbia	19.3	19.2	19.2	19.0	18.7	18.6	18.5	18.2	18.2	18.3	18.3	18.2	18.2
Florida	322.1	321.9	322.0	323.5	323.3	322.8	324.0	324.1	316.9	324.5	325.1	325.9	329.7
Georgia	223.3	223.6	223.8	225.2	225.4	226.6	228.1	230.7	225.9	233.2	234.4	234.8	235.9
Hawaii	41.1	41.2	41.0	41.4	41.2	41.0	40.8	41.2	40.7	40.8	40.8	40.7	40.4
Idaho	23.5	23.4	23.1	23.2	23.3	23.5	23.7	23.7	23.4	23.8	23.8	24.4	24.3
Illinois	334.9	338.5	338.8	339.1	340.5	341.0	342.3	341.4	327.2	341.0	340.9	341.5	341.9
Indiana	139.7	138.6	139.2	139.8	140.4	140.4	140.1	138.7	136.4	140.6	141.0	141.1	142.1
Iowa	64.2	64.9	64.9	65.1	65.3	65.3	65.0	65.6	63.1	66.0	66.4	66.7	67.0
Kansas	70.4	70.9	71.5	71.9	72.5	72.4	72.7	71.9	70.4	73.2	73.0	73.0	72.8
Kentucky	95.9	95.7	95.9	96.0	96.4	96.5	96.4	97.5	88.5	97.3	97.4	97.2	97.5
Louisiana	108.5	109.1	108.6	109.1	109.6	109.9	109.5	110.2	108.7	110.6	110.8	110.8	110.6
Maine	22.5	22.8	22.7	22.6	22.6	22.7	22.5	22.6	21.8	22.8	22.5	22.5	22.6
Maryland	105.8	107.6	108.6	108.6	107.1	108.0	108.2	108.2	104.2	107.8	106.3	106.1	106.1
Massachusetts	131.8	131.3	131.9	132.2	131.5	132.0	132.0	131.9	127.5	132.0	132.8	132.1	131.7
Michigan	168.7	168.2	169.8	169.9	168.4	168.8	169.2	169.6	165.0	171.3	170.7	171.5	171.9
Minnesota	120.4	121.4	121.9	122.3	122.4	122.8	123.2	122.8	119.5	123.7	123.9	124.1	124.4
Mississippi	52.5	52.8	52.7	52.5	52.2	52.5	51.7	52.0	50.2	51.9	52.3	52.9	52.8
Missouri	162.1	161.9	162.1	162.2	162.4	162.5	162.6	161.5	158.9	159.1	158.7	158.5	158.9
Montana	20.3	20.5	20.5	20.7	20.3	20.6	20.3	20.1	19.8	20.7	20.5	20.8	20.7
Nebraska	50.4	50.9	51.3	52.1	52.4	53.0	52.9	52.9	50.8	54.7	53.2	53.4	53.3
Nevada	43.2	43.3	43.5	43.8	44.0	44.2	44.4	44.7	43.4	44.9	45.0	45.0	45.0
New Hampshire	19.8	19.6	19.6	19.6	19.5	19.4	19.8	20.2	20.1	19.3	19.3	19.2	19.4
New Jersey	256.4	255.8	256.9	257.5	257.4	257.5	257.6	257.1	247.2	258.2	258.9	259.6	260.3
New Mexico	30.6	30.7	30.8	30.8	30.9	31.1	31.3	31.3	30.4	31.4	31.6	31.5	31.6
New York	401.9	407.2	407.2	407.9	408.0	406.2	406.4	406.9	393.8	407.6	409.2	408.1	407.5
North Carolina	170.0	170.7	171.7	172.8	173.3	172.9	173.1	173.2	167.2	173.3	174.2	174.2	174.9
North Dakota	18.3	18.5	18.5	18.4	18.6	18.4	18.5	18.5	18.5	18.4	18.4	18.3	18.4
Ohio	232.3	234.8	235.2	235.3	234.6	234.5	233.6	233.4	225.9	234.7	234.8	234.8	234.6
Oklahoma	77.7	77.8	77.5	77.4	77.8	78.2	78.7	79.0	78.4	79.3	79.9	80.2	80.7
Oregon	72.5	73.7	74.3	73.8	74.3	73.8	73.3	73.0	70.2	73.6	73.5	73.4	73.0
Pennsylvania	271.3	271.5	271.9	271.9	272.2	273.3	272.0	272.5	261.7	273.7	271.9	271.0	270.8
Rhode Island	15.1	14.9	14.8	15.0	15.0	14.9	15.0	15.2	14.5	15.1	15.2	15.3	15.2
South Carolina	74.0	74.0	73.5	74.0	75.1	75.0	74.4	74.7	72.8	75.2	75.5	76.1	76.5
South Dakota	16.6	16.5	16.4	16.2	15.9	16.1	15.9	15.9	15.2	15.9	16.0	15.9	15.9
Tennessee	143.3	142.7	143.1	143.1	143.1	142.5	141.1	141.3	136.3	141.4	141.2	141.2	141.4
Texas	492.8	492.0	492.8	493.3	493.6	496.4	496.8	500.4	490.3	502.0	503.0	504.8	506.6
Utah	55.0	55.1	55.4	55.4	56.1	56.4	56.5	56.8	54.9	57.0	57.0	57.1	57.6
Vermont	12.3	12.3	12.3	12.4	12.4	12.5	12.5	12.4	11.8	12.0	12.1	12.1	12.1
Virginia	164.3	165.2	165.2	165.7	165.5	166.4	166.8	167.7	164.3	169.1	169.3	169.6	169.9
Washington	124.2	124.7	124.7	125.7	125.6	125.8	125.5	125.6	122.7	126.3	126.6	126.2	126.1
West Virginia	39.1	38.3	38.5	38.6	38.6	38.7	38.7	38.4	37.7	38.3	38.2	38.5	38.6
Wisconsin	121.4	121.2	120.6	121.0	121.4	122.5	122.3	122.2	118.1	122.0	122.1	122.5	121.5
Wyoming	13.6	13.6	13.5	13.8	13.6	13.8	13.7	13.8	13.8	13.9	13.8	14.0	13.9

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Trade												
Alabama	421.4	421.3	421.7	424.0	422.6	423.9	422.8	423.7	423.5	423.7	424.7	426.7	426.2
Alaska	54.3	54.1	54.2	54.2	54.2	55.2	55.7	56.2	56.3	55.9	54.9	54.9	54.9
Arizona	473.4	476.1	481.1	483.6	482.0	484.7	484.8	486.9	487.3	487.8	489.9	494.0	497.2
Arkansas	249.5	248.0	248.0	249.2	249.2	250.1	250.4	250.9	250.8	250.3	251.0	252.4	252.7
California	2,999.9	2,983.8	2,998.2	3,007.9	3,015.5	3,022.8	3,025.1	3,026.7	3,026.5	3,030.0	3,029.1	3,044.8	3,049.7
Colorado	470.5	467.6	470.5	471.6	472.5	471.4	474.3	474.8	477.1	476.4	477.7	480.1	479.7
Connecticut	349.9	350.0	349.0	349.7	347.9	349.3	352.4	353.4	355.5	355.8	355.5	357.7	360.1
Delaware	85.5	84.8	85.4	86.0	86.1	86.0	85.6	85.6	85.4	86.2	86.2	86.2	86.6
District of Columbia	50.3	50.1	50.4	50.2	49.6	48.6	48.8	49.1	49.0	49.3	49.2	49.3	49.3
Florida	1,635.1	1,633.9	1,640.7	1,644.6	1,652.1	1,656.8	1,660.1	1,659.8	1,666.9	1,674.1	1,677.7	1,683.8	1,689.5
Georgia	915.1	903.9	902.3	905.8	908.0	909.9	912.0	916.4	923.6	925.1	930.4	933.8	942.5
Hawaii	135.0	135.3	135.9	135.4	135.1	135.0	134.5	133.8	133.9	134.2	134.3	133.7	133.4
Idaho	126.9	127.4	127.9	128.7	128.4	128.5	127.5	126.5	125.6	125.9	125.2	125.9	126.7
Illinois	1,312.0	1,297.0	1,299.9	1,304.0	1,301.9	1,304.7	1,304.1	1,300.9	1,300.4	1,304.9	1,311.4	1,312.9	1,319.0
Indiana	683.5	678.2	679.4	681.3	685.0	687.6	689.5	688.9	688.3	688.0	688.7	687.6	687.6
Iowa	340.7	340.5	339.5	339.9	340.4	341.3	342.1	342.3	343.4	342.7	343.6	342.9	342.1
Kansas	306.9	309.1	308.4	309.2	308.2	309.2	310.6	312.0	312.8	311.7	312.3	312.1	311.4
Kentucky	405.2	404.5	405.2	408.5	410.8	413.3	412.9	409.7	411.3	410.9	408.3	412.4	415.3
Louisiana	428.7	427.4	427.5	432.4	432.6	431.4	431.4	432.0	431.1	431.9	436.8	438.6	439.4
Maine	134.1	137.1	137.3	137.7	137.6	138.2	138.1	139.2	139.3	140.3	141.0	142.1	141.1
Maryland	533.7	531.6	534.9	535.5	533.9	536.4	537.1	537.6	537.1	537.5	539.1	540.2	539.9
Massachusetts	706.3	705.0	702.5	702.6	700.9	703.6	707.3	708.6	711.5	713.0	716.6	719.7	724.0
Michigan	1,037.1	1,033.4	1,040.2	1,042.4	1,038.9	1,043.1	1,043.3	1,045.9	1,044.6	1,047.8	1,051.8	1,045.3	1,049.6
Minnesota	600.0	600.4	602.1	604.2	599.1	601.3	601.9	601.3	602.5	602.5	605.0	607.5	610.1
Mississippi	233.4	233.5	232.8	233.7	233.1	233.1	230.4	231.3	232.5	232.4	232.1	232.3	231.9
Missouri	618.9	616.1	614.0	615.5	615.5	615.7	615.7	613.8	613.1	614.5	616.4	619.8	620.8
Montana	97.3	97.2	97.5	97.5	98.1	98.4	98.6	98.6	98.9	99.0	98.2	98.4	98.8
Nebraska	209.6	210.2	210.5	210.1	208.1	207.7	208.3	208.7	209.2	210.3	210.4	211.5	210.8
Nevada	176.4	176.6	178.2	178.3	179.6	180.4	181.1	182.2	181.9	183.8	184.0	185.2	185.1
New Hampshire	147.9	147.2	147.8	147.8	147.5	149.0	149.3	151.9	150.4	150.5	151.6	151.5	152.5
New Jersey	860.9	860.9	867.1	868.0	869.9	869.1	872.7	873.2	873.7	873.0	875.1	875.0	880.2
New Mexico	166.6	165.8	165.7	166.0	166.6	167.1	168.2	168.2	168.1	168.3	167.9	168.8	169.5
New York	1,635.4	1,627.9	1,628.2	1,631.3	1,632.0	1,632.7	1,635.7	1,639.2	1,642.2	1,643.8	1,645.0	1,649.7	1,652.9
North Carolina	820.3	822.2	821.1	823.0	823.0	824.1	818.9	817.0	813.8	813.8	809.3	814.6	814.0
North Dakota	80.8	80.9	80.9	80.8	80.4	80.7	81.4	80.9	81.1	81.3	81.8	82.1	82.8
Ohio	1,315.7	1,315.9	1,317.5	1,317.8	1,316.5	1,317.7	1,320.6	1,318.4	1,319.2	1,321.5	1,322.6	1,327.0	1,329.3
Oklahoma	323.9	324.6	324.9	326.7	325.1	325.8	324.8	324.6	326.6	326.4	328.0	329.9	329.7
Oregon	371.7	372.2	372.0	373.5	374.3	375.0	376.0	377.5	377.3	376.0	379.3	380.4	383.5
Pennsylvania	1,221.4	1,220.0	1,222.5	1,227.0	1,230.0	1,235.8	1,232.2	1,233.2	1,234.5	1,239.7	1,244.0	1,245.9	1,242.4
Rhode Island	99.8	98.7	99.2	99.6	99.4	99.7	99.3	100.2	100.2	99.5	100.9	101.1	101.3
South Carolina	402.1	400.3	401.4	403.6	405.6	407.5	407.3	407.9	409.5	409.8	411.6	415.5	418.4
South Dakota	87.9	86.9	87.4	87.6	87.1	88.5	88.2	87.6	88.5	87.9	87.8	88.3	87.8
Tennessee	605.9	604.0	604.7	606.8	605.2	604.5	603.7	602.9	604.9	605.8	606.7	607.0	608.8
Texas	2,014.7	2,014.2	2,019.1	2,023.8	2,030.8	2,032.7	2,034.6	2,040.5	2,042.1	2,043.7	2,051.6	2,057.0	2,060.3
Utah	234.6	235.0	235.7	237.0	237.7	239.5	240.2	241.1	240.7	240.0	241.1	241.6	242.8
Vermont	64.3	65.0	65.3	65.6	66.3	66.2	66.9	66.6	66.1	66.0	65.8	65.9	65.8
Virginia	726.1	724.2	725.5	726.5	725.1	726.0	729.5	733.8	736.7	737.2	738.0	743.1	745.7
Washington	596.6	596.3	596.7	598.9	600.0	602.9	605.1	607.2	609.4	609.1	611.8	613.7	614.2
West Virginia	161.3	160.6	160.7	162.5	163.0	163.6	163.9	164.0	163.3	163.5	164.0	164.3	164.2
Wisconsin	600.7	600.5	601.6	602.9	601.5	602.2	603.6	603.0	604.3	606.5	605.9	606.8	607.6
Wyoming	52.3	51.7	52.1	52.1	52.2	51.7	51.5	52.5	52.7	52.6	53.1	52.5	52.6

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	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Finance, insurance, and real estate												
Alabama	82.7	82.9	83.1	83.5	83.3	83.5	83.9	84.0	84.3	84.3	84.7	84.9	85.1
Alaska	11.7	11.7	11.7	11.7	11.6	11.7	11.8	11.9	11.9	11.9	11.8	11.9	11.9
Arizona	117.6	119.0	120.2	121.3	121.6	122.1	123.0	123.8	124.2	124.7	125.8	126.1	126.9
Arkansas	43.6	43.6	43.6	43.8	43.7	44.0	44.1	43.9	43.9	44.0	44.0	44.1	44.2
California	733.8	732.3	732.6	732.2	732.3	732.8	734.3	735.8	735.6	736.0	738.4	740.4	740.7
Colorado	118.8	119.9	120.3	120.7	121.0	120.3	120.7	121.2	121.9	121.7	122.1	122.8	122.7
Connecticut	130.4	129.7	129.3	129.0	129.4	129.7	129.9	130.1	130.3	130.5	130.5	131.3	131.8
Delaware	44.6	44.3	44.9	45.2	46.2	46.6	46.9	47.0	47.4	48.0	48.0	47.7	47.7
District of Columbia	28.0	28.0	28.1	28.2	27.7	27.6	27.7	27.7	27.8	27.6	27.6	27.6	27.6
Florida	401.0	401.7	401.8	402.5	405.1	406.0	407.2	408.5	410.1	410.9	413.0	414.2	417.4
Georgia	182.6	183.5	183.3	184.1	185.4	186.5	187.6	188.4	189.5	189.6	190.8	190.7	191.7
Hawaii	36.6	36.4	36.3	35.9	35.9	35.7	35.8	35.7	35.8	35.7	35.5	35.5	35.4
Idaho	25.4	25.5	25.5	25.4	25.5	25.5	25.5	25.7	25.6	25.7	25.4	25.6	25.5
Illinois	387.9	387.0	387.9	389.2	390.0	390.1	390.7	390.8	391.4	392.6	393.8	395.5	396.4
Indiana	136.4	137.1	137.7	138.0	138.5	138.2	138.1	138.6	138.6	138.3	138.4	138.4	138.6
Iowa	77.8	77.5	77.9	78.2	78.5	78.8	78.6	78.7	79.0	79.2	79.6	79.9	79.8
Kansas	59.0	59.5	59.5	59.8	59.9	60.0	60.2	60.3	60.5	60.8	61.0	60.9	60.8
Kentucky	68.6	68.4	68.6	68.7	68.8	69.0	69.2	69.4	69.5	69.2	69.5	69.9	70.2
Louisiana	83.4	83.5	83.6	83.5	83.5	83.5	83.7	83.8	84.1	84.2	84.2	84.5	84.9
Maine	27.1	27.4	27.2	27.2	27.1	27.1	26.9	27.4	27.5	27.4	27.6	27.7	28.0
Maryland	128.6	127.7	127.3	127.7	127.3	127.7	127.9	127.2	128.0	128.6	129.0	128.8	129.0
Massachusetts	213.1	211.9	213.0	213.9	214.0	215.1	216.5	217.4	218.2	218.6	219.7	220.6	220.8
Michigan	203.2	201.9	202.7	202.5	203.8	203.5	202.8	202.7	202.1	202.8	203.4	203.9	204.9
Minnesota	143.5	143.2	143.9	144.7	145.0	145.0	145.1	145.4	145.8	146.3	146.4	146.9	147.6
Mississippi	41.2	41.1	41.0	41.3	41.4	41.4	41.6	41.4	40.5	40.8	40.8	41.0	40.9
Missouri	151.9	153.6	154.6	155.2	155.0	155.7	156.5	157.8	157.0	157.1	157.5	158.0	159.1
Montana	16.2	16.1	16.4	16.5	16.6	16.6	16.7	16.6	16.8	16.8	16.8	16.6	16.8
Nebraska	53.6	54.2	54.0	54.2	54.6	55.0	55.0	55.2	55.2	55.7	55.8	55.9	56.4
Nevada	38.4	38.3	38.6	38.9	39.0	39.2	39.2	39.5	39.7	39.8	40.2	40.4	40.7
New Hampshire	28.3	28.5	28.3	28.5	28.4	28.3	28.4	28.6	28.4	28.2	28.5	28.2	28.0
New Jersey	234.5	235.0	234.1	234.4	234.3	234.7	235.5	236.0	236.0	236.7	237.3	237.6	237.9
New Mexico	31.9	32.2	32.2	32.1	32.1	32.1	32.0	32.0	31.9	31.8	31.8	31.9	32.2
New York	723.5	725.4	725.8	726.1	725.3	725.0	725.0	724.7	724.9	725.4	725.2	726.0	726.1
North Carolina	158.4	159.2	159.5	159.9	159.5	160.0	160.2	161.1	161.5	162.3	162.6	162.5	162.9
North Dakota	14.8	14.7	14.7	14.6	14.9	15.0	15.1	15.2	15.3	15.4	15.6	15.6	15.6
Ohio	279.8	279.5	280.7	280.0	280.1	280.8	281.4	281.2	281.9	282.1	282.9	283.0	283.6
Oklahoma	68.4	68.3	68.6	68.7	68.8	69.1	69.2	69.2	69.3	69.5	70.0	70.4	70.4
Oregon	92.6	93.3	93.8	93.8	94.0	94.2	94.6	94.8	94.8	94.6	94.9	95.3	95.5
Pennsylvania	312.4	311.5	311.8	311.5	312.3	312.5	312.5	312.5	312.1	312.3	313.8	315.3	315.7
Rhode Island	25.6	25.5	25.5	25.5	25.8	25.8	25.9	26.0	26.0	26.0	26.2	26.1	26.3
South Carolina	73.1	73.2	73.2	73.5	73.6	74.2	74.2	74.0	74.3	74.8	74.8	75.0	75.5
South Dakota	20.2	20.3	20.2	20.6	20.7	20.8	20.9	21.0	21.1	21.3	21.6	21.7	21.8
Tennessee	118.9	119.3	119.1	119.8	119.6	119.7	119.5	119.7	119.9	120.0	119.8	119.2	119.4
Texas	448.3	448.7	448.4	448.7	449.8	451.2	453.4	454.1	455.5	455.8	456.9	458.2	458.4
Utah	51.4	51.1	51.4	51.5	51.6	51.8	52.0	52.3	52.2	52.0	52.3	52.8	53.0
Vermont	12.2	12.4	12.4	12.4	12.4	12.5	12.6	12.6	12.7	12.4	12.3	12.2	12.2
Virginia	163.8	164.1	164.1	164.8	164.6	165.4	166.7	166.5	167.0	166.7	166.9	167.5	168.4
Washington	124.6	125.4	125.7	126.0	126.0	126.3	126.2	126.2	126.6	126.7	126.8	127.1	127.7
West Virginia	27.5	27.3	27.4	27.5	27.6	27.7	27.4	27.4	27.6	27.6	27.5	27.7	27.8
Wisconsin	139.6	139.8	140.4	140.5	140.9	141.2	142.1	142.2	142.5	142.6	143.4	143.7	144.3
Wyoming	8.0	7.9	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.1

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	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	Services												
Alabama	411.8	409.7	411.1	413.0	414.2	415.5	415.3	418.6	419.1	419.2	421.1	421.3	422.0
Alaska	62.8	62.6	63.0	63.6	63.8	64.5	64.5	64.8	64.8	64.9	64.4	64.7	64.7
Arizona	580.2	579.3	583.1	584.3	586.1	590.4	594.4	598.8	597.2	601.1	603.7	606.8	608.0
Arkansas	250.7	250.4	250.8	250.9	250.6	251.6	250.9	250.0	250.9	252.0	252.8	254.5	254.9
California	4,004.2	4,015.6	4,025.9	4,048.9	4,052.9	4,068.0	4,082.1	4,097.9	4,114.5	4,120.3	4,136.1	4,139.3	4,162.0
Colorado	579.1	581.5	587.4	592.5	585.8	589.1	588.0	587.5	587.1	591.1	591.9	597.1	599.5
Connecticut	488.5	489.0	490.8	493.1	493.2	496.0	497.7	499.8	501.0	502.3	502.8	505.4	507.1
Delaware	104.4	104.3	104.6	104.9	104.2	105.1	105.0	105.3	105.7	106.2	106.9	107.8	108.4
District of Columbia	263.7	263.9	267.0	267.8	266.5	264.8	266.8	268.3	266.8	266.5	265.7	264.7	264.3
Florida	2,164.0	2,166.8	2,181.5	2,191.3	2,206.9	2,223.0	2,228.2	2,237.7	2,247.5	2,256.8	2,258.3	2,270.0	2,280.7
Georgia	918.5	918.2	920.9	924.6	927.3	931.3	931.4	940.0	949.9	960.7	973.4	979.5	987.6
Hawaii	167.0	168.1	168.6	168.6	168.8	168.6	167.9	168.5	168.6	168.4	168.3	169.1	168.4
Idaho	116.0	115.9	116.9	117.4	116.9	118.1	117.4	118.8	118.4	119.2	120.4	120.2	116.9
Illinois	1,659.8	1,662.1	1,664.5	1,669.3	1,676.0	1,685.8	1,686.5	1,691.7	1,700.2	1,700.7	1,702.0	1,707.1	1,709.6
Indiana	661.4	665.3	664.1	671.4	669.5	675.0	673.8	675.6	676.9	677.9	682.2	685.1	685.4
Iowa	367.6	367.5	369.6	371.7	371.9	372.8	375.2	374.0	374.4	373.3	376.9	378.4	379.8
Kansas	305.7	307.1	308.4	308.8	310.8	311.7	311.8	312.6	312.0	312.3	312.1	312.1	312.9
Kentucky	416.8	413.7	415.8	419.6	419.9	422.1	422.5	424.8	427.8	427.7	428.3	429.0	431.5
Louisiana	495.4	496.8	495.2	494.5	493.3	493.1	492.5	493.8	493.8	496.3	496.3	497.7	497.1
Maine	152.4	152.9	154.0	153.9	154.7	154.5	155.3	156.2	156.6	156.5	156.8	157.6	158.0
Maryland	727.9	723.7	730.4	733.5	734.3	738.7	741.4	742.2	743.0	742.5	746.4	751.2	754.2
Massachusetts	1,079.9	1,078.6	1,083.1	1,088.4	1,096.8	1,102.7	1,102.0	1,106.2	1,108.8	1,111.7	1,117.0	1,119.1	1,121.4
Michigan	1,180.9	1,182.8	1,189.6	1,194.3	1,196.8	1,198.1	1,200.2	1,201.7	1,205.4	1,205.9	1,207.3	1,213.4	1,223.8
Minnesota	679.4	677.9	683.7	687.2	687.5	689.9	694.9	694.4	696.6	697.9	697.9	700.7	702.5
Mississippi	253.0	250.4	251.5	252.9	254.2	253.8	251.1	250.0	256.0	255.6	257.7	256.9	255.5
Missouri	719.0	714.1	722.2	723.2	725.9	729.7	729.3	725.9	727.7	727.8	726.1	731.2	735.9
Montana	102.9	101.7	102.5	103.3	103.7	103.9	105.0	104.6	104.5	104.5	105.4	105.6	106.3
Nebraska	224.2	224.9	226.3	228.5	227.4	227.1	227.3	228.4	228.8	230.8	231.9	232.9	233.8
Nevada	373.5	376.5	378.6	380.8	381.0	382.8	385.1	385.5	386.2	388.1	388.4	390.4	389.2
New Hampshire	164.1	163.6	163.3	164.0	163.1	165.0	166.5	166.6	166.0	165.6	165.3	165.8	166.8
New Jersey	1,140.8	1,143.9	1,147.8	1,151.8	1,150.7	1,155.2	1,158.1	1,164.5	1,166.7	1,171.0	1,173.4	1,180.6	1,184.3
New Mexico	195.2	194.9	195.3	196.7	195.9	196.2	196.4	196.7	197.8	198.2	198.8	199.1	199.6
New York	2,645.8	2,639.3	2,652.5	2,661.2	2,667.6	2,674.6	2,675.2	2,680.9	2,690.5	2,699.0	2,711.1	2,718.0	2,724.7
North Carolina	852.0	845.4	842.0	848.3	849.2	854.1	858.4	861.3	865.8	872.9	881.0	886.5	888.9
North Dakota	86.1	86.0	86.9	86.8	87.1	87.5	87.7	88.3	88.2	88.2	88.2	88.9	88.9
Ohio	1,429.5	1,429.4	1,431.8	1,431.0	1,434.1	1,441.4	1,443.9	1,446.7	1,447.8	1,448.2	1,451.6	1,455.9	1,457.7
Oklahoma	374.1	376.3	377.8	379.4	379.1	381.9	381.0	381.7	386.3	386.8	387.4	389.2	389.5
Oregon	395.0	392.0	397.9	397.0	400.5	401.1	400.6	404.5	405.2	404.5	405.3	404.7	409.6
Pennsylvania	1,677.4	1,679.3	1,689.1	1,693.9	1,700.5	1,705.8	1,711.1	1,708.9	1,715.9	1,716.9	1,719.4	1,729.7	1,730.6
Rhode Island	148.0	146.1	145.8	146.4	146.4	145.7	147.1	147.3	148.5	148.6	148.9	149.7	149.9
South Carolina	378.1	375.0	377.2	378.5	382.3	384.6	386.4	387.4	389.0	389.8	390.1	391.9	394.8
South Dakota	91.0	90.1	90.9	89.8	90.1	91.2	90.9	91.5	91.8	92.6	91.7	92.2	93.1
Tennessee	664.8	664.8	666.6	665.8	665.0	664.0	663.4	665.9	669.5	671.0	671.5	674.1	675.4
Texas	2,266.8	2,255.9	2,275.2	2,280.7	2,286.1	2,296.6	2,298.6	2,308.3	2,326.0	2,333.1	2,338.9	2,352.8	2,363.1
Utah	263.1	264.3	266.8	267.7	268.5	269.4	271.7	273.0	274.6	276.1	275.7	277.8	278.3
Vermont	82.0	83.0	82.5	82.6	82.5	83.1	82.6	82.8	82.9	82.8	84.1	84.1	83.7
Virginia	932.6	936.1	943.4	947.2	947.2	951.3	947.1	953.8	957.4	963.1	967.6	969.9	976.9
Washington	659.1	659.4	664.2	666.6	670.0	674.7	677.3	680.2	684.7	687.6	690.1	691.8	693.7
West Virginia	193.9	194.9	195.4	195.7	195.7	195.5	196.5	198.2	198.7	198.2	197.8	199.1	198.3
Wisconsin	672.0	668.6	670.2	674.1	673.7	675.7	677.0	680.5	682.7	687.3	691.7	694.3	697.5
Wyoming	48.0	47.9	48.1	48.4	48.0	48.2	48.0	48.7	48.7	48.5	49.0	48.1	48.5

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P
	Government												
Alabama	342.1	342.6	343.3	343.4	343.7	343.7	342.8	341.3	343.4	345.2	347.3	347.6	348.9
Alaska	73.0	73.2	73.5	73.2	73.3	71.8	72.5	73.4	73.1	72.9	73.1	73.4	73.3
Arizona	326.5	322.7	326.5	326.9	327.9	328.5	325.2	319.9	325.0	324.9	332.3	333.4	332.3
Arkansas	180.1	180.2	180.3	180.4	180.7	180.2	181.9	181.6	182.6	182.4	182.5	182.3	182.6
California	2,133.1	2,139.0	2,139.9	2,147.5	2,147.9	2,151.2	2,148.2	2,136.0	2,146.8	2,159.9	2,165.1	2,168.8	2,172.4
Colorado	310.5	313.3	310.5	309.9	309.7	312.0	312.7	313.5	311.1	313.7	313.9	313.4	314.0
Connecticut	227.0	224.7	226.8	225.3	228.5	227.1	226.3	229.1	227.4	228.1	226.3	226.0	226.2
Delaware	53.1	53.1	53.0	52.9	53.4	53.3	53.1	53.1	53.3	53.4	53.4	53.7	53.8
District of Columbia	237.5	235.2	234.3	232.1	231.4	231.3	230.6	232.2	230.2	228.2	228.0	227.1	226.7
Florida	936.2	947.8	942.1	940.4	942.6	943.8	943.4	937.6	937.3	946.1	948.7	955.6	951.4
Georgia	570.0	566.3	566.2	567.4	566.9	568.5	569.5	573.6	572.5	573.3	573.6	576.2	577.7
Hawaii	109.3	112.4	110.2	109.3	110.0	110.1	111.3	110.5	112.9	113.7	111.9	110.8	110.6
Idaho	99.6	98.3	98.4	98.0	97.9	98.1	98.1	99.1	99.0	98.3	97.7	98.0	97.9
Illinois	808.0	805.3	805.2	808.6	807.8	809.1	813.9	812.4	818.0	812.9	807.8	808.6	805.6
Indiana	393.7	386.5	390.1	389.3	389.2	393.0	399.2	388.9	395.4	391.2	392.1	389.3	391.9
Iowa	230.2	231.1	231.6	230.6	230.6	231.4	233.3	231.0	230.5	229.9	230.6	229.0	229.4
Kansas	240.2	237.3	237.2	240.1	236.8	239.4	236.2	237.1	234.3	235.5	238.9	241.0	240.9
Kentucky	290.9	290.8	292.4	291.7	292.8	294.7	293.5	294.7	294.3	293.5	295.0	294.9	295.2
Louisiana	361.3	360.8	363.1	364.0	364.6	365.1	365.9	360.8	361.4	363.2	362.8	363.5	362.6
Maine	93.6	93.3	93.2	93.4	93.1	92.2	93.4	93.1	93.1	93.7	93.1	93.1	93.4
Maryland	419.4	422.6	422.4	422.2	422.0	421.0	425.9	426.4	421.8	423.1	423.2	422.1	421.1
Massachusetts	403.1	401.1	400.6	401.2	402.4	402.1	402.5	402.3	402.7	407.0	405.3	405.5	406.3
Michigan	643.6	646.3	644.6	641.6	643.4	646.5	644.4	635.4	632.0	644.0	637.5	634.3	644.1
Minnesota	383.0	380.0	380.6	381.5	379.6	382.4	384.8	388.5	388.6	385.8	383.3	383.2	383.8
Mississippi	220.3	220.0	220.6	220.9	222.2	223.4	226.9	227.8	229.9	229.6	228.6	229.1	229.4
Missouri	405.0	405.0	407.4	408.4	409.6	412.1	416.2	416.6	417.4	418.3	417.1	416.2	417.0
Montana	77.2	78.0	77.9	77.6	78.0	77.6	76.3	76.3	75.6	76.0	77.2	77.3	77.5
Nebraska	152.5	152.9	152.2	152.6	152.5	150.6	151.3	152.5	150.2	150.4	151.7	153.0	154.4
Nevada	103.9	104.6	104.4	104.8	105.2	105.6	109.1	107.3	106.2	107.6	107.4	108.5	110.0
New Hampshire	79.4	80.3	79.8	79.9	81.6	81.6	81.3	82.8	82.6	80.1	80.1	80.6	80.3
New Jersey	566.9	568.7	567.5	566.5	566.4	566.5	566.1	565.1	563.1	568.5	569.3	568.6	570.3
New Mexico	173.6	172.9	172.8	172.2	173.4	173.1	176.2	175.8	174.7	174.2	175.2	175.8	175.6
New York	1,374.4	1,371.3	1,372.3	1,372.8	1,371.8	1,374.1	1,374.9	1,374.8	1,374.6	1,373.1	1,379.2	1,375.7	1,376.9
North Carolina	572.3	576.1	577.0	577.4	580.7	581.1	579.0	570.5	580.3	578.5	579.7	582.3	584.2
North Dakota	70.8	70.7	71.1	71.2	70.1	70.8	71.0	70.9	70.9	71.9	71.7	71.5	71.6
Ohio	753.2	751.7	753.8	753.0	750.8	754.5	758.9	765.3	768.3	760.5	753.6	755.0	756.8
Oklahoma	273.1	271.8	271.4	271.6	271.6	273.6	273.2	275.6	278.3	274.3	275.4	275.2	274.8
Oregon	247.8	248.9	249.9	249.3	249.5	248.6	249.2	247.1	248.2	250.5	250.1	250.3	252.0
Pennsylvania	723.1	723.2	726.5	723.2	724.3	726.8	726.9	726.9	722.2	736.6	736.9	734.8	732.6
Rhode Island	62.1	62.2	62.3	62.3	62.3	62.5	61.5	60.5	61.1	63.0	63.3	63.0	63.5
South Carolina	300.5	300.4	301.0	301.5	301.9	302.1	303.2	304.1	303.8	305.9	304.7	305.3	305.0
South Dakota	70.1	70.6	70.9	70.0	70.2	70.8	69.4	70.1	70.0	70.3	70.4	70.3	70.3
Tennessee	383.5	382.8	383.8	383.5	382.0	382.1	390.5	381.3	382.3	385.1	388.1	388.6	388.7
Texas	1,466.0	1,463.1	1,468.9	1,471.4	1,475.3	1,478.3	1,472.5	1,471.0	1,476.8	1,484.7	1,475.3	1,478.5	1,481.8
Utah	168.8	168.4	168.9	168.8	168.7	168.9	169.5	167.9	169.1	171.3	172.1	173.7	173.6
Vermont	45.7	45.0	45.6	45.1	45.5	44.8	45.5	45.1	45.3	45.3	45.9	45.2	45.6
Virginia	601.1	603.6	602.0	601.4	600.9	600.4	600.1	602.1	605.1	603.9	606.1	608.3	606.2
Washington	453.8	455.3	452.2	454.8	454.8	454.9	461.9	462.5	459.4	459.0	458.2	456.3	458.6
West Virginia	138.4	138.5	140.3	140.7	140.9	140.4	141.1	139.1	141.1	140.2	139.8	140.9	139.9
Wisconsin	384.3	384.6	385.2	384.9	384.7	386.1	387.1	382.1	383.4	384.9	387.8	388.7	389.0
Wyoming	58.8	59.1	59.0	59.1	58.8	59.0	59.0	58.0	56.9	57.8	58.2	57.7	58.0

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

NOTE: All data have been adjusted to March 1996 benchmarks and incorporate updated seasonal adjustment factors.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P	Jan.P
Total private	34.4	34.8	34.8	34.5	34.5	34.6	34.4	34.6	34.5	34.5	34.8	34.6	34.8
Goods-producing	41.1	41.2	41.4	41.4	41.4	41.1	41.2	41.1	41.2	41.3	41.2	41.4	41.5
Mining	44.7	45.8	45.9	45.3	46.0	45.4	45.4	45.5	45.1	45.2	45.6	44.8	45.4
Construction	38.6	38.8	38.9	38.9	39.4	38.7	39.0	38.6	38.9	38.8	38.1	38.8	39.7
Manufacturing	41.8	41.9	42.1	42.1	42.0	41.8	41.8	41.8	41.9	42.0	42.1	42.2	42.1
<i>Overtime hours</i>	4.7	4.7	4.9	4.9	4.8	4.6	4.7	4.7	4.7	4.8	4.9	4.9	4.9
Durable goods	42.5	42.7	42.9	43.0	42.8	42.6	42.6	42.7	42.6	42.8	42.9	43.0	42.8
<i>Overtime hours</i>	5.0	5.0	5.2	5.3	5.2	5.0	5.0	5.0	5.0	5.1	5.2	5.2	5.2
Lumber and wood products	40.7	40.8	41.0	41.2	41.0	41.0	41.1	40.8	40.9	41.1	41.2	41.0	41.2
Furniture and fixtures	39.8	39.9	40.3	40.1	40.4	39.9	40.0	40.0	40.2	40.0	40.5	40.7	41.5
Stone, clay, and glass products	42.6	43.3	43.1	43.0	43.4	42.9	43.1	43.0	43.1	43.1	42.9	43.7	43.9
Primary metal industries	44.4	44.6	44.8	45.1	44.8	44.7	44.4	45.0	44.9	45.1	45.3	45.3	45.3
Blast furnaces and basic steel products	44.7	44.6	44.8	45.2	44.7	44.5	44.3	45.2	45.1	45.3	45.3	45.6	45.9
Fabricated metal products	42.4	42.5	42.6	42.9	42.6	42.4	42.4	42.3	42.4	42.6	42.6	42.9	42.7
Industrial machinery and equipment	43.2	43.4	43.5	43.9	43.6	43.3	43.4	43.4	43.4	43.4	43.8	43.6	43.5
Electronic and other electrical equipment	41.3	41.9	42.1	42.3	42.0	42.0	42.0	41.7	41.7	41.8	42.0	42.0	41.6
Transportation equipment	44.7	44.6	45.0	44.8	44.5	44.2	43.7	44.3	43.9	44.4	44.0	44.7	43.6
Motor vehicles and equipment	45.6	45.3	45.7	45.3	45.2	44.8	44.0	44.7	44.1	45.0	44.3	45.0	43.4
Instruments and related products	41.6	42.1	42.0	41.9	41.9	41.8	41.7	42.3	42.0	41.9	42.2	41.8	41.6
Miscellaneous manufacturing	39.9	40.5	40.2	40.5	40.3	40.1	40.4	40.2	40.3	40.2	40.5	40.7	40.5
Nondurable goods	40.7	40.8	40.9	40.9	40.8	40.6	40.6	40.7	40.9	40.8	41.1	41.1	41.1
<i>Overtime hours</i>	4.2	4.3	4.4	4.4	4.3	4.1	4.3	4.2	4.3	4.4	4.5	4.5	4.4
Food and kindred products	41.2	41.3	41.3	41.1	41.4	40.9	41.1	41.0	41.2	41.2	41.6	41.6	41.5
Tobacco products	39.9	40.8	40.2	39.0	38.4	37.6	36.1	37.5	38.1	38.7	39.3	40.3	38.6
Textile mill products	41.2	40.9	41.2	41.7	41.4	41.2	41.3	41.2	41.4	41.3	41.5	41.7	41.5
Apparel and other textile products	37.2	37.2	37.5	37.5	37.1	37.4	36.9	37.1	37.3	37.2	37.1	37.5	37.6
Paper and allied products	43.7	43.7	43.8	43.9	43.8	43.4	43.5	43.4	43.7	43.7	44.1	43.8	43.6
Printing and publishing	38.3	38.5	38.6	38.5	38.3	38.3	38.4	38.3	38.7	38.7	38.8	38.7	38.5
Chemicals and allied products	43.2	43.3	43.3	43.1	43.3	43.1	43.0	43.3	43.4	43.2	43.4	43.0	43.4
Petroleum and coal products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products	41.4	41.7	41.8	42.0	41.6	41.5	41.7	41.7	41.6	41.8	42.2	42.4	42.3
Leather and leather products	38.4	38.9	38.7	38.5	38.2	38.1	38.4	38.0	38.4	38.6	38.0	38.3	38.3
Service-producing	32.7	33.0	33.0	32.7	32.7	32.9	32.7	32.9	32.8	32.8	33.1	32.8	33.0
Transportation and public utilities	39.5	39.7	39.8	39.3	39.5	39.6	39.0	40.1	39.9	39.8	40.2	39.7	40.1
Wholesale trade	38.2	38.6	38.6	38.4	38.4	38.5	38.3	38.4	38.3	38.3	38.7	38.2	38.4
Retail trade	28.8	29.1	29.1	28.9	28.9	28.9	28.8	29.1	28.8	28.9	28.9	28.9	29.0
Finance, insurance, and real estate	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Services	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

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

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

components, cannot be separated with sufficient precision.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1993 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

(1982=100)

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P	Jan.P
Total private	138.2	140.0	140.2	139.6	140.0	140.6	140.2	140.8	140.9	141.2	142.9	142.5	143.4
Goods-producing	112.0	113.1	113.3	113.3	113.7	112.7	112.9	113.0	113.3	113.6	113.9	115.0	116.1
Mining	54.8	56.4	56.6	55.8	57.3	56.3	56.3	56.3	56.1	56.1	56.2	55.7	56.5
Construction	151.0	154.5	154.0	153.2	156.2	152.8	154.1	152.9	154.2	153.5	152.2	156.6	163.6
Manufacturing	107.4	107.9	108.3	108.5	108.3	107.8	107.8	108.1	108.3	108.7	109.4	109.9	109.8
Durable goods	110.0	110.7	111.3	111.7	111.4	111.0	111.1	112.0	111.8	112.5	113.2	113.9	113.7
Lumber and wood products	140.3	140.7	142.2	143.3	142.9	142.2	142.3	141.5	142.1	143.0	143.6	144.6	146.0
Furniture and fixtures	125.1	125.7	127.3	126.7	128.0	126.7	127.3	126.7	127.6	127.3	129.6	130.5	134.1
Stone, clay, and glass products	108.9	111.0	110.0	109.2	110.2	108.7	110.0	109.7	110.0	110.5	110.0	112.3	113.1
Primary metal industries	93.1	93.5	93.9	94.5	93.9	94.0	93.2	95.2	95.0	95.9	96.5	96.5	96.7
Blast furnaces and basic steel products	73.4	72.9	73.2	73.8	72.6	72.3	72.0	73.4	74.1	74.0	74.0	74.5	75.0
Fabricated metal products	115.7	116.2	116.7	118.0	117.1	116.8	116.5	117.2	117.4	118.4	118.6	119.9	119.9
Industrial machinery and equipment	106.0	106.9	107.7	109.2	108.5	108.1	108.5	108.9	108.9	109.7	111.1	110.7	111.0
Electronic and other electrical equipment	106.6	108.3	108.8	109.1	108.2	108.5	109.1	108.9	109.0	109.4	110.3	110.8	110.3
Transportation equipment	126.4	126.1	127.6	126.5	126.8	126.2	125.7	129.7	127.6	129.6	129.7	131.4	128.2
Motor vehicles and equipment	167.7	165.9	167.9	164.4	165.4	165.6	163.1	169.1	164.7	168.3	168.7	169.8	163.2
Instruments and related products	75.1	76.0	75.4	75.1	75.1	75.2	75.1	75.8	75.6	75.4	76.0	75.6	75.8
Miscellaneous manufacturing	102.5	104.1	102.5	103.3	103.2	102.3	103.4	102.5	102.0	101.8	101.4	103.4	103.3
Nondurable goods	104.0	104.0	104.3	104.2	104.0	103.4	103.1	102.8	103.5	103.6	104.3	104.5	104.4
Food and kindred products	117.0	117.0	117.4	117.0	117.3	115.8	115.6	114.8	116.2	116.5	118.4	118.6	118.6
Tobacco products	63.2	64.7	63.7	59.9	58.9	57.8	57.2	57.6	58.5	61.3	64.2	61.9	61.2
Textile mill products	89.4	88.2	88.8	89.6	88.8	88.2	88.5	87.6	88.2	88.0	88.1	88.7	87.8
Apparel and other textile products	74.6	74.2	74.3	73.9	73.0	73.2	72.0	71.7	71.6	71.2	70.6	71.2	70.7
Paper and allied products	110.2	110.2	110.2	110.4	110.4	109.0	109.0	108.5	109.5	109.5	110.7	110.4	110.5
Printing and publishing	123.3	123.9	124.3	124.7	125.1	125.2	125.4	124.5	125.6	125.8	126.4	126.2	124.8
Chemicals and allied products	100.1	100.3	100.3	99.9	100.5	99.7	99.3	100.1	100.9	100.8	101.6	101.0	102.3
Petroleum and coal products	78.0	76.3	76.1	73.6	75.0	74.2	73.5	74.9	74.2	73.1	73.9	73.0	75.3
Rubber and misc. plastics products	143.1	144.5	145.0	145.9	144.7	144.2	144.3	144.9	144.7	145.6	146.8	148.3	148.9
Leather and leather products	42.5	43.0	42.8	42.0	41.7	41.0	40.7	39.7	39.5	40.3	39.1	38.8	38.8
Service-producing	150.0	152.1	152.3	151.3	151.8	153.1	152.5	153.2	153.3	153.6	155.9	154.8	155.7
Transportation and public utilities	129.3	130.5	131.4	130.1	131.0	131.3	129.3	128.2	132.2	132.1	133.2	131.0	133.1
Wholesale trade	124.3	125.9	126.3	125.7	125.9	126.2	126.0	126.5	126.2	126.7	128.3	126.9	128.0
Retail trade	136.7	138.2	138.5	137.9	138.0	138.2	138.2	139.7	138.5	139.2	140.3	140.6	140.9
Finance, insurance, and real estate	124.7	128.9	129.0	126.7	127.3	130.5	127.4	129.4	128.6	128.1	132.9	129.0	129.5
Services	180.2	182.6	182.6	181.7	182.3	184.5	184.4	184.9	185.0	185.3	188.3	187.4	188.4

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

P = preliminary.
NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1993 forward are subject to revision.

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

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

Industry	Millions of hours (annual rate) ¹			Percent change		
	Nov. 1997 ^r	Dec. 1997 ^r	Jan. 1998 ^P	Jan. 1997 to Jan. 1998 ^P	Nov. 1997 to Dec. 1997 ^r	Dec. 1997 to Jan. 1998 ^P
Total	227,171	227,097	229,110	4.1	0.0	0.9
Private sector	190,374	189,760	191,066	3.9	-.3	.7
Mining	1,352	1,339	1,359	1.9	-1.0	1.5
Construction	11,257	11,585	12,044	8.3	2.9	4.0
Manufacturing	40,609	40,751	40,744	1.9	.3	.0
Durable goods	24,357	24,473	24,473	2.9	.5	.0
Nondurable goods	16,252	16,277	16,271	.3	.2	.0
Transportation and public utilities	13,645	13,429	13,632	4.6	-1.6	1.5
Wholesale trade	13,541	13,400	13,530	3.7	-1.0	1.0
Retail trade	33,667	33,771	33,924	3.4	.3	.5
Finance, insurance, and real estate	13,689	13,315	13,394	3.5	-2.7	.6
Services	62,613	62,170	62,438	4.9	-.7	.4
Government	36,797	37,337	38,045	4.9	1.5	1.9

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

^P = preliminary.

^r = revised.

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

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

SOURCE: Office of Productivity and Technology (202—606-5606). Historical data for this series also are available on the Internet at the following address: <ftp://ftp.bls.gov/pub/special.requests/opt/table10>

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

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

Industry	1997												1998
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P	Jan. ^P
Average hourly earnings													
Total private (in current dollars)	\$12.05	\$12.10	\$12.14	\$12.14	\$12.19	\$12.23	\$12.24	\$12.31	\$12.35	\$12.40	\$12.48	\$12.47	\$12.51
Goods-producing	13.73	13.76	13.79	13.80	13.85	13.86	13.86	13.94	13.97	14.07	14.11	14.16	14.16
Mining	15.98	15.96	15.94	15.96	16.05	16.12	16.10	16.07	16.20	16.27	16.43	16.39	16.51
Construction	15.73	15.79	15.80	15.86	15.91	15.95	15.96	16.03	16.08	16.12	16.22	16.36	16.24
Manufacturing	13.02	13.03	13.07	13.07	13.11	13.12	13.11	13.20	13.22	13.35	13.37	13.39	13.39
Excluding overtime ²	12.34	12.35	12.37	12.38	12.38	12.42	12.41	12.50	12.51	12.60	12.63	12.64	12.65
Service-producing	11.49	11.54	11.59	11.58	11.63	11.69	11.70	11.77	11.81	11.85	11.94	11.91	11.96
Transportation and public utilities	14.74	14.64	14.73	14.76	14.80	14.85	14.95	15.01	14.95	15.01	15.05	15.09	15.20
Wholesale trade	13.12	13.23	13.30	13.27	13.33	13.42	13.38	13.54	13.54	13.57	13.73	13.69	13.68
Retail trade	8.19	8.21	8.25	8.26	8.28	8.30	8.32	8.36	8.42	8.46	8.50	8.50	8.55
Finance, insurance, and real estate	12.95	13.08	13.12	13.00	13.18	13.29	13.30	13.49	13.47	13.54	13.64	13.56	13.59
Services	12.05	12.12	12.16	12.16	12.20	12.26	12.26	12.33	12.36	12.41	12.50	12.49	12.53
Total private (in constant (1982) dollars) ³	7.46	7.47	7.49	7.49	7.52	7.54	7.53	7.56	7.56	7.58	7.62	7.61	(4)
Goods-producing	8.50	8.50	8.51	8.52	8.55	8.55	8.53	8.56	8.55	8.60	8.62	8.64	(4)
Service-producing	7.11	7.13	7.15	7.15	7.18	7.21	7.20	7.23	7.23	7.24	7.29	7.27	(4)
Average weekly earnings													
Total private (in current dollars)	414.52	421.08	422.47	418.83	420.56	423.16	421.06	425.93	426.08	427.80	434.30	431.46	435.35
Goods-producing	564.30	566.91	570.91	571.32	573.39	569.65	571.03	572.93	575.56	581.09	581.33	586.22	587.64
Mining	714.31	730.97	731.65	722.99	738.30	731.85	730.94	731.19	730.62	735.40	749.21	734.27	749.55
Construction	607.18	612.65	614.62	616.95	626.85	617.27	622.44	618.76	625.51	625.46	617.98	634.77	644.73
Manufacturing	544.24	545.96	550.25	550.25	550.62	548.42	548.00	551.76	553.92	560.70	562.88	565.06	563.72
Service-producing	375.72	380.82	382.47	378.67	380.30	384.60	382.59	387.23	387.37	388.68	395.21	390.65	394.68
Transportation and public utilities	582.23	581.21	586.25	580.07	584.60	588.06	583.05	601.90	596.51	597.40	605.01	599.07	609.52
Wholesale trade	501.18	510.68	513.38	509.57	511.87	516.67	512.45	519.94	518.58	519.73	531.35	522.96	525.31
Retail trade	235.87	238.91	240.08	238.71	239.29	239.87	239.62	243.28	242.50	244.49	245.65	245.65	247.95
Finance, insurance, and real estate	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Services	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Total private (in constant (1982) dollars) ³	256.51	260.09	260.78	258.54	259.60	260.89	259.11	261.63	260.92	261.49	265.30	263.41	(4)
Goods-producing	349.20	350.16	352.41	352.67	353.94	351.20	351.40	351.92	352.46	355.19	355.12	357.89	(4)
Service-producing	232.50	235.22	236.09	233.75	234.75	237.11	235.44	237.86	237.21	237.58	241.42	238.49	(4)

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

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

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

⁴ Not available.

⁵ These series are not computed because the average weekly hours⁴ components are not available on a seasonally adjusted basis.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1993 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-12. Employees on nonfarm payrolls by detailed industry

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Total		121,464	118,903	124,531	124,699	122,125	-	-	-	-	-
Total private		101,593	99,448	104,346	104,563	102,426	83,346	81,257	85,560	85,705	83,549
Mining		570	560	576	572	562	426	418	436	434	424
Metal mining	10	53.9	53.7	53.1	53.1	52.6	41.9	41.7	40.6	40.6	-
Iron ores	101	8.5	8.5	8.3	8.3	-	7.0	7.0	6.9	6.9	-
Copper ores	102	16.3	16.1	16.4	16.4	-	12.6	12.4	12.3	12.3	-
Coal mining	12	93.6	93.4	90.4	90.1	89.8	76.8	76.5	74.1	73.8	-
Bituminous coal and lignite mining	122	87.0	87.0	84.6	84.5	-	71.2	71.1	69.2	69.0	-
Oil and gas extraction	13	317.7	314.5	323.8	324.0	321.4	228.8	226.3	239.8	240.3	-
Crude petroleum and natural gas	131	138.3	136.9	130.6	130.7	-	77.9	76.8	75.5	75.6	-
Oil and gas field services	138	175.4	173.7	189.1	189.2	-	147.8	146.3	160.9	161.3	-
Nonmetallic minerals, except fuels	14	104.7	98.6	108.2	105.1	98.2	78.8	73.2	81.9	79.4	-
Crushed and broken stone	142	40.1	37.1	41.2	40.0	-	31.4	28.5	32.1	31.1	-
Sand and gravel	144	34.5	31.9	36.8	35.0	-	-	-	-	-	-
Chemical and fertilizer minerals	147	12.2	12.3	11.9	12.0	-	-	-	-	-	-
Construction		5,420	5,070	5,817	5,635	5,337	4,191	3,847	4,528	4,346	4,052
General building contractors	15	1,272.7	1,219.5	1,346.0	1,333.1	1,288.3	901.7	848.9	953.7	939.3	-
Residential building construction	152	642.4	620.5	687.5	681.1	-	435.0	413.6	470.1	463.1	-
Operative builders	153	26.1	25.8	27.1	26.9	-	10.6	10.4	10.9	10.8	-
Nonresidential building construction	154	604.2	573.2	631.4	625.1	-	456.1	424.9	472.7	465.4	-
Heavy construction, except building	16	726.2	640.8	791.9	724.4	645.8	601.5	519.2	661.2	595.8	-
Highway and street construction	161	206.2	164.2	249.0	206.0	-	162.8	123.1	203.4	161.2	-
Heavy construction, except highway	162	520.0	476.6	542.9	518.4	-	438.7	396.1	457.8	434.6	-
Special trade contractors	17	3,421.3	3,209.6	3,679.0	3,577.7	3,402.5	2,687.8	2,478.5	2,913.4	2,810.6	-
Plumbing, heating, and air conditioning	171	775.5	760.8	800.8	802.3	-	571.9	557.5	591.6	592.5	-
Painting and paper hanging	172	189.2	172.7	208.1	196.0	-	154.8	139.3	173.5	160.9	-
Electrical work	173	658.4	643.4	704.7	703.1	-	520.6	505.3	560.1	558.9	-
Masonry, stonework, and plastering	174	453.8	416.8	492.5	480.9	-	390.5	352.5	424.6	412.5	-
Carpentry and floor work	175	242.0	235.5	258.0	261.3	-	183.8	177.6	197.5	199.4	-
Roofing, siding, and sheet metal work	176	229.2	202.0	243.2	231.4	-	183.7	156.7	193.7	181.5	-
Manufacturing		18,469	18,331	18,695	18,694	18,583	12,757	12,642	12,935	12,931	12,831
Durable goods		10,828	10,761	11,055	11,074	11,030	7,418	7,364	7,598	7,614	7,571
Lumber and wood products	24	786.2	774.0	805.8	804.7	793.6	647.1	635.4	664.3	663.4	653.1
Logging	241	78.9	77.8	81.9	81.2	-	63.1	62.1	65.8	65.5	-
Sawmills and planing mills	242	182.9	182.1	187.7	188.4	-	159.2	158.4	163.6	164.1	-
Sawmills and planing mills, general	2421	145.5	144.6	148.8	149.6	-	126.2	125.2	129.3	129.9	-
Hardwood dimension and flooring mills	2426	35.5	35.6	36.9	36.8	-	31.4	31.6	32.6	32.5	-
Millwork, plywood, and structural members	243	290.6	286.0	299.3	299.7	-	233.4	228.6	240.8	240.5	-
Millwork	2431	116.6	114.5	118.4	119.5	-	90.3	87.7	91.5	91.6	-
Wood kitchen cabinets	2434	79.5	78.3	83.6	83.8	-	63.6	62.5	67.9	68.1	-
Hardwood veneer and plywood	2435	27.7	27.5	28.3	28.3	-	23.4	23.3	23.9	24.0	-
Softwood veneer and plywood	2436	30.2	30.1	30.1	29.7	-	28.1	28.1	27.6	27.3	-
Wood containers	244	52.7	52.0	54.1	54.2	-	44.9	44.2	46.0	46.4	-
Wood buildings and mobile homes	245	91.1	87.9	92.1	90.8	-	73.3	70.3	74.0	72.7	-
Mobile homes	2451	69.5	67.2	69.6	68.4	-	58.3	56.4	58.5	57.2	-
Miscellaneous wood products	249	90.0	88.2	90.7	90.4	-	73.2	71.8	74.1	74.2	-
Furniture and fixtures	25	508.2	505.6	514.7	517.2	516.0	402.3	400.5	409.0	411.7	411.5
Household furniture	251	276.2	275.6	276.5	278.1	-	232.6	232.2	233.0	234.8	-
Wood household furniture	2511	124.6	124.0	122.4	122.1	-	107.7	107.2	106.1	105.9	-
Upholstered household furniture	2512	85.9	85.4	87.9	88.3	-	72.3	72.0	74.0	74.5	-
Metal household furniture	2514	21.2	21.4	19.8	21.3	-	17.5	17.8	16.4	17.8	-
Mattresses and bedsprings	2515	32.2	32.6	35.1	35.5	-	24.8	25.0	27.1	27.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Furniture and fixtures—Continued											
Office furniture	252	62.1	61.6	63.5	63.9	—	46.1	45.6	47.2	47.4	—
Public building and related furniture	253	44.6	44.2	45.3	45.5	—	35.3	35.2	35.7	35.9	—
Partitions and fixtures	254	86.7	85.8	89.5	89.6	—	63.1	62.3	66.7	67.1	—
Miscellaneous furniture and fixtures	259	38.6	38.4	39.9	40.1	—	25.2	25.2	26.4	26.5	—
Stone, clay, and glass products	32	537.5	521.7	545.6	538.7	525.3	418.2	403.4	427.5	420.4	407.3
Flat glass	321	15.7	15.7	15.6	15.5	—	12.4	12.5	12.6	12.5	—
Glass and glassware, pressed or blown	322	71.8	71.8	71.9	72.0	—	60.3	59.8	59.7	59.5	—
Glass containers	3221	27.3	27.0	25.2	25.3	—	24.5	24.0	22.5	22.6	—
Pressed and blown glass, nec	3229	44.5	44.8	46.7	46.7	—	35.8	35.8	37.2	36.9	—
Products of purchased glass	323	58.5	57.8	59.9	59.1	—	45.3	44.5	47.6	46.5	—
Cement, hydraulic	324	17.3	17.2	17.4	17.4	—	13.2	13.1	13.3	13.2	—
Structural clay products	325	32.9	32.5	32.6	32.2	—	25.9	25.3	25.4	25.1	—
Pottery and related products	326	39.9	39.5	38.8	38.5	—	31.9	31.4	30.5	30.4	—
Concrete, gypsum, and plaster products	327	210.5	197.4	218.6	213.1	—	160.5	148.7	168.9	163.7	—
Concrete block and brick	3271	17.4	16.6	18.3	17.7	—	10.9	10.3	11.7	11.4	—
Concrete products, nec	3272	71.1	68.8	73.3	73.1	—	53.8	51.8	56.3	55.9	—
Ready-mixed concrete	3273	104.2	94.3	109.3	104.6	—	82.0	72.8	86.9	82.3	—
Misc. nonmetallic mineral products	329	76.4	75.9	75.9	75.9	—	58.2	58.1	58.5	58.4	—
Abrasive products	3291	19.9	19.7	19.5	19.7	—	15.7	15.6	15.5	15.6	—
Asbestos products	3292	2.6	2.6	2.6	2.6	—	2.2	2.2	2.2	2.2	—
Mineral wool	3296	23.9	23.6	23.7	23.7	—	—	—	—	—	—
Primary metal industries	33	710.7	708.5	718.3	720.5	719.4	555.0	552.8	563.5	565.5	564.3
Blast furnaces and basic steel products	331	237.9	237.0	237.0	236.7	235.8	182.9	182.1	183.1	183.1	182.1
Blast furnaces and steel mills	3312	165.7	165.1	163.6	162.9	—	128.3	127.8	127.4	127.1	—
Steel pipe and tubes	3317	26.7	26.7	27.4	27.6	—	20.1	20.1	20.7	21.0	—
Iron and steel foundries	332	129.4	128.9	134.2	134.9	—	106.2	105.9	110.4	110.9	—
Gray and ductile iron foundries	3321	82.0	81.7	83.7	83.9	—	68.0	67.9	69.6	69.7	—
Malleable iron foundries	3322	4.1	4.0	3.8	3.9	—	3.2	3.1	3.0	3.0	—
Steel foundries, nec	3325	26.5	26.2	27.8	27.9	—	21.7	21.5	22.7	22.8	—
Primary nonferrous metals	333	39.0	38.8	39.1	39.1	—	30.1	30.2	30.2	30.3	—
Primary aluminum	3334	22.5	22.5	22.2	22.2	—	18.1	18.2	18.0	18.0	—
Nonferrous rolling and drawing	335	167.7	168.5	168.3	169.0	—	128.0	128.1	129.6	130.1	—
Copper rolling and drawing	3351	22.7	22.6	22.3	22.7	—	17.7	17.6	17.7	18.0	—
Aluminum sheet, plate, and foil	3353	21.3	21.5	21.1	20.8	—	15.9	15.9	15.7	15.5	—
Nonferrous wire drawing and insulating	3357	72.3	72.7	72.0	72.2	—	54.7	54.7	55.2	55.4	—
Nonferrous foundries (castings)	336	91.2	90.1	92.6	93.3	—	74.6	73.5	75.3	75.9	—
Aluminum foundries	3365	24.6	24.5	25.3	25.3	—	20.2	20.2	20.7	20.8	—
Fabricated metal products	34	1,463.6	1,456.2	1,491.8	1,494.3	1,491.5	1,102.1	1,095.6	1,127.0	1,130.5	1,127.0
Metal cans and shipping containers	341	38.3	38.0	37.5	37.3	—	33.0	32.5	32.0	31.9	—
Metal cans	3411	30.9	30.6	30.3	30.0	—	26.9	26.5	26.1	25.9	—
Cutlery, handtools, and hardware	342	127.0	126.2	127.4	127.3	—	96.0	95.5	97.6	98.0	—
Hand and edge tools, and blades and handsaws	3423.5	43.9	43.6	43.2	43.1	—	34.0	33.8	33.3	33.3	—
Hardware, nec	3429	70.6	70.4	71.5	71.6	—	53.7	53.4	54.7	55.2	—
Plumbing and heating, except electric	343	60.0	59.3	60.5	60.8	—	43.3	42.2	43.5	43.6	—
Plumbing fixture fittings and trim	3432	23.7	23.6	23.3	23.6	—	17.3	17.1	16.9	17.2	—
Heating equipment, except electric	3433	22.1	21.7	22.6	22.5	—	15.3	14.6	15.5	15.3	—
Fabricated structural metal products	344	445.0	441.5	453.9	453.0	—	327.7	324.4	332.5	332.3	—
Fabricated structural metal	3441	75.7	75.7	77.9	77.5	—	55.9	55.8	57.1	56.9	—
Metal doors, sash, and trim	3442	77.0	75.3	77.7	76.8	—	57.2	55.6	57.4	56.6	—
Fabricated plate work (boiler shops)	3443	101.3	100.6	100.9	101.4	—	73.5	72.8	72.8	73.4	—
Sheet metal work	3444	119.4	119.1	122.6	122.6	—	92.4	91.9	93.9	94.0	—
Architectural metal work	3446	29.5	29.4	30.8	30.7	—	20.8	20.8	22.4	22.3	—
Screw machine products, bolts, etc	345	101.9	101.4	106.1	106.7	—	80.2	79.7	83.4	83.9	—
Screw machine products	3451	52.6	52.5	55.5	55.8	—	42.8	42.8	45.1	45.4	—
Bolts, nuts, rivets, and washers	3452	49.3	48.9	50.6	50.9	—	37.4	36.9	38.3	38.5	—
Metal forgings and stampings	346	254.4	252.8	257.8	258.9	—	203.3	202.1	205.4	206.4	—
Iron and steel forgings	3462	30.9	30.9	32.6	32.9	—	23.6	23.6	25.0	25.3	—
Automotive stampings	3465	118.3	116.9	116.0	116.9	—	98.9	97.3	95.8	96.6	—
Metal stampings, nec	3469	94.1	93.7	97.7	97.6	—	72.4	72.6	75.9	75.8	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Fabricated metal products—Continued											
Metal services, nec	347	137.8	138.1	145.2	145.5	—	109.2	109.6	117.2	117.6	—
Plating and polishing	3471	84.1	84.6	90.3	90.8	—	66.9	67.5	73.6	74.3	—
Metal coating and allied services	3479	53.7	53.5	54.9	54.7	—	42.3	42.1	43.6	43.3	—
Ordnance and accessories, nec	348	45.2	45.3	41.9	41.8	—	23.3	23.7	23.4	23.3	—
Ammunition, except for small arms, nec	3483	23.9	23.5	21.9	21.9	—	9.7	9.5	10.1	10.1	—
Miscellaneous fabricated metal products	349	254.0	253.6	261.5	263.0	—	186.1	185.9	192.0	193.5	—
Valves and pipe fittings, nec	3494	25.1	25.0	25.8	25.9	—	18.7	18.7	19.0	19.1	—
Misc. fabricated wire products	3496	54.7	54.5	55.4	55.5	—	41.4	41.1	41.7	41.8	—
Industrial machinery and equipment	35	2,121.0	2,124.5	2,178.5	2,187.5	2,191.6	1,327.5	1,331.8	1,371.6	1,379.8	1,384.9
Engines and turbines	351	83.1	82.7	81.8	81.8	—	52.5	53.1	51.7	51.4	—
Turbines and turbine generator sets	3511	24.7	24.6	24.4	24.4	—	14.0	14.0	13.8	13.8	—
Internal combustion engines, nec	3519	58.4	58.1	57.4	57.4	—	38.5	39.1	37.9	37.6	—
Farm and garden machinery	352	102.9	105.3	103.8	106.8	—	74.1	76.8	75.6	78.4	—
Farm machinery and equipment	3523	74.8	75.3	77.8	78.8	—	53.5	54.2	56.5	57.4	—
Construction and related machinery	353	233.2	233.5	246.3	248.4	—	151.6	151.4	161.1	162.3	—
Construction machinery	3531	86.0	86.0	88.5	89.2	—	58.6	58.6	60.5	61.0	—
Mining machinery	3532	16.7	16.7	16.7	16.8	—	9.8	9.8	10.0	10.1	—
Oil and gas field machinery	3533	41.8	41.6	48.8	49.3	—	28.2	28.0	33.4	33.6	—
Conveyors and conveying equipment	3535	41.1	41.1	42.5	43.1	—	23.3	23.3	23.7	23.9	—
Industrial trucks and tractors	3537	29.4	29.8	31.0	31.2	—	20.4	20.4	21.6	21.7	—
Metalworking machinery	354	347.1	347.3	353.1	353.6	—	246.5	247.3	252.3	253.6	—
Machine tools, metal cutting types	3541	41.9	41.7	41.8	42.1	—	25.9	25.9	26.4	26.7	—
Machine tools, metal forming types	3542	17.2	17.3	17.4	17.5	—	11.1	11.1	11.0	11.0	—
Special dies, tools, jigs, and fixtures	3544	166.1	166.7	170.6	171.3	—	126.4	127.2	130.7	131.5	—
Machine tool accessories	3545	53.1	53.3	54.1	53.8	—	37.1	37.3	38.4	38.3	—
Power driven handtools	3546	22.5	22.0	21.1	20.9	—	15.5	15.3	14.6	14.5	—
Special industry machinery	355	174.7	175.3	182.2	182.7	—	98.2	98.5	99.9	100.1	—
Textile machinery	3552	14.9	14.9	15.2	15.2	—	10.0	10.0	9.9	10.0	—
Printing trades machinery	3555	21.8	22.1	22.1	22.3	—	12.3	12.6	12.6	12.7	—
Food products machinery	3556	25.4	25.4	25.5	25.3	—	15.4	15.3	15.1	15.0	—
General industrial machinery	356	257.2	257.3	260.8	261.4	—	165.1	164.6	167.2	167.6	—
Pumps and pumping equipment	3561	30.0	30.1	30.3	30.4	—	17.2	17.2	17.5	17.6	—
Ball and roller bearings	3562	40.0	39.8	40.3	40.3	—	31.8	31.3	31.4	31.4	—
Air and gas compressors	3563	25.8	25.9	25.9	25.8	—	15.2	15.3	15.0	15.0	—
Blowers and fans	3564	35.4	35.3	35.7	35.9	—	23.6	23.7	24.1	24.2	—
Speed changers, drives, and gears	3566	17.5	17.5	18.2	18.2	—	12.4	12.3	13.2	13.3	—
Power transmission equipment, nec	3568	21.6	21.3	22.0	22.0	—	15.1	14.9	15.4	15.5	—
Computer and office equipment	357	366.1	366.8	384.1	386.0	386.5	129.5	130.4	145.4	147.2	—
Electronic computers	3571	192.4	192.8	199.6	200.4	—	57.1	57.8	68.0	68.9	—
Computer terminals, calculators, and office machines, nec	3575,8,9	57.6	57.6	61.0	61.4	—	23.2	23.2	24.3	24.8	—
Refrigeration and service machinery	358	205.0	204.7	202.7	201.2	—	147.5	147.1	144.3	143.3	—
Refrigeration and heating equipment	3585	142.1	141.9	137.7	136.2	—	108.0	107.6	103.4	102.6	—
Misc. industrial and commercial machinery	359	351.7	351.6	363.7	365.6	—	262.5	262.6	274.1	275.9	—
Carburetors, pistons, rings, valves	3592	23.1	23.0	23.0	23.1	—	18.3	18.2	18.3	18.5	—
Scales, balances, and industrial machinery, nec	3596,9	282.0	282.0	292.1	293.9	—	215.2	215.4	225.5	226.8	—
Electronic and other electrical equipment	36	1,654.4	1,644.0	1,680.3	1,685.5	1,684.8	1,046.9	1,041.8	1,065.8	1,070.0	1,069.8
Electric distribution equipment	361	81.5	80.7	81.1	79.9	—	55.6	55.0	55.0	53.8	—
Transformers, except electronic	3612	39.8	39.1	38.7	38.2	—	28.4	27.8	26.6	26.2	—
Switchgear and switchboard apparatus	3613	41.7	41.6	42.4	41.7	—	27.2	27.2	28.4	27.6	—
Electrical industrial apparatus	362	156.3	155.0	153.0	153.5	—	109.4	107.9	106.5	106.6	—
Motors and generators	3621	75.4	74.9	74.2	74.7	—	58.9	58.5	57.8	57.8	—
Relays and industrial controls	3625	60.3	59.7	58.2	58.2	—	35.6	34.6	33.8	33.9	—
Household appliances	363	119.2	119.1	116.8	116.7	—	94.0	94.1	92.0	92.0	—
Household refrigerators and freezers	3632	27.8	29.2	25.6	25.7	—	22.1	23.4	19.8	19.9	—
Household laundry equipment	3633	17.4	17.5	17.8	17.9	—	13.9	13.9	14.1	14.2	—
Electric housewares and fans	3634	26.4	24.6	27.0	26.1	—	19.6	18.5	20.6	19.7	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Electronic and other electrical equipment—Continued											
Electric lighting and wiring equipment	364	179.4	178.2	180.2	181.0	—	128.6	128.0	128.9	129.2	—
Electric lamps	3641	22.8	22.6	22.4	22.6	—	17.5	17.5	17.3	17.5	—
Current-carrying wiring devices	3643	62.4	62.1	62.4	62.5	—	40.4	40.2	41.1	41.2	—
Noncurrent-carrying wiring devices	3644	17.6	17.4	17.7	17.8	—	13.7	13.4	13.4	13.2	—
Residential lighting fixtures	3645	20.4	20.4	21.4	20.9	—	15.5	15.6	15.9	15.5	—
Household audio and video equipment	365	83.0	80.6	78.4	78.6	—	54.2	53.0	50.3	50.7	—
Household audio and video equipment	3651	55.5	54.6	54.0	54.0	—	33.2	32.7	31.7	31.8	—
Communications equipment	366	271.8	270.1	274.2	274.8	—	128.6	128.8	131.2	131.5	—
Telephone and telegraph apparatus	3661	113.1	111.7	116.2	116.8	—	56.7	57.2	57.1	56.8	—
Electronic components and accessories	367	610.1	609.0	647.1	651.5	653.2	365.0	364.6	393.6	397.3	—
Electron tubes	3671	22.9	22.6	22.8	23.1	—	16.1	15.9	16.9	17.1	—
Semiconductors and related devices	3674	256.1	255.0	275.6	278.1	—	114.4	113.7	125.2	126.6	—
Electronic components, nec	3679	137.2	137.0	142.5	143.0	—	91.4	91.6	98.2	99.0	—
Misc. electrical equipment and supplies	369	153.1	151.3	149.5	149.5	—	111.5	110.4	108.3	108.9	—
Storage batteries	3691	28.0	27.8	26.9	26.8	—	21.7	21.8	21.0	20.9	—
Engine electrical equipment	3694	68.3	67.6	67.7	68.1	—	54.6	54.2	53.3	53.8	—
Transportation equipment	37	1,804.5	1,793.1	1,871.7	1,878.7	1,864.8	1,225.5	1,214.6	1,275.8	1,280.5	1,263.6
Motor vehicles and equipment	371	970.4	957.7	993.8	996.9	983.3	767.1	755.6	788.5	790.3	772.9
Motor vehicles and car bodies	3711	345.6	333.6	349.0	349.0	—	265.4	254.7	270.9	269.7	—
Truck and bus bodies	3713	38.7	38.8	41.1	40.7	—	31.1	31.1	32.8	32.5	—
Motor vehicle parts and accessories	3714	534.4	533.7	546.1	548.7	—	429.1	428.0	437.8	440.0	—
Truck trailers	3715	33.6	33.6	38.2	39.3	—	26.6	26.8	31.0	32.2	—
Aircraft and parts	372	480.3	483.0	524.2	526.8	527.1	234.6	236.1	267.0	268.3	—
Aircraft	3721	255.3	257.0	276.8	278.7	—	104.3	104.7	118.6	119.2	—
Aircraft engines and engine parts	3724	97.8	97.4	101.6	101.7	—	51.2	51.4	54.9	55.2	—
Aircraft parts and equipment, nec	3728	127.2	128.6	145.8	146.4	—	79.1	80.0	93.5	93.9	—
Ship and boat building and repairing	373	152.4	151.2	149.2	150.1	—	117.5	116.3	112.6	114.2	—
Ship building and repairing	3731	97.7	97.1	93.7	94.3	—	71.9	71.2	66.3	67.8	—
Boat building and repairing	3732	54.7	54.1	55.5	55.8	—	45.6	45.1	46.3	46.4	—
Railroad equipment	374	36.1	35.6	35.2	35.4	—	27.4	27.0	26.4	26.7	—
Guided missiles, space vehicles, and parts	376	90.2	89.8	91.4	91.6	—	24.3	24.1	24.5	24.5	—
Guided missiles and space vehicles	3761	62.9	62.2	63.3	63.5	—	15.4	15.2	15.5	15.4	—
Miscellaneous transportation equipment	379	52.3	52.8	53.1	53.1	—	37.7	38.4	38.6	38.6	—
Travel trailers and campers	3792	21.4	21.5	22.2	22.4	—	17.9	18.1	18.6	18.8	—
Instruments and related products	38	856.0	852.7	861.0	862.4	861.9	423.0	420.8	421.7	423.5	424.9
Search and navigation equipment	381	160.9	160.6	162.4	162.2	—	44.8	43.9	42.2	42.2	—
Measuring and controlling devices	382	298.4	298.1	302.4	303.2	—	152.0	152.1	154.1	154.7	—
Environmental controls	3822	41.9	41.7	40.5	40.3	—	27.5	27.6	27.4	27.2	—
Process control instruments	3823	66.1	66.2	66.4	66.6	—	33.3	33.5	33.8	34.3	—
Instruments to measure electricity	3825	75.9	75.6	78.5	79.0	—	33.2	32.8	32.6	32.8	—
Medical instruments and supplies	384	268.7	267.3	269.4	270.6	—	157.6	157.4	156.5	157.3	—
Surgical and medical instruments	3841	104.8	104.4	103.8	104.2	—	67.3	67.6	65.1	65.6	—
Surgical appliances and supplies	3842	92.6	91.7	93.0	93.7	—	57.0	56.7	57.8	58.2	—
Ophthalmic goods	385	35.1	35.2	35.7	35.8	—	22.9	22.1	23.2	23.7	—
Photographic equipment and supplies	386	85.1	83.8	83.4	82.8	—	39.2	38.9	39.3	39.1	—
Watches, clocks, watchcases, and parts	387	7.8	7.7	7.7	7.8	—	6.5	6.4	6.4	6.5	—
Miscellaneous manufacturing industries	39	386.3	381.1	387.6	384.9	381.1	270.8	267.2	271.4	269.0	264.9
Jewelry, silverware, and plated ware	391	49.6	47.9	48.4	48.2	—	34.4	33.0	33.6	33.3	—
Jewelry, precious metal	3911	37.2	35.8	36.3	36.1	—	25.3	24.1	24.9	24.6	—
Musical instruments	393	15.7	15.7	16.2	16.4	—	12.3	12.4	12.8	12.9	—
Toys and sporting goods	394	112.2	111.2	107.0	106.5	—	77.6	76.7	73.1	72.2	—
Dolls, games, toys, and children's vehicles	3942,4	40.5	39.5	39.2	38.2	—	26.4	25.6	25.8	24.4	—
Sporting and athletic goods, nec	3949	71.7	71.7	67.8	68.3	—	51.2	51.1	47.3	47.8	—
Pens, pencils, office, and art supplies	395	31.8	31.5	30.7	30.8	—	21.5	21.4	20.7	21.0	—
Costume jewelry and notions	396	24.0	23.5	24.2	23.9	—	16.7	16.3	17.3	17.2	—
Costume jewelry	3961	13.8	13.2	14.0	13.7	—	9.6	9.1	10.2	10.0	—
Miscellaneous manufactures	399	153.0	151.3	161.1	159.1	—	108.3	107.4	113.9	112.4	—
Signs and advertising specialties	3993	66.4	66.1	69.4	69.5	—	43.9	43.7	45.2	45.3	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods		7,641	7,570	7,640	7,620	7,553	5,339	5,278	5,337	5,317	5,260
Food and kindred products	20	1,674.9	1,652.9	1,708.8	1,691.1	1,666.2	1,243.1	1,222.4	1,271.4	1,252.8	1,232.0
Meat products	201	482.8	479.7	489.9	490.9	-	411.4	407.4	416.7	416.7	-
Meat packing plants	2011	148.6	148.5	150.9	151.1	-	124.9	124.3	126.8	126.5	-
Sausages and other prepared meats	2013	96.7	95.4	97.8	97.8	-	75.3	74.0	75.7	75.7	-
Poultry slaughtering and processing	2015	237.5	235.8	241.2	242.0	-	211.2	209.1	214.2	214.5	-
Dairy products	202	141.2	140.7	141.0	141.1	-	93.9	93.6	93.4	93.8	-
Cheese, natural and processed	2022	41.0	40.3	40.3	40.8	-	33.4	33.0	32.9	33.2	-
Fluid milk	2026	61.7	61.6	62.1	61.7	-	35.4	35.2	35.2	35.2	-
Preserved fruits and vegetables	203	215.4	207.3	223.3	212.5	-	178.0	170.0	187.4	176.2	-
Canned specialties	2032	19.6	19.7	18.7	18.9	-	15.6	15.7	14.8	14.9	-
Canned fruits and vegetables	2033	60.5	58.0	65.8	58.7	-	48.2	45.5	54.2	47.0	-
Frozen fruits and vegetables	2037	45.0	41.3	47.2	44.9	-	39.1	35.6	41.2	38.8	-
Grain mill products	204	126.7	126.5	126.6	126.2	-	90.5	90.4	91.2	91.1	-
Flour and other grain mill products	2041	19.2	19.2	19.6	19.5	-	12.0	12.1	12.0	12.1	-
Prepared feeds, nec	2048	40.5	40.5	40.0	40.0	-	26.1	26.1	26.3	26.4	-
Bakery products	205	212.4	207.9	213.6	213.3	-	143.7	139.5	143.8	142.8	-
Bread, cake, and related products	2051	151.1	148.1	153.1	153.4	-	92.8	89.9	92.6	92.3	-
Cookies, crackers, and frozen bakery products, except bread	2052.3	61.3	59.8	60.5	59.9	-	50.9	49.6	51.2	50.5	-
Sugar and confectionery products	206	107.2	100.4	110.1	107.2	-	86.5	79.9	88.2	85.4	-
Raw cane sugar	2061	6.4	5.9	8.2	8.2	-	5.0	4.3	6.3	6.2	-
Cane sugar refining	2062	4.3	4.3	4.3	4.3	-	3.3	3.3	3.1	3.2	-
Beet sugar	2063	9.6	8.7	11.6	10.1	-	8.6	7.7	10.6	9.0	-
Candy and other confectionery products	2064	59.7	54.9	59.0	57.9	-	49.3	44.8	47.8	46.8	-
Fats and oils	207	31.2	30.5	33.1	33.0	-	21.9	21.8	23.2	23.2	-
Beverages	208	176.4	175.3	180.5	180.3	-	84.7	83.7	88.6	88.3	-
Malt beverages	2082	35.6	34.6	34.2	34.4	-	23.0	22.3	21.7	22.0	-
Bottled and canned soft drinks	2086	91.9	92.9	94.0	94.1	-	37.9	38.0	38.9	38.6	-
Misc. food and kindred products	209	181.6	184.6	190.7	186.6	-	132.5	136.1	138.9	135.3	-
Tobacco products	21	44.6	43.8	43.7	43.4	41.5	35.4	34.6	34.7	34.2	34.6
Cigarettes	211	28.6	28.2	27.5	27.5	-	21.3	21.1	20.5	20.6	-
Textile mill products	22	614.9	611.9	603.3	603.5	597.2	521.1	518.6	511.8	512.1	506.8
Broadwoven fabric mills, cotton	221	73.4	72.9	70.7	70.6	-	65.2	65.0	63.3	63.3	-
Broadwoven fabric mills, synthetics	222	65.1	64.9	65.9	66.7	-	54.9	54.5	55.3	56.2	-
Broadwoven fabric mills, wool	223	14.3	14.6	14.1	14.1	-	12.2	12.4	11.9	11.9	-
Narrow fabric mills	224	20.5	20.7	20.7	20.8	-	17.0	17.2	17.2	17.3	-
Knitting mills	225	174.3	173.3	167.7	166.8	-	149.4	148.7	143.3	142.3	-
Women's hosiery, except socks	2251	21.1	21.0	19.7	19.7	-	18.4	18.4	17.3	17.3	-
Hosiery, nec	2252	39.1	38.8	37.9	37.6	-	34.1	33.8	33.1	32.8	-
Knit outerwear mills	2253	53.5	52.7	50.7	50.0	-	45.8	45.1	43.4	42.9	-
Knit underwear mills	2254	17.3	17.6	14.5	14.3	-	15.2	15.5	12.7	12.6	-
Welt knit fabric mills	2257	22.4	22.4	23.5	23.7	-	18.5	18.6	19.6	19.6	-
Textile finishing, except wool	226	67.4	66.8	63.8	63.8	-	55.1	54.7	52.2	52.1	-
Finishing plants, cotton	2261	31.4	31.0	30.0	29.9	-	25.7	25.5	24.6	24.5	-
Finishing plants, synthetics	2262	21.6	21.5	20.4	20.5	-	17.2	17.2	16.4	16.4	-
Carpets and rugs	227	61.2	61.2	63.2	63.5	-	49.9	49.7	52.7	53.3	-
Yarn and thread mills	228	88.3	87.4	86.4	86.7	-	78.5	77.8	76.5	76.5	-
Yarn spinning mills	2281	64.7	63.8	63.0	63.2	-	57.9	57.2	56.2	56.2	-
Throwing and winding mills	2282	16.7	16.7	16.2	16.3	-	14.4	14.4	13.8	13.8	-
Miscellaneous textile goods	229	50.4	50.1	50.8	50.5	-	38.9	38.6	39.4	39.2	-
Apparel and other textile products	23	837.5	823.8	800.9	792.9	779.9	683.8	673.8	652.7	644.2	631.8
Men's and boys' suits and coats	231	31.7	31.4	29.9	30.2	-	25.7	25.6	24.2	24.5	-
Men's and boys' furnishings	232	218.2	215.4	204.2	203.4	-	184.6	182.7	172.8	172.2	-
Men's and boys' shirts	2321	45.3	45.1	41.9	42.0	-	38.6	38.3	36.2	36.3	-
Men's and boys' trousers and slacks	2325	73.3	73.0	69.7	69.3	-	63.0	63.1	60.3	59.8	-
Men's and boys' work clothing	2326	33.2	32.1	29.9	30.5	-	28.4	27.5	25.6	26.4	-
Women's and misses' outerwear	233	244.5	238.7	234.3	229.4	-	198.4	193.9	189.8	184.4	-
Women's and misses' blouses and shirts	2331	26.0	25.3	24.5	24.0	-	20.4	19.6	18.9	18.2	-
Women's, juniors', and misses' dresses	2335	38.2	37.5	37.3	36.7	-	29.8	29.3	29.1	28.5	-
Women's and misses' suits and coats	2337	23.9	22.7	26.1	24.9	-	19.0	17.7	20.4	19.4	-
Women's and misses' outerwear, nec	2339	156.4	153.2	146.4	143.8	-	129.2	127.3	121.4	118.3	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	39.8	39.1	35.8	35.2	—	31.4	30.9	28.1	27.8	—
Women's and children's underwear	2341	29.1	28.3	25.9	25.6	—	24.1	23.5	21.0	20.6	—
Brassieres, girdles, and allied garments	2342	10.7	10.8	9.9	9.6	—	7.3	7.4	7.1	7.2	—
Girls' and children's outerwear	236	32.8	31.8	28.9	28.5	—	27.0	26.2	23.8	23.4	—
Girls' and children's dresses and blouses	2361	12.7	12.5	10.9	10.6	—	10.8	10.7	9.4	9.1	—
Misc. apparel and accessories	238	33.3	32.3	32.9	32.4	—	26.8	26.2	26.2	25.7	—
Misc. fabricated textile products	239	218.1	216.2	216.8	215.9	—	175.0	173.4	173.6	172.1	—
Curtains and draperies	2391	20.0	19.6	17.9	18.0	—	15.7	15.4	13.9	13.8	—
House furnishings, nec	2392	55.3	55.1	56.0	56.1	—	46.9	46.9	47.4	47.3	—
Automotive and apparel trimmings	2396	59.8	59.0	59.5	59.2	—	47.6	46.7	47.1	46.9	—
Paper and allied products	26	679.3	675.4	677.1	677.7	675.7	517.3	514.4	516.1	517.6	517.6
Paper mills	262	159.9	160.0	157.8	157.9	—	124.1	124.2	122.7	122.8	—
Paperboard mills	263	49.2	49.5	48.6	48.8	—	37.7	38.0	37.7	37.7	—
Paperboard containers and boxes	265	219.0	217.7	218.5	218.8	—	170.0	168.7	169.2	169.5	—
Corrugated and solid fiber boxes	2653	130.7	130.7	131.1	131.5	—	97.9	98.0	98.2	98.7	—
Sanitary food containers	2656	17.1	16.8	16.7	16.4	—	15.1	14.8	15.0	14.7	—
Folding paperboard boxes	2657	48.8	48.3	48.3	48.4	—	39.7	39.1	38.8	38.9	—
Misc. converted paper products	267	238.7	235.8	240.8	240.8	—	175.6	173.6	177.4	178.5	—
Paper, coated and laminated, nec	2672	45.7	45.0	46.8	47.2	—	24.1	23.5	24.2	25.3	—
Bags: plastics, laminated, and coated	2673	38.4	38.3	39.4	39.1	—	29.7	29.6	30.9	30.7	—
Envelopes	2677	24.1	24.0	24.8	25.0	—	18.8	18.7	19.4	19.5	—
Printing and publishing	27	1,544.7	1,530.6	1,556.3	1,563.6	1,551.4	844.2	832.5	847.3	852.9	837.6
Newspapers	271	445.4	441.7	451.0	452.7	—	151.3	148.6	151.2	152.0	—
Periodicals	272	131.7	131.6	133.4	134.7	—	44.1	44.0	46.0	45.9	—
Books	273	124.6	123.5	122.5	123.8	—	65.5	65.3	63.6	64.7	—
Book publishing	2731	85.2	84.3	84.2	84.1	—	34.2	34.4	33.2	33.1	—
Book printing	2732	39.4	39.2	38.3	39.7	—	31.3	30.9	30.4	31.6	—
Miscellaneous publishing	274	86.0	85.8	91.2	91.9	—	39.8	39.7	43.1	43.8	—
Commercial printing	275	568.1	561.4	570.9	573.0	—	407.1	400.8	408.7	410.9	—
Commercial printing, lithographic	2752	368.7	364.3	372.2	374.0	—	263.7	259.4	265.9	267.7	—
Commercial printing, nec	2759	179.0	177.2	178.8	179.0	—	127.3	125.6	127.0	127.3	—
Manifold business forms	276	44.6	44.7	44.3	44.6	—	31.0	31.3	31.3	31.6	—
Blankbooks and bookbinding	278	66.2	65.4	65.5	65.6	—	51.1	50.4	49.7	50.2	—
Printing trade services	279	50.4	50.2	48.7	48.6	—	34.8	34.5	32.8	32.9	—
Chemicals and allied products	28	1,026.0	1,023.3	1,026.3	1,026.2	1,023.5	566.9	564.4	572.4	574.3	574.6
Industrial inorganic chemicals	281	117.9	117.6	115.9	115.2	—	54.5	54.5	58.7	59.3	—
Industrial inorganic chemicals, nec	2819	72.6	72.2	70.5	69.9	—	36.1	36.0	35.3	35.4	—
Plastics materials and synthetics	282	158.4	157.9	154.5	154.0	—	105.6	106.0	103.6	103.6	—
Plastics materials and resins	2821	76.3	76.1	77.1	77.4	—	47.4	47.5	48.0	48.2	—
Organic fibers, noncellulosic	2824	48.4	48.2	46.9	46.7	—	37.6	37.5	36.9	36.8	—
Drugs	283	257.3	258.2	260.9	261.4	—	118.9	118.2	116.7	117.3	—
Pharmaceutical preparations	2834	205.1	205.6	207.3	207.4	—	97.1	96.4	94.0	94.1	—
Soap, cleaners, and toilet goods	284	152.2	150.8	156.3	156.5	—	92.7	91.3	96.4	96.4	—
Soap and other detergents	2841	40.3	40.0	40.3	40.3	—	22.3	21.9	21.5	21.5	—
Polishing, sanitation, and finishing preparations	2842,3	41.4	41.3	42.2	42.4	—	23.0	22.8	23.8	23.9	—
Toilet preparations	2844	70.5	69.5	73.8	73.8	—	47.4	46.6	51.1	51.0	—
Paints and allied products	285	52.9	52.9	53.7	53.6	—	27.9	28.2	28.5	28.5	—
Industrial organic chemicals	286	142.3	142.4	141.0	141.2	—	80.7	80.6	81.2	81.6	—
Cyclic crudes and intermediates	2865	25.6	25.7	25.8	25.9	—	15.6	15.7	15.6	15.6	—
Industrial organic chemicals, nec	2869	113.9	113.9	112.5	112.6	—	63.0	62.8	63.6	64.0	—
Agricultural chemicals	287	52.1	51.0	50.0	50.2	—	30.8	30.1	30.3	30.4	—
Miscellaneous chemical products	289	92.9	92.5	94.0	94.1	—	55.8	55.5	57.0	57.2	—
Petroleum and coal products	29	138.0	135.3	138.0	135.4	134.2	89.4	87.0	90.7	88.4	87.3
Petroleum refining	291	98.4	98.2	95.5	95.5	—	63.4	63.4	62.3	62.4	—
Asphalt paving and roofing materials	295	25.3	22.8	27.8	25.1	—	18.3	15.9	20.6	18.1	—
Rubber and misc. plastics products	30	986.7	980.0	995.7	997.8	997.0	765.1	759.0	772.1	773.7	772.4
Tires and inner tubes	301	78.9	78.3	76.5	77.3	—	57.1	57.4	56.4	56.1	—
Rubber and plastics footwear	302	6.5	6.5	7.2	7.0	—	5.2	5.3	5.8	5.6	—
Hose, belting, gaskets, and packing	305	68.1	68.1	71.1	71.1	—	52.2	52.0	54.7	55.0	—
Rubber and plastics hose and belting	3052	27.8	27.8	28.4	28.6	—	21.5	21.5	22.1	22.4	—
Fabricated rubber products, nec	306	113.9	113.3	115.8	116.7	—	87.8	87.1	88.4	89.6	—
Miscellaneous plastics products, nec	308	719.3	713.8	725.1	725.7	—	562.8	557.2	566.8	567.4	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Leather and leather products	31	94.3	93.1	89.5	88.2	86.6	73.1	71.2	67.9	66.7	65.4
Leather tanning and finishing	311	13.0	12.9	12.6	12.6	—	10.8	10.5	10.4	10.5	—
Footwear, except rubber	314	43.5	42.8	39.7	38.6	—	35.0	34.3	31.9	30.9	—
Men's footwear, except athletic	3143	22.6	21.9	21.2	21.1	—	17.6	16.9	16.8	16.6	—
Women's footwear, except athletic	3144	12.6	12.4	10.5	10.1	—	10.2	10.0	8.1	7.9	—
Luggage	316	10.8	10.5	11.1	11.3	—	8.3	7.9	8.2	8.1	—
Handbags and personal leather goods	317	9.9	9.6	9.1	8.9	—	6.1	5.8	5.3	5.2	—
Transportation and public utilities		6,365	6,296	6,542	6,547	6,460	5,370	5,296	5,465	5,464	5,368
Transportation		4,143	4,080	4,287	4,291	4,208	—	—	—	—	—
Railroad transportation	40	227.6	224.2	229.7	229.8	229.0	—	—	—	—	—
Class I railroads plus Amtrak ²	4011	202.6	199.6	203.0	203.0	—	—	—	—	—	—
Local and interurban passenger transit	41	465.4	461.9	475.1	477.0	472.4	426.2	422.6	434.7	437.6	—
Local and suburban transportation	411	222.9	222.0	229.1	230.2	—	201.8	200.8	207.8	209.2	—
Taxicabs	412	31.0	30.8	31.5	31.9	—	—	—	—	—	—
Intercity and rural bus transportation	413	27.1	26.9	27.6	27.5	—	24.7	24.5	24.7	24.8	—
School buses	415	150.1	150.3	151.8	152.9	—	—	—	—	—	—
Trucking and warehousing	42	1,658.3	1,621.4	1,720.0	1,711.0	1,669.1	1,444.7	1,410.2	1,509.9	1,501.0	—
Trucking and courier services, except air	421	1,493.9	1,460.8	1,548.1	1,540.5	—	1,307.0	1,276.0	1,365.7	1,358.3	—
Public warehousing and storage	422	159.7	156.0	167.3	165.7	—	133.4	130.0	140.1	138.4	—
Water transportation	44	169.2	167.5	173.9	170.6	165.1	—	—	—	—	—
Water transportation of freight, nec	444	14.5	14.4	15.0	14.7	—	—	—	—	—	—
Water transportation services	449	112.0	111.6	117.4	115.5	—	98.1	98.3	103.2	100.7	—
Transportation by air	45	1,183.5	1,166.6	1,233.9	1,249.4	1,221.2	—	—	—	—	—
Air transportation, scheduled	451	1,021.9	1,005.5	1,063.6	1,077.6	—	—	—	—	—	—
Air transportation, scheduled	4512	516.6	516.1	539.2	542.3	—	—	—	—	—	—
Airports, flying fields, and services	458	117	116	124	125	—	—	—	—	—	—
Pipelines, except natural gas	46	14.3	14.2	14.2	14.2	14.2	11.6	11.6	11.6	11.5	—
Transportation services	47	424.9	424.3	439.7	439.3	437.1	345.2	344.0	359.9	360.0	—
Passenger transportation arrangement	472	215.8	215.6	216.6	215.0	—	179.6	179.3	180.7	180.1	—
Travel agencies	4724	171.0	170.9	172.4	171.3	—	142.5	142.4	144.2	143.5	—
Freight transportation arrangement	473	163.1	162.5	171.9	173.3	—	127.9	126.7	136.2	137.1	—
Communications and public utilities		2,222	2,216	2,255	2,256	2,252	—	—	—	—	—
Communications	48	1,347.0	1,344.3	1,394.1	1,394.9	1,395.3	1,059.4	1,052.6	1,052.1	1,044.7	—
Telephone communications	481	899.7	898.5	939.6	942.0	—	692.2	687.3	682.2	676.3	—
Telephone communications, except radio	4813	767.2	764.9	788.5	789.4	—	587.3	582.2	563.8	558.8	—
Radio and television broadcasting	483	248.2	246.8	252.6	251.8	—	206.9	205.5	210.4	209.3	—
Radio broadcasting stations	4832	117.0	115.8	121.5	121.4	—	—	—	—	—	—
Television broadcasting stations	4833	131.2	131.0	131.1	130.4	—	—	—	—	—	—
Cable and other pay television services	484	176.4	176.5	179.6	178.8	—	148.5	148.3	149.2	148.9	—
Electric, gas, and sanitary services	49	875.3	871.4	860.5	860.6	856.8	694.5	691.5	683.4	683.7	—
Electric services	491	381.1	379.6	374.2	374.5	—	303.2	302.0	298.8	299.8	—
Gas production and distribution	492	145.0	144.1	140.0	140.6	—	112.5	111.9	108.1	108.4	—
Combination utility services	493	161.3	160.7	158.8	158.9	—	125.0	124.5	122.6	122.5	—
Sanitary services	495	155.4	154.4	154.3	153.4	—	128.2	127.6	127.7	126.9	—
Wholesale trade		6,560	6,514	6,741	6,748	6,718	5,297	5,250	5,419	5,418	5,381
Durable goods	50	3,854	3,843	3,992	4,006	4,003	3,073	3,063	3,162	3,166	—
Motor vehicles, parts, and supplies	501	504.3	503.3	509.4	511.7	—	411.4	410.4	412.2	412.3	—
Automobiles and other motor vehicles	5012	138.9	140.0	144.0	145.3	—	—	—	—	—	—
Motor vehicle supplies and new parts	5013	289.4	288.4	289.0	290.2	—	—	—	—	—	—
Furniture and home furnishings	502	157.1	156.7	164.9	166.0	—	125.4	124.8	131.7	132.2	—
Furniture	5021	74.4	74.4	78.7	79.3	—	—	—	—	—	—
Home furnishings	5023	82.7	82.3	86.2	86.7	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Wholesale trade—Continued											
Durable goods—Continued											
Lumber and other construction materials	503	246.3	242.1	254.3	251.3	--	203.5	198.8	210.4	207.9	--
Lumber, plywood, and millwork	5031	125.8	125.2	129.0	128.4	--	--	--	--	--	--
Construction materials, nec	5039	38.2	37.2	38.8	38.3	--	--	--	--	--	--
Professional and commercial equipment	504	839.3	838.3	869.4	873.5	--	663.3	661.7	679.6	679.5	--
Office equipment	5044	196.7	197.6	207.5	209.3	--	--	--	--	--	--
Computers, peripherals and software	5045	325.1	325.2	334.6	335.9	--	--	--	--	--	--
Medical and hospital equipment	5047	177.1	177.9	183.5	184.3	--	144.4	145.0	148.4	148.6	--
Metals and minerals, except petroleum	505	144.1	143.7	146.2	146.6	--	116.1	115.9	118.3	118.5	--
Electrical goods	506	526.9	525.9	555.3	560.7	--	397.9	396.7	408.3	412.8	--
Electrical apparatus and equipment	5063	222.3	223.4	236.2	238.0	--	--	--	--	--	--
Electrical appliances, television and radio sets	5064	48.4	48.2	49.3	49.8	--	--	--	--	--	--
Electronic parts and equipment	5065	256.2	254.3	269.8	272.9	--	--	--	--	--	--
Hardware, plumbing, and heating equipment	507	300.6	301.2	304.2	304.7	--	244.6	245.3	247.2	247.6	--
Hardware	5072	105.9	105.7	107.2	107.6	--	--	--	--	--	--
Plumbing and hydronic heating supplies	5074	119.5	119.0	119.8	120.1	--	--	--	--	--	--
Machinery, equipment, and supplies	508	806.1	806.6	839.4	840.8	--	644.1	645.0	671.3	670.9	--
Construction and mining machinery	5082	85.1	85.1	90.4	90.5	--	--	--	--	--	--
Farm and garden machinery	5083	117.2	118.0	122.5	122.4	--	--	--	--	--	--
Industrial machinery and equipment	5084	327.2	328.4	342.5	343.7	--	--	--	--	--	--
Industrial supplies	5085	151.8	150.7	155.4	155.3	--	--	--	--	--	--
Misc. wholesale trade durable goods	509	329.1	325.3	348.6	350.5	--	267.0	264.6	282.5	284.0	--
Scrap and waste materials	5093	129.1	128.7	137.9	138.4	--	--	--	--	--	--
Nondurable goods											
Paper and paper products	51	2,706	2,671	2,749	2,742	2,715	2,224	2,187	2,257	2,252	--
Paper and paper products	511	260.7	260.0	261.6	263.6	--	218.9	219.0	218.5	220.9	--
Stationery and office supplies	5112	149.4	149.7	150.6	152.8	--	--	--	--	--	--
Drugs, proprietaries, and sundries	512	208.2	208.2	215.1	217.3	--	173.7	173.3	178.8	180.5	--
Apparel, piece goods, and notions	513	225.6	218.0	229.0	224.3	--	181.4	174.3	185.4	181.8	--
Groceries and related products	514	913.4	899.8	920.9	920.0	--	770.5	755.0	775.9	775.7	--
Groceries, general line	5141	284.3	282.1	291.1	291.0	--	--	--	--	--	--
Meats and meat products	5147	57.3	56.9	57.3	57.8	--	--	--	--	--	--
Fresh fruits and vegetables	5148	108.5	104.5	104.0	101.2	--	--	--	--	--	--
Farm-product raw materials	515	106.1	102.4	109.7	106.6	--	85.2	82.1	88.4	85.5	--
Chemicals and allied products	516	146.7	146.7	146.1	146.3	--	107.2	107.3	106.5	106.4	--
Petroleum and petroleum products	517	157.1	157.0	161.2	162.4	--	129.9	129.3	133.4	134.6	--
Petroleum bulk stations and terminals	5171	63.4	63.5	66.4	67.3	--	--	--	--	--	--
Petroleum products, nec	5172	93.7	93.5	94.8	95.1	--	--	--	--	--	--
Beer, wine, and distilled beverages	518	155.7	154.8	157.2	157.5	--	125.8	124.6	127.0	127.4	--
Beer and ale	5181	100.1	99.8	102.3	102.2	--	--	--	--	--	--
Wine and distilled beverages	5182	55.6	55.0	54.9	55.3	--	--	--	--	--	--
Misc. wholesale trade nondurable goods	519	532.7	523.9	547.7	544.1	--	431.0	422.5	442.8	439.0	--
Farm supplies	5191	160.2	159.6	169.9	167.1	--	--	--	--	--	--
Retail trade		22,541	21,514	22,752	23,131	22,091	19,900	18,907	20,055	20,417	19,373
Building materials and garden supplies	52	904.4	863.7	927.7	925.2	893.1	755.5	713.4	769.5	767.6	--
Lumber and other building materials	521	546.5	529.7	567.3	564.4	--	463.8	445.8	478.0	475.6	--
Paint, glass, and wallpaper stores	523	65.6	64.6	68.5	68.6	--	51.0	49.8	53.0	53.3	--
Hardware stores	525	168.7	163.8	166.3	167.3	--	140.0	134.8	137.1	137.8	--
Retail nurseries and garden stores	526	85.1	68.4	84.7	84.4	--	70.1	53.8	69.6	69.3	--
General merchandise stores	53	3,068.0	2,759.8	3,079.5	3,195.2	2,897.7	2,872.0	2,571.5	2,871.8	2,983.7	--
Department stores	531	2,676.5	2,416.1	2,709.7	2,792.3	2,540.1	2,530.5	2,275.1	2,551.9	2,632.8	--
Variety stores	533	161.9	139.0	149.6	165.0	--	140.1	119.0	127.5	141.2	--
Miscellaneous general merchandise stores	539	229.6	204.7	220.2	237.9	--	201.4	177.4	192.4	209.7	--
Food stores	54	3,530.7	3,454.3	3,556.5	3,590.3	3,517.3	3,207.9	3,135.1	3,231.0	3,263.2	--
Grocery stores	541	3,072.2	3,039.3	3,092.8	3,102.8	--	2,809.8	2,780.3	2,830.7	2,839.3	--
Meat and fish markets	542	57.8	47.9	52.1	57.4	--	--	--	--	--	--
Dairy products stores	545	22.5	17.5	17.8	19.1	--	--	--	--	--	--
Retail bakeries	546	204.5	198.2	214.8	218.7	--	180.3	174.1	188.1	191.9	--
Automotive dealers and service stations	55	2,292.0	2,276.8	2,334.6	2,327.9	2,312.9	1,916.6	1,903.9	1,946.6	1,939.7	--
New and used car dealers	551	1,044.3	1,044.4	1,061.1	1,056.8	1,056.1	874.3	875.3	890.4	886.6	--

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P
Retail trade—Continued											
Automotive dealers and service stations—Continued											
Auto and home supply stores	553	390.1	383.6	406.8	405.7	—	314.6	308.6	317.5	314.8	—
Gasoline service stations	554	675.6	667.9	675.2	675.0	—	583.4	576.1	586.5	587.0	—
Automotive dealers, nec	559	9.3	9.2	10.1	10.1	—	7.8	7.7	8.4	8.4	—
Apparel and accessory stores	56	1,207.3	1,109.8	1,157.4	1,210.9	1,116.9	1,011.5	917.0	971.4	1,021.9	—
Men's and boys' clothing stores	561	87.1	81.4	78.9	84.1	—	71.4	65.6	63.3	68.3	—
Women's clothing stores	562	320.3	296.1	302.1	315.3	—	268.6	245.7	250.9	263.7	—
Family clothing stores	565	396.3	351.2	387.3	408.9	—	347.9	303.3	347.1	368.1	—
Shoe stores	566	209.3	202.3	201.2	210.7	—	165.7	159.0	159.3	167.4	—
Furniture and home furnishings stores	57	1,064.1	1,026.5	1,086.4	1,115.8	1,078.8	879.7	842.1	898.4	926.1	—
Furniture and home furnishings stores	571	543.3	528.6	555.3	567.5	—	443.6	429.9	454.2	464.9	—
Furniture stores	5712	316.5	312.5	327.1	332.6	—	—	—	—	—	—
Household appliance stores	572	74.2	72.5	70.6	71.8	—	60.7	58.8	57.5	58.6	—
Radio, television, and computer stores	573	446.6	425.4	460.5	476.5	—	375.4	353.4	386.7	402.6	—
Radio, television, and electronic stores	5731	204.6	196.2	210.6	217.4	—	173.7	165.2	177.2	182.8	—
Record and prerecorded tape stores	5735	96.4	82.5	89.2	95.9	—	80.7	66.4	74.8	83.3	—
Eating and drinking places	58	7,500.1	7,227.4	7,596.5	7,638.9	7,363.7	6,750.7	6,491.0	6,828.0	6,868.7	—
Miscellaneous retail establishments	59	2,974.8	2,795.8	3,013.4	3,126.9	2,910.2	2,505.7	2,332.6	2,538.5	2,645.9	—
Drug stores and proprietary stores	591	626.9	623.2	640.9	654.0	—	518.6	515.4	535.3	547.7	—
Liquor stores	592	116.3	112.6	114.7	116.9	—	—	—	—	—	—
Used merchandise stores	593	109.7	107.9	118.3	118.6	—	91.5	89.7	98.6	98.7	—
Miscellaneous shopping goods stores	594	1,134.7	1,018.6	1,126.2	1,210.2	—	971.6	858.0	961.6	1,041.2	—
Sporting goods and bicycle shops	5941	208.3	196.4	216.2	226.1	—	—	—	—	—	—
Book stores	5942	136.3	133.6	134.4	143.2	—	—	—	—	—	—
Stationery stores	5943	87.9	87.9	91.2	92.8	—	—	—	—	—	—
Jewelry stores	5944	157.4	152.4	154.4	163.6	—	—	—	—	—	—
Gift, novelty, and souvenir shops	5947	240.0	209.3	230.9	243.5	—	—	—	—	—	—
Sewing, needlework, and piece goods	5949	54.6	53.6	54.9	54.6	—	—	—	—	—	—
Nonstore retailers	596	372.4	343.3	388.8	386.8	—	318.1	290.9	331.8	330.8	—
Catalog and mail-order houses	5961	248.9	223.0	265.0	262.2	—	—	—	—	—	—
Merchandising machine operators	5962	67.9	67.4	66.6	66.6	—	—	—	—	—	—
Fuel dealers	598	104.2	104.5	102.7	104.4	—	86.9	87.2	85.3	87.0	—
Retail stores, nec	599	510.6	485.7	521.8	536.0	—	423.8	399.0	432.1	444.6	—
Florists, tobacco stores, and newsstands	5992,3,4	156.7	145.6	155.0	166.8	—	—	—	—	—	—
Optical goods stores	5995	69.0	67.9	73.5	73.3	—	57.5	56.7	60.9	59.9	—
Miscellaneous retail stores, nec	5999	284.9	272.2	293.3	295.9	—	230.7	218.1	239.1	241.8	—
Finance, insurance, and real estate³		6,942	6,917	7,109	7,135	7,122	5,058	5,035	5,192	5,212	5,197
Finance		3,342	3,345	3,449	3,471	3,475	—	—	—	—	—
Depository institutions	60	2,030.3	2,029.9	2,053.8	2,064.5	2,063.4	1,462.1	1,460.4	1,473.4	1,482.2	—
Commercial banks	602	1,475.8	1,476.1	1,496.6	1,502.7	1,501.8	1,047.9	1,047.1	1,059.9	1,065.1	—
State commercial banks	6022	591.6	592.1	610.0	613.3	—	423.6	423.6	436.0	438.7	—
National and commercial banks, nec	6021,9	884.2	884.0	886.6	889.4	—	624.3	623.5	623.9	626.4	—
Savings institutions	603	255.5	254.8	249.5	252.1	252.4	—	—	—	—	—
Federal savings institutions	6035	144.0	143.5	141.4	143.4	—	—	—	—	—	—
Savings institutions, except federal	6036	111.5	111.3	108.1	108.7	—	—	—	—	—	—
Credit unions	606	166.5	166.7	172.7	173.8	—	132.5	132.3	137.0	138.2	—
Nondepository institutions	61	532.9	532.8	555.8	560.5	562.1	380.3	380.8	388.7	389.6	—
Personal credit institutions	614	164.2	163.4	167.8	170.7	—	115.2	114.9	109.6	109.3	—
Business credit institutions	615	108.2	108.4	116.4	117.1	—	—	—	—	—	—
Mortgage bankers and brokers	616	239.0	239.5	249.8	250.6	251.2	—	—	—	—	—
Security and commodity brokers	62	566.8	569.5	609.0	613.1	615.9	—	—	—	—	—
Security brokers and dealers	621	427.4	429.6	459.8	461.7	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges	622,3	24.5	24.4	25.9	26.1	—	—	—	—	—	—
Security and commodity services	628	114.9	115.5	123.3	125.3	—	75.2	75.5	82.0	83.2	—
Holding and other investment offices	67	212.2	212.4	230.3	232.4	233.6	—	—	—	—	—
Holding offices	671	107.7	108.0	112.3	113.1	—	—	—	—	—	—

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 ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Finance, insurance, and real estate—Continued											
Insurance	63,64	2,218	2,212	2,245	2,256	2,254	-	-	-	-	-
Insurance carriers	63	1,504.4	1,501.5	1,520.5	1,528.6	1,527.3	1,078.1	1,075.5	1,121.1	1,133.0	-
Life insurance	631	509.9	506.9	508.1	510.2	-	339.5	335.7	332.4	335.1	-
Medical service and health insurance	632	328.1	329.5	336.2	339.3	-	268.6	270.9	272.5	274.8	-
Hospital and medical service plans	6324	266.9	268.8	275.2	277.9	-	221.1	223.6	226.8	228.5	-
Fire, marine, and casualty insurance	633	530.2	529.0	533.2	534.5	-	361.1	360.3	401.3	407.2	-
Title insurance	636	69.3	69.0	72.5	73.4	-	-	-	-	-	-
Insurance agents, brokers, and service	64	713.6	710.8	724.1	727.3	726.7	-	-	-	-	-
Real estate	65	1,382	1,360	1,415	1,408	1,393	-	-	-	-	-
Real estate operators and lessors	651	581.7	570.9	577.5	578.4	-	-	-	-	-	-
Real estate agents and managers	653	659.7	651.7	688.0	684.3	-	-	-	-	-	-
Subdividers and developers	655	107.7	104.9	115.0	109.9	-	-	-	-	-	-
Services		34,726	34,246	36,114	36,101	35,553	30,347	29,862	31,530	31,483	30,923
Agricultural services	07	587.3	543.0	682.1	623.5	573.1	489.4	448.5	575.4	519.2	-
Veterinary services	074	176.3	176.2	184.4	184.1	-	148.1	148.2	155.4	154.7	-
Landscape and horticultural services	078	362.4	319.0	447.3	389.7	-	301.3	260.8	378.3	323.2	-
Hotels and other lodging places	70	1,663.5	1,634.6	1,694.2	1,680.1	1,653.5	-	-	-	-	-
Hotels and motels	701	1,618.0	1,590.6	1,649.1	1,637.5	-	1,417.7	1,392.7	1,448.2	1,432.9	-
Personal services	72	1,176.6	1,238.1	1,163.4	1,168.6	1,231.2	-	-	-	-	-
Laundry, cleaning, and garment services	721	435.2	432.0	440.6	439.9	-	382.6	379.9	388.0	387.8	-
Photographic studios, portrait	722	82.9	74.4	88.3	79.8	-	-	-	-	-	-
Beauty shops	723	407.9	404.2	404.5	407.8	-	364.7	361.5	360.0	362.6	-
Funeral service and crematories	726	95.9	96.0	97.7	98.2	-	-	-	-	-	-
Miscellaneous personal services	729	137.5	214.8	116.1	126.8	-	114.3	188.0	95.8	104.9	-
Business services	73	7,488.1	7,298.4	7,960.3	7,973.7	7,751.3	6,655.5	6,461.5	7,064.1	7,067.8	-
Advertising	731	247.6	247.2	254.9	256.4	-	180.3	179.5	185.1	185.5	-
Advertising agencies	7311	165.9	165.4	170.8	170.1	-	-	-	-	-	-
Credit reporting and collection	732	127.3	127.1	131.8	132.1	-	-	-	-	-	-
Mailing, reproduction, and stenographic services	733	309.0	304.8	324.5	324.0	-	-	-	-	-	-
Photocopying and duplicating services	7334	75.9	75.6	79.5	79.2	-	64.0	64.1	67.4	67.0	-
Services to buildings	734	891.2	878.8	903.2	901.7	892.3	797.2	786.6	805.1	804.0	-
Disinfecting and pest control services	7342	83.1	82.9	86.7	86.7	-	66.2	66.0	69.2	69.7	-
Building maintenance services, nec	7349	808.1	795.9	816.5	815.0	-	731.0	720.6	735.9	734.3	-
Miscellaneous equipment rental and leasing	735	238.9	233.0	250.0	248.7	-	191.6	186.1	199.5	197.4	-
Medical equipment rental	7352	39.6	38.7	41.4	41.7	-	31.3	30.6	31.1	31.1	-
Heavy construction equipment rental	7353	43.9	42.7	44.3	43.9	-	37.1	36.0	37.7	37.2	-
Equipment rental and leasing, nec	7359	155.4	151.6	164.3	163.1	-	123.2	119.5	130.7	129.1	-
Personnel supply services	736	2,762.7	2,594.9	2,926.0	2,912.2	2,706.3	-	-	-	-	-
Employment agencies	7361	322.3	304.7	348.4	354.3	-	-	-	-	-	-
Help supply services	7363	2,440.4	2,290.2	2,577.6	2,557.9	2,367.3	2,371.3	2,221.3	2,510.7	2,486.9	-
Computer and data processing services	737	1,258.9	1,270.3	1,402.6	1,421.5	1,437.5	1,004.7	1,012.3	1,115.9	1,131.7	-
Computer programming services	7371	284.4	287.6	322.7	326.6	-	239.3	243.3	274.8	278.6	-
Prepackaged software	7372	207.3	208.6	233.4	237.6	-	-	-	-	-	-
Computer integrated systems design	7373	148.4	151.3	164.8	166.3	-	104.9	106.5	115.9	116.2	-
Data processing and preparation	7374	240.6	241.5	261.4	264.9	-	-	-	-	-	-
Information retrieval services	7375	71.2	71.5	78.3	78.9	-	52.0	52.0	55.8	55.9	-
Computer maintenance and repair	7378	52.9	53.2	55.6	56.2	-	38.5	37.9	38.2	38.4	-
Miscellaneous business services	738	1,652.5	1,642.3	1,767.3	1,777.1	-	1,441.8	1,429.2	1,538.4	1,547.9	-
Detective and armored car services	7381	550.4	543.0	586.5	586.9	-	509.5	501.5	541.7	541.8	-
Security systems services	7382	54.4	54.7	60.2	60.6	-	46.1	46.5	51.3	51.1	-
Photofinishing laboratories	7384	76.6	71.3	83.4	83.0	-	-	-	-	-	-
Auto repair, services, and parking	75	1,106.7	1,102.1	1,149.7	1,151.8	1,148.2	911.6	904.5	940.6	941.6	-
Automotive rentals, without drivers	751	197.7	196.1	209.6	210.2	-	163.0	160.3	172.2	172.1	-
Passenger car rental	7514	128.8	127.8	140.1	140.9	-	108.1	106.7	116.3	116.7	-
Automobile parking	752	70.0	68.1	70.4	71.2	-	61.7	59.7	61.5	62.5	-
Automotive repair shops	753	615.8	615.1	631.0	629.8	-	496.3	494.4	503.6	501.7	-
Automotive and tire repair shops	7532.4	214.2	215.8	221.0	221.7	-	176.5	177.2	180.4	181.0	-
General automotive repair shops	7538	259.9	259.5	265.2	266.0	-	209.2	208.5	210.0	209.7	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
		Services—Continued									
Auto repair, services, and parking—Continued											
Automotive services, except repair	754	223.2	222.8	238.7	240.6	—	190.6	190.1	203.3	205.3	—
Carwashes	7542	121.0	120.7	125.0	127.9	—	106.4	106.1	110.2	112.9	—
Miscellaneous repair services	76	379.1	374.1	389.9	389.7	384.7	310.2	304.8	319.0	318.4	—
Electrical repair shops	762	115.5	113.7	118.7	118.9	—	—	—	—	—	—
Motion pictures	78	530.6	528.5	548.7	565.7	555.1	445.5	440.3	457.2	472.3	—
Motion picture production and services	781	226.6	229.7	244.2	249.3	—	189.4	189.6	205.1	209.2	—
Motion picture theaters	783	118.6	116.4	113.7	119.4	—	—	—	—	—	—
Video tape rental	784	159.5	158.7	168.3	174.6	—	130.2	128.7	135.0	140.4	—
Amusement and recreation services	79	1,323.7	1,272.5	1,415.5	1,425.1	1,368.6	1,142.4	1,094.8	1,219.4	1,226.7	—
Bowling centers	793	84.0	83.3	80.0	80.0	—	75.6	75.0	71.4	71.6	—
Misc. amusement and recreation services	799	963.2	924.0	1,028.5	1,041.8	—	830.1	793.5	886.7	896.3	—
Physical fitness facilities	7991	159.2	159.5	172.7	172.7	—	141.5	141.1	153.9	154.3	—
Membership sports and recreation clubs	7997	293.3	257.1	322.8	318.0	—	253.2	218.2	280.0	275.3	—
Health services	80	9,577.3	9,562.0	9,779.0	9,804.0	9,780.9	8,489.5	8,471.8	8,665.1	8,684.2	—
Offices and clinics of medical doctors	801	1,707.9	1,707.5	1,770.4	1,784.2	1,781.4	1,402.0	1,399.7	1,452.5	1,464.1	—
Offices and clinics of dentists	802	618.0	618.7	623.7	628.1	—	541.9	541.7	544.8	548.4	—
Offices and clinics of other health practitioners	804	422.8	417.4	437.7	439.8	—	351.1	346.6	364.2	365.7	—
Offices and clinics of chiropractors and optometrists	8041,2	163.6	162.2	168.4	168.3	—	—	—	—	—	—
Nursing and personal care facilities	805	1,750.8	1,744.7	1,770.5	1,770.9	1,757.8	1,576.1	1,569.6	1,591.1	1,591.5	—
Skilled nursing care facilities	8051	1,304.2	1,300.3	1,319.7	1,319.9	—	—	—	—	—	—
Intermediate care facilities	8052	213.2	212.5	213.6	213.3	—	192.2	191.6	191.3	191.2	—
Nursing and personal care, nec	8059	233.4	231.9	237.2	237.7	—	—	—	—	—	—
Hospitals	806	3,839.5	3,833.7	3,910.7	3,919.8	3,923.7	3,515.3	3,510.6	3,586.0	3,593.0	—
General medical and surgical hospitals	8062	3,543.5	3,539.0	3,607.4	3,615.0	—	—	—	—	—	—
Psychiatric hospitals	8063	86.1	85.8	85.8	86.5	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric	8069	209.9	208.9	217.5	218.3	—	—	—	—	—	—
Medical and dental laboratories	807	199.9	201.1	207.2	207.2	—	—	—	—	—	—
Home health care services	808	674.8	674.6	687.0	682.0	671.1	623.1	622.5	633.2	628.0	—
Legal services	81	938.7	937.3	967.1	971.4	969.5	747.5	746.8	771.0	775.1	—
Educational services	82	2,149.6	1,998.3	2,286.9	2,235.1	2,064.9	—	—	—	—	—
Elementary and secondary schools	821	610.6	605.7	623.0	623.8	—	—	—	—	—	—
Colleges and universities	822	1,291.5	1,151.5	1,390.0	1,340.7	—	—	—	—	—	—
Vocational schools	824	83.0	79.8	90.1	89.2	—	—	—	—	—	—
Social services	83	2,433.5	2,419.4	2,521.9	2,530.0	2,516.5	2,113.7	2,099.4	2,187.7	2,193.0	—
Individual and family services	832	655.8	651.5	677.3	679.8	—	570.2	565.8	586.8	588.7	—
Job training and related services	833	310.5	308.4	321.3	321.9	—	265.7	264.1	276.1	276.1	—
Child day care services	835	587.6	582.9	611.6	611.0	608.2	520.7	514.9	543.1	541.4	—
Residential care	836	681.8	670.6	709.1	715.3	715.2	590.5	589.9	615.2	621.3	—
Social services, nec	839	197.8	196.0	202.6	202.0	—	166.6	164.7	166.5	165.5	—
Museums and botanical and zoological gardens	84	84.3	79.0	86.5	85.5	79.9	—	—	—	—	—
Membership organizations	86	2,180.1	2,155.5	2,187.4	2,196.7	2,172.6	—	—	—	—	—
Business associations	861	106.9	105.1	107.8	107.6	—	—	—	—	—	—
Professional organizations	862	59.4	59.2	59.7	60.1	—	42.6	42.4	43.1	43.2	—
Labor organizations	863	146.7	140.1	142.0	145.0	—	—	—	—	—	—
Civic and social associations	864	430.2	418.4	445.1	450.0	—	—	—	—	—	—
Engineering and management services	87	2,892.8	2,889.0	3,064.5	3,083.1	3,087.4	2,210.0	2,205.5	2,335.6	2,348.3	—
Engineering and architectural services	871	850.7	847.5	894.5	899.0	896.3	697.5	694.0	734.1	737.4	—
Engineering services	8711	653.5	649.5	685.4	689.2	—	541.1	537.2	568.9	571.9	—
Architectural services	8712	141.3	142.6	150.4	151.7	—	110.6	111.3	117.4	118.4	—
Surveying services	8713	55.9	55.4	58.7	58.1	—	45.8	45.5	47.8	47.1	—
Accounting, auditing, and bookkeeping	872	569.7	583.9	609.7	611.9	—	404.3	416.5	427.4	426.2	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Services—Continued											
Engineering and management services—Continued											
Research and testing services	873	564.2	558.3	581.2	582.8	—	429.2	424.3	444.1	445.6	—
Commercial physical research	8731	209.9	208.9	213.1	214.0	—	145.1	144.7	147.3	147.8	—
Commercial nonphysical research	8732	125.3	125.4	135.2	134.9	—	103.1	102.9	111.8	111.9	—
Noncommercial research organizations	8733	140.4	135.8	143.7	144.7	—	109.0	105.2	112.4	113.3	—
Management and public relations	874	908.2	899.3	979.1	989.4	989.3	679.0	670.7	730.0	739.1	—
Management services	8741	315.9	313.1	337.5	339.0	—	231.3	229.5	247.5	249.7	—
Management consulting services	8742	317.5	315.9	351.6	357.4	—	238.2	237.0	263.9	267.3	—
Public relations services	8743	36.8	37.3	42.2	42.6	—	23.8	24.2	28.6	28.7	—
Services, nec	89	46.9	46.9	49.6	49.4	48.2	37.2	37.4	39.2	39.0	—
Government		19,871	19,455	20,185	20,136	19,699	—	—	—	—	—
Federal Government ⁴		2,757	2,703	2,679	2,721	2,664	—	—	—	—	—
Executive, by agency ⁴		2,697.0	2,642.9	2,617.5	—	—	—	—	—	—	—
Department of Defense		716.2	708.3	681.8	—	—	—	—	—	—	—
Postal Service ⁵		902.8	865.6	867.7	—	—	—	—	—	—	—
Other executive agencies		1,078.0	1,069.0	1,068.0	—	—	—	—	—	—	—
Legislative		31.3	30.7	31.1	—	—	—	—	—	—	—
Judicial		29.0	29.1	30.0	—	—	—	—	—	—	—
Federal Government, except Postal Service		1,854.5	1,837.1	1,810.9	1,803.9	1,790.5	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities		50.7	50.2	46.9	46.7	—	—	—	—	—	—
Ship building and repairing	3731	22.3	22.2	21.7	21.6	—	—	—	—	—	—
Transportation and public utilities, except Postal Service		22.1	21.8	19.5	19.1	—	—	—	—	—	—
Services		360.9	355.3	353.7	353.4	—	—	—	—	—	—
Hospitals	806	226.4	222.9	219.2	219.8	—	—	—	—	—	—
State government		4,703	4,560	4,806	4,750	4,601	—	—	—	—	—
Hospitals	806	371.1	371.1	371.9	370.2	—	—	—	—	—	—
Education	82	2,036.3	1,891.1	2,125.1	2,074.4	1,921.3	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		1,807.3	1,810.4	1,820.4	1,817.3	—	—	—	—	—	—
State government, except education		2,666.9	2,668.8	2,681.3	2,675.8	2,679.5	—	—	—	—	—
Local government		12,411	12,192	12,700	12,665	12,434	—	—	—	—	—
Transportation and public utilities		451.5	449.4	451.4	452.9	—	—	—	—	—	—
Hospitals	806	667.1	668.1	682.8	683.9	—	—	—	—	—	—
Education	82	7,152.4	6,968.1	7,329.1	7,305.7	7,110.2	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		3,674.1	3,644.8	3,738.6	3,730.0	—	—	—	—	—	—
Local government, except education		5,258.8	5,223.6	5,370.8	5,359.1	5,324.2	—	—	—	—	—

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

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

³ Excludes nonoffice commissioned real estate sales agents.

⁴ Prepared by the Office of Personnel Management. Data relate to civilian

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

⁵ Includes rural mail carriers.

— Data not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1996 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	Oct. 1996	Nov. 1996	Sept. 1997	Oct. 1997	Nov. 1997
Total	58,700	59,117	59,421	60,119	60,517
Total private	47,717	47,979	48,609	48,897	49,177
Goods-producing	6,660	6,649	6,713	6,720	6,722
Mining	78	78	79	80	79
Construction	619	616	646	647	645
Manufacturing	5,963	5,955	5,988	5,993	5,998
Durable goods	2,848	2,857	2,906	2,922	2,940
Lumber and wood products	137	137	140	141	141
Furniture and fixtures	158	159	159	161	162
Stone, clay, and glass products	103	102	103	103	103
Primary metal industries	101	101	103	103	104
Fabricated metal products	322	324	328	329	330
Industrial machinery and equipment	456	458	475	478	482
Electronic and other electrical equipment	681	684	688	692	698
Transportation equipment	366	370	391	394	399
Instruments and related products	349	349	348	350	351
Miscellaneous manufacturing	175	175	172	173	171
Nondurable goods	3,115	3,098	3,082	3,071	3,058
Food and kindred products	575	562	588	576	566
Tobacco products	15	14	14	14	14
Textile mill products	289	289	284	282	281
Apparel and other textile products	638	634	598	597	589
Paper and allied products	165	165	166	165	166
Printing and publishing	693	696	695	698	703
Chemicals and allied products	327	326	327	326	326
Petroleum and coal products	25	25	25	24	25
Rubber and misc. plastics products	336	337	339	341	342
Leather and leather products	52	51	48	48	47
Service-producing	52,040	52,468	52,708	53,399	53,795
Transportation and public utilities	1,928	1,940	1,952	1,958	1,963
Wholesale trade	2,033	2,039	2,059	2,077	2,077
Retail trade	11,534	11,806	11,733	11,800	12,077
Finance, insurance, and real estate	4,363	4,374	4,457	4,468	4,477
Services	21,199	21,171	21,695	21,874	21,861
Government	10,983	11,138	10,812	11,222	11,340
Federal	1,148	1,152	1,136	1,132	1,141
State	2,395	2,415	2,354	2,452	2,470
Local	7,440	7,571	7,322	7,638	7,729

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1996 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		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Alabama	1,850.7	1,871.3	1,871.5	10.5	10.0	10.1	97.0	99.5	98.4
Birmingham	457.2	463.3	465.3	3.3	3.3	3.4	26.2	28.4	28.1
Huntsville	170.3	173.3	173.2	(1)	(1)	(1)	5.9	6.0	5.8
Mobile	216.9	224.4	224.8	(1)	(1)	(1)	16.4	17.0	16.9
Montgomery	157.6	158.9	159.4	(1)	(1)	(1)	9.1	8.8	8.7
Tuscaloosa	76.5	78.5	78.0	2.8	2.6	2.6	5.5	5.7	5.5
Alaska	252.3	259.8	255.4	9.4	9.8	9.6	11.1	12.2	11.0
Anchorage	120.5	123.5	123.3	2.5	2.5	2.4	5.6	6.4	6.0
Arizona	1,966.9	2,045.1	2,057.0	14.6	15.2	15.2	129.9	135.4	135.0
Phoenix-Mesa	1,361.7	1,439.3	1,452.8	6.8	8.4	8.6	93.7	97.9	97.7
Tucson	316.6	324.6	325.0	2.4	2.4	2.4	19.2	20.0	20.1
Arkansas	1,098.5	1,110.9	1,111.7	3.4	3.5	3.4	48.1	49.9	49.6
Fayetteville-Springdale-Rogers	138.7	141.5	141.3	(1)	(1)	(1)	6.1	6.1	6.1
Fort Smith	94.7	94.3	94.5	.8	.8	.8	3.8	3.7	3.7
Little Rock-North Little Rock	302.1	302.1	302.0	(1)	(1)	(1)	14.8	14.1	14.0
Pine Bluff	36.2	36.0	35.9	(1)	(1)	(1)	1.1	.9	.9
California	13,055.8	13,372.6	13,420.6	29.3	29.6	29.6	524.7	582.6	577.0
Bakersfield	179.5	183.7	183.3	10.8	11.2	11.2	8.4	9.5	9.2
Fresno	271.4	275.4	274.9	.5	.5	.5	12.6	13.1	13.0
Los Angeles-Long Beach	3,878.2	3,934.5	3,946.9	6.0	5.8	5.8	110.1	110.8	111.4
Modesto	129.7	133.3	132.8	(2)	(2)	(2)	5.9	6.5	6.1
Oakland	931.6	949.2	950.5	2.1	2.2	2.2	46.1	50.2	49.1
Orange County	1,208.9	1,238.0	1,243.6	.8	.9	.9	52.5	56.5	55.6
Riverside-San Bernardino	830.8	854.5	857.1	1.2	1.2	1.3	47.0	51.7	50.9
Sacramento	615.6	630.2	630.4	.2	.2	.2	29.6	33.9	32.6
Salinas	114.9	119.0	118.3	.1	.1	.1	4.1	4.8	4.7
San Diego	1,015.1	1,040.3	1,043.8	.3	.3	.3	46.0	50.8	50.8
San Francisco	980.3	989.5	994.3	.6	.6	.6	32.2	36.1	35.9
San Jose	898.6	930.1	933.5	.1	.1	.1	34.8	38.6	38.3
Santa Barbara-Santa Maria-Lompoc	148.9	153.0	152.4	1.1	1.1	1.1	6.1	6.3	6.4
Santa Rosa	160.8	166.7	166.4	.4	.5	.4	8.1	9.1	8.5
Stockton-Lodi	163.4	170.2	167.7	.1	.1	.1	7.2	7.8	7.2
Vallejo-Fairfield-Napa	145.7	150.0	150.2	.4	.5	.5	8.1	9.2	9.3
Ventura	245.5	248.9	250.8	1.7	1.4	1.4	10.9	11.5	11.5
Colorado	1,946.8	1,971.0	1,994.0	13.2	13.4	13.4	113.1	115.8	116.2
Boulder-Longmont	156.2	159.5	160.1	(1)	(1)	(1)	6.7	5.5	5.8
Colorado Springs	212.7	218.9	220.3	(1)	(1)	(1)	12.0	12.4	12.7
Denver	1,024.7	1,042.4	1,049.7	6.5	6.0	6.1	58.6	59.8	60.1
Connecticut	1,617.1	1,648.7	1,653.0	.8	.8	.8	51.5	58.7	56.0
Bridgeport	182.7	184.9	184.9	(2)	(2)	(2)	5.4	5.6	5.3
Danbury	85.8	85.7	86.2	(1)	(1)	(1)	3.1	3.2	3.1
Hartford	595.6	607.9	608.6	(1)	(1)	(1)	19.0	19.6	18.9
New Haven-Meriden	248.4	252.2	252.2	(1)	(1)	(1)	8.9	9.8	9.7
New London-Norwich	135.2	138.3	138.5	(1)	(1)	(1)	3.9	4.5	4.4
Stamford-Norwalk	201.8	203.6	205.3	(1)	(1)	(1)	5.6	6.1	5.9
Waterbury	85.3	88.7	88.9	(2)	(2)	(2)	3.2	3.7	3.5
Delaware	384.6	397.0	398.6	.1	.1	.1	22.1	23.6	23.3
Dover	53.3	55.0	55.7	.1	.1	.1	2.5	2.4	2.4
Wilmington-Newark	298.2	304.2	305.5	.2	.2	.2	17.0	17.4	17.0
District of Columbia	624.9	611.6	612.7	.1	.1	.1	8.5	8.4	8.4
Washington PMSA	2,459.7	2,503.1	2,507.7	.9	.9	.9	119.2	126.9	126.0
Florida	6,359.2	6,519.6	6,586.3	7.0	7.1	7.1	326.9	341.6	341.9
Daytona Beach	151.4	154.3	155.1	(2)	(2)	(2)	7.5	7.5	7.5
Fort Lauderdale	626.1	642.4	651.4	.1	.1	.1	34.0	36.9	37.1
Fort Myers-Cape Coral	152.9	154.0	155.8	(2)	(2)	(2)	12.1	12.8	12.7
Gainesville	112.1	115.7	116.2	(2)	(2)	(2)	4.1	3.8	3.8
Jacksonville	510.4	526.6	530.3	(2)	(2)	(2)	26.9	27.6	27.7
Lakeland-Winter Haven	172.0	174.5	176.8	3.2	3.0	3.0	8.9	8.9	8.9
Melbourne-Titusville-Palm Bay	171.6	176.3	177.1	(2)	(2)	(2)	8.9	8.9	8.7
Miami	963.7	976.6	985.0	.4	.4	.4	33.4	33.6	33.5
Orlando	775.3	810.0	819.5	(2)	(2)	(2)	40.8	42.9	43.5
Pensacola	149.6	154.4	155.3	(2)	(2)	(2)	10.6	10.9	10.9
Sarasota-Bradenton	233.9	247.0	250.1	(2)	(2)	(2)	12.8	14.4	14.4
Tallahassee	149.5	152.7	153.5	(2)	(2)	(2)	6.1	6.3	6.3
Tampa-St. Petersburg-Clearwater	1,048.5	1,081.8	1,091.1	.4	.4	.4	49.5	52.5	52.9
West Palm Beach-Boca Raton	432.1	445.4	450.0	(2)	(2)	(2)	25.0	25.9	25.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Alabama	382.7	378.2	378.3	90.3	90.7	90.4	432.1	433.2	436.8
Birmingham	51.7	51.1	51.3	30.1	30.2	30.0	113.5	112.5	114.0
Huntsville	38.8	40.3	40.4	3.4	3.4	3.4	34.7	34.5	35.0
Mobile	27.3	27.8	27.8	12.9	13.3	13.4	58.5	60.5	60.9
Montgomery	17.6	17.7	17.7	6.4	6.4	6.4	38.4	38.5	39.1
Tuscaloosa	10.6	11.0	11.1	2.5	2.6	2.6	18.2	18.3	18.3
Alaska	9.8	11.1	8.8	21.5	22.9	22.5	54.3	54.9	54.9
Anchorage	1.8	1.9	1.8	11.4	11.8	11.8	30.4	30.7	31.0
Arizona	200.3	211.2	212.4	95.5	99.5	99.8	488.1	503.7	512.8
Phoenix-Mesa	153.6	164.4	165.6	68.8	73.6	74.0	340.4	359.3	367.4
Tucson	29.2	29.9	30.1	13.3	13.6	13.7	68.5	71.0	71.5
Arkansas	252.5	251.5	252.4	65.9	66.3	67.2	252.5	254.8	255.7
Fayetteville-Springdale-Rogers	34.1	34.0	33.8	9.5	9.5	9.5	38.3	40.0	40.0
Fort Smith	27.2	27.0	27.1	6.4	6.6	6.6	19.6	19.8	19.9
Little Rock-North Little Rock	33.3	32.8	32.5	20.9	20.5	20.5	71.5	70.8	71.0
Pine Bluff	8.2	8.1	8.0	1.8	1.9	1.8	7.6	7.2	7.3
California	1,865.5	1,907.6	1,905.9	650.1	669.2	668.5	3,083.7	3,091.4	3,134.3
Bakersfield	10.1	9.8	9.5	9.2	9.3	9.3	44.1	44.3	44.6
Fresno	29.8	29.9	29.4	14.2	15.0	14.6	67.2	67.1	67.6
Los Angeles-Long Beach	652.9	664.3	664.7	207.6	211.7	211.9	867.1	865.8	874.4
Modesto	25.4	26.7	26.1	5.9	6.0	6.0	33.3	33.8	34.2
Oakland	114.6	116.9	117.4	60.3	61.9	62.0	214.4	216.4	219.1
Orange County	214.6	221.2	221.5	43.1	44.9	45.2	308.5	310.0	315.8
Riverside-San Bernardino	100.2	104.4	104.4	43.4	44.5	44.5	219.3	223.0	226.3
Sacramento	43.2	45.7	45.6	25.5	25.9	26.0	138.1	139.5	140.8
Salinas	9.4	8.5	8.3	5.4	5.6	5.4	31.1	32.5	32.7
San Diego	116.6	120.1	120.4	38.6	38.6	39.1	241.6	242.5	245.3
San Francisco	77.3	77.6	77.7	77.0	77.4	77.4	206.9	205.3	208.4
San Jose	248.8	257.9	258.3	25.3	26.4	26.4	180.3	186.0	188.2
Santa Barbara-Santa Maria-Lompoc	16.2	17.1	17.2	5.4	5.6	5.5	35.7	36.5	36.7
Santa Rosa	23.9	25.2	25.4	6.1	6.2	6.1	41.9	42.4	42.8
Stockton-Lodi	21.5	22.3	21.8	11.6	11.7	11.6	40.6	41.2	41.4
Vallejo-Fairfield-Napa	17.2	18.2	18.1	5.8	6.2	6.1	39.4	39.1	39.3
Ventura	30.5	31.8	31.8	9.4	9.9	9.9	61.0	60.7	61.6
Colorado	197.7	202.5	203.4	119.3	117.3	120.0	484.1	485.8	493.8
Boulder-Longmont	29.8	31.3	31.4	3.6	3.5	3.5	35.6	36.1	36.5
Colorado Springs	25.5	27.3	27.4	11.7	11.9	11.9	48.8	49.0	49.9
Denver	89.9	91.4	92.1	83.2	82.1	84.0	254.7	257.2	261.4
Connecticut	276.9	276.6	277.0	73.9	75.9	76.0	360.2	364.1	370.4
Bridgeport	40.1	40.3	40.2	7.3	7.3	7.3	41.8	41.5	41.9
Danbury	19.3	18.9	18.8	2.8	2.8	2.8	23.1	22.7	23.1
Hartford	92.3	93.4	93.6	26.5	28.6	28.6	126.3	125.2	126.8
New Haven-Meriden	39.5	37.5	37.4	15.9	16.0	16.1	52.6	54.4	54.8
New London-Norwich	24.8	23.6	23.8	6.2	6.4	6.3	28.4	29.5	29.7
Stamford-Norwalk	28.5	28.3	28.6	10.1	9.5	9.4	46.5	46.1	47.3
Waterbury	18.4	18.8	18.9	3.5	3.6	3.6	18.0	19.3	19.8
Delaware	56.6	59.9	59.9	15.8	16.3	16.4	87.2	87.0	88.2
Dover	6.0	6.6	6.5	1.7	1.7	1.7	14.2	13.4	14.0
Wilmington-Newark	41.3	43.9	43.9	13.8	14.1	14.2	63.2	62.4	63.2
District of Columbia	13.3	13.8	13.9	19.3	18.1	18.3	51.6	50.0	50.5
Washington PMSA	97.7	99.7	100.3	112.3	112.7	112.1	488.1	484.9	490.8
Florida	495.7	495.7	496.8	326.7	326.9	334.3	1,679.5	1,699.5	1,734.9
Daytona Beach	14.1	14.4	14.5	3.7	3.3	3.3	43.9	44.7	45.5
Fort Lauderdale	43.9	44.0	44.1	32.4	32.6	33.5	179.9	180.3	184.9
Fort Myers-Cape Coral	6.8	6.9	7.0	6.7	6.4	6.5	44.8	45.3	46.4
Gainesville	5.5	5.5	5.6	2.4	2.4	2.5	25.4	26.8	27.3
Jacksonville	37.0	38.2	38.5	35.9	36.9	37.6	129.0	131.4	133.5
Lakeland-Winter Haven	22.1	21.8	22.1	9.2	8.6	8.7	48.9	49.4	50.5
Melbourne-Titusville-Palm Bay	26.0	26.6	26.6	5.0	4.9	5.1	41.9	43.7	44.1
Miami	77.7	76.0	75.9	82.0	84.2	85.5	257.0	255.0	260.3
Orlando	52.5	53.2	53.9	40.4	40.6	41.5	196.3	201.7	205.4
Pensacola	11.4	11.7	11.6	6.7	6.7	6.8	38.6	40.7	41.4
Sarasota-Bradenton	20.2	20.7	20.8	5.5	5.0	5.1	61.2	62.9	64.5
Tallahassee	5.2	5.4	5.3	3.9	3.9	4.0	31.7	31.9	32.5
Tampa-St. Petersburg-Clearwater	88.4	88.3	88.9	45.9	45.9	46.6	267.4	273.4	277.1
West Palm Beach-Boca Raton	30.4	30.9	31.0	16.8	16.4	17.0	115.0	116.0	119.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Alabama	82.7	84.7	85.1	411.9	422.9	422.1	343.5	352.1	350.3
Birmingham	33.6	34.7	34.7	129.6	132.7	132.9	69.2	70.4	70.9
Huntsville	4.6	4.7	4.7	44.2	46.0	45.5	38.7	38.4	38.4
Mobile	9.7	9.7	9.7	58.2	60.1	59.9	33.9	36.0	36.2
Montgomery	9.1	9.4	9.4	40.6	41.0	41.0	36.4	37.1	37.1
Tuscaloosa	2.4	2.5	2.5	13.3	13.9	13.8	21.2	21.9	21.6
Alaska	11.6	11.8	11.8	61.1	62.9	63.0	73.5	74.2	73.8
Anchorage	7.1	7.1	7.1	33.4	34.5	34.4	28.3	28.6	28.8
Arizona	118.2	126.5	127.7	583.6	608.6	611.6	336.7	345.0	342.5
Phoenix-Mesa	99.0	105.9	107.1	416.4	439.2	442.3	183.0	190.6	190.1
Tucson	12.4	12.7	12.8	100.1	101.4	100.9	71.5	73.6	73.5
Arkansas	43.6	44.0	44.2	248.4	254.2	252.6	184.1	186.7	186.6
Fayetteville-Springdale-Rogers	4.8	4.8	4.8	26.7	27.5	27.4	19.2	19.6	19.7
Fort Smith	3.1	3.0	3.1	23.8	23.5	23.4	10.0	9.9	9.9
Little Rock-North Little Rock	17.2	17.3	17.4	86.0	86.9	86.7	58.4	59.7	59.9
Pine Bluff	1.4	1.3	1.3	8.3	8.5	8.5	7.8	8.1	8.1
California	735.1	739.4	742.0	4,013.8	4,155.9	4,170.3	2,153.6	2,196.9	2,193.0
Bakersfield	6.1	6.6	6.6	42.0	42.3	42.3	48.8	50.7	50.6
Fresno	14.0	13.8	13.8	68.6	69.9	70.2	64.5	66.1	65.8
Los Angeles-Long Beach	216.2	216.9	217.4	1,277.3	1,310.4	1,312.6	541.0	548.8	548.7
Modesto	4.2	4.5	4.5	30.6	31.1	31.2	24.4	24.7	24.7
Oakland	52.0	51.9	51.9	271.2	279.2	280.0	170.9	170.5	168.8
Orange County	85.6	86.1	86.7	369.8	380.2	379.8	134.0	138.2	138.1
Riverside-San Bernardino	30.0	30.2	30.2	217.7	223.9	223.8	172.0	175.6	175.7
Sacramento	39.1	40.0	40.2	172.3	176.9	178.1	167.6	168.1	166.9
Salinas	6.2	5.8	5.8	31.3	33.0	32.9	27.3	28.7	28.4
San Diego	56.7	57.2	57.4	322.4	333.7	334.1	192.9	197.1	196.4
San Francisco	98.6	99.6	100.3	359.7	365.5	366.8	128.0	127.1	127.2
San Jose	30.1	30.2	30.4	291.2	300.8	302.3	88.0	90.1	89.5
Santa Barbara-Santa Maria-Lompoc	7.3	7.1	7.2	47.0	47.6	47.0	30.1	31.7	31.3
Santa Rosa	9.4	9.4	9.4	44.9	46.4	46.4	26.1	27.5	27.4
Stockton-Lodi	8.5	8.5	8.5	40.8	42.8	42.2	33.1	35.8	34.9
Vallejo-Fairfield-Napa	5.7	5.7	5.7	37.9	39.8	39.5	31.2	31.3	31.7
Ventura	11.9	12.5	12.8	75.6	77.8	78.4	44.5	43.3	43.4
Colorado	119.6	122.2	123.5	583.9	592.9	604.3	315.9	321.1	319.4
Boulder-Longmont	5.5	5.4	5.4	48.8	50.8	50.8	26.2	26.9	26.7
Colorado Springs	10.6	10.5	10.5	69.5	72.8	72.9	34.6	35.0	35.0
Denver	78.5	82.6	82.9	308.7	316.4	316.4	144.6	146.9	146.7
Connecticut	130.5	131.2	131.9	490.7	508.4	509.1	232.6	233.0	231.8
Bridgeport	10.5	10.4	10.5	57.3	59.0	59.1	20.3	20.8	20.6
Danbury	4.1	4.4	4.5	23.9	24.1	24.2	9.5	9.6	9.7
Hartford	67.9	67.1	67.1	168.1	171.8	171.8	95.5	102.2	101.8
New Haven-Meriden	13.7	13.4	13.4	86.0	89.0	88.8	31.8	32.1	32.0
New London-Norwich	3.5	3.6	3.6	33.5	34.3	34.4	34.9	36.4	36.3
Stamford-Norwalk	23.2	24.9	25.4	70.3	70.9	70.9	17.6	17.8	17.8
Waterbury	4.5	4.6	4.6	24.9	26.0	25.7	12.8	12.7	12.8
Delaware	44.5	47.7	47.7	104.3	107.9	108.3	54.0	54.5	54.7
Dover	2.5	3.1	3.1	11.4	12.9	12.9	14.9	14.9	15.1
Wilmington-Newark	38.7	41.0	41.0	85.8	86.9	87.4	38.2	38.3	38.6
District of Columbia	28.0	27.6	27.6	267.1	267.9	267.7	237.0	225.7	226.2
Washington PMSA	129.9	128.7	129.0	915.1	955.8	957.7	596.5	593.5	590.9
Florida	401.6	414.2	417.8	2,167.1	2,265.5	2,283.0	954.7	969.1	970.5
Daytona Beach	6.7	6.8	6.8	51.6	52.9	52.8	23.9	24.7	24.7
Fort Lauderdale	43.9	45.0	45.3	208.4	218.8	221.3	83.5	84.7	85.1
Fort Myers-Cape Coral	8.6	8.4	8.5	49.6	49.6	50.1	24.2	24.5	24.5
Gainesville	5.0	5.2	5.2	30.7	32.3	32.2	39.0	39.7	39.6
Jacksonville	51.9	52.7	52.6	158.5	166.1	166.1	70.8	73.2	73.8
Lakeland-Winter Haven	7.8	7.9	8.0	46.2	48.7	49.2	25.7	26.2	26.4
Melbourne-Titusville-Palm Bay	5.7	5.8	5.9	59.4	61.4	61.5	24.7	25.0	25.2
Miami	67.8	69.9	70.1	310.0	317.9	320.7	135.4	139.6	138.6
Orlando	45.7	47.2	47.7	314.5	337.1	340.1	84.7	86.9	87.0
Pensacola	5.9	6.0	6.2	47.9	50.2	50.3	28.2	27.9	27.8
Sarasota-Bradenton	11.8	11.9	12.1	98.6	107.4	108.2	23.7	24.6	24.9
Tallahassee	5.7	5.8	5.8	37.9	39.9	40.0	58.8	59.3	59.4
Tampa-St. Petersburg-Clearwater	72.8	77.1	77.9	389.2	408.3	411.2	134.9	135.9	136.1
West Palm Beach-Boca Raton	29.8	30.1	30.4	163.3	171.3	173.5	51.8	54.8	52.6

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		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Georgia	3,602.1	3,709.8	3,735.2	7.8	7.8	7.9	165.9	172.2	171.0
Albany	60.1	62.1	62.1	(2)	(2)	(2)	4.0	4.1	4.2
Athens	73.1	73.7	73.8	(1)	(1)	(1)	2.4	2.4	2.4
Atlanta	1,950.5	2,016.0	2,027.2	1.6	1.5	1.6	94.1	97.3	95.4
Augusta-Aiken	197.2	196.2	196.3	.4	.4	.4	10.8	10.4	10.3
Columbus	113.0	115.2	116.1	(1)	(1)	(1)	5.3	5.1	5.2
Macon	148.8	151.4	152.0	1.2	1.1	1.1	6.3	6.3	6.3
Savannah	133.7	135.0	135.3	(1)	(1)	(1)	7.7	7.3	7.4
Hawaii	536.0	531.2	533.0	(1)	(1)	(1)	22.9	21.6	21.1
Honolulu	408.0	403.3	404.9	(1)	(1)	(1)	17.2	16.1	15.8
Idaho	499.5	511.0	504.2	3.0	2.9	2.8	29.8	33.9	31.8
Boise City	190.0	198.1	198.8	(1)	(1)	(1)	13.0	14.7	14.3
Illinois	5,758.8	5,831.3	5,832.0	12.1	12.0	11.9	221.6	235.6	226.5
Bloomington-Normal	78.6	79.6	80.3	(1)	(1)	(1)	2.4	2.4	2.3
Champaign-Urbana	99.1	99.8	99.4	(1)	(1)	(1)	3.1	3.4	3.2
Chicago	4,032.0	4,097.8	4,102.3	1.4	1.7	1.6	154.3	163.6	157.1
Davenport-Moline-Rock Island	176.8	179.2	179.4	(1)	(1)	(1)	8.4	9.4	9.0
Decatur	57.9	58.1	58.2	(1)	(1)	(1)	3.6	3.7	3.6
Kankakee	43.8	44.9	45.1	(1)	(1)	(1)	2.3	2.5	2.5
Peoria-Pekin	168.1	170.7	169.8	(1)	(1)	(1)	7.5	8.3	7.7
Rockford	177.7	178.2	178.9	(1)	(1)	(1)	6.8	7.1	6.9
Springfield	113.0	113.8	114.2	(1)	(1)	(1)	4.7	5.2	4.8
Indiana	2,853.7	2,893.7	2,890.8	6.5	6.6	6.5	131.0	136.4	132.7
Bloomington	63.8	68.1	65.2	(1)	(1)	(1)	3.4	3.4	3.4
Elkhart-Goshen	116.1	117.5	117.0	(1)	(1)	(1)	4.6	4.6	4.6
Evansville-Henderson	152.0	153.3	152.7	1.4	1.5	1.5	8.9	9.1	8.6
Fort Wayne	268.6	268.6	269.3	(1)	(1)	(1)	12.9	13.6	13.5
Gary	264.1	265.5	265.3	(1)	(1)	(1)	17.0	17.5	17.0
Indianapolis	828.2	832.8	834.2	.8	.7	.7	43.5	45.9	45.4
Kokomo	53.6	54.4	54.8	(1)	(1)	(1)	1.7	2.0	2.0
Lafayette	90.8	95.3	94.6	(1)	(1)	(1)	3.8	4.2	4.1
Muncie	59.9	61.4	61.4	(1)	(1)	(1)	2.6	2.7	2.7
South Bend	133.7	137.4	138.0	(1)	(1)	(1)	7.2	7.6	7.5
Terre Haute	71.4	71.4	71.0	.2	.2	.2	3.1	3.6	3.3
Iowa	1,402.8	1,428.8	1,426.7	2.1	2.2	2.1	57.9	65.3	60.8
Cedar Rapids	111.6	114.1	113.8	(1)	(1)	(1)	5.6	6.4	6.4
Des Moines	268.9	273.9	274.4	(1)	(1)	(1)	10.6	11.8	10.6
Dubuque	50.1	51.0	51.4	(1)	(1)	(1)	1.8	2.0	1.8
Iowa City	65.1	66.4	65.9	(1)	(1)	(1)	1.9	2.3	2.2
Sioux City	65.3	65.3	65.0	(1)	(1)	(1)	3.5	3.7	3.4
Waterloo-Cedar Falls	70.1	71.8	71.4	(1)	(1)	(1)	2.4	2.8	2.6
Kansas	1,256.5	1,286.2	1,284.8	7.8	7.8	7.9	56.9	62.6	59.7
Lawrence	45.9	46.0	45.8	(1)	(1)	(1)	1.9	2.0	1.9
Topeka	100.3	99.6	99.4	(1)	(1)	(1)	4.2	4.6	4.2
Wichita	270.2	277.4	277.9	1.5	1.4	1.4	13.8	14.4	14.1
Kentucky	1,705.7	1,734.7	1,741.4	22.7	21.9	21.8	78.7	81.5	80.2
Lexington	267.4	274.7	274.0	.2	.2	.2	12.6	13.4	13.1
Louisville	545.0	556.3	558.7	.6	.6	.5	27.5	27.6	27.9
Owensboro	42.8	44.2	44.5	.3	.3	.3	3.1	3.4	3.4
Louisiana	1,841.3	1,863.0	1,862.5	50.3	53.3	53.4	114.2	114.0	113.4
Alexandria	54.2	53.2	53.1	.1	.1	.1	3.0	3.1	3.1
Baton Rouge	284.0	296.0	295.1	.8	1.0	1.1	31.2	33.4	33.2
Houma	70.8	74.7	75.2	6.7	7.6	7.6	3.2	3.6	3.6
Lafayette	156.9	160.3	160.5	14.0	15.3	15.3	8.6	9.1	9.0
Lake Charles	85.2	84.5	84.5	1.4	1.4	1.4	10.0	8.3	8.3
Monroe	67.2	68.5	68.6	.2	.2	.2	3.4	3.5	3.5
New Orleans	610.1	616.2	616.6	14.1	14.8	14.7	28.4	28.2	28.2
Shreveport-Bossier City	171.0	172.4	174.4	2.5	2.5	2.5	9.8	10.2	10.5
Maine	545.5	563.6	561.2	.1	.1	.1	23.6	26.2	24.7
Lewiston-Auburn	41.9	43.6	43.3	(2)	(2)	(2)	1.6	1.9	1.8
Portland	141.4	142.6	142.7	(2)	(2)	(2)	6.5	6.5	6.4

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		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Georgia	590.0	589.9	591.5	224.1	235.5	236.7	938.1	948.1	965.7
Albany	8.7	8.5	8.4	2.8	2.8	2.8	14.9	15.2	15.3
Athens	11.9	11.8	11.8	2.0	2.0	2.1	19.6	19.2	19.4
Atlanta	219.3	220.3	220.8	159.4	165.8	166.9	534.4	541.9	549.8
Augusta-Aiken	41.6	40.6	40.8	6.5	6.6	6.6	45.3	44.8	45.1
Columbus	21.3	20.8	21.0	3.5	3.7	3.9	26.0	26.2	26.4
Macon	20.7	21.0	21.0	5.3	5.4	5.4	35.8	35.6	36.0
Savannah	17.3	18.1	18.2	9.1	9.8	9.6	35.9	34.8	35.2
Hawaii	16.4	16.1	16.0	41.4	40.9	40.7	137.8	134.8	136.2
Honolulu	12.6	12.4	12.3	33.6	32.9	33.0	102.8	99.7	100.5
Idaho	73.0	76.3	76.2	23.6	24.5	24.4	129.2	128.0	128.9
Boise City	33.7	35.8	36.0	9.2	9.5	9.6	46.7	47.9	48.3
Illinois	978.1	980.0	977.8	338.2	345.3	345.3	1,346.1	1,332.6	1,353.5
Bloomington-Normal	9.0	9.0	9.1	2.8	2.8	2.9	18.0	18.1	18.2
Champaign-Urbana	12.0	12.1	12.1	2.5	2.6	2.6	22.4	22.3	22.5
Chicago	661.9	661.9	662.2	248.7	254.9	255.4	936.3	931.2	948.4
Davenport-Moline-Rock Island	29.8	30.1	30.4	9.2	9.2	9.2	48.5	48.8	49.2
Decatur	13.9	13.7	13.7	5.0	5.2	5.2	12.6	12.8	13.0
Kankakee	8.6	8.9	9.0	1.9	2.0	2.0	10.8	11.0	11.1
Peoria-Pekin	31.6	31.9	31.9	9.2	9.4	9.4	41.0	41.7	42.1
Rockford	53.6	54.1	54.4	9.2	9.3	9.5	38.0	37.6	38.2
Springfield	4.5	4.5	4.5	4.8	4.9	4.9	24.9	25.0	25.6
Indiana	672.9	675.5	677.1	140.0	141.9	142.4	701.2	700.8	705.4
Bloomington	9.7	10.6	10.4	1.8	1.9	1.7	15.5	15.5	16.0
Elkhart-Goshen	58.1	58.9	58.5	3.3	3.0	3.0	22.3	22.3	22.3
Evansville-Henderson	31.5	30.7	30.7	7.3	7.2	7.3	37.6	37.2	37.5
Fort Wayne	73.6	72.6	73.0	12.2	12.2	12.3	64.3	65.2	65.3
Gary	51.0	49.9	49.8	15.3	15.0	15.0	64.6	64.2	64.6
Indianapolis	126.4	126.1	126.3	48.3	47.1	47.7	221.3	222.1	222.7
Kokomo	21.0	21.6	21.7	1.3	1.3	1.3	12.1	12.2	12.2
Lafayette	22.1	22.4	22.4	2.3	2.3	2.3	19.5	19.8	20.0
Muncie	10.9	10.5	10.5	4.2	4.2	4.2	13.5	13.6	13.5
South Bend	22.0	22.4	22.5	5.8	6.1	6.1	34.7	34.2	34.6
Terre Haute	11.8	11.5	11.5	3.3	3.1	3.1	21.8	20.8	20.6
Iowa	248.4	251.6	251.7	64.6	67.1	67.4	346.9	346.8	348.3
Cedar Rapids	20.7	21.8	21.8	7.9	7.7	7.6	25.6	25.5	25.5
Des Moines	24.4	25.1	25.2	13.1	13.9	14.0	72.4	71.9	72.9
Dubuque	11.7	11.9	12.0	2.0	2.0	2.0	12.1	12.0	12.0
Iowa City	4.8	4.7	4.7	1.9	1.9	2.0	12.9	13.3	13.3
Sioux City	13.1	13.2	13.1	3.8	3.8	3.9	16.2	15.8	15.9
Waterloo-Cedar Falls	14.6	14.6	14.4	2.3	2.2	2.2	16.6	16.7	16.9
Kansas	199.1	207.0	207.6	70.8	73.1	73.2	311.7	315.9	316.3
Lawrence	5.2	5.3	5.3	1.2	1.1	1.1	12.2	12.3	12.4
Topeka	9.9	9.4	9.6	6.5	6.7	6.6	22.2	22.1	22.2
Wichita	65.1	71.2	71.5	10.5	10.3	10.3	63.3	63.1	63.4
Kentucky	312.3	313.0	314.9	96.9	98.5	98.6	415.4	419.8	425.5
Lexington	44.3	45.7	45.9	10.7	10.8	10.9	61.7	63.2	63.4
Louisville	87.7	87.7	89.2	38.6	40.9	40.3	137.7	139.9	141.8
Owensboro	6.8	7.0	7.0	2.2	2.3	2.3	11.1	11.6	11.9
Louisiana	189.3	190.3	189.7	109.1	111.1	111.3	437.0	444.1	448.4
Alexandria	3.5	3.4	3.5	2.7	2.6	2.6	12.4	12.5	12.4
Baton Rouge	24.5	24.9	24.9	12.6	12.5	12.6	66.6	70.7	71.1
Houma	6.7	7.5	7.6	7.3	7.7	7.8	17.0	17.4	17.4
Lafayette	15.7	15.1	15.2	9.6	9.6	9.7	41.0	42.0	42.1
Lake Charles	11.6	12.0	12.0	4.4	4.4	4.4	17.9	18.5	18.5
Monroe	7.8	7.8	7.8	3.7	3.8	3.8	17.0	17.6	17.8
New Orleans	47.6	48.1	48.1	42.0	41.9	41.7	154.3	155.4	155.7
Shreveport-Bossier City	20.1	19.8	19.9	8.3	8.2	8.3	39.7	40.4	41.1
Maine	88.2	89.5	89.5	22.7	22.7	22.8	136.0	143.9	142.9
Lewiston-Auburn	7.8	7.8	7.8	1.8	2.0	2.0	11.1	11.5	11.5
Portland	14.3	15.1	15.4	6.2	6.3	6.3	42.7	43.6	43.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Georgia	183.5	191.1	192.7	916.9	981.5	985.6	575.8	583.7	584.1
Albany	2.3	2.4	2.4	14.9	15.8	15.7	12.5	13.3	13.3
Athens	2.2	2.2	2.3	15.1	15.8	15.6	19.9	20.3	20.2
Atlanta	123.7	129.7	130.1	561.9	598.5	601.4	256.1	261.0	261.2
Augusta-Aiken	6.3	6.1	6.1	45.8	46.2	46.1	40.5	41.1	40.9
Columbus	7.4	8.0	8.0	28.6	30.2	30.3	20.9	21.2	21.3
Macon	8.1	8.3	8.4	38.1	40.2	40.3	33.3	33.5	33.5
Savannah	4.2	4.3	4.4	38.5	39.1	38.9	21.0	21.6	21.6
Hawaii	36.6	35.5	35.4	168.0	169.7	169.4	112.9	112.6	114.2
Honolulu	29.5	28.5	28.5	121.3	123.2	122.8	91.0	90.5	92.0
Idaho	25.5	25.6	25.6	114.7	119.4	115.5	100.7	100.4	99.0
Boise City	11.6	11.9	11.9	46.4	48.1	48.5	29.4	30.2	30.2
Illinois	387.2	393.9	395.6	1,655.5	1,707.1	1,704.5	820.0	824.8	816.9
Bloomington-Normal	13.6	14.0	14.1	18.6	18.8	18.9	14.2	14.5	14.8
Champaign-Urbana	3.5	3.5	3.5	20.2	20.4	20.5	35.4	35.5	35.0
Chicago	303.2	308.1	309.1	1,236.3	1,282.0	1,277.5	489.9	494.4	491.0
Davenport-Moline-Rock Island	8.1	8.4	8.4	45.9	45.8	46.2	26.9	27.5	27.0
Decatur	1.9	1.9	1.9	14.1	13.8	13.8	6.8	7.0	7.0
Kankakee	1.7	1.7	1.7	11.5	11.8	11.8	7.0	7.0	7.0
Peoria-Pekin	8.1	8.1	8.1	51.7	51.9	51.8	19.0	19.4	18.8
Rockford	7.5	7.4	7.5	45.4	45.2	45.0	17.2	17.5	17.4
Springfield	7.8	7.9	8.0	32.6	32.4	32.5	33.7	33.9	33.9
Indiana	135.8	138.0	138.0	661.5	688.5	685.4	404.8	406.0	403.3
Bloomington	2.1	2.1	2.0	12.3	12.6	12.5	19.0	22.0	19.2
Elkhart-Goshen	2.7	2.9	2.9	17.9	18.6	18.6	7.2	7.2	7.1
Evansville-Henderson	7.5	7.5	7.6	43.1	44.3	44.2	14.7	15.8	15.3
Fort Wayne	14.7	14.6	14.7	62.3	62.6	62.7	28.1	27.8	27.8
Gary	9.5	9.5	9.6	69.1	72.2	71.9	37.6	37.2	37.4
Indianapolis	60.6	62.1	62.2	214.7	217.4	217.7	112.6	111.4	111.5
Kokomo	1.5	1.4	1.4	8.6	8.4	8.6	7.4	7.5	7.6
Lafayette	3.7	3.7	3.7	16.5	17.9	17.9	22.9	25.0	24.2
Muncie	1.7	1.7	1.7	15.2	15.4	15.4	11.8	13.3	13.4
South Bend	6.5	6.5	6.5	43.5	46.3	46.5	14.0	14.3	14.3
Terre Haute	2.3	2.4	2.4	16.5	17.4	17.5	12.4	12.4	12.4
Iowa	77.8	79.4	79.8	368.6	380.4	380.8	236.5	236.0	235.8
Cedar Rapids	5.6	6.1	6.1	35.4	35.5	35.4	10.8	11.1	11.0
Des Moines	36.5	38.6	38.6	77.5	78.5	78.9	34.4	34.1	34.2
Dubuque	1.6	1.6	1.6	17.2	17.7	18.2	3.7	3.8	3.8
Iowa City	1.7	1.9	1.9	13.6	13.9	13.5	28.3	28.4	28.3
Sioux City	2.6	2.6	2.6	18.6	18.5	18.4	7.5	7.7	7.7
Waterloo-Cedar Falls	3.3	3.3	3.3	18.0	18.9	18.8	12.9	13.3	13.2
Kansas	58.9	60.8	60.7	305.6	313.0	312.9	245.7	246.0	246.5
Lawrence	2.0	1.9	1.9	10.1	10.3	10.1	13.3	13.1	13.1
Topeka	6.6	7.0	7.0	27.1	26.5	26.2	23.8	23.3	23.6
Wichita	11.2	11.1	11.1	70.7	71.6	71.6	34.1	34.3	34.5
Kentucky	68.7	70.0	70.3	415.0	429.4	429.8	296.0	300.6	300.3
Lexington	10.2	10.5	10.5	70.9	73.5	73.2	56.8	57.4	56.8
Louisville	28.8	29.2	29.5	154.8	160.4	159.5	69.3	70.0	70.0
Owensboro	1.9	1.9	1.9	10.5	10.6	10.6	6.9	7.1	7.1
Louisiana	83.4	84.5	84.9	494.8	498.2	496.6	363.2	367.5	364.8
Alexandria	2.2	2.2	2.2	17.0	16.1	16.1	13.3	13.2	13.1
Baton Rouge	16.8	17.6	17.6	73.0	75.0	75.1	58.5	60.9	59.5
Houma	2.3	2.3	2.3	14.5	15.0	15.3	13.1	13.6	13.6
Lafayette	5.8	5.9	5.9	38.9	39.9	39.9	23.3	23.4	23.4
Lake Charles	2.7	2.7	2.7	24.0	23.4	23.3	13.2	13.8	13.9
Monroe	4.6	4.9	4.9	17.8	17.7	17.8	12.7	13.0	12.8
New Orleans	30.9	31.0	31.1	189.4	190.3	190.4	103.4	106.5	106.7
Shreveport-Bossier City	6.7	6.4	6.3	51.4	51.9	52.7	32.5	33.0	33.1
Maine	27.0	27.5	27.9	150.4	155.7	156.0	97.5	98.0	97.3
Lewiston-Auburn	2.0	2.1	2.1	12.7	13.4	13.2	4.9	4.9	4.9
Portland	12.5	12.6	12.7	40.5	40.1	39.9	18.7	18.4	18.4

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		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Maryland	2,246.3	2,282.9	2,289.7	1.1	1.2	1.2	134.8	142.6	141.6
Baltimore PMSA	1,154.9	1,174.0	1,175.1	.1	.2	.2	63.8	66.5	65.8
Baltimore City	406.9	409.5	409.9	(1)	(1)	(1)	12.7	13.5	13.3
Suburban Maryland-D.C.	834.1	840.5	843.1	(1)	(1)	(1)	58.9	61.1	60.5
Massachusetts	3,108.4	3,186.4	3,190.8	1.3	1.3	1.3	96.6	105.4	101.8
Barnstable-Yarmouth	52.9	55.2	54.5	(1)	(1)	(1)	2.4	2.5	2.5
Boston	1,891.9	1,935.2	1,940.2	.4	.4	.4	53.5	57.6	55.6
Brockton	92.6	94.0	93.7	(2)	(2)	(2)	3.2	3.3	3.2
Fitchburg-Leominster	51.5	52.0	52.2	(2)	(2)	(2)	1.6	1.7	1.6
Lawrence	148.4	151.8	152.0	(2)	(2)	(2)	5.7	6.1	5.8
Lowell	110.8	114.6	115.3	(1)	(1)	(1)	4.8	5.0	4.9
New Bedford	63.0	64.3	64.2	(2)	(2)	(2)	2.0	2.1	2.0
Pittsfield	41.7	42.5	42.5	.1	.1	.1	1.5	1.8	1.8
Springfield	249.5	251.4	250.4	.1	.1	.1	7.3	8.2	7.7
Worcester	223.2	228.1	228.3	.2	.2	.2	7.2	8.0	7.6
Michigan	4,428.0	4,479.1	4,501.6	7.5	7.2	7.0	169.0	195.7	185.4
Ann Arbor	266.9	271.4	272.1	(1)	(1)	(1)	9.3	10.3	9.9
Benton Harbor	71.9	73.5	73.2	(1)	(1)	(1)	2.2	2.6	2.5
Detroit	2,096.1	2,141.6	2,151.9	.8	.8	.8	76.2	88.2	84.6
Flint	184.7	185.4	186.2	(1)	(1)	(1)	6.9	7.5	7.4
Grand Rapids-Muskegon-Holland ..	547.9	563.0	565.9	(1)	(1)	(1)	22.8	24.8	23.6
Jackson	61.0	61.8	61.8	(1)	(1)	(1)	2.1	2.3	2.2
Kalamazoo-Battle Creek	209.7	211.9	211.6	(1)	(1)	(1)	7.5	8.2	7.9
Lansing-East Lansing	234.4	236.7	236.3	(1)	(1)	(1)	7.8	8.8	8.2
Saginaw-Bay City-Midland	178.1	181.7	181.6	(1)	(1)	(1)	8.8	10.1	9.6
Minnesota	2,469.5	2,528.6	2,526.8	7.7	7.9	7.5	84.6	97.5	88.7
Duluth-Superior	111.4	113.7	112.9	5.0	4.9	4.9	4.0	4.7	4.2
Minneapolis-St. Paul	1,605.7	1,642.1	1,641.3	(2)	(2)	(2)	54.4	61.3	57.6
Rochester	71.2	73.5	73.7	(1)	(1)	(1)	2.4	2.8	2.7
St. Cloud	85.8	86.9	86.9	(1)	(1)	(1)	3.6	4.0	3.7
Mississippi	1,104.7	1,115.0	1,114.7	4.9	4.8	5.2	48.9	49.8	49.2
Jackson	219.6	220.8	222.1	(2)	(2)	(2)	10.8	11.2	11.4
Missouri	2,608.6	2,642.5	2,642.6	4.8	4.8	4.7	118.5	121.9	116.6
Kansas City	895.6	918.1	919.7	(1)	(1)	(1)	44.6	49.1	47.0
St. Louis	1,299.5	1,303.3	1,307.9	(1)	(1)	(1)	66.8	66.2	65.3
Springfield	158.5	160.3	159.7	(1)	(1)	(1)	6.4	6.4	6.4
Montana	360.6	369.5	368.5	5.5	5.3	5.2	16.3	19.9	18.3
Nebraska	848.3	870.4	869.2	1.2	1.1	1.1	36.1	39.1	37.9
Lincoln	146.2	148.4	148.1	(1)	(1)	(1)	6.1	6.6	6.2
Omaha	390.0	402.1	401.6	(1)	(1)	(1)	17.7	19.3	19.0
Nevada	874.3	918.0	916.3	15.0	14.9	14.7	80.2	86.6	86.5
Las Vegas	617.6	651.6	651.6	2.1	2.1	2.1	62.3	66.5	66.8
Reno	175.9	181.0	179.6	.6	.5	.5	12.5	14.1	13.6
New Hampshire	573.0	578.1	582.5	.5	.5	.4	21.6	22.0	21.4
Manchester	95.8	96.0	97.0	(1)	(1)	(1)	4.2	4.6	4.6
Nashua	88.4	92.6	93.1	(1)	(1)	(1)	2.7	2.5	2.5
Portsmouth-Rochester	113.5	113.8	114.0	(1)	(1)	(1)	3.4	3.4	3.1
New Jersey	3,698.5	3,766.0	3,776.5	1.9	2.1	2.0	125.4	134.1	130.2
Atlantic-Cape May	172.1	178.6	176.4	(1)	(1)	(1)	7.4	8.5	7.9
Bergen-Passaic	639.9	647.1	647.6	(1)	(1)	(1)	20.8	21.7	20.7
Camden	471.0	481.2	483.4	(1)	(1)	(1)	20.8	21.3	20.9
Jersey City	244.1	249.5	249.4	(1)	(1)	(1)	4.0	5.1	4.9
Middlesex-Somerset-Hunterdon ..	595.5	609.3	611.4	.5	.5	.5	19.1	19.9	19.1
Monmouth-Ocean	354.3	360.4	358.7	(1)	(1)	(1)	16.8	17.4	16.9
Newark	944.4	959.4	965.5	.6	.7	.6	29.8	31.1	31.1
Trenton	197.2	199.0	199.5	(1)	(1)	(1)	4.1	4.5	4.4
Vineland-Millville-Bridgeton ..	57.0	59.7	59.5	.3	.3	.3	1.8	2.1	2.0
New Mexico	704.2	714.5	716.7	15.5	15.7	15.6	41.3	42.4	41.8
Albuquerque	330.4	337.5	338.2	(1)	(1)	(1)	21.7	21.8	21.6
Las Cruces	52.0	52.5	52.5	(1)	(1)	(1)	3.2	3.2	3.1
Santa Fe	69.9	70.3	70.1	(1)	(1)	(1)	3.3	3.5	3.4

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		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Maryland	173.8	175.1	175.5	107.0	107.0	107.2	547.8	547.6	554.3
Baltimore PMSA	101.2	101.2	101.4	57.3	57.9	58.1	275.1	274.4	279.3
Baltimore City	32.5	32.3	32.5	19.5	19.8	19.7	66.0	65.1	65.3
Suburban Maryland-D.C.	36.9	37.2	37.6	34.6	33.5	33.5	206.5	204.6	207.4
Massachusetts	445.5	452.5	453.1	134.0	134.0	133.9	724.0	731.6	741.4
Barnstable-Yarmouth	1.8	1.8	1.8	3.0	2.9	2.9	17.7	19.0	18.7
Boston	219.9	222.3	222.4	83.8	83.2	83.1	419.5	417.9	425.3
Brockton	10.9	10.5	10.6	5.1	5.2	5.2	31.3	32.0	31.9
Fitchburg-Leominster	13.6	13.6	13.7	2.1	2.2	2.2	12.6	12.3	12.5
Lawrence	36.9	38.6	38.7	5.2	5.3	5.3	36.3	36.9	37.1
Lowell	28.1	29.4	29.7	6.5	6.8	6.8	24.4	24.5	24.7
New Bedford	13.9	14.5	14.5	2.5	2.5	2.6	16.6	16.6	16.9
Pittsfield	7.5	7.3	7.3	1.2	1.2	1.2	10.7	10.6	10.8
Springfield	39.0	39.4	39.3	9.4	9.0	8.9	59.0	58.6	59.1
Worcester	41.9	43.3	43.6	9.3	9.4	9.3	49.5	49.8	50.0
Michigan	971.0	965.4	967.2	169.3	172.0	172.5	1,065.7	1,060.4	1,078.5
Ann Arbor	53.9	53.7	53.9	5.8	5.9	6.0	53.5	54.1	54.8
Benton Harbor	21.0	21.0	21.1	2.9	2.9	2.9	16.2	16.5	16.5
Detroit	449.6	445.5	445.7	94.7	96.1	96.7	507.7	519.9	530.4
Flint	43.6	40.9	40.9	5.3	5.3	5.4	47.7	48.2	49.3
Grand Rapids-Muskegon-Holland	155.0	157.3	158.6	19.2	19.6	19.6	137.9	141.5	143.4
Jackson	13.0	13.0	13.1	3.6	3.6	3.6	15.9	15.9	16.0
Kalamazoo-Battle Creek	49.8	49.8	49.9	6.9	7.0	7.0	47.2	47.7	48.0
Lansing-East Lansing	30.2	30.3	30.3	6.2	6.1	6.1	52.6	53.0	53.4
Saginaw-Bay City-Midland	39.8	40.0	39.7	7.1	7.3	7.3	46.8	47.5	48.1
Minnesota	428.4	439.2	439.4	121.8	125.5	125.8	611.7	614.9	622.0
Duluth-Superior	8.2	8.3	8.3	7.1	7.6	7.7	28.9	29.1	29.2
Minneapolis-St. Paul	273.3	277.4	277.5	87.3	88.1	88.2	397.7	399.2	403.3
Rochester	10.1	11.8	11.7	2.0	2.1	2.1	14.8	14.9	15.0
St. Cloud	15.3	15.7	16.0	2.9	3.0	3.0	26.7	26.6	26.7
Mississippi	243.0	242.8	242.2	52.7	53.6	53.0	237.5	234.6	236.0
Jackson	21.6	22.1	21.7	15.2	15.1	15.0	53.4	52.3	53.2
Missouri	412.7	412.7	413.1	162.6	159.3	159.5	630.8	629.9	632.9
Kansas City	106.8	107.8	107.9	70.4	70.5	70.6	227.1	228.8	231.6
St. Louis	196.3	196.1	196.5	81.1	80.9	80.8	317.0	318.0	322.5
Springfield	23.7	23.7	23.8	10.7	11.7	11.7	45.7	45.1	45.0
Montana	24.0	24.3	24.2	20.7	21.1	21.1	98.0	99.0	99.5
Nebraska	115.3	115.7	115.9	50.9	53.5	53.8	214.0	214.9	215.3
Lincoln	16.7	17.7	17.6	9.1	9.3	9.4	31.8	30.5	30.6
Omaha	39.9	39.3	39.4	26.2	27.4	27.9	94.2	97.1	97.3
Nevada	39.4	40.6	40.7	43.3	45.4	45.1	180.2	187.6	188.9
Las Vegas	21.8	22.6	22.6	30.9	32.1	31.9	128.0	134.2	135.2
Reno	13.2	13.6	13.7	10.8	11.3	11.2	41.2	41.8	41.9
New Hampshire	105.6	107.1	107.8	20.0	19.3	19.6	150.2	153.0	154.8
Manchester	13.1	13.2	13.3	5.6	5.5	5.7	24.3	24.1	24.5
Nashua	27.0	28.0	27.9	2.3	2.2	2.3	21.8	22.8	23.1
Portsmouth-Rochester	18.3	19.3	19.9	4.1	4.5	4.4	29.1	29.7	29.6
New Jersey	484.3	485.8	483.9	258.8	262.1	262.8	886.5	890.3	905.7
Atlantic-Cape May	6.2	6.1	6.4	7.3	7.4	7.2	34.1	36.4	35.9
Bergen-Passaic	106.1	105.1	104.1	34.9	35.0	34.4	181.1	179.9	182.0
Camden	55.7	56.0	56.4	22.4	22.5	22.5	130.8	132.4	135.2
Jersey City	28.6	30.1	29.3	29.5	29.2	29.2	58.8	58.5	58.9
Middlesex-Somerset-Hunterdon	94.5	93.3	93.3	47.1	47.3	47.4	141.3	141.5	143.7
Monmouth-Ocean	21.6	21.9	21.7	21.4	22.1	21.8	99.1	99.6	100.4
Newark	135.0	137.2	137.5	82.1	84.1	84.3	192.5	193.9	197.6
Trenton	19.9	19.4	19.2	7.7	8.1	8.1	33.2	32.6	33.1
Vineland-Millville-Bridgeton	12.6	12.9	12.8	2.9	3.2	3.1	11.4	11.9	12.1
New Mexico	45.7	47.0	46.7	31.3	32.0	32.3	168.6	170.1	171.6
Albuquerque	29.6	30.7	30.6	15.0	15.4	15.5	81.6	81.9	82.5
Las Cruces	2.6	2.8	2.8	1.8	1.9	1.9	11.1	11.2	11.4
Santa Fe	2.0	1.9	2.0	1.3	1.3	1.3	15.0	15.0	15.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Maryland	128.7	128.5	129.1	725.2	750.4	751.2	427.9	430.5	429.6
Baltimore PMSA	71.0	69.7	69.7	375.2	390.6	388.7	211.2	213.5	211.9
Baltimore City	33.4	32.7	32.8	154.3	157.3	157.1	88.5	88.8	89.2
Suburban Maryland-D.C.	48.8	48.4	48.8	277.6	281.9	282.0	170.8	173.8	173.3
Massachusetts	212.9	219.7	220.6	1,083.6	1,128.1	1,124.9	410.5	413.8	413.8
Barnstable-Yarmouth	3.2	3.4	3.3	17.0	17.8	17.4	7.8	7.8	7.9
Boston	157.3	162.6	163.1	735.8	767.9	766.5	221.7	223.3	223.8
Brockton	3.0	3.0	3.1	23.3	23.9	23.5	15.8	16.1	16.2
Fitchburg-Leominster	1.5	1.6	1.6	12.4	12.8	12.7	7.7	7.8	7.9
Lawrence	4.5	4.3	4.4	42.1	42.9	43.1	17.7	17.7	17.6
Lowell	3.8	3.9	3.9	28.9	30.3	30.6	14.3	14.7	14.7
New Bedford	2.0	2.0	2.0	16.1	16.2	16.2	9.9	10.4	10.0
Pittsfield	1.9	2.0	2.0	13.9	14.4	14.2	4.9	5.1	5.1
Springfield	12.4	11.8	11.9	75.9	77.6	77.1	46.4	46.7	46.3
Worcester	15.3	15.7	15.7	66.9	68.3	68.3	32.9	33.4	33.6
Michigan	202.5	202.7	204.2	1,178.0	1,213.4	1,221.4	665.0	662.2	665.4
Ann Arbor	9.7	9.9	10.1	62.5	64.3	64.4	72.2	73.2	73.1
Benton Harbor	2.6	2.6	2.6	18.4	19.1	18.8	8.7	8.8	8.8
Detroit	111.1	111.8	112.4	624.0	648.1	651.0	232.0	231.3	230.4
Flint	6.7	6.7	6.7	49.2	51.0	50.9	25.3	25.7	25.7
Grand Rapids-Muskegon-Holland	21.5	22.3	22.5	136.7	141.8	142.3	54.7	55.7	55.9
Jackson	1.8	1.8	1.8	14.1	14.5	14.5	10.5	10.7	10.5
Kalamazoo-Battle Creek	10.8	10.9	10.9	52.0	52.5	52.4	35.5	35.7	35.6
Lansing-East Lansing	13.2	13.4	13.6	55.1	56.4	56.1	69.3	68.7	68.6
Saginaw-Bay City-Midland	6.6	6.7	6.7	46.0	47.1	47.2	22.9	23.2	23.0
Minnesota	143.5	146.6	147.5	679.3	700.0	702.5	392.5	397.0	393.4
Duluth-Superior	3.4	3.5	3.5	31.7	31.5	31.5	23.1	24.1	23.6
Minneapolis-St. Paul	112.8	114.7	115.3	458.7	475.3	476.8	221.0	225.6	222.1
Rochester	2.4	2.4	2.5	32.4	32.6	32.9	7.1	6.9	6.8
St. Cloud	2.9	3.0	3.0	21.2	21.4	21.5	13.2	13.2	13.0
Mississippi	41.1	40.8	40.8	253.1	256.6	255.8	223.5	232.0	232.5
Jackson	15.6	15.9	16.0	56.2	57.1	57.3	46.1	46.4	46.8
Missouri	152.1	158.0	159.3	713.7	730.5	730.7	413.4	425.4	425.8
Kansas City	62.9	64.3	64.8	254.3	261.0	260.8	129.5	136.6	137.0
St. Louis	78.4	78.5	78.6	397.4	403.7	404.1	162.5	159.9	160.1
Springfield	6.7	6.9	6.9	45.5	46.0	45.5	19.8	20.5	20.4
Montana	16.2	16.6	16.8	101.7	104.1	105.0	78.2	79.2	78.4
Nebraska	53.6	55.9	56.5	223.5	234.1	233.1	153.7	156.1	155.6
Lincoln	9.6	10.0	10.1	36.7	37.1	36.8	36.2	37.2	37.4
Omaha	32.7	34.4	34.7	129.1	133.5	132.6	50.2	51.1	50.7
Nevada	38.4	40.4	40.7	371.9	391.1	387.6	105.9	111.4	112.1
Las Vegas	29.4	30.8	31.0	277.8	294.1	292.0	65.3	69.2	70.0
Reno	7.7	8.1	8.1	66.8	67.7	66.8	23.1	23.9	23.8
New Hampshire	28.2	28.0	27.9	163.3	164.3	166.0	83.6	83.9	84.6
Manchester	7.1	6.6	6.5	30.9	31.0	31.1	10.6	11.0	11.3
Nashua	3.2	3.0	3.1	23.2	25.6	25.8	8.2	8.5	8.4
Portsmouth-Rochester	5.9	5.8	5.8	29.0	29.1	29.3	23.7	22.0	21.9
New Jersey	233.5	236.3	237.0	1,133.9	1,178.2	1,177.2	574.2	577.1	577.7
Atlantic-Cape May	5.8	6.0	6.0	82.9	85.6	84.7	28.4	28.6	28.3
Bergen-Passaic	34.3	34.6	34.8	190.7	198.7	199.6	72.0	72.1	72.0
Camden	22.4	23.1	23.1	139.5	147.0	146.3	79.4	78.9	79.0
Jersey City	24.5	25.3	25.6	58.9	61.2	61.6	39.8	39.9	39.9
Middlesex-Somerset-Hunterdon	43.6	43.5	43.7	171.7	184.5	185.4	77.7	78.8	78.3
Monmouth-Ocean	17.9	18.6	18.6	114.2	118.4	116.7	63.3	62.4	62.6
Newark	70.0	70.6	70.5	290.9	296.4	297.8	143.5	145.4	146.1
Trenton	11.2	11.2	11.3	68.2	69.8	70.4	52.9	53.4	53.0
Vineland-Millville-Bridgeton	3.2	3.3	3.3	12.0	12.4	12.2	12.8	13.6	13.7
New Mexico	31.9	31.9	32.2	194.2	197.3	198.6	175.7	178.1	177.9
Albuquerque	17.2	17.1	17.0	101.6	105.7	105.9	63.7	64.9	65.1
Las Cruces	1.9	1.9	1.9	11.5	11.1	11.1	19.9	20.4	20.3
Santa Fe	3.2	3.2	3.2	20.9	21.6	21.4	24.2	23.8	23.7

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		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
New York	8,054.1	8,158.0	8,176.8	4.6	5.0	4.5	258.4	278.8	267.7
Albany-Schenectady-Troy	430.5	435.4	435.1	.5	.6	.5	13.8	15.4	14.3
Binghamton	113.7	116.4	116.3	(1)	(1)	(1)	3.7	3.9	3.5
Buffalo-Niagara Falls	545.8	547.4	547.7	(1)	(1)	(1)	19.9	21.9	19.9
Dutchess County	108.2	109.1	108.9	(1)	(1)	(1)	4.4	4.7	4.6
Elmira	44.2	43.5	43.7	(1)	(1)	(1)	1.5	1.7	1.7
Glens Falls	48.8	48.7	48.5	(1)	(1)	(1)	1.8	2.1	1.9
Nassau-Suffolk	1,124.1	1,141.6	1,149.4	(1)	(1)	(1)	46.5	50.7	49.8
New York PMSA	3,937.5	3,987.3	4,004.3	(1)	(1)	(1)	118.7	124.8	122.6
New York City	3,428.5	3,472.5	3,487.6	.3	.3	.3	93.7	99.3	97.8
Newburgh	119.8	119.4	119.1	(1)	(1)	(1)	4.5	4.5	4.4
Rochester	534.0	537.3	535.9	.5	.4	.4	16.5	17.8	16.6
Rockland County	101.3	101.5	101.9	(1)	(1)	(1)	4.2	4.1	3.9
Syracuse	338.2	340.6	340.2	(1)	(1)	(1)	11.9	12.9	12.1
Utica-Rome	127.0	128.5	127.6	(1)	(1)	(1)	2.9	3.4	3.1
Westchester County	387.9	393.2	394.8	(1)	(1)	(1)	18.8	19.2	18.7
North Carolina	3,647.1	3,707.7	3,712.8	3.8	4.0	3.9	194.9	204.6	203.5
Asheville	105.7	108.9	108.8	(1)	(1)	(1)	5.8	6.0	5.8
Charlotte-Gastonia-Rock Hill	741.6	746.6	747.9	(1)	(1)	(1)	44.2	45.5	45.7
Greensboro-Winston-Salem-High Point	622.6	622.7	622.5	(1)	(1)	(1)	29.6	30.5	30.4
Raleigh-Durham-Chapel Hill	583.2	601.3	601.5	(1)	(1)	(1)	31.3	33.8	33.8
North Dakota	313.8	323.5	322.6	4.0	4.3	4.1	13.9	16.7	15.0
Bismarck	48.0	49.3	49.1	(1)	(1)	(1)	2.4	2.7	2.5
Fargo-Moorhead	94.2	98.5	98.5	(1)	(1)	(1)	5.1	6.5	5.9
Grand Forks	49.8	52.4	52.5	(1)	(1)	(1)	2.1	2.9	2.8
Ohio	5,386.3	5,427.0	5,439.9	13.8	13.7	13.6	215.9	229.2	221.4
Akron	321.1	324.6	325.2	.3	.3	.3	12.6	13.9	13.2
Canton-Massillon	180.9	183.6	184.2	.7	.7	.7	8.1	9.0	8.7
Cincinnati	836.1	843.3	846.7	.7	.7	.7	38.9	42.0	40.9
Cleveland-Lorain-Elyria	1,136.4	1,151.3	1,155.6	1.0	1.0	.9	42.3	46.2	44.9
Columbus	815.7	825.3	828.3	.6	.6	.6	32.9	35.0	34.0
Dayton-Springfield	478.2	479.4	479.5	.4	.4	.4	17.6	18.1	17.7
Hamilton-Middletown	114.1	115.2	114.9	(1)	(1)	(1)	6.3	6.8	6.6
Lima	78.2	79.5	79.8	(1)	(1)	(1)	3.7	4.1	4.0
Mansfield	80.8	81.7	81.9	(1)	(1)	(1)	2.5	2.6	2.5
Steubenville-Weirton	47.6	50.2	50.4	.4	.4	.4	1.8	1.7	1.8
Toledo	320.5	317.6	317.5	.2	.2	.2	15.5	15.1	14.7
Youngstown-Warren	244.5	245.0	245.4	.6	.5	.5	9.5	10.2	10.0
Oklahoma	1,387.4	1,416.9	1,421.1	31.1	31.2	31.4	51.4	52.8	52.8
Enid	24.1	24.1	24.3	1.0	1.0	1.0	1.0	1.2	1.2
Lawton	38.1	38.7	38.8	.1	.1	.1	1.6	1.6	1.6
Oklahoma City	505.4	512.6	515.5	7.0	7.1	7.1	18.7	19.2	18.9
Tulsa	371.7	381.2	383.4	7.8	7.6	7.7	14.0	14.5	14.5
Oregon	1,509.4	1,557.2	1,557.7	1.8	1.9	1.9	79.6	86.0	85.1
Eugene-Springfield	136.1	140.8	140.0	.2	.2	.2	6.2	6.7	6.6
Medford-Ashland	68.5	70.7	71.2	.1	.1	.1	3.0	3.0	3.0
Portland-Vancouver	905.8	937.7	942.3	1.1	1.2	1.2	51.4	56.5	56.4
Salem	130.6	134.3	133.5	.2	.3	.3	6.6	7.1	7.1
Pennsylvania	5,419.7	5,533.9	5,527.0	19.6	20.2	20.0	203.6	228.0	218.7
Allentown Bethlehem-Easton	261.6	264.4	264.0	(1)	(1)	(1)	10.4	10.3	10.1
Altoona	57.9	58.1	58.1	(1)	(1)	(1)	2.5	2.6	2.4
Erie	128.7	130.7	129.9	(1)	(1)	(1)	4.5	4.5	3.9
Harrisburg-Lebanon-Carlisle	350.9	356.2	357.0	(1)	(1)	(1)	12.9	14.0	13.3
Johnstown	86.7	88.1	87.9	(1)	(1)	(1)	3.8	4.3	3.9
Lancaster	211.1	215.0	215.2	.4	.4	.4	11.9	12.2	12.0
Philadelphia PMSA	2,257.5	2,288.7	2,296.0	(1)	(1)	(1)	80.6	85.3	83.7
Philadelphia City	686.0	689.7	691.1	(1)	(1)	(1)	10.2	10.8	10.4
Pittsburgh	1,074.1	1,080.8	1,079.1	4.2	4.5	4.4	46.8	50.2	46.9
Reading	163.5	167.1	167.1	(1)	(1)	(1)	6.4	7.4	7.2
Scranton-Wilkes-Barre-Hazleton	274.8	277.3	276.7	.4	.4	.4	9.1	10.2	9.3
Sharon	47.3	48.8	48.7	(1)	(1)	(1)	1.5	1.6	1.5
State College	67.8	71.3	69.7	(1)	(1)	(1)	2.5	2.5	2.2
Williamsport	54.5	55.4	54.8	(1)	(1)	(1)	2.3	2.4	2.2
York	163.3	164.7	164.9	.5	.4	.4	7.8	8.2	7.9

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
New York	915.9	926.3	922.3	407.6	412.4	413.2	1,688.2	1,680.5	1,705.6
Albany-Schenectady-Troy	39.0	39.0	39.0	17.1	17.5	17.4	96.3	96.7	98.0
Binghamton	25.3	26.2	26.1	4.7	4.8	4.8	24.5	24.3	24.7
Buffalo-Niagara Falls	88.9	89.7	89.9	26.0	25.6	25.5	133.6	133.0	134.7
Dutchess County	17.5	18.1	18.0	4.0	3.9	3.8	21.3	21.3	21.6
Elmira	9.5	9.3	9.4	1.5	1.5	1.5	11.6	11.2	11.5
Glens Falls	8.4	8.2	8.2	1.3	1.4	1.4	11.4	11.1	11.0
Nassau-Suffolk	111.0	112.7	112.6	49.4	50.8	50.9	298.0	297.3	303.6
New York PMSA	314.0	317.9	313.9	234.0	233.6	233.8	703.6	706.0	718.9
New York City	260.6	264.5	260.5	207.5	207.3	207.4	586.0	590.4	600.5
Newburgh	12.1	11.5	11.4	6.5	6.7	6.8	33.8	33.7	33.7
Rochester	128.2	126.8	126.5	18.3	18.4	18.3	114.5	114.5	116.0
Rockland County	12.0	12.2	12.2	6.1	6.1	6.1	23.8	23.4	23.9
Syracuse	49.2	49.6	49.5	18.2	18.5	18.7	81.2	80.8	81.5
Utica-Rome	18.7	19.0	19.0	4.1	3.8	3.8	28.1	27.7	27.4
Westchester County	39.7	39.5	39.6	19.8	19.5	19.7	89.5	88.0	90.3
North Carolina	847.3	845.0	844.8	171.7	175.4	176.6	841.8	827.5	835.4
Asheville	20.1	19.8	19.7	4.9	4.9	4.9	26.2	26.7	26.8
Charlotte-Gastonia-Rock Hill	146.8	146.6	147.0	53.3	50.3	50.3	178.9	177.8	179.0
Greensboro--Winston-Salem--High Point	166.1	165.6	165.5	33.4	32.5	32.6	144.9	141.5	141.5
Raleigh-Durham-Chapel Hill	81.9	83.5	83.2	25.8	26.9	27.2	123.2	123.9	123.9
North Dakota	21.9	23.3	23.0	18.6	18.6	18.7	82.0	83.2	84.0
Bismarck	2.5	2.7	2.6	3.1	3.2	3.1	12.1	12.2	12.3
Fargo-Moorhead	7.7	8.2	8.4	5.5	5.4	5.3	27.4	27.9	28.2
Grand Forks	3.9	3.9	3.8	2.4	2.2	2.3	14.1	14.6	14.6
Ohio	1,094.0	1,085.1	1,090.0	234.7	237.0	237.1	1,348.8	1,345.0	1,362.5
Akron	65.0	63.0	63.7	14.8	14.8	14.7	81.3	81.5	82.1
Canton-Massillon	46.6	46.6	46.9	5.7	5.7	5.7	45.3	45.6	46.0
Cincinnati	142.7	141.7	142.1	43.5	44.4	44.1	221.7	220.7	224.6
Cleveland-Lorain-Elyria	223.0	222.9	225.0	45.4	45.2	45.4	277.1	277.7	281.2
Columbus	91.6	91.9	92.5	36.4	37.4	37.1	225.6	222.3	225.3
Dayton-Springfield	100.7	100.0	100.2	19.3	19.1	19.3	112.9	112.5	113.7
Hamilton-Middletown	21.3	21.0	21.2	4.6	4.7	4.6	31.6	31.1	31.2
Lima	19.7	19.6	19.7	2.9	3.0	3.0	19.2	19.7	19.8
Mansfield	23.0	22.8	22.9	4.2	4.0	4.0	18.6	18.7	19.0
Steubenville-Weirton	11.0	13.4	13.4	2.8	2.7	2.7	11.0	10.8	10.9
Toledo	61.3	61.7	61.7	14.4	14.5	14.4	81.2	79.7	80.1
Youngstown-Warren	59.2	58.8	58.8	10.0	10.3	10.4	63.2	62.8	63.4
Oklahoma	177.3	180.3	181.3	77.8	80.2	80.8	328.9	332.9	334.7
Enid	1.9	2.0	2.0	2.0	2.1	2.1	6.3	6.0	6.1
Lawton	3.7	3.7	3.6	1.8	1.8	1.8	9.0	8.9	9.0
Oklahoma City	52.4	54.4	54.5	24.1	24.7	25.0	124.5	124.3	126.1
Tulsa	56.5	58.4	58.6	28.3	30.3	30.5	89.4	91.3	92.4
Oregon	235.2	246.2	244.1	73.3	74.1	73.8	380.3	387.3	392.0
Eugene-Springfield	20.1	21.7	21.2	4.5	4.7	4.7	36.0	37.2	37.2
Medford-Ashland	8.9	9.2	9.1	3.2	3.3	3.2	22.1	22.4	23.1
Portland-Vancouver	141.6	150.0	150.0	51.3	52.6	52.8	231.3	236.2	240.8
Salem	16.6	17.4	16.5	3.5	3.4	3.5	28.9	29.0	29.4
Pennsylvania	932.4	936.9	936.6	275.0	275.3	274.6	1,255.7	1,268.0	1,277.1
Allentown Bethlehem-Easton	57.2	57.2	57.1	14.5	14.7	14.7	54.8	55.5	55.9
Altoona	10.4	10.0	10.1	4.3	4.3	4.3	15.7	15.6	15.7
Erie	33.9	34.1	34.0	4.7	4.5	4.5	29.3	29.5	29.7
Harrisburg-Lebanon-Carlisle	45.3	45.8	46.0	24.1	24.7	24.8	79.7	80.6	81.8
Johnstown	12.6	12.6	12.5	4.8	5.0	4.9	20.9	21.3	21.3
Lancaster	56.5	56.4	56.4	8.5	8.3	8.3	53.6	54.5	55.1
Philadelphia PMSA	306.8	308.6	308.6	105.9	107.8	107.9	516.1	514.8	522.0
Philadelphia City	60.7	60.5	60.6	32.6	32.7	32.9	117.1	116.6	117.7
Pittsburgh	133.5	135.0	135.1	66.3	65.9	66.1	266.5	261.5	264.1
Reading	43.9	43.9	43.7	7.4	7.6	7.6	38.5	39.3	39.9
Scranton--Wilkes-Barre--Hazleton	55.3	54.0	53.8	14.8	14.9	14.9	66.3	66.3	66.6
Sharon	10.8	11.4	11.5	2.0	2.2	2.2	12.6	13.1	13.2
State College	8.8	8.9	8.9	2.0	2.0	2.0	13.0	13.3	13.2
Williamsport	13.2	13.4	13.3	1.9	1.9	1.8	13.1	13.3	13.3
York	48.8	49.3	48.9	7.5	7.4	7.4	40.2	40.6	41.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
New York	725.5	725.3	728.1	2,663.2	2,736.0	2,742.0	1,390.7	1,393.6	1,393.4
Albany-Schenectady-Troy	25.7	25.7	25.9	129.0	130.6	130.0	109.0	109.9	110.1
Binghamton	3.9	4.1	4.1	29.2	30.6	30.6	22.3	22.6	22.6
Buffalo-Niagara Falls	28.2	28.5	28.5	160.2	159.9	160.3	89.0	88.8	88.9
Dutchess County	4.2	4.2	4.2	33.5	33.7	33.6	23.3	23.3	23.1
Elmira	1.4	1.3	1.3	11.2	10.7	10.8	7.5	7.6	7.6
Glens Falls	2.5	2.5	2.5	13.1	13.4	13.4	10.3	10.1	10.1
Nassau-Suffolk	79.2	78.3	78.9	357.5	368.3	369.1	182.6	183.7	184.6
New York PMSA	508.6	508.5	510.3	1,444.8	1,481.3	1,489.4	613.7	615.1	615.4
New York City	477.0	476.3	478.1	1,271.7	1,302.0	1,309.9	531.7	532.4	533.1
Newburgh	5.3	5.2	5.3	30.7	30.9	30.7	27.0	26.9	26.7
Rochester	23.0	23.0	23.0	153.2	156.2	155.4	79.8	80.3	79.8
Rockland County	5.0	4.9	4.9	30.5	31.3	31.4	19.8	19.6	19.5
Syracuse	18.0	17.8	17.8	98.9	99.0	98.9	60.8	61.8	61.8
Utica-Rome	7.7	7.7	7.6	37.4	39.0	38.8	28.3	27.9	28.0
Westchester County	25.5	26.1	26.1	136.5	141.9	142.0	58.1	58.9	58.5
North Carolina	157.9	162.0	162.4	844.5	890.9	888.9	585.2	598.3	597.3
Asheville	3.1	3.1	3.1	30.6	33.3	33.4	15.0	15.1	15.1
Charlotte-Gastonia-Rock Hill	48.9	50.2	50.2	179.6	182.0	182.0	89.9	94.2	93.7
Greensboro--Winston-Salem--High Point	31.4	32.1	32.1	148.9	151.3	151.3	68.3	69.2	69.1
Raleigh-Durham-Chapel Hill	27.7	28.3	28.5	174.2	179.3	180.4	119.1	125.6	124.5
North Dakota	14.8	15.5	15.6	85.9	88.7	88.7	72.7	73.2	73.5
Bismarck	2.3	2.5	2.5	15.4	15.7	15.8	10.2	10.3	10.3
Fargo-Moorhead	5.9	6.5	6.5	28.1	29.2	29.2	14.5	14.8	15.0
Grand Forks	1.5	1.5	1.5	13.0	14.8	14.8	12.8	12.5	12.7
Ohio	279.9	282.7	283.8	1,427.4	1,458.2	1,455.8	771.8	776.1	775.7
Akron	12.5	12.8	12.7	85.3	88.3	88.5	49.3	50.0	50.0
Canton-Massillon	5.9	5.9	5.9	48.7	49.8	49.9	19.9	20.3	20.4
Cincinnati	52.2	53.3	53.7	232.5	237.4	237.1	103.9	103.1	103.5
Cleveland-Lorain-Elyria	72.4	73.0	73.2	329.8	339.3	338.3	145.4	146.0	146.7
Columbus	68.4	69.1	69.5	224.2	231.6	231.6	136.0	137.4	138.2
Dayton-Springfield	18.2	18.3	18.4	135.1	138.2	137.5	74.0	72.8	72.3
Hamilton-Middletown	4.3	4.2	4.2	25.1	25.9	25.9	20.9	21.5	21.2
Lima	2.1	2.2	2.3	20.0	20.4	20.5	10.6	10.5	10.5
Mansfield	2.8	2.7	2.6	19.2	20.6	20.6	10.5	10.3	10.3
Steubenville-Weirton	1.4	1.5	1.5	13.0	13.4	13.4	6.2	6.3	6.3
Toledo	11.1	11.1	11.2	88.1	86.7	86.7	48.7	48.6	48.5
Youngstown-Warren	9.3	9.3	9.2	61.6	60.8	61.0	31.1	32.3	32.1
Oklahoma	68.5	70.2	70.5	373.6	389.9	389.1	278.8	279.4	280.5
Enid	1.0	1.0	1.1	6.6	6.6	6.6	4.3	4.2	4.2
Lawton	1.8	1.8	1.8	8.2	8.7	8.7	11.9	12.1	12.2
Oklahoma City	28.0	28.7	28.9	147.0	150.0	149.8	103.7	104.2	105.2
Tulsa	20.2	20.7	20.8	112.6	115.2	115.5	42.9	43.2	43.4
Oregon	92.9	95.3	95.8	393.6	407.1	408.0	252.7	259.3	257.0
Eugene-Springfield	7.0	7.1	7.2	35.9	37.4	37.2	26.2	25.8	25.7
Medford-Ashland	3.1	3.1	3.1	17.7	18.6	18.7	10.4	11.0	10.9
Portland-Vancouver	65.2	66.3	66.9	247.5	255.0	255.5	116.4	119.9	118.7
Salem	6.6	6.4	6.4	31.6	33.2	32.9	36.6	37.5	37.4
Pennsylvania	311.3	313.7	314.8	1,682.2	1,740.1	1,735.8	739.9	751.7	749.4
Allentown Bethlehem-Easton	13.4	13.1	13.1	80.1	82.4	81.4	31.2	31.2	31.7
Altoona	1.9	2.1	2.0	15.1	15.5	15.5	8.0	8.0	8.1
Erie	5.4	5.5	5.5	35.4	36.6	36.2	15.5	16.0	16.1
Harrisburg-Lebanon-Carlisle	25.3	24.8	25.0	91.1	99.0	98.7	72.5	67.3	67.4
Johnstown	4.5	4.6	4.6	26.2	26.4	26.8	13.9	13.9	13.9
Lancaster	8.9	9.3	9.3	52.2	54.6	54.2	19.1	19.3	19.5
Philadelphia PMSA	155.0	155.3	155.9	789.4	814.5	814.6	303.7	302.4	303.3
Philadelphia City	54.0	53.4	53.4	285.7	291.2	290.3	125.7	124.5	125.8
Pittsburgh	61.6	61.7	62.0	369.0	375.0	373.8	126.2	127.0	126.7
Reading	9.0	9.1	9.2	38.6	40.2	39.9	19.7	19.6	19.6
Scranton--Wilkes-Barre--Hazleton	13.9	14.4	14.6	79.3	81.7	81.2	35.7	35.4	35.9
Sharon	1.4	1.4	1.4	13.6	13.7	13.6	5.4	5.4	5.3
State College	2.1	2.2	2.3	13.7	14.2	14.2	25.7	28.2	26.9
Williamsport	2.2	2.3	2.3	14.6	14.7	14.6	7.2	7.4	7.3
York	4.9	5.0	5.1	36.9	37.4	37.6	16.7	16.4	16.5

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Rhode Island	450.4	456.1	457.1	.2	.2	.2	13.5	15.5	15.2
Providence-Fall River-Warwick	503.0	509.3	510.3	.2	.2	.2	14.7	16.9	16.3
South Carolina	1,693.3	1,731.7	1,740.1	1.8	1.8	1.8	95.4	100.6	101.5
Charleston-North Charleston	215.0	221.4	222.3	(1)	(1)	(1)	13.9	14.9	14.9
Columbia	276.3	284.2	286.4	(1)	(1)	(1)	14.6	16.0	16.0
Greenville-Spartanburg-Anderson	457.0	466.1	468.7	(1)	(1)	(1)	29.0	30.0	30.1
South Dakota	351.0	356.1	356.2	2.3	2.4	2.3	13.8	15.3	14.7
Rapid City	46.1	47.6	47.5	(1)	(1)	(1)	2.6	3.2	3.1
Sioux Falls	99.6	103.1	103.4	(1)	(1)	(1)	4.1	4.5	4.2
Tennessee	2,577.6	2,593.1	2,598.3	4.5	4.3	4.6	113.9	122.3	122.0
Chattanooga	219.0	217.8	218.0	(1)	(1)	(1)	9.8	9.7	9.7
Johnson City-Kingsport-Bristol	196.4	196.5	197.1	(1)	(1)	(1)	10.0	9.8	9.8
Knoxville	319.6	317.1	316.8	.5	.2	.5	18.7	18.2	18.3
Memphis	555.3	554.6	555.5	(1)	(1)	(1)	23.9	24.2	24.1
Nashville	617.9	624.9	625.8	(1)	(1)	(1)	30.1	31.1	30.9
Texas	8,408.8	8,607.5	8,638.2	158.9	164.9	165.3	445.6	466.0	465.7
Abilene	54.9	55.6	55.7	1.4	1.4	1.4	2.2	2.2	2.2
Amarillo	93.7	96.9	97.0	.6	.6	.6	4.3	4.7	4.8
Austin-San Marcos	545.5	557.0	556.5	1.2	1.2	1.2	27.7	27.4	27.2
Beaumont-Port Arthur	152.7	155.8	156.8	.7	.7	.8	12.9	13.7	14.1
Brazoria	73.5	74.9	75.0	1.4	1.5	1.5	8.7	8.5	8.6
Brownsville-Harlingen-San Benito	95.2	98.8	99.3	(1)	(1)	(1)	3.2	3.5	3.6
Bryan-College Station	67.3	69.1	69.1	.7	.8	.8	2.7	3.0	2.9
Corpus Christi	154.3	157.5	158.6	2.3	2.5	2.4	13.1	13.4	13.4
Dallas	1,704.5	1,770.3	1,777.6	11.4	12.0	12.0	74.8	83.7	83.4
El Paso	239.5	242.8	243.7	(1)	(1)	(1)	11.2	11.6	11.8
Ft. Worth-Arlington	692.9	718.4	721.7	4.5	4.4	4.4	33.1	35.7	35.4
Galveston-Texas City	86.7	89.2	89.5	.8	.8	.8	4.2	4.6	4.6
Houston	1,839.4	1,894.7	1,906.8	66.3	67.9	68.6	127.9	138.4	138.9
Killeen Temple	95.6	98.8	99.1	(1)	(1)	(1)	3.8	4.3	4.2
Laredo	57.7	61.0	61.6	3.3	3.4	3.4	2.1	2.1	2.1
Longview-Marshall	86.6	87.0	86.9	3.2	3.3	3.3	3.9	3.9	3.8
Lubbock	111.8	115.6	115.9	.1	.1	.1	4.0	4.1	4.2
McAllen-Edinburg-Mission	130.8	138.1	139.8	1.0	1.1	1.1	6.5	7.0	7.1
Odessa Midland	98.2	101.3	101.4	11.8	12.6	12.5	5.7	6.3	6.3
San Angelo	42.2	42.1	42.0	.7	.7	.7	1.8	1.9	1.9
San Antonio	642.7	663.3	666.0	1.9	1.9	1.9	33.1	34.8	35.0
Sherman-Danison	42.6	43.2	43.4	(1)	(1)	(1)	1.8	2.1	2.1
Texarkana	50.6	50.5	50.5	(1)	(1)	(1)	2.2	2.2	2.1
Tyler	75.0	76.5	77.0	1.5	1.6	1.6	2.8	2.7	2.7
Victoria	34.1	35.0	34.7	1.5	1.5	1.5	2.2	2.1	2.1
Waco	94.1	96.9	96.8	(1)	(1)	(1)	4.3	4.5	4.5
Wichita Falls	58.8	59.1	59.0	1.1	1.1	1.1	2.2	2.2	2.2
Utah	985.1	1,021.4	1,025.7	8.1	8.4	8.4	60.3	67.7	65.2
Provo-Orem	135.0	140.4	140.4	(1)	(1)	(1)	8.8	9.5	9.0
Salt Lake City-Ogden	661.4	688.4	691.1	3.0	2.9	2.9	39.9	44.9	43.8
Vermont	281.2	282.3	285.1	.6	.6	.6	12.8	13.3	12.5
Barre-Montpelier	30.9	29.3	29.3	(1)	(1)	(1)	1.6	1.3	1.2
Burlington	99.2	101.7	101.8	(1)	(1)	(1)	4.7	5.1	5.1
Virginia	3,202.6	3,280.4	3,290.0	10.6	10.7	10.7	178.9	189.5	188.4
Bristol	36.9	37.6	37.0	(1)	(1)	(1)	1.6	1.4	1.4
Charlottesville	80.5	82.7	82.8	(1)	(1)	(1)	4.2	4.5	4.5
Danville	45.7	46.0	46.0	(1)	(1)	(1)	2.3	2.5	2.4
Lynchburg	99.1	101.0	100.6	(1)	(1)	(1)	5.9	6.1	6.1
Norfolk-Virginia Beach-Newport News	661.8	663.8	663.0	(1)	(1)	(1)	41.0	42.1	41.8
Northern Virginia	983.3	1,024.7	1,031.7	.6	.7	.7	53.9	59.7	59.4
Richmond-Petersburg	513.8	527.5	530.6	.8	.7	.7	31.8	33.7	33.7
Roanoke	142.8	144.6	144.9	(1)	(1)	(1)	8.0	9.0	9.0
Washington	2,462.2	2,559.6	2,550.5	3.4	3.5	3.4	127.0	138.4	133.0
Seattle-Bellevue-Everett	1,267.2	1,334.1	1,339.7	.7	.7	.8	62.5	67.7	66.6
Spokane	181.7	190.5	190.0	(1)	(1)	(1)	9.6	11.3	10.3
Tacoma	228.6	232.1	232.9	.2	.2	.2	12.0	12.6	12.2

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		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Rhode Island	82.4	81.6	81.6	15.3	15.4	15.4	101.9	102.7	103.5
Providence-Fall River-Warwick	104.6	104.4	103.9	17.6	17.9	18.0	118.3	117.2	119.1
South Carolina	361.1	359.3	359.8	74.4	76.2	76.9	405.3	416.8	421.6
Charleston-North Charleston	20.7	20.7	20.9	11.0	11.3	11.3	54.7	55.8	56.6
Columbia	25.1	25.2	25.4	12.7	12.1	12.1	65.4	67.5	68.8
Greenville-Spartanburg-Anderson	124.1	123.8	124.3	19.8	20.4	20.5	116.8	119.4	121.1
South Dakota	48.4	49.2	49.4	16.7	16.1	16.0	88.3	88.4	88.2
Rapid City	4.2	4.8	4.8	2.0	2.0	2.0	14.1	14.4	14.1
Sioux Falls	13.4	14.2	14.1	6.4	6.3	6.2	26.0	25.9	26.1
Tennessee	521.2	516.1	515.9	144.1	142.0	142.1	621.6	619.1	624.8
Chattanooga	43.9	43.5	43.6	8.3	8.5	8.5	52.8	52.4	52.6
Johnson City-Kingsport-Bristol	53.4	51.8	52.1	8.0	7.6	7.6	44.7	44.3	44.3
Knoxville	48.5	48.0	48.1	14.4	13.7	13.7	83.2	83.5	83.7
Memphis	62.6	63.1	62.5	61.8	60.3	60.5	145.6	147.7	148.6
Nashville	95.7	95.0	95.2	31.7	31.6	32.0	152.3	154.2	155.0
Texas	1,063.3	1,079.6	1,083.1	497.2	506.8	511.2	2,056.1	2,081.0	2,103.2
Abilene	3.2	3.3	3.3	2.7	2.5	2.5	14.7	14.7	14.8
Amarillo	9.2	9.7	9.7	5.7	5.3	5.3	26.9	27.9	28.1
Austin-San Marcos	72.8	73.7	74.1	17.9	18.1	18.3	119.3	121.5	122.7
Beaumont-Port Arthur	24.3	24.8	24.7	8.0	7.9	7.9	36.5	36.6	37.2
Brazoria	16.8	16.6	16.6	2.8	2.9	3.0	14.4	14.9	14.9
Brownsville-Harlingen-San Benito	12.6	12.3	12.4	4.2	4.2	4.2	23.8	24.8	25.1
Bryan-College Station	3.6	3.7	3.7	1.3	1.4	1.4	14.8	15.2	15.4
Corpus Christi	13.6	13.7	13.9	6.4	6.3	6.4	36.0	36.3	36.9
Dallas	238.9	243.2	243.4	115.7	124.2	124.9	432.4	444.3	448.8
El Paso	44.6	43.3	43.4	13.1	12.9	13.0	57.6	57.7	58.4
Ft. Worth-Arlington	108.0	109.9	109.6	62.8	66.2	66.9	178.7	186.5	189.3
Galveston-Texas City	8.0	8.2	8.2	4.0	4.4	4.4	18.5	19.1	19.2
Houston	200.1	205.7	207.3	127.1	130.1	130.2	437.1	441.3	448.1
Killeen Temple	9.8	9.0	9.1	3.5	3.5	3.6	23.0	23.6	23.7
Laredo	1.4	1.6	1.6	8.9	10.0	10.1	15.8	16.7	17.0
Longview-Marshall	18.8	18.5	18.4	3.9	3.8	3.8	22.2	22.1	22.3
Lubbock	7.5	7.8	7.8	6.0	5.7	5.8	32.5	33.9	34.2
McAllen-Edinburg-Mission	13.2	13.2	13.4	4.5	4.7	4.7	36.6	39.0	39.8
Odessa Midland	7.0	7.1	7.2	3.9	4.0	4.0	26.7	26.6	26.8
San Angelo	5.4	5.3	5.2	2.2	2.1	2.1	10.2	9.7	9.7
San Antonio	49.4	50.2	50.4	31.1	32.0	32.3	160.7	164.8	167.0
Sherman-Denison	10.5	10.3	10.3	1.5	1.5	1.5	9.7	9.4	9.5
Texarkana	6.0	6.0	6.0	2.2	2.1	2.1	13.3	13.5	13.6
Tyler	11.2	11.0	11.0	3.5	3.7	3.8	19.4	19.6	19.8
Victoria	3.1	3.3	3.1	1.5	1.4	1.5	9.5	9.6	9.7
Waco	16.5	16.4	16.5	3.6	3.8	3.8	22.0	22.4	22.6
Wichita Falls	8.2	8.1	8.2	2.8	2.9	2.9	13.8	13.8	13.9
Utah	131.7	134.0	134.4	55.7	57.5	58.3	243.0	247.7	251.2
Provo-Orem	19.5	20.1	20.2	2.3	2.3	2.3	30.4	31.9	32.1
Salt Lake City-Ogden	81.8	83.4	83.5	43.2	44.3	45.4	167.6	171.1	174.0
Vermont	46.3	47.3	47.4	12.3	12.1	12.1	65.6	66.3	67.1
Barre-Montpelier	3.6	3.4	3.3	1.1	1.0	1.0	6.8	6.6	6.8
Burlington	17.9	18.7	18.8	4.4	4.4	4.2	22.5	21.6	21.9
Virginia	400.1	397.6	398.6	166.0	170.8	171.5	746.0	756.8	765.6
Bristol	10.0	10.1	9.9	1.2	1.1	1.1	9.9	10.1	10.0
Charlottesville	8.1	8.3	8.3	2.4	2.3	2.3	16.8	16.9	17.1
Danville	16.0	15.4	15.3	1.1	1.0	1.0	10.0	10.0	10.1
Lynchburg	25.5	25.0	24.9	3.7	3.7	3.7	22.9	22.7	22.7
Norfolk-Virginia Beach-Newport News	67.8	66.5	66.8	32.4	33.2	33.2	162.1	161.6	161.2
Northern Virginia	41.5	42.5	42.5	59.3	61.0	61.4	223.8	225.2	229.8
Richmond-Petersburg	60.2	60.1	60.6	27.2	27.8	27.9	125.3	127.8	130.5
Roanoke	19.3	19.3	19.2	8.5	8.7	8.7	39.3	39.2	39.4
Washington	354.4	377.1	374.7	125.4	127.1	127.4	610.1	624.0	627.7
Seattle-Bellevue-Everett	206.5	226.5	228.3	75.8	78.5	79.4	308.4	318.2	323.0
Spokane	22.0	22.1	21.8	8.3	8.5	8.4	46.1	50.2	50.9
Tacoma	26.5	27.4	27.4	10.0	10.5	10.5	57.2	58.6	59.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Rhode Island	25.5	26.0	26.2	148.1	150.6	150.0	63.5	64.1	65.0
Providence-Fall River-Warwick	27.7	28.5	28.5	154.8	157.8	157.3	65.1	66.4	67.0
South Carolina	72.8	74.6	75.2	374.8	391.1	391.2	307.7	311.3	312.1
Charleston-North Charleston	8.4	8.7	8.7	56.5	59.1	58.9	49.8	50.9	51.0
Columbia	19.8	20.1	20.2	67.4	71.5	71.7	71.3	71.8	72.2
Greenville-Spartanburg-Anderson	15.5	15.5	15.6	96.3	100.6	100.6	55.5	56.4	56.5
South Dakota	20.1	21.6	21.7	89.9	91.1	92.1	71.5	72.0	71.8
Rapid City	1.7	1.8	1.7	14.0	13.6	13.8	7.5	7.8	8.0
Sioux Falls	10.9	12.3	12.4	29.1	30.1	30.4	9.7	9.8	10.0
Tennessee	119.0	119.3	119.5	663.0	674.6	673.7	390.3	395.4	395.7
Chattanooga	14.3	14.6	14.7	54.1	54.1	53.8	35.8	35.0	35.1
Johnson City-Kingsport-Bristol	5.7	5.7	5.7	45.5	47.2	47.4	29.1	30.1	30.2
Knoxville	13.5	13.4	13.4	84.4	84.1	83.2	56.4	56.0	55.9
Memphis	28.6	28.7	28.7	153.8	153.7	154.2	79.0	76.9	76.9
Nashville	37.3	38.2	38.3	191.9	194.5	194.1	78.9	80.3	80.3
Texas	449.1	458.2	459.3	2,255.2	2,350.4	2,351.3	1,483.4	1,500.6	1,499.1
Abilene	2.0	2.2	2.2	18.7	19.2	19.1	10.0	10.1	10.2
Amarillo	4.7	4.8	4.8	25.2	26.4	26.3	17.1	17.5	17.4
Austin-San Marcos	28.9	29.7	29.7	152.4	157.3	157.2	125.3	128.1	126.1
Beaumont-Port Arthur	4.8	5.0	5.0	39.4	40.0	40.0	26.1	27.1	27.1
Brazoria	1.8	1.8	1.8	13.5	14.1	14.0	14.1	14.6	14.6
Brownsville-Harlingen-San Benito	3.6	3.7	3.8	25.6	26.6	26.7	22.2	23.7	23.5
Bryan-College Station	2.4	2.4	2.4	13.8	14.2	14.3	28.0	28.4	28.2
Corpus Christi	6.3	6.4	6.4	45.5	47.5	47.8	31.1	31.4	31.4
Dallas	131.9	134.4	134.8	504.4	531.5	532.7	195.0	197.0	197.6
El Paso	8.8	8.8	8.9	52.6	55.2	55.1	51.6	53.3	53.1
Ft. Worth-Arlington	31.2	32.5	32.5	182.0	189.5	189.5	92.6	93.7	94.1
Galveston-Texas City	5.4	5.4	5.5	17.4	18.0	18.2	28.4	28.7	28.6
Houston	96.2	98.6	99.2	537.7	559.4	560.6	247.0	253.3	253.9
Killeen Temple	4.0	4.1	4.1	24.8	27.0	27.2	26.7	27.3	27.2
Laredo	2.1	2.2	2.3	9.9	10.6	10.7	14.2	14.4	14.4
Longview-Marshall	3.0	3.1	3.1	20.0	20.6	20.5	11.6	11.7	11.7
Lubbock	5.4	5.5	5.5	31.2	32.8	32.8	25.1	25.7	25.5
McAllen-Edinburg-Mission	4.6	4.9	5.0	28.3	30.1	30.6	36.1	38.1	38.1
Odessa Midland	3.4	3.5	3.5	22.4	23.7	23.8	17.3	17.5	17.3
San Angelo	1.6	1.6	1.6	11.6	12.0	12.1	8.7	8.8	8.7
San Antonio	42.4	44.7	44.7	191.1	201.6	201.6	133.0	133.3	133.1
Sherman-Denison	2.1	2.1	2.1	11.4	12.0	12.1	5.6	5.8	5.8
Texarkana	1.7	1.8	1.8	13.4	13.6	13.7	11.8	11.3	11.2
Tyler	3.8	4.0	4.0	21.6	22.4	22.5	11.2	11.5	11.6
Victoria	1.7	1.7	1.4	8.4	9.1	9.1	6.2	6.3	6.3
Waco	5.7	5.7	5.7	27.0	28.8	28.4	15.0	15.3	15.3
Wichita Falls	2.2	2.2	2.2	15.8	16.0	16.0	12.7	12.8	12.5
Utah	51.8	52.7	53.4	265.1	277.8	280.5	169.4	175.6	174.3
Provo-Orem	3.8	4.0	4.1	52.1	53.3	53.4	18.1	19.3	19.3
Salt Lake City-Ogden	42.3	44.0	44.3	177.0	186.3	186.8	106.6	111.5	110.4
Vermont	12.2	12.2	12.2	83.2	82.5	85.0	48.2	48.0	48.2
Barre-Montpelier	2.5	2.3	2.3	8.1	7.7	7.9	7.2	7.0	6.8
Burlington	4.8	5.0	5.0	28.4	30.1	30.2	16.5	16.8	16.6
Virginia	163.8	167.1	168.5	927.5	968.0	972.0	609.7	619.9	614.7
Bristol	1.1	1.2	1.2	7.5	8.0	7.8	5.6	5.7	5.6
Charlottesville	3.9	4.0	4.1	19.2	20.0	19.9	25.9	26.7	26.6
Danville	1.4	1.4	1.4	8.9	9.7	9.8	6.0	6.0	6.0
Lynchburg	4.2	4.5	4.5	24.1	25.4	25.2	12.8	13.6	13.5
Norfolk-Virginia Beach-Newport News	30.1	31.3	31.6	189.1	190.6	190.0	139.3	138.5	138.4
Northern Virginia	53.0	52.8	53.4	372.7	401.3	405.6	178.5	181.5	178.9
Richmond-Petersburg	43.1	43.8	44.2	126.6	131.9	132.3	98.8	101.7	100.7
Roanoke	9.0	8.7	8.7	41.3	42.0	42.4	17.4	17.7	17.5
Washington	125.0	127.3	128.1	658.7	691.8	693.0	458.2	470.4	463.2
Seattle-Bellevue-Everett	76.4	79.1	80.1	359.6	376.3	378.0	177.3	187.1	183.5
Spokane	10.7	10.8	10.8	54.2	56.2	56.5	30.8	31.4	31.3
Tacoma	11.2	11.3	11.3	63.3	63.5	64.1	48.2	48.0	47.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
West Virginia	707.5	720.6	717.6	24.8	23.9	23.9	34.6	36.9	34.7
Charleston	130.7	131.0	130.1	2.0	2.0	2.0	6.9	6.9	6.7
Huntington-Ashland	121.1	122.9	123.3	1.6	1.4	1.3	5.6	5.7	5.5
Parkersburg-Marietta	69.8	70.3	70.1	.4	.4	.4	4.5	4.4	4.4
Wheeling	66.2	66.0	65.8	1.6	1.7	1.7	2.3	2.7	2.5
Wisconsin	2,643.8	2,702.3	2,699.2	2.3	2.7	2.3	106.8	115.9	109.0
Appleton-Oshkosh-Neenah	191.7	195.0	194.5	(1)	(1)	(1)	11.0	12.2	11.6
Eau Claire	70.4	73.0	72.7	(1)	(1)	(1)	2.6	3.0	2.8
Green Bay	133.0	134.8	134.9	(1)	(1)	(1)	6.6	7.4	7.0
Janesville-Beloit	66.9	67.4	67.2	(1)	(1)	(1)	2.6	2.6	2.5
Kenosha	49.3	50.2	50.4	(1)	(1)	(1)	2.2	2.2	2.2
La Crosse	69.2	70.8	70.4	(1)	(1)	(1)	2.4	2.9	2.6
Madison	268.3	275.9	274.6	(1)	(1)	(1)	12.1	13.7	13.1
Milwaukee-Waukesha	827.9	843.8	846.8	(1)	(1)	(1)	29.3	31.3	30.5
Racine	80.2	83.7	83.6	(1)	(1)	(1)	3.0	3.4	3.2
Sheboygan	58.7	59.8	60.0	(1)	(1)	(1)	2.4	2.6	2.6
Wausau	62.6	64.6	64.9	(1)	(1)	(1)	2.8	2.8	2.7
Wyoming	219.7	221.2	220.1	15.9	16.5	16.3	13.9	15.2	13.5
Casper	30.2	30.9	30.8	1.9	2.0	2.0	1.6	1.8	1.7
Puerto Rico	986.6	955.2	962.0	1.0	1.0	1.0	56.6	56.4	55.3
Caguas	65.3	68.0	69.0	(1)	(1)	(1)	3.6	4.3	4.3
Mayaguez	70.9	68.2	68.8	(1)	(1)	(1)	3.6	4.1	4.3
Ponce	76.1	73.3	73.7	(1)	(1)	(1)	4.8	4.3	4.3
San Juan-Bayamon	620.7	598.1	603.2	.5	.5	.5	39.4	37.6	36.3
Virgin Islands	41.9	41.7	42.4	(1)	(1)	(1)	2.3	2.2	2.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
West Virginia	81.4	83.6	83.8	39.1	38.5	38.6	164.9	167.2	167.8
Charleston	9.9	10.1	10.0	9.2	8.9	8.9	32.8	31.8	32.2
Huntington-Ashland	17.3	17.1	17.2	6.8	6.9	6.9	32.4	32.1	32.5
Parkersburg-Marietta	13.4	12.6	12.8	2.9	2.7	2.7	17.9	17.6	17.7
Wheeling	6.1	6.3	6.2	3.1	3.0	3.0	17.1	16.6	16.7
Wisconsin	596.4	606.6	607.3	123.2	123.6	123.3	614.3	619.3	621.3
Appleton-Oshkosh-Neenah	58.5	57.8	57.9	7.3	7.6	7.5	41.5	42.6	42.3
Eau Claire	11.2	12.3	12.4	3.5	3.5	3.5	19.5	19.4	19.3
Green Bay	27.7	28.3	28.3	9.3	9.7	9.7	31.6	32.3	32.5
Janesville-Beloit	21.2	21.6	21.7	2.5	2.5	2.6	15.3	14.8	14.8
Kenosha	11.1	11.8	11.9	1.7	1.6	1.6	13.1	12.9	12.9
La Crosse	11.4	11.8	11.9	3.0	3.0	3.0	20.4	20.4	20.5
Madison	28.0	28.3	28.3	9.0	9.2	9.1	60.0	60.0	59.9
Milwaukee-Waukesha	175.3	177.0	177.5	40.0	38.7	39.1	181.4	181.1	182.8
Racine	25.0	25.4	25.5	3.1	3.3	3.2	16.7	17.0	17.1
Sheboygan	23.4	24.1	24.1	1.7	1.6	1.6	11.1	11.0	11.1
Wausau	17.2	18.2	18.2	3.4	3.5	3.5	15.5	16.0	16.2
Wyoming	10.9	10.9	10.8	13.7	14.0	14.0	51.9	52.0	52.3
Casper	1.5	1.4	1.4	1.7	1.6	1.6	8.7	8.8	8.8
Puerto Rico	154.3	148.2	147.4	24.8	22.8	22.8	206.5	197.6	203.2
Caguas	15.8	16.2	16.2	.8	.7	.7	15.0	14.6	15.2
Mayaguez	20.2	18.0	17.9	.7	.7	.7	11.9	11.4	12.0
Ponce	10.7	10.3	10.2	2.6	2.6	2.6	13.8	12.8	13.2
San Juan-Bayamon	71.2	67.5	67.7	18.5	17.9	18.4	136.8	131.0	134.4
Virgin Islands	2.3	2.2	2.2	2.3	2.4	2.4	9.6	9.7	9.8

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		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
West Virginia	27.4	27.6	27.7	194.3	199.7	198.7	141.0	143.2	142.4
Charleston	7.1	7.2	7.2	39.2	39.9	39.7	23.6	24.2	23.4
Huntington-Ashland	3.7	3.8	3.8	32.2	34.1	34.4	21.5	21.8	21.7
Parkersburg-Marietta	2.5	2.6	2.6	17.7	19.4	19.1	10.5	10.6	10.4
Wheeling	2.7	2.7	2.7	22.6	22.6	22.5	10.7	10.4	10.5
Wisconsin	139.7	143.4	144.4	668.5	691.5	694.0	392.7	399.2	397.6
Appleton-Oshkosh-Neenah	9.3	9.7	9.7	41.3	42.0	42.3	22.7	23.1	23.2
Eau Claire	2.5	2.5	2.5	18.8	19.8	19.9	12.2	12.5	12.3
Green Bay	9.9	9.3	9.6	32.3	32.3	32.6	15.6	15.3	15.1
Janesville-Beloit	1.8	1.7	1.7	14.9	15.0	14.8	8.8	9.1	9.2
Kenosha	1.6	1.5	1.5	12.3	12.2	12.5	7.4	8.0	7.9
La Crosse	2.8	2.9	3.0	19.1	19.5	19.5	10.1	10.2	10.1
Madison	20.1	20.1	20.3	66.1	69.5	69.8	73.0	75.1	74.1
Milwaukee-Waukesha	57.5	59.1	59.3	253.2	265.1	265.7	91.3	91.4	92.0
Racine	2.4	2.5	2.5	20.6	22.5	22.4	9.4	9.6	9.6
Sheboygan	2.3	2.5	2.5	11.5	11.5	11.6	6.4	6.5	6.5
Wausau	4.7	4.9	4.9	11.8	12.0	12.2	7.2	7.3	7.3
Wyoming	7.9	7.9	8.0	45.4	45.2	45.9	60.1	59.5	59.3
Casper	1.2	1.2	1.2	8.2	8.7	8.6	5.4	5.4	5.5
Puerto Rico	44.3	44.8	45.3	185.7	179.9	180.0	313.4	304.5	307.0
Caguas	1.7	1.9	2.0	11.3	11.0	11.2	17.1	19.3	19.4
Mayaguez	2.1	2.0	2.0	10.9	11.5	11.3	21.5	20.5	20.6
Ponce	2.4	2.3	2.3	15.2	14.7	14.8	26.6	26.3	26.3
San Juan-Bayamon	34.7	35.2	35.6	129.1	123.5	123.7	190.5	184.9	186.6
Virgin Islands	1.8	1.8	1.8	9.8	9.9	10.5	13.8	13.5	13.5

¹ Combined with construction.

² Not available.

P = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1996 benchmarks.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Total private		34.9	33.9	34.8	34.7	34.2	-	-	-	-	-
Goods-producing		41.8	40.4	41.4	42.0	40.8	-	-	-	-	-
Mining		46.0	44.2	45.7	45.1	44.9	-	-	-	-	-
Metal mining	10	44.4	45.1	44.4	44.5	-	-	-	-	-	-
Iron ores	101	45.4	47.6	46.2	45.4	-	-	-	-	-	-
Copper ores	102	45.4	45.7	45.4	46.2	-	-	-	-	-	-
Coal mining	12	46.2	46.6	45.2	44.5	-	-	-	-	-	-
Bituminous coal and lignite mining	122	46.2	46.7	45.3	44.5	-	-	-	-	-	-
Oil and gas extraction	13	45.9	43.8	45.6	44.8	-	-	-	-	-	-
Crude petroleum and natural gas	131	43.6	44.4	43.0	41.4	-	-	-	-	-	-
Oil and gas field services	138	47.2	43.6	46.9	46.5	-	-	-	-	-	-
Nonmetallic minerals, except fuels	14	46.7	42.3	46.8	46.7	-	-	-	-	-	-
Crushed and broken stone	142	48.7	41.4	48.5	48.6	-	-	-	-	-	-
Construction		38.6	36.4	37.8	38.4	37.3	-	-	-	-	-
General building contractors	15	38.1	36.2	37.6	38.2	-	-	-	-	-	-
Residential building construction	152	36.2	35.0	36.5	36.8	-	-	-	-	-	-
Operative builders	153	38.5	36.8	37.3	38.1	-	-	-	-	-	-
Nonresidential building construction	154	39.8	37.3	38.7	39.7	-	-	-	-	-	-
Heavy construction, except building	16	41.4	38.3	39.3	40.8	-	-	-	-	-	-
Highway and street construction	161	40.9	35.7	37.4	38.6	-	-	-	-	-	-
Heavy construction, except highway	162	41.7	39.1	40.2	41.6	-	-	-	-	-	-
Special trade contractors	17	38.1	36.1	37.5	38.0	-	-	-	-	-	-
Plumbing, heating, and air conditioning	171	39.5	38.5	39.2	39.6	-	-	-	-	-	-
Painting and paper hanging	172	36.9	34.6	36.5	36.8	-	-	-	-	-	-
Electrical work	173	40.6	39.1	39.6	40.4	-	-	-	-	-	-
Masonry, stonework, and plastering	174	35.6	32.9	34.9	35.2	-	-	-	-	-	-
Carpentry and floor work	175	35.7	33.7	35.8	36.0	-	-	-	-	-	-
Roofing, siding, and sheet metal work	176	33.6	29.7	32.7	33.3	-	-	-	-	-	-
Manufacturing		42.8	41.5	42.6	43.1	41.8	5.1	4.5	5.2	5.4	4.7
Durable goods		43.6	42.3	43.3	43.9	42.5	5.5	4.8	5.5	5.8	5.0
Lumber and wood products	24	41.2	39.6	41.4	41.2	40.1	4.4	3.6	4.5	4.4	-
Logging	241	39.8	39.3	40.3	40.7	-	5.0	4.8	5.1	5.3	-
Sawmills and planing mills	242	42.6	41.2	42.3	42.3	-	5.4	4.7	5.1	5.1	-
Sawmills and planing mills, general	2421	42.7	41.3	42.6	42.5	-	5.7	5.1	5.5	5.5	-
Hardwood dimension and flooring mills	2426	42.3	40.9	41.2	41.7	-	4.1	3.5	3.7	3.7	-
Millwork, plywood, and structural members	243	41.8	40.0	42.2	41.7	-	4.6	3.4	4.9	4.6	-
Millwork	2431	41.0	39.3	41.9	41.0	-	3.4	2.4	4.3	3.6	-
Wood kitchen cabinets	2434	40.6	38.7	41.8	41.4	-	5.1	3.2	5.3	5.5	-
Hardwood veneer and plywood	2435	44.3	43.1	42.3	43.1	-	5.9	5.6	4.7	5.4	-
Softwood veneer and plywood	2436	46.0	44.0	44.9	44.7	-	6.2	5.6	6.1	5.9	-
Wood containers	244	39.5	38.1	39.7	40.1	-	3.5	2.9	3.7	4.1	-
Wood buildings and mobile homes	245	38.3	35.7	39.6	38.5	-	2.6	1.6	2.9	2.6	-
Mobile homes	2451	38.4	35.5	39.6	38.4	-	2.5	1.4	2.7	2.6	-
Miscellaneous wood products	249	41.6	40.0	40.9	40.8	-	3.8	3.1	3.8	3.4	-
Furniture and fixtures	25	41.6	39.3	41.2	42.1	40.9	3.9	3.0	3.9	4.4	-
Household furniture	251	40.3	38.3	40.1	41.1	-	3.3	2.6	3.2	3.8	-
Wood household furniture	2511	40.7	38.3	40.4	41.2	-	3.1	2.5	3.1	3.2	-
Upholstered household furniture	2512	39.9	37.8	39.7	41.7	-	3.3	2.0	3.0	4.3	-
Metal household furniture	2514	41.2	41.3	41.8	41.0	-	3.8	4.6	5.0	5.8	-
Mattresses and bedsprings	2515	40.1	38.5	38.7	39.1	-	3.6	3.3	3.2	3.4	-
Office furniture	252	44.4	41.3	44.0	45.4	-	5.0	3.5	5.5	6.0	-
Public building and related furniture	253	41.4	39.6	40.8	41.3	-	5.3	4.2	3.9	3.9	-
Partitions and fixtures	254	43.4	41.7	42.8	43.2	-	4.5	3.7	4.7	4.8	-
Miscellaneous furniture and fixtures	259	43.1	38.8	42.8	43.4	-	4.7	2.8	5.2	5.6	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Total private		\$12.06	\$12.11	\$12.51	\$12.51	\$12.58	\$420.89	\$410.53	\$435.35	\$434.10	\$430.24
Goods-producing		13.73	13.68	14.11	14.20	14.11	573.91	552.67	584.15	596.40	575.69
Mining		15.95	16.18	16.38	16.47	16.70	733.70	715.16	748.57	742.80	749.83
Metal mining	10	17.79	17.52	18.27	18.00	—	789.88	790.15	811.19	801.00	—
Iron ores	101	18.59	18.33	19.74	19.00	—	843.99	872.51	911.99	862.60	—
Copper ores	102	16.09	16.06	16.51	16.38	—	730.49	733.94	749.55	756.76	—
Coal mining	12	19.14	19.24	19.14	19.58	—	884.27	896.58	865.13	871.31	—
Bituminous coal and lignite mining	122	19.51	19.56	19.42	19.87	—	901.36	913.45	879.73	884.22	—
Oil and gas extraction	13	15.29	15.56	15.93	15.98	—	701.81	681.53	726.41	715.90	—
Crude petroleum and natural gas	131	20.90	20.45	21.87	21.90	—	911.24	907.98	940.41	906.66	—
Oil and gas field services	138	12.51	12.89	13.32	13.47	—	590.47	562.00	624.71	626.36	—
Nonmetallic minerals, except fuels	14	13.83	13.79	14.36	14.38	—	645.86	583.32	672.05	671.55	—
Crushed and broken stone	142	13.22	13.00	13.69	13.73	—	643.81	538.20	663.97	667.28	—
Construction		15.66	15.73	16.25	16.34	16.24	604.48	572.57	614.25	627.46	605.75
General building contractors	15	14.96	14.99	15.51	15.62	—	569.98	542.64	583.18	596.68	—
Residential building construction	152	13.75	13.80	14.40	14.57	—	497.75	483.00	525.60	536.18	—
Operative builders	153	14.18	14.49	15.21	15.36	—	545.93	533.23	567.33	585.22	—
Nonresidential building construction	154	16.03	16.09	16.55	16.59	—	637.99	600.16	640.49	658.62	—
Heavy construction, except building	16	14.76	15.01	15.74	15.63	—	611.06	574.88	618.58	637.70	—
Highway and street construction	161	14.49	14.88	15.72	15.28	—	592.64	531.22	587.93	589.81	—
Heavy construction, except highway	162	14.86	15.05	15.74	15.74	—	619.66	588.46	632.75	654.78	—
Special trade contractors	17	16.12	16.15	16.61	16.75	—	614.17	583.02	622.88	636.50	—
Plumbing, heating, and air conditioning	171	16.50	16.40	16.80	17.06	—	651.75	631.40	658.56	675.58	—
Painting and paper hanging	172	14.29	14.31	14.88	14.86	—	527.30	495.13	543.12	546.85	—
Electrical work	173	17.48	17.39	17.99	18.21	—	709.69	679.95	712.40	735.68	—
Masonry, stonework, and plastering	174	15.95	16.03	16.45	16.50	—	567.82	527.39	574.11	580.80	—
Carpentry and floor work	175	15.64	15.60	16.33	16.75	—	558.35	525.72	584.61	603.00	—
Roofing, siding, and sheet metal work	176	13.82	13.91	14.54	14.59	—	464.35	413.13	475.46	485.85	—
Manufacturing		13.07	13.04	13.37	13.48	13.42	559.40	541.16	569.56	580.99	560.96
Durable goods		13.64	13.62	13.97	14.07	13.96	594.70	576.13	604.90	617.67	593.30
Lumber and wood products	24	10.61	10.58	10.90	10.93	10.85	437.13	418.97	451.26	450.32	435.09
Logging	241	11.93	11.85	12.40	12.25	—	474.81	465.71	499.72	498.58	—
Sawmills and planing mills	242	10.80	10.77	10.93	10.96	—	460.08	443.72	462.34	463.61	—
Sawmills and planing mills, general	2421	11.20	11.18	11.37	11.38	—	478.24	461.73	484.36	483.65	—
Hardwood dimension and flooring mills	2426	9.25	9.20	9.20	9.32	—	391.28	376.28	379.04	388.64	—
Millwork, plywood, and structural members	243	10.67	10.69	11.05	11.05	—	446.01	427.60	466.31	460.79	—
Millwork	2431	10.65	10.72	11.16	11.05	—	436.65	421.30	467.60	453.05	—
Wood kitchen cabinets	2434	10.37	10.32	10.80	10.92	—	421.02	399.38	451.44	452.09	—
Hardwood veneer and plywood	2435	9.36	9.39	9.63	9.83	—	414.65	404.71	407.35	423.67	—
Softwood veneer and plywood	2436	13.02	13.06	13.24	13.17	—	598.92	574.64	594.48	588.70	—
Wood containers	244	8.27	8.18	8.54	8.58	—	326.67	311.66	339.04	344.06	—
Wood buildings and mobile homes	245	10.73	10.47	11.12	11.35	—	410.96	373.78	440.35	436.98	—
Mobile homes	2451	10.93	10.60	11.31	11.59	—	419.71	376.30	447.88	445.06	—
Miscellaneous wood products	249	10.18	10.18	10.24	10.33	—	423.49	407.20	418.82	421.46	—
Furniture and fixtures	25	10.43	10.38	10.70	10.79	10.77	433.89	407.93	440.84	454.26	440.49
Household furniture	251	9.86	9.85	10.10	10.20	—	397.36	377.26	405.01	419.22	—
Wood household furniture	2511	9.32	9.40	9.60	9.65	—	379.32	360.02	387.84	397.58	—
Upholstered household furniture	2512	10.76	10.57	10.76	11.00	—	429.32	399.55	427.17	458.70	—
Metal household furniture	2514	9.08	9.44	9.82	9.73	—	374.10	389.87	410.48	398.93	—
Mattresses and bedsprings	2515	10.59	10.56	10.70	10.64	—	424.66	406.56	414.09	416.02	—
Office furniture	252	11.40	11.39	11.77	11.81	—	506.16	470.41	517.88	536.17	—
Public building and related furniture	253	11.45	11.15	11.63	11.75	—	474.03	441.54	474.50	485.28	—
Partitions and fixtures	254	11.06	11.07	11.37	11.52	—	480.00	461.62	486.64	497.66	—
Miscellaneous furniture and fixtures	259	10.48	10.37	10.75	10.78	—	451.69	402.36	460.10	467.85	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P
Durable goods—Continued											
Stone, clay, and glass products	32	43.1	40.9	43.1	43.5	42.2	5.6	4.6	5.8	5.8	—
Flat glass	321	47.0	43.8	45.9	45.9	—	7.8	6.5	7.2	7.1	—
Glass and glassware, pressed or blown	322	42.8	42.4	43.0	43.3	—	4.9	4.6	5.0	4.8	—
Glass containers	3221	44.3	43.8	44.9	45.9	—	6.3	5.9	6.4	6.4	—
Pressed and blown glass, nec	3229	41.8	41.4	41.9	41.8	—	3.9	3.7	4.1	3.8	—
Products of purchased glass	323	42.5	41.2	42.8	43.4	—	4.5	3.8	5.5	5.5	—
Cement, hydraulic	324	45.1	46.3	46.1	45.4	—	5.2	6.8	6.1	5.7	—
Structural clay products	325	42.4	41.5	42.5	42.8	—	4.9	4.5	4.8	4.8	—
Pottery and related products	326	41.5	40.6	42.1	42.0	—	4.4	4.4	5.7	5.2	—
Concrete, gypsum, and plaster products	327	43.2	38.9	43.1	43.7	—	6.5	4.4	6.3	6.4	—
Concrete block and brick	3271	44.6	43.2	45.0	44.4	—	7.2	5.3	7.6	7.1	—
Concrete products, nec	3272	43.4	40.5	43.1	44.1	—	5.7	4.5	6.0	6.3	—
Ready-mixed concrete	3273	41.9	35.5	41.8	42.4	—	6.5	3.4	5.9	5.9	—
Misc. nonmetallic mineral products	329	44.0	42.7	43.5	43.9	—	5.7	5.2	5.6	5.8	—
Abrasive products	3291	43.8	43.3	43.9	44.2	—	4.4	4.1	4.2	4.4	—
Asbestos products	3292	48.0	47.1	47.6	48.1	—	5.8	7.0	8.4	8.7	—
Primary metal industries	33	45.3	44.5	45.5	46.1	45.3	6.6	6.3	7.0	7.3	—
Blast furnaces and basic steel products	331	45.1	44.7	45.5	46.1	45.8	6.2	6.1	6.6	6.8	—
Blast furnaces and steel mills	3312	45.5	45.2	45.9	46.2	—	6.3	6.4	6.8	6.8	—
Steel pipe and tubes	3317	45.5	43.8	45.2	46.8	—	7.5	5.9	7.1	7.8	—
Iron and steel foundries	332	46.6	45.6	46.5	47.5	—	6.9	6.4	7.6	8.1	—
Gray and ductile iron foundries	3321	47.3	46.4	47.4	48.2	—	7.8	7.3	8.6	9.1	—
Malleable iron foundries	3322	44.9	44.8	54.6	53.6	—	5.5	6.4	10.7	9.8	—
Steel foundries, nec	3325	43.9	43.1	44.2	45.5	—	5.2	4.4	5.6	6.6	—
Primary nonferrous metals	333	43.7	43.5	45.1	45.2	—	5.6	5.8	6.7	6.3	—
Primary aluminum	3334	43.0	43.0	44.6	45.4	—	5.7	5.8	6.6	6.2	—
Nonferrous rolling and drawing	335	45.6	44.7	46.0	46.2	—	7.7	7.4	8.2	8.3	—
Copper rolling and drawing	3351	45.7	43.4	44.8	44.9	—	8.7	7.9	7.9	8.0	—
Aluminum sheet, plate, and foil	3353	46.7	46.5	47.3	47.5	—	7.0	7.8	10.8	10.6	—
Nonferrous wire drawing and insulating	3357	45.1	44.5	46.2	46.6	—	7.3	6.8	7.9	8.3	—
Nonferrous foundries (castings)	336	44.2	43.1	43.9	44.8	—	5.7	5.2	5.6	6.1	—
Aluminum foundries	3365	44.1	42.2	44.0	44.7	—	5.9	4.7	5.6	5.6	—
Fabricated metal products	34	43.6	42.1	43.3	44.0	42.6	5.5	4.7	5.5	5.8	—
Metal cans and shipping containers	341	44.1	42.0	43.4	44.0	—	5.9	5.7	5.8	5.5	—
Metal cans	3411	44.6	42.3	43.7	44.8	—	5.8	5.8	5.7	5.6	—
Cutlery, handtools, and hardware	342	44.0	42.5	44.1	44.6	—	5.0	4.5	5.3	5.6	—
Hand and edge tools, and blades and handsaws	3423,5	43.3	42.4	44.2	44.7	—	4.7	4.2	5.2	5.3	—
Hardware, nec	3429	43.8	42.5	44.1	44.7	—	5.1	4.6	5.4	6.0	—
Plumbing and heating, except electric	343	44.9	41.5	41.9	42.8	—	5.3	4.0	4.8	5.2	—
Plumbing fixture fittings and trim	3432	46.6	42.4	41.6	43.3	—	4.9	4.2	4.4	5.6	—
Heating equipment, except electric	3433	43.0	40.4	42.7	42.9	—	5.7	3.4	5.1	5.2	—
Fabricated structural metal products	344	42.9	41.0	42.8	43.4	—	5.1	4.1	5.2	5.4	—
Fabricated structural metal	3441	44.2	42.0	43.5	44.4	—	6.3	5.3	6.5	7.0	—
Metal doors, sash, and trim	3442	40.8	38.2	41.8	41.7	—	3.8	2.7	3.9	3.7	—
Fabricated plate work (boiler shops)	3443	44.8	42.9	44.3	44.9	—	6.3	5.1	6.0	6.1	—
Sheet metal work	3444	42.3	40.8	41.5	42.5	—	4.3	3.7	4.4	4.7	—
Architectural metal work	3446	41.5	40.3	42.3	42.7	—	4.1	3.2	4.5	4.5	—
Screw machine products, bolts, etc	345	44.7	43.7	44.6	45.7	—	6.3	5.7	6.4	7.1	—
Screw machine products	3451	43.4	42.7	43.3	43.9	—	5.2	5.0	5.8	6.2	—
Bolts, nuts, rivets, and washers	3452	46.2	44.8	46.1	47.9	—	7.6	6.5	7.2	8.1	—
Metal forgings and stampings	346	44.8	43.9	44.6	45.3	—	6.5	5.9	6.7	6.9	—
Iron and steel forgings	3462	45.1	45.1	46.4	47.1	—	6.8	6.0	7.7	7.8	—
Automotive stampings	3465	45.7	44.8	45.5	46.2	—	7.3	6.5	7.4	7.6	—
Metal stampings, nec	3469	43.0	41.8	42.6	42.8	—	4.9	4.5	5.1	5.2	—
Metal services, nec	347	43.0	41.6	41.8	42.6	—	5.5	4.4	5.1	5.6	—
Plating and polishing	3471	42.7	41.4	41.3	41.9	—	5.2	4.4	4.8	5.3	—
Metal coating and allied services	3479	43.5	41.8	42.7	43.8	—	6.0	4.5	5.6	6.1	—
Ordnance and accessories, nec	348	41.7	40.0	41.0	40.9	—	3.7	3.0	3.7	3.8	—
Ammunition, except for small arms, nec	3483	42.8	41.3	41.5	42.3	—	3.8	2.7	3.8	4.0	—
Misc. fabricated metal products	349	43.1	42.2	43.4	44.1	—	5.0	4.5	5.1	5.3	—
Valves and pipe fittings, nec	3494	44.0	42.5	43.3	43.6	—	5.1	5.0	5.1	4.5	—
Misc. fabricated wire products	3496	41.3	41.0	41.0	41.7	—	4.1	3.7	3.5	3.7	—

See footnotes at end of table.

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Stone, clay, and glass products	32	\$12.93	\$12.99	\$13.36	\$13.39	\$13.36	\$557.28	\$531.29	\$575.82	\$582.47	\$563.79
Flat glass	321	18.17	18.06	18.90	19.17	-	853.99	791.03	867.51	879.90	-
Glass and glassware, pressed or blown	322	14.67	14.59	15.14	15.23	-	627.88	618.62	651.02	659.46	-
Glass containers	3221	15.43	15.32	15.82	15.83	-	683.55	671.02	710.32	726.60	-
Pressed and blown glass, nec	3229	14.12	14.07	14.70	14.82	-	590.22	582.50	615.93	619.48	-
Products of purchased glass	323	11.80	12.05	12.09	12.04	-	501.50	496.46	517.45	522.54	-
Cement, hydraulic	324	17.14	17.54	18.32	17.82	-	773.01	812.10	844.55	809.03	-
Structural clay products	325	11.52	11.41	11.49	11.64	-	488.45	473.52	488.33	498.19	-
Pottery and related products	326	11.27	11.36	11.66	11.72	-	467.71	461.22	490.89	492.24	-
Concrete, gypsum, and plaster products	327	12.24	12.19	12.75	12.80	-	528.77	474.19	549.53	559.36	-
Concrete block and brick	3271	11.72	11.90	12.39	12.37	-	522.71	514.08	557.55	549.23	-
Concrete products, nec	3272	10.95	10.88	11.39	11.50	-	475.23	440.64	490.91	507.15	-
Ready-mixed concrete	3273	12.97	13.00	13.51	13.59	-	543.44	461.50	564.72	576.22	-
Misc. nonmetallic mineral products	329	13.43	13.45	13.77	13.77	-	590.92	574.32	599.00	604.50	-
Abrasive products	3291	11.54	11.66	12.22	12.22	-	505.45	504.88	536.46	540.12	-
Asbestos products	3292	15.41	15.97	15.90	15.63	-	739.68	752.19	756.84	751.80	-
Primary metal industries	33	15.15	15.12	15.39	15.41	15.48	686.30	672.84	700.25	710.40	701.24
Blast furnaces and basic steel products	331	17.92	17.71	18.25	18.10	18.39	808.19	791.64	830.38	834.41	842.26
Blast furnaces and steel mills	3312	19.48	19.22	19.95	19.75	-	886.34	868.74	915.71	912.45	-
Steel pipe and tubes	3317	14.26	13.95	14.16	14.11	-	648.83	611.01	640.03	660.35	-
Iron and steel foundries	332	13.70	13.77	14.11	14.21	-	638.42	627.91	656.12	674.98	-
Gray and ductile iron foundries	3321	14.51	14.61	15.11	15.26	-	686.32	677.90	716.21	735.53	-
Malleable iron foundries	3322	16.45	16.93	15.13	15.96	-	738.61	758.46	826.10	855.46	-
Steel foundries, nec	3325	12.69	12.46	12.86	12.83	-	557.09	537.03	568.41	583.77	-
Primary nonferrous metals	333	16.53	16.45	16.89	17.01	-	722.36	715.58	761.74	768.85	-
Primary aluminum	3334	16.78	16.52	17.02	16.92	-	721.54	710.36	759.09	768.17	-
Nonferrous rolling and drawing	335	14.46	14.50	14.58	14.74	-	659.38	648.15	670.68	680.99	-
Copper rolling and drawing	3351	14.36	14.38	14.78	15.09	-	656.25	624.09	662.14	677.54	-
Aluminum sheet, plate, and foil	3353	16.62	16.54	16.90	16.72	-	776.15	769.11	799.37	794.20	-
Nonferrous wire drawing and insulating	3357	14.68	14.59	14.62	14.89	-	662.07	649.26	675.44	693.87	-
Nonferrous foundries (castings)	336	12.06	12.14	12.02	12.17	-	533.05	523.23	527.68	545.22	-
Aluminum foundries	3365	11.43	11.45	11.53	11.76	-	504.06	483.19	507.32	525.67	-
Fabricated metal products	34	12.79	12.75	12.97	13.09	13.02	557.64	536.78	561.60	575.96	554.65
Metal cans and shipping containers	341	16.15	16.16	16.26	16.50	-	712.22	678.72	705.68	726.00	-
Metal cans	3411	17.12	17.21	17.26	17.47	-	763.55	727.98	754.26	782.66	-
Cutlery, handtools, and hardware	342	12.62	12.65	12.34	12.50	-	555.28	537.63	544.19	557.50	-
Hand and edge tools, and blades and handsaws	3423.5	11.79	11.92	12.09	12.17	-	510.51	505.41	534.38	544.00	-
Hardware, nec	3429	12.56	12.67	12.53	12.76	-	550.13	538.48	552.57	570.37	-
Plumbing and heating, except electric	343	11.57	11.38	11.94	12.04	-	519.49	472.27	500.29	515.31	-
Plumbing fixture fittings and trim	3432	11.28	11.04	11.71	11.66	-	525.65	468.10	487.14	504.88	-
Heating equipment, except electric	3433	11.73	11.52	11.82	11.87	-	504.39	465.41	504.71	509.22	-
Fabricated structural metal products	344	12.04	12.00	12.32	12.40	-	516.52	492.00	527.30	538.16	-
Fabricated structural metal	3441	12.01	12.05	12.50	12.63	-	530.84	506.10	543.75	560.77	-
Metal doors, sash, and trim	3442	10.24	10.26	10.47	10.57	-	417.79	391.93	437.65	440.77	-
Fabricated plate work (boiler shops)	3443	13.32	13.22	13.66	13.61	-	596.74	567.14	605.14	611.09	-
Sheet metal work	3444	12.25	12.19	12.56	12.65	-	518.18	497.35	521.24	537.63	-
Architectural metal work	3446	11.66	11.49	11.69	11.73	-	483.89	463.05	494.49	500.87	-
Screw machine products, bolts, etc	345	12.75	12.84	13.05	13.12	-	569.93	561.11	582.03	599.58	-
Screw machine products	3451	12.09	12.11	12.46	12.46	-	524.71	517.10	539.52	546.99	-
Bolts, nuts, rivets, and washers	3452	13.46	13.64	13.70	13.83	-	621.85	611.07	631.57	662.46	-
Metal forgings and stampings	346	15.14	15.08	15.41	15.58	-	678.27	662.01	687.29	705.77	-
Iron and steel forgings	3462	14.18	13.85	14.52	14.67	-	639.52	624.64	673.73	690.96	-
Automotive stampings	3465	17.51	17.47	17.88	18.10	-	800.21	782.66	813.54	836.22	-
Metal stampings, nec	3469	12.08	12.11	12.41	12.50	-	519.44	506.20	528.67	535.00	-
Metal services, nec	347	10.74	10.66	10.84	10.99	-	461.82	443.46	453.11	468.17	-
Plating and polishing	3471	10.64	10.51	10.73	10.87	-	454.33	435.11	443.15	455.45	-
Metal coating and allied services	3479	10.89	10.89	11.02	11.20	-	473.72	455.20	470.55	490.56	-
Ordnance and accessories, nec	348	14.67	14.79	15.49	15.37	-	611.74	591.60	635.09	628.63	-
Ammunition, except for small arms, nec	3483	15.68	15.68	16.50	15.87	-	671.10	647.58	684.75	671.30	-
Misc. fabricated metal products	349	12.22	12.11	12.35	12.45	-	526.68	511.04	535.99	549.05	-
Valves and pipe fittings, nec	3494	12.42	12.35	12.52	12.55	-	546.48	524.88	542.12	547.18	-
Misc. fabricated wire products	3496	10.89	10.74	10.92	10.97	-	449.76	440.34	447.72	457.45	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P
Durable goods—Continued											
Industrial machinery and equipment	35	44.4	43.3	44.0	44.8	43.6	5.9	5.3	5.9	6.4	—
Engines and turbines	351	45.7	44.7	45.4	46.5	—	7.1	5.8	6.8	7.7	—
Turbines and turbine generator sets	3511	44.7	42.7	43.2	45.0	—	6.9	3.9	5.8	7.2	—
Internal combustion engines, nec	3519	46.0	45.4	46.2	47.0	—	7.2	6.5	7.1	7.9	—
Farm and garden machinery	352	43.5	43.2	42.8	44.2	—	5.6	5.3	4.9	5.6	—
Farm machinery and equipment	3523	44.0	42.8	43.6	44.6	—	6.0	5.3	5.5	6.1	—
Construction and related machinery	353	45.6	44.1	45.0	46.0	—	6.7	5.9	6.3	6.9	—
Construction machinery	3531	44.5	43.9	44.1	44.8	—	6.1	5.8	5.3	6.0	—
Mining machinery	3532	44.6	43.9	42.7	43.6	—	6.0	5.0	4.8	5.2	—
Oil and gas field machinery	3533	51.1	47.9	49.7	50.6	—	10.0	8.9	10.4	10.5	—
Conveyors and conveying equipment	3535	44.4	42.3	43.4	45.3	—	6.0	5.1	5.5	6.2	—
Industrial trucks and tractors	3537	43.0	41.0	42.2	42.5	—	5.1	3.9	4.5	4.7	—
Metalworking machinery	354	45.2	44.4	44.5	45.4	—	6.9	6.5	6.6	7.2	—
Machine tools, metal cutting types	3541	45.0	44.4	44.5	45.9	—	6.7	6.2	6.6	7.0	—
Machine tools, metal forming types	3542	47.0	46.6	45.9	47.3	—	7.5	7.1	7.0	8.1	—
Special dies, tools, jigs, and fixtures	3544	45.3	44.6	44.3	45.5	—	7.5	7.2	7.1	7.7	—
Machine tool accessories	3545	44.2	43.6	43.7	45.0	—	5.5	5.2	5.2	5.9	—
Power driven handtools	3546	42.7	42.9	43.8	44.0	—	4.9	4.6	5.3	5.7	—
Special industry machinery	355	44.0	42.8	43.7	44.3	—	5.5	4.8	5.7	6.1	—
Textile machinery	3552	42.8	42.2	41.6	42.4	—	3.9	3.5	4.1	4.9	—
Printing trades machinery	3555	43.2	40.3	43.0	42.7	—	4.9	4.0	5.4	5.5	—
Food products machinery	3556	44.2	43.3	42.2	44.1	—	6.1	5.1	4.8	5.4	—
General industrial machinery	356	44.7	43.2	43.8	44.7	—	5.9	5.0	5.6	6.2	—
Pumps and pumping equipment	3561	44.6	43.5	42.9	43.0	—	6.0	5.2	5.1	5.7	—
Ball and roller bearings	3562	44.8	45.4	43.9	44.6	—	6.8	6.8	6.8	7.6	—
Air and gas compressors	3563	44.0	42.7	44.1	44.7	—	6.0	5.2	5.5	6.0	—
Blowers and fans	3564	44.9	42.8	44.3	45.2	—	5.0	3.5	5.0	5.6	—
Speed changers, drives, and gears	3566	46.1	43.6	44.5	46.7	—	6.4	5.6	6.4	7.8	—
Power transmission equipment, nec	3568	42.9	42.1	43.0	43.7	—	5.0	4.9	5.8	5.9	—
Computer and office equipment	357	43.2	41.8	42.8	42.9	—	4.1	3.4	4.4	4.7	—
Electronic computers	3571	43.4	41.3	42.8	43.1	—	3.5	2.7	4.2	4.5	—
Computer terminals, calculators, and office machines, nec	3575,8,9	41.9	41.5	42.6	45.2	—	3.9	4.1	5.1	6.3	—
Refrigeration and service machinery	358	44.3	42.9	44.7	45.5	—	5.1	4.4	5.3	5.9	—
Refrigeration and heating equipment	3585	44.7	43.3	45.4	46.2	—	5.1	4.7	5.7	6.3	—
Misc. industrial and commercial machinery	359	43.8	42.9	43.5	44.3	—	5.9	5.4	6.2	6.7	—
Carburetors, pistons, rings, valves	3592	42.8	42.7	41.4	43.1	—	5.8	5.5	4.9	5.8	—
Scales, balances, and industrial machinery, nec	3596,9	43.5	42.7	43.3	44.1	—	5.8	5.4	6.3	6.7	—
Electronic and other electrical equipment	36	42.9	41.2	42.6	43.1	41.5	4.7	3.7	4.7	5.0	—
Electric distribution equipment	361	42.9	41.0	42.5	42.8	—	4.9	3.7	4.9	5.2	—
Transformers, except electronic	3612	42.8	41.2	43.4	43.8	—	3.9	2.9	4.5	4.7	—
Switchgear and switchboard apparatus	3613	43.1	40.8	41.6	41.8	—	6.0	4.5	5.2	5.7	—
Electrical industrial apparatus	362	42.8	41.0	42.5	44.2	—	3.9	3.3	4.1	4.8	—
Motors and generators	3621	43.0	41.2	42.1	44.7	—	3.6	3.3	3.7	4.8	—
Relays and industrial controls	3625	41.8	39.5	42.2	42.7	—	4.2	2.8	4.4	4.7	—
Household appliances	363	42.6	40.4	41.1	43.0	—	3.9	2.9	3.1	4.1	—
Household refrigerators and freezers	3632	41.9	38.3	39.9	43.8	—	2.2	2.6	2.1	3.2	—
Household laundry equipment	3633	42.5	39.9	41.3	43.7	—	2.8	1.6	2.2	4.2	—
Electric housewares and fans	3634	41.9	40.6	42.2	42.0	—	3.9	2.1	3.7	3.1	—
Electric lighting and wiring equipment	364	43.2	41.4	42.2	43.3	—	4.9	4.1	4.7	5.2	—
Electric lamps	3641	44.8	43.6	42.4	42.5	—	5.4	5.6	4.9	4.8	—
Current-carrying wiring devices	3643	42.2	41.7	41.8	42.8	—	4.6	4.4	4.8	4.7	—
Noncurrent-carrying wiring devices	3644	43.4	42.0	42.8	43.9	—	3.5	3.1	3.7	3.9	—
Residential lighting fixtures	3645	41.8	38.1	39.4	41.4	—	4.2	2.8	3.4	4.3	—
Household audio and video equipment	365	41.0	40.5	43.4	41.3	—	4.6	3.8	5.8	4.8	—
Household audio and video equipment	3651	40.0	40.6	41.8	41.1	—	3.9	2.9	3.9	4.0	—
Communications equipment	366	44.2	41.3	43.6	44.0	—	4.9	3.1	4.6	4.8	—
Telephone and telegraph apparatus	3661	45.3	43.1	45.6	45.4	—	5.4	3.6	4.9	4.9	—
Electronic components and accessories	367	42.5	41.3	42.6	42.7	—	4.8	4.0	4.9	5.0	—
Electron tubes	3671	36.3	40.3	40.9	41.5	—	3.5	4.3	4.6	4.4	—
Semiconductors and related devices	3674	41.8	40.6	43.5	42.5	—	4.8	4.2	5.1	4.9	—
Electronic components, nec	3679	43.8	41.5	42.4	42.6	—	4.7	3.4	4.7	4.8	—
Misc. electrical equipment and supplies	369	43.6	41.7	43.2	43.6	—	5.6	4.5	5.2	5.8	—
Storage batteries	3691	44.7	42.1	43.6	43.3	—	6.5	4.8	5.1	5.3	—
Engine electrical equipment	3694	43.8	42.1	43.3	44.7	—	5.6	4.7	5.8	7.0	—

See footnotes at end of table.

ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings					
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	
Durable goods—Continued												
Industrial machinery and equipment	35	\$13.97	\$13.91	\$14.29	\$14.39	\$14.34	\$620.27	\$602.30	\$628.76	\$644.67	\$625.22	
Engines and turbines	351	17.04	16.71	16.98	17.16	—	778.73	746.94	770.89	797.94	—	
Turbines and turbine generator sets	3511	19.42	18.52	20.02	20.21	—	868.07	790.80	864.86	909.45	—	
Internal combustion engines, nec	3519	16.20	16.10	15.95	16.09	—	745.20	730.94	736.89	756.23	—	
Farm and garden machinery	352	14.04	13.59	13.98	13.85	—	610.74	587.09	598.34	612.17	—	
Farm machinery and equipment	3523	15.21	14.84	14.77	14.72	—	669.24	635.15	643.97	656.51	—	
Construction and related machinery	353	13.45	13.40	13.57	13.57	—	613.32	590.94	610.65	624.22	—	
Construction machinery	3531	13.85	13.89	14.00	13.96	—	616.33	609.77	617.40	625.41	—	
Mining machinery	3532	14.54	14.42	14.36	14.61	—	648.48	633.04	613.17	637.00	—	
Oil and gas field machinery	3533	13.02	13.02	13.36	13.20	—	665.32	623.66	663.99	667.92	—	
Conveyors and conveying equipment	3535	13.41	13.41	13.66	13.78	—	595.40	567.24	592.84	624.23	—	
Industrial trucks and tractors	3537	12.60	12.22	12.56	12.60	—	541.80	501.02	530.03	535.50	—	
Metalworking machinery	354	14.81	14.86	15.07	15.24	—	669.41	659.78	670.62	691.90	—	
Machine tools, metal cutting types	3541	14.71	14.66	14.79	14.72	—	661.95	650.90	658.16	675.65	—	
Machine tools, metal forming types	3542	15.36	15.28	15.50	15.57	—	721.92	712.05	711.45	736.46	—	
Special dies, tools, jigs, and fixtures	3544	15.43	15.56	15.80	16.01	—	698.98	693.98	699.94	728.46	—	
Machine tool accessories	3545	13.01	13.04	13.20	13.34	—	575.04	568.54	576.84	600.30	—	
Power driven handtools	3546	12.32	12.41	12.40	12.52	—	526.06	532.39	543.12	550.88	—	
Special industry machinery	355	14.39	14.35	14.85	15.12	—	633.16	614.18	648.95	669.82	—	
Textile machinery	3552	12.48	12.50	12.91	13.30	—	534.14	527.50	537.06	563.92	—	
Printing trades machinery	3555	15.34	15.17	15.97	16.33	—	662.69	611.35	686.71	697.29	—	
Food products machinery	3556	14.12	14.10	14.53	14.69	—	624.10	610.53	613.17	647.83	—	
General industrial machinery	356	13.66	13.65	13.92	14.14	—	610.60	589.68	609.70	632.06	—	
Pumps and pumping equipment	3561	14.51	14.50	14.63	14.94	—	647.15	630.75	627.63	642.42	—	
Ball and roller bearings	3562	14.84	15.03	15.21	15.44	—	664.83	682.36	667.72	688.62	—	
Air and gas compressors	3563	14.15	14.16	14.82	15.35	—	622.60	604.63	653.56	686.15	—	
Blowers and fans	3564	11.38	11.27	11.67	11.87	—	510.96	482.36	516.98	536.52	—	
Speed changers, drives, and gears	3566	14.39	14.38	14.92	15.05	—	663.38	626.97	663.94	702.84	—	
Power transmission equipment, nec	3568	13.18	13.22	13.32	13.51	—	565.42	556.56	572.76	590.39	—	
Computer and office equipment	357	14.31	14.08	14.71	14.70	—	618.19	588.54	629.59	630.63	—	
Electronic computers	3571	15.78	15.47	16.27	16.04	—	684.85	638.91	696.36	691.32	—	
Computer terminals, calculators, and office machines, nec	3575,8,9	13.39	13.39	13.55	13.38	—	561.04	555.69	577.23	604.78	—	
Refrigeration and service machinery	358	12.59	12.51	13.25	13.30	—	557.74	536.68	592.28	605.15	—	
Refrigeration and heating equipment	3585	12.80	12.82	13.69	13.74	—	572.16	555.11	621.53	634.79	—	
Misc. industrial and commercial machinery	359	13.49	13.48	13.90	14.03	—	590.86	578.29	604.65	621.53	—	
Carburetors, pistons, rings, valves	3592	14.43	14.21	14.57	14.54	—	617.60	606.77	603.20	626.67	—	
Scales, balances, and industrial machinery, nec ..	3596,9	13.27	13.27	13.75	13.86	—	577.25	566.63	595.38	611.23	—	
Electronic and other electrical equipment	36	12.54	12.46	13.00	13.05	12.91	537.97	513.35	553.80	562.46	535.77	
Electric distribution equipment	361	12.35	12.37	12.90	13.05	—	529.82	507.17	548.25	558.54	—	
Transformers, except electronic	3612	11.39	11.42	11.90	12.04	—	487.49	470.50	516.46	527.35	—	
Switchgear and switchboard apparatus	3613	13.36	13.34	13.87	14.06	—	575.82	544.27	576.99	587.71	—	
Electrical industrial apparatus	362	11.97	11.88	12.37	12.53	—	512.32	487.08	525.73	553.83	—	
Motors and generators	3621	11.24	11.15	11.47	11.65	—	483.32	459.38	482.89	520.76	—	
Relays and industrial controls	3625	13.34	13.24	14.00	14.22	—	557.61	522.98	590.80	607.19	—	
Household appliances	363	12.26	12.27	12.33	12.44	—	522.28	495.71	506.76	534.92	—	
Household refrigerators and freezers	3632	13.99	13.73	13.30	13.23	—	586.18	525.86	530.67	579.47	—	
Household laundry equipment	3633	14.22	14.21	14.09	14.38	—	604.35	566.98	581.92	628.41	—	
Electric housewares and fans	3634	9.96	10.01	10.62	10.62	—	417.32	406.41	448.16	446.04	—	
Electric lighting and wiring equipment	364	12.70	12.71	12.81	12.82	—	548.64	526.19	540.58	555.11	—	
Electric lamps	3641	15.36	15.45	16.02	16.21	—	688.13	673.62	679.25	688.93	—	
Current-carrying wiring devices	3643	12.72	12.72	13.11	12.92	—	536.78	530.42	548.00	552.98	—	
Noncurrent-carrying wiring devices	3644	11.33	11.43	11.40	11.52	—	491.72	480.06	487.92	505.73	—	
Residential lighting fixtures	3645	8.94	9.05	8.99	8.99	—	373.69	344.81	354.21	372.19	—	
Household audio and video equipment	365	10.34	10.45	11.64	11.46	—	423.94	423.23	505.18	473.30	—	
Household audio and video equipment	3651	10.33	10.33	11.09	11.01	—	413.20	419.40	463.56	452.51	—	
Communications equipment	366	13.76	13.67	13.97	13.89	—	608.19	564.57	609.09	611.16	—	
Telephone and telegraph apparatus	3661	15.08	14.89	15.19	14.77	—	683.12	641.76	692.66	670.56	—	
Electronic components and accessories	367	12.25	12.10	12.99	13.02	—	520.63	499.73	553.37	555.95	—	
Electron tubes	3671	14.42	13.76	15.17	15.49	—	523.45	554.53	620.45	642.84	—	
Semiconductors and related devices	3674	15.83	15.52	17.31	17.30	—	661.69	630.11	752.99	735.25	—	
Electronic components, nec	3679	10.42	10.33	10.63	10.74	—	456.40	428.70	450.71	457.52	—	
Misc. electrical equipment and supplies	369	13.72	13.67	13.94	14.11	—	598.19	570.04	602.21	615.20	—	
Storage batteries	3691	15.13	14.82	15.06	15.21	—	676.31	623.92	656.62	658.59	—	
Engine electrical equipment	3694	13.92	13.94	14.20	14.45	—	609.70	586.87	614.86	645.92	—	

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Transportation equipment	37	45.6	44.6	44.5	45.7	43.6	7.2	6.5	6.7	7.4	—
Motor vehicles and equipment	371	46.5	45.5	44.8	46.3	43.4	7.8	7.0	7.1	8.0	—
Motor vehicles and car bodies	3711	47.1	46.3	44.1	46.4	—	8.1	7.1	6.7	8.1	—
Truck and bus bodies	3713	44.7	44.2	44.2	43.1	—	6.0	6.2	6.6	6.3	—
Motor vehicle parts and accessories	3714	46.9	45.9	45.7	47.0	—	8.2	7.4	7.7	8.5	—
Truck trailers	3715	41.5	38.6	42.1	42.3	—	4.2	2.8	3.7	4.6	—
Aircraft and parts	372	45.6	44.4	45.6	46.4	—	8.1	7.2	7.6	7.7	—
Aircraft	3721	44.2	43.8	45.2	45.9	—	8.4	7.9	7.3	7.5	—
Aircraft engines and engine parts	3724	47.0	44.4	45.5	47.5	—	7.7	6.2	8.0	8.2	—
Aircraft parts and equipment, nec	3728	46.6	45.2	46.1	46.5	—	8.1	6.8	7.8	7.7	—
Ship and boat building and repairing	373	43.0	42.3	41.7	42.3	—	4.5	4.6	4.6	4.9	—
Ship building and repairing	3731	45.0	44.3	43.2	44.1	—	5.3	5.7	5.7	6.2	—
Boat building and repairing	3732	39.9	39.1	39.6	39.8	—	3.1	2.8	2.9	3.1	—
Railroad equipment	374	43.9	43.5	45.2	45.4	—	5.0	4.3	5.3	5.1	—
Guided missiles, space vehicles, and parts	376	44.1	43.3	42.5	44.2	—	4.7	4.1	4.4	4.9	—
Guided missiles and space vehicles	3761	44.9	43.7	41.8	44.4	—	4.9	4.0	3.8	4.7	—
Misc. transportation equipment	379	39.7	38.7	40.9	41.2	—	3.2	2.9	3.6	3.7	—
Travel trailers and campers	3792	37.7	35.7	39.6	39.4	—	1.8	1.8	2.5	2.5	—
Instruments and related products	38	43.0	41.7	42.6	42.9	41.7	4.5	3.7	4.2	4.4	—
Search and navigation equipment	381	44.7	43.3	44.0	44.0	—	4.6	4.2	4.6	4.7	—
Measuring and controlling devices	382	43.7	41.7	42.7	43.0	—	4.2	3.4	4.0	4.3	—
Environmental controls	3822	43.8	41.7	41.9	42.5	—	4.9	3.6	4.1	4.5	—
Process control instruments	3823	43.7	41.7	42.9	43.8	—	4.7	3.4	3.9	4.2	—
Instruments to measure electricity	3825	43.5	41.3	42.7	41.9	—	3.5	2.9	3.3	3.3	—
Medical instruments and supplies	384	42.1	41.2	42.3	43.0	—	4.0	3.4	4.0	4.5	—
Surgical and medical instrument	3841	42.0	41.9	42.2	42.5	—	4.1	3.8	3.6	4.0	—
Surgical appliances and supplies	3842	42.2	40.3	41.7	42.9	—	4.3	3.2	4.1	4.8	—
Ophthalmic goods	385	41.7	40.0	41.6	40.8	—	3.0	2.2	2.7	2.4	—
Photographic equipment and supplies	386	43.3	43.2	42.7	43.2	—	8.3	7.7	6.3	6.3	—
Watches, clocks, watchcases, and parts	387	42.0	37.3	39.7	40.6	—	2.8	1.3	2.0	2.2	—
Miscellaneous manufacturing industries	39	41.1	39.6	41.2	41.3	40.2	3.5	2.9	3.8	3.7	—
Jewelry, silverware, and plated ware	391	40.2	38.4	42.1	41.1	—	3.5	1.9	4.2	3.5	—
Jewelry, precious metal	3911	40.0	37.7	42.1	40.9	—	3.7	1.8	4.2	3.7	—
Musical instruments	393	41.8	41.2	41.7	41.1	—	2.7	2.4	3.2	3.0	—
Toys and sporting goods	394	41.3	39.2	40.8	41.1	—	2.9	2.5	2.8	3.0	—
Dolls, games, toys, and children's vehicles	3942,4	38.9	36.8	40.6	40.3	—	2.3	1.8	3.1	2.6	—
Sporting and athletic goods, nec	3949	42.5	40.4	41.0	41.5	—	3.2	2.8	2.7	3.2	—
Pens, pencils, office, and art supplies	395	41.8	39.8	40.8	40.4	—	4.0	3.1	3.5	3.1	—
Costume jewelry and notions	396	41.7	39.5	39.7	40.5	—	3.6	2.9	3.4	3.5	—
Costume jewelry	3961	41.9	40.4	38.8	40.3	—	3.8	2.6	3.2	3.3	—
Miscellaneous manufactures	399	40.9	40.0	41.5	41.9	—	3.9	3.4	4.4	4.4	—
Signs and advertising specialties	3993	41.8	40.8	42.7	42.6	—	4.1	3.8	4.6	4.6	—
Nondurable goods		41.6	40.5	41.5	41.8	40.8	4.5	4.0	4.7	4.7	4.2
Food and kindred products	20	42.0	40.7	42.2	42.3	41.0	5.0	4.5	5.5	5.3	—
Meat products	201	40.8	40.4	41.8	41.2	—	4.3	4.3	5.3	4.9	—
Meat packing plants	2011	43.0	42.2	44.6	44.2	—	5.2	5.1	6.6	6.1	—
Sausages and other prepared meats	2013	41.8	40.4	43.4	42.8	—	5.5	4.5	6.9	6.6	—
Poultry slaughtering and processing	2015	39.1	39.3	39.7	38.8	—	3.3	3.7	4.0	3.6	—
Dairy products	202	41.8	41.5	42.6	42.0	—	5.0	4.8	5.2	5.0	—
Cheese, natural and processed	2022	41.0	40.7	41.9	41.9	—	4.8	4.2	4.8	5.0	—
Fluid milk	2026	42.8	42.5	43.6	42.2	—	5.2	5.2	5.7	5.1	—
Preserved fruits and vegetables	203	42.4	41.2	41.8	42.7	—	5.2	4.6	5.4	5.5	—
Canned specialties	2032	45.0	44.0	45.2	46.7	—	6.9	8.0	8.2	10.1	—
Canned fruits and vegetables	2033	41.4	40.1	41.6	43.2	—	3.8	3.1	5.3	4.9	—
Frozen fruits and vegetables	2037	40.5	40.5	40.8	41.4	—	4.6	3.8	4.4	4.9	—
Grain mill products	204	47.5	45.8	46.0	47.0	—	8.2	7.3	7.7	7.7	—
Flour and other grain mill products	2041	46.4	43.9	48.6	49.0	—	7.1	6.2	9.3	8.6	—
Prepared feeds, nec	2048	44.9	45.1	43.5	43.9	—	7.2	7.1	6.3	6.4	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Durable goods—Continued											
Transportation equipment	37	\$17.57	\$17.46	\$17.98	\$18.15	\$17.83	\$801.19	\$778.72	\$800.11	\$829.46	\$777.39
Motor vehicles and equipment	371	18.12	18.02	18.57	18.71	18.31	842.58	819.91	831.94	866.27	794.65
Motor vehicles and car bodies	3711	21.54	21.34	22.26	22.59	-	1,014.53	988.04	981.67	1,048.18	-
Truck and bus bodies	3713	15.63	16.09	15.98	15.90	-	698.66	711.18	706.32	685.29	-
Motor vehicle parts and accessories	3714	16.72	16.69	17.25	17.26	-	784.17	766.07	788.33	811.22	-
Truck trailers	3715	11.19	11.13	11.09	11.46	-	464.39	429.62	466.89	484.76	-
Aircraft and parts	372	18.80	18.65	19.12	19.30	-	857.28	828.06	871.87	895.52	-
Aircraft	3721	(2)	(2)	(2)	(2)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	18.50	18.16	19.27	19.33	-	869.50	806.30	876.79	918.18	-
Aircraft parts and equipment, nec	3728	16.65	16.60	16.80	16.99	-	775.89	750.32	774.48	790.04	-
Ship and boat building and repairing	373	13.10	13.15	13.13	13.19	-	563.30	556.25	547.52	557.94	-
Ship building and repairing	3731	14.40	14.49	14.43	14.42	-	648.00	641.91	623.38	635.92	-
Boat building and repairing	3732	10.80	10.75	11.09	11.21	-	430.92	420.33	439.16	446.16	-
Railroad equipment	374	16.92	16.78	16.96	17.10	-	742.79	729.93	766.59	776.34	-
Guided missiles, space vehicles, and parts	376	19.18	19.31	19.77	19.81	-	845.84	836.12	840.23	875.60	-
Guided missiles and space vehicles	3761	(2)	(2)	(2)	(2)	-	-	-	-	-	-
Misc. transportation equipment	379	11.57	11.33	11.65	11.78	-	459.33	438.47	476.49	485.34	-
Travel trailers and campers	3792	11.27	10.94	11.57	11.95	-	424.88	390.56	458.17	470.83	-
Instruments and related products	38	13.39	13.38	13.70	13.73	13.69	575.77	557.95	583.62	589.02	570.87
Search and navigation equipment	381	17.10	16.84	17.20	17.48	-	764.37	729.17	756.80	769.12	-
Measuring and controlling devices	382	13.38	13.39	13.80	13.79	-	584.71	558.36	589.26	592.97	-
Environmental controls	3822	11.73	11.75	11.76	11.87	-	513.77	489.98	492.74	504.48	-
Process control instruments	3823	13.01	13.03	13.46	13.58	-	568.54	543.35	577.43	594.80	-
Instruments to measure electricity	3825	15.27	15.33	16.19	15.93	-	664.25	633.13	691.31	667.47	-
Medical instruments and supplies	384	12.29	12.28	12.74	12.75	-	517.41	505.94	538.90	548.25	-
Surgical and medical instrument	3841	11.64	11.70	11.99	12.01	-	488.88	490.23	505.98	510.43	-
Surgical appliances and supplies	3842	11.40	11.34	11.93	11.96	-	481.08	457.00	497.48	513.08	-
Ophthalmic goods	385	10.06	10.15	10.17	10.34	-	419.50	406.00	423.07	421.87	-
Photographic equipment and supplies	386	15.93	15.92	15.84	15.82	-	689.77	687.74	676.37	683.42	-
Watches, clocks, watchcases, and parts	387	9.44	9.59	10.02	10.04	-	396.48	357.71	397.79	407.62	-
Miscellaneous manufacturing industries	39	10.59	10.59	10.72	10.83	10.82	435.25	419.36	441.66	447.28	434.96
Jewelry, silverware, and plated ware	391	11.01	10.93	11.15	11.27	-	442.60	419.71	469.42	463.20	-
Jewelry, precious metal	3911	11.18	11.04	11.27	11.48	-	447.20	416.21	474.47	469.53	-
Musical instruments	393	10.60	10.67	10.70	10.93	-	443.08	439.60	446.19	449.22	-
Toys and sporting goods	394	9.95	10.04	10.22	10.31	-	410.94	393.57	416.98	423.74	-
Dolls, games, toys, and children's vehicles	3942,4	9.43	9.55	9.66	9.84	-	366.83	351.44	392.20	396.55	-
Sporting and athletic goods, nec	3949	10.20	10.26	10.51	10.53	-	433.50	414.50	430.91	437.00	-
Pens, pencils, office, and art supplies	395	10.96	11.07	11.09	11.11	-	458.13	440.59	452.47	448.84	-
Costume jewelry and notions	396	9.07	9.22	9.57	9.78	-	378.22	364.19	379.93	396.09	-
Costume jewelry	3961	7.89	7.88	8.69	8.96	-	330.59	318.35	337.17	361.09	-
Miscellaneous manufactures	399	11.08	10.98	11.01	11.12	-	453.17	439.20	456.92	465.93	-
Signs and advertising specialties	3993	11.49	11.23	11.70	11.74	-	480.28	458.18	499.59	500.12	-
Nondurable goods		12.24	12.20	12.48	12.59	12.60	509.18	494.10	517.92	526.26	514.08
Food and kindred products	20	11.46	11.41	11.60	11.73	11.70	481.32	464.39	489.52	496.18	479.70
Meat products	201	9.31	9.33	9.46	9.51	-	379.85	376.93	395.43	391.81	-
Meat packing plants	2011	10.07	10.03	10.08	10.19	-	433.01	423.27	449.57	450.40	-
Sausages and other prepared meats	2013	10.64	10.71	10.83	10.86	-	444.75	432.68	470.02	464.81	-
Poultry slaughtering and processing	2015	8.30	8.38	8.51	8.52	-	324.53	329.33	337.85	330.58	-
Dairy products	202	12.99	13.07	13.39	13.36	-	542.98	542.41	570.41	561.12	-
Cheese, natural and processed	2022	11.66	11.85	12.19	12.14	-	478.06	482.30	510.76	508.67	-
Fluid milk	2026	13.68	13.78	14.08	14.03	-	585.50	585.65	613.89	592.07	-
Preserved fruits and vegetables	203	11.02	11.05	11.07	11.43	-	467.25	455.26	462.73	488.06	-
Canned specialties	2032	14.43	14.62	14.87	15.43	-	649.35	643.28	672.12	720.58	-
Canned fruits and vegetables	2033	12.00	12.01	11.69	12.29	-	496.80	481.60	486.30	530.93	-
Frozen fruits and vegetables	2037	10.22	10.24	10.34	10.50	-	413.91	414.72	421.87	434.70	-
Grain mill products	204	14.55	14.28	14.63	14.96	-	691.13	654.02	672.98	703.12	-
Flour and other grain mill products	2041	12.43	12.41	13.11	13.12	-	576.75	544.80	637.15	642.88	-
Prepared feeds, nec	2048	11.24	11.19	11.61	11.56	-	504.68	504.67	505.04	507.48	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	41.1	39.0	41.3	41.5	—	5.2	3.9	5.2	5.1	—
Bread, cake, and related products	2051	40.5	39.0	41.0	40.7	—	5.0	4.0	5.2	4.8	—
Cookies, crackers, and frozen bakery products, except bread	2052,3	42.1	38.9	42.0	43.0	—	5.5	3.8	5.1	5.5	—
Sugar and confectionery products	206	43.2	40.6	42.8	43.2	—	5.5	4.2	5.9	5.5	—
Raw cane sugar	2061	57.2	53.1	63.3	63.2	—	19.4	14.0	18.7	18.5	—
Cane sugar refining	2062	49.1	44.3	53.9	50.4	—	11.9	9.3	15.9	11.8	—
Beet sugar	2063	43.1	43.8	40.4	43.0	—	4.5	4.5	4.2	4.0	—
Candy and other confectionery products	2064	42.0	38.6	40.8	41.5	—	4.2	3.1	4.4	4.3	—
Fats and oils	207	46.0	44.3	44.1	44.0	—	7.0	6.5	7.3	7.2	—
Beverages	208	44.5	41.6	43.2	44.0	—	4.8	4.5	5.0	4.5	—
Malt beverages	2082	49.5	45.4	49.2	47.9	—	7.7	7.1	9.3	6.9	—
Bottled and canned soft drinks	2086	42.6	40.6	40.8	42.4	—	4.1	3.9	3.6	3.8	—
Misc. food and kindred products	209	39.3	37.5	40.2	41.0	—	4.4	3.9	5.0	5.1	—
Tobacco products	21	41.9	39.2	39.5	41.3	38.0	4.6	4.0	2.8	4.6	—
Cigarettes	211	42.3	39.5	37.9	42.1	—	5.7	4.9	2.4	4.5	—
Textile mill products	22	42.0	41.0	41.9	42.1	41.3	5.0	4.4	4.8	5.0	—
Broadwoven fabric mills, cotton	221	42.9	40.6	42.3	42.6	—	5.9	4.9	5.5	5.8	—
Broadwoven fabric mills, synthetics	222	42.3	41.7	42.8	42.3	—	5.3	5.1	5.8	5.6	—
Broadwoven fabric mills, wool	223	42.4	41.9	40.5	40.9	—	6.1	5.7	4.6	4.8	—
Narrow fabric mills	224	39.3	39.9	40.8	39.9	—	3.0	3.1	3.2	3.1	—
Knitting mills	225	40.3	39.7	40.5	40.2	—	3.9	3.5	3.6	3.9	—
Women's hosiery, except socks	2251	41.0	39.5	39.9	37.9	—	4.5	3.4	2.8	2.5	—
Hosiery, nec	2252	38.7	38.6	38.8	37.4	—	3.4	3.5	3.2	3.2	—
Knit outerwear mills	2253	40.5	40.0	41.0	41.1	—	3.3	3.1	3.5	3.7	—
Knit underwear mills	2254	36.3	34.9	41.3	39.5	—	2.2	1.9	2.7	2.4	—
Weft knit fabric mills	2257	42.7	42.7	39.4	39.6	—	5.4	5.2	4.4	5.0	—
Textile finishing, except wool	226	44.4	41.9	42.9	44.3	—	6.8	5.1	5.6	6.3	—
Finishing plants, cotton	2261	45.7	42.9	43.4	44.5	—	7.4	5.5	5.8	6.3	—
Finishing plants, synthetics	2262	43.1	41.1	43.4	44.2	—	5.9	4.3	5.8	6.4	—
Carpets and rugs	227	43.3	42.4	43.1	44.4	—	5.9	5.2	6.0	5.9	—
Yarn and thread mills	228	41.7	41.1	42.1	42.5	—	4.6	4.3	4.9	5.2	—
Yarn spinning mills	2281	42.2	41.6	42.8	43.4	—	4.8	4.6	5.4	5.6	—
Throwing and winding mills	2282	38.9	38.2	39.3	38.7	—	3.5	3.2	3.3	4.0	—
Miscellaneous textile goods	229	42.6	42.4	42.4	43.0	—	4.9	4.4	4.9	5.2	—
Apparel and other textile products	23	37.9	36.9	37.6	38.1	37.3	2.4	1.9	2.3	2.6	—
Men's and boys' suits and coats	231	37.6	37.5	37.7	38.7	—	1.6	1.5	1.4	1.6	—
Men's and boys' furnishings	232	37.4	36.5	37.3	37.0	—	1.7	1.4	1.7	1.5	—
Men's and boys' shirts	2321	36.0	35.7	36.9	36.4	—	1.3	1.3	2.0	1.6	—
Men's and boys' trousers and slacks	2325	36.5	36.3	36.7	36.7	—	1.5	1.2	1.4	1.4	—
Men's and boys' work clothing	2326	38.2	36.2	38.2	38.5	—	1.7	1.4	1.8	2.0	—
Women's and misses' outerwear	233	36.6	35.8	35.9	36.6	—	1.9	1.8	1.7	2.0	—
Women's and misses' blouses and shirts	2331	34.7	35.9	35.0	35.0	—	1.5	1.7	1.3	1.2	—
Women's, juniors', and misses' dresses	2335	38.1	36.9	37.6	37.5	—	2.1	2.1	1.9	2.0	—
Women's and misses' suits and coats	2337	34.8	33.3	36.6	36.9	—	1.5	1.2	1.8	2.3	—
Women's and misses' outerwear, nec	2339	36.8	35.8	35.6	36.6	—	2.0	1.8	1.7	2.1	—
Women's and children's undergarments	234	37.3	37.2	37.3	38.2	—	2.5	2.0	2.3	2.6	—
Women's and children's underwear	2341	36.7	36.2	38.2	38.2	—	2.0	1.3	2.3	2.3	—
Brassieres, girdles, and allied garments	2342	39.3	40.4	34.8	38.1	—	4.4	4.3	2.2	3.3	—
Girls' and children's outerwear	236	37.9	37.3	37.3	37.5	—	2.3	1.9	3.2	3.2	—
Girls' and children's dresses and blouses	2361	36.9	35.9	38.3	37.3	—	2.3	2.1	3.9	3.3	—
Misc. apparel and accessories	238	38.5	36.8	38.9	37.5	—	1.7	1.4	2.0	1.8	—
Misc. fabricated textile products	239	40.1	38.5	39.6	40.9	—	3.9	2.8	3.7	4.4	—
Curtains and draperies	2391	38.4	37.1	36.4	37.8	—	2.7	1.0	1.5	2.0	—
House furnishings, nec	2392	40.2	38.4	40.5	42.2	—	3.9	3.2	4.1	5.2	—
Automotive and apparel trimmings	2396	40.7	39.3	40.0	41.3	—	4.2	3.2	3.9	5.3	—
Paper and allied products	26	44.5	43.8	44.4	44.7	43.7	6.0	5.5	6.2	6.1	—
Paper mills	262	46.5	45.9	45.3	46.0	—	6.6	6.5	6.6	6.7	—
Paperboard mills	263	45.3	44.9	44.6	45.3	—	7.5	7.5	7.3	6.9	—

See footnotes at end of table.

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	\$12.22	\$12.15	\$12.48	\$12.51	-	\$502.24	\$473.85	\$515.42	\$519.17	-
Bread, cake, and related products	2051	12.27	12.22	12.65	12.72	-	496.94	476.58	518.65	517.70	-
Cookies, crackers, and frozen bakery products, except bread	2052.3	12.14	12.01	12.19	12.15	-	511.09	467.19	511.98	522.45	-
Sugar and confectionery products	206	11.96	12.25	12.54	12.55	-	516.67	497.35	536.71	542.16	-
Raw cane sugar	2061	12.39	12.28	11.64	11.29	-	708.71	652.07	736.81	713.53	-
Cane sugar refining	2062	17.66	17.87	18.38	18.07	-	867.11	791.64	990.68	910.73	-
Beet sugar	2063	12.54	13.20	12.86	13.07	-	540.47	578.16	519.54	562.01	-
Candy and other confectionery products	2064	10.84	11.17	11.71	11.85	-	455.28	431.16	477.77	491.78	-
Fats and oils	207	12.29	12.23	12.77	12.81	-	565.34	541.79	563.16	563.64	-
Beverages	208	16.08	16.04	16.41	16.26	-	715.56	667.26	708.91	715.44	-
Malt beverages	2082	21.08	21.70	22.93	22.25	-	1,043.46	985.18	1,128.16	1,065.78	-
Bottled and canned soft drinks	2086	13.47	13.30	13.36	13.50	-	573.82	539.98	545.09	572.40	-
Misc. food and kindred products	209	10.55	10.37	10.39	10.60	-	414.62	388.88	417.68	434.60	-
Tobacco products	21	18.67	18.56	17.78	19.05	\$18.86	782.27	727.55	702.31	786.77	\$716.68
Cigarettes	211	25.23	24.92	24.66	25.20	-	1,067.23	984.34	934.61	1,060.92	-
Textile mill products	22	9.92	9.93	10.15	10.24	10.25	416.64	407.13	425.29	431.10	423.33
Broadwoven fabric mills, cotton	221	10.27	10.26	10.59	10.65	-	440.58	416.56	447.96	453.69	-
Broadwoven fabric mills, synthetics	222	10.85	10.88	11.10	11.11	-	458.96	453.70	475.08	469.95	-
Broadwoven fabric mills, wool	223	10.21	10.39	10.66	10.62	-	432.90	435.34	431.73	434.36	-
Narrow fabric mills	224	9.22	9.33	9.26	9.31	-	362.35	372.27	377.81	371.47	-
Knitting mills	225	9.06	9.10	9.19	9.32	-	365.12	361.27	372.20	374.66	-
Women's hosiery, except socks	2251	8.32	8.49	8.58	8.59	-	341.12	335.36	342.34	325.56	-
Hosiery, nec	2252	8.95	9.07	9.21	9.25	-	346.37	350.10	357.35	345.95	-
Knit outerwear mills	2253	8.62	8.51	8.59	8.76	-	349.11	340.40	352.19	360.04	-
Knit underwear mills	2254	9.11	9.28	9.35	9.53	-	330.69	323.87	386.16	376.44	-
Weft knit fabric mills	2257	9.92	9.88	10.03	10.21	-	423.58	421.88	395.18	404.32	-
Textile finishing, except wool	226	10.13	10.10	10.45	10.55	-	449.77	423.19	448.31	447.37	-
Finishing plants, cotton	2261	10.11	10.05	10.39	10.42	-	462.03	431.15	450.93	463.69	-
Finishing plants, synthetics	2262	10.43	10.29	10.95	11.08	-	449.53	422.92	475.23	489.74	-
Carpets and rugs	227	10.07	9.97	10.20	10.30	-	436.03	422.73	439.62	457.32	-
Yarn and thread mills	228	9.59	9.63	9.88	9.93	-	399.90	395.79	415.95	422.03	-
Yarn spinning mills	2281	9.55	9.61	9.92	9.95	-	403.01	399.78	424.58	431.83	-
Throwing and winding mills	2282	9.86	9.84	9.96	10.05	-	383.55	375.89	391.43	388.94	-
Miscellaneous textile goods	229	11.49	11.48	11.72	11.82	-	489.47	486.75	496.93	508.26	-
Apparel and other textile products	23	8.15	8.12	8.33	8.43	8.45	308.89	299.63	313.21	321.18	315.19
Men's and boys' suits and coats	231	8.37	8.37	8.57	8.65	-	314.71	313.88	323.09	334.76	-
Men's and boys' furnishings	232	7.61	7.65	7.85	7.85	-	284.61	279.23	292.81	290.45	-
Men's and boys' shirts	2321	7.50	7.55	7.69	7.75	-	270.00	269.54	283.76	282.10	-
Men's and boys' trousers and slacks	2325	7.66	7.70	8.02	7.98	-	279.59	279.51	294.33	292.87	-
Men's and boys' work clothing	2326	7.55	7.63	7.74	7.77	-	288.41	276.21	295.67	299.15	-
Women's and misses' outerwear	233	7.66	7.68	7.97	8.08	-	280.36	274.94	286.12	295.73	-
Women's and misses' blouses and shirts	2331	6.84	6.89	7.15	7.27	-	237.35	247.35	250.25	254.45	-
Women's, juniors', and misses' dresses	2335	8.49	8.57	8.97	9.15	-	323.47	316.23	337.27	343.13	-
Women's and misses' suits and coats	2337	7.92	7.89	7.86	7.98	-	275.62	262.74	287.68	294.46	-
Women's and misses' outerwear, nec	2339	7.54	7.56	7.87	7.95	-	277.47	270.65	280.17	290.97	-
Women's and children's undergarments	234	7.78	7.75	8.00	8.05	-	290.19	288.30	298.40	307.51	-
Women's and children's underwear	2341	7.55	7.58	7.76	7.88	-	277.09	274.40	296.43	301.02	-
Brassieres, girdles, and allied garments	2342	8.47	8.24	8.78	8.52	-	332.87	332.90	305.54	324.61	-
Girls' and children's outerwear	236	7.21	7.16	7.77	7.84	-	273.26	267.07	289.82	294.00	-
Girls' and children's dresses and blouses	2361	7.15	7.17	7.43	7.48	-	263.84	257.40	284.57	279.00	-
Misc. apparel and accessories	238	7.63	7.62	7.95	7.96	-	293.76	280.42	309.26	298.50	-
Misc. fabricated textile products	239	9.39	9.24	9.22	9.41	-	376.54	355.74	365.11	384.87	-
Curtains and draperies	2391	7.63	7.68	8.25	8.27	-	292.99	284.93	300.30	312.61	-
House furnishings, nec	2392	8.53	8.48	8.92	8.95	-	342.91	325.63	361.26	377.69	-
Automotive and apparel trimmings	2396	11.72	11.50	10.94	11.58	-	477.00	451.95	437.60	478.25	-
Paper and allied products	26	14.95	14.84	15.24	15.30	15.20	665.28	649.99	676.66	683.91	664.24
Paper mills	262	18.75	18.69	19.44	19.40	-	871.88	857.87	880.63	892.40	-
Paperboard mills	263	19.19	18.65	19.04	19.10	-	869.31	837.39	849.18	865.23	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	44.7	43.3	44.6	45.0	—	6.1	5.3	6.4	6.2	—
Corrugated and solid fiber boxes	2653	45.0	43.7	45.2	45.0	—	6.4	5.5	7.0	6.6	—
Sanitary food containers	2656	43.8	41.7	43.1	46.1	—	5.0	4.7	4.7	5.1	—
Folding paperboard boxes	2657	44.6	43.8	44.3	44.8	—	6.2	5.8	6.3	6.2	—
Misc. converted paper products	267	42.7	42.3	43.3	43.5	—	5.1	4.6	5.5	5.5	—
Paper, coated and laminated, nec	2672	44.2	44.8	44.2	44.9	—	4.7	4.4	4.7	5.1	—
Bags: plastics, laminated, and coated	2673	42.6	42.3	43.3	42.9	—	5.4	5.1	5.5	5.1	—
Envelopes	2677	43.2	42.5	42.7	43.0	—	5.2	4.5	4.7	4.9	—
Printing and publishing											
Newspapers	271	34.0	32.3	33.8	34.0	—	1.6	0.9	1.8	1.9	—
Periodicals	272	37.8	36.5	38.0	36.6	—	3.0	2.5	3.2	2.6	—
Books	273	39.5	37.9	40.3	40.8	—	4.0	3.5	4.1	4.3	—
Book publishing	2731	37.6	36.8	38.6	38.6	—	2.9	3.4	2.5	3.0	—
Book printing	2732	41.6	39.2	42.0	43.2	—	5.3	3.7	5.9	5.7	—
Miscellaneous publishing	274	36.1	36.2	36.7	36.6	—	2.4	2.2	2.9	3.1	—
Commercial printing	275	40.5	39.5	41.0	40.9	—	4.2	3.6	4.6	4.4	—
Commercial printing, lithographic	2752	40.4	39.4	40.7	40.6	—	4.2	3.5	4.6	4.3	—
Commercial printing, nec	2759	40.0	39.1	40.9	41.2	—	3.9	3.4	4.5	4.3	—
Manifold business forms	276	43.0	41.2	43.7	43.8	—	5.2	4.1	4.8	5.8	—
Blankbooks and bookbinding	278	40.9	38.8	39.8	40.7	—	3.3	2.3	3.0	3.2	—
Printing trade services	279	39.6	39.0	40.2	40.0	—	4.3	3.7	4.8	4.5	—
Chemicals and allied products											
Industrial inorganic chemicals	281	47.1	46.7	47.3	46.4	—	6.1	5.7	6.5	6.5	—
Industrial inorganic chemicals, nec	2819	47.3	46.6	46.9	45.0	—	6.0	5.5	6.3	6.2	—
Plastics materials and synthetics	282	45.1	43.0	44.0	44.4	—	5.5	5.5	5.6	5.7	—
Plastics materials and resins	2821	46.8	45.6	44.7	45.3	—	5.8	6.0	5.7	5.8	—
Organic fibers, noncellulosic	2824	45.2	41.0	43.4	43.4	—	5.3	4.8	5.3	4.9	—
Drugs	283	42.5	42.0	42.0	42.2	—	5.3	5.0	5.7	6.0	—
Pharmaceutical preparations	2834	42.4	42.2	42.2	42.5	—	5.3	5.0	5.4	5.8	—
Soap, cleaners, and toilet goods	284	43.2	40.7	42.0	42.4	—	3.8	3.2	3.9	4.0	—
Soap and other detergents	2841	44.3	41.5	43.8	45.8	—	4.7	3.8	5.0	5.3	—
Polishing, sanitation, and finishing preparations	2842,3	42.7	40.5	41.9	42.4	—	3.5	3.1	3.6	4.1	—
Toilet preparations	2844	42.9	40.4	41.2	40.9	—	3.5	3.0	3.5	3.4	—
Paints and allied products	285	43.5	42.1	42.7	44.4	—	4.0	3.7	4.5	5.2	—
Industrial organic chemicals	286	45.7	45.1	44.8	45.1	—	6.5	5.9	6.2	6.1	—
Cyclic crudes and intermediates	2865	47.8	47.0	43.4	45.3	—	7.8	7.4	4.6	5.7	—
Industrial organic chemicals, nec	2869	45.2	44.7	45.2	45.1	—	6.1	5.5	6.6	6.2	—
Agricultural chemicals	287	44.9	45.2	44.9	44.7	—	5.7	6.0	6.7	6.7	—
Miscellaneous chemical products	289	44.4	42.8	44.3	44.2	—	5.3	4.9	5.6	5.5	—
Petroleum and coal products											
Petroleum refining	291	44.6	46.4	44.1	42.4	—	5.3	6.1	5.7	5.2	—
Asphalt paving and roofing materials	295	41.8	41.0	41.7	40.8	—	7.3	6.5	6.8	5.4	—
Rubber and misc. plastics products											
Tires and inner tubes	301	45.1	44.4	44.6	46.8	—	6.1	6.2	6.7	6.8	—
Rubber and plastics footwear	302	40.8	40.8	41.6	41.4	—	0.6	1.9	3.3	4.6	—
Hose, belting, gaskets, and packing	305	43.3	43.1	43.0	44.4	—	5.3	4.8	5.2	5.7	—
Rubber and plastics hose and belting	3052	43.8	44.9	44.2	45.3	—	5.8	5.7	5.7	6.2	—
Fabricated rubber products, nec	306	43.9	42.3	43.7	44.7	—	5.3	4.4	5.4	5.7	—
Miscellaneous plastics products, nec	308	42.1	40.8	42.1	42.7	—	4.5	4.0	4.6	4.8	—
Leather and leather products											
Leather tanning and finishing	311	43.2	41.0	42.1	43.9	—	6.3	5.2	4.5	5.6	—
Footwear, except rubber	314	37.9	37.1	36.5	36.8	—	1.6	1.5	1.5	1.8	—
Men's footwear, except athletic	3143	37.4	37.5	35.8	36.0	—	1.7	2.0	1.6	1.9	—
Women's footwear, except athletic	3144	38.8	36.8	38.2	37.5	—	1.1	0.7	1.0	0.7	—
Luggage	316	42.0	39.2	40.2	39.8	—	2.9	1.5	3.2	2.1	—
Handbags and personal leather goods	317	37.9	36.2	41.1	40.4	—	1.1	0.9	3.4	1.3	—
Service-producing		33.0	32.2	33.0	32.9	32.4	—	—	—	—	—
Transportation and public utilities		39.9	38.8	40.3	39.8	39.5	—	—	—	—	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	\$12.61	\$12.58	\$12.96	\$13.03	—	\$563.67	\$544.71	\$578.02	\$586.35	—
Corrugated and solid fiber boxes	2653	12.61	12.58	12.96	13.05	—	567.45	549.75	585.79	587.25	—
Sanitary food containers	2656	12.56	12.80	12.85	12.71	—	550.13	533.76	553.84	585.93	—
Folding paperboard boxes	2657	13.30	13.11	13.77	13.85	—	593.18	574.22	610.01	620.48	—
Misc. converted paper products	267	13.13	12.94	13.31	13.41	—	560.65	547.36	576.32	583.34	—
Paper, coated and laminated, nec	2672	15.17	14.56	15.41	15.37	—	670.51	652.29	681.12	690.11	—
Bags: plastics, laminated, and coated	2673	11.95	11.86	12.01	12.03	—	509.07	501.68	520.03	516.09	—
Envelopes	2677	11.89	11.82	12.05	12.19	—	513.65	502.35	514.54	524.17	—
Printing and publishing	27	12.90	12.86	13.25	13.30	\$13.29	503.10	486.11	519.40	522.69	\$505.02
Newspapers	271	12.71	12.80	13.02	13.11	—	432.14	413.44	440.08	445.74	—
Periodicals	272	14.17	14.08	14.81	14.59	—	535.63	513.92	562.78	533.99	—
Books	273	12.26	12.23	12.51	12.40	—	484.27	463.52	504.15	505.92	—
Book publishing	2731	11.77	11.97	11.90	11.77	—	442.55	440.50	459.34	454.32	—
Book printing	2732	12.75	12.50	13.11	12.99	—	530.40	490.00	550.62	561.17	—
Miscellaneous publishing	274	12.48	12.51	12.82	13.06	—	450.53	452.86	470.49	478.00	—
Commercial printing	275	13.16	13.03	13.49	13.56	—	532.98	514.69	553.09	554.60	—
Commercial printing, lithographic	2752	13.39	13.28	13.66	13.76	—	540.96	523.23	555.96	558.66	—
Commercial printing, nec	2759	12.52	12.34	12.92	12.95	—	500.80	482.49	528.43	533.54	—
Manifold business forms	276	13.73	13.55	14.32	14.49	—	590.39	558.26	625.78	634.66	—
Blankbooks and bookbinding	278	10.06	10.05	10.33	10.28	—	411.45	389.94	411.13	418.40	—
Printing trade services	279	15.85	15.88	16.34	16.58	—	627.66	619.32	656.87	663.20	—
Chemicals and allied products	28	16.45	16.37	16.85	16.91	16.93	730.38	705.55	736.35	742.35	733.07
Industrial inorganic chemicals	281	18.31	18.31	18.91	18.78	—	862.40	855.08	894.44	871.39	—
Industrial inorganic chemicals, nec	2819	18.63	18.62	19.14	18.98	—	881.20	867.69	897.67	854.10	—
Plastics materials and synthetics	282	17.18	17.12	17.67	17.76	—	774.82	736.16	777.48	788.54	—
Plastics materials and resins	2821	18.98	18.96	19.84	19.99	—	888.26	864.58	886.85	905.55	—
Organic fibers, noncellulosic	2824	14.98	14.70	15.12	15.07	—	677.10	602.70	656.21	654.04	—
Drugs	283	16.15	15.99	16.78	16.64	—	686.38	671.58	704.76	702.21	—
Pharmaceutical preparations	2834	15.96	15.87	16.60	16.41	—	676.70	669.71	700.52	697.43	—
Soap, cleaners, and toilet goods	284	13.27	13.27	13.40	13.89	—	573.26	540.09	562.80	588.94	—
Soap and other detergents	2841	16.73	16.48	17.26	17.86	—	741.14	683.92	755.99	817.99	—
Polishing, sanitation, and finishing preparations ..	2842,3	12.67	12.37	12.96	13.33	—	541.01	500.99	543.02	565.19	—
Toilet preparations	2844	11.88	12.17	11.89	12.29	—	509.65	491.67	489.87	502.66	—
Paints and allied products	285	13.91	13.70	14.18	14.40	—	605.09	576.77	605.49	639.36	—
Industrial organic chemicals	286	19.76	19.56	20.13	20.17	—	903.03	882.16	901.82	909.67	—
Cyclic crudes and intermediates	2865	19.66	19.62	20.03	20.08	—	939.75	922.14	869.30	909.62	—
Industrial organic chemicals, nec	2869	19.89	19.68	20.28	20.31	—	899.03	879.70	916.66	915.98	—
Agricultural chemicals	287	16.61	16.30	17.00	16.93	—	745.79	736.76	763.30	756.77	—
Miscellaneous chemical products	289	15.07	14.98	15.19	15.25	—	669.11	641.14	672.92	674.05	—
Petroleum and coal products	29	20.26	20.13	20.40	20.55	20.44	889.41	905.85	885.36	867.21	887.10
Petroleum refining	291	22.38	21.99	22.62	22.68	—	998.15	1,020.34	997.54	961.63	—
Asphalt paving and roofing materials	295	14.68	14.26	15.22	15.33	—	613.62	584.66	634.67	625.46	—
Rubber and misc. plastics products	30	11.51	11.49	11.65	11.81	11.84	490.33	475.69	495.13	511.37	500.83
Tires and inner tubes	301	18.42	18.53	18.61	18.65	—	830.74	822.73	830.01	872.82	—
Rubber and plastics footwear	302	9.39	9.61	9.90	9.98	—	383.11	392.09	411.84	413.17	—
Hose, belting, gaskets, and packing	305	11.75	11.54	11.66	11.94	—	508.78	497.37	501.38	530.14	—
Rubber and plastics hose and belting	3052	12.01	11.64	11.79	11.93	—	526.04	522.64	521.12	540.43	—
Fabricated rubber products, nec	306	11.01	11.00	11.37	11.55	—	483.34	465.30	496.87	516.29	—
Miscellaneous plastics products, nec	308	10.83	10.79	10.97	11.11	—	455.94	440.23	461.84	474.40	—
Leather and leather products	31	8.83	8.83	9.10	9.17	9.25	347.02	332.89	350.35	355.80	348.73
Leather tanning and finishing	311	11.57	11.70	11.97	11.95	—	499.82	479.70	503.94	524.61	—
Footwear, except rubber	314	8.45	8.48	8.61	8.65	—	320.26	314.61	314.27	318.32	—
Men's footwear, except athletic	3143	9.41	9.42	9.13	9.31	—	351.93	353.25	326.85	335.16	—
Women's footwear, except athletic	3144	7.27	7.29	7.59	7.52	—	282.08	268.27	289.94	282.00	—
Luggage	316	8.56	8.68	8.84	8.88	—	359.52	340.26	355.37	353.42	—
Handbags and personal leather goods	317	7.74	7.86	8.28	8.18	—	293.35	284.53	340.31	330.47	—
Service-producing		11.50	11.60	11.98	11.95	12.08	379.50	373.52	395.34	393.16	391.39
Transportation and public utilities		14.60	14.71	15.14	15.12	15.16	582.54	570.75	610.14	601.78	598.82

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Transportation and public utilities—Continued											
Railroad transportation:											
Class 1 railroads plus Amtrak ³	4011	47.0	47.4	51.7	50.0	-	-	-	-	-	-
Local and interurban passenger transit	41	34.3	33.0	34.3	34.3	-	-	-	-	-	-
Local and suburban transportation	411	38.4	37.5	38.8	38.5	-	-	-	-	-	-
Intercity and rural bus transportation	413	38.4	37.8	39.5	38.1	-	-	-	-	-	-
Trucking and warehousing	42	40.1	38.8	40.4	40.2	-	-	-	-	-	-
Trucking and courier services, except air	421	40.1	38.7	40.3	40.1	-	-	-	-	-	-
Public warehousing and storage	422	40.3	38.9	41.4	41.3	-	-	-	-	-	-
Water transportation:											
Water transportation services	449	39.1	38.2	39.1	38.5	-	-	-	-	-	-
Pipelines, except natural gas	46	46.1	45.0	45.0	44.6	-	-	-	-	-	-
Transportation services											
Passenger transportation arrangement	472	37.9	37.4	38.0	36.5	-	-	-	-	-	-
Travel agencies	4724	37.5	36.9	38.3	36.6	-	-	-	-	-	-
Freight transportation arrangement	473	40.1	38.2	37.1	37.2	-	-	-	-	-	-
Communications											
Telephone communications	481	42.1	41.8	42.1	41.9	-	-	-	-	-	-
Telephone communications, except radio	4813	42.4	42.5	42.3	42.2	-	-	-	-	-	-
Radio and television broadcasting	483	35.9	35.0	36.0	35.4	-	-	-	-	-	-
Cable and other pay television services	484	39.1	39.0	39.9	39.6	-	-	-	-	-	-
Electric, gas, and sanitary services											
Electric services	491	41.4	41.2	42.1	40.5	-	-	-	-	-	-
Gas production and distribution	492	42.9	42.4	44.1	42.8	-	-	-	-	-	-
Combination utility services	493	43.0	42.5	43.2	43.7	-	-	-	-	-	-
Sanitary services	495	42.5	42.3	42.5	42.2	-	-	-	-	-	-
Wholesale trade		38.7	37.9	38.7	38.4	38.1	-	-	-	-	-
Durable goods											
Motor vehicles, parts, and supplies	501	38.1	38.0	38.0	37.9	-	-	-	-	-	-
Furniture and home furnishings	502	38.3	37.5	37.8	38.1	-	-	-	-	-	-
Lumber and other construction materials	503	40.0	38.6	39.9	39.5	-	-	-	-	-	-
Professional and commercial equipment	504	40.0	38.8	40.4	39.6	-	-	-	-	-	-
Medical and hospital equipment	5047	39.7	39.1	40.2	39.2	-	-	-	-	-	-
Metals and minerals, except petroleum	505	42.1	41.2	42.0	41.8	-	-	-	-	-	-
Electrical goods	506	40.0	38.9	39.6	39.2	-	-	-	-	-	-
Hardware, plumbing, and heating equipment	507	39.6	38.6	39.5	39.2	-	-	-	-	-	-
Machinery, equipment, and supplies	508	39.6	38.7	39.7	39.4	-	-	-	-	-	-
Misc. wholesale trade durable goods	509	38.3	37.2	38.0	37.9	-	-	-	-	-	-
Nondurable goods											
Paper and paper products	511	36.5	36.0	37.1	36.5	-	-	-	-	-	-
Drugs, proprietaries, and sundries	512	36.8	36.0	36.6	36.1	-	-	-	-	-	-
Apparel, piece goods, and notions	513	37.2	36.9	38.4	37.4	-	-	-	-	-	-
Groceries and related products	514	38.7	37.9	38.6	38.5	-	-	-	-	-	-
Farm-product raw materials	515	34.5	33.3	35.4	33.9	-	-	-	-	-	-
Chemicals and allied products	516	40.6	39.7	40.1	40.1	-	-	-	-	-	-
Petroleum and petroleum products	517	38.2	37.8	38.1	37.8	-	-	-	-	-	-
Beer, wine, and distilled beverages	518	38.2	37.2	37.8	37.4	-	-	-	-	-	-
Misc. wholesale trade nondurable goods	519	36.1	35.4	36.2	36.2	-	-	-	-	-	-
Retail trade		29.3	28.0	28.8	29.2	28.1	-	-	-	-	-
Building materials and garden supplies											
Lumber and other building materials	521	35.6	36.2	36.0	35.9	-	-	-	-	-	-
Paint, glass, and wallpaper stores	523	35.8	34.8	35.9	35.7	-	-	-	-	-	-
Hardware stores	525	31.4	30.3	31.0	31.0	-	-	-	-	-	-
Retail nurseries and garden stores	526	32.0	29.9	30.3	30.5	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P
Transportation and public utilities—Continued											
Railroad transportation:											
Class I railroads plus Amtrak ³	4011	\$17.81	\$18.15	\$18.12	\$17.91	—	\$837.07	\$860.31	\$936.80	\$895.50	—
Local and interurban passenger transit	41	10.86	10.88	11.02	11.07	—	372.50	359.04	377.99	379.70	—
Local and suburban transportation	411	11.42	11.39	11.43	11.51	—	438.53	427.13	443.48	443.14	—
Intercity and rural bus transportation	413	13.82	14.00	14.30	14.25	—	530.69	529.20	564.85	542.93	—
Trucking and warehousing	42	13.05	12.97	13.39	13.43	—	523.31	503.24	540.96	539.89	—
Trucking and courier services, except air	421	13.27	13.17	13.66	13.67	—	532.13	509.68	550.50	548.17	—
Public warehousing and storage	422	10.81	10.87	10.80	11.12	—	435.64	422.84	447.12	459.26	—
Water transportation:											
Water transportation services	449	18.97	19.44	20.91	19.97	—	741.73	742.61	817.58	768.85	—
Pipelines, except natural gas	46	20.84	20.30	20.94	20.70	—	960.72	913.50	942.30	923.22	—
Transportation services	47	12.74	12.62	13.56	13.36	—	495.59	474.51	513.92	495.66	—
Passenger transportation arrangement	472	12.55	12.46	13.90	13.56	—	475.65	466.00	528.20	494.94	—
Travel agencies	4724	12.86	12.74	14.12	13.75	—	482.25	470.11	540.80	503.25	—
Freight transportation arrangement	473	13.32	13.16	13.66	13.53	—	534.13	502.71	506.79	503.32	—
Communications	48	16.41	16.63	17.17	17.15	—	662.96	665.20	695.39	689.43	—
Telephone communications	481	17.03	17.27	17.77	17.72	—	716.96	721.89	748.12	742.47	—
Telephone communications, except radio	4813	17.51	17.79	18.28	18.26	—	742.42	756.08	773.24	770.57	—
Radio and television broadcasting	483	16.48	16.65	17.49	17.59	—	591.63	582.75	629.64	622.69	—
Cable and other pay television services	484	13.09	13.32	13.79	13.76	—	511.82	519.48	550.22	544.90	—
Electric, gas, and sanitary services	49	18.79	18.82	19.67	19.61	—	791.06	786.68	839.91	819.70	—
Electric services	491	19.77	19.80	20.81	20.64	—	818.48	815.76	876.10	835.92	—
Gas production and distribution	492	18.02	17.76	18.64	18.45	—	773.06	753.02	822.02	789.66	—
Combination utility services	493	22.73	22.84	23.38	23.23	—	977.39	970.70	1,010.02	1,015.15	—
Sanitary services	495	13.98	14.18	15.15	15.44	—	594.15	599.81	643.88	651.57	—
Wholesale trade		13.20	13.18	13.74	13.71	\$13.77	510.84	499.52	531.74	526.46	\$524.64
Durable goods	50	13.73	13.74	14.32	14.26	—	542.34	530.36	565.64	557.57	—
Motor vehicles, parts, and supplies	501	11.90	11.99	12.50	12.68	—	453.39	455.62	475.00	480.57	—
Furniture and home furnishings	502	12.07	12.15	12.66	12.68	—	462.28	455.63	478.55	483.11	—
Lumber and other construction materials	503	12.38	12.39	13.02	12.89	—	495.20	478.25	519.50	509.16	—
Professional and commercial equipment	504	16.38	16.44	16.81	16.67	—	655.20	637.87	679.12	660.13	—
Medical and hospital equipment	5047	15.41	15.33	16.40	16.64	—	611.78	599.40	659.28	652.29	—
Metals and minerals, except petroleum	505	13.36	13.28	13.73	13.77	—	562.46	547.14	576.66	575.59	—
Electrical goods	506	14.88	14.70	15.66	15.51	—	595.20	571.83	620.14	607.99	—
Hardware, plumbing, and heating equipment	507	12.85	12.86	13.64	13.53	—	508.86	496.40	538.78	530.38	—
Machinery, equipment, and supplies	508	13.75	13.78	14.41	14.33	—	544.50	533.29	572.08	564.60	—
Misc. wholesale trade durable goods	509	10.74	10.72	11.04	11.19	—	411.34	398.78	419.52	424.10	—
Nondurable goods	51	12.43	12.36	12.90	12.91	—	467.37	456.08	486.33	482.83	—
Paper and paper products	511	12.54	12.39	13.58	13.11	—	457.71	446.04	503.82	478.52	—
Drugs, proprietaries, and sundries	512	15.92	15.76	17.04	16.78	—	585.86	567.36	623.66	605.76	—
Apparel, piece goods, and notions	513	12.16	12.23	12.42	12.65	—	452.35	451.29	476.93	473.11	—
Groceries and related products	514	12.66	12.57	13.09	13.16	—	489.94	476.40	505.27	506.66	—
Farm-product raw materials	515	9.37	9.43	9.71	9.82	—	323.27	314.02	343.73	332.90	—
Chemicals and allied products	516	13.88	13.78	14.74	14.60	—	563.53	547.07	591.07	585.46	—
Petroleum and petroleum products	517	11.79	11.75	11.91	11.85	—	450.38	444.15	453.77	447.93	—
Beer, wine, and distilled beverages	518	14.64	14.45	14.94	15.22	—	559.25	537.54	564.73	569.23	—
Misc. wholesale trade nondurable goods	519	10.33	10.28	10.56	10.61	—	372.91	363.91	382.27	384.08	—
Retail trade		8.16	8.24	8.51	8.50	8.61	239.09	230.72	245.09	248.20	241.94
Building materials and garden supplies	52	9.70	9.77	10.06	10.01	—	334.65	336.09	347.07	344.34	—
Lumber and other building materials	521	10.16	10.16	10.45	10.39	—	361.70	367.79	376.20	373.00	—
Paint, glass, and wallpaper stores	523	10.27	10.12	10.80	10.64	—	367.67	352.18	387.72	379.85	—
Hardware stores	525	8.07	8.09	8.29	8.31	—	253.40	245.13	256.99	257.61	—
Retail nurseries and garden stores	526	8.46	9.14	9.12	9.13	—	270.72	273.29	276.34	278.47	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Retail trade—Continued											
General merchandise stores	53	31.2	28.1	29.8	30.9	-	-	-	-	-	-
Department stores	531	31.3	28.2	29.9	31.0	-	-	-	-	-	-
Variety stores	533	28.9	25.9	27.9	29.3	-	-	-	-	-	-
Misc. general merchandise stores	539	30.6	28.3	30.1	31.1	-	-	-	-	-	-
Food stores	54	29.7	29.0	29.6	29.5	-	-	-	-	-	-
Grocery stores	541	29.8	29.3	29.8	29.6	-	-	-	-	-	-
Retail bakeries	546	28.5	26.8	28.9	29.5	-	-	-	-	-	-
Automotive dealers and service stations	55	35.3	35.0	35.6	35.2	-	-	-	-	-	-
New and used car dealers	551	36.9	36.4	37.0	36.8	-	-	-	-	-	-
Auto and home supply stores	553	37.3	36.8	38.1	37.4	-	-	-	-	-	-
Gasoline service stations	554	31.8	31.8	31.9	31.5	-	-	-	-	-	-
Automotive dealers, nec	559	36.0	36.2	35.1	35.2	-	-	-	-	-	-
Apparel and accessory stores	56	27.6	25.4	26.6	27.3	-	-	-	-	-	-
Men's and boys' clothing stores	561	29.6	28.4	28.8	29.9	-	-	-	-	-	-
Women's clothing stores	562	25.5	23.1	24.9	25.1	-	-	-	-	-	-
Family clothing stores	565	29.0	26.2	27.4	28.2	-	-	-	-	-	-
Shoe stores	566	27.1	25.5	25.9	26.9	-	-	-	-	-	-
Furniture and home furnishings stores	57	33.6	32.3	33.1	33.4	-	-	-	-	-	-
Furniture and home furnishings stores	571	33.6	32.3	33.1	33.0	-	-	-	-	-	-
Household appliance stores	572	35.9	34.1	34.8	35.4	-	-	-	-	-	-
Radio, television, and computer stores	573	33.3	32.0	32.9	33.6	-	-	-	-	-	-
Radio, television, and electronic stores	5731	34.7	32.4	33.1	34.6	-	-	-	-	-	-
Record and prerecorded tape stores	5735	25.7	24.5	24.9	27.1	-	-	-	-	-	-
Eating and drinking places ⁴	58	25.2	24.1	25.1	25.2	-	-	-	-	-	-
Miscellaneous retail establishments	59	30.9	28.9	29.2	30.3	-	-	-	-	-	-
Drug stores and proprietary stores	591	29.1	28.4	28.6	28.7	-	-	-	-	-	-
Used merchandise stores	593	30.9	30.5	30.8	30.8	-	-	-	-	-	-
Miscellaneous shopping goods stores	594	30.0	26.9	27.1	29.3	-	-	-	-	-	-
Nonstore retailers	596	34.5	32.3	33.0	33.9	-	-	-	-	-	-
Fuel dealers	598	40.0	40.0	39.0	39.2	-	-	-	-	-	-
Retail stores, nec	599	31.3	29.0	30.0	31.0	-	-	-	-	-	-
Optical goods stores	5995	33.2	33.3	33.0	33.0	-	-	-	-	-	-
Miscellaneous retail stores, nec	5999	31.3	29.0	30.2	30.7	-	-	-	-	-	-
Finance, insurance, and real estate⁵		36.7	35.7	36.7	35.8	35.9	-	-	-	-	-
Depository institutions	60	36.1	34.9	36.0	35.0	-	-	-	-	-	-
Commercial banks	602	35.9	34.6	35.9	34.6	-	-	-	-	-	-
State commercial banks	6022	36.4	35.0	36.1	35.1	-	-	-	-	-	-
National and commercial banks, nec	6021,9	35.5	34.4	35.8	34.3	-	-	-	-	-	-
Credit unions	606	36.3	35.6	36.2	35.7	-	-	-	-	-	-
Nondepository institutions	61	39.4	37.6	38.6	37.3	-	-	-	-	-	-
Personal credit institutions	614	40.2	38.1	39.4	37.7	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services	628	38.2	36.5	38.9	37.2	-	-	-	-	-	-
Insurance carriers	63	38.8	38.2	39.1	38.5	-	-	-	-	-	-
Life insurance	631	38.7	37.9	38.4	37.8	-	-	-	-	-	-
Medical service and health insurance	632	39.7	38.8	39.0	39.3	-	-	-	-	-	-
Hospital and medical service plans	6324	39.7	38.9	39.3	39.8	-	-	-	-	-	-
Fire, marine, and casualty insurance	633	38.3	38.3	39.9	38.7	-	-	-	-	-	-
Services		32.7	32.0	32.8	32.6	32.4	-	-	-	-	-
Agricultural services	07	32.9	31.4	33.5	32.5	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Retail trade—Continued											
General merchandise stores	53	\$7.93	\$7.98	\$8.28	\$8.27	—	\$247.42	\$224.24	\$246.74	\$255.54	—
Department stores	531	7.98	8.01	8.32	8.32	—	249.77	225.88	248.77	257.92	—
Variety stores	533	7.13	7.46	7.67	7.58	—	206.06	193.21	213.99	222.09	—
Misc. general merchandise stores	539	7.72	7.79	8.12	8.09	—	236.23	220.46	244.41	251.60	—
Food stores	54	8.52	8.61	8.80	8.83	—	253.04	249.69	260.48	260.49	—
Grocery stores	541	8.64	8.71	8.92	8.97	—	257.47	255.20	265.82	265.51	—
Retail bakeries	546	7.66	7.62	7.64	7.76	—	218.31	204.22	220.80	228.92	—
Automotive dealers and service stations	55	11.09	10.99	11.64	11.49	—	391.48	384.65	414.38	404.45	—
New and used car dealers	551	13.95	13.74	14.63	14.31	—	514.76	500.14	541.31	526.61	—
Auto and home supply stores	553	9.18	9.18	9.69	9.61	—	342.41	337.82	369.19	359.41	—
Gasoline service stations	554	7.33	7.35	7.62	7.70	—	233.09	233.73	243.08	242.55	—
Automotive dealers, nec	559	12.22	12.01	12.46	12.62	—	439.92	434.76	437.35	444.22	—
Apparel and accessory stores	56	7.76	7.95	8.19	8.16	—	214.18	201.93	217.85	222.77	—
Men's and boys' clothing stores	561	9.34	9.55	9.87	9.69	—	276.46	271.22	284.26	289.73	—
Women's clothing stores	562	7.55	7.87	8.13	8.11	—	192.53	181.80	202.44	203.56	—
Family clothing stores	565	7.63	7.72	7.94	7.85	—	221.27	202.26	217.56	221.37	—
Shoe stores	566	7.63	7.76	8.06	8.23	—	206.77	197.88	208.75	221.39	—
Furniture and home furnishings stores	57	10.95	10.98	11.53	11.51	—	367.92	354.65	381.64	384.43	—
Furniture and home furnishings stores	571	10.62	10.46	11.01	11.05	—	356.83	337.86	364.43	364.65	—
Household appliance stores	572	10.85	10.50	11.04	11.03	—	389.52	358.05	384.19	390.46	—
Radio, television, and computer stores	573	11.36	11.70	12.22	12.12	—	378.29	374.40	402.04	407.23	—
Radio, television, and electronic stores	5731	10.77	10.62	11.23	11.43	—	373.72	344.09	371.71	395.48	—
Record and prerecorded tape stores	5735	6.73	6.89	7.08	6.90	—	172.96	168.81	176.29	186.99	—
Eating and drinking places ⁴	58	5.97	5.95	6.21	6.28	—	150.44	143.40	155.87	158.26	—
Miscellaneous retail establishments	59	8.77	9.08	9.13	9.09	—	270.99	262.41	266.60	275.43	—
Drug stores and proprietary stores	591	9.44	9.53	9.77	9.79	—	274.70	270.65	279.42	280.97	—
Used merchandise stores	593	7.48	7.58	7.72	7.76	—	231.13	231.19	237.78	239.01	—
Miscellaneous shopping goods stores	594	7.99	8.49	8.41	8.31	—	239.70	228.38	227.91	243.48	—
Nonstore retailers	596	9.30	9.39	9.53	9.69	—	320.85	303.30	314.49	328.49	—
Fuel dealers	598	12.36	12.42	12.77	12.87	—	494.40	496.80	498.03	504.50	—
Retail stores, nec	599	8.94	9.16	9.24	9.17	—	279.82	265.64	277.20	284.27	—
Optical goods stores	5995	11.10	11.19	11.17	11.21	—	368.52	372.63	368.61	369.93	—
Miscellaneous retail stores, nec	5999	9.17	9.46	9.54	9.48	—	287.02	274.34	288.11	291.04	—
Finance, insurance, and real estate⁵		13.02	12.99	13.69	13.58	\$13.63	477.83	463.74	502.42	486.16	\$489.32
Depository institutions	60	10.11	10.10	10.50	10.51	—	364.97	352.49	378.00	367.85	—
Commercial banks	602	9.67	9.65	10.00	10.08	—	347.15	333.89	359.00	348.77	—
State commercial banks	6022	9.43	9.51	9.83	9.87	—	343.25	332.85	354.86	346.44	—
National and commercial banks, nec	6021.9	9.84	9.74	10.12	10.22	—	349.32	335.06	362.30	350.55	—
Credit unions	606	10.00	10.01	10.35	10.34	—	363.00	356.36	374.67	369.14	—
Nondepository institutions	61	13.19	13.23	14.21	14.11	—	519.69	497.45	548.51	526.30	—
Personal credit institutions	614	11.39	11.41	11.99	11.92	—	457.88	434.72	472.41	449.38	—
Security and commodity brokers:											
Security and commodity services	628	18.25	18.48	20.01	20.05	—	697.15	674.52	778.39	745.86	—
Insurance carriers	63	15.40	15.32	16.45	16.16	—	597.52	585.22	643.20	622.16	—
Life insurance	631	14.32	14.18	14.98	14.92	—	554.18	537.42	575.23	563.98	—
Medical service and health insurance	632	14.50	14.39	15.20	15.15	—	575.65	558.33	592.80	595.40	—
Hospital and medical service plans	6324	14.76	14.62	15.54	15.57	—	585.97	568.72	610.72	619.69	—
Fire, marine, and casualty insurance	633	16.83	16.75	18.06	17.49	—	644.59	641.53	720.59	676.86	—
Services		12.16	12.19	12.58	12.62	12.68	397.63	390.08	412.62	411.41	410.83
Agricultural services	07	9.54	9.56	9.73	9.97	—	313.87	300.18	325.96	324.03	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	28.3	27.7	29.1	28.3	-	-	-	-	-	-
Landscape and horticultural services	078	35.0	33.2	35.3	34.6	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels ⁴	701	30.7	29.3	31.2	30.3	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services	721	34.3	33.0	34.4	34.5	-	-	-	-	-	-
Beauty shops ⁴	723	28.3	27.1	28.2	28.4	-	-	-	-	-	-
Miscellaneous personal services	729	25.7	23.7	27.5	27.3	-	-	-	-	-	-
Business services											
Advertising	731	37.0	36.2	37.3	36.3	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	37.6	35.1	37.5	37.1	-	-	-	-	-	-
Services to buildings	734	28.8	27.9	28.5	28.5	-	-	-	-	-	-
Disinfecting and pest control services	7342	37.7	35.7	36.9	35.7	-	-	-	-	-	-
Building maintenance services, nec	7349	28.0	27.2	27.7	27.8	-	-	-	-	-	-
Miscellaneous equipment rental and leasing											
Miscellaneous equipment rental and leasing	735	39.3	37.9	38.7	38.7	-	-	-	-	-	-
Medical equipment rental	7352	38.2	37.5	37.0	36.8	-	-	-	-	-	-
Heavy construction equipment rental	7353	39.7	38.7	40.2	40.5	-	-	-	-	-	-
Equipment rental and leasing, nec	7359	39.4	37.8	38.6	38.7	-	-	-	-	-	-
Personnel supply services:											
Help supply services	7363	32.3	31.5	32.4	32.6	-	-	-	-	-	-
Computer and data processing services	737	38.2	37.6	39.0	38.4	-	-	-	-	-	-
Computer programming services	7371	38.5	37.8	38.7	38.1	-	-	-	-	-	-
Computer integrated systems design	7373	38.9	37.9	39.8	38.9	-	-	-	-	-	-
Information retrieval services	7375	39.1	38.3	38.5	38.5	-	-	-	-	-	-
Computer maintenance and repair	7378	39.5	39.1	38.8	38.7	-	-	-	-	-	-
Miscellaneous business services											
Detective and armored car services	7381	34.9	34.6	34.5	34.5	-	-	-	-	-	-
Security systems services	7382	37.0	36.7	35.4	35.3	-	-	-	-	-	-
Auto repair, services, and parking											
Automotive rentals, without drivers	751	36.5	36.2	36.2	36.4	-	-	-	-	-	-
Passenger car rental	7514	36.6	35.7	36.4	36.4	-	-	-	-	-	-
Automobile parking	752	33.9	33.3	33.7	33.1	-	-	-	-	-	-
Automotive repair shops	753	38.3	38.0	38.2	38.1	-	-	-	-	-	-
Automotive and tire repair shops	7532.4	38.2	38.1	38.3	38.3	-	-	-	-	-	-
General automotive repair shops	7538	38.0	37.6	37.6	37.5	-	-	-	-	-	-
Automotive services, except repair	754	30.3	29.8	30.6	30.6	-	-	-	-	-	-
Carwashes	7542	27.0	26.3	26.4	27.6	-	-	-	-	-	-
Miscellaneous repair services											
Miscellaneous repair services	76	38.4	37.7	38.3	38.3	-	-	-	-	-	-
Motion pictures											
Motion picture production and services	781	39.9	38.8	39.6	39.8	-	-	-	-	-	-
Video tape rental	784	23.8	23.4	24.5	23.7	-	-	-	-	-	-
Amusement and recreation services											
Bowling centers	793	24.5	24.3	25.0	24.8	-	-	-	-	-	-
Misc. amusement and recreation services	799	26.4	25.0	25.9	26.1	-	-	-	-	-	-
Physical fitness facilities	7991	18.9	18.1	19.6	18.6	-	-	-	-	-	-
Membership sports and recreation clubs	7997	29.6	26.7	27.6	29.2	-	-	-	-	-	-
Health services											
Offices and clinics of medical doctors	801	33.5	32.9	33.5	33.0	-	-	-	-	-	-
Offices and clinics of dentists	802	28.7	27.8	28.7	28.5	-	-	-	-	-	-
Offices and clinics of other health practitioners	804	29.9	29.9	30.3	30.1	-	-	-	-	-	-
Nursing and personal care facilities	805	32.7	32.1	32.7	32.5	-	-	-	-	-	-
Intermediate care facilities	8052	32.3	31.6	32.2	32.0	-	-	-	-	-	-
Hospitals	806	34.6	34.6	35.2	35.1	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	\$9.40	\$9.39	\$9.70	\$9.84	—	\$266.02	\$260.10	\$282.27	\$278.47	—
Landscape and horticultural services	078	9.70	9.77	9.81	10.10	—	339.50	324.36	346.29	349.46	—
Hotels and other lodging places:											
Hotels and motels ⁴	701	8.57	8.47	8.79	8.96	—	263.10	248.17	274.25	271.49	—
Personal services:											
Laundry, cleaning, and garment services	721	7.90	7.91	8.17	8.22	—	270.97	261.03	281.05	283.59	—
Beauty shops ⁴	723	9.07	8.84	9.14	9.46	—	256.68	239.56	257.75	268.66	—
Miscellaneous personal services	729	8.96	8.22	8.79	9.09	—	230.27	194.81	241.73	248.16	—
Business services											
Advertising	731	16.61	16.56	17.17	17.06	—	614.57	599.47	640.44	619.28	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	10.66	10.80	11.27	11.13	—	400.82	379.08	422.63	412.92	—
Services to buildings	734	7.80	7.71	8.12	8.08	—	224.64	215.11	231.42	230.28	—
Disinfecting and pest control services	7342	10.12	9.96	11.18	11.03	—	381.52	355.57	412.54	393.77	—
Building maintenance services, nec	7349	7.52	7.44	7.73	7.72	—	210.56	202.37	214.12	214.62	—
Miscellaneous equipment rental and leasing	735	11.79	11.79	12.18	12.26	—	463.35	446.84	471.37	474.46	—
Medical equipment rental	7352	10.81	11.00	11.65	11.88	—	412.94	412.50	431.05	437.18	—
Heavy construction equipment rental	7353	15.36	15.42	15.88	15.97	—	609.79	596.75	638.38	646.79	—
Equipment rental and leasing, nec	7359	10.94	10.87	11.19	11.22	—	431.04	410.89	431.93	434.21	—
Personnel supply services:											
Help supply services	7363	9.55	9.64	9.82	9.92	—	308.47	303.66	318.17	323.39	—
Computer and data processing services	737	19.53	19.41	20.46	20.39	—	746.05	729.82	797.94	782.98	—
Computer programming services	7371	22.63	22.31	23.75	23.71	—	871.26	843.32	919.13	903.35	—
Computer integrated systems design	7373	20.11	19.88	20.67	20.55	—	782.28	753.45	822.67	799.40	—
Information retrieval services	7375	15.00	15.12	15.31	15.50	—	586.50	579.10	589.44	596.75	—
Computer maintenance and repair	7378	14.25	14.08	15.54	15.47	—	562.88	550.53	602.95	598.69	—
Miscellaneous business services	738	9.60	9.59	9.95	9.97	—	320.64	314.55	330.34	331.00	—
Detective and armored car services	7381	7.60	7.59	8.03	8.10	—	265.24	262.61	277.04	279.45	—
Security systems services	7382	12.02	11.98	12.59	12.82	—	444.74	439.67	445.69	452.55	—
Auto repair, services, and parking											
Automotive rentals, without drivers	751	9.90	9.90	10.27	10.31	—	361.35	358.38	371.77	375.28	—
Passenger car rental	7514	8.86	8.85	9.28	9.27	—	324.28	315.95	337.79	337.43	—
Automobile parking	752	7.43	7.42	8.22	8.46	—	251.88	247.09	277.01	280.03	—
Automotive repair shops	753	11.70	11.78	12.08	12.14	—	448.11	447.64	461.46	462.53	—
Automotive and tire repair shops	7532.4	12.32	12.40	12.65	12.78	—	470.62	472.44	484.50	489.47	—
General automotive repair shops	7538	11.63	11.77	12.01	12.05	—	441.94	442.55	451.58	451.88	—
Automotive services, except repair	754	7.92	7.91	8.40	8.25	—	239.98	235.72	257.04	252.45	—
Carwashes	7542	6.91	6.87	7.29	7.27	—	186.57	180.68	192.46	200.65	—
Miscellaneous repair services											
Motion pictures	78	14.54	14.73	14.90	15.25	—	442.02	438.95	455.94	463.60	—
Motion picture production and services	781	20.46	20.78	20.32	20.87	—	816.35	806.26	804.67	830.63	—
Video tape rental	784	6.30	6.33	6.79	6.87	—	149.94	148.12	166.36	162.82	—
Amusement and recreation services											
Bowling centers	793	7.13	7.17	7.45	7.54	—	174.69	174.23	186.25	186.99	—
Misc. amusement and recreation services	799	8.86	8.81	9.07	9.15	—	233.90	220.25	234.91	238.82	—
Physical fitness facilities	7991	8.22	8.30	8.60	8.72	—	155.36	150.23	168.56	162.19	—
Membership sports and recreation clubs	7997	9.20	9.19	9.34	9.63	—	272.32	245.37	257.78	281.20	—
Health services											
Offices and clinics of medical doctors	801	13.52	13.55	13.99	14.08	—	452.92	445.80	468.67	464.64	—
Offices and clinics of dentists	802	13.28	13.39	13.87	13.89	—	381.14	372.24	398.07	395.87	—
Offices and clinics of other health practitioners	804	12.17	12.11	12.83	12.89	—	363.88	362.09	388.75	387.99	—
Nursing and personal care facilities	805	9.11	9.20	9.50	9.53	—	297.90	295.32	310.65	309.73	—
Intermediate care facilities	8052	8.55	8.63	8.98	9.00	—	276.17	272.71	289.16	288.00	—
Hospitals	806	14.87	14.89	15.20	15.25	—	514.50	515.19	535.04	535.28	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Services—Continued											
Health services—Continued											
Home health care services	808	28.6	28.3	29.1	29.2	—	—	—	—	—	—
Legal services	81	35.5	34.3	35.6	34.7	—	—	—	—	—	—
Social services	83	31.5	30.8	31.6	31.2	—	—	—	—	—	—
Individual and family services	832	31.6	31.0	31.7	31.4	—	—	—	—	—	—
Job training and related services	833	31.3	30.7	31.2	30.8	—	—	—	—	—	—
Child day care services	835	29.9	29.1	30.3	29.9	—	—	—	—	—	—
Residential care	836	32.5	31.8	32.6	32.0	—	—	—	—	—	—
Social services, nec	839	32.5	31.7	32.8	32.2	—	—	—	—	—	—
Membership organizations:											
Professional organizations	862	35.1	34.2	35.7	35.1	—	—	—	—	—	—
Engineering and management services	87	37.4	36.9	37.5	37.0	—	—	—	—	—	—
Engineering and architectural services	871	39.4	38.8	39.5	39.3	—	—	—	—	—	—
Engineering services	8711	39.7	39.2	39.9	39.6	—	—	—	—	—	—
Architectural services	8712	38.5	38.0	38.7	38.4	—	—	—	—	—	—
Surveying services	8713	37.4	36.6	37.7	38.0	—	—	—	—	—	—
Accounting, auditing, and bookkeeping	872	36.2	36.1	36.5	35.8	—	—	—	—	—	—
Research and testing services	873	36.7	36.1	36.8	36.1	—	—	—	—	—	—
Commercial physical research	8731	40.2	39.8	40.5	39.6	—	—	—	—	—	—
Commercial nonphysical research	8732	30.5	29.9	30.6	30.3	—	—	—	—	—	—
Noncommercial research organizations	8733	36.9	36.6	36.5	35.5	—	—	—	—	—	—
Management and public relations	874	36.5	35.8	36.5	35.9	—	—	—	—	—	—
Management services	8741	35.7	35.1	35.3	34.7	—	—	—	—	—	—
Management consulting services	8742	37.1	36.4	36.9	36.4	—	—	—	—	—	—
Public relations services	8743	36.5	34.9	36.3	34.5	—	—	—	—	—	—
Services, nec	89	36.0	34.9	35.2	34.7	—	—	—	—	—	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Services—Continued											
Health services—Continued											
Home health care services	808	\$11.35	\$11.34	\$11.36	\$11.40	—	\$324.61	\$320.92	\$330.58	\$332.88	—
Legal services	81	17.13	16.96	17.79	17.66	—	608.12	581.73	633.32	612.80	—
Social services	83	8.73	8.73	8.97	8.97	—	275.00	268.88	283.45	279.86	—
Individual and family services	832	9.25	9.23	9.51	9.46	—	292.30	286.13	301.47	297.04	—
Job training and related services	833	8.57	8.51	8.71	8.69	—	268.24	261.26	271.75	267.65	—
Child day care services	835	7.53	7.51	7.72	7.75	—	225.15	218.54	233.92	231.73	—
Residential care	836	8.80	8.84	9.07	9.12	—	286.00	281.11	295.68	291.84	—
Social services, nec	839	10.50	10.45	10.93	10.84	—	341.25	331.27	358.50	349.05	—
Membership organizations:											
Professional organizations	862	17.14	17.14	18.18	18.07	—	601.61	586.19	649.03	634.26	—
Engineering and management services	87	16.89	16.79	17.60	17.52	—	631.69	619.55	660.00	648.24	—
Engineering and architectural services	871	18.47	18.50	19.28	19.28	—	727.72	717.80	761.56	757.70	—
Engineering services	8711	19.24	19.33	20.13	20.18	—	763.83	757.74	803.19	799.13	—
Architectural services	8712	16.70	16.54	17.35	17.11	—	642.95	628.52	671.45	657.02	—
Surveying services	8713	13.21	12.98	13.43	13.43	—	494.05	475.07	506.31	510.34	—
Accounting, auditing, and bookkeeping	872	14.56	14.18	15.27	15.06	—	527.07	511.90	557.36	539.15	—
Research and testing services	873	17.62	17.60	18.25	18.08	—	646.65	635.36	671.60	652.69	—
Commercial physical research	8731	19.93	19.66	20.40	19.98	—	801.19	782.47	826.20	791.21	—
Commercial nonphysical research	8732	13.67	13.73	14.17	14.07	—	416.94	410.53	433.60	426.32	—
Noncommercial research organizations	8733	20.40	20.51	21.50	21.64	—	752.76	750.67	784.75	768.22	—
Management and public relations	874	16.04	15.98	16.74	16.66	—	585.46	572.08	611.01	598.09	—
Management services	8741	14.40	14.35	15.39	15.33	—	514.08	503.69	543.27	531.95	—
Management consulting services	8742	18.19	18.00	18.68	18.40	—	674.85	655.20	689.29	669.76	—
Public relations services	8743	14.81	14.84	15.42	15.31	—	540.57	517.92	559.75	528.20	—
Services, nec	89	16.81	16.69	17.01	16.81	—	605.16	582.48	598.75	583.31	—

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

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

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

⁴ Money payments only; tips, not included.

⁵ Excludes nonoffice commissioned real estate sales agents.

— Data not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1996 forward are subject to revision.

Corrected overtime hours, annual averages, 1994-97

Year	Manufacturing		
	Total	Durable goods	Nondurable goods
1994	4.7	5.0	4.3
1995	4.4	4.7	4.0
1996	4.5	4.8	4.1
1997p	4.8	5.1	4.4

NOTE: Data were erroneously published in the January 1998 issue of this publication.

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)			
	Nov. 1996	Dec. 1996	Nov. 1997	Dec. 1997P	Nov. 1996	Dec. 1996	Nov. 1997	Dec. 1997P
Average hourly earnings excluding lump-sum payments	\$20.47	\$20.67	\$20.91	\$21.12	\$19.84	\$20.15	\$21.06	\$21.04
Average hourly earnings, including lump-sum payments	20.80	20.97	21.21	21.42	19.84	20.15	21.06	21.04

P = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

B-16. Average hourly earnings, excluding overtime,¹ of production workers on manufacturing payrolls

Industry	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997 ^P	Jan. 1998 ^P
Manufacturing	\$12.34	\$12.38	\$12.61	\$12.69	\$12.71
Durable goods	12.83	12.89	13.13	13.20	13.19
Lumber and wood products	10.07	10.12	10.33	10.37	(2)
Furniture and fixtures	9.95	10.00	10.21	10.26	(2)
Stone, clay, and glass products	12.14	12.31	12.52	12.56	(2)
Primary metal industries	14.12	14.12	14.28	14.28	(2)
Fabricated metal products	12.04	12.08	12.20	12.28	(2)
Industrial machinery and equipment	13.10	13.11	13.39	13.44	(2)
Electronic and other electrical equipment	11.89	11.92	12.33	12.34	(2)
Transportation equipment	16.29	16.28	16.72	16.79	(2)
Instruments and related products	12.73	12.81	13.06	13.05	(2)
Miscellaneous manufacturing	10.16	10.22	10.25	10.36	(2)
Nondurable goods	11.61	11.63	11.82	11.92	\$11.98
Food and kindred products	10.81	10.80	10.89	11.04	(2)
Tobacco products	17.69	17.67	17.18	18.05	(2)
Textile mill products	9.36	9.42	9.60	9.66	(2)
Apparel and other textile products	7.90	7.91	8.08	8.16	(2)
Paper and allied products	14.01	13.96	14.25	14.32	(2)
Printing and publishing	12.34	12.39	12.63	12.69	(2)
Chemicals and allied products	15.52	15.48	15.85	15.89	(2)
Petroleum and coal products	19.02	18.84	19.08	19.34	(2)
Rubber and misc. plastics products	10.90	10.93	11.01	11.15	(2)
Leather and leather products	8.58	8.62	8.84	8.89	(2)

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

² Not available.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1996 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	Average hourly earnings					Average weekly earnings				
	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P	Dec. 1996	Jan. 1997	Nov. 1997	Dec. 1997P	Jan. 1998P
Total private:										
Current dollars	\$12.06	\$12.11	\$12.51	\$12.51	\$12.58	\$420.89	\$410.53	\$435.35	\$434.10	\$430.24
Constant (1982) dollars	7.50	7.51	7.65	7.66	(2)	261.58	254.51	266.11	265.83	(2)
Mining:										
Current dollars	15.95	16.18	16.38	16.47	\$16.70	733.70	715.16	748.57	742.80	\$749.83
Constant (1982) dollars	9.91	10.03	10.01	10.09	(2)	456.00	443.37	457.56	454.87	(2)
Construction:										
Current dollars	15.66	15.73	16.25	16.34	\$16.24	604.48	572.57	614.25	627.46	\$605.75
Constant (1982) dollars	9.73	9.75	9.93	10.01	(2)	375.69	354.97	375.46	384.24	(2)
Manufacturing:										
Current dollars	13.07	13.04	13.37	13.48	\$13.42	559.40	541.16	569.56	580.99	\$560.96
Constant (1982) dollars	8.12	8.08	8.17	8.25	(2)	347.67	335.50	348.14	355.78	(2)
Transportation and public utilities:										
Current dollars	14.60	14.71	15.14	15.12	\$15.16	582.54	570.75	610.14	601.78	\$598.82
Constant (1982) dollars	9.07	9.12	9.25	9.26	(2)	362.05	353.84	372.95	368.51	(2)
Wholesale trade:										
Current dollars	13.20	13.18	13.74	13.71	\$13.77	510.84	499.52	531.74	526.46	\$524.64
Constant (1982) dollars	8.20	8.17	8.40	8.40	(2)	317.49	309.68	325.02	322.39	(2)
Retail trade										
Current dollars	8.16	8.24	8.51	8.50	\$8.61	239.09	230.72	245.09	248.20	\$241.94
Constant (1982) dollars	5.07	5.11	5.20	5.21	(2)	148.60	143.04	149.81	151.99	(2)
Finance, insurance, and real estate:										
Current dollars	13.02	12.99	13.69	13.58	\$13.63	477.83	463.74	502.42	486.16	\$489.32
Constant (1982) dollars	8.09	8.05	8.37	8.32	(2)	296.97	287.50	307.10	297.71	(2)
Services:										
Current dollars	12.16	12.19	12.58	12.62	\$12.68	397.63	390.08	412.62	411.41	\$410.83
Constant (1982) dollars	7.56	7.56	7.69	7.73	(2)	247.13	241.84	252.21	251.94	(2)

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

² Not available.

P = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 1996 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1996 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 area

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Alabama	42.5	42.7	43.0	\$11.75	\$12.03	\$12.16	\$499.38	\$513.68	\$522.88
Birmingham	43.9	44.6	44.6	12.92	12.76	12.87	567.19	569.10	574.00
Mobile	45.3	44.6	44.4	13.98	14.11	14.21	633.29	629.31	630.92
Alaska	33.8	43.4	40.8	14.26	13.39	14.39	481.99	581.13	587.11
Arizona	42.9	41.6	41.9	11.69	11.72	11.74	501.50	487.55	491.91
Arkansas	42.6	41.8	43.0	10.56	10.92	11.07	449.86	456.46	476.01
Fayetteville-Springdale-Rogers	41.5	41.3	42.8	9.83	10.57	10.61	407.95	436.54	454.11
Fort Smith	42.3	42.0	43.4	10.56	11.11	11.24	446.69	466.62	487.82
Little Rock-North Little Rock	42.6	42.3	41.8	11.46	11.47	11.57	488.20	485.18	483.63
Pine Bluff	41.5	42.6	43.1	12.33	13.06	12.59	511.70	556.36	542.63
California	42.4	42.4	42.8	13.10	13.29	13.37	555.44	563.50	572.24
Bakersfield	41.3	40.6	41.9	13.58	14.00	14.07	560.85	568.40	589.53
Fresno	41.0	41.0	41.1	11.51	11.98	12.05	471.91	491.18	495.26
Los Angeles-Long Beach	42.7	43.0	43.3	12.26	12.46	12.51	523.50	535.78	541.68
Modesto	43.1	41.9	42.5	13.26	13.26	13.28	571.51	555.59	564.40
Oakland	42.8	41.6	41.8	15.65	15.72	15.86	669.82	653.95	662.95
Orange County	43.8	43.5	44.0	12.89	12.84	12.93	564.58	558.54	568.92
Riverside-San Bernardino	41.6	41.7	42.1	11.48	11.97	11.91	477.57	499.15	501.41
Sacramento	41.1	41.2	41.3	13.90	14.56	14.59	571.29	599.87	602.57
Salinas	39.3	38.6	39.2	13.86	13.93	13.86	544.70	537.70	543.31
San Diego	40.3	40.7	40.8	13.07	13.53	13.62	526.72	550.67	555.70
San Francisco	41.0	41.4	41.2	14.29	14.53	14.61	585.89	601.54	601.93
San Jose	42.5	43.0	43.2	16.18	16.76	16.77	687.65	720.68	724.46
Santa Barbara-Santa Maria-Lompoc	42.2	41.3	42.3	13.59	13.85	13.83	573.50	572.01	585.01
Santa Rosa	40.0	38.8	39.3	14.60	15.08	14.90	584.00	585.10	585.57
Stockton-Lodi	43.0	42.7	42.9	13.23	13.51	13.42	568.89	576.88	575.72
Vallejo-Fairfield-Napa	42.0	42.6	42.9	15.16	15.17	15.30	636.72	646.24	656.37
Ventura	42.8	43.1	43.0	12.52	12.43	12.43	535.86	535.73	534.49
Colorado	42.7	42.3	42.5	13.04	13.61	13.60	556.81	575.70	578.00
Denver	42.4	41.9	41.4	13.00	13.27	13.29	551.20	556.01	550.21
Connecticut	43.4	43.2	43.6	14.21	14.73	14.84	616.71	636.34	647.02
Bridgeport	44.3	43.1	44.2	15.22	15.10	15.53	674.25	650.81	686.43
Danbury	45.2	45.3	44.8	14.88	14.71	14.81	672.58	666.36	663.49
Hartford	44.3	44.3	44.9	15.08	15.49	15.78	668.04	686.21	708.52
New Haven-Meriden	43.2	42.5	42.6	13.98	14.44	14.74	603.94	613.70	627.92
New London-Norwich	42.9	42.7	42.7	14.51	15.11	15.06	622.48	645.20	643.06
Stamford-Norwalk	42.3	40.5	40.1	14.05	14.02	13.61	594.32	567.81	545.76
Waterbury	44.7	43.2	44.0	13.37	13.65	13.57	597.64	589.68	597.08
Delaware	40.9	43.0	43.1	14.27	15.10	15.13	583.64	649.30	652.10
Dover	38.4	39.4	40.4	12.88	13.76	13.77	494.59	542.14	556.31
Wilmington-Newark	43.4	44.1	43.9	17.30	17.99	18.05	750.82	793.36	792.40
District of Columbia:									
Washington PMSA	39.3	40.0	40.3	13.81	14.25	14.32	542.73	570.00	577.10
Florida	43.2	42.3	42.7	10.81	10.99	11.10	466.99	464.88	473.97
Georgia	44.4	42.7	43.6	11.50	11.79	11.87	510.60	503.43	517.53
Atlanta	45.3	42.8	44.6	12.44	12.69	12.87	563.53	543.13	574.00
Savannah	50.1	50.0	50.4	14.20	14.74	14.87	711.42	737.00	749.45
Hawaii	39.9	39.7	39.4	13.03	13.34	13.34	519.90	529.60	525.60
Honolulu	41.8	40.2	40.5	13.05	13.33	13.43	545.49	535.87	543.92
Idaho	38.3	40.9	39.8	12.43	12.12	12.23	476.07	495.71	486.75
Illinois	42.2	42.5	42.8	13.21	13.51	13.56	557.46	574.18	580.37
Bloomington-Normal	43.2	41.0	39.9	18.24	17.25	17.36	787.97	707.25	692.66
Champaign-Urbana	41.1	40.6	40.6	10.82	11.34	11.36	444.70	460.40	461.22
Chicago	41.9	42.6	42.8	13.09	13.43	13.46	548.47	572.12	576.09
Davenport-Moline-Rock Island	41.9	43.8	43.7	15.00	15.36	15.48	628.50	672.77	676.48
Decatur	41.6	42.9	42.9	16.24	16.62	16.66	675.58	713.00	714.71
Kankakee	41.0	42.4	42.5	14.35	14.74	14.80	588.35	624.98	629.00
Peoria-Pekin	42.2	42.8	42.7	16.46	16.51	16.58	694.61	706.63	707.97
Rockford	42.4	42.7	43.2	14.89	15.17	15.18	631.34	647.76	655.78
Springfield	41.3	41.7	42.0	11.76	12.09	12.21	485.69	504.15	512.82

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 area — Continued

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Indiana	44.1	43.4	44.0	\$14.78	\$14.97	\$15.00	\$651.80	\$649.70	\$660.00
Bloomington	42.4	41.1	41.4	12.68	11.35	11.44	537.63	466.49	473.62
Elkhart-Goshen	39.8	40.0	40.0	12.21	12.17	12.26	485.96	486.80	490.40
Evansville-Henderson	43.8	43.6	44.1	14.14	15.45	15.17	619.33	673.62	669.00
Fort Wayne	41.9	41.1	41.3	14.45	14.42	14.46	605.46	592.66	597.20
Gary	42.3	42.9	42.2	18.27	18.72	18.74	772.82	803.09	790.83
Indianapolis	44.6	44.3	44.3	15.91	15.72	15.72	709.59	696.40	696.40
Kokomo	48.5	50.7	53.0	18.94	21.19	21.35	918.59	1,074.33	1,131.55
Lafayette	45.8	43.0	44.1	14.74	15.73	15.45	675.09	676.39	681.35
Muncie	44.5	43.1	43.1	14.54	14.52	14.52	647.03	625.81	625.81
South Bend	42.9	41.6	41.0	12.73	12.28	12.59	546.12	510.85	516.19
Terre Haute	44.5	45.3	45.3	14.52	14.74	14.60	646.14	667.72	661.38
Iowa	42.7	43.6	43.5	13.59	13.80	13.89	580.29	601.68	604.22
Cedar Rapids	44.9	44.5	43.6	16.67	17.05	17.69	748.48	758.73	771.28
Des Moines	41.8	45.3	45.1	14.24	13.47	13.77	595.23	610.19	621.03
Dubuque	43.3	42.3	42.3	15.24	15.30	15.18	659.89	647.19	642.11
Sioux City	39.1	39.5	38.8	10.90	11.45	11.65	482.19	452.28	452.02
Kansas	43.0	43.0	43.2	13.23	13.74	13.87	568.89	590.82	599.18
Topeka	42.2	41.8	43.2	13.90	15.14	15.57	586.58	632.85	672.62
Wichita	45.4	44.4	44.3	15.39	16.13	16.26	698.71	716.17	720.32
Kentucky	42.1	41.9	42.4	12.92	13.43	13.55	543.93	562.72	574.52
Lexington	42.9	43.6	44.5	13.74	14.30	14.46	589.45	623.48	643.47
Louisville	42.9	41.9	42.9	14.29	14.91	15.20	613.04	624.73	652.08
Louisiana	45.6	44.6	45.3	13.95	14.33	14.75	636.12	639.12	668.18
Baton Rouge	44.4	43.7	44.5	16.04	16.74	16.71	712.18	731.54	743.60
New Orleans	45.3	44.4	44.3	14.47	14.59	14.63	655.49	647.80	648.11
Shreveport-Bossier City	43.6	43.4	43.6	14.16	14.23	14.25	617.38	617.58	621.30
Maine	41.4	40.6	41.6	13.05	13.13	13.20	540.27	533.08	549.12
Lewiston-Auburn	41.5	42.7	42.4	11.40	11.62	11.44	473.10	496.17	485.06
Portland	39.1	37.9	38.9	11.22	11.20	11.36	438.70	424.48	441.90
Maryland	41.8	42.1	42.2	14.00	14.36	14.26	585.20	604.56	601.77
Baltimore PMSA	42.3	42.0	42.3	14.72	15.05	14.98	622.66	632.10	633.65
Massachusetts	42.6	42.3	43.1	13.19	13.57	13.62	561.89	574.01	587.02
Boston	42.2	41.9	42.8	14.37	14.75	14.79	606.41	618.03	633.01
Springfield	43.1	42.8	43.7	12.76	13.19	13.08	549.96	564.53	571.60
Worcester	43.0	42.9	43.8	13.16	13.62	13.64	565.88	584.30	597.43
Michigan	45.6	44.1	45.7	17.00	17.46	17.61	775.20	769.99	804.78
Ann Arbor	47.4	46.0	48.5	17.53	18.53	19.24	830.92	852.38	933.14
Detroit	46.9	45.4	47.0	18.58	18.94	19.24	871.40	859.88	904.28
Flint	47.4	45.4	45.2	22.21	23.96	24.00	1,052.75	1,087.78	1,084.80
Grand Rapids-Muskegon-Holland	44.3	42.7	43.4	14.53	14.48	14.52	643.68	618.30	630.17
Jackson	42.0	42.7	44.7	12.98	13.08	13.06	545.16	558.52	583.78
Kalamazoo-Battle Creek	44.7	46.0	46.4	15.38	15.58	15.66	687.49	716.68	726.62
Lansing East Lansing	44.9	42.3	42.7	18.15	19.07	19.10	814.93	806.66	815.57
Saginaw-Bay City-Midland	47.4	46.0	46.7	20.12	21.38	21.39	953.69	983.48	998.91
Minnesota	41.5	42.1	42.6	13.56	13.85	13.93	562.74	583.09	593.42
Duluth-Superior	41.8	41.0	41.9	11.89	12.64	12.68	497.00	518.24	531.29
Minneapolis-St. Paul	41.6	41.9	42.4	14.42	14.68	14.69	599.87	615.09	622.86
St. Cloud	41.8	43.7	44.9	12.81	12.92	13.03	535.46	564.60	585.05
Mississippi	42.7	41.8	42.8	10.37	10.52	10.58	442.80	439.74	452.82
Jackson	42.9	41.1	40.2	11.80	11.81	11.94	506.22	485.39	479.99
Missouri	43.3	42.1	43.3	12.83	13.15	13.38	555.54	553.62	579.35
Kansas City	44.1	44.7	45.8	14.56	14.51	14.68	642.10	648.60	672.34
St. Louis	45.1	43.8	45.5	15.43	15.46	15.75	695.89	677.15	716.63
Springfield	40.5	39.9	42.3	11.09	10.98	11.16	449.15	438.10	472.07
Montana	39.3	40.6	41.8	13.20	13.27	13.40	518.76	538.76	560.12
Nebraska	41.3	42.4	42.1	11.90	12.09	12.40	491.47	512.62	522.04
Lincoln	45.0	46.4	47.0	13.43	13.72	13.81	604.35	636.61	649.07
Omaha	43.0	42.6	42.8	13.15	13.32	13.44	565.45	567.43	575.23
Nevada	43.9	45.1	45.1	14.17	13.89	14.00	622.06	626.44	631.40
Las Vegas	38.1	42.7	41.7	15.34	14.55	15.21	584.45	621.29	634.26

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
New Hampshire	43.2	42.4	43.3	\$12.58	\$12.45	\$12.70	\$543.46	\$527.88	\$549.91
Manchester	43.6	40.2	42.3	13.60	13.71	13.88	592.96	551.14	587.12
Nashua	43.7	41.6	43.4	14.93	14.94	14.76	652.44	621.50	640.58
Portsmouth-Rochester	46.3	42.1	42.8	12.10	11.68	12.14	560.23	491.73	519.59
New Jersey	43.2	42.6	43.0	14.17	14.38	14.48	612.14	612.59	622.64
New Mexico	40.9	39.2	39.7	11.24	12.17	12.04	459.72	477.06	477.99
Albuquerque	41.6	38.2	39.1	11.82	14.73	14.69	491.71	562.69	574.38
New York	41.7	41.9	42.3	13.05	13.43	13.44	544.19	562.72	568.51
Albany-Schenectady-Troy	41.7	42.8	42.5	14.54	14.87	14.91	606.32	636.44	633.68
Binghamton	41.6	40.1	43.8	10.33	10.51	10.23	429.73	421.45	448.07
Buffalo-Niagara Falls	44.2	44.1	44.8	16.38	17.37	17.33	724.00	766.02	776.38
Dutchess County	39.8	39.3	40.9	11.77	12.48	12.19	468.45	490.46	498.57
Elmira	42.0	42.3	43.3	12.30	12.46	12.53	516.60	527.06	542.55
Nassau-Suffolk	40.8	41.2	40.9	12.05	12.26	12.28	491.64	505.11	502.25
New York PMSA	38.8	39.4	39.6	11.98	12.21	12.46	464.82	481.07	493.42
New York City	38.7	39.2	39.4	11.81	11.99	12.27	457.05	470.01	483.44
Newburgh	40.6	40.3	41.2	11.65	11.31	11.34	472.99	455.79	467.21
Rochester	43.9	43.7	44.1	14.55	14.87	14.89	638.75	649.82	656.65
Rockland County	42.5	42.5	42.7	15.46	16.07	15.98	657.05	682.98	682.35
Syracuse	44.6	43.4	42.8	14.33	14.39	14.36	639.12	624.53	614.61
Utica-Rome	40.3	41.0	41.3	11.65	11.68	11.64	469.50	478.88	480.73
Westchester County	41.1	40.4	40.5	11.93	12.57	12.60	490.32	507.83	510.30
North Carolina	42.0	41.8	42.1	11.22	11.52	11.56	471.24	481.54	486.68
Asheville	43.4	43.9	43.9	10.75	11.41	11.33	466.55	500.90	497.39
Charlotte-Gastonia-Rock Hill	42.1	41.5	42.0	12.11	12.48	12.47	509.83	517.92	523.74
Greensboro-Winston-Salem-High Point	41.0	41.4	41.6	11.46	11.92	11.99	469.86	493.49	498.78
Raleigh-Durham-Chapel Hill	42.9	42.0	42.3	12.23	12.77	12.79	524.67	536.34	541.02
North Dakota	41.2	39.3	40.7	11.10	11.34	11.42	457.32	445.66	464.79
Fargo-Moorhead	41.5	40.1	39.7	10.93	11.35	11.40	453.60	455.14	452.58
Ohio	44.3	44.3	44.8	14.94	15.52	15.65	661.84	687.54	701.12
Akron	43.9	43.9	44.6	12.57	12.75	12.80	551.82	559.73	570.88
Canton-Massillon	41.3	43.3	42.9	13.39	13.70	13.68	553.01	593.21	586.87
Cincinnati	44.6	44.3	45.0	14.42	14.77	14.95	643.13	654.31	672.75
Cleveland-Lorain-Elyria	43.9	44.9	45.0	14.81	15.26	15.33	650.16	685.17	689.85
Columbus	43.0	43.4	43.5	14.22	14.72	14.88	611.46	638.85	647.28
Dayton-Springfield	45.3	45.7	45.9	15.88	16.66	16.77	719.36	761.36	769.74
Hamilton-Middletown	46.7	46.6	45.8	16.29	17.09	17.02	760.74	796.39	779.52
Lima	44.3	44.5	44.8	15.55	16.41	16.33	688.87	730.25	731.58
Mansfield	44.9	44.3	44.2	15.93	16.75	16.84	715.26	742.03	744.33
Steubenville-Weirton	43.7	41.3	41.5	15.33	17.07	17.20	669.92	704.99	713.80
Toledo	45.4	43.9	44.4	16.87	17.07	17.02	765.90	749.37	755.69
Youngstown-Warren	43.4	43.8	43.4	16.30	17.15	17.47	707.42	751.17	758.20
Oklahoma	42.2	42.7	42.9	12.19	12.39	12.50	514.42	529.05	536.25
Oklahoma City	45.0	44.0	43.6	13.65	13.00	13.14	614.25	572.00	572.90
Tulsa	42.7	43.6	44.2	12.34	13.17	13.29	526.92	574.21	587.42
Oregon	41.1	41.2	41.2	13.20	13.62	13.72	542.52	561.14	565.26
Eugene-Springfield	39.7	40.1	40.3	13.00	12.87	13.16	516.10	516.09	530.35
Medford-Ashland	40.8	40.6	39.0	11.84	12.51	12.58	483.07	507.91	490.62
Portland-Vancouver	42.0	41.8	42.3	13.47	13.85	13.88	565.74	578.93	587.12
Salem	40.9	40.0	39.0	11.55	11.65	11.99	472.40	466.00	467.61
Pennsylvania	42.6	42.8	43.1	13.64	13.87	13.91	581.06	593.64	599.52
Allentown-Bethlem-Easton	43.1	43.1	42.6	13.65	14.15	13.96	588.32	609.87	594.70
Altoona	41.7	40.7	40.3	11.02	11.76	11.70	459.53	478.63	471.51
Erie	43.8	45.3	45.3	13.92	14.29	14.31	609.70	647.34	648.24
Harrisburg-Lebanon-Carlisle	40.1	40.4	40.3	13.11	13.33	13.28	525.71	538.53	535.18
Johnstown	38.2	39.2	38.6	10.25	10.39	10.17	391.55	407.29	392.56
Lancaster	41.7	41.5	41.5	13.10	13.18	13.19	546.27	546.97	547.39
Philadelphia PMSA	42.8	42.1	42.4	14.64	14.92	15.05	626.59	628.13	638.12
Pittsburgh	43.6	43.4	43.3	14.70	14.87	14.89	640.92	645.36	644.74
Reading	43.2	42.3	43.0	14.99	15.21	15.10	647.57	643.38	649.30
Scranton-Wilkes-Barre-Hazleton	41.4	41.6	41.1	12.19	12.47	12.43	504.67	518.75	510.87
Sharon	43.8	43.8	43.4	14.44	15.02	14.89	632.47	657.88	646.23
State College	43.1	42.4	43.5	11.57	12.24	11.66	498.67	518.98	507.21
Williamsport	42.7	42.1	42.9	11.22	10.93	10.99	479.09	460.15	471.47
York	43.1	44.9	45.5	13.68	14.53	14.59	589.61	652.40	663.85

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 area — Continued

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P	Dec. 1996	Nov. 1997	Dec. 1997 ^P
Rhode Island	41.3	41.7	42.4	\$11.15	\$11.42	\$11.43	\$460.50	\$476.21	\$484.63
Providence-Fall River-Warwick	41.9	42.2	43.0	11.21	11.79	11.95	469.70	497.54	513.85
South Carolina	42.3	42.8	42.7	10.34	10.44	10.43	437.38	446.83	445.36
South Dakota	42.5	42.1	42.2	9.82	10.00	9.99	417.35	421.00	421.58
Rapid City	40.7	41.0	41.2	9.57	9.94	9.98	389.50	407.54	411.18
Sioux Falls	41.6	42.7	42.8	10.09	10.45	10.48	419.74	446.22	448.54
Tennessee	41.9	42.3	42.7	11.52	11.99	12.10	482.69	507.18	516.67
Chattanooga	42.3	41.5	42.6	10.88	10.83	11.07	460.22	449.45	471.58
Johnson City-Kingsport-Bristol	39.8	41.2	40.5	12.16	12.91	13.12	483.97	531.89	531.36
Knoxville	42.1	41.8	42.0	10.89	11.72	11.74	458.47	489.90	493.08
Memphis	43.5	42.3	40.8	12.15	12.34	12.37	528.53	521.98	504.70
Nashville	42.3	42.1	43.2	12.34	12.87	13.06	521.98	541.83	564.19
Texas	43.9	44.0	44.3	11.97	12.19	12.19	525.48	536.36	540.02
Dallas	46.1	43.8	44.5	12.05	12.20	12.31	555.51	534.36	547.80
Ft. Worth-Arlington	44.3	44.5	45.3	12.62	13.08	13.19	559.07	582.06	597.51
Houston	45.7	46.5	46.3	13.86	14.28	13.97	633.40	664.02	646.81
San Antonio	42.9	42.3	42.6	9.73	9.79	9.73	417.42	414.12	414.50
Utah	40.2	41.7	40.9	12.45	12.80	12.96	500.49	533.76	530.06
Salt Lake City-Ogden	40.0	41.5	40.5	12.46	12.74	13.23	498.40	528.71	535.82
Vermont	41.9	40.8	42.2	12.68	12.81	13.03	531.29	522.65	549.87
Burlington	45.8	45.0	44.2	13.15	13.42	13.46	602.27	603.90	594.93
Virginia	43.6	42.5	43.3	12.39	12.75	12.96	540.20	541.88	561.17
Bristol	41.9	43.1	44.8	9.92	10.60	10.75	415.65	456.86	481.60
Charlottesville	46.1	42.5	40.9	9.90	10.28	10.22	456.39	436.90	418.00
Danville	45.7	42.4	44.4	11.96	12.36	12.65	546.57	524.06	561.66
Lynchburg	43.9	44.8	42.5	12.06	12.77	12.87	529.43	572.10	546.98
Northern Virginia	40.1	41.2	42.1	12.50	12.95	13.03	501.25	533.54	548.56
Richmond-Petersburg	44.1	42.8	44.9	15.87	16.00	16.41	699.87	684.80	736.81
Roanoke	40.3	41.9	42.5	13.93	14.84	15.14	561.38	621.80	643.45
Washington	41.5	41.6	41.7	14.89	15.40	15.60	617.94	640.64	650.52
West Virginia	42.2	42.4	42.2	13.12	13.43	13.42	553.66	569.43	566.32
Charleston	47.4	47.6	47.7	14.11	14.92	14.80	668.81	710.19	705.96
Huntington-Ashland	43.1	43.8	43.9	14.41	15.03	14.72	621.07	658.31	646.21
Parkersburg-Marietta	45.6	44.4	45.9	16.78	16.48	17.22	765.17	731.71	790.40
Wheeling	38.7	41.4	45.2	13.42	16.70	16.57	519.35	691.38	748.96
Wisconsin	43.3	43.0	43.2	13.55	13.93	14.00	586.72	598.99	604.80
Appleton-Oshkosh-Neenah	45.4	45.1	44.7	14.72	15.31	15.09	668.29	690.48	674.52
Eau Claire	45.1	41.5	41.0	13.05	12.62	12.68	588.56	523.73	519.88
Green Bay	43.0	42.8	40.4	14.47	15.02	14.62	622.21	642.86	590.65
Janesville-Beloit	45.6	47.2	44.9	17.34	17.81	18.14	790.70	840.63	814.49
Kenosha	42.4	42.2	42.5	14.54	15.13	15.43	616.50	638.49	655.78
La Crosse	42.8	44.3	46.0	11.80	11.53	11.63	505.04	510.78	534.98
Madison	42.7	42.2	41.5	12.66	12.53	12.82	540.58	528.77	532.03
Milwaukee-Waukesha	43.2	42.6	43.1	14.76	15.04	15.26	637.63	640.70	657.71
Racine	44.5	45.2	46.8	14.31	14.58	14.81	636.80	659.02	693.11
Sheboygan	44.4	42.6	43.5	13.24	13.11	13.17	587.86	558.49	572.90
Wausau	43.8	44.1	43.2	13.01	13.30	13.23	569.84	586.53	571.54
Wyoming	40.8	40.5	40.9	13.87	14.69	14.71	565.90	594.95	601.64
Puerto Rico	40.2	40.1	40.2	7.86	8.40	8.41	315.97	336.84	338.08
Virgin Islands	42.7	45.3	43.6	17.58	18.26	18.29	750.67	827.18	797.44

^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 1996 benchmarks.

Publication of Data for Regions and Divisions

Publication of monthly census region and division data derived from the Current Population Survey (CPS) has been discontinued with the issuance of December 1997 data in the January 1998 issue of this publication. With the release of data for January 1998 (March issue), table C-1 will present estimates for census regions and divisions obtained by summing the official State estimates produced and published through the Local Area Unemployment Statistics (LAUS) program (table C-2). Historical data will

appear in a subsequent issue of this publication and on the BLS Internet.

Because of the shift to the sum-of-States procedure, data for census regions and divisions will lag by 1 month the official national CPS estimates published elsewhere in *Employment and Earnings*. State estimation procedures are designed to produce accurate (unadjusted and seasonally adjusted) data for each individual State. State labor force levels should not be summed to generate national labor force estimates.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
Alabama													
Civilian labor force	2,096.7	2,088.3	2,096.1	2,105.8	2,098.9	2,099.9	2,095.7	2,108.6	2,109.2	2,119.1	2,125.5	2,127.9	2,130.5
Employed	2,002.6	1,996.6	2,003.4	2,010.2	2,006.1	2,002.0	2,000.9	2,009.2	2,009.0	2,013.9	2,023.9	2,028.9	2,034.0
Unemployed	94.1	91.8	92.7	95.6	92.8	97.9	94.9	99.4	100.2	105.2	101.5	99.0	96.6
Unemployment rate	4.5	4.4	4.4	4.5	4.4	4.7	4.5	4.7	4.8	5.0	4.8	4.7	4.5
Alaska													
Civilian labor force	320.9	320.6	322.1	323.4	323.8	322.0	321.4	322.9	324.0	324.7	325.0	324.9	326.2
Employed	295.4	296.5	297.6	298.1	298.1	299.9	299.2	299.5	299.4	300.3	300.9	300.7	303.5
Unemployed	25.5	24.1	24.5	25.3	25.7	22.1	22.2	23.4	24.6	24.4	24.1	24.2	22.7
Unemployment rate	7.9	7.5	7.6	7.8	7.9	6.9	6.9	7.3	7.6	7.5	7.4	7.4	7.0
Arizona													
Civilian labor force	2,262.5	2,293.9	2,278.5	2,273.8	2,272.6	2,281.6	2,268.2	2,282.9	2,291.8	2,290.5	2,295.6	2,306.5	2,305.3
Employed	2,139.6	2,173.9	2,161.8	2,163.5	2,164.6	2,174.2	2,169.3	2,186.2	2,190.5	2,193.3	2,206.5	2,206.2	2,209.4
Unemployed	122.9	120.0	116.8	110.3	108.0	107.4	98.9	96.6	101.3	97.1	89.1	100.2	95.9
Unemployment rate	5.4	5.2	5.1	4.8	4.8	4.7	4.4	4.2	4.4	4.2	3.9	4.3	4.2
Arkansas													
Civilian labor force	1,239.7	1,242.5	1,245.2	1,250.2	1,241.3	1,238.6	1,244.6	1,247.8	1,246.4	1,243.8	1,240.7	1,241.7	1,245.6
Employed	1,173.2	1,175.8	1,177.7	1,182.1	1,183.7	1,181.7	1,180.1	1,179.1	1,179.7	1,179.5	1,178.4	1,183.2	1,182.8
Unemployed	66.5	66.7	67.5	68.1	57.6	56.9	64.4	68.7	66.7	64.3	62.3	58.5	62.8
Unemployment rate	5.4	5.4	5.4	5.4	4.6	4.6	5.2	5.5	5.3	5.2	5.0	4.7	5.0
California													
Civilian labor force	15,665.0	15,770.7	15,785.3	15,839.2	15,874.2	15,848.5	15,833.8	15,874.2	15,918.6	15,923.9	15,942.9	15,943.8	16,061.4
Employed	14,598.4	14,687.0	14,745.9	14,792.5	14,836.0	14,842.0	14,840.1	14,887.3	14,924.7	14,911.2	14,930.4	15,000.9	15,091.4
Unemployed	1,066.6	1,083.7	1,039.4	1,046.7	1,038.3	1,006.4	993.7	987.0	993.8	1,012.7	1,012.4	942.9	970.0
Unemployment rate	6.8	6.9	6.6	6.6	6.5	6.4	6.3	6.2	6.2	6.4	6.4	5.9	6.0
Colorado													
Civilian labor force	2,100.4	2,129.0	2,131.8	2,144.4	2,149.8	2,140.2	2,151.7	2,168.6	2,167.0	2,177.1	2,196.6	2,209.3	2,203.8
Employed	2,015.9	2,050.0	2,064.6	2,075.3	2,078.4	2,065.7	2,076.9	2,101.3	2,097.8	2,103.2	2,130.3	2,138.7	2,138.9
Unemployed	84.5	79.0	67.3	69.1	71.4	74.5	74.8	67.3	69.2	73.9	66.3	70.6	64.9
Unemployment rate	4.0	3.7	3.2	3.2	3.3	3.5	3.5	3.1	3.2	3.4	3.0	3.2	2.9
Connecticut													
Civilian labor force	1,722.0	1,735.6	1,731.4	1,732.6	1,741.5	1,741.7	1,749.2	1,746.6	1,741.5	1,742.9	1,739.0	1,730.0	1,722.6
Employed	1,623.0	1,645.9	1,646.0	1,646.9	1,651.7	1,651.2	1,657.7	1,663.1	1,661.7	1,663.5	1,656.9	1,649.2	1,646.8
Unemployed	99.0	89.7	85.4	85.7	89.8	90.5	91.5	83.5	79.8	79.3	82.0	80.8	75.8
Unemployment rate	5.7	5.2	4.9	4.9	5.2	5.2	5.2	4.8	4.6	4.6	4.7	4.7	4.4
Delaware													
Civilian labor force	384.4	393.1	393.2	393.6	390.7	389.4	390.9	391.2	390.8	390.2	389.1	388.1	390.2
Employed	364.2	373.6	374.5	375.2	374.4	373.5	374.0	374.3	374.4	375.7	375.2	376.4	376.8
Unemployed	20.2	19.4	18.6	18.4	16.3	15.8	16.9	16.9	16.3	14.6	13.9	11.7	13.3
Unemployment rate	5.3	4.9	4.7	4.7	4.2	4.1	4.3	4.3	4.2	3.7	3.6	3.0	3.4
District of Columbia													
Civilian labor force	270.0	267.6	266.1	269.2	266.7	266.8	256.6	257.2	262.0	262.2	259.7	259.5	260.2
Employed	247.3	246.7	246.4	248.1	247.5	248.6	239.4	238.3	241.0	241.0	237.5	239.1	239.0
Unemployed	22.7	20.9	19.7	21.1	19.3	18.2	17.2	19.0	21.0	21.3	22.1	20.4	21.2
Unemployment rate	8.4	7.8	7.4	7.8	7.2	6.8	6.7	7.4	8.0	8.1	8.5	7.9	8.1
Florida													
Civilian labor force	6,997.1	7,100.2	7,094.6	7,098.3	7,099.6	7,144.3	7,144.3	7,143.9	7,177.5	7,183.0	7,191.5	7,214.3	7,217.6
Employed	6,656.1	6,752.6	6,748.1	6,741.8	6,742.5	6,785.0	6,789.8	6,813.2	6,837.4	6,840.8	6,858.6	6,876.1	6,881.7
Unemployed	340.9	347.6	346.5	356.5	357.1	359.2	354.5	330.7	340.1	342.2	332.9	338.2	335.9
Unemployment rate	4.9	4.9	4.9	5.0	5.0	5.0	5.0	4.6	4.7	4.8	4.6	4.7	4.7

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
Georgia													
Civilian labor force	3,803.6	3,826.3	3,835.0	3,842.1	3,846.9	3,853.6	3,870.3	3,870.1	3,901.4	3,905.7	3,903.8	3,924.4	3,935.3
Employed	3,625.3	3,648.6	3,655.3	3,663.2	3,680.1	3,680.5	3,699.9	3,701.1	3,730.7	3,729.7	3,756.3	3,769.5	3,776.2
Unemployed	178.2	177.7	179.7	178.9	166.7	173.1	170.4	169.0	170.7	176.0	147.5	154.9	159.1
Unemployment rate	4.7	4.6	4.7	4.7	4.3	4.5	4.4	4.4	4.4	4.5	3.8	3.9	4.0
Hawaii													
Civilian labor force	596.0	594.6	593.9	593.1	593.6	590.2	593.4	597.5	598.8	598.0	596.9	591.1	590.7
Employed	557.1	560.8	560.9	558.8	558.3	555.6	556.9	560.0	562.5	562.5	561.7	557.4	556.1
Unemployed	38.9	33.8	33.0	34.3	35.3	34.6	36.5	37.5	36.3	35.5	35.1	33.6	34.7
Unemployment rate	6.5	5.7	5.6	5.8	5.9	5.9	6.2	6.3	6.1	5.9	5.9	5.7	5.9
Idaho													
Civilian labor force	631.1	636.3	631.6	632.0	634.6	636.7	639.5	641.1	638.9	641.5	642.4	639.6	641.5
Employed	596.1	602.8	599.1	598.4	602.5	605.9	608.6	609.6	605.6	609.6	610.0	608.9	608.2
Unemployed	35.0	33.5	32.5	33.6	32.1	30.8	30.9	31.4	33.3	31.9	32.5	30.7	33.3
Unemployment rate	5.6	5.3	5.1	5.3	5.1	4.8	4.8	4.9	5.2	5.0	5.1	4.8	5.2
Illinois													
Civilian labor force	6,126.8	6,130.2	6,131.8	6,149.6	6,139.5	6,117.6	6,121.1	6,145.0	6,146.2	6,132.0	6,134.0	6,150.1	6,149.1
Employed	5,806.7	5,821.7	5,827.6	5,841.9	5,844.1	5,849.3	5,849.4	5,856.9	5,872.2	5,852.4	5,860.4	5,854.7	5,854.8
Unemployed	320.1	308.5	304.2	307.7	295.4	268.3	271.7	288.1	274.0	279.6	273.6	295.3	294.2
Unemployment rate	5.2	5.0	5.0	5.0	4.8	4.4	4.4	4.7	4.5	4.6	4.5	4.8	4.8
Indiana													
Civilian labor force	3,048.1	3,076.8	3,062.7	3,083.6	3,098.2	3,106.0	3,108.5	3,121.4	3,120.6	3,122.6	3,121.6	3,120.3	3,120.4
Employed	2,938.3	2,982.6	2,975.3	2,985.2	2,997.9	3,006.8	3,006.7	3,021.6	3,010.8	3,011.4	2,999.8	3,012.3	3,013.2
Unemployed	109.8	94.3	87.4	98.4	100.3	99.1	101.8	99.8	109.8	111.2	121.8	108.0	107.2
Unemployment rate	3.6	3.1	2.9	3.2	3.2	3.2	3.3	3.2	3.5	3.6	3.9	3.5	3.4
Iowa													
Civilian labor force	1,610.0	1,603.6	1,615.0	1,627.0	1,619.2	1,615.3	1,610.8	1,599.6	1,583.0	1,592.7	1,592.0	1,580.3	1,597.9
Employed	1,548.3	1,545.9	1,558.0	1,574.2	1,565.6	1,566.6	1,561.9	1,557.9	1,539.6	1,549.5	1,550.5	1,537.7	1,552.9
Unemployed	61.6	57.7	57.0	52.8	53.6	48.8	48.9	41.7	43.4	43.1	41.6	42.6	45.0
Unemployment rate	3.8	3.6	3.5	3.2	3.3	3.0	3.0	2.6	2.7	2.7	2.6	2.7	2.8
Kansas													
Civilian labor force	1,347.2	1,385.2	1,383.6	1,382.0	1,384.0	1,383.1	1,380.5	1,392.5	1,392.3	1,397.4	1,396.8	1,391.7	1,391.4
Employed	1,285.4	1,329.6	1,329.2	1,328.8	1,328.9	1,327.6	1,328.2	1,338.4	1,340.5	1,343.7	1,344.5	1,340.8	1,339.6
Unemployed	61.8	55.6	54.5	53.2	55.1	55.5	52.4	54.2	51.8	53.7	52.4	50.9	51.8
Unemployment rate	4.6	4.0	3.9	3.8	4.0	4.0	3.8	3.9	3.7	3.8	3.7	3.7	3.7
Kentucky													
Civilian labor force	1,880.1	1,913.8	1,911.3	1,916.0	1,924.0	1,920.6	1,920.1	1,928.7	1,924.2	1,926.4	1,932.1	1,936.6	1,936.1
Employed	1,770.6	1,808.4	1,805.9	1,813.5	1,824.4	1,821.1	1,820.9	1,826.5	1,821.9	1,826.3	1,835.3	1,846.5	1,846.3
Unemployed	109.6	105.4	105.5	102.5	99.6	99.5	99.3	102.2	102.3	100.1	96.8	90.1	89.8
Unemployment rate	5.8	5.5	5.5	5.4	5.2	5.2	5.2	5.3	5.3	5.2	5.0	4.7	4.6
Louisiana													
Civilian labor force	2,023.7	2,011.9	2,012.0	2,030.6	2,022.0	2,019.4	2,004.9	2,005.7	2,013.1	2,005.5	2,014.6	2,019.0	2,031.2
Employed	1,890.8	1,896.9	1,906.8	1,912.4	1,909.6	1,892.8	1,879.0	1,878.2	1,891.8	1,890.6	1,896.0	1,896.5	1,914.7
Unemployed	132.9	115.0	105.2	118.2	112.4	126.5	125.9	127.5	121.3	114.9	118.6	122.5	116.6
Unemployment rate	6.6	5.7	5.2	5.8	5.6	6.3	6.3	6.4	6.0	5.7	5.9	6.1	5.7
Maine													
Civilian labor force	674.7	667.8	666.8	672.6	669.1	668.7	670.0	668.4	669.1	667.1	667.5	661.9	662.3
Employed	643.1	638.1	637.9	643.3	637.3	636.3	637.8	634.3	637.3	635.3	634.4	630.1	628.2
Unemployed	31.6	29.7	29.0	29.3	31.8	32.4	32.1	34.1	31.7	31.8	33.1	31.7	34.0
Unemployment rate	4.7	4.4	4.3	4.4	4.7	4.8	4.8	5.1	4.7	4.8	5.0	4.8	5.1

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	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
Maryland													
Civilian labor force	2,806.5	2,759.1	2,760.2	2,764.3	2,772.3	2,779.8	2,776.0	2,775.8	2,762.2	2,764.8	2,765.0	2,771.8	2,775.7
Employed	2,679.4	2,632.6	2,634.8	2,639.6	2,640.3	2,648.5	2,644.7	2,644.7	2,637.7	2,634.6	2,636.0	2,642.1	2,643.4
Unemployed	127.2	126.5	125.5	124.7	132.1	131.3	131.3	131.1	124.5	130.2	128.9	129.6	132.2
Unemployment rate	4.5	4.6	4.5	4.5	4.8	4.7	4.7	4.7	4.5	4.7	4.7	4.7	4.8
Massachusetts													
Civilian labor force	3,200.6	3,216.6	3,213.8	3,217.0	3,234.1	3,236.6	3,228.3	3,235.1	3,244.5	3,244.4	3,250.0	3,262.1	3,260.0
Employed	3,075.2	3,085.8	3,092.6	3,089.7	3,101.4	3,099.6	3,098.5	3,110.0	3,105.8	3,114.1	3,128.5	3,134.1	3,134.9
Unemployed	125.4	130.9	121.2	127.3	132.7	137.0	127.8	125.2	138.8	130.3	121.4	127.9	125.1
Unemployment rate	3.9	4.1	3.8	4.0	4.1	4.2	4.0	3.9	4.3	4.0	3.7	3.9	3.8
Michigan													
Civilian labor force	4,845.3	4,887.8	4,891.4	4,880.3	4,874.0	4,875.5	4,866.3	4,863.3	4,846.4	4,862.4	4,891.1	4,909.3	4,920.6
Employed	4,612.9	4,647.9	4,671.6	4,671.9	4,661.4	4,678.3	4,669.6	4,673.5	4,665.5	4,665.7	4,699.3	4,712.0	4,725.9
Unemployed	232.4	239.9	219.8	208.4	212.6	197.2	196.7	189.8	180.9	196.7	191.8	197.3	194.7
Unemployment rate	4.8	4.9	4.5	4.3	4.4	4.0	4.0	3.9	3.7	4.0	3.9	4.0	4.0
Minnesota													
Civilian labor force	2,613.8	2,646.4	2,650.3	2,652.3	2,656.2	2,659.0	2,657.5	2,668.1	2,675.7	2,675.0	2,677.3	2,681.1	2,679.8
Employed	2,511.2	2,555.8	2,570.7	2,571.4	2,566.3	2,571.2	2,573.0	2,586.2	2,589.2	2,589.1	2,590.7	2,603.4	2,604.6
Unemployed	102.6	92.8	79.6	80.9	89.9	87.7	84.5	81.9	86.5	85.9	86.5	77.7	75.2
Unemployment rate	3.9	3.5	3.0	3.1	3.4	3.3	3.2	3.1	3.2	3.2	3.2	2.9	2.8
Mississippi													
Civilian labor force	1,262.7	1,269.4	1,277.8	1,279.8	1,273.1	1,272.1	1,265.9	1,273.5	1,274.9	1,281.3	1,285.9	1,289.1	1,280.7
Employed	1,189.3	1,199.1	1,205.9	1,205.2	1,209.2	1,209.1	1,202.9	1,210.0	1,204.9	1,205.2	1,207.7	1,216.0	1,216.9
Unemployed	73.4	70.4	71.9	74.6	64.0	63.1	63.0	63.6	70.0	76.1	78.2	73.1	63.8
Unemployment rate	5.8	5.5	5.6	5.8	5.0	5.0	5.0	5.0	5.5	5.9	6.1	5.7	5.0
Missouri													
Civilian labor force	2,925.5	2,865.6	2,873.8	2,857.0	2,863.5	2,861.5	2,857.2	2,852.7	2,853.9	2,865.5	2,878.4	2,870.6	2,865.3
Employed	2,784.1	2,739.1	2,747.6	2,737.8	2,736.5	2,745.5	2,746.9	2,750.4	2,752.3	2,750.9	2,759.9	2,758.0	2,750.7
Unemployed	141.4	126.5	126.1	119.2	127.1	116.0	110.3	102.4	101.6	114.6	118.5	112.6	114.6
Unemployment rate	4.8	4.4	4.4	4.2	4.4	4.1	3.9	3.6	3.6	4.0	4.1	3.9	4.0
Montana													
Civilian labor force	449.3	454.4	453.0	456.0	456.7	459.0	458.4	460.8	465.7	463.5	464.4	463.8	465.6
Employed	427.7	432.5	432.4	433.5	432.4	436.5	435.5	437.3	442.1	440.7	441.1	439.5	440.6
Unemployed	21.6	21.9	20.7	22.5	24.3	22.5	23.0	23.5	23.6	22.8	23.3	24.3	25.0
Unemployment rate	4.8	4.8	4.6	4.9	5.3	4.9	5.0	5.1	5.1	4.9	5.0	5.2	5.4
Nebraska													
Civilian labor force	916.5	921.1	918.7	919.8	917.3	919.9	919.0	922.8	922.8	925.2	926.2	926.5	929.3
Employed	890.6	898.4	896.3	898.0	899.2	898.6	897.0	900.6	899.7	901.1	905.0	908.9	914.1
Unemployed	26.0	22.7	22.3	21.7	18.1	21.3	22.0	22.2	23.2	24.1	21.2	17.6	15.3
Unemployment rate	2.8	2.5	2.4	2.4	2.0	2.3	2.4	2.4	2.5	2.6	2.3	1.9	1.6
Nevada													
Civilian labor force	864.8	881.7	883.9	884.4	887.6	889.3	896.8	901.9	903.8	910.1	904.5	904.0	902.2
Employed	817.5	841.1	844.3	844.9	847.7	850.5	856.4	861.8	863.7	870.1	866.7	867.4	867.0
Unemployed	47.3	40.6	39.6	39.5	39.9	38.8	40.4	40.1	40.2	40.0	37.8	36.6	35.2
Unemployment rate	5.5	4.6	4.5	4.5	4.5	4.4	4.5	4.4	4.4	4.4	4.2	4.0	3.9
New Hampshire													
Civilian labor force	620.1	647.3	648.5	640.9	643.9	648.9	651.3	655.8	653.1	652.3	654.5	654.8	652.8
Employed	595.9	626.7	626.7	627.5	626.8	630.9	632.3	636.2	635.3	634.1	636.0	634.7	634.9
Unemployed	24.2	20.6	21.8	13.4	17.1	18.1	19.0	19.6	17.8	18.2	18.5	20.1	17.9
Unemployment rate	3.9	3.2	3.4	2.1	2.7	2.8	2.9	3.0	2.7	2.8	2.8	3.1	2.7

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
New Jersey													
Civilian labor force	4,152.1	4,145.0	4,142.7	4,132.6	4,139.1	4,135.8	4,141.9	4,158.1	4,143.2	4,147.1	4,151.9	4,151.7	4,147.4
Employed	3,900.6	3,898.7	3,912.7	3,905.5	3,924.1	3,914.5	3,915.2	3,934.9	3,928.1	3,924.9	3,936.6	3,946.3	3,942.4
Unemployed	251.6	246.4	230.0	227.0	215.0	221.3	226.7	223.2	215.1	222.3	215.2	205.4	205.1
Unemployment rate	6.1	5.9	5.6	5.5	5.2	5.4	5.5	5.4	5.2	5.4	5.2	4.9	4.9
New Mexico													
Civilian labor force	802.3	818.7	816.3	814.2	817.4	820.3	822.1	825.3	826.4	827.3	831.9	832.8	836.2
Employed	736.8	765.0	763.0	760.9	765.0	768.8	769.2	772.7	776.0	777.4	782.8	781.9	784.3
Unemployed	65.5	53.7	53.2	53.3	52.4	51.5	52.9	52.6	50.4	49.9	49.1	50.9	51.9
Unemployment rate	8.2	6.6	6.5	6.5	6.4	6.3	6.4	6.4	6.1	6.0	5.9	6.1	6.2
New York													
Civilian labor force	8,686.6	8,677.2	8,691.9	8,705.9	8,715.9	8,750.5	8,759.9	8,774.8	8,779.3	8,799.8	8,810.5	8,803.4	8,799.3
Employed	8,147.1	8,129.5	8,144.7	8,157.1	8,165.0	8,195.8	8,208.8	8,213.8	8,217.6	8,240.7	8,247.9	8,253.4	8,265.8
Unemployed	539.5	547.6	547.2	548.8	550.8	554.7	551.0	560.9	561.7	559.1	562.6	550.0	533.5
Unemployment rate	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.2	6.1
North Carolina													
Civilian labor force	3,860.4	3,821.4	3,794.0	3,818.0	3,817.3	3,819.8	3,796.9	3,807.3	3,806.6	3,810.3	3,802.5	3,824.2	3,811.4
Employed	3,697.4	3,674.6	3,654.9	3,684.5	3,695.5	3,687.0	3,657.8	3,664.9	3,660.5	3,669.3	3,673.3	3,689.4	3,673.0
Unemployed	163.0	146.8	139.1	133.5	121.9	132.8	139.1	142.4	146.1	140.9	129.3	134.8	138.4
Unemployment rate	4.2	3.8	3.7	3.5	3.2	3.5	3.7	3.7	3.8	3.7	3.4	3.5	3.6
North Dakota													
Civilian labor force	346.9	347.0	347.2	347.1	347.6	350.9	349.5	347.9	346.4	346.4	346.1	346.7	348.2
Employed	335.9	336.4	338.1	337.6	337.5	339.4	339.8	338.8	338.0	338.9	339.4	340.0	341.3
Unemployed	11.0	10.7	9.0	9.6	10.0	11.5	9.6	9.1	8.4	7.5	6.7	6.7	6.9
Unemployment rate	3.2	3.1	2.6	2.8	2.9	3.3	2.8	2.6	2.4	2.2	1.9	1.9	2.0
Ohio													
Civilian labor force	5,672.2	5,769.4	5,792.0	5,753.7	5,755.2	5,744.4	5,734.2	5,730.8	5,747.8	5,757.2	5,763.9	5,776.7	5,780.6
Employed	5,389.0	5,478.3	5,474.5	5,482.1	5,480.6	5,482.0	5,494.4	5,490.2	5,503.1	5,500.4	5,505.9	5,517.2	5,523.3
Unemployed	283.2	291.1	317.5	271.5	274.6	262.4	239.8	240.5	244.7	256.8	258.0	259.5	257.3
Unemployment rate	5.0	5.0	5.5	4.7	4.8	4.6	4.2	4.2	4.3	4.5	4.5	4.5	4.5
Oklahoma													
Civilian labor force	1,590.1	1,602.1	1,606.0	1,601.1	1,598.1	1,601.2	1,598.3	1,603.7	1,601.9	1,594.1	1,599.6	1,613.9	1,608.2
Employed	1,528.8	1,540.8	1,551.8	1,544.3	1,543.3	1,545.2	1,539.4	1,542.6	1,539.9	1,532.3	1,539.5	1,554.7	1,553.0
Unemployed	61.3	61.4	54.2	56.8	54.8	56.0	59.0	61.1	62.0	61.8	60.2	59.2	55.3
Unemployment rate	3.9	3.8	3.4	3.5	3.4	3.5	3.7	3.8	3.9	3.9	3.8	3.7	3.4
Oregon													
Civilian labor force	1,743.1	1,731.0	1,704.1	1,713.6	1,730.3	1,708.0	1,696.8	1,706.0	1,738.0	1,759.6	1,774.3	1,774.5	1,788.1
Employed	1,633.3	1,636.2	1,608.7	1,614.2	1,633.0	1,622.6	1,610.3	1,615.8	1,642.4	1,664.3	1,683.3	1,680.1	1,693.9
Unemployed	109.8	94.8	95.4	99.5	97.3	85.4	86.5	90.1	95.7	95.4	91.0	94.4	94.3
Unemployment rate	6.3	5.5	5.6	5.8	5.6	5.0	5.1	5.3	5.5	5.4	5.1	5.3	5.3
Pennsylvania													
Civilian labor force	5,934.7	5,959.2	5,980.9	5,980.6	5,978.0	6,004.3	5,993.0	6,008.4	6,002.3	5,998.3	5,958.2	5,983.7	6,010.6
Employed	5,647.4	5,681.5	5,686.8	5,678.3	5,664.6	5,694.3	5,670.4	5,690.2	5,686.0	5,681.9	5,671.1	5,695.2	5,724.2
Unemployed	287.2	277.6	294.2	302.2	313.4	309.9	322.5	318.2	316.3	316.3	287.1	288.5	286.5
Unemployment rate	4.8	4.7	4.9	5.1	5.2	5.2	5.4	5.3	5.3	5.3	4.8	4.8	4.8
Rhode Island													
Civilian labor force	500.7	497.9	495.3	498.2	500.7	501.3	503.1	504.3	506.6	508.8	508.4	506.2	507.0
Employed	475.9	473.4	472.2	473.9	474.8	472.8	473.5	476.5	481.5	483.9	482.7	481.7	483.0
Unemployed	24.9	24.5	23.1	24.3	25.8	28.5	29.6	27.9	25.0	24.9	25.7	24.5	24.0
Unemployment rate	5.0	4.9	4.7	4.9	5.2	5.7	5.9	5.5	4.9	4.9	5.1	4.8	4.7

See footnotes at end of table.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1996	1997											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P
South Carolina													
Civilian labor force	1,846.0	1,886.4	1,885.8	1,893.7	1,886.2	1,892.0	1,904.8	1,904.7	1,911.6	1,902.3	1,889.3	1,886.9	1,891.6
Employed	1,733.7	1,782.0	1,782.1	1,794.1	1,798.8	1,801.0	1,807.8	1,817.2	1,821.0	1,814.6	1,822.2	1,821.1	1,822.4
Unemployed	112.3	104.5	103.7	99.6	87.4	91.1	96.9	87.5	90.6	87.7	67.1	65.8	69.3
Unemployment rate	6.1	5.5	5.5	5.3	4.6	4.8	5.1	4.6	4.7	4.6	3.6	3.5	3.7
South Dakota													
Civilian labor force	392.3	391.4	390.1	390.7	389.7	391.3	391.5	391.4	391.6	390.7	392.2	393.0	394.6
Employed	379.3	379.2	379.3	379.5	379.1	380.9	380.5	380.6	381.1	380.6	381.8	382.2	383.7
Unemployed	13.0	12.2	10.7	11.2	10.6	10.4	10.9	10.8	10.5	10.1	10.4	10.8	11.0
Unemployment rate	3.3	3.1	2.7	2.9	2.7	2.7	2.8	2.8	2.7	2.6	2.6	2.8	2.8
Tennessee													
Civilian labor force	2,769.8	2,758.9	2,758.7	2,755.8	2,761.7	2,753.0	2,758.9	2,771.1	2,758.8	2,763.2	2,758.3	2,760.4	2,768.1
Employed	2,629.0	2,619.5	2,621.7	2,813.6	2,622.1	2,617.6	2,613.5	2,619.1	2,617.3	2,613.5	2,619.2	2,619.9	2,628.5
Unemployed	140.8	139.4	137.0	142.2	139.6	135.4	145.4	152.0	141.5	149.7	139.1	140.5	139.6
Unemployment rate	5.1	5.1	5.0	5.2	5.1	4.9	5.3	5.5	5.1	5.4	5.0	5.1	5.0
Texas													
Civilian labor force	9,806.5	9,883.4	9,918.4	9,935.6	9,907.1	9,931.8	9,932.8	9,941.2	9,941.2	9,969.7	9,995.2	9,977.8	9,966.6
Employed	9,286.9	9,348.2	9,357.7	9,354.0	9,381.7	9,394.0	9,395.4	9,394.4	9,405.0	9,444.3	9,457.8	9,474.5	9,486.6
Unemployed	519.6	535.3	560.6	581.6	545.4	537.8	537.4	546.8	536.2	525.4	537.4	503.3	480.0
Unemployment rate	5.3	5.4	5.7	5.9	5.5	5.4	5.4	5.5	5.4	5.3	5.4	5.0	4.8
Utah													
Civilian labor force	1,013.0	1,034.5	1,037.2	1,041.1	1,048.7	1,048.8	1,047.6	1,050.3	1,054.3	1,055.9	1,063.2	1,063.2	1,063.3
Employed	979.0	1,001.7	1,004.1	1,011.6	1,014.9	1,017.0	1,014.6	1,018.8	1,021.5	1,026.2	1,031.2	1,032.7	1,033.8
Unemployed	33.9	32.8	33.1	29.6	31.8	31.8	33.0	31.6	32.8	29.7	32.1	30.5	29.5
Unemployment rate	3.4	3.2	3.2	2.8	3.0	3.0	3.1	3.0	3.1	2.8	3.0	2.9	2.8
Vermont													
Civilian labor force	325.8	328.0	329.0	328.5	328.0	328.4	328.9	329.3	331.1	329.9	332.4	333.4	333.5
Employed	310.9	315.0	316.1	315.6	315.3	315.8	318.5	316.8	318.4	317.6	320.0	321.5	320.9
Unemployed	14.9	12.9	12.9	12.9	12.7	12.6	12.4	12.5	12.7	12.3	12.4	11.9	12.6
Unemployment rate	4.6	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.7	3.7	3.6	3.8
Virginia													
Civilian labor force	3,370.6	3,518.2	3,514.8	3,521.0	3,525.3	3,525.2	3,521.2	3,534.0	3,538.0	3,538.7	3,532.3	3,536.9	3,533.3
Employed	3,227.4	3,375.1	3,368.2	3,373.4	3,371.5	3,374.4	3,370.5	3,385.5	3,389.4	3,396.8	3,405.4	3,409.0	3,415.7
Unemployed	143.2	143.1	148.8	147.6	153.8	150.9	150.7	148.5	148.6	141.9	126.8	127.9	117.5
Unemployment rate	4.2	4.1	4.2	4.2	4.4	4.3	4.3	4.2	4.2	4.0	3.6	3.6	3.3
Washington													
Civilian labor force	2,908.3	2,918.8	2,917.7	2,931.2	2,946.5	2,943.5	2,950.9	2,978.9	2,989.9	2,994.3	2,989.3	2,994.4	3,030.3
Employed	2,725.2	2,753.1	2,771.4	2,788.4	2,795.9	2,802.7	2,807.2	2,838.8	2,839.0	2,836.9	2,857.8	2,869.7	2,897.7
Unemployed	183.1	165.7	146.2	142.8	150.6	140.9	143.8	142.1	150.9	157.4	131.4	124.7	132.6
Unemployment rate	6.3	5.7	5.0	4.9	5.1	4.8	4.9	4.8	5.0	5.3	4.4	4.2	4.4
West Virginia													
Civilian labor force	814.1	803.3	807.8	804.8	809.5	796.1	802.3	806.6	803.4	798.1	801.8	802.5	798.7
Employed	753.5	745.9	747.0	748.5	749.1	748.3	750.9	752.9	749.3	747.5	749.5	749.6	748.0
Unemployed	60.6	57.4	60.8	56.3	60.4	47.9	51.3	53.7	54.1	50.6	52.3	52.8	50.7
Unemployment rate	7.4	7.1	7.5	7.0	7.5	6.0	6.4	6.7	6.7	6.3	6.5	6.6	6.4
Wisconsin													
Civilian labor force	2,944.3	2,928.9	2,928.7	2,918.2	2,919.5	2,914.7	2,921.4	2,931.6	2,935.2	2,942.0	2,940.8	2,959.3	2,967.4
Employed	2,842.6	2,822.5	2,824.7	2,816.9	2,819.3	2,815.8	2,816.7	2,820.9	2,829.3	2,832.8	2,841.4	2,857.3	2,865.9
Unemployed	101.7	106.4	102.1	101.4	100.2	98.9	104.7	110.7	105.9	109.2	99.5	102.0	101.5
Unemployment rate	3.5	3.6	3.5	3.5	3.4	3.4	3.6	3.8	3.6	3.7	3.4	3.4	3.4
Wyoming													
Civilian labor force	258.1	256.7	256.1	256.2	257.6	257.0	257.5	258.1	256.6	256.3	257.4	256.9	257.8
Employed	245.1	245.0	244.8	244.8	244.9	244.8	244.8	245.5	244.9	245.4	246.5	246.1	246.2
Unemployed	13.1	11.8	11.3	11.5	12.7	12.3	12.7	12.6	11.7	10.9	10.9	10.8	11.6
Unemployment rate	5.1	4.6	4.4	4.5	4.9	4.8	4.9	4.9	4.6	4.3	4.2	4.2	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 selected metropolitan areas

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Alabama	2,100.0	2,143.1	2,134.4	80.1	94.2	81.6	3.8	4.4	3.8
Birmingham	454.8	465.8	466.2	10.7	14.0	11.7	2.4	3.0	2.5
Huntsville	164.3	168.8	168.4	3.8	4.4	3.9	2.3	2.6	2.3
Mobile	259.2	270.4	269.5	9.4	10.8	9.3	3.6	4.0	3.4
Montgomery	159.0	161.8	161.8	5.0	5.8	4.9	3.2	3.6	3.0
Tuscaloosa	79.2	82.2	81.4	1.9	2.3	1.9	2.4	2.7	2.4
Alaska	316.8	322.9	321.8	26.5	24.3	23.8	8.4	7.5	7.4
Anchorage	142.6	143.9	145.1	7.6	8.2	7.3	5.3	5.7	5.0
Arizona	2,258.3	2,311.4	2,302.1	112.7	91.9	86.1	5.0	4.0	3.7
Phoenix-Mesa	1,474.9	1,526.8	1,527.1	49.5	40.4	38.5	3.4	2.6	2.5
Tucson	382.5	382.0	379.3	13.4	11.0	10.8	3.5	2.9	2.9
Arkansas	1,228.2	1,238.3	1,233.5	65.7	52.9	62.2	5.3	4.3	5.0
Fayetteville-Springdale-Rogers	139.6	143.7	142.6	3.9	3.6	4.4	2.8	2.5	3.1
Fort Smith	95.0	95.4	94.5	5.0	4.7	4.8	5.2	4.9	5.1
Little Rock-North Little Rock	297.6	299.9	297.8	11.2	9.9	10.9	3.8	3.3	3.7
Pine Bluff	37.1	36.7	36.6	2.8	2.3	2.6	7.7	6.1	7.0
California	15,578.7	15,951.1	15,951.0	979.0	920.8	880.1	6.3	5.8	5.5
Bakersfield	281.3	296.2	295.8	34.4	35.2	34.7	12.2	11.9	11.7
Fresno	418.9	416.0	419.5	55.1	58.4	58.1	13.1	14.0	13.9
Los Angeles-Long Beach	4,404.2	4,491.1	4,550.7	308.3	275.3	265.5	7.0	6.1	5.8
Modesto	193.2	200.1	195.7	25.3	24.4	23.3	13.1	12.2	11.9
Oakland	1,143.5	1,168.0	1,161.7	45.1	43.3	38.5	3.9	3.7	3.3
Orange County	1,348.4	1,383.4	1,381.8	42.4	38.8	34.7	3.1	2.8	2.5
Riverside-San Bernardino	1,321.6	1,361.2	1,353.3	83.1	82.7	72.1	6.3	6.1	5.3
Sacramento	724.5	743.0	739.4	36.4	34.7	32.6	5.0	4.7	4.4
Salinas	178.9	186.7	186.4	24.5	18.6	27.1	13.7	10.0	14.6
San Diego	1,232.6	1,261.3	1,256.1	50.0	45.4	39.5	4.1	3.6	3.1
San Francisco	921.3	931.8	930.8	26.8	26.6	23.8	2.9	2.9	2.6
San Jose	904.2	938.1	936.6	26.8	23.8	21.6	3.0	2.5	2.3
Santa Barbara-Santa Maria-Lompoc	191.6	194.2	191.9	10.5	9.8	9.6	5.5	5.1	5.0
Santa Rosa	231.2	239.1	237.3	8.2	7.9	7.3	3.6	3.3	3.1
Stockton-Lodi	233.2	243.7	238.8	26.0	26.2	25.6	11.1	10.8	10.7
Vallejo-Fairfield-Napa	230.1	236.7	234.8	14.9	13.2	12.0	6.5	5.6	5.1
Ventura	382.3	386.2	384.2	24.6	25.7	21.8	6.4	6.7	5.7
Colorado	2,098.6	2,214.7	2,196.4	76.5	66.2	58.7	3.6	3.0	2.7
Boulder-Longmont	163.1	173.5	170.9	5.2	4.4	3.6	3.2	2.5	2.1
Colorado Springs	237.9	255.2	251.9	9.2	8.4	7.1	3.9	3.3	2.8
Denver	1,047.8	1,108.1	1,095.1	34.0	28.7	24.8	3.2	2.6	2.3
Connecticut	1,708.4	1,724.9	1,707.4	94.6	74.1	72.1	5.5	4.3	4.2
Bridgeport	218.5	219.0	216.2	14.3	11.3	10.7	6.6	5.1	5.0
Danbury	107.8	107.1	106.3	3.9	2.9	2.7	3.6	2.7	2.6
Hartford	584.2	590.8	585.0	34.1	26.1	26.1	5.8	4.4	4.5
New Haven-Meriden	270.0	272.4	269.1	15.0	11.6	11.2	5.5	4.3	4.2
New London-Norwich	152.8	155.8	153.8	9.1	7.9	7.4	6.0	5.0	4.8
Stamford-Newark	191.6	193.1	192.2	6.7	5.5	5.2	3.5	2.9	2.7
Waterbury	116.2	119.5	118.6	7.2	5.5	5.5	6.2	4.6	4.7
Delaware	384.1	389.7	389.5	18.3	10.7	11.5	4.8	2.8	3.0
Dover	69.4	71.3	71.9	3.1	2.1	2.3	4.4	2.9	3.2
Wilmington-Newark	289.8	290.2	290.0	15.8	9.3	9.6	5.5	3.2	3.3
District of Columbia	267.9	258.3	258.2	21.1	19.9	19.9	7.9	7.7	7.7
Washington	2,534.7	2,568.6	2,560.9	86.3	85.9	80.7	3.4	3.3	3.1
Florida	6,982.2	7,216.8	7,193.9	313.8	333.8	305.3	4.5	4.6	4.2
Daytona Beach	187.4	192.0	190.5	7.2	7.4	6.8	3.9	3.8	3.6
Fort Lauderdale	737.8	764.8	763.5	33.7	37.5	34.0	4.6	4.9	4.5
Fort Myers-Cape Coral	171.5	172.6	172.7	5.4	5.7	5.3	3.1	3.3	3.1
Gainesville	100.6	105.0	103.8	2.6	2.7	2.5	2.6	2.6	2.4
Jacksonville	515.0	536.2	532.5	16.9	18.7	16.9	3.3	3.5	3.2
Lakeland-Winter Haven	198.6	201.5	202.1	10.6	11.2	10.0	5.3	5.6	5.0
Melbourne-Titusville-Palm Bay	194.8	200.9	199.0	8.9	9.1	8.3	4.6	4.5	4.2
Miami	1,034.5	1,055.5	1,047.2	70.7	73.7	67.4	6.8	7.0	6.4
Orlando	786.1	825.6	825.9	25.4	27.5	25.0	3.2	3.3	3.0
Pensacola	166.2	172.7	171.8	6.2	6.5	6.2	3.7	3.8	3.6
Sarasota-Bradenton	246.4	260.9	260.8	6.7	6.9	6.4	2.7	2.6	2.4
Tallahassee	142.5	147.2	145.7	4.0	4.4	4.1	2.8	3.0	2.8
Tampa-St. Petersburg-Clearwater	1,105.6	1,145.7	1,144.8	37.4	39.5	37.2	3.4	3.4	3.3
West Palm Beach-Boca Raton	471.5	489.5	486.9	26.4	28.7	25.4	5.6	5.9	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 selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Georgia	3,817.6	3,942.6	3,943.2	166.9	146.7	148.2	4.4	3.7	3.8
Albany	56.6	59.1	59.0	3.0	3.5	3.6	5.3	5.8	6.1
Athens	72.8	73.6	73.5	2.0	1.8	2.1	2.8	2.5	2.9
Atlanta	2,015.1	2,097.0	2,091.5	74.0	62.2	62.4	3.7	3.0	3.0
Augusta-Aiken	204.3	205.0	203.8	12.1	10.2	10.3	5.9	5.0	5.1
Columbus	118.6	121.8	121.8	5.4	5.8	5.4	4.6	4.7	4.5
Macon	150.2	153.3	153.1	6.4	6.1	6.4	4.3	4.0	4.1
Savannah	133.8	134.7	134.2	6.2	5.1	5.2	4.6	3.8	3.9
Hawaii	595.0	593.5	590.5	33.9	33.3	30.5	5.7	5.6	5.2
Honolulu	429.4	428.6	426.2	20.0	20.5	18.3	4.7	4.8	4.3
Idaho	628.0	639.7	638.4	36.5	28.8	34.9	5.8	4.5	5.5
Boise City	211.5	218.3	218.6	8.4	7.3	8.4	4.0	3.3	3.8
Illinois	6,118.2	6,153.0	6,144.3	305.5	263.1	283.6	5.0	4.3	4.6
Bloomington-Normal	80.1	81.1	81.6	2.0	1.9	2.3	2.5	2.3	2.8
Champaign-Urbana	94.2	94.6	93.9	2.7	2.3	2.5	2.9	2.5	2.6
Chicago	4,075.1	4,111.1	4,103.3	195.7	170.1	178.3	4.8	4.1	4.3
Davenport-Moline-Rock Island	185.3	183.2	183.4	8.1	5.4	6.0	4.3	2.9	3.3
Decatur	59.6	58.9	58.7	4.6	3.6	3.6	7.8	6.1	6.2
Kankakee	52.0	52.9	53.0	3.0	2.5	2.9	5.8	4.8	5.4
Peoria-Pekin	179.1	179.4	178.1	9.2	7.0	7.5	5.2	3.9	4.2
Rockford	194.5	193.7	194.5	8.8	7.0	8.3	4.5	3.6	4.2
Springfield	105.7	106.2	106.4	4.5	4.2	4.6	4.2	3.9	4.3
Indiana	3,032.2	3,121.4	3,097.2	105.7	100.3	104.3	3.5	3.2	3.4
Bloomington	59.7	64.8	61.9	1.2	1.3	1.4	2.0	2.0	2.3
Elkhart-Goshen	92.7	94.9	93.9	3.8	3.1	3.2	4.1	3.3	3.4
Evansville-Henderson	152.3	157.2	155.1	5.8	5.8	5.6	3.8	3.7	3.6
Fort Wayne	259.6	265.6	264.3	7.4	6.7	6.9	2.8	2.5	2.6
Gary	297.2	303.6	301.3	12.3	11.7	11.8	4.1	3.8	3.9
Indianapolis	809.3	830.6	826.6	21.2	21.3	23.0	2.6	2.6	2.8
Kokomo	51.9	53.8	54.0	1.6	1.5	1.8	3.1	2.8	3.3
Lafayette	86.1	92.3	90.9	2.1	2.2	2.2	2.4	2.4	2.5
Muncie	61.8	64.4	64.0	2.4	2.1	2.4	3.9	3.3	3.7
South Bend	135.1	139.6	139.2	4.5	4.3	4.3	3.3	3.1	3.1
Terre Haute	74.1	75.4	74.6	4.2	4.0	4.1	5.6	5.2	5.5
Iowa	1,602.5	1,588.8	1,589.8	61.3	41.0	45.8	3.8	2.6	2.9
Cedar Rapids	111.6	110.5	110.5	3.2	2.1	2.3	2.9	1.9	2.1
Des Moines	260.0	256.4	257.1	8.1	5.2	5.6	3.1	2.0	2.2
Dubuque	50.5	49.4	49.9	2.5	1.4	1.7	4.9	2.8	3.4
Iowa City	66.3	65.9	65.3	1.8	1.4	1.3	2.7	2.1	2.0
Sioux City	67.0	65.5	65.3	2.4	1.8	1.7	3.5	2.7	2.7
Waterloo-Cedar Falls	69.7	69.0	68.6	3.1	2.2	2.4	4.4	3.2	3.5
Kansas	1,343.5	1,396.9	1,388.2	56.4	50.7	47.3	4.2	3.6	3.4
Lawrence	51.4	52.8	52.2	2.2	2.1	1.9	4.3	3.9	3.7
Topeka	89.7	90.0	89.6	4.9	4.4	4.3	5.5	4.9	4.8
Wichita	268.8	280.6	278.5	10.0	8.9	7.6	3.7	3.2	2.7
Kentucky	1,877.7	1,944.3	1,933.3	101.5	87.7	84.3	5.4	4.5	4.4
Lexington	245.0	259.8	258.1	6.1	5.4	5.6	2.5	2.1	2.2
Louisville	532.1	559.6	553.0	22.6	21.0	17.0	4.2	3.8	3.1
Owensboro	47.9	50.7	50.7	2.5	2.1	2.0	5.1	4.1	4.0
Louisiana	1,995.1	2,017.7	2,002.7	122.4	113.1	106.9	6.1	5.6	5.3
Alexandria	58.9	57.9	57.5	3.8	3.3	3.2	6.4	5.8	5.5
Baton Rouge	289.4	302.4	298.5	14.6	13.9	12.7	5.0	4.6	4.3
Houma	84.3	89.0	88.8	3.1	2.6	2.4	3.7	2.9	2.8
Lafayette	168.1	174.2	172.5	8.4	9.7	8.9	5.0	5.6	5.2
Lake Charles	90.1	89.3	88.4	6.0	5.3	4.9	6.6	6.0	5.6
Monroe	68.5	70.2	69.6	4.1	4.2	3.8	6.1	5.9	5.5
New Orleans	610.8	617.1	610.5	34.1	31.3	28.3	5.6	5.1	4.6
Shreveport-Bossier City	184.7	186.3	186.3	12.3	11.3	10.7	6.7	6.1	5.8
Maine	665.3	656.5	654.1	29.7	32.0	32.2	4.5	4.9	4.9
Lewiston-Auburn	53.2	53.3	53.1	2.3	2.6	2.4	4.4	4.9	4.5
Portland	135.6	132.3	132.7	2.9	3.4	3.2	2.1	2.6	2.4

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
Maryland	2,785.1	2,774.9	2,755.8	117.9	127.6	122.7	4.2	4.6	4.5
Baltimore	1,311.0	1,310.6	1,299.4	59.2	65.5	61.3	4.5	5.0	4.7
Massachusetts	3,195.9	3,263.3	3,251.5	112.0	113.6	110.3	3.5	3.5	3.4
Barnstable-Yarmouth	67.9	70.6	69.7	3.8	3.7	4.0	5.7	5.2	5.8
Boston	1,779.9	1,821.7	1,816.0	52.0	54.0	50.0	2.9	3.0	2.8
Brockton	127.3	129.4	128.2	5.1	5.0	4.8	4.0	3.9	3.7
Fitchburg-Leominster	68.5	69.3	69.2	2.9	3.0	2.8	4.2	4.4	4.0
Lawrence	192.3	200.1	198.3	9.6	9.4	8.5	5.0	4.7	4.3
Lowell	155.3	161.0	161.1	5.3	5.5	5.3	3.4	3.4	3.3
New Bedford	80.6	61.6	61.4	5.7	5.1	5.4	7.1	6.3	6.6
Pittsfield	39.8	40.5	40.4	1.9	1.8	1.9	4.8	4.3	4.6
Springfield	279.5	282.5	280.8	10.2	10.8	11.0	3.6	3.8	3.9
Worcester	248.1	253.8	252.8	7.7	8.0	7.7	3.1	3.2	3.0
Michigan	4,828.1	4,914.5	4,901.4	206.4	174.1	170.8	4.3	3.5	3.5
Ann Arbor	282.4	286.4	285.9	7.3	5.7	5.7	2.6	2.0	2.0
Benton Harbor	81.7	83.2	82.1	4.2	3.7	3.3	5.2	4.4	4.0
Detroit	2,172.0	2,211.5	2,211.7	83.3	70.4	67.8	3.8	3.2	3.1
Flint	202.2	202.2	201.8	10.3	9.2	8.8	5.1	4.6	4.3
Grand Rapids-Muskegon-Holland	560.5	575.8	575.5	18.9	16.7	15.8	3.4	2.9	2.7
Jackson	74.3	75.2	74.8	3.2	3.0	2.9	4.3	4.0	3.9
Kalamazoo-Battle-Creek	223.6	226.1	224.4	8.5	7.8	7.4	3.8	3.4	3.3
Lansing-East Lansing	237.2	239.5	238.2	7.1	6.2	6.3	3.0	2.6	2.7
Saginaw-Bay City-Midland	193.0	196.4	195.7	8.3	7.2	7.4	4.3	3.7	3.8
Minnesota	2,591.6	2,687.0	2,654.4	95.1	67.9	69.0	3.7	2.5	2.6
Duluth-Superior	123.6	127.1	124.7	5.9	5.3	4.8	4.8	4.2	3.8
Minneapolis-St. Paul	1,615.3	1,676.3	1,658.4	42.3	32.9	31.4	2.6	2.0	1.9
Rochester	63.8	67.0	66.4	1.5	1.0	1.0	2.4	1.5	1.6
St. Cloud	93.0	95.0	94.4	4.4	2.7	3.0	4.7	2.8	3.2
Mississippi	1,261.4	1,285.9	1,279.0	60.9	63.6	52.3	4.8	4.9	4.1
Jackson	224.7	230.5	230.6	5.6	7.2	5.5	2.5	3.1	2.4
Missouri	2,923.5	2,869.8	2,871.5	136.8	102.1	111.9	4.7	3.6	3.9
Kansas City	954.0	964.4	962.0	37.7	31.9	31.6	3.9	3.3	3.3
St. Louis LMA	1,382.3	1,352.9	1,356.5	58.9	49.0	52.6	4.3	3.6	3.9
Springfield	173.8	168.7	167.6	6.5	4.8	5.1	3.8	2.9	3.0
Montana	443.1	460.0	459.4	23.2	23.6	26.4	5.2	5.1	5.7
Nebraska	907.7	927.4	921.0	24.2	15.6	14.4	2.7	1.7	1.6
Lincoln	139.3	145.1	143.6	3.0	1.8	1.6	2.2	1.3	1.1
Omaha	372.1	391.1	387.9	10.4	7.3	6.6	2.8	1.9	1.7
Nevada	863.0	904.8	899.9	45.2	34.7	34.0	5.2	3.8	3.8
Las Vegas	652.7	689.1	686.2	34.3	26.5	25.5	5.3	3.8	3.7
Reno	168.3	173.6	171.9	8.0	5.6	5.6	4.8	3.2	3.3
New Hampshire	618.6	654.8	650.2	23.0	19.8	17.5	3.7	3.0	2.7
Manchester	86.0	101.0	100.9	3.1	2.5	2.3	3.2	2.5	2.3
Nashua	93.8	103.4	102.7	3.1	2.7	2.5	3.3	2.7	2.5
Portsmouth-Rochester	118.4	122.5	121.2	3.8	3.1	2.7	3.2	2.5	2.2
New Jersey	4,151.6	4,157.5	4,150.8	238.1	194.8	195.1	5.7	4.7	4.7
Atlantic-Cape May	170.0	172.7	171.2	17.5	15.2	16.2	10.3	8.8	9.5
Bergen-Passaic	679.5	675.2	673.3	39.3	30.7	30.4	5.8	4.5	4.5
Jersey City	290.2	289.9	289.5	25.0	20.2	20.8	8.6	7.0	7.2
Middlesex-Somerset-Hunterdon	623.1	630.1	629.4	24.9	20.7	19.9	4.0	3.3	3.2
Monmouth-Ocean	508.5	510.4	506.7	27.0	23.0	23.1	5.3	4.5	4.6
Newark	1,014.2	1,016.2	1,018.5	55.5	46.8	46.1	5.5	4.6	4.5
Trenton	170.0	169.1	169.0	8.7	6.9	6.9	5.1	4.1	4.1
Vineland-Millville-Bridgeton	64.8	65.9	65.8	6.6	5.4	5.9	10.1	8.1	8.9
New Mexico	798.4	835.5	832.1	61.1	47.9	48.4	7.7	5.7	5.8
Albuquerque	346.4	365.3	365.0	17.4	14.7	14.5	5.0	4.0	4.0
Las Cruces	66.3	69.6	68.3	6.4	5.1	5.1	9.6	7.3	7.5
Santa Fe	71.4	73.6	73.0	3.4	2.6	2.6	4.8	3.5	3.5

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
	Dec. 1996	Nov. 1997	Dec. 1997P	Number			Percent of labor force		
				Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
New York	8,660.0	8,784.7	8,766.8	508.6	521.0	499.7	5.9	5.9	5.7
Albany-Schenectady-Troy	443.8	452.5	450.6	17.1	18.2	17.9	3.8	4.0	4.0
Binghamton	122.5	126.8	126.6	4.8	4.9	5.1	4.0	3.9	4.1
Buffalo-Niagara Falls	570.1	579.9	579.0	25.7	30.3	30.3	4.5	5.2	5.2
Dutchess County	118.0	119.1	119.0	4.1	4.2	4.0	3.5	3.5	3.4
Elmira	45.0	44.6	44.9	1.6	2.0	1.9	3.6	4.4	4.1
Glens Falls	59.4	60.5	60.0	3.8	4.3	4.4	6.5	7.0	7.3
Nassau-Suffolk	1,369.8	1,403.7	1,406.3	45.3	50.7	47.2	3.3	3.6	3.4
New York	3,969.1	3,990.2	3,988.7	314.9	307.1	287.2	7.9	7.7	7.2
New York City	3,339.3	3,352.0	3,350.3	293.9	285.3	267.0	8.8	8.5	8.0
Newburgh	168.9	169.5	168.2	6.0	6.4	6.0	3.6	3.8	3.6
Rochester	564.0	578.1	574.5	19.6	22.6	23.0	3.5	3.9	4.0
Syracuse	362.0	367.7	365.6	15.7	16.5	16.4	4.3	4.5	4.5
Utica-Rome	139.7	143.1	141.4	6.6	7.4	7.4	4.7	5.2	5.2
North Carolina	3,840.9	3,835.3	3,801.6	146.5	131.1	125.0	3.8	3.4	3.3
Asheville	111.4	112.6	111.6	3.3	2.7	2.7	2.9	2.4	2.4
Charlotte-Gastonia-Rock Hill	745.2	740.9	735.2	24.3	19.6	17.4	3.3	2.6	2.4
Greensboro-Winston-Salem-High Point	640.6	632.2	626.6	17.7	17.0	15.5	2.8	2.7	2.5
Raleigh-Durham-Chapel Hill	587.4	596.8	592.0	12.0	11.0	9.8	2.0	1.8	1.6
North Dakota	340.4	342.5	341.3	11.7	6.5	7.3	3.4	1.9	2.1
Bismarck	52.1	52.4	52.2	1.9	1.0	1.2	3.6	1.9	2.2
Fargo-Moorhead	98.2	101.6	101.4	2.3	1.2	1.5	2.4	1.2	1.5
Grand Forks	55.0	57.4	57.0	1.7	1.2	1.2	3.1	2.1	2.2
Ohio	5,666.1	5,799.0	5,765.1	273.3	248.7	247.3	4.8	4.3	4.3
Akron	362.7	368.8	367.3	17.6	14.4	15.2	4.8	3.9	4.1
Canton-Massillon	202.0	206.7	205.7	10.3	8.8	8.8	5.1	4.2	4.3
Cincinnati	820.1	843.4	840.8	30.5	29.1	28.1	3.7	3.4	3.3
Cleveland-Lorain-Elyria	1,111.1	1,138.1	1,132.8	59.5	52.1	50.4	5.4	4.6	4.4
Columbus	800.2	823.5	820.2	23.3	22.1	21.2	2.9	2.7	2.6
Dayton-Springfield	477.6	486.0	482.1	20.2	18.4	17.6	4.2	3.8	3.7
Hamilton-Middletown	168.0	172.3	170.6	6.1	6.1	5.8	3.6	3.5	3.4
Lima	76.1	77.5	77.7	4.4	3.4	3.7	5.8	4.3	4.7
Mansfield	84.3	87.0	86.2	5.0	5.2	4.8	5.9	6.0	5.6
Steubenville-Weirton	57.0	58.0	57.5	4.0	4.6	4.3	7.0	7.9	7.5
Toledo	316.8	320.2	317.5	14.1	14.6	14.1	4.5	4.5	4.4
Youngstown-Warren	282.8	287.1	285.7	16.9	15.8	16.4	6.0	5.5	5.7
Oklahoma	1,579.5	1,617.0	1,598.1	59.6	56.0	54.5	3.8	3.5	3.4
Enid	26.6	27.3	26.9	0.8	0.8	0.8	2.9	2.9	2.9
Lawton	40.6	41.5	40.9	1.9	1.7	1.6	4.8	4.1	3.9
Oklahoma City	520.8	531.2	525.2	15.6	15.2	14.5	3.0	2.9	2.8
Tulsa	389.7	401.9	397.6	11.8	11.5	11.0	3.0	2.9	2.8
Oregon	1,721.4	1,771.4	1,770.3	106.3	90.2	91.3	6.2	5.1	5.2
Eugene-Springfield	159.3	164.8	164.6	9.5	8.2	8.4	6.0	5.0	5.1
Medford-Ashland	87.2	88.4	88.9	7.1	5.3	5.1	8.1	6.0	5.8
Portland-Vancouver	1,011.5	1,047.0	1,053.1	44.9	39.9	39.3	4.4	3.8	3.7
Salem	161.7	165.3	164.2	10.0	8.4	8.8	6.2	5.1	5.4
Pennsylvania	5,929.9	6,009.4	6,000.8	257.9	275.1	253.7	4.3	4.6	4.2
Allentown-Bethlehem-Easton	302.4	306.5	306.0	12.6	13.2	11.9	4.2	4.3	3.9
Altoona	62.6	62.9	62.9	3.0	3.2	3.1	4.8	5.0	4.9
Erie	138.9	141.5	140.9	6.7	7.1	6.8	4.8	5.0	4.8
Harrisburg-Lebanon-Carlisle	348.8	354.4	355.2	8.8	10.2	9.4	2.5	2.9	2.7
Johnstown	104.6	106.3	105.9	7.3	7.4	7.2	7.0	6.9	6.8
Lancaster	240.1	244.3	243.3	5.9	6.9	6.2	2.4	2.8	2.6
Philadelphia	2,479.7	2,510.3	2,508.2	108.9	110.6	97.3	4.4	4.4	3.9
Pittsburgh	1,151.7	1,159.2	1,159.7	46.9	49.3	47.4	4.1	4.3	4.1
Reading	181.9	186.4	185.7	6.0	7.0	6.1	3.3	3.7	3.3
Scranton-Wilkes-Barre-Hazleton	311.1	314.8	314.6	19.0	20.3	19.6	6.1	6.4	6.2
Sharon	55.9	57.4	57.3	2.3	2.1	2.1	4.1	3.6	3.6
State College	66.7	69.7	68.7	1.8	1.7	2.1	2.7	2.4	3.0
Williamsport	59.0	60.5	60.1	3.4	3.6	3.7	5.7	6.0	6.2
York	193.5	195.3	195.3	6.3	6.8	6.0	3.3	3.5	3.1
Rhode Island	501.5	510.9	508.5	23.2	22.4	22.6	4.6	4.4	4.4
Providence-Fall River-Warwick	574.8	583.7	582.1	27.7	26.3	26.9	4.8	4.5	4.6

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
	Dec. 1996	Nov. 1997	Dec. 1997P	Number			Percent of labor force		
				Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
South Carolina	1,816.5	1,876.3	1,863.9	100.0	59.9	59.1	5.5	3.2	3.2
Charleston-North Charleston	237.9	250.3	248.7	11.4	6.5	6.3	4.8	2.6	2.5
Columbia	256.0	271.3	270.5	8.8	5.1	4.8	3.4	1.9	1.8
Greenville-Spartanburg-Anderson	485.0	487.0	485.0	17.9	9.8	9.6	3.9	2.0	2.0
South Dakota	384.2	391.8	386.7	12.7	10.1	10.7	3.3	2.6	2.8
Rapid City	45.2	47.0	46.3	1.5	1.3	1.2	3.4	2.7	2.6
Sioux Falls	93.4	97.4	96.7	2.0	1.5	1.6	2.1	1.6	1.7
Tennessee	2,755.1	2,796.4	2,756.1	118.0	134.7	116.3	4.3	4.8	4.2
Chattanooga	219.2	225.0	221.7	8.4	10.6	9.1	3.8	4.7	4.1
Johnson City-Kingsport-Bristol	226.4	230.8	228.9	8.8	10.7	9.9	3.9	4.6	4.3
Knoxville	347.7	348.7	343.8	12.4	13.6	11.8	3.6	3.9	3.4
Memphis	541.1	548.5	542.5	19.5	23.9	20.3	3.6	4.4	3.7
Nashville	624.7	638.6	631.3	17.5	20.5	16.9	2.8	3.2	2.7
Texas	9,816.5	10,013.1	9,978.5	483.5	491.2	444.5	4.9	4.9	4.5
Abilene	60.9	61.1	60.6	2.2	2.1	1.8	3.6	3.5	3.0
Amarillo	113.7	115.7	115.2	4.2	3.7	3.3	3.7	3.2	2.9
Austin-San Marcos	640.3	647.8	643.7	18.9	18.8	16.8	2.9	2.9	2.6
Beaumont-Port Arthur	180.1	181.6	181.2	14.1	13.7	12.7	7.8	7.6	7.0
Brazoria	106.8	107.9	107.0	7.0	6.9	6.2	6.6	6.4	5.8
Brownsville-Harlingen-San Benito	123.4	128.8	127.5	13.5	15.9	14.4	11.0	12.3	11.3
Bryan-College Station	71.4	72.5	72.3	1.5	1.3	1.2	2.1	1.8	1.6
Corpus Christi	180.6	180.4	180.4	13.8	11.5	10.9	7.6	6.4	6.0
Dallas	1,787.1	1,841.8	1,836.8	59.9	63.0	55.5	3.4	3.4	3.0
El Paso	290.8	291.4	288.7	30.2	29.4	25.8	10.4	10.1	8.9
Fort Worth-Arlington	843.9	868.9	868.1	26.8	28.3	25.4	3.2	3.3	2.9
Galveston-Texas City	125.7	127.2	126.1	10.0	9.1	8.1	8.0	7.1	6.4
Houston	2,034.3	2,068.2	2,064.8	95.0	91.8	81.4	4.7	4.4	3.9
Killeen-Temple	113.0	116.7	115.9	4.8	5.6	4.8	4.3	4.8	4.2
Laredo	69.1	71.3	71.2	7.3	6.5	6.1	10.6	9.2	8.5
Longview-Marshall	103.0	103.2	102.3	6.8	7.3	6.6	6.6	7.1	6.4
Lubbock	122.8	126.6	125.8	3.7	4.3	3.8	3.0	3.4	3.0
McAllen-Edinburg-Mission	191.7	199.8	201.5	33.9	35.6	35.7	17.7	17.8	17.7
Odessa-Midland	119.9	121.7	120.8	5.5	5.3	4.6	4.6	4.3	3.8
San Angelo	50.8	50.6	50.2	1.5	1.6	1.4	2.9	3.1	2.7
San Antonio	733.7	751.5	748.8	25.9	28.8	25.1	3.5	3.8	3.3
Sherman-Denison	49.5	49.8	49.6	2.0	1.9	1.7	3.9	3.8	3.5
Texarkana	57.2	57.1	56.5	4.0	4.2	3.7	7.0	7.3	6.6
Tyler	87.8	89.3	89.0	4.8	5.3	4.7	5.5	6.0	5.3
Victoria	42.3	42.7	42.4	1.9	1.7	1.6	4.4	4.1	3.7
Waco	100.0	102.6	101.9	3.7	4.3	3.9	3.7	4.2	3.8
Wichita Falls	65.8	65.8	65.5	2.5	2.8	2.6	3.8	4.2	4.0
Utah	1,014.4	1,069.7	1,063.9	29.7	30.8	26.0	2.9	2.9	2.4
Provo-Orem	151.0	159.5	160.6	3.6	3.6	3.1	2.4	2.3	1.9
Salt Lake City-Ogden	651.8	689.3	683.4	17.5	19.4	16.1	2.7	2.8	2.3
Vermont	325.4	333.3	332.6	13.8	12.1	12.0	4.2	3.6	3.6
Burlington	97.5	101.9	101.2	2.8	2.4	2.4	2.9	2.4	2.4
Virginia	3,335.8	3,518.9	3,497.9	135.0	120.1	109.6	4.0	3.4	3.1
Charlottesville	71.0	75.6	75.1	1.8	1.3	1.1	2.5	1.7	1.4
Danville	55.5	57.6	57.3	3.3	2.9	2.9	6.0	5.0	5.1
Lynchburg	101.4	106.9	106.0	3.6	3.2	3.0	3.5	2.9	2.8
Norfolk-Virginia Beach-Newport News	709.0	736.7	728.9	32.4	30.3	26.6	4.6	4.1	3.7
Richmond-Petersburg	481.1	512.0	510.5	17.2	16.0	14.0	3.6	3.1	2.7
Roanoke	125.5	132.5	131.6	3.3	3.5	3.0	2.6	2.7	2.3
Washington	2,900.9	2,984.2	3,021.1	186.7	133.0	138.8	6.4	4.5	4.6
Seattle-Bellevue-Everett	1,304.2	1,368.4	1,391.4	56.8	39.8	39.4	4.4	2.9	2.8
Spokane	202.5	208.9	212.1	12.0	8.3	9.5	5.9	4.0	4.5
Tacoma	324.8	329.2	334.5	18.2	14.2	13.8	5.6	4.3	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 selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P	Dec. 1996	Nov. 1997	Dec. 1997P
West Virginia	814.7	802.1	801.6	60.9	50.1	52.0	7.5	6.2	6.5
Charleston	131.6	130.2	129.3	6.7	5.8	5.8	5.0	4.5	4.5
Huntington-Ashland	137.5	140.3	139.9	9.5	8.9	8.6	6.9	6.4	6.1
Parkersburg-Marietta	78.0	78.6	77.8	4.7	4.6	4.3	6.0	5.9	5.6
Wheeling	73.9	73.6	73.3	3.9	3.8	4.1	5.3	5.2	5.5
Wisconsin	2,921.4	2,951.9	2,948.6	88.5	88.8	88.5	3.0	3.0	3.0
Appleton-Oshkosh-Neenah	220.7	222.0	221.4	5.1	5.8	5.6	2.3	2.6	2.5
Eau Claire	81.0	82.3	82.3	2.9	2.4	2.8	3.6	2.9	3.4
Green Bay	130.9	130.9	131.0	3.2	3.5	3.3	2.5	2.7	2.5
Janesville-Beloit	77.6	77.2	76.8	2.5	2.7	2.4	3.3	3.5	3.1
Kenosha	76.7	76.3	76.5	2.1	2.2	2.0	2.8	2.8	2.6
La Crosse	71.9	72.9	72.4	1.9	1.8	1.8	2.7	2.5	2.6
Madison	260.6	263.9	263.0	3.6	3.7	3.7	1.4	1.4	1.4
Milwaukee-Waukesha	808.7	812.5	813.0	22.4	24.5	21.4	2.8	3.0	2.6
Racine	93.3	95.7	95.5	3.2	3.2	3.1	3.4	3.3	3.2
Sheboygan	61.4	61.6	61.7	1.3	1.4	1.3	2.1	2.2	2.0
Wausau	70.6	72.1	72.4	2.1	2.2	2.2	3.0	3.0	3.1
Wyoming	255.8	256.1	255.5	13.2	10.3	11.6	5.1	4.0	4.6
Casper	33.7	33.9	34.2	2.0	1.5	1.7	6.1	4.6	5.1
Puerto Rico	1,299.2	1,325.4	1,292.6	131.8	176.8	169.0	10.1	13.3	13.1
Caguas	113.4	120.8	118.7	10.1	13.9	13.2	8.9	11.5	11.1
Mayaguez	92.1	94.5	92.0	10.6	15.6	14.8	11.5	16.5	16.1
Ponce	108.7	110.7	107.4	15.6	19.5	18.5	14.4	17.6	17.2
San Juan-Bayamon	715.0	716.2	702.6	57.3	77.5	74.8	8.0	10.8	10.7

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

Explanatory Notes and Estimates of Error

Introduction

The statistics in this periodical are compiled from two major sources: (1) household interviews, and (2) reports from employers.

Data based on household interviews are obtained from the Current Population Survey (CPS), a sample survey of the population 16 years of age and over. The survey is conducted each month by the Bureau of the Census for the Bureau of Labor Statistics and provides comprehensive data on the labor force, the employed, and the unemployed, classified by such characteristics as age, sex, race, family relationship, marital status, occupation, and industry attachment. The survey also provides data on the characteristics and past work experience of those not in the labor force. The information is collected by trained interviewers from a sample of about 50,000 households (beginning with January 1996 data) located in 754 sample areas. These areas are chosen to represent all counties and independent cities in the U.S., with coverage in 50 States and the District of Columbia. The data collected are based on the activity or status reported for the calendar week including the 12th of the month.

Data based on establishment records are compiled each month from mail questionnaires and telephone interviews by the Bureau of Labor Statistics, in cooperation with State agencies. The Current Employment Statistics (CES) survey is designed to provide industry information on nonfarm wage and salary employment, average weekly hours, average hourly earnings, and average weekly earnings for the Nation, States, and metropolitan areas. The employment, hours, and earnings series are based on payroll reports from a sample of about 390,000 establishments employing about 48 million nonfarm wage and salary workers. The data relate to all workers, full or part time, who receive pay during the payroll period which includes the 12th of the month.

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

Data from these two sources differ from each other because of variations in definitions and coverage, source of

information, methods of collection, and estimating procedures. Sampling variability and response errors are additional reasons for discrepancies. The major factors which have a differential effect on the levels and trends of the two data series are as follows.

Employment

Coverage. The household survey definition of employment comprises wage and salary workers (including domestics and other private household workers), self-employed persons, and unpaid workers who worked 15 hours or more during the reference week in family-operated enterprises. Employment in both agricultural and nonagricultural industries is included. The payroll survey covers only wage and salary employees on the payrolls of nonfarm establishments.

Multiple jobholding. The household survey provides information on the work status of the population without duplication, since each person is classified as employed, unemployed, or not in the labor force. Employed persons holding more than one job are counted only once. In the figures based on establishment reports, persons who worked in more than one establishment during the reporting period are counted each time their names appear on payrolls.

Unpaid absences from jobs. The household survey includes among the employed all civilians who had jobs but were not at work during the reference week—that is, were not working but had jobs from which they were temporarily absent because of illness, vacation, bad weather, childcare problems, labor-management disputes, or because they were taking time off for various other reasons, even if they were not paid by their employers for the time off. In the figures based on payroll reports, persons on leave paid for by the company are included, but those on leave without pay for the entire payroll period are not.

Hours of work

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

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

Earnings

The household survey measures the earnings of wage and salary workers in all occupations and industries in both the private and public sectors. Data refer to the usual earnings received from the worker's sole or primary job. Data from the establishment survey generally refer to average earnings of production and related workers in mining and manufacturing, construction workers in construction, and nonsupervisory employees in private service-producing industries. For a comprehensive discussion of the various earnings series available from the household and establishment surveys, see *BLS Measures of Compensation*, BLS Bulletin 2239 (1986).

COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

Unemployment insurance data. The unemployed total from the household survey includes all persons who did not have a job during the reference week, were currently available for a job, and were looking for work or were waiting to be called back to a job from which they had been laid off, whether or not they were eligible for unemployment insurance. Figures on unemployment insurance claims, prepared by the Employment and Training Administration of the U.S. Department of Labor, exclude, in addition to otherwise ineligible persons who do not file claims for benefits, persons who have exhausted their benefit rights, new workers who have not earned rights to unemployment insurance, and persons losing jobs not covered by unemployment insurance systems (some workers in agriculture, domestic services, and religious organizations, and self-employed and unpaid family workers).

In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used in the household survey. For example, persons with a job but not at work and persons working only a few hours during the week are sometimes eligible for unemployment compensation but are classified as employed rather than unemployed in the household survey.

For an examination of the similarities and differences between State insured unemployment and total unemployment, see "Measuring Total and State Insured Unemploy-

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

Agricultural employment estimates of the U.S. Department of Agriculture. The principal differences in coverage are the inclusion of persons under 16 in the National Agricultural Statistics Service series and the treatment of dual jobholders, who are counted more than once if they work on more than one farm during the reporting period. There are also wide differences in sampling techniques and data collecting and estimating methods, which cannot be readily measured in terms of their impact on differences in the levels and trends of the two series.

COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

Statistics on manufacturers and business, Bureau of the Census. BLS establishment statistics on employment differ from employment counts derived by the Bureau of the Census from its censuses or sample surveys of manufacturing and business establishments. The major reasons for noncomparability are different treatment of business units considered parts of an establishment, such as central administrative offices and auxiliary units; the industrial classification of establishments; and different reporting patterns by multiunit companies. There are also differences in the scope of the industries covered, e.g., the Census of Business excludes professional services, public utilities, and financial establishments, whereas these are included in the BLS statistics.

County Business Patterns, Bureau of the Census. Data in *County Business Patterns* (CBP) differ from BLS establishment statistics in the treatment of central administrative offices and auxiliary units. Differences may also arise because of industrial classification and reporting practices. In addition, CBP excludes interstate railroads and most of government, and coverage is incomplete for some of the nonprofit agencies.

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

Household Data

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

COLLECTION AND COVERAGE

Statistics on the employment status of the population and related data are compiled by BLS using data from the Current Population Survey (CPS). This monthly survey of households is conducted for BLS by the Bureau of the Census through a scientifically selected sample designed to represent the civilian noninstitutional population. Respondents are interviewed to obtain information about the employment status of each member of the household 16 years of age and over. The inquiry relates to activity or status during the calendar week, Sunday through Saturday, which includes the 12th day of the month. This is known as the "reference week." Actual field interviewing is conducted in the following week, referred to as the "survey week."

Each month about 50,000 occupied units are eligible for interview. Some 3,200 of these households are contacted but interviews are not obtained because the occupants are not at home after repeated calls or are unavailable for other reasons. This represents a noninterview rate for the survey that ranges between 6 and 7 percent. In addition to the 50,000 occupied units, there are about 9,000 sample units in an average month which are visited but found to be vacant or otherwise not eligible for enumeration. Part of the sample is changed each month. The rotation plan, as will be explained later, provides for three-fourths of the sample to be common from one month to the next, and one-half to be common with the same month a year earlier.

CONCEPTS AND DEFINITIONS

The concepts and definitions underlying labor force data have been modified, but not substantially altered, since the inception of the survey in 1940; those in use as of January 1994 are as follows:

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

Employed persons. All persons who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees, worked in their own business, profession, or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and (b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, child-care problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

Each employed person is counted only once, even if he or she holds more than one job. For purposes of occupation and industry classification, multiple jobholders are counted in the job at which they worked the greatest number of hours during the reference week.

Included in the total are employed citizens of foreign countries who are temporarily in the United States but not living on the premises of an embassy. Excluded are persons whose only activity consisted of work around their own house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and other organizations.

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

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

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

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

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

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

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

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

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

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

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

The class-of-worker breakdown assigns workers to the following categories: Private and government wage and salary workers, self-employed workers, and unpaid family workers. Wage and salary workers receive wages, salary, commissions, tips, or pay in kind from a private employer or from a government unit. Self-employed persons are those who work for profit or fees in their own business, profession, trade, or farm. Only the unincorporated self-employed are included in the self-employed category in the class of worker typology. Self-employed persons who respond that their businesses are incorporated are included among wage and salary workers, because technically, they are paid employees of a corporation. Unpaid family workers are persons working without pay for 15 hours a week or more on a farm or in a business operated by a member of the household to whom they are related by birth or marriage.

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

Hours of work. These statistics relate to the actual number of hours worked during the reference week. For example, persons who normally work 40 hours a week but were off on the Columbus Day holiday would be reported as working 32 hours, even though they were paid for the holiday. For persons working in more than one job, the published figures relate to the number of hours worked in all jobs during the week; all the hours are credited to the major job. Unpublished data are available for the hours worked in each job and for usual hours.

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

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

Usual full- or part-time status. Data on persons “at work” exclude persons who were temporarily absent from a job and therefore classified in the zero-hours-worked category, “with a job but not at work.” These are persons who were absent from their jobs for the entire week for such reasons as bad weather, vacation, illness, or involvement in a labor dispute. In order to differentiate a person’s normal schedule from their activity during the reference week, persons are also classified according to their usual full- or part-time status. In this context, *full-time workers* are those who usually worked 35 hours or more (at all jobs combined). This group will include some individuals who worked less than 35 hours in the reference week for either economic or noneconomic reasons and those who are temporarily absent from work. Similarly, *part-time workers* are those who usually work less than 35 hours per week (at all jobs), regardless of the number of hours worked in the reference week. This may include some individuals who actually worked more than 34 hours in the reference week, as well as those who are temporarily absent from work. The *full-time labor force* includes all employed persons who usually work full time and unemployed persons who are either looking for full-time work or are on layoff from full-time jobs. The *part-time labor force* consists of employed persons who usually work part time and unemployed persons who are seeking or are on layoff from part-time jobs. Unemployment rates for full- and part-time workers are calculated using the concepts of the *full- and part-time labor force*.

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

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

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

Usual weekly earnings. Data represent earnings before taxes and other deductions, and include any overtime pay, commissions, or tips usually received (at the main job in the case of multiple jobholders.) Earnings reported on a basis other than weekly (e.g., annual, monthly, hourly) are converted to weekly. The term “usual” is as perceived by the respondent. If the respondent asks for a definition of usual, interviewers are instructed to define the term as more than

half the weeks worked during the past 4 or 5 months. Data refer to wage and salary workers (excluding all self-employed persons regardless of whether or not their business’s were incorporated) who usually work full time on their sole or primary job.

Median earnings. These figures indicate the value which divides the earnings distribution into two equal parts, one part having values above the median and the other having values below the median. The medians as shown in this publication are calculated by linear interpolation of the \$50 centered interval within which each median falls. Data expressed in constant dollars are deflated by the Consumer Price Index for All Urban Consumers (CPI-U).

Single, never married; married, spouse present; and other marital status. These are the terms used to define the marital status of individuals at the time of interview. Married, spouse present, applies to husband and wife if both were living in the same household, even though one may be temporarily absent on business, vacation, on a visit, in a hospital, etc. Other marital status applies to persons who are married, spouse absent; widowed; or divorced. Married, spouse absent relates to persons who are separated due to marital problems, as well as husbands and wives who are living apart because one or the other was employed elsewhere, on duty with the Armed Forces, or any other reasons.

Household. A household consists of all persons—related family members and all unrelated persons—who occupy a housing unit and have no other usual address. A house, an apartment, a group of rooms, or a single room is regarded as a housing unit when occupied or intended for occupancy as separate living quarters. A *householder* is the person (or one of the persons) in whose name the housing unit is owned or rented. The term is never applied to either husbands or wives in married-couple families but relates only to persons in families maintained by either men or women without a spouse.

Family. A family is defined as a group of two or more persons residing together who are related by birth, marriage, or adoption; all such persons are considered as members of one family. Families are classified either as married-couple families or as families maintained by women or men without spouses. A family maintained by a woman or a man is one in which the householder is either single, widowed, divorced, or married, spouse absent.

HISTORICAL COMPARABILITY

Changes in concepts and methods

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

- In 1945, the questionnaire was radically changed with

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Noncomparability of labor force levels

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

- Beginning in 1953, as a result of introducing data from the 1950 census into the estimating procedures, population levels were raised by about 600,000; labor force, total employment, and agricultural employment were increased by about 350,000, primarily affecting the figures for totals and men; other categories were relatively unaffected.
- Beginning in 1960, the inclusion of Alaska and Hawaii resulted in an increase of about 500,000 in the population and about 300,000 in the labor force. Four-fifths of this increase was in nonagricultural employment; other labor force categories were not appreciably affected.
- Beginning in 1962, the introduction of data from the 1960 census reduced the population by about 50,000 and labor force and employment by about 200,000; unemployment totals were virtually unchanged.
- Beginning in 1972, information from the 1970 census was introduced into the estimation procedures, increasing the population by about 800,000; labor force and employment totals were raised by a little more than 300,000; unemployment levels and rates were essentially unchanged.
- In March 1973, a subsequent population adjustment based on the 1970 census was introduced. This adjustment,

which affected the white and black-and-other groups but had little effect on totals, resulted in the reduction of nearly 300,000 in the white population and an increase of the same magnitude in the black-and-other population. Civilian labor force and total employment figures were affected to a lesser degree; the white labor force was reduced by 150,000, and the black-and-other labor force rose by about 210,000. Unemployment levels and rates were not significantly affected.

- Beginning in January 1974, the method used to prepare independent estimates of the civilian noninstitutional population was modified to an “inflation-deflation” approach. This change in the derivation of the estimates had its greatest impact on estimates of 20- to 24-year-old men—particularly those of the black-and-other population—but had little effect on estimates of the total population 16 years and over. Additional information on the adjustment procedure appears in “CPS Population Controls Derived from Inflation-Deflation Method of Estimation,” in the February 1974 issue of this publication.
- Effective in July 1975, as a result of the large inflow of Vietnamese refugees into the United States, the total and black-and-other independent population controls for persons 16 years and over were adjusted upward by 76,000—(30,000 men and 46,000 women). The addition of the refugees increased the black-and-other population by less than 1 percent in any age-sex group, with all of the changes being confined to the “other” component of the population.
- Beginning in January 1978, the introduction of an expansion in the sample and revisions in the estimation procedures resulted in an increase of about 250,000 in the civilian labor force and employment totals; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in “Revisions in the Current Population Survey in January 1978” in the February 1978 issue of this publication.
- Beginning in October 1978, the race of the individual was determined by the household respondent for the incoming rotation group households, rather than by the interviewer as before. The purpose of this change was to provide more accurate estimates of characteristics by race. Thus, in October 1978, one-eighth of the sample households had race determined by the household respondent and seven-eighths of the sample households had race determined by interviewer observation. It was not until January 1980 that the entire sample had race determined by the household respondent. The new procedure had no significant effect on the estimates.
- Beginning in January 1979, the first-stage ratio adjustment method was changed in the CPS estimation procedure. Differences between the old and new procedures existed only for metropolitan and nonmetropolitan area estimates, not for the total United States. The reasoning behind

the change and an indication of the differences appear in "Revisions in the Current Population Survey in January 1979" in the February 1979 issue of this publication.

- Beginning in January 1982, the second-stage ratio adjustment method was changed. The purpose of the change and an indication of its effect on national estimates of labor force characteristics appear in "Revisions in the Current Population Survey Beginning in January 1982" in the February 1982 issue of this publication. In addition, current population estimates used in the second-stage estimation procedure were derived from information obtained from the 1980 census, rather than the 1970 census. This change caused substantial increases in the total population and in the estimates of persons in all labor force categories. Rates for labor force characteristics, however, remained virtually unchanged. Some 30,000 labor force series were adjusted back to 1970 to avoid major breaks in series. The adjustment procedure used also is described in the February 1982 article cited above. The revisions did not, however, smooth out the breaks in series occurring between 1972 and 1979 (described above), and data users should consider them when comparing estimates from different periods.

- Beginning in January 1983, the first-stage ratio adjustment method was updated to incorporate data from the 1980 census. The purpose of the change and an indication of its effect on national estimates of labor force characteristics appear in "Revisions in the Current Population Survey Beginning in January 1983" in the February 1983 issue of this publication. There were only slight differences between the old and new procedures in estimates of levels for the various labor force characteristics and virtually no differences in estimates of participation rates.

- Beginning in January 1985, most of the steps of the CPS estimation procedure—the noninterview adjustment, the first- and second-stage ratio adjustments, and the composite estimator—were revised. These procedures are described in the Estimating Methods section. A description of the changes and an indication of their effect on national estimates of labor force characteristics appear in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1985" in the February 1985 issue of this publication. Overall, the revisions had only a slight effect on most estimates. The greatest impact was on estimates of persons of Hispanic origin. Major estimates were revised back to January 1980.

- Beginning in January 1986, the population controls used in the second-stage ratio adjustment method were revised to reflect an explicit estimate of the number of undocumented immigrants (largely Hispanic) since 1980 and an improved estimate of the number of emigrants among legal foreign-born residents for the same time period. As a result, the total civilian population and labor force estimates were raised by nearly 400,000; civilian employment was increased by about 350,000. The Hispanic-origin population and labor

force estimates were raised by about 425,000 and 305,000, respectively, and Hispanic employment by 270,000. Overall and subgroup unemployment levels and rates were not significantly affected. Because of the magnitude of the adjustments for Hispanics, data were revised back to January 1980 to the extent possible. An explanation of the changes and their effect on estimates of labor force characteristics appear in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986" in the February 1986 issue of this publication.

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

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

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

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

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

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

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

Changes in the occupational and industrial classification system

Beginning in 1971, the comparability of occupational employment data was affected as a result of changes in the occupational classification system for the 1970 census that were introduced into the CPS. Comparability was further affected in December 1971, when a question relating to major activity or duties was added to the monthly CPS questionnaire in order to determine more precisely the occupational classification of individuals. As a result of these changes, meaningful comparisons of occupational employment levels could not be made between 1971-72 and prior years nor between those 2 years. Unemployment rates were not significantly affected. For a further explanation of the changes in the occupational classification system, see "Revisions in Occupational Classifications for 1971" and "Revisions in the Current Population Survey" in the February 1971 and February 1972 issues, respectively, of this publication.

Beginning in January 1983, the occupational and industrial classification systems used in the 1980 census were introduced into the CPS. The 1980 census occupational classification system evolved from the Standard Occupational Classification (SOC) system and was so radically different in concepts and nomenclature from the 1970 system that comparisons of historical data are not possible without major adjustments. For example, the 1980 major group "sales occupations" is substantially larger than the 1970 category "sales workers." Major additions include "cashiers" from "clerical workers" and some self-employed proprietors in retail trade establishments from "managers and administrators, except farm."

The industrial classification system used in the 1980 census was based on the 1972 Standard Industrial Classification (SIC) system, as modified in 1977. The adoption of the new system had much less of an adverse effect on historical

comparability than did the new occupational system. The most notable changes from the 1970 system were the transfer of farm equipment stores from "retail" to "wholesale" trade, postal service from "public administration" to "transportation," and some interchange between "professional and related services" and "public administration." Additional information on the 1980 census occupational and industrial classification systems appears in "Revisions in the Current Population Survey Beginning in January 1983" in the February 1983 issue of this publication.

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

Sampling

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CPS sample, 1947 to present. Table 1-A provides a description of some aspects of the CPS sample designs in use since 1947. A more detailed account of the history of the CPS sample design appears in *The Current Population Survey: Design and Methodology*, Technical Paper No. 40, Bureau of the Census, or *Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Survey*, Report 463, Bureau of Labor Statistics. A description of the 1990 census-based sample design appears in "Redesign of the Sample for the Current Population Survey," in the May 1994 issue of this publication.

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

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

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

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

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

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

ESTIMATING METHODS

Under the estimating methods used in the CPS, all of the results for a given month become available simultaneously and are based on returns from the entire panel of respondents. The estimation procedure involves weighting the data from each sample person by the inverse of the probability of the person being in the sample. This gives a rough measure of the number of actual persons that the sample person represents. Since 1985, most sample persons within the same State have had the same probability of selection. Some selection probabilities may differ within a State due to the sample design or for operational reasons. Field subsampling, for example, which is carried out when areas selected for the sample are found to contain many more households than expected, may cause probabilities of selection to differ for some sample areas within a State. Through a series of estimation steps (outlined below), the selection probabilities are adjusted for noninterviews and survey undercoverage; data from previous months are incorporated into the estimates through the composite estimation procedure.

1. *Noninterview adjustment.* The weights for all interviewed households are adjusted to account for occupied sample households for which no information was obtained because of absence, impassable roads, refusals, or unavailability of the respondents for other reasons. This noninterview adjustment is made separately for clusters of similar sample areas that are usually, but not necessarily, contained within a State. Similarity of sample areas is based on Metropolitan Statistical Area (MSA) status and size. Within each cluster, there is a further breakdown by residence. Each MSA cluster is split by "central city" and "balance of the MSA." Each non-MSA cluster is split by "urban" and "rural" residence categories. The proportion of sample households not interviewed varies from 6 to 7 percent, depending on weather, vacation, etc.

2. *Ratio estimates.* The distribution of the population selected for the sample may differ somewhat, by chance, from that of the population as a whole in such characteristics as age, race, sex, and State of residence. Because these characteristics are closely correlated with labor force participation and other principal measurements made from the sample, the survey estimates can be substantially improved when weighted appropriately by the known distribution of these population characteristics. This is accomplished through two stages of ratio adjustment, as follows:

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

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

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

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

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

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

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

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

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

Rounding of estimates

The sums of individual items may not always equal the totals shown in the same tables because of independent rounding of totals and components to the nearest thousand. Similarly, sums of percent distributions may not always equal 100 percent because of rounding. Differences, however, are insignificant.

Reliability of the estimates

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. The standard errors provided indicate primarily the magnitude of the sampling error. They also incorporate the effect of some nonsampling errors in response and enumeration but do not account for any systematic biases in the data.

Nonsampling error. The full extent of nonsampling error is unknown, but special studies have been conducted to quantify some sources of nonsampling error in the CPS, as discussed below. The effect of nonsampling error should be small on estimates of relative change, such as month-to-month change. Estimates of monthly levels would be more severely affected by the nonsampling error.

Nonsampling errors in surveys can be attributed to many sources, e.g., the inability to obtain information about all persons in the sample; differences in the interpretation of questions; inability or unwillingness of respondents to provide correct information; inability to recall information; errors made in collecting and processing the data; errors made in estimating values for missing data; and failure to represent all sample households and all persons within sample households (undercoverage).

Nonsampling errors occurring in the interview phase of the survey are studied by means of a reinterview program. This program is used to estimate various sources of error as well as to evaluate and control the work of the interviewers. A random sample of each interviewer's work is inspected through reinterview at regular intervals. The results indicate, among other things, that the data published from the CPS are subject to moderate systematic biases. A description of the CPS reinterview program and some of the other results may be found in *The Current Population Survey Reinterview Program, January 1961 through December 1966*, Technical Paper No. 19, Bureau of the Census, U.S. Department of Commerce.

The effects of some components of nonsampling error in the CPS data can be examined as a result of the rotation plan used for the sample, since the level of the estimates

varies by rotation group. A description of these effects appears in "The Effects of Rotation Group Bias on Estimates From Panel Surveys," by Barbara A. Bailar, *Journal of the American Statistical Association*, Volume 70, No. 349, March 1975.

Undercoverage in the CPS results from missed housing units and missed persons within sample households. The CPS covers about 92 percent of the decennial census population (adjusted for census undercount). It is known that the CPS undercoverage varies with age, sex, race, and Hispanic origin. Generally, undercoverage is larger for men than for women and larger for blacks, Hispanics, and other races than for whites. Ratio adjustment to independent age-sex-race-origin population controls, as described previously, partially corrects for the biases due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics than interviewed persons in the same age-sex-race-origin group.

Additional information on nonsampling error in the CPS appears in *An Error Profile: Employment as Measured by the Current Population Survey*, by Camilla Brooks and Barbara Bailar, Statistical Policy Working Paper 3, U.S. Department of Commerce, Office of Federal Statistical Policy and Standards; in "The Current Population Survey: An Overview," by Marvin Thompson and Gary Shapiro, *Annals of Economic and Social Measurement*, Vol. 2, April 1973; and in *The Current Population Survey, Design and Methodology*, Technical Paper No. 40, Bureau of the Census, U.S. Department of Commerce. This last document includes a comprehensive discussion of various sources of errors and describes attempts to measure them in the CPS.

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

1. Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the true population value.
2. Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the true population value.
3. Approximately 95 percent of the intervals from two

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

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

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

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

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

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

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

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

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

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

Table 1-B. Standard errors for major employment status categories

(In thousands)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total ¹	-0.000017682	2985.26
Men ¹	-.000032770	2764.05
Women	-.000029553	2529.99
Both sexes, 16 to 19 years	-.000171805	2544.62
White ¹	-.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

¹ Excludes not-in-labor-force data.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total or white:		
Most characteristics	-0.000012482	2001.12
High correlation characteristics ¹	-.000009288	1564.84
Low correlation characteristics ¹	-.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:²		
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

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

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

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

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

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

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

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

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

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

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

Establishment Data ("B" tables)

COLLECTION

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

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

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

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

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

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

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

graphic stratification and differences in the timing of benchmark adjustments.

CONCEPTS

Industrial classification

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

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

Industry employment

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

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

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

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

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

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

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

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

Industry hours and earnings

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

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

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

by members of the construction trades.

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

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

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

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

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

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

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

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

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

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

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

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

For each sample establishment in SIC 3721 and SIC 3761

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

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

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

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

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

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

ESTIMATING METHODS

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

Benchmarks

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

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

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

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

sample versus the full universe counts derived from the UI.

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

Monthly estimation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 2-B summarizes bias adjustments for the 1986-96 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 1996 is listed as 129,000; this represents the average of bias adjustments made each month over the period April 1995 through March 1996. Bias required is computed retrospectively, after the March benchmark for a given year is known. Bias required figures are calculated by taking the difference between a March estimate derived purely from the sample (i.e. a series calculated without bias adjustment) and the March benchmark. Dividing this figure by 12 gives the average monthly bias required figure. The bias required is thus defined as the amount of bias adjustment which would have achieved a zero benchmark error. The difference between the total bias required and the total bias added is then, by definition, approximately the benchmark revision amount, for any given year. Also provided in the table for illustration, are the March-to-March changes. As discussed above, the over-the-year changes indicate correlation with the bias added and bias required figures.

THE SAMPLE

Design

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

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

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

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

Under the survey design, large establishments fall into a certainty strata for sample selection. The size of the sample for the various industries is determined empirically on the basis of experience and cost considerations. For example, in a manufacturing industry with a high proportion of total employment concentrated in a small number of establishments, a larger percent of total employment is included in the sample. Consequently, the sample design for such industries provides for a complete census of the large establishments, with a relatively few chosen from among the smaller establishments. For an industry in which a large proportion of total employment is concentrated in small establishments, the sample design again calls for inclusion of all large establishments but also for a more substantial number of smaller ones. Many industries in the trade and services divisions fall into this category. To keep the sample to a size which can be handled by available resources, it is necessary to have a sample design for these industries with a smaller proportion of total universe coverage than is the case for most manufacturing industries.

Coverage

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

Reliability

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

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

Table 2-B. March employment benchmarks and bias adjustments for total private industries, March 1986-96
(In thousands)

Year	Benchmark		Average monthly bias		Over-the-year employment change ⁵
	Employment ¹	Revision ²	Added ³	Required ⁴	
1986	81,204	-400	149	116	1,758
1987	83,173	21	98	99	1,969
1988	86,180	-310	114	88	3,007
1989	89,015	-93	131	123	2,835
1990	90,546	-261	85	63	1,531
1991	88,790	-583	61	12	-1,756
1992	88,347	-130	33	22	-443
1993	89,790	288	83	107	1,443
1994	92,730	688	115	171	2,940
1995	96,175	511	144	187	3,445
1996	98,158	72	129	135	1,983

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

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

³ The average amount of bias adjustment each month over the

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

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

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

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

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

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

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

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

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

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

If $S_1 = S_2$, then:

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

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

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

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

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

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

Table 2-C. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1996

Industry	Bench- marks (thou- sands)	Sample coverage ¹		
		Number of establish- ments	Employees	
			Number (thou- sands)	Percent of bench- marks
Total	117,952	327,799	44,496	38
Mining	566	3,172	237	42
Construction	4,952	26,429	978	20
Manufacturing	18,366	58,259	8,968	49
Transportation and public utilities	6,159	² 16,432	2,358	38
Wholesale trade ..	6,396	25,768	1,153	18
Retail trade	21,023	63,150	4,959	24
Finance, insurance, and real estate ...	6,815	24,268	2,200	32
Services	33,881	78,057	8,286	24
Government:				
Federal	2,770	³ 5,335	2,770	100
State	4,750	7,098	3,987	84
Local	12,274	19,831	8,600	70

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

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

³ Total Federal employment counts by agency for use in national estimates are provided to BLS by the Office of Personnel Management. Detailed industry estimates for the Executive Branch, as well as State and area estimates of Federal employment, are based on a sample of reports covering about 62 percent of employment in Federal establishments.

Table 2-D. Current (March 1996) and historical benchmark revisions
(Numbers in thousands)

Industry	March 1996 benchmark revision		10-year average mean percent revision ¹	
	Level	Percent	Actual	Absolute
Total	57	(²)	(²)	0.3
Total private	72	.1	(²)	.3
Goods-producing	189	.8	-0.1	.8
Mining	3	.5	-1.2	1.7
Metal mining	3	5.7	-1.6	3.1
Coal mining	-3	-3.1	-1.1	2.2
Oil and gas extraction	7	2.2	-1.4	2.6
Nonmetallic minerals, except fuels	-1	-1.0	-4	1.6
Construction	8	.2	-.7	1.4
General building contractors	21	1.8	-.4	2.6
Heavy construction, except building	7	1.0	.2	1.8
Special trade contractors	-19	-.6	-1.0	1.5
Manufacturing	178	1.0	.1	.7
Durable goods	92	.9	.1	.7
Lumber and wood products	16	2.1	.2	1.7
Furniture and fixtures	3	.6	.3	1.1
Stone, clay, and glass products	5	.9	.3	.7
Primary metal industries	5	.7	-.1	.9
Blast furnaces and basic steel products	3	1.2	.4	1.3
Fabricated metal products	-3	-.2	(²)	.9
Industrial machinery and equipment	26	1.2	-.1	1.3
Computer and office equipment	4	1.1	(²)	2.4
Electronic and other electrical equipment	1	.1	-.5	.9
Electronic components and accessories	-3	-.5	-.4	1.7
Transportation equipment	17	1.0	1.0	1.1
Motor vehicles and equipment	9	1.0	1.4	1.4
Aircraft and parts	5	1.1	1.0	1.5
Instruments and related products	21	2.5	.2	1.9
Miscellaneous manufacturing	1	.3	2.0	1.4
Nondurable goods	86	1.1	(²)	.7
Food and kindred products	37	2.2	.1	1.0
Tobacco products	0	0	-.2	4.5
Textile mill products	-10	-1.6	-.1	.9
Apparel and other textile products	17	1.9	.1	1.3
Paper and allied products	4	.6	.4	.6
Printing and publishing	10	.6	-.3	.8
Chemicals and allied products	11	1.1	-.1	.9
Petroleum and coal products	3	2.1	-.5	1.6
Rubber and miscellaneous plastics products	13	1.3	.5	1.5
Leather and leather products	0	0	-.6	2.5
Service-producing	-132	-.1	.1	.3
Transportation and public utilities	-74	-1.2	-.3	1.0
Transportation	-14	-.4	-.4	1.3
Railroad transportation	0	0	-.9	1.1
Local and interurban passenger transit	-13	-2.9	.1	2.4
Trucking and warehousing	-242	-15.2	-1.6	2.9
Water transportation	0	0	.5	3.6
Transportation by air	261	23.9	2.7	5.2
Pipelines, except natural gas	1	6.7	.6	5.1
Transportation services	-21	-5.1	-1.6	3.3
Communications and public utilities	-60	-2.7	-.2	1.1
Communications	-50	-3.8	-.2	1.7
Electric, gas, and sanitary services	-11	-1.2	-.2	.8
Wholesale trade	-108	-1.7	-.4	1.3
Durable goods	-66	-1.8	-.5	1.5
Nondurable goods	-42	-1.6	-.3	1.1

See footnotes at end of table.

Table 2-D. Current (March 1996) and historical benchmark revisions—Continued
(Numbers in thousands)

Industry	March 1996 benchmark revision		10-year average mean percent revision ¹	
	Level	Percent	Actual	Absolute
Retail trade	111	.5	.5	.7
Building materials and garden supplies	-11	-1.3	.2	1.6
General merchandise stores	9	.3	2.2	2.7
Department stores	-6	-.3	2.8	3.5
Food stores	7	.2	-.2	.8
Automotive dealers and service stations	-1	(²)	-1.1	1.1
New and used car dealers	1	.1	-.5	1.0
Apparel and accessory stores	-4	-.4	1.1	1.6
Furniture and home furnishings stores	9	.9	-.4	1.1
Eating and drinking places	79	1.1	.8	1.3
Miscellaneous retail establishments	20	.8	.3	.9
Finance, insurance, and real estate	-78	-1.1	-.4	1.2
Finance	-25	-.8	-.8	1.3
Depository institutions	-2	-.1	-1.0	1.3
Commercial banks	-5	-.3	-.4	.7
Savings institutions ³	3	1.1	-4.2	6.4
Nondepository institutions	2	.4	.8	2.0
Mortgage bankers and brokers	0	0	.9	4.9
Security and commodity brokers	9	1.7	.1	1.3
Holding and other investment offices	-33	-15.9	-4.1	5.3
Insurance	-44	-2.0	.2	1.3
Insurance carriers	-40	-2.7	.2	1.5
Insurance agents, brokers, and service	-4	-.6	.1	1.5
Real estate	-9	-.7	-.6	1.6
Services ⁴	32	.1	.1	.5
Agricultural services	10	1.8	2.3	2.5
Hotels and other lodging places	35	2.1	.7	1.5
Personal services	-1	-.1	.6	1.4
Business services	84	1.2	.4	1.8
Services to buildings	2	.2	1.2	1.6
Personnel supply services	1	(²)	1.3	3.6
Help supply services ³	-2	-.1	1.4	2.7
Computer and data processing services	30	2.5	-.8	2.9
Auto repair, services, and parking	1	.1	-1.0	1.4
Miscellaneous repair services	10	2.7	-.7	4.7
Motion pictures	-4	-.8	-.2	4.3
Amusement and recreation services	-59	-4.4	-.2	3.3
Health services	-84	-.9	-.8	.9
Offices and clinics of medical doctors	11	.7	-1.2	1.8
Nursing and personal care facilities	-5	-.3	-.7	.9
Hospitals	-38	-1.0	-.8	.8
Home health care services ³	8	1.2	1.0	2.6
Legal services	-3	-.3	-.4	1.2
Educational services	19	.9	1.1	2.8
Social services	10	.4	-.7	1.7
Child day care services	-4	-.7	-2.6	4.7
Residential care	8	1.2	0	1.6
Museums and botanical and zoological gardens	0	0	1.2	2.5
Membership organizations	45	2.1	2.6	3.3
Engineering and management services ³	-52	-1.8	.2	1.6
Engineering and architectural services	2	.2	-.5	1.4
Management and public relations ³	-38	-4.5	1.3	3.7
Services, nec	1	2.2	.6	.8
Government	-15	-.1	(²)	.2
Federal	0	0	0	0
Federal, except Postal Service	0	0	0	0
State	-23	-.5	.4	.5
Education	-39	-1.9	.5	1.0
Other State government	15	.6	.3	.5
Local	8	.1	-.1	.3
Education	8	.1	-.1	.4
Other local government	-1	(²)	.4	

¹ Data relate to the 1987-96 benchmarks, as originally published, unless otherwise noted.

² Less than 0.05 percent.

³ Data relate to 1989-96.

⁴ Includes other industries, not shown separately.

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

(In percent)

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

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

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

(In percent)

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

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

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

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

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

Revisions of preliminary hours and earnings estimates are normally not greater than 0.1 of an hour for weekly hours and 1 cent for hourly earnings, at the total private nonfarm level, and may be slightly larger for the more detailed industry groupings.

STATISTICS FOR STATES AND AREAS

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

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

The CES area statistics relate to metropolitan areas. Definitions for all areas are published each year in the issue of *Employment and Earnings* that contains State and area annual averages (usually the May issue). Changes in definitions are noted as they occur. Additional industry detail may be obtained from the State agencies listed on the inside back cover of each issue.

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

Table 2-G. Errors of preliminary employment estimates

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Total	61,300	0	0
Total private	52,300	0	0
Goods-producing	14,200	0	0
Mining	2,300	-0.1	.3
Metal mining	300	0	.4
Coal mining	900	-.1	.6
Oil and gas extraction	2,200	-.1	.5
Nonmetallic minerals, except fuels	300	0	.3
Construction	9,000	.1	.1
General building contractors	4,400	.1	.3
Heavy construction, except building	3,700	.1	.4
Special trade contractors	5,700	.1	.1
Manufacturing	10,200	0	0
Durable goods	6,700	0	.1
Lumber and wood products	1,300	.1	.1
Furniture and fixtures	1,300	0	.2
Stone, clay, and glass products	1,100	0	.2
Primary metal industries	1,400	0	.1
Blast furnaces and basic steel products	1,300	0	.4
Fabricated metal products	1,800	0	.1
Industrial machinery and equipment	2,600	0	.1
Computer and office equipment	1,400	.1	.3
Electronic and other electrical equipment	2,400	.1	.1
Electronic components and accessories	1,300	.1	.2
Transportation equipment	4,300	0	.2
Motor vehicles and equipment	3,700	.1	.3
Aircraft and parts	1,800	-.1	.2
Instruments and related products	1,700	0	.1
Miscellaneous manufacturing	1,200	0	.2
Nondurable goods	5,500	0	.1
Food and kindred products	3,300	-.1	.2
Tobacco products	500	.3	.8
Textile mill products	1,100	0	.1
Apparel and other textile products	2,500	.1	.2
Paper and allied products	1,200	0	.1
Printing and publishing	1,700	.1	.1
Chemicals and allied products	1,800	-.1	.1
Petroleum and coal products	1,000	-.1	.5
Rubber and miscellaneous plastics products	1,600	0	.1
Leather and leather products	700	-.1	.4
Service-producing	57,600	0	0
Transportation and public utilities	9,200	-.1	.1
Transportation	8,100	-.1	.2
Railroad transportation	2,200	-.3	.7
Local and interurban passenger transit	3,500	-.2	.5
Trucking and warehousing	5,400	-.1	.2
Water transportation	1,500	-.3	.7
Transportation by air	2,500	-.1	.3
Pipelines, except natural gas	200	-.4	.8
Transportation services	1,200	-.1	.3
Communications and public utilities	4,600	0	.1
Communications	4,500	0	.2
Electric, gas, and sanitary services	1,600	0	.1
Wholesale trade	7,700	.1	.1
Durable goods	4,400	.1	.1
Nondurable goods	4,800	.1	.1

See footnotes at end of table.

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

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Retail trade	33,100	.1	.1
Building materials and garden supplies	2,800	0	.3
General merchandise stores	17,600	.2	.5
Department stores	16,200	.2	.5
Food stores	6,300	.1	.1
Automotive dealers and service stations	2,700	0	.1
New and used car dealers	1,200	-.1	.1
Apparel and accessory stores	5,800	.2	.4
Furniture and home furnishings stores	3,600	.1	.3
Eating and drinking places	12,400	.1	.1
Miscellaneous retail establishments	8,500	.2	.3
Finance, insurance, and real estate	6,100	0	.1
Finance	3,800	0	.1
Depository institutions	2,800	-.1	.1
Commercial banks	2,300	-.1	.1
Savings institutions	1,100	-.1	.3
Nondepository institutions	1,400	.1	.2
Mortgage bankers and brokers	1,000	0	.3
Security and commodity brokers	900	0	.1
Holding and other investment offices	1,600	-.1	.5
Insurance	2,800	0	.1
Insurance carriers	2,400	0	.1
Insurance agents, brokers, and service	1,000	0	.1
Real estate	2,700	0	.2
Services ²	29,100	0	.1
Agricultural services	3,200	.2	.4
Hotels and other lodging places	5,900	.2	.3
Personal services	8,100	-.1	.4
Business services	13,900	.1	.2
Services to buildings	2,800	0	.3
Personnel supply services	11,800	.2	.4
Help supply services	11,400	.2	.4
Computer and data processing services	2,400	0	.2
Auto repair, services, and parking	1,900	0	.1
Miscellaneous repair services	1,100	0	.2
Motion pictures	5,500	0	.8
Amusement and recreation services	9,700	.3	.6
Health services	5,300	0	0
Offices and clinics of medical doctors	2,700	0	.1
Nursing and personal care facilities	2,000	0	.1
Hospitals	2,800	0	.1
Home health care services	1,800	.1	.3
Legal services	1,100	0	.1
Educational services	13,200	0	.6
Social services	7,900	.1	.3
Child day care services	4,800	.3	.7
Residential care	1,300	0	.2
Museums and botanical and zoological gardens	700	.2	.7
Membership organizations	3,800	0	.2
Engineering and management services	4,900	0	.2
Engineering and architectural services	2,400	0	.3
Management and public relations	3,100	.1	.3
Services, nec	400	.1	.8
Government	23,900	0	.1
Federal	10,400	0	.3
Federal, except Postal Service	8,900	0	.3
State	11,600	0	.2
Education	10,900	0	.5
Other State government	4,700	0	.1
Local	18,800	0	.1
Education	16,000	.1	.2
Other local government	12,100	0	.2

¹ 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.

² Includes other industries, not shown separately.

NOTE: Errors are based on differences from January 1992 through December 1996.

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

FEDERAL-STATE COOPERATIVE PROGRAM

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

Annual average data for the States and over 270 areas shown in table C-3 are published in *Employment and Earnings* (usually the May issue). For regions, States, selected metropolitan areas, and central cities, annual average data classified by selected demographic, social, and economic characteristics are published in the BLS bulletin, *Geographic Profile of Employment and Unemployment*.

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

ESTIMATING METHODS

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

Estimates for States

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

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

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

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

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

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

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

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

Estimates for sub-State areas

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

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

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

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

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

Seasonal Adjustment

Over the course of a year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical and other 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 1997, with the release of the March 1996 benchmark revisions, BLS began using an updated version of the X-12 ARIMA software developed by the Bureau of the Census to seasonally adjust national establishment-based employment, hours, and earnings series. The X-12 ARIMA (first introduced in June 1996) replaces the X-11 ARIMA, which had been used to adjust these series since the early 1980's. All national establishment-based series were revised back to 1988.

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 varia-

tion 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.

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 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 broader level seasonally adjusted series.

Seasonal adjustment factors for Federal Government employment are derived from unadjusted data which include Christmas temporary workers employed by the Postal Service. The number of temporary census workers for the decennial census, however, are removed prior to the calculation of seasonal adjustment factors.

BLS also makes special adjustments for floating holidays for the establishment-based series on average weekly hours and manufacturing overtime hours. From 1988 forward, these adjustments are now accomplished as part of the X-12 ARIMA/REGARIMA modeling process rather than through the previously used moving-holiday extension of X-11 ARIMA. 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; this replaces the X-11 ARIMA-based procedure previously used to account for this effect.

Revised seasonally adjusted national establishment-based series based on the experience through March 1997, new seasonal adjustment factors for March-October 1997, and a description of the current seasonal adjustment procedure appear in the June 1997 issue of *Employment and Earnings*. Revised factors for the September 1997-April 1998 period will appear in the December issue.

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

Region and State labor force data

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

INDEX TO STATISTICAL TABLES

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

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