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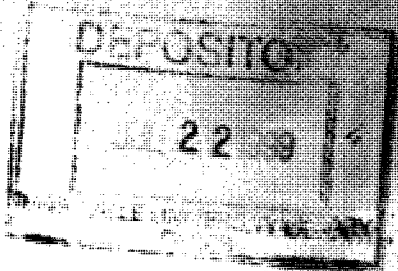
Employment & Earnings

US Department of Labor
Bureau of Economic Analysis
June 1999

In this issue:

Establishment data adjustment to reflect new benchmarks

Revised 1998 annual averages for national establishment data





U.S. DEPARTMENT OF LABOR
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BUREAU OF LABOR STATISTICS
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Employment & Earnings (ISSN 0013-6840; USPS 485-010), is published monthly and prepared in the Office of Employment and Unemployment Statistics in collaboration with the Office of Publications. The data are collected by the Bureau of the Census (Department of Commerce) and State employment security agencies, in cooperation with the Bureau of Labor Statistics. The State agencies are listed on the inside back cover.

Employment & Earnings may be ordered from: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Phone (202) 512-1800. Subscription price per year \$35 domestic and \$43.75 foreign. Single copy \$17 domestic and \$21.25 foreign. Prices are subject to change by the U.S. Government Printing Office.

Correspondence concerning subscriptions, including address changes and missing issues, should be sent to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Phone (202) 512-2303. POSTMASTER: Send address changes to *Employment & Earnings*, U.S. Government Printing Office, Washington, DC 20402.

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Periodicals postage paid at Washington, DC, and at additional mailing addresses.

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June 1999
Vol. 46 No. 6

Calendar of Features

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

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Earnings by detailed occupation	Jan.
Employee absences	Jan.
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Women employees	March, June
National data revised to reflect new benchmarks and new seasonal adjustment factors	June
State and area annual averages	May
Area definitions	May

Region, State, and area labor force data

Annual averages	May
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Editors' Note

Beginning with this issue, national estimates of employment, hours, and earnings from the monthly survey of business establishments have been revised to reflect March 1998 benchmarks (comprehensive counts of employment) and updated seasonal adjustment factors. Unadjusted data from April 1997 forward and seasonally adjusted data from January 1994 forward have been revised.

The article beginning on page 3 discusses the effects of the revisions and provides new seasonal adjustment factors to be used to calculate establishment-based estimates for March-October 1999. Revised current data appear in the "B" tables. Historical data for all national establishment data series are available at <http://stats.bls.gov/ceshome.htm>, the Current Employment Statistics homepage.

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¹ All tables containing not seasonally adjusted national establishment data.

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Employment and Unemployment Developments, May 1999

The unemployment rate, at 4.2 percent, was little changed in May. The number of nonfarm payroll jobs edged up by 11,000, following a large increase of 343,000 in April (as revised). In May, substantial job losses occurred in manufacturing and construction, while the services industry had a relatively small gain.

Unemployment

The number of unemployed persons, 5.8 million, and the unemployment rate, 4.2 percent, were little changed in May. The rate has been below 4.5 percent since November 1998. Over the month, jobless rates declined for adult women (3.6 percent) and teenagers (12.6 percent). Unemployment rates for adult men (3.6 percent), whites (3.7 percent), blacks (7.5 percent), and Hispanics (6.7 percent) were virtually unchanged in May. (See tables A-3 and A-4.)

Total employment and the labor force

The civilian labor force, at 139.0 million, and the labor force participation rate, at 67.0 percent, were essentially unchanged from April. Total employment, at 133.2 million, also was little changed. The employment-population ratio—the proportion of the population age 16 and over with jobs—remained at 64.2 percent in May. (See table A-3.)

About 7.9 million persons (not seasonally adjusted) held more than one job in May. These multiple jobholders represented 5.9 percent of the total employed, compared with 6.2 percent a year earlier. (See table A-37.)

Persons not in the labor force

About 1.1 million persons (not seasonally adjusted) were marginally attached to the labor force in May. These were people who wanted and were available for work and had looked for a job sometime in the prior 12 months but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. The number of discouraged workers—a subset of the marginally attached who were not currently looking for work specifically because they believed no jobs were available for them—was 256,000 in May. (See table A-36.)

Industry payroll employment

Nonfarm payroll employment was little changed in May at 128.2 million, seasonally adjusted, after a large increase of 343,000 (as revised) in April. In May, job losses in the goods-producing industries were offset by modest growth in the

service-producing sector. (See table B-3.)

In the goods-producing sector, construction employment fell by 40,000 in May, after seasonal adjustment. It had risen by about the same amount in April (as revised). Construction employment has fluctuated in recent months in part because of the unusual weather patterns this past winter. Since October 1998, however, the industry has added 194,000 jobs, about in line with the gain over the October 1997-May 1998 period.

Manufacturing employment continued to decline in May, with a loss of 45,000 jobs. Factory employment has decreased by 453,000 since its recent peak in March 1998. Over the month, large declines continued in industrial machinery (-8,000), apparel (-8,000), and aircraft (-6,000). Smaller losses occurred in electrical equipment, textiles, paper, and printing and publishing.

Job losses also continued in mining. Employment in the industry fell by 7,000 in May and has declined by 39,000 thus far in 1999. Most of the recent decline has been concentrated in oil and gas extraction.

In the service-producing sector, the services industry added 71,000 jobs in May, well below its average monthly gain of 125,000 over the prior 12 months. Business services added 42,000 jobs in May, with increases in personnel supply (13,000) and computer services (16,000) equal to their monthly averages over the prior 12 months. Growth in engineering and management services (13,000) fell short of its recent pace. Employment in health services was about unchanged in May, following a large increase in April. Both hotels and agricultural services had less seasonal hiring than normal, resulting in seasonally adjusted losses for May.

Retail trade employment was little changed in May, following a sharp rise in April. Over the month, declines occurred in food stores (13,000) and in building materials and garden supplies (5,000). Eating and drinking places added 23,000 jobs in May, after a larger gain in April. Although movements in retail employment have varied widely from month to month this year, average monthly growth thus far in 1999 (46,000) exceeds the 1998 monthly average (32,000).

Employment in transportation and public utilities increased by 13,000 in May, slightly below the industry's average growth over the prior 12 months. Transportation industries added 12,000 jobs, with trucking and air transportation each gaining 5,000. Communications continued its moderate growth trend.

In May, finance, insurance, and real estate added 12,000 jobs, well below its monthly average of 22,000 in the prior 12 months. Job growth in both finance and insurance has slowed this year compared with 1998. Wholesale trade employment edged down by 3,000 in May, compared with an average gain of 14,000 in the prior 12 months.

Government employment was little changed over the month. A decline in Federal employment (16,000) reflected the completion of some preliminary work on the decennial census. Local government education added 19,000 jobs.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls edged up 0.1 hour in May to 34.5 hours, seasonally adjusted. The manufacturing workweek also was up 0.1 hour to 41.7 hours. Factory over-

time increased by 0.3 hour to 4.6 hours per week. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls rose by 0.2 percent to 147.3 (1982=100), seasonally adjusted. The manufacturing index remained at 106.5 in May. (See table B-9.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls increased by 5 cents in May to \$13.19, seasonally adjusted. Average weekly earnings rose by 0.7 percent in May to \$455.06, seasonally adjusted. Over the year, average hourly earnings rose by 3.6 percent and average weekly earnings rose by 3.0 percent. (See table B-11.)

Corrections to Earnings Data

The average hourly earnings series for wholesale and retail trade that appeared in the May issue of this publication contained errors. The errors have been corrected in this issue. The corrections resulted in substantial upward revisions to the average hourly earnings data for March and April 1999 in wholesale and retail trade. The total private average hourly earnings series was revised only slightly, due partially to offsetting, downward revisions in other industry series that reflect the routine incorporation of additional sample reports, as well as the introduction of seasonal factor updates this month. Additional information may be obtained by calling (202) 606-6555 or at <http://stats.bls.gov/ceshome.htm>, the BLS Current Employment Statistics Internet site.

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>
June	July 2	September	October 8
July	August 6	October	November 5
August	September 3	November	December 3

BLS Establishment Estimates Revised to Incorporate March 1998 Benchmarks

Sheila McConnell

With the release of data for May 1999, the Bureau of Labor Statistics (BLS) introduced its annual revision of national estimates of employment, hours, and earnings from the Current Employment Statistics (CES) monthly survey of nonfarm establishments. Each year, the CES survey realigns its sample-based estimates to reflect more currently available universe counts of employment—a process known as benchmarking. Comprehensive counts of employment, or benchmarks, are derived primarily from employment data reported on unemployment insurance (UI) tax reports that nearly all employers are required to file with State employment security agencies.

The incorporation of the March 1998 benchmarks has revised all unadjusted data for the period after the March 1997 benchmark, that is, from April 1997 forward. Seasonally adjusted employment, hours, indexes of aggregate hours, and earnings of production or nonsupervisory workers have been revised from January 1994 forward.

Summary of the benchmark revisions

The March 1998 benchmark level for total nonfarm employment is 124,050,000; this figure is 44,000 above the previously published sample-based estimate, an adjustment of less than 0.05 percent. This year's revision stands in contrast to last year's more substantial upward revision of 0.4 percent (table 1).

Sheila McConnell is an economist in the Division of Monthly Industry Employment Statistics, Bureau of Labor Statistics.

Table 2 summarizes the data for the March 1998 revisions, not seasonally adjusted, by industry. The small revision resulted from offsetting adjustments in two major sectors: An upward revision of 91,000 (0.4 percent) in the goods-producing sector was mitigated by a downward revision of 47,000 (less than 0.05 percent) in the service-producing sector. The upward adjustment within the goods-producing sector came almost entirely from manufacturing, which was adjusted by 61,000 (0.3 percent).

Within manufacturing, there were offsetting adjustments. Durable goods had an upward revision of 75,000 (0.7 percent) and nondurable goods a downward revision of 14,000 (0.2 percent). Within durable goods, nearly all the component series contributed to the upward revision, the largest of which were in industrial machinery and equipment (14,000), fabricated metals (12,000), and transportation equipment (11,000). In nondurable goods, the downward revision was concentrated in food and kindred products (18,000).

The service-producing sector had several substantial but offsetting revisions to the component divisions. Retail trade and government were revised downward by 99,000 (0.5 percent) and 41,000 (0.2 percent), respectively. Offsetting these declines were upward revisions in transportation and public utilities (41,000) and finance, insurance, and real estate (56,000). Both the wholesale trade and the services industries had downward revisions of 2,000, which were adjustments of less than 0.05 percent. However, within services there were several larger but offsetting adjustments. Both amusement and recreation services and health services were

Table 1. Percent differences between nonfarm employment benchmarks and estimates by industry division, March 1991-98¹

Industry	1991	1992	1993	1994	1995	1996	1997	1998
Total	-0.6	-0.1	0.2	0.7	0.5	(²)	0.4	(²)
Mining	-6	-8	2.2	-7	.2	0.5	3.1	2.5
Construction	-2	-2.6	1.6	1.9	-1.6	.2	1.1	.3
Manufacturing .....	.1	-8	1.1	1.3	.3	1.0	.7	.3
Transportation and public utilities	-1.0	-6	1.0	2.2	-7	-1.2	-3	.6
Wholesale trade	-2	.7	-2.6	1.2	1.2	-1.7	-1	(²)
Retail trade	-3	.9	-2	1.3	1.6	.5	-1	-5
Finance, insurance, and real estate	-4	-1.5	1.5	2.1	-1.8	-1.1	.5	.8
Services	-1.6	.2	.1	-8	.9	.1	1.0	(²)
Government	-3	.4	-1	.4	.2	-1	-4	-2

¹ Differences are based on comparisons of final, published March estimates and benchmark levels, as originally published.

² Less than 0.05 percent.

revised downward by 66,000 and 53,000, respectively, while membership organizations experienced a substantial upward revision of 91,000, or 3.9 percent.

Revisions in the post-benchmark period

New estimates have been computed for each month since March 1998, based on the new benchmark levels. On a seasonally adjusted basis, the revision in total nonfarm employment showed an increase of 60,000 in February 1999, reflecting the adjustment to the new benchmark and the recomputation of bias and seasonal adjustment factors (table 3). Average monthly bias adjustment levels for April 1998 to March 1999 were revised up slightly, from an average of 133,000 per month to an average of 150,000 per month.

Why benchmarks differ from estimates

A benchmark revision is the difference between the benchmark level for a given March and its corresponding sample-based estimate. The overall accuracy of the establishment survey is usually gauged by the size of this difference. The benchmark revision is often regarded as a proxy for total survey error, but this does not take into account error in the universe data. The employment counts obtained from quarterly unemployment insurance tax forms are administrative data that reflect employer record-keeping practices and differing State laws and procedures. The benchmark revision can be more precisely interpreted as the difference between two independently derived employment counts, each subject to its own error sources.

Like any sample survey, the establishment survey is susceptible to two sources of error: sampling error and nonsampling error. Sampling error is present anytime a sample is used to make inferences about a population. The magnitude of the sampling error, or variance, relates directly to sample size and the percentage of the universe covered by that sample. The CES monthly survey captures slightly over one-third of the universe—exceptionally high by usual sampling standards. This coverage implies a very small sampling error at the total nonfarm employment level.

Both the universe counts and the establishment survey estimates are subject to nonsampling errors common to all surveys—coverage, response, and processing errors. The error structures for both the CES monthly survey and the UI universe are complex. Still, the two programs generally produce consistent total employment figures, each validating the other. Over the prior decade, annual benchmark revisions at the total nonfarm level have averaged 0.3 percent, with an absolute range from less than 0.05 percent to 0.7 percent.

Effect of benchmark revisions on other series

The routine benchmarking process also results in revisions in the series on women workers and production or nonsupervisory workers. There are no benchmark employment levels for these series; they are revised by preserving ratios of employment for the particular series to all employ-

ees prior to benchmarking, and then applying these ratios to the revised all-employee figures. These figures are calculated at the basic cell level and then aggregated to produce the summary estimates.

Average weekly hours and average hourly earnings are not benchmarked; they are estimated solely from reports supplied by survey respondents at the basic estimating cell level. The broader industry groups of the hours and earnings series, however, require a weighting mechanism to yield meaningful averages. The production or nonsupervisory worker employment estimates for the basic cells are used as weights for the hours and earnings estimates for broader industry groupings. Adjustments of the all-employee estimates to new benchmarks may alter the weights, which, in turn, may change the estimates for hours and earnings of production or nonsupervisory workers at higher levels of aggregation.

Generally, new employment benchmarks have little effect on hours and earnings estimates for major groupings. To influence the hours and earnings estimates of a broader group, employment revisions have to be relatively large and must affect industries that have substantially different hours or earnings averages than other industries in their group. Occasionally, corrections of errors in the reported payroll data for individual establishments may also change the averages of selected industries. Table 4 gives detailed information on revisions to specific hours and earnings series resulting from the March 1998 benchmark. At the total private level, average hourly earnings and average weekly hours were unchanged.

Methods

Benchmark adjustment procedure. Establishment survey benchmarking is done on an annual basis to a population derived primarily from the administrative file of employees covered by unemployment insurance (UI). The time required to complete the revision process—from the full collection of the UI population data to publication of the revised industry estimates—is about 15 months. The benchmark adjustment procedure replaces the March sample-based employment estimates with UI-based population counts for March. The benchmark therefore determines the final employment levels, while sample movements capture month-to-month trends.

Benchmarks are established for each of the 1,698 industry-size-class basic estimation cells and are aggregated to develop published levels. On a not seasonally adjusted basis, the sample-based estimates for the year preceding and the year following the benchmark also are then subject to revision. Employment estimates for the months between the most recent March benchmark and the previous year's benchmark are adjusted using a "wedge back" procedure. In this process, the difference between the benchmark level and the previously published March estimate for each estimating cell is computed. This difference, or error, is lin-

early distributed across the 11 months of estimates subsequent to the previous benchmark; eleven-twelfths of the March difference is added to February estimates, ten-twelfths to January estimates, and so on, ending with the previous April estimates, which receive one-twelfth of the March difference. The wedge procedure assumes that the total estimation error accumulated at a steady rate since the last benchmark. Applying previously derived over-the-month sample changes to the revised March level recalculates estimates for the months following the March benchmark. New bias adjustment factors, which incorporate the most recent benchmark experience, also are calculated and applied during post-benchmark estimation.

Benchmark source material. The principal source of benchmark data for private industries is the "ES-202 report." This report contains employment data provided to State employment security agencies by employers covered by State UI laws. The ES-202 is supplemented by universe counts for Federal employees derived from summaries prepared by the U.S. Office of Personnel Management (OPM) for the executive, legislative, and judicial branches. These summaries are complete counts of Federal workers and usually are not subject to revision. The official OPM summaries do not provide industry detail for Federal employment, such as hospitals, on a current monthly basis. BLS estimates these from a sample of Federal establishments. BLS uses several other sources to establish benchmarks for the remaining industries partially covered or exempt from mandatory UI coverage, accounting for nearly 2.5 percent of the nonfarm employment total.

Data on employees covered under Social Security laws, published by the Bureau of the Census in *County Business Patterns*, are used to augment UI data for nonoffice insurance sales workers, child day-care workers, religious organizations, and private schools and hospitals. Benchmarks for State and local government hospitals and educational institutions are based on the Annual Census of Governments conducted by the Bureau of the Census. Benchmark data from these sources are available only on a 1- or 2-year lagged basis. Extrapolation to a current level is accomplished by assuming and applying the employment trends from the UI-covered part of the population in these industries to the non-covered part. Universe data for interstate railroads are obtained from the Interstate Commerce Commission.

Bias adjustment. Bias adjustment factors are computed for each 3-digit SIC level, but are applied at the basic cell level, as part of the standard monthly 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 business formations. There is a lag between an establishment opening for business and its appearance on the UI universe frame to be available for sampling. Because new firms generate a substantial amount of employment growth during

any given year, nonsampling methods are used to estimate this growth; otherwise, substantial underestimation of total employment levels would occur. Formal bias-adjustment procedures have been used in the CES program since the late 1960s. Prior to the 1983 benchmark, bias adjustments were derived from a simple mean error model, which averaged undercount errors for the previous three years to arrive at bias projections for the coming post-benchmark year.

This procedure eventually proved inadequate during periods of rapidly changing employment trends, and the bias adjustment methods were revised. Research done in the early 1980s indicated that bias requirements were strongly correlated with current employment growth or decline. Based on this finding, a revised method was developed. It incorporated 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 methodological enhancement made the model more sensitive to cyclical changes. BLS has used the regression-adjusted mean error model since 1983 for the production of national estimates.

Although an important function of bias adjustment is to account for employment resulting from new business formations, it also adjusts for other types of nonsampling error in the survey. Because the primary input to the modeling procedure is the total estimation error, the monthly bias adjustment levels have no specific economic meaning in and of themselves but represent a correction process for a complex joint error structure of sample and universe data.

Text table A summarizes the above discussion. It shows the March benchmarks and revisions for total private employment from 1988 through 1998. The table also shows the average monthly "bias added" and "bias required." Bias added is the average amount of bias that is added each month over the course of an interbenchmark period. For example, the bias added for 1998 was 150,000; this represents the average bias adjustment made each month over the period April 1997 through March 1998. Bias required is computed retrospectively, after the March benchmark for a given year is determined. Total bias required is the difference between a March estimate derived purely from the CES sample (that is, a series calculated without any bias adjustment) and the March benchmark. Dividing this figure by 12 gives the average monthly bias required figure. The bias required thus equals the amount of monthly bias adjustment needed to achieve a zero benchmark error. For a given year, the difference between the total bias required and total bias added is approximately the benchmark revision amount. Also included in the table, for comparison, is the March-to-March change. As discussed above, the over-the-year change shows some correlation with the bias added and bias required figures.

The current bias estimation 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 tabulations. A principal dis-

Text table A. March employment benchmarks and bias adjustments for total private industries, March 1988-98

(In thousands)

Year	Benchmark		Average monthly bias		Over-the-year employment change ⁵
	Employment ¹	Revision ²	Added ³	Required ⁴	
1988	86,180	-310	114	88	3,007
1989	89,015	-93	131	123	2,835
1990	90,546	-261	85	63	1,531
1991	88,790	-583	61	12	-1,756
1992	88,347	-130	33	22	-443
1993	89,790	288	83	107	1,443
1994	92,730	688	115	171	2,940
1995	96,175	511	144	187	3,445
1996	98,158	72	129	135	1,983
1997	101,040	518	130	173	2,882
1998	103,965	85	150	157	2,925

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.

advantage is the model's inability to incorporate UI counts as they become available on an ongoing basis, with their 6- to 9-month lags from the reference period. The quarterly bias factors currently produced by the model are therefore subject to intervention analysis, and adjustments can be made to its results prior to the establishment of final factors for a quarter. The bias factors are reviewed primarily through detection of outliers (that is, abnormally high or low values) and by comparison of CES sample and bias trends with the most recent quarterly observations of UI universe counts.

Noneconomic code changes. Historically, major sources of benchmark revision at the major industry division levels and below are noneconomic code changes. These are introduced into the universe data in the first quarter of each calendar year.

Each year, coding for approximately one-third of all establishments is reviewed and corrected as necessary through the SIC refiling survey. Corrections to individual establishments' SIC and ownership codes are made through this process. The volume of these corrections has often been quite large and had substantial effects on universe employment distributions at the industry levels, but effects on total non-farm employment have been minimal. In 1999, BLS and its State partners completed a multi-year conversion to a new refiling schedule, which uses a random selection method to

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

Effects for the 1998 benchmark. The results of the SIC refiling affected the measurement of benchmark revisions for 1998 most significantly in manufacturing, wholesale trade and services. In manufacturing, almost all of the revision was due to refiling. In wholesale trade and services, the benchmark revision would have been larger without the effects of the noneconomic code changes. In construction, transportation and public utilities, retail trade, and finance, insurance, and real estate code changes had the opposite effect; that is, had it not been for the refiling, the revisions would have been smaller. Text table B shows the net effect on all major divisions from the most recent refiling, and displays the actual benchmark revision alongside an "adjusted benchmark revision," the amount of revision excluding the noneconomic code change component.

Availability of revised data

LABSTAT, the BLS public database on the Internet, contains all historical employment, hours, and earnings data revised as a result of this benchmark, both unadjusted and seasonally adjusted data, and updated seasonal adjustment factors. The data can be accessed at <http://stats.bls.gov/ceshome.htm>, the Current Employment Statistics homepage. Employment, hours, and earnings estimates are published monthly in *Employment and Earnings* for most of the significant nonfarm industries. Those industries for which monthly data are not published are either quite small or are not represented by a sufficient sample. Table 5 contains the March 1998 benchmark figures for these industries.

Seasonal adjustment procedure

BLS uses X-12 ARIMA software developed by the Bureau of Census to seasonally adjust national employment, hours, and earnings series derived from the CES program. Series are seasonally adjusted using multiplicative models; additive models are not considered. For employment, seasonal adjustment factors are directly applied to the component levels. Individual 2-digit SIC levels are seasonally adjusted and higher level aggregates are formed by summation of these components. Seasonally adjusted totals for hours and earnings are obtained by taking weighted averages of the seasonally adjusted data for the component series. Seasonally adjusted data are not published for a small number of series characterized by small seasonal components relative to their trend-cycle and irregular components. These series are identified in tables 6 through 11. These unpublished series are used, however, in aggregations of broader seasonally adjusted levels.

BLS computes and publishes projected seasonal factors

Text table B. Effect of noneconomic code changes on benchmark employment levels by industry, March 1998

(Numbers in thousands)

Industry	Overall benchmark revision	Net employment shift due to code changes ¹	Benchmark revision, less effect of code changes	Percent benchmark revision	
				Total	Less effect of code change
Total nonfarm	44	-2	46	(¹)	(¹)
Mining	15	1	14	2.5	2.4
Construction	15	8	7	.3	.1
Manufacturing	61	65	-4	.3	(¹)
Transportation and public utilities	41	12	29	.6	.4
Wholesale trade	-2	-34	32	(¹)	.5
Retail trade	-99	-5	-94	-5	-4
Finance, insurance, and real estate	56	10	46	.8	.6
Services	-2	-59	57	(¹)	.2
Government	-41	0	-41	-2	-2

¹ Less than 0.05 percent.

twice a year for use in seasonally adjusting the establishment-based employment, hours, and earnings series. Factors for the 6-month period, May through October 1999, are published in tables 6 through 11. Additionally, these tables include revised seasonal factors for March and April 1999, based on the most current seasonal adjustment computations; these factors are in use for the March final and April second preliminary and final estimates.

With the release of the 1995 benchmark revision, BLS began refining its seasonal adjustment procedures to control for survey interval variations, sometimes referred to as the 4- versus 5-week effect. At that time, data for 1988 forward were revised to incorporate this new methodology.

BLS is continuing its special treatment in seasonally adjusting the construction industry series, which began with the 1996 benchmark. Initially, in the application of the interval effect modeling process to the construction series, there was difficulty in accurately identifying and measuring the effect because of the strong influence of variable weather patterns on employment movements in the industry. Thus, interval effect modeling was not used for the construction series over the first year of the X-12 implementation. Further research by BLS had allowed incorporation of interval effect modeling for the construction industry, by disaggregating the construction series into its finer industry and geographic estimating cells and tightening outlier designation parameters. This allowed a more precise identification of weather related outliers which had masked the interval effect and clouded the seasonal adjustment patterns in general. With these outliers removed, interval effect modeling became feasible. The result is an improved seasonally adjusted series for construction, because it is controlled for two potential distortions, unusual weather events and the 4-versus 5-week effect.

For a few series, model fitting for the interval effect continues to be problematic; these series are seasonally adjusted with the X-12 procedures but without the interval effect adjustment. The all-employee series without the interval

effect adjustment are local and interurban passenger transit, private educational services, membership organizations, miscellaneous services, not elsewhere classified, transportation equipment and motor vehicles and equipment.

BLS is continuing the practice of making special adjustments for average weekly hours and average weekly overtime series to account for the presence or absence of religious holidays in the April survey reference period and Labor Day in the September reference period. From 1988 forward those adjustments are accomplished as a part of the X-12 ARIMA modeling process; estimates prior to 1988 were adjusted through a moving-holiday extension of X-11 ARIMA.

A special adjustment also is made in November each year for poll workers in the local government, except education series; this adjustment is incorporated as part of the X-12 modeling process for 1988 forward. An X-11 based procedure is used for earlier years.

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

Refinements in hours and earnings seasonal adjustment. With the release of the 1997 benchmark, BLS implemented refinements to the seasonal adjustment process for the hours and earnings series to correct for distortions related to the

method of accounting for the varying length of payroll periods across months. There is a significant correlation between over-the-month changes in both the average weekly hour (AWH) and the average hourly earnings (AHE) series and the number of weekdays in a month, resulting in non-economic fluctuations in these two series. Both AWH and AHE show more growth in 'short' months (20 or 21 weekdays) than 'long' months (22 or 23 weekdays). Much of the previously unexplained volatility in these series is attributable to this calendar effect. The calendar effect is evident from 1989 forward in most service-producing industries and at the total private level. The effect is stronger for the AWH than the AHE series.

The calendar effect is traced to response and processing errors associated with converting payroll and hours information from sample respondents with semi-monthly or monthly pay periods to a weekly equivalent. The response error comes from sample respondents reporting a fixed number of total hours for workers regardless of the length of the reference month, while the CES conversion process assumes the hours reporting will be variable. A constant level of hours reporting most likely occurs when employees are salaried rather than paid by the hour, as employers are less likely to keep actual detailed hours records for these employees. This causes artificial peaks in the AWH series in shorter months that are reversed in longer months.

The processing error occurs when respondents with salaried workers report hours correctly (vary them according to the length of the month), and different conversion factors should be applied to payroll and hours. The CES processing system uses the hours conversion factor for both fields, resulting in peaks in the AHE series in short months and reversals in long months. Currently, the CES processing system can accommodate only one conversion factor per reporter.

REGARIMA modeling is used to identify, measure, and remove the length-of-pay period effect for seasonally adjusted average weekly hours and average hourly earnings series. REGARIMA modeling combines standard regression analysis, (which measures the correlation among two or more variables), with ARIMA modeling, which describes and predicts the behavior of a data series based on its own history. The length-of-pay period variable proves significant for explaining AWH movements in all the service-producing industry divisions. For AHE, the length-of-pay period variable is significant for three major industry divisions: wholesale trade, finance, insurance, and real estate, and services. All division level AWH series in the service-producing sector have been adjusted from January 1989 forward. The division level AHE series for wholesale trade, finance, insurance, and real estate, and services have been adjusted from January 1989 forward as well. The volatility of over-the-month changes for total private hours and earnings series have been reduced, thereby improving the overall measurement of underlying trends in these key economic indicators.

REGARIMA modeling improves the series but does not

correct the underlying microdata response and processing system errors. The series to which length-of-pay period adjustment is applied are not subject to the 4- versus 5-week adjustment, as the modeling cannot support the number of variables that would be required in the regression equation to make both adjustments. Because the 4- versus 5-week model shows only marginal significance in the service-producing industries, their replacement with the length-of-pay period adjustment is a viable trade-off. The 4- versus 5-week adjustment is most significant in manufacturing hours and earnings series; it will continue to be applied there and in other divisions not affected by the length-of-pay period variable.

Update on the CES sample redesign

In June 1995, BLS announced plans for a comprehensive sample redesign of its monthly payroll survey. The initial research phase for the CES sample redesign was completed in 1997, and the Bureau launched a production test of the new sample redesign at that time. The production test phase will conclude in June 2000, when the first estimates from the new design, for the wholesale trade industry, will be published with the 1999 benchmark revisions. The remaining industry divisions will be phased in with subsequent years' benchmark releases, between 2001 and 2003.

Current design limitations. The existing CES survey is a quota sample whose inception over 50 years ago predated the introduction of probability sampling as the internationally recognized standard for sample surveys. Quota samples are known to be at risk for potentially significant biases: introducing a probability-based sample for CES will more effectively insure a proper representation of the universe of nonfarm business establishments through randomized selection techniques and the regular rotation of sample members.

In addition, the CES sample redesign addresses a second critical limitation of the current CES sample, lack of timely sample-based representation of employment from new business births. Procedures have been developed for regular sample updates that will ensure better representation of new units in the CES sample. Time series modeling techniques are being tested to estimate the residual portion of birth employment not accounted for through improved sampling techniques.

Introduction of a probability-based sample for the CES survey will allow for the publication of sampling errors and confidence intervals—standard survey accuracy measures not directly applicable to the current non-probability design. Overall accuracy of the survey employment estimates, however, will still be best measured by the magnitude of annual benchmark revisions, as they encompass the total estimation error associated with the CES employment series.

The new CES sample design. The new design is a stratified, simple random sample, where the strata, or sub-populations,

are defined by State, industry, and employment size. The sampling rates for each stratum are determined through a method known as optimum allocation, which distributes a fixed number of sample units across a set of strata to minimize the overall variance, or sampling error, on the primary estimate of interest. The total nonfarm employment level is the primary estimate of interest, and the new design gives top priority to measuring it as precisely as possible, or, in other words, minimizing the statistical error around the state-wide total nonfarm employment estimates.

For the CES redesign, the number of sample units drawn was fixed to the approximate size of the existing CES sample; the sample size supportable by current program resources. The current sample size supports the publication of considerable industry and geographic detail within a State, and provides for highly reliable national CES estimates at the total nonfarm and detailed industry levels.

The sampling frame, and the CES sample itself, will be updated on a regular basis, as new quarters of UI-based universe data become available. This frame maintenance will help keep the sample up to date by adding new firm births and deleting business deaths and provide the basis for a regular program of ongoing sample rotation. The largest units (tentatively defined as those with employment of 1,000 or more) will not be rotated. The exact rotation period, or length of time a unit is in the sample, largely will be determined based on solicitation and data collection cost figures developed during the production test.

In addition to sample updates for business births, the new design also provides for an annual update process that includes sample frame maintenance and the redrawing of the entire sample for the first quarter of each year. Frame maintenance provides for the updating of industry, size class, and metropolitan area designations and for the merging of the supplemental birth samples into the overall frame. A high degree of overlap is expected at each annual update because all UI accounts (the basic sampling unit for this design) are ordered on the frame through a technique known as permanent random numbers (PRN). This technique assigns random numbers to all UI accounts on the universe frame at the time they first appear and then orders the frame by PRN. The allocation for each sampling cell is fulfilled by working down the ordered PRN list until the full complement of needed units is drawn. Because the random numbers are permanent and thus remain in essentially the same order on the frame, this technique minimizes cancellation of existing sample units and the need to solicit replacement units.

Improved estimators also have been developed and tested for the CES survey to support the new sample design. The primary difference from the current CES estimator will be the application of a weight to each sample unit in the estimation process. The weights are derived from population sampling fractions and are a standard feature of probability sample estimators. CES currently uses an unweighted ratio estimator.

Business birth and death estimation. Regular updating of the CES sample frame, with information from the UI universe files will help keep the CES survey current with respect to employment from business births and business deaths. The most timely UI universe files available, however, always will be a minimum of 6 to 9 months out of date. The CES survey thus can not rely on regular frame maintenance alone to provide estimates for business birth and death employment contributions. BLS has researched both sample-based and model-based approaches to measuring birth units that have not yet appeared on the UI universe frame. The research demonstrated that sampling for births was not feasible in the very short CES production timeframes, and BLS is now pursuing a model-based approach for this component.

Exploratory research indicated that while both the business birth and death components are relatively large, the net contribution was relatively small and stable. BLS is therefore developing and testing a birth modeling procedure with two components: Using business deaths to impute employment for business births and an additional component to measure the net birth and death employment not accounted for by the imputation. The research and refinement of birth modeling techniques will continue over the final year of the production test, focusing in particular on wholesale trade and then manufacturing, the first two industries slated for conversion to the new sample design. The most significant potential drawback to a model-based approach is that time series modeling assumes a predictable continuation of historical patterns and relationships. Therefore, a model-based approach is likely to have some difficulty producing reliable estimates at economic turning points or during periods when there are sudden changes in trend. In sum, accurate estimation of the business birth component of total nonfarm employment will continue to be the most problematic aspect of CES employment estimation.

Production test results to date. As a result of the nearly 2 years of production testing that BLS has completed to date, a number of modifications to the original CES sample redesign methods and procedures have been made. The new sample design and estimators originally developed in the research phase of the redesign were first tested under near ideal conditions, using historical UI universe micro data files as a proxy for monthly collection of CES sample data from respondents. There was no response error or non-response in this proxy sample, and resource constraints were not an issue. This research phase allowed BLS to define the best design and estimators from a purely methodological viewpoint.

The next phase in the redesign, the production test, has afforded the opportunity to evaluate the originally specified redesign methodology in the actual operating environment of the CES survey, which includes sample non-response, some response differences from the UI universe respondent

level data, and short production timeframes. The production test has thus been a valuable exercise in tempering an ideal statistical methodology, with actual operating conditions and constraints. The most significant design modifications resulting from the production test are described below and include modifications to accommodate both resource constraints and limitations in sample response.

The original sample redesign methodology called for continual quarterly updating of the CES sample for new business births, along with a complete redraw of the entire sample in the first quarter of each year. However, even with the minimization effect provided by the PRN technique described above, these procedures still generated an ongoing sample solicitation workload that was too great for CES program resources to support. A fourth quarter birth update also is problematic operationally because birth units selected in this update are frequently subject to being dropped very shortly after their selection, when the next first quarter annual redraw is done, thus proving an inefficient use of solicitation resources.

Design modifications. Three modifications to the original redesign methodology have been adopted to address these issues. First, the business birth updates will be limited to semi-annual rather than quarterly frequencies. The birth updates will be done with the first quarter annual redraw, and for the third quarter of each year.

Second, a 'swapping' procedure has been developed for the annual sample redraw. This procedure increases the sample overlap from year to year, thereby reducing the new sample solicitation workload to a manageable level. The underlying principle of the swapping procedure is the retention of some of the currently responding sample units that were not selected in the redraw and would otherwise have been dropped. These retained units are substituted or swapped with newly selected sample units from the redraw, thus reducing the overall amount of new unit solicitation associated with the annual sample update. The swapping is constrained to sample units in the same industry, size class, and geographic area. The swapping procedure has a potential for introducing sample bias as it departs somewhat from purely random sampling. However, simulations and evaluations done to date indicate no bias has resulted from the swapping; BLS will continue to study the issue. The swapping procedure is planned for incorporation with each annual update, after initial implementation for a major industry division is completed.

As a final solicitation workload efficiency measure, the CES survey will retain the largest current CES sample members (those with 100 or more employees), even in the cases where they were not selected for the probability-based sample. They will be treated as certainty units, in other words, assigned a weight of 1, such that they represent only themselves in the estimates; this precludes them from introducing any bias into the sample design. These units will strengthen the CES estimation process by providing addi-

tional sample coverage without incurring any solicitation costs. Another advantage of this procedure is that it retains units which are in sampling cells where all the units have a high probability of selection; therefore, any unit not selected in a particular annual redraw has a high chance of selection in the next update. This procedure then saves the costs of canceling and re-soliciting these units.

Estimator changes. The estimator originally chosen for the CES sample redesign was a basic expansion estimator augmented by benchmark factors, or post-stratification weights, derived using information from the most current UI universe population figures. While this estimator worked the best among those tested in the research phase, it did not perform acceptably in the production test. When actual CES collected micro data were used to produce estimates, rather than the complete set of UI universe micro data available for research testing, this estimator proved not robust enough against response error differences in CES versus UI reporting. The expansion estimator requires very precise correlation between CES sample responses and their corresponding records on the UI sampling frame to avoid substantial errors in estimating employment levels. Thus, BLS has abandoned use of this estimator for the redesign and will instead use an improved version of the current ratio estimator (also known as the link relative).

Presently, the CES survey uses an unweighted link relative; under the redesign, a weighted link relative will be used. The weights are defined based on each sample unit's probability of selection within its sampling cell. This will ensure each sample unit provides the appropriate contribution to the overall estimate. The link relative basically applies the ratio of change between current and previous month sample employment totals to move forward, on a monthly basis, the benchmark employment level established from each March's UI universe file. It thus takes better advantage of the UI benchmark employment level to minimize errors on the estimate of employment levels. A drawback to the expansion estimator is that it does not guarantee precise geographic additivity of employment estimates within a State or across States to a national total. However, the overall employment levels and trends among geographic levels should still prove consistent.

Sampling unit definition. A second methodology issue that BLS is still examining is the designation of the UI account as the basic sampling unit. UI account numbers are unique within a State and generally cover all the worksites within a firm. The UI account was originally chosen as the sampling unit because it provides for the implicit capture of worksite births and deaths within multi-establishment firms that are covered by a single UI account. However, the actual capture of information on the opening and closing of worksites during monthly CES data collection, and the requisite precise matching of this information against the UI universe frame on an ongoing, quick turnaround basis required by

the CES production timeframes has proven problematic. A worksite definition is generally more straightforward for both data collectors and respondents to understand and use. However, a worksite sampling unit definition would not provide for the ongoing capture of information relating to employment expansions and contractions that result from the opening and closing of worksites within multi-unit firms. Thus, a larger share of the business-birth employment component would have to be model-based under a worksite than the UI account sampling unit definition. BLS will continue to study this issue and the long-term viability of the UI account as the appropriate sampling unit for the CES during the final year of the production test.

The lengthy CES redesign research and production test phase combine to allow BLS to prepare an implementation plan that is as statistically sound and efficient as possible, given the actual operating environment and resource constraints of the CES program. This is critical because of the visibility and sensitivity of CES data series as economic indicators, as well as their extensive use as primary input to other key economic data series.

Final stages of the production test. During the upcoming third and final year of the CES production test, BLS will concentrate on resolving the methodological issues outlined

above relating to business birth modeling and sample unit definition. In addition, the Bureau will work to establish viable seasonal adjustment factors, a difficult task in the absence of a lengthy time series based on the probability sample. BLS also will complete modifications to its production systems to accommodate the new sample design methods and procedures.

Sample redesign implementation plans. The Bureau will proceed with a phased-in implementation of the new CES sample design beginning in June 2000, coincident with the publication of March 1999 CES national benchmark revisions. The wholesale trade industry series for CES national estimates will be converted to the new probability-based procedures at that time. Probability-based estimates for State and area wholesale trade series are targeted for introduction in March 2001 with the next State benchmark revision.

After the initial conversion of wholesale trade, BLS will continue a phase-in of the new design by major industry division. Implementation of the new sample and estimators for major divisions are scheduled to coincide with the publication of benchmark revisions so as not to disrupt published over-the-month changes for current month estimates with a continually changing sample composition.

Table 2. Differences between nonfarm employment benchmarks and estimates by industry, March 1998

(Numbers in thousands)

Industry	Benchmark	Estimate	Difference	
			Amount	Percent
Total	124,050	124,006	44	(¹)
Total private	103,965	103,880	85	0.1
Goods-producing	24,871	24,780	91	.4
Mining	592	577	15	2.5
Metal mining	50	50	0	0
Coal mining	94	93	1	1.1
Oil and gas extraction	345	331	14	4.1
Nonmetallic minerals, except fuels	104	103	1	1.0
Construction	5,474	5,459	15	.3
General building contractors	1,279	1,301	-22	-1.7
Heavy construction, except building	726	714	12	1.7
Special trade contractors	3,470	3,445	25	.7
Manufacturing	18,805	18,744	61	.3
Durable goods	11,215	11,140	75	.7
Lumber and wood products	795	786	9	1.1
Furniture and fixtures	528	521	7	1.3
Stone, clay, and glass products	547	546	1	.2
Primary metal industries	719	719	0	0
Blast furnaces and basic steel products	234	235	-1	-.4
Fabricated metal products	1,507	1,495	12	.8
Industrial machinery and equipment	2,225	2,211	14	.6
Computer and office equipment	383	379	4	1.0
Electronic and other electrical equipment	1,724	1,718	6	.3
Electronic components and accessories	674	680	-6	-.9
Transportation equipment	1,900	1,889	11	.6
Motor vehicles and equipment	1,005	1,004	1	.1
Aircraft and parts	524	523	1	.2
Instruments and related products	876	867	9	1.0
Miscellaneous manufacturing	395	388	7	1.8
Nondurable goods	7,590	7,604	-14	-.2
Food and kindred products	1,646	1,664	-18	-1.1
Tobacco products	41	41	0	0
Textile mill products	604	603	1	.2
Apparel and other textile products	786	792	-6	-.8
Paper and allied products	678	685	-7	-1.0
Printing and publishing	1,560	1,561	-1	-.1
Chemicals and allied products	1,040	1,034	6	.6
Petroleum and coal products	138	133	5	3.6
Rubber and miscellaneous plastics products	1,011	1,008	3	.3
Leather and leather products	86	85	1	1.2
Service-producing	99,179	99,226	-47	(¹)
Transportation and public utilities	6,497	6,456	41	.6
Transportation	4,186	4,132	54	1.3
Railroad transportation	227	228	-1	-.4
Local and interurban passenger transit	478	473	5	1.0
Trucking and warehousing	1,689	1,658	31	1.8
Water transportation	171	177	-6	-3.5
Transportation by air	1,156	1,137	19	1.6
Pipelines, except natural gas	14	14	0	0
Transportation services	452	446	6	1.3
Communications and public utilities	2,311	2,324	-13	-.6
Communications	1,456	1,469	-13	-.9
Electric, gas, and sanitary services	855	855	0	0
Wholesale trade	6,742	6,744	-2	(¹)
Durable goods	4,002	4,027	-25	-.6
Nondurable goods	2,740	2,717	23	.8

See footnotes at end of table.

Table 2. Differences between nonfarm employment benchmarks and estimates by industry, March 1998—Continued

(Numbers in thousands)

Industry	Benchmark	Estimate	Difference	
			Amount	Percent
Retail trade	21,724	21,823	-99	-.5
Building materials and garden supplies	906	931	-25	-2.8
General merchandise stores	2,605	2,660	-55	-2.1
Department stores	2,314	2,343	-29	-1.3
Food stores	3,430	3,487	-57	-1.7
Automotive dealers and service stations	2,301	2,311	-10	-.4
New and used car dealers	1,039	1,055	-16	-1.5
Apparel and accessory stores	1,098	1,064	34	3.1
Furniture and home furnishings stores	1,005	1,037	-32	-3.2
Eating and drinking places	7,597	7,520	77	1.0
Miscellaneous retail establishments	2,781	2,814	-33	-1.2
Finance, insurance, and real estate	7,269	7,213	56	.8
Finance	3,538	3,504	34	1.0
Depository institutions	2,035	2,035	0	0
Commercial banks	1,467	1,459	8	.5
Savings institutions	256	262	-6	-2.3
Nondepository institutions	635	602	33	5.2
Mortgage bankers and brokers	309	276	33	10.7
Security and commodity brokers	628	631	-3	-.5
Holding and other investment offices	241	236	5	2.1
Insurance	2,312	2,298	14	.6
Insurance carriers	1,574	1,563	11	.7
Insurance agents, brokers, and service	739	736	3	.4
Real estate	1,419	1,411	8	.6
Services ²	36,862	36,864	-2	(¹)
Agricultural services	615	617	-2	-.3
Hotels and other lodging places	1,694	1,689	5	.3
Personal services	1,253	1,240	13	1.0
Business services	8,301	8,286	15	.2
Services to buildings	937	960	-23	-2.5
Personnel supply services	3,094	3,041	53	1.7
Help supply services	2,745	2,711	34	1.2
Computer and data processing services	1,541	1,545	-4	-.3
Auto repair, services, and parking	1,129	1,144	-15	-1.3
Miscellaneous repair services	373	379	-6	-1.6
Motion pictures	575	567	8	1.4
Amusement and recreation services	1,437	1,503	-66	-4.6
Health services	9,795	9,848	-53	-.5
Offices and clinics of medical doctors	1,778	1,790	-12	-.7
Nursing and personal care facilities	1,762	1,757	5	.3
Hospitals	3,898	3,925	-27	-.7
Home health care services	688	695	-7	-1.0
Legal services	957	966	-9	-.9
Educational services	2,291	2,324	-33	-1.4
Social services	2,608	2,596	12	.5
Child day care services	610	589	21	3.4
Residential care	738	742	-4	-.5
Museums and botanical and zoological gardens	87	86	1	1.1
Membership organizations	2,340	2,249	91	3.9
Engineering and management services	3,122	3,176	-54	-1.7
Engineering and architectural services	883	895	-12	-1.4
Management and public relations	992	1,008	-16	-1.6
Services, nec	50	51	-1	-2.0
Government	20,085	20,126	-41	-.2
Federal	2,662	2,662	0	0
Federal, except Postal Service	1,809	1,809	0	0
State	4,702	4,741	-39	-.8
Education	2,040	2,065	-25	-1.2
Other State government	2,662	2,676	-14	-.5
Local	12,721	12,723	-2	(¹)
Education	7,407	7,391	16	.2
Other local government	5,314	5,332	-18	-.3

¹ Less than 0.05 percent.

² Includes other industries, not shown separately.

Table 3. Differences in seasonally adjusted levels and over-the-month changes, total nonfarm employment, January 1998-February 1999

(In thousands)

Year and date	Levels			Over-the-month changes		
	As previously published	As revised	Difference	As previously published	As revised	Difference
1998:						
January	124,640	124,580	-60	351	317	-34
February	124,832	124,773	-59	192	193	1
March	124,914	124,961	47	82	188	106
April	125,234	125,220	-14	320	259	-61
May	125,562	125,478	-84	328	258	-70
June	125,751	125,689	-62	189	211	22
July	125,869	125,808	-61	118	119	1
August	126,191	126,170	-21	322	362	40
September	126,363	126,361	-2	172	191	19
October	126,527	126,567	40	164	206	42
November	126,804	126,841	37	277	274	-3
December	127,118	127,186	68	314	345	31
1999:						
January	127,335	127,378	43	217	192	-25
February	127,670	127,730	60	335	352	17

Table 4. Effect of March 1998 benchmark revisions on hours and earnings estimates, selected industries

Industry	Average weekly hours			Average hourly earnings		
	Previous estimate	Revised estimate	Difference	Previous estimate	Revised estimate	Difference
Total private	34.5	34.5	0	\$12.68	\$12.68	\$0.00
Goods-producing	40.9	40.9	0	14.18	14.18	0
Mining	43.4	43.4	0	16.89	16.85	-.04
Construction	37.9	38.0	.1	16.29	16.31	.02
Manufacturing	41.7	41.7	0	13.47	13.47	0
Durable goods	42.4	42.5	.1	14.02	14.01	-.01
Lumber and wood products	40.8	40.7	-.1	10.95	10.94	-.01
Furniture and fixtures	40.4	40.4	0	10.80	10.81	.01
Stone, clay, and glass products	42.5	42.6	.1	13.46	13.46	0
Primary metal industries	44.5	44.5	0	15.52	15.53	.01
Fabricated metal products	42.2	42.2	0	13.01	12.99	-.02
Industrial machinery and equipment	43.5	43.5	0	14.36	14.38	.02
Electronic and other electrical equipment	41.4	41.3	-.1	13.06	13.04	-.02
Transportation equipment	43.7	43.7	0	17.92	17.88	-.04
Instruments and related products	41.7	41.7	0	13.73	13.76	.03
Miscellaneous manufacturing	40.5	40.5	0	10.79	10.80	.01
Nondurable goods	40.7	40.7	0	12.63	12.64	.01
Food and kindred products	40.9	40.9	0	11.70	11.69	-.01
Tobacco products	37.0	37.1	.1	18.54	18.42	-.12
Textile mill products	41.2	41.2	0	10.29	10.29	0
Apparel and other textile products	37.2	37.2	0	8.43	8.43	0
Paper and allied products	43.1	43.1	0	15.27	15.28	.01
Printing and publishing	38.4	38.5	.1	13.36	13.38	.02
Chemicals and allied products	43.4	43.4	0	16.97	16.96	-.01
Petroleum and coal products	43.2	43.1	-.1	21.16	21.20	.04
Rubber and miscellaneous plastics products	41.5	41.5	0	11.78	11.78	0
Leather and leather products	37.7	37.7	0	9.32	9.30	-.02
Service-producing	32.9	32.9	0	12.19	12.19	0
Transportation and public utilities	39.4	39.4	0	15.24	15.21	-.03
Wholesale trade	38.4	38.4	0	13.86	13.90	.04
Retail trade	28.7	28.7	0	8.67	8.64	-.03
Finance, insurance, and real estate	36.8	36.8	0	13.97	13.98	.01
Services	32.7	32.6	-.1	12.77	12.77	0

Table 5. Employment benchmarks for industries not published monthly, March 1991-98

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Total		107,507	107,300	108,935	112,141	115,849	117,952	120,903	124,050
Total Private		88,790	88,347	89,790	92,730	96,175	98,158	101,040	103,965
Goods-producing		23,390	22,724	22,754	23,181	23,784	23,884	24,359	24,871
Mining		695	634	603	592	576	566	580	592
Lead and zinc ores	103	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.5
Gold and silver ores	104	19.7	19.6	18.7	17.1	17.7	19.0	19.1	16.7
Other metal ores and mining services	106,8,9	9.0	7.3	5.8	5.9	6.2	6.8	7.5	7.2
Bituminous coal and lignite-surface	1221	53.3	50.7	47.1	45.8	43.4	40.2	40.0	38.4
Bituminous coal-underground	1222	75.9	68.3	63.3	59.4	56.2	50.6	50.4	49.3
Anthracite mining and coal mining services	123,4	9.1	8.5	7.4	7.2	7.4	6.7	6.0	5.8
Natural gas liquids	132	4.7	6.0	5.0	5.0	5.2	5.0	4.9	4.9
Clay, ceramic, and refractory minerals	145	7.4	7.5	7.5	7.4	7.7	7.5	7.5	7.3
Dimension stone and other nonmetallic minerals	141,8,9	10.2	9.1	9.3	9.3	10.0	10.4	10.9	11.4
Construction		4,356	4,117	4,177	4,497	4,748	4,952	5,260	5,474
Bridge, tunnel, and elevated highway	1622	41.4	42.5	42.4	39.6	43.6	43.1	44.8	42.7
Water, sewer, and utility lines	1623	186.9	180.0	181.6	190.8	196.8	203.7	219.3	227.5
Heavy construction, nec	1629	248.1	243.4	228.3	239.0	246.8	253.9	255.4	266.8
Masonry and other stonework	1741	127.3	120.3	118.1	127.6	137.5	140.9	152.2	153.6
Plastering, drywall, and insulation	1742	218.9	194.1	194.4	210.9	222.1	230.0	248.9	263.8
Terrazzo, tile, marble, and mosaic work	1743	33.8	29.8	30.1	31.3	33.4	34.5	37.2	40.2
Carpentry work	1751	118.7	119.4	127.3	144.9	156.2	166.4	182.9	193.0
Floor laying and floor work, nec	1752	46.2	43.8	46.6	49.9	53.1	54.5	58.8	62.7
Concrete work	177	161.6	161.2	166.0	185.9	208.1	221.4	239.8	255.7
Water well drilling	178	18.8	18.8	18.5	19.6	20.6	21.4	21.6	21.5
Miscellaneous special trade contractors	179	469.6	436.9	442.3	482.2	511.9	531.7	568.1	594.7
Structural steel erection	1791	67.8	58.6	56.4	59.7	62.7	68.2	72.9	76.5
Glass and glazing work	1793	36.1	32.0	32.0	33.1	35.4	37.0	39.7	42.1
Excavation work	1794	94.1	90.2	93.0	101.5	111.0	116.4	126.0	131.0
Wrecking, demolition, and other special trade contractors	1795,6,9	271.6	256.1	260.9	287.9	302.8	310.1	329.5	345.1
Manufacturing		18,339	17,973	17,974	18,092	18,460	18,366	18,519	18,805
Durable goods		10,580	10,247	10,192	10,307	10,644	10,689	10,894	11,215
Lumber and wood products:									
Special product sawmills, nec	2429	2.7	2.1	2.1	1.9	1.6	1.8	1.9	2.2
Structural wood members, nec	2439	20.6	22.3	25.2	29.8	32.6	34.5	36.8	39.3
Nailed wood boxes and shooks	2441	4.2	3.8	3.9	3.8	3.8	3.9	4.0	4.2
Wood pallets and skids	2448	32.0	31.7	33.6	37.3	40.2	40.6	41.8	44.1
Wood containers, nec	2449	7.8	7.4	7.2	7.4	7.1	7.6	7.3	7.7
Prefabricated wood buildings	2452	16.0	14.7	15.5	16.1	18.1	19.0	20.8	22.5
Wood preserving	2491	11.9	11.1	11.1	11.5	11.5	11.6	11.8	12.0
Reconstituted wood products	2493	16.5	17.4	17.6	18.9	19.9	20.6	20.8	20.0
Wood products, nec	2499	52.3	51.8	54.4	56.6	55.8	54.7	56.5	55.5
Furniture and fixtures:									
Wood television and radio cabinets, and household furniture, nec	2517,9	12.0	13.5	13.0	12.5	11.6	11.5	12.4	11.9
Wood office furniture	2521	30.3	27.2	26.5	28.0	28.3	29.0	28.9	32.3
Office furniture, except wood	2522	32.1	33.6	32.9	33.1	34.3	32.8	33.4	36.2
Wood partitions and fixtures	2541	40.3	39.7	39.7	42.3	47.8	47.5	49.8	51.4
Partitions and fixtures, except wood	2542	33.0	32.3	33.6	34.0	37.6	36.0	36.0	39.8
Drapery hardware and blinds and shades	2591	19.7	19.9	18.7	20.0	20.8	20.7	21.6	21.7
Furniture and fixtures, nec	2599	14.0	14.6	15.5	16.0	16.3	16.9	17.1	17.1
Stone, clay, and glass products:									
Brick and structural clay tile	3251	13.9	13.3	14.0	13.7	14.3	13.5	13.5	13.6
Clay refractories	3255	6.4	5.8	5.8	5.8	7.2	7.6	7.4	7.3
Ceramic tile and structural clay products, nec	3253,9	11.7	10.8	11.9	12.1	13.0	11.4	13.3	12.1
Vitreous plumbing fixtures	3261	8.6	8.9	9.4	10.0	10.6	9.9	10.1	9.6
Vitreous and semivitreous table and kitchenware	3262,3	4.9	5.4	5.0	5.1	5.4	5.6	5.9	5.9
Porcelain electrical supplies	3264	10.7	10.1	9.8	10.0	10.7	10.8	10.1	10.1
Pottery products, nec	3269	12.5	13.2	14.5	14.9	14.8	14.3	13.5	13.0
Lime	3274	5.0	5.0	4.9	4.8	5.1	5.1	5.0	5.0
Gypsum products	3275	12.0	11.6	11.8	11.9	12.2	12.6	12.7	12.8
Cut stone and stone products	328	14.0	13.6	13.1	13.6	13.1	13.8	14.7	15.2
Minerals, ground or treated	3295	13.4	12.7	12.2	12.3	12.3	12.8	12.5	12.6
Nonclay refractories	3297	8.1	8.9	8.7	8.6	8.3	8.4	9.0	8.8
Nonmetallic mineral products, nec	3299	8.6	7.4	8.3	9.3	9.9	9.6	10.3	10.6

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Durable goods—Continued									
Primary metal industries:									
Electrometallurgical products	3313	6.0	6.3	6.0	5.7	5.2	6.1	5.7	5.9
Steel wire and related products	3315	16.9	16.4	17.1	18.2	19.3	20.8	21.0	20.4
Cold finishing of steel shapes	3316	16.9	15.6	15.7	16.1	17.0	17.2	16.9	17.6
Steel investment foundries	3324	16.2	15.6	14.4	14.3	15.7	16.2	17.3	19.0
Primary copper	3331	5.3	5.7	5.4	5.8	5.9	4.4	4.5	4.4
Primary nonferrous metals, nec	3339	14.5	12.9	12.4	11.9	11.8	12.1	12.3	12.8
Secondary nonferrous metals	334	18.5	15.5	14.5	15.4	15.8	16.0	16.0	16.5
Aluminum extruded products	3354	28.0	26.8	27.6	27.6	31.4	31.3	32.4	33.7
Aluminum and nonferrous rolling and drawing, nec	3355.6	18.1	19.0	18.5	18.1	18.4	19.2	19.2	19.3
Aluminum die-castings	3363	26.2	28.9	30.4	31.7	36.6	37.6	38.4	39.9
Nonferrous die-castings, except aluminum	3364	11.5	10.5	10.9	11.1	11.1	10.6	11.1	11.5
Copper foundries	3366	10.0	9.3	9.0	9.2	9.5	9.5	9.3	9.5
Nonferrous foundries, nec	3369	8.2	7.0	6.1	6.2	6.5	6.8	7.0	6.9
Miscellaneous primary metal products	339	26.2	25.9	26.5	27.5	28.5	29.2	30.1	31.1
Metal heat treating	3398	15.2	14.9	15.3	16.0	17.5	18.0	18.6	19.3
Primary metal products, nec	3399	11.0	11.0	11.2	11.5	11.0	11.2	11.5	11.8
Fabricated metal products:									
Metal barrels, drums, and pails	3412	9.4	8.8	8.2	7.9	7.7	7.7	7.4	7.2
Cutlery	3421	11.8	11.6	11.4	11.9	11.8	12.4	12.6	12.9
Metal sanitary ware	3431	12.6	13.0	13.2	13.9	14.6	13.5	14.0	14.2
Prefabricated metal buildings	3448	22.4	20.9	21.6	23.5	25.7	26.3	28.0	29.7
Miscellaneous metal work	3449	13.2	12.3	12.5	12.4	12.4	13.0	13.1	13.8
Nonferrous forgings, crowns, and closures	3463.6	11.1	11.9	11.2	11.1	11.6	12.0	12.9	13.9
Small arms, small arms ammunition, and other ordnance and accessories, nec	3482,4,9	26.6	25.0	24.1	23.2	25.0	23.5	21.0	21.8
Industrial valves	3491	26.8	26.6	25.2	25.2	26.9	26.4	26.9	27.4
Fluid power valves and hose fittings	3492	27.6	27.5	27.2	27.7	31.8	33.1	33.7	38.3
Steel springs, except wire	3493	5.6	4.8	4.8	5.1	5.6	5.5	5.6	5.9
Wire springs	3495	12.1	13.0	13.5	14.1	15.3	14.5	14.7	15.0
Fabricated pipe and fittings	3498	24.5	25.2	26.7	26.8	27.4	28.9	29.8	30.7
Metal foil and leaf, and fabricated metal products, nec	3497.9	54.5	50.2	55.5	58.0	62.6	65.1	67.0	69.8
Industrial machinery and equipment:									
Lawn and garden equipment	3524	26.7	27.1	27.2	28.4	30.4	29.7	30.5	28.6
Elevators and moving stairways	3534	10.3	9.3	9.6	9.6	9.8	9.8	9.7	9.9
Hoists, cranes, and monorails	3536	9.0	7.7	7.3	7.2	7.8	8.6	8.7	8.9
Industrial patterns	3543	8.7	8.2	8.1	8.4	8.8	8.3	8.0	8.3
Welding apparatus	3548	18.4	18.5	18.0	18.9	20.7	21.5	21.4	20.7
Rolling mill and metalworking machinery, nec	3547.9	12.4	12.7	13.1	13.3	15.2	16.3	17.1	18.0
Woodworking machinery	3553	8.4	8.0	8.7	9.9	11.3	11.1	10.6	10.4
Paper industries machinery	3554	18.9	19.6	19.3	19.5	21.2	22.4	22.3	22.2
Special industry machinery, nec	3559	60.8	60.0	60.4	62.4	71.8	82.1	82.0	88.0
Packaging machinery	3565	21.5	19.0	19.8	20.1	22.1	22.7	23.0	23.8
Industrial furnaces and ovens	3567	17.2	15.9	15.6	16.5	17.7	18.7	19.1	20.1
General industrial machinery, nec	3569	39.6	40.0	40.8	42.8	44.3	46.2	48.4	50.3
Computer storage devices	3572	38.2	35.6	38.0	37.6	40.3	43.2	43.1	42.8
Computer peripheral equipment, nec	3577	58.7	55.3	53.0	57.9	60.0	71.0	72.8	77.6
Automatic vending machines	3581	7.3	6.8	7.1	7.5	8.1	7.8	8.0	8.5
Commercial laundry equipment	3582	5.7	5.3	5.5	5.8	6.2	6.1	5.9	5.2
Measuring and dispensing pumps, and service industry machinery, nec	3586.9	41.6	41.9	42.9	45.8	48.6	47.9	47.5	48.5
Fluid power cylinders and actuators	3593	18.4	16.4	16.3	17.1	18.5	18.8	18.6	19.4
Fluid power pumps and motors	3594	28.7	27.4	26.3	25.4	26.2	26.8	27.0	28.3
Electronic and other electrical equipment:									
Carbon and graphite products	3624	10.2	9.4	9.3	9.5	10.0	10.2	10.1	9.8
Electrical industrial apparatus, nec	3629	9.3	9.6	9.5	9.2	9.7	10.1	10.0	10.2
Household cooking equipment	3631	18.0	17.6	21.1	21.8	23.3	22.6	23.1	22.1
Household vacuum cleaners and appliances, nec	3635.9	21.6	25.6	25.6	25.5	23.8	24.6	24.1	26.9
Commercial lighting fixtures	3646	22.2	22.0	22.8	23.6	25.8	24.7	25.0	26.5
Vehicular lighting equipment	3647	17.5	17.5	17.6	16.8	18.0	17.8	18.5	18.4
Lighting equipment, nec	3648	10.0	9.4	10.0	10.6	12.6	12.6	13.3	13.8
Prerecorded records and tapes	3652	23.2	21.6	23.4	25.1	26.9	28.2	26.9	26.2
Radio and television communications equipment	3663	111.0	106.0	102.9	107.8	122.2	126.5	125.7	128.6

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Durable goods—Continued									
Electronic and other electrical equipment—Continued									
Communications equipment, nec	3669	24.4	23.2	24.8	25.0	28.0	29.2	29.3	29.9
Printed circuit boards	3672	99.2	92.2	99.8	100.6	114.8	126.7	132.5	143.2
Electronic capacitors	3675	20.2	18.4	19.6	19.4	20.9	21.3	20.1	19.6
Electronic resistors	3676	11.5	11.0	10.1	10.4	10.6	10.8	10.3	9.8
Electronic coils and transformers	3677	17.9	17.1	17.4	16.8	18.9	18.9	18.6	18.5
Electronic connectors	3678	15.9	16.2	15.6	15.9	16.9	18.4	19.7	21.1
Primary batteries, dry and wet	3692	10.8	12.1	11.3	11.5	11.9	12.0	12.0	12.4
Magnetic and optical recording media, and electrical equipment and supplies, nec	3695.9	55.9	49.7	49.2	49.9	47.0	45.9	45.5	44.2
Transportation equipment:									
Motor homes	3716	14.2	17.2	18.5	19.6	20.6	18.2	19.3	20.0
Motorcycles, bicycles, and parts	375	14.7	15.8	17.1	18.0	20.9	22.3	21.4	21.6
Space propulsion units and parts, and space vehicle equipment, nec	3764.9	49.5	42.4	36.4	32.5	29.7	28.0	28.0	29.2
Tanks and tank components	3795	14.3	12.8	11.1	9.7	8.7	7.3	6.5	6.5
Transportation equipment, nec	3799	12.6	14.9	16.3	19.3	22.2	23.9	25.3	25.8
Instruments and related products:									
Laboratory apparatus and furniture	3821	8.8	9.6	10.2	9.9	9.6	10.2	10.1	10.0
Fluid meters and counting devices	3824	12.0	12.4	12.4	12.5	11.9	11.9	11.6	11.9
Analytical instruments	3826	28.6	28.5	28.0	27.3	27.7	30.0	31.1	32.2
Optical instruments and lenses	3827	19.4	18.8	17.4	18.4	18.1	20.1	21.9	23.9
Measuring and controlling devices, nec	3829	45.7	42.6	40.4	38.3	40.6	41.2	41.4	43.9
Dental equipment and supplies	3843	13.0	12.8	13.8	14.2	13.8	14.5	14.2	15.0
X-ray apparatus and tubes	3844	11.4	10.7	10.8	10.8	12.7	12.7	12.9	13.3
Electromedical equipment	3845	31.8	37.6	38.4	41.7	41.9	42.7	44.3	44.3
Miscellaneous manufacturing industries:									
Silverware and plated ware	3914	6.5	6.3	6.2	6.1	6.5	6.1	6.0	6.1
Jewelers' materials and lapidary work	3915	6.6	6.8	7.0	7.0	6.3	6.2	6.3	6.3
Pens and mechanical pencils	3951	8.7	8.0	8.7	8.3	9.0	9.0	9.0	8.9
Lead pencils and art goods	3952	7.2	7.7	7.8	7.5	7.5	7.2	7.4	6.9
Marking devices, carbon paper, and inked ribbons	3953.5	17.3	17.2	16.8	17.1	15.0	15.0	14.8	15.2
Fasteners, buttons, needles, and pins	3965	11.8	11.9	11.4	11.3	11.0	10.4	10.1	9.9
Brooms and brushes	3991	13.2	13.3	14.1	14.1	14.6	14.2	14.2	14.4
Burial caskets	3995	9.0	8.9	8.9	9.2	9.1	8.8	8.7	8.5
Hard surface floor coverings and manufacturing industries, nec ..	3996.9	57.7	54.6	57.7	61.1	62.6	63.1	66.6	72.7
Nondurable goods		7,759	7,726	7,782	7,785	7,816	7,677	7,625	7,590
Food and kindred products:									
Creamery butter	2021	2.0	1.9	2.1	2.1	2.0	1.9	1.8	1.9
Dry, condensed, and evaporated products	2023	17.1	17.3	17.6	17.7	16.6	16.4	16.2	15.1
Ice cream and frozen desserts	2024	21.5	21.4	23.0	22.9	23.3	22.4	21.9	22.0
Dehydrated fruits, vegetables, and soups	2034	17.1	15.0	16.0	16.4	15.8	15.5	16.5	14.8
Pickles, sauces, and salad dressings	2035	20.1	21.1	20.9	21.3	21.4	22.4	20.8	21.0
Frozen specialties, nec	2038	44.5	48.8	49.7	50.0	52.6	51.4	51.3	53.3
Cereal breakfast foods	2043	18.9	18.4	19.8	19.8	19.5	19.7	18.3	17.8
Rice milling	2044	5.5	4.8	4.6	4.9	5.0	5.0	5.0	4.8
Prepared flour mixes and doughs	2045	11.0	11.5	13.0	13.9	13.3	13.2	13.5	13.4
Wet corn milling	2046	9.6	10.0	9.7	9.5	9.8	10.1	10.1	10.2
Dog and cat food	2047	16.3	16.9	18.0	18.3	18.1	19.1	19.4	20.0
Chocolate and cocoa products and chewing gum	2066.7	21.4	19.3	19.3	19.0	18.4	17.4	17.4	18.1
Salted and roasted nuts and seeds	2068	7.7	9.5	9.0	8.1	8.4	8.2	8.0	7.8
Cottonseed, soybean, and vegetable oil mills	2074.5,6	13.2	13.3	12.9	13.1	13.2	12.9	13.4	14.2
Animal and marine fats and oils	2077	7.6	7.5	7.6	7.7	7.7	8.0	8.3	8.2
Edible fats and oils, nec	2079	9.9	10.2	11.2	10.7	9.7	9.5	9.8	9.1
Wines, brandy, and brandy spirits	2084	16.0	16.1	17.0	16.8	17.4	18.8	20.8	22.1
Distilled and blended liquors	2085	9.2	8.5	8.7	8.3	8.2	7.8	7.7	7.5
Malt and flavoring extracts and syrups, nec	2083.7	17.5	17.5	17.9	19.0	20.2	21.3	21.7	21.8
Canned and cured fish and seafoods	2091	9.4	8.5	8.1	8.6	7.5	7.2	7.6	6.9
Fresh or frozen packaged fish	2092	43.3	45.4	47.3	45.0	43.9	45.9	45.9	43.8
Roasted coffee	2095	11.6	11.6	10.4	10.7	9.7	9.8	10.4	9.4
Potato chips and similar snacks	2096	35.3	35.5	35.2	35.0	35.0	33.2	32.5	31.1
Manufactured ice	2097	5.5	5.4	5.6	5.7	5.7	5.9	5.9	5.9
Macaroni and spaghetti	2098	8.5	8.2	8.9	8.8	8.5	8.5	8.1	7.7
Food preparations, nec	2099	62.7	62.1	65.7	68.7	66.1	72.1	71.2	72.6
Tobacco products:									
Cigars	212	2.7	2.4	2.4	2.2	2.2	2.7	3.1	3.4
Other tobacco products	213.4	9.7	10.5	10.1	9.6	9.2	9.9	9.7	10.1

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Nondurable goods—Continued									
Textile mill products:									
Lace and warp knit fabric mills, and knitting mills, nec	2258,9	21.0	21.3	21.1	21.7	21.1	21.2	21.5	21.8
Finishing plants, nec	2269	12.4	13.8	14.1	14.6	14.1	14.0	15.0	14.9
Thread mills	2284	6.9	6.7	6.7	6.9	7.4	6.6	6.7	7.2
Coated fabrics, not rubberized	2295	8.8	8.9	8.9	9.0	9.0	9.3	9.7	9.6
Tire cord and fabrics	2296	6.0	6.4	6.7	6.5	6.5	6.5	6.3	6.6
Cordage and twine	2298	7.5	7.0	7.0	6.7	7.6	7.0	7.0	7.2
Nonwoven fabrics and other textile goods, nec	2297,9	28.1	28.6	28.0	29.7	30.1	28.8	30.7	31.3
Apparel and other textile products:									
Men's and boys' underwear and nightwear	2322	24.8	24.4	27.0	25.2	25.5	19.1	15.9	13.5
Men's and boys' neckwear	2323	6.3	7.3	6.9	6.9	6.6	5.7	5.4	4.6
Men's and boys' clothing, nec	2329	49.4	52.9	52.3	50.4	50.5	44.6	43.2	40.7
Hats, caps, and millinery	235	15.6	18.2	19.9	20.6	20.3	19.2	17.6	16.7
Girls' and children's outerwear, nec	2369	29.1	29.4	28.9	25.2	25.8	22.4	18.0	16.1
Fur goods	237	1.2	.9	.9	.8	.8	.8	.8	.7
Fabric dress and work gloves	2381	6.0	5.5	5.3	5.4	5.0	4.8	4.9	4.8
Robes and dressing gowns	2384	4.9	4.8	3.9	3.5	3.0	2.4	1.9	1.7
Waterproof outerwear	2385	6.6	6.2	6.3	5.1	4.1	4.3	4.5	3.8
Leather and sheep-lined clothing	2386	2.7	2.5	2.8	2.9	2.5	2.1	2.0	2.2
Apparel belts	2387	8.4	8.1	8.2	7.0	6.3	5.8	5.5	5.0
Apparel and accessories, nec	2389	14.3	14.4	16.7	17.1	16.2	16.0	15.6	15.7
Textile bags	2393	9.6	10.0	10.1	10.9	11.9	11.6	11.6	10.2
Canvas and related products	2394	16.5	16.7	17.6	19.4	19.9	19.0	19.1	19.0
Pleating and stitching	2395	14.9	15.8	16.4	16.1	16.8	18.4	17.9	18.0
Other fabricated textile products	2397,9	32.4	31.7	32.7	34.7	35.7	34.6	34.0	34.5
Paper and allied products:									
Pulp mills	261	14.3	13.9	13.5	12.6	12.5	12.6	12.4	12.1
Setup paperboard boxes	2652	8.1	7.3	7.2	7.4	7.5	7.4	7.0	6.6
Fiber cans, drums, and similar products	2655	15.9	15.0	15.1	15.4	15.0	14.8	14.8	14.7
Paper, coated and laminated, packaging	2671	21.2	21.4	21.4	21.3	22.7	21.6	22.0	22.8
Bags: uncoated paper and multiwall	2674	19.1	19.6	18.9	18.8	18.5	18.1	18.2	17.2
Die-cut paper and board	2675	16.8	18.0	18.8	19.4	20.1	19.8	20.0	20.5
Sanitary paper products	2676	30.8	32.4	33.0	32.9	30.0	29.6	30.6	31.0
Stationery and converted paper products, nec	2678,9	42.2	41.1	41.8	41.4	42.1	41.3	40.9	40.1
Printing and publishing:									
Commercial printing, gravure	2754	18.1	18.9	19.5	20.7	20.4	20.3	20.0	20.4
Greeting cards	277	27.0	26.0	26.0	27.2	26.4	26.4	27.3	28.1
Blankbooks and looseleaf binders	2782	43.0	41.3	41.3	40.3	39.3	38.1	37.8	36.3
Bookbinding and related work	2789	26.9	27.0	27.2	28.3	29.9	28.2	27.9	27.5
Typesetting	2791	29.8	25.2	23.7	23.3	21.2	19.8	18.4	18.0
Platemaking services	2796	32.0	33.4	33.2	33.1	34.0	32.5	31.9	32.3
Chemicals and allied products:									
Alkalies and chlorine	2812	12.6	12.9	12.8	12.6	10.0	10.5	10.5	10.2
Industrial gases	2813	23.6	24.6	24.2	23.4	23.0	23.5	23.9	24.2
Inorganic pigments	2816	10.1	10.6	10.9	11.2	11.8	11.7	11.6	11.5
Synthetic rubber	2822	15.3	16.0	16.5	16.1	16.0	16.5	17.0	18.4
Cellulosic synthetic fibers	2823	13.1	11.4	11.7	17.6	17.8	17.5	17.0	15.5
Medicinals and botanicals	2833	18.3	18.7	19.7	19.8	20.6	21.5	23.3	24.6
Diagnostic and other biological products	2835,6	22.3	26.5	28.4	29.5	28.8	30.4	32.1	34.7
Gum and wood chemicals	2861	4.8	3.5	2.9	2.8	2.7	2.8	2.5	2.3
Nitrogenous fertilizers	2873	10.6	10.6	9.2	8.9	8.7	8.7	8.9	9.4
Phosphatic fertilizers	2874	10.3	12.1	10.4	9.4	9.9	10.0	10.0	9.7
Fertilizers, mixing only	2875	10.4	9.9	9.8	9.9	10.1	10.0	10.0	9.3
Agricultural chemicals, nec	2879	25.3	27.0	27.4	26.8	25.6	24.2	24.1	24.1
Adhesives and sealants	2891	23.6	23.0	23.5	22.8	24.5	24.7	25.6	26.1
Explosives	2892	14.4	12.9	10.1	9.0	8.2	7.8	7.6	7.9
Printing ink	2893	16.2	15.7	16.3	16.3	15.9	16.3	16.4	16.4
Other chemical preparations	2895,9	44.5	41.9	42.5	44.8	43.5	44.3	43.7	43.8
Petroleum and coal products:									
Asphalt paving mixtures and blocks	2951	10.9	11.1	10.9	11.3	11.7	11.6	12.2	13.1
Asphalt felts and coatings	2952	12.7	12.6	13.0	13.1	12.9	13.0	13.8	13.5
Miscellaneous petroleum and coal products	299	12.3	12.3	12.5	12.6	14.0	14.3	14.1	14.4

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Nondurable goods—Continued									
Rubber and miscellaneous plastics products:									
Gaskets, packing and sealing devices	3053	33.9	35.1	36.0	37.6	40.5	39.8	40.4	42.3
Mechanical rubber goods	3061	44.2	44.6	45.9	47.9	50.5	50.4	51.3	53.1
Fabricated rubber products, nec	3069	55.6	56.6	57.0	58.7	61.2	62.2	60.8	60.2
Unsupported plastics film and sheet	3081	55.2	55.9	56.3	57.5	61.6	62.3	62.8	62.6
Unsupported plastics profile shapes	3082	25.4	23.7	23.9	25.4	23.6	23.8	24.2	25.6
Laminated plastics plate and sheet	3083	20.2	20.2	21.6	21.9	22.6	23.4	24.1	25.0
Plastics pipe	3084	14.7	13.9	14.3	15.4	16.7	16.3	18.3	18.5
Plastics bottles	3085	29.7	30.2	31.1	31.6	33.1	32.2	32.4	34.0
Plastics foam products	3086	48.4	49.5	50.7	53.4	55.1	55.6	58.4	57.9
Custom compound purchased resins	3087	23.3	22.3	23.4	24.6	26.1	26.2	25.6	25.8
Plastics plumbing fixtures and plastic products, nec	3088.9	385.4	397.6	422.9	445.6	475.0	468.1	480.9	491.2
Leather and leather products:									
Footwear cut stock	313	5.4	4.8	4.2	3.4	2.9	2.0	2.1	1.8
House slippers	3142	3.7	3.2	2.8	3.1	3.4	2.6	2.3	2.0
Footwear, except rubber, nec	3149	9.6	8.1	7.6	7.2	6.8	5.7	5.6	5.0
Leather gloves and mittens	315	2.5	2.5	2.6	2.6	2.8	2.5	2.6	2.4
Women's handbags and purses	3171	4.9	4.7	5.1	5.1	4.7	4.3	3.5	3.0
Personal leather goods, nec	3172	8.4	7.4	7.2	7.0	6.9	6.7	6.4	5.9
Leather goods, nec	319	9.6	9.7	9.9	10.7	12.0	12.7	12.5	12.4
Service-producing		84,117	84,576	86,181	88,960	92,065	94,068	96,544	99,179
Transportation and public utilities		5,707	5,655	5,720	5,890	6,066	6,159	6,331	6,497
Transportation:									
Other railroads and switching and terminal services	4013	32.2	32.1	31.9	26.9	26.2	25.6	24.3	25.3
Bus charter service, and bus terminal and service facilities	414.7	27.4	27.7	28.6	29.3	30.1	31.9	33.0	35.3
Local trucking, without storage	4212	(1)	(1)	407.7	432.8	442.4	450.1	460.4	470.8
Trucking, except local	4213	(1)	(1)	731.3	764.8	804.7	819.4	829.4	862.9
Local trucking, with storage	4214	(1)	(1)	64.3	67.4	70.1	71.4	72.3	73.4
Courier services, except by air	4215	(1)	(1)	64.4	83.7	96.3	102.5	107.0	112.3
General warehousing and storage	4225	66.5	70.2	72.3	79.5	84.0	88.7	93.2	100.3
Warehousing and storage, nec	4221,2.6	49.5	49.2	50.9	53.2	55.5	57.4	59.3	63.2
Trucking terminal facilities	423	3.9	3.5	4.1	4.2	4.1	4.8	5.2	5.6
Deep sea and Great Lakes freight transportation	441,2,3	32.4	34.2	30.3	29.3	28.2	26.3	25.6	23.2
Water transportation of passengers	448	15.0	15.5	15.0	16.5	16.3	16.7	17.7	18.8
Marine cargo handling	4491	57.6	56.8	53.3	55.2	59.3	55.0	57.8	54.2
Marinas	4493	17.2	16.8	17.1	17.8	18.2	19.2	20.2	20.5
Towing, tugboat, and water transportation services, nec	4492.9	36.8	33.5	33.0	35.2	35.5	35.5	38.2	40.3
Air courier services	4513	315.3	324.6	341.7	361.4	411.0	446.8	460.5	464.5
Air transportation, nonscheduled	452	27.5	28.5	30.2	34.0	40.1	42.1	43.1	45.9
Tour operators	4725	21.6	23.6	24.9	27.4	29.5	31.5	33.4	33.5
Passenger transport arrangement, nec	4729	13.9	12.1	12.0	11.5	11.7	11.7	12.3	12.3
Rental of railroad cars	474	5.6	4.7	4.4	4.7	4.9	4.9	4.9	5.0
Miscellaneous transportation services	478	23.3	24.3	27.8	32.1	35.9	38.2	40.9	46.5
Communications and public utilities:									
Radiotelephone communications	4812	44.2	50.7	59.6	74.3	95.6	117.3	144.1	161.8
Telegraph and other communications	482	10.4	8.7	7.0	7.2	8.5	8.2	9.0	9.2
Communications services, nec	489	23.3	17.2	17.7	17.2	17.8	19.8	21.4	23.7
Water supply	494	25.8	25.7	26.3	26.6	27.6	28.3	28.2	29.0
Steam and air-conditioning supply, and irrigation systems	496.7	4.6	4.2	3.6	3.7	3.7	3.8	3.7	3.8
Wholesale trade		6,050	5,993	5,903	6,047	6,316	6,396	6,567	6,742
Tires and tubes	5014	28.4	28.4	28.6	29.0	29.7	30.0	30.5	30.4
Motor vehicle parts, used	5015	39.8	39.5	40.0	42.0	43.6	44.5	46.5	46.9
Brick, stone, and related materials	5032	37.0	37.4	37.6	39.7	44.8	46.5	49.6	51.9
Roofing, siding, and insulation	5033	25.8	25.9	27.0	28.2	31.1	32.2	34.4	35.5
Photographic equipment and supplies	5043	30.7	28.9	27.5	27.6	26.7	24.7	22.7	21.9
Commercial equipment, nec	5046	50.8	49.7	50.4	51.1	54.1	54.4	55.5	57.1
Ophthalmic goods	5048	20.1	20.7	19.9	20.3	21.2	21.7	21.8	22.3
Professional equipment, nec	5049	34.3	35.8	35.0	34.8	35.8	35.3	35.8	36.4
Warm air heating and air-conditioning	5075	51.7	51.6	52.0	54.5	57.2	59.0	60.7	61.2
Refrigeration equipment and supplies	5078	13.3	12.9	12.7	13.5	13.3	13.8	13.9	13.4
Service establishment equipment	5087	82.0	80.5	76.4	78.5	81.9	83.8	84.7	86.4
Transportation equipment and supplies	5088	39.2	38.9	35.3	34.6	36.1	37.4	38.5	41.9
Sporting and recreational goods	5091	41.7	43.1	40.7	43.6	46.4	46.7	47.8	48.4

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Wholesale trade—Continued									
Toys and hobby goods and supplies	5092	23.1	24.1	25.0	26.2	27.8	27.5	28.2	28.0
Jewelry and precious stones	5094	47.9	48.0	48.5	49.1	48.0	47.9	48.3	49.8
Wholesale trade durable goods, nec	5099	69.2	69.4	64.2	69.1	76.7	77.3	82.5	81.1
Printing and writing paper	5111	25.0	23.9	23.1	22.4	23.2	23.5	23.6	23.4
Industry and personal service paper	5113	86.4	84.4	86.0	86.7	85.5	87.7	87.8	88.9
Piece goods and notions	5131	51.2	52.5	52.6	51.8	53.9	51.8	51.5	51.5
Men's and boys' clothing	5136	42.4	44.4	47.1	48.2	51.2	50.2	50.6	51.7
Women's and children's clothing	5137	80.9	85.8	81.8	84.2	90.1	86.8	89.7	90.0
Footwear	5139	21.5	22.0	22.7	23.8	25.9	25.0	26.6	27.5
Packaged frozen foods	5142	34.5	35.3	35.2	35.5	36.4	37.8	37.5	38.7
Dairy products, except dried or canned	5143	46.8	46.3	45.0	45.5	44.9	43.6	42.8	42.9
Poultry and poultry products	5144	19.8	18.7	17.5	17.1	17.4	16.4	16.1	16.0
Confectionery	5145	48.5	49.8	50.6	52.1	54.4	55.2	57.0	54.9
Fish and seafoods	5146	29.3	28.7	27.3	27.9	29.0	29.2	28.6	28.4
Groceries and related products, nec	5149	231.3	236.5	231.8	242.6	258.4	263.4	272.2	283.9
Grain and field beans	5153	63.2	63.3	59.9	59.8	60.0	58.8	58.1	57.8
Livestock	5154	35.4	35.1	34.7	34.8	33.6	31.4	30.9	31.0
Farm-product raw materials, nec	5159	16.7	16.2	15.6	15.6	15.5	14.2	14.8	15.1
Plastics materials and basic shapes	5162	24.5	25.6	26.5	27.2	29.2	30.0	31.3	32.4
Chemicals and allied products, nec	5169	113.0	113.2	114.9	113.9	117.6	117.7	119.7	121.4
Books, periodicals, and newspapers	5192	70.7	72.0	73.8	77.8	84.0	85.5	84.0	87.4
Flowers and florists' supplies	5193	50.2	51.1	49.7	51.6	56.1	56.3	59.0	57.0
Tobacco and tobacco products	5194	45.5	48.3	48.6	45.9	45.2	43.6	41.9	41.5
Paints, varnishes, and supplies	5198	29.2	28.0	28.2	28.5	30.0	30.4	29.9	29.4
Wholesale trade nondurable goods, nec	5199	127.3	136.6	125.3	134.6	147.9	146.8	159.5	165.1
Retail trade		18,934	18,855	19,133	19,857	20,627	21,023	21,467	21,724
Mobile home dealers	527	23.7	23.6	25.1	28.6	33.4	36.7	41.3	43.1
Fruit and vegetable markets	543	22.0	23.2	22.3	24.0	25.3	25.2	25.8	25.9
Candy, nut, and confectionery stores	544	30.9	28.2	29.2	29.0	28.5	29.8	30.8	29.2
Miscellaneous food stores	549	43.1	44.9	49.1	56.2	64.8	72.7	82.8	79.4
Used car dealers	552	61.3	62.2	63.1	70.4	77.1	83.0	89.8	95.0
Boat dealers	555	30.7	29.0	28.1	29.8	32.6	33.9	35.4	35.7
Recreational vehicle dealers	556	19.1	19.7	20.5	22.7	24.4	25.6	26.3	27.4
Motorcycle dealers	557	23.4	23.4	23.4	25.9	28.7	30.3	31.9	33.1
Women's accessory and specialty stores	563	49.8	50.0	51.5	53.6	53.6	50.7	50.5	52.6
Children's and infants' wear stores	564	32.9	32.5	33.0	34.6	38.2	39.3	39.5	40.9
Miscellaneous apparel and accessory stores	569	77.6	78.0	78.6	82.6	85.6	86.7	89.6	91.6
Floor covering stores	5713	75.0	74.5	76.3	78.8	83.1	82.1	84.5	82.8
Drapery, upholstery, and miscellaneous home furnishings	5714,9	95.0	95.1	96.7	101.3	110.7	114.8	124.0	129.9
Computer and software stores	5734	75.3	78.9	80.3	86.8	97.1	104.6	118.1	130.1
Musical instrument stores	5736	26.2	26.3	26.8	27.9	29.4	30.2	31.3	32.8
Hobby, toy, and game shops	5945	89.9	93.4	90.3	96.7	102.6	107.1	107.9	115.3
Camera, luggage, and leather goods stores	5946,8	38.9	37.8	36.7	36.1	36.7	37.3	37.9	38.3
Direct selling establishments	5963	55.2	52.4	51.7	51.7	54.2	53.3	53.8	54.2
Finance, insurance, and real estate		6,656	6,534	6,633	6,883	6,770	6,815	6,988	7,269
Central reserve depositories	601	27.3	27.0	26.0	26.3	25.8	25.6	25.2	23.8
Foreign banks and branches and agencies	608	29.3	34.2	34.4	32.9	32.8	32.3	30.5	29.4
Functions closely related to banking	609	60.3	60.4	62.5	66.6	68.4	71.6	77.4	82.2
Federal and federally sponsored credit agencies	611	12.1	16.2	17.8	19.9	21.5	20.8	21.3	22.0
Short-term business credit	6153	50.7	49.1	49.6	53.4	56.5	63.0	68.9	73.8
Miscellaneous business credit institutions	6159	35.0	32.4	31.5	33.6	34.0	38.5	42.7	45.5
Investment advice	6282	54.0	55.2	62.7	72.5	74.9	81.0	94.7	103.6
Security and commodity services, nec	6289	27.2	25.8	24.0	24.6	24.3	25.3	27.1	28.7
Bank holding companies	6712	28.6	25.2	27.8	27.7	28.8	29.1	27.1	27.0
Holding companies, nec	6719	82.0	74.9	75.8	76.1	73.4	75.0	78.0	78.2
Trusts	673	76.1	76.5	68.2	71.0	65.9	43.0	45.4	63.2
Investment offices and miscellaneous investing	672,9	42.1	42.1	48.1	54.6	56.2	60.9	66.0	72.2
Accident and health insurance	6321	55.9	61.5	61.0	61.7	61.1	61.2	62.4	65.8
Pension, health, and welfare funds	637	38.9	39.4	39.4	41.8	42.4	43.4	44.8	47.8
Surety insurance and insurance carriers, nec	635,9	16.7	17.8	18.8	19.9	20.5	21.3	22.5	26.2
Title abstract offices	654	28.3	30.4	32.1	37.5	29.7	31.5	32.1	36.1

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Services		28,053	28,586	29,647	30,872	32,612	33,881	35,328	36,862
Agricultural services:									
Animal services, except veterinary	075	43.5	40.9	42.8	45.2	45.4	47.2	49.4	51.3
Hotels and other lodging places:									
Camps and recreational vehicle parks	703	22.0	22.8	23.4	23.7	25.3	26.4	25.8	26.6
Rooming and boarding houses, and membership-basis organization hotels	702,4	17.9	17.1	17.3	16.9	17.2	17.7	16.8	16.7
Personal services:									
Power laundries and garment pressing and cleaners agents	7211,2	(1)	(1)	58.4	52.9	53.2	51.1	49.0	48.9
Linen supply	7218	(1)	(1)	63.5	63.2	64.5	66.3	68.2	69.3
Drycleaning plants and carpet and upholstery cleaning, except rugs	7216,7	(1)	(1)	191.5	197.4	203.3	204.2	207.8	205.6
Industrial launderers	7218	(1)	(1)	43.8	48.4	52.4	53.2	54.6	56.2
Coin-operated laundries and laundry and garment services, nec	7215,9	(1)	(1)	58.6	54.1	53.4	53.7	54.0	53.9
Barber shops	724	14.1	13.9	13.8	12.3	12.1	11.7	11.3	10.6
Shoe repair shops and shoeshine parlors	725	6.6	6.7	6.4	5.7	5.5	5.1	4.9	4.4
Tax return preparation services	7291	105.7	114.4	118.1	122.9	127.8	124.5	116.7	123.3
Miscellaneous personal services, nec	7299	98.2	97.0	100.4	96.4	100.0	105.0	110.0	112.9
Business services:									
Outdoor, radio, television, and other advertising, nec	7312,3,9	68.7	69.6	72.1	70.6	74.7	80.4	84.9	89.4
Adjustment and collection services	7322	70.5	74.6	77.6	78.5	83.2	89.3	93.9	104.3
Credit reporting services	7323	35.8	37.9	37.7	38.0	34.0	36.5	37.0	37.9
Direct mail advertising services	7331	88.1	84.7	88.3	90.7	96.4	103.2	107.9	108.3
Commercial photography	7335	16.1	15.7	16.1	15.2	15.7	15.3	15.3	15.2
Commercial art and graphic design	7336	45.6	45.1	47.3	48.2	54.8	58.7	61.1	64.5
Secretarial and court reporting	7338	29.7	30.7	33.0	33.9	36.7	40.6	42.5	44.6
Computer facilities management	7376	24.2	25.2	25.8	23.9	25.0	27.6	27.7	28.5
Computer rental and leasing	7377	10.8	10.2	9.8	9.3	8.7	9.1	8.5	9.7
Computer related services, nec	7379	94.0	101.9	116.1	130.8	159.9	201.7	262.7	332.0
News syndicates	7383	10.0	10.2	9.9	10.0	11.0	12.3	11.8	11.9
Business services, nec	7389	635.5	647.7	702.3	713.2	816.6	902.0	980.7	1,046.9
Auto repair, services, and parking:									
Passenger car leasing	7515	10.0	9.5	9.3	8.7	8.7	9.2	8.8	9.4
Truck and utility trailer rental	7513,9	55.3	52.1	53.5	53.4	57.5	58.1	57.8	56.8
Auto exhaust system repair shops	7533	22.4	23.3	23.9	25.0	26.2	26.7	26.9	25.5
Automotive glass replacement shops	7536	20.5	20.0	20.6	22.3	25.7	26.9	29.7	31.6
Automotive transmission repair shops	7537	23.5	23.1	23.9	25.2	26.2	27.8	28.8	29.3
Automotive repair shops, nec	7539	50.8	50.0	50.2	50.2	52.1	53.9	54.1	53.7
Automotive services, nec	7549	62.9	66.1	71.0	79.7	88.7	97.6	105.6	108.7
Reupholstery and furniture repair	764	20.8	20.5	20.9	20.5	21.6	21.5	21.6	21.8
Watch and miscellaneous repair shops	763,9	208.0	212.6	224.7	204.0	225.0	235.7	234.7	240.5
Motion pictures:									
Motion picture distribution and services	782	14.7	14.9	15.0	18.8	20.8	24.3	20.5	18.6
Amusement and recreational services:									
Dance studios, schools, and halls	791	22.7	24.6	24.9	25.4	26.4	27.2	29.0	29.7
Producers, orchestras, and entertainers	792	137.0	135.9	138.5	138.6	144.3	149.5	161.9	160.3
Commercial sports	794	91.9	91.8	91.7	94.7	96.2	105.8	109.9	109.6
Public golf courses	7992	35.5	39.7	39.4	46.4	54.4	56.4	65.8	72.0
Coin-operated amusement devices	7993	25.7	28.7	35.8	41.1	70.3	69.9	80.6	80.8
Amusement parks	7996	87.7	89.3	91.2	93.4	94.9	98.7	104.0	102.6
Amusement and recreation, nec	7999	186.3	208.4	255.4	306.3	320.5	326.2	338.0	353.1
Health services:									
Offices and clinics of osteopathic physicians	803	43.1	45.1	45.4	50.1	49.9	49.0	48.8	50.1
Offices and clinics of podiatrists	8043	24.3	25.2	25.8	26.7	27.7	27.9	28.2	28.1
Offices and clinics of health practitioners, nec.	8049	129.1	148.6	167.4	189.7	211.1	223.0	239.1	254.4
Health and allied services, nec	809	234.0	248.7	270.1	280.7	298.0	309.1	323.4	335.2

See footnotes at end of table.

Table 5. Employment benchmarks for industries not published monthly, March 1991-98—Continued

(In thousands)

Industry	1987 SIC Code	1991	1992	1993	1994	1995	1996	1997	1998
Services—Continued									
Specialty outpatient clinics, nec.	8093	159.6	167.1	179.5	184.3	194.4	198.3	202.5	204.9
Kidney dialysis centers and health and allied services, nec.	8092,9	74.4	81.6	90.6	96.4	103.6	110.8	120.9	130.3
Educational services:									
Libraries	823	18.4	19.9	14.3	16.2	21.9	21.9	22.3	22.9
Schools and educational services, nec.	829	104.6	108.2	113.8	120.1	130.1	139.1	150.9	166.4
Membership organizations:									
Religious organizations	866	1,211.6	1,149.9	1,195.3	1,238.7	1,296.5	1,321.6	1,380.2	1,468.2
Political and membership organizations, nec.	865,9	81.1	80.5	96.8	105.5	101.8	114.7	114.7	121.0
Engineering and management services:									
Testing laboratories	8734	74.5	79.6	80.5	82.8	88.7	88.9	91.2	97.3
Facilities support services	8744	58.8	66.3	66.3	71.7	73.1	77.3	82.4	86.4
Business consulting, nec.	8748	80.0	90.5	101.2	116.7	134.6	150.9	164.4	180.3
Government		18,717	18,953	19,145	19,411	19,674	19,794	19,863	20,085
Federal:									
Small arms ammunition and ordnance		18.1	18.8	16.9	14.1	12.9	11.9	14.9	14.0
Other manufacturing		27.1	25.6	22.3	21.1	20.3	20.0	15.2	13.9
Trade		79.5	75.3	70.1	66.1	58.7	53.3	64.4	60.7
Finance		31.2	33.6	32.8	33.6	27.9	19.7	16.4	15.3
Other services		155.7	158.9	152.8	149.1	144.1	136.1	135.1	126.8
All other Federal Government, except Postal Service		1,489.3	1,533.1	1,471.4	1,485.4	1,437.2	1,391.4	1,342.6	1,319.3
State:									
Construction		85.7	82.5	84.7	88.8	90.4	88.4	86.6	86.4
Transportation and public utilities		49.4	48.4	48.7	49.3	49.4	49.5	52.9	52.1
Services		2,662.4	2,680.0	2,717.6	2,764.9	2,830.1	2,799.0	2,741.8	2,749.6
Social services		212.2	203.7	212.0	217.2	218.5	213.0	208.7	205.6
Services, except hospitals, education, and social services		140.5	135.6	138.7	139.3	141.5	141.8	140.8	155.9
Local:									
Services		7,467.7	7,569.6	7,718.1	7,864.5	8,032.2	8,169.0	8,339.1	8,560.6
Social services		113.5	121.3	123.2	131.3	138.0	141.3	138.0	138.3
Services, except hospitals, education, and social services		230.6	239.5	244.5	261.8	278.7	306.2	330.0	384.1
Nonclassifiable establishments		127.3	142.5	133.9	130.6	147.1	167.6	143.6	237.5

¹ Not available.

NOTE: N.e.c. is an abbreviation for "not elsewhere classified" and designates broad categories of industries which cannot be more specifically

identified. This table includes data for totals and some industry divisions which are published regularly.

Table 6. Seasonal adjustment factors for employees on nonfarm payrolls by industry

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total¹								
Goods-producing¹								
Mining¹								
Metal mining	0.9838	0.9877	0.9984	1.0207	1.0195	1.0206	1.0041	0.9989
Coal mining .....	.9968	.9987	.9975	1.0036	.9951	1.0046	1.0018	.9986
Oil and gas extraction .....	.9838	.9848	.9917	1.0036	1.0154	1.0174	1.0164	1.0083
Nonmetallic minerals, except fuels .....	.9575	.9979	1.0235	1.0379	1.0376	1.0393	1.0323	1.0271
Construction¹								
General building contractors .....	.9502	.9755	.9984	1.0322	1.0508	1.0497	1.0251	1.0233
Heavy construction, except building .....	.8815	.9677	1.0397	1.0700	1.0831	1.0942	1.0958	1.0850
Special trade contractors .....	.9359	.9723	1.0085	1.0339	1.0519	1.0563	1.0408	1.0360
Manufacturing¹								
Durable goods¹								
Lumber and wood products .....	.9831	.9877	.9977	1.0121	1.0146	1.0166	1.0105	1.0072
Furniture and fixtures	1.0018	1.0011	1.0008	1.0051	.9897	.9982	.9984	.9992
Stone, clay, and glass products .....	.9783	.9977	1.0082	1.0205	1.0126	1.0199	1.0153	1.0158
Primary metal industries	1.0001	.9990	.9994	1.0055	.9895	.9982	1.0014	1.0000
Blast furnaces and basic steel products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Fabricated metal products .....	.9992	.9984	.9996	1.0050	.9890	.9988	1.0013	1.0024
Industrial machinery and equipment	1.0025	1.0022	1.0025	1.0059	.9971	.9962	.9977	.9965
Computer and office equipment .....	.9970	.9955	.9997	1.0033	1.0048	1.0024	.9992	1.0004
Electronic and other electrical equipment .....	.9996	.9981	.9979	1.0036	.9974	.9989	1.0005	.9998
Electronic components and accessories	1.0009	.9991	1.0000	1.0045	1.0020	1.0004	.9986	.9976
Transportation equipment ³	1.0010	1.0007	1.0031	1.0060	.9850	.9990	1.0009	1.0007
Motor vehicles and equipment ³	1.0019	1.0015	1.0061	1.0095	.9731	.9990	1.0010	1.0010
Aircraft and parts .....	.9973	.9977	.9969	.9982	.9978	.9960	1.0003	1.0017
Instruments and related products .....	.9994	.9997	.9989	1.0040	1.0011	1.0019	.9995	.9997
Miscellaneous manufacturing .....	.9971	1.0007	1.0009	1.0059	.9963	1.0027	1.0065	1.0130
Nondurable goods¹								
Food and kindred products .....	.9769	.9762	.9829	.9991	1.0139	1.0417	1.0349	1.0182
Tobacco products .....	.9832	.9533	.9204	.9176	.9148	1.0063	1.0382	1.0582
Textile mill products .....	.9967	1.0004	1.0022	1.0071	.9947	1.0003	1.0026	1.0041
Apparel and other textile products .....	.9976	.9974	1.0036	1.0100	.9894	1.0062	1.0105	1.0101
Paper and allied products .....	.9964	.9950	.9972	1.0068	1.0020	1.0032	.9998	.9990
Printing and publishing .....	.9976	.9987	.9990	1.0017	1.0006	.9997	.9974	.9997
Chemicals and allied products .....	.9975	.9963	1.0000	1.0065	1.0054	1.0054	1.0006	.9987
Petroleum and coal products .....	.9765	.9926	1.0064	1.0200	1.0233	1.0233	1.0165	1.0144
Rubber and misc. plastics products	1.0014	.9996	.9997	1.0080	.9911	1.0005	1.0022	1.0011
Leather and leather products	1.0011	1.0038	1.0048	1.0109	.9715	1.0016	.9999	1.0073
Service-producing¹								
Transportation and public utilities¹								
Transportation ¹								
Railroad transportation .....	.9877	.9995	1.0041	1.0043	1.0084	1.0046	1.0102	1.0068
Local and interurban passenger transit ³	1.0317	1.0228	1.0386	.9978	.8698	.8634	1.0253	1.0374
Trucking and warehousing .....	.9795	.9863	.9975	1.0094	1.0130	1.0181	1.0162	1.0173
Water transportation .....	.9643	.9853	1.0087	1.0375	1.0541	1.0424	1.0215	.9996
Transportation by air .....	.9906	.9926	.9952	.9969	.9983	.9969	.9942	.9974
Pipelines, except natural gas .....	.9884	.9857	.9922	1.0157	1.0260	1.0185	.9991	.9966
Transportation services .....	.9995	.9996	1.0005	1.0019	1.0009	1.0026	1.0003	1.0031
Communications and public utilities ¹								
Communications .....	.9983	.9985	1.0009	1.0040	1.0034	1.0038	.9995	.9989
Electric, gas, and sanitary services .....	.9971	.9965	1.0011	1.0075	1.0105	1.0072	.9989	.9975
Wholesale trade¹								
Durable goods .....	.9971	.9995	1.0016	1.0064	1.0069	1.0037	.9988	.9986
Nondurable goods .....	.9909	.9946	1.0008	1.0061	1.0073	1.0055	1.0054	1.0076
Retail trade¹								
Building materials and garden supplies .....	.9670	1.0107	1.0464	1.0519	1.0383	1.0214	1.0023	.9938
General merchandise stores .....	.9622	.9653	.9709	.9773	.9790	.9808	.9868	1.0172
Department stores .....	.9627	.9642	.9705	.9770	.9789	.9820	.9878	1.0178
Food stores .....	.9866	.9873	.9948	1.0054	1.0072	1.0043	.9977	1.0022
Automotive dealers and service stations .....	.9906	.9958	1.0025	1.0094	1.0133	1.0117	1.0062	1.0030
New and used car dealers .....	.9976	.9985	1.0001	1.0037	1.0051	1.0038	1.0024	1.0022
Apparel and accessory stores .....	.9681	.9758	.9775	.9905	.9944	1.0026	.9887	.9963
Furniture and home furnishings stores .....	.9916	.9892	.9885	.9890	.9916	.9903	.9895	.9993
Eating and drinking places .....	.9843	.9987	1.0194	1.0299	1.0221	1.0245	1.0170	.9939
Miscellaneous retail establishments .....	.9787	.9807	.9882	.9848	.9811	.9851	.9914	1.0051

See footnotes at end of table.

Table 6. Seasonal adjustment factors for employees on nonfarm payrolls by industry—Continued

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Finance, insurance, and real estate¹								
Finance ¹								
Depository institutions	0.9972	0.9970	0.9982	1.0063	1.0083	1.0057	0.9971	0.9960
Commercial banks .....	.9966	.9965	.9979	1.0063	1.0085	1.0061	.9965	.9957
Savings institutions .....	.9988	.9999	1.0005	1.0085	1.0101	1.0048	.9964	.9953
Nondepository institutions	1.0004	.9993	1.0000	1.0033	1.0041	1.0033	.9982	.9970
Mortgage bankers and brokers .....	.9988	1.0013	1.0027	1.0077	1.0067	1.0064	1.0005	.9972
Security and commodity brokers .....	.9952	.9956	.9965	1.0048	1.0105	1.0085	1.0013	.9974
Holding and other investment offices .....	.9995	1.0035	1.0010	1.0028	1.0058	.9989	.9955	.9976
Insurance ¹								
Insurance carriers .....	.9971	.9987	.9987	1.0033	1.0065	1.0042	.9991	.9982
Insurance agents, brokers, and service	1.0000	.9985	.9998	1.0037	1.0035	1.0022	.9969	.9982
Real estate .....	.9765	.9895	1.0042	1.0283	1.0382	1.0357	1.0119	.9980
Services¹								
Agricultural services .....	.8879	1.0075	1.0769	1.1107	1.1075	1.0931	1.0549	1.0368
Hotels and other lodging places .....	.9587	.9739	1.0097	1.0564	1.0808	1.0764	1.0261	1.0020
Personal services	1.0501	1.0519	.9929	.9774	.9646	.9648	.9688	.9749
Business services .....	.9851	.9904	.9974	1.0054	1.0047	1.0118	1.0118	1.0178
Services to buildings .....	.9938	.9990	1.0072	1.0110	1.0078	1.0086	1.0044	1.0004
Personnel supply services .....	.9678	.9819	.9947	1.0047	1.0007	1.0258	1.0235	1.0402
Help supply services .....	.9653	.9790	.9944	1.0057	1.0030	1.0291	1.0279	1.0412
Computer and data processing services	1.0024	1.0008	.9981	1.0001	1.0017	1.0005	.9961	.9962
Auto repair, services, and parking .....	.9984	.9993	1.0015	1.0069	1.0068	1.0060	1.0022	.9996
Miscellaneous repair services .....	.9906	.9995	1.0010	1.0103	1.0128	1.0096	1.0028	1.0039
Motion pictures	1.0040	.9963	1.0004	1.0035	1.0169	1.0206	.9887	.9810
Amusement and recreation services .....	.9125	.9884	1.0535	1.1498	1.1842	1.1577	1.0567	.9623
Health services								
Offices and clinics of medical doctors .....	.9975	.9982	.9985	1.0027	1.0041	1.0036	.9992	.9998
Nursing and personal care facilities .....	.9981	.9977	.9977	1.0013	1.0033	1.0029	1.0011	1.0006
Hospitals .....	.9988	.9984	.9985	1.0019	1.0041	1.0019	.9993	1.0002
Home health care services .....	.9993	1.0006	1.0036	1.0029	.9984	.9959	.9999	1.0027
Legal services .....	.9949	.9942	.9945	1.0148	1.0175	1.0067	.9951	.9965
Educational services ³	1.0637	1.0638	1.0148	.9108	.8734	.8584	.9772	1.0670
Social services								
Child day care services	1.0239	1.0289	1.0336	.9777	.9172	.9196	1.0153	1.0282
Residential care .....	.9989	.9999	1.0003	1.0082	1.0085	1.0055	.9969	.9964
Museums and botanical and zoological gardens .....	.9385	.9857	1.0387	1.0770	1.0920	1.0729	1.0129	1.0100
Membership organizations ³ .....	.9943	.9951	.9998	1.0160	1.0304	1.0169	.9908	.9942
Engineering and management services								
Engineering and architectural services	1.0022	1.0047	.9987	1.0072	1.0081	1.0033	.9969	.9958
Management and public relations .....	.9899	.9906	.9976	1.0138	1.0156	1.0153	1.0042	1.0016
Services, nec	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Government¹								
Federal ¹								
Postal Service .....	.9920	.9905	.9894	.9903	.9861	.9895	.9898	.9974
Federal, except Postal Service .....	.9965	1.0004	1.0052	1.0148	1.0136	1.0088	1.0009	.9934
State ¹								
Education	1.0711	1.0668	1.0317	.9096	.8555	.8505	.9791	1.0659
Other State government .....	.9935	.9967	1.0002	1.0123	1.0208	1.0130	1.0032	.9961
Local ¹								
Education	1.0545	1.0486	1.0514	1.0037	.8408	.8380	.9796	1.0353
Other local government .....	.9809	.9827	.9958	1.0307	1.0553	1.0410	.9994	.9883

¹ Seasonally adjusted data are derived by aggregation of the component series.

² Seasonal adjustment factors are not computed because the seasonal component, which is small relative to the trend-cycle and irregular components, cannot be separated with sufficient precision.

³ No adjustment was made to control for the effects of a 4- vs.

5-week interval between surveys.

NOTE: March-April factors replace those published in the December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

Table 7. Seasonal adjustment factors for women employees on nonfarm payrolls by industry

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total¹								
Goods-producing¹								
Mining	0.9908	0.9943	0.9962	1.0121	1.0169	1.0159	0.9982	0.9978
Construction .....	.9756	.9836	.9989	1.0148	1.0262	1.0245	1.0163	1.0133
Manufacturing¹								
Durable goods¹								
Lumber and wood products .....	.9837	.9897	.9984	1.0126	1.0090	1.0144	1.0068	1.0074
Furniture and fixtures	1.0015	1.0035	1.0039	1.0075	.9876	.9946	.9945	.9956
Stone, clay, and glass products .....	.9895	.9940	.9984	1.0093	.9932	1.0101	1.0069	1.0115
Primary metal industries .....	.9941	.9922	.9992	1.0118	1.0010	1.0096	1.0030	.9985
Fabricated metal products .....	.9990	.9961	.9979	1.0046	.9844	.9994	1.0008	1.0060
Industrial machinery and equipment	1.0049	1.0032	1.0054	1.0069	.9972	.9939	.9932	.9946
Electronic and other electrical equipment	1.0003	.9981	.9986	1.0027	.9917	.9957	.9990	.9997
Transportation equipment ² .....	.9975	.9995	1.0012	1.0064	.9821	1.0006	.9999	.9998
Instruments and related products	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Miscellaneous manufacturing .....	.9949	.9977	1.0025	1.0056	.9932	1.0087	1.0131	1.0201
Nondurable goods¹								
Food and kindred products .....	.9637	.9611	.9722	.9905	1.0176	1.0580	1.0611	1.0337
Tobacco products .....	.9742	.9284	.8654	.8749	.8579	1.0248	1.0702	1.1044
Textile mill products .....	.9939	.9994	1.0019	1.0093	.9956	1.0027	1.0022	1.0060
Apparel and other textile products .....	.9961	.9974	1.0034	1.0093	.9847	1.0060	1.0114	1.0115
Paper and allied products .....	.9907	.9877	.9965	1.0105	1.0078	1.0102	1.0024	1.0022
Printing and publishing .....	.9961	.9983	1.0000	1.0035	1.0018	1.0001	.9968	1.0005
Chemicals and allied products .....	.9960	.9939	.9992	1.0080	1.0094	1.0076	1.0017	.9996
Petroleum and coal products .....	.9786	.9891	.9923	1.0167	1.0197	1.0266	1.0082	1.0042
Rubber and misc. plastics products	1.0012	.9983	1.0000	1.0074	.9887	.9960	1.0020	1.0048
Leather and leather products .....	.9975	.9963	1.0069	1.0081	.9690	1.0087	1.0099	1.0100
Service-producing¹								
Transportation and public utilities .....	.9981	.9973	1.0027	1.0020	.9875	.9855	1.0027	1.0056
Wholesale trade .....	.9944	.9943	.9986	1.0025	1.0027	1.0002	1.0025	1.0064
Retail trade .....	.9751	.9829	.9968	1.0059	1.0025	1.0056	1.0038	1.0040
Finance, insurance, and real estate .....	.9968	.9979	.9995	1.0072	1.0095	1.0069	.9986	.9958
Services .....	.9986	1.0027	1.0034	1.0047	1.0028	1.0000	1.0011	1.0054
Government¹								
Federal .....	.9944	.9978	1.0022	1.0083	1.0043	1.0031	.9963	.9935
State	1.0277	1.0268	1.0134	.9659	.9475	.9428	.9920	1.0276
Local	1.0330	1.0291	1.0354	1.0101	.8941	.8860	.9849	1.0229

¹ Seasonally adjusted data are derived by aggregation of the component series.

² No adjustment was made to control for the effects of a 4- vs. 5-week interval between surveys.

³ Seasonal adjustment factors are not computed because the seasonal component, which is small relative to the trend-cycle and

irregular components, cannot be separated with sufficient precision.

NOTE: March-April factors replace those published in the December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

Table 8. Seasonal adjustment factors for production or nonsupervisory workers¹ on nonfarm payrolls by industry

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total private²								
Goods-producing²								
Mining	0.9790	0.9884	0.9993	1.0129	1.0190	1.0223	1.0184	1.0119
Construction .....	.9134	.9730	1.0150	1.0475	1.0690	1.0743	1.0576	1.0525
Manufacturing²								
Durable goods²								
Lumber and wood products .....	.9814	.9863	.9969	1.0131	1.0157	1.0186	1.0120	1.0089
Furniture and fixtures	1.0031	1.0026	1.0029	1.0051	.9875	.9969	.9982	.9989
Stone, clay, and glass products .....	.9755	.9968	1.0088	1.0223	1.0113	1.0221	1.0169	1.0197
Primary metal industries	1.0006	.9997	.9991	1.0061	.9873	.9964	1.0017	1.0003
Blast furnaces and basic steel products	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Fabricated metal products	1.0001	.9991	.9995	1.0062	.9840	.9976	1.0025	1.0033
Industrial machinery and equipment	1.0060	1.0047	1.0039	1.0057	.9919	.9911	.9973	.9949
Electronic and other electrical equipment	1.0013	.9981	.9989	1.0027	.9897	.9949	.9990	1.0007
Transportation equipment ⁴	1.0045	1.0048	1.0075	1.0113	.9777	.9928	.9981	.9979
Motor vehicles and equipment ⁴	1.0059	1.0071	1.0111	1.0157	.9644	.9904	.9964	1.0000
Instruments and related products	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Miscellaneous manufacturing .....	.9979	.9987	1.0011	1.0072	.9918	1.0022	1.0099	1.0188
Nondurable goods²								
Food and kindred products .....	.9734	.9706	.9774	.9964	1.0121	1.0522	1.0442	1.0234
Tobacco products .....	.9763	.9338	.8920	.8833	.8804	1.0080	1.0583	1.0842
Textile mill products .....	.9971	1.0008	1.0022	1.0077	.9927	.9997	1.0018	1.0044
Apparel and other textile products .....	.9979	.9968	1.0042	1.0101	.9863	1.0043	1.0114	1.0118
Paper and allied products .....	.9950	.9929	.9961	1.0071	1.0021	1.0053	1.0006	1.0003
Printing and publishing .....	.9975	.9989	.9979	1.0009	.9998	.9999	.9977	.9992
Chemicals and allied products .....	.9992	.9967	1.0005	1.0051	1.0016	1.0035	.9995	1.0007
Petroleum and coal products .....	.9672	.9959	1.0125	1.0310	1.0317	1.0334	1.0244	1.0223
Rubber and misc. plastics products	1.0023	1.0005	1.0004	1.0088	.9868	.9997	1.0029	1.0019
Leather and leather products	1.0023	1.0043	1.0072	1.0143	.9619	1.0048	.9975	1.0067
Service-producing²								
Transportation and public utilities .....	.9910	.9931	1.0016	1.0059	.9983	.9970	1.0057	1.0085
Wholesale trade .....	.9927	.9963	1.0009	1.0073	1.0085	1.0059	1.0023	1.0031
Retail trade .....	.9781	.9874	1.0009	1.0094	1.0064	1.0075	1.0026	1.0010
Finance, insurance, and real estate .....	.9922	.9959	1.0005	1.0125	1.0176	1.0141	1.0001	.9957
Services .....	.9931	1.0015	1.0048	1.0108	1.0129	1.0083	1.0033	1.0054

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 Seasonally adjusted data are derived by aggregation of the component series.

³ Seasonal adjustment factors are not computed because the seasonal component, which is small relative to the trend-cycle and

irregular components, cannot be separated with sufficient precision.

⁴ No adjustment was made to control for the effects of a 4- vs. 5-week interval between surveys.

NOTE: March-April factors replace those published in the December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

Table 9. Seasonal adjustment factors for average weekly hours of production or nonsupervisory workers¹ on private nonfarm payrolls by industry

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total private²								
Goods-producing²								
Mining	0.9838	0.9885	1.0024	1.0046	0.9911	1.0074	0.9991	1.0157
Construction .....	.9801	1.0000	1.0113	1.0102	1.0255	1.0255	.9804	1.0256
Manufacturing²								
Durable goods²								
Lumber and wood products .....	.9906	1.0006	1.0049	1.0115	1.0011	1.0102	.9971	1.0082
Furniture and fixtures .....	.9926	.9961	.9855	.9977	.9908	1.0087	.9900	1.0099
Stone, clay, and glass products .....	.9829	1.0014	1.0102	1.0105	1.0042	1.0126	1.0092	1.0158
Primary metal industries .....	.9993	1.0032	1.0025	1.0017	.9796	.9942	.9926	1.0011
Blast furnaces and basic steel products ³	1.0007	1.0015	1.0024	1.0011	.9888	.9953	1.0006	.9966
Fabricated metal products .....	.9939	1.0072	1.0001	1.0036	.9810	.9970	.9840	1.0067
Industrial machinery and equipment	1.0042	1.0069	1.0017	1.0020	.9840	.9916	.9786	.9962
Electronic and other electrical equipment .....	.9962	.9993	.9933	.9989	.9816	.9987	.9906	1.0043
Transportation equipment	1.0047	1.0050	1.0088	.9980	.9511	.9943	.9947	1.0052
Motor vehicles and equipment	1.0083	1.0101	1.0182	.9993	.9300	.9883	.9926	1.0050
Instruments and related products	1.0039	.9964	.9953	.9995	.9832	.9960	.9868	.9976
Miscellaneous manufacturing	1.0039	1.0075	.9965	.9977	.9802	.9976	.9926	1.0095
Nondurable goods²								
Food and kindred products .....	.9850	.9830	.9944	.9954	.9948	1.0062	1.0138	1.0090
Tobacco products .....	.9830	.9938	.9974	1.0251	.9821	1.0015	.9967	1.0368
Textile mill products .....	.9981	.9964	.9968	1.0091	.9838	1.0048	1.0029	1.0015
Apparel and other textile products	1.0011	1.0032	.9994	1.0114	.9876	1.0048	.9863	1.0041
Paper and allied products ⁴ .....	.9930	.9998	.9957	1.0000	.9876	.9934	1.0092	1.0045
Printing and publishing	1.0007	.9991	.9923	.9895	.9924	1.0020	1.0100	1.0056
Chemicals and allied products ³	1.0006	.9921	.9958	.9993	.9896	.9943	1.0005	1.0019
Petroleum and coal products	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Rubber and misc. plastics products .....	.9993	1.0072	1.0010	1.0034	.9821	.9940	.9920	1.0028
Leather and leather products .....	.9970	.9955	.9963	1.0123	.9880	1.0106	1.0031	1.0110
Service-producing²								
Transportation and public utilities⁶ .....	.9913	.9907	.9993	1.0022	1.0041	1.0118	1.0005	.9999
Wholesale trade⁶ .....	.9944	.9971	1.0086	1.0013	.9988	1.0074	.9961	.9997
Retail trade^{3,6} .....	.9857	.9885	1.0017	1.0095	1.0244	1.0301	1.0024	.9944
Finance, insurance, and real estate	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Services⁶ .....	.9933	.9963	1.0063	1.0004	1.0062	1.0165	.9915	.9976

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 Seasonally adjusted data are derived by aggregation of the component series.

³ No moving-holiday adjustment was done for April or September because there was no evidence of significant effects associated with the relative timing of Easter or Labor Day, respectively, and the reference period of the payroll survey.

⁴ No moving-holiday adjustment was done for September because there was no evidence of significant effects associated with the relative timing of Labor Day and the reference period of the

payroll survey.

⁵ Seasonal adjustment factors are not computed because the seasonal component, which is small relative to the trend-cycle and irregular components, cannot be separated with sufficient precision.

⁶ An adjustment was made to control for the distortions related to the varying length of payroll periods across months. No adjustment was made to control for the effects of a 4- vs. 5-week interval between surveys.

NOTE: March-April factors replace those published in the December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

Table 10. Seasonal adjustment factors for average weekly overtime hours of production workers on manufacturing payrolls

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Manufacturing¹								
Durable goods	0.9877	1.0598	0.9949	0.9942	0.9132	1.0051	0.9812	1.0248
Nondurable goods .....	.9537	.9926	.9600	.9850	.9806	1.0419	1.0935	1.0549

¹ Seasonally adjusted data are derived by aggregation of the component series.

NOTE: March-April factors replace those published in the

December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

Table 11. Seasonal adjustment factors for average hourly earnings of production or nonsupervisory workers¹ on private nonfarm payrolls by industry

Industry	1999							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total private²								
Goods-producing²								
Mining	1.0003	1.0037	0.9970	0.9983	0.9936	0.9933	0.9969	0.9942
Construction .....	.9925	.9929	.9964	.9951	1.0021	1.0063	1.0122	1.0115
Manufacturing	1.0016	1.0008	1.0001	.9970	.9932	.9940	1.0027	.9972
Excluding overtime	1.0029	1.0008	1.0007	.9979	.9956	.9938	1.0027	.9951
Service-producing²								
Transportation and public utilities .....	.9987	.9981	.9937	.9943	.9976	.9978	1.0001	1.0008
Wholesale trade³ .....	.9945	1.0025	1.0033	.9917	.9961	1.0014	.9984	.9974
Retail trade	1.0026	1.0005	.9993	.9959	.9917	.9902	1.0020	1.0031
Finance, insurance, and real estate³	1.0014	1.0021	1.0081	.9919	.9899	.9987	.9960	.9980
Services³	1.0046	1.0027	1.0011	.9890	.9833	.9859	.9995	.9995

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 Seasonally adjusted data are derived by aggregation of the component series.

³ An adjustment was made to control for the distortions related to

the varying length of payroll periods across months. No adjustment was made to control for the effects of a 4- vs. 5-week interval between surveys.

NOTE: March-April factors replace those published in the December 1998 issue of this publication. All factors are multiplicative. Seasonally adjusted series are computed by dividing the original value by the corresponding seasonal factor.

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

(Numbers in thousands)

Category	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Labor force status													
Civilian noninstitutional population	204,899	205,085	205,270	205,479	205,699	205,919	206,104	206,270	206,719	206,873	207,036	207,236	207,427
Civilian labor force	137,369	137,498	137,407	137,481	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091	139,019
Percent of population	67.0	67.0	66.9	66.9	67.1	67.1	67.1	67.2	67.4	67.3	67.0	67.1	67.0
Employed	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224
Percent of population	64.1	64.0	63.9	63.9	64.1	64.0	64.1	64.2	64.5	64.4	64.3	64.2	64.2
Unemployed	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795
Not in labor force	67,530	67,587	67,863	67,998	67,618	67,803	67,911	67,723	67,372	67,602	68,220	68,145	68,408
Unemployment rates													
All workers	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2
Men, 20 years and over	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6
Women, 20 years and over	3.9	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6
Both sexes, 16 to 19 years	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6
White	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7
Black	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5
Hispanic origin	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7

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

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

(Numbers in thousands)

Industry	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	May ^P
Employment													
Total	125,478	125,689	125,808	126,170	126,361	126,567	126,841	127,186	127,378	127,730	127,813	128,156	128,167
Total private	105,715	105,913	106,009	106,301	106,470	106,654	106,893	107,213	107,386	107,676	107,726	108,057	108,075
Goods-producing industries	25,379	25,381	25,240	25,344	25,333	25,306	25,298	25,354	25,315	25,329	25,285	25,289	25,197
Mining	595	593	588	585	583	578	574	570	560	553	550	538	531
Construction	5,932	5,962	5,990	6,005	6,009	6,042	6,085	6,173	6,170	6,238	6,232	6,276	6,236
Manufacturing	18,852	18,826	18,662	18,754	18,741	18,686	18,639	18,611	18,585	18,538	18,503	18,475	18,430
Service-producing industries	100,099	100,308	100,568	100,826	101,028	101,261	101,543	101,832	102,063	102,401	102,528	102,867	102,970
Transportation and public utilities	6,577	6,589	6,606	6,625	6,637	6,657	6,671	6,684	6,708	6,723	6,732	6,752	6,765
Wholesale trade	6,814	6,826	6,836	6,846	6,871	6,876	6,891	6,901	6,924	6,937	6,947	6,965	6,962
Retail trade	22,237	22,257	22,321	22,353	22,382	22,392	22,443	22,525	22,556	22,648	22,611	22,738	22,755
Finance, insurance, and real estate	7,374	7,400	7,430	7,445	7,467	7,494	7,520	7,542	7,570	7,581	7,595	7,614	7,626
Services	37,334	37,460	37,576	37,688	37,780	37,929	38,070	38,207	38,313	38,458	38,556	38,699	38,770
Government	19,763	19,776	19,799	19,869	19,891	19,913	19,948	19,973	19,992	20,054	20,087	20,099	20,092
Over-the-month change													
Total	258	211	119	362	191	206	274	345	192	352	83	343	11
Total private	221	198	96	292	169	184	239	320	173	290	50	331	18
Goods-producing industries	-39	2	-141	104	-11	-27	-8	56	-39	14	-44	4	-92
Mining	-5	-2	-5	-3	-2	-5	-4	-4	-10	-7	-3	-12	-7
Construction	-11	30	28	15	4	33	43	88	-3	68	-6	44	-40
Manufacturing	-23	-26	-164	92	-13	-55	-47	-28	-26	-47	-35	-28	-45
Service-producing industries	297	209	260	258	202	233	282	289	231	338	127	339	103
Transportation and public utilities	18	12	17	19	12	20	14	13	24	15	9	20	13
Wholesale trade	16	12	10	10	25	5	15	10	23	13	10	18	-3
Retail trade	60	20	64	32	29	10	51	82	31	92	-37	127	17
Finance, insurance, and real estate	26	26	30	15	22	27	26	22	28	11	14	19	12
Services	140	126	116	112	92	149	141	137	106	145	98	143	71
Government	37	13	23	70	22	22	35	25	19	62	33	12	-7
Hours of work¹													
Total private	34.7	34.6	34.6	34.6	34.5	34.6	34.6	34.6	34.6	34.6	34.5	34.4	34.5
Manufacturing	41.8	41.8	41.7	41.7	41.6	41.7	41.7	41.7	41.6	41.6	41.5	41.6	41.7
Overtime	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.6
Indexes of aggregate weekly hours (1982=100)¹													
Total private	145.0	144.8	145.2	145.5	145.1	146.0	146.1	146.6	146.8	147.3	146.8	147.0	147.3
Manufacturing	109.6	109.2	107.8	108.5	108.3	108.1	107.7	107.5	107.1	106.8	106.5	106.5	106.5
Earnings¹													
Average hourly earnings, total private:													
Current dollars	\$12.73	\$12.76	\$12.80	\$12.85	\$12.88	\$12.91	\$12.94	\$12.98	\$13.04	\$13.06	\$13.11	\$13.14	\$13.19
Constant (1982) dollars	7.74	7.75	7.76	7.78	7.80	7.80	7.80	7.81	7.83	7.84	7.86	7.83	N.A.
Average weekly earnings, total private	441.73	441.50	442.88	444.61	444.36	446.69	447.72	449.11	451.18	451.88	452.30	452.02	455.06

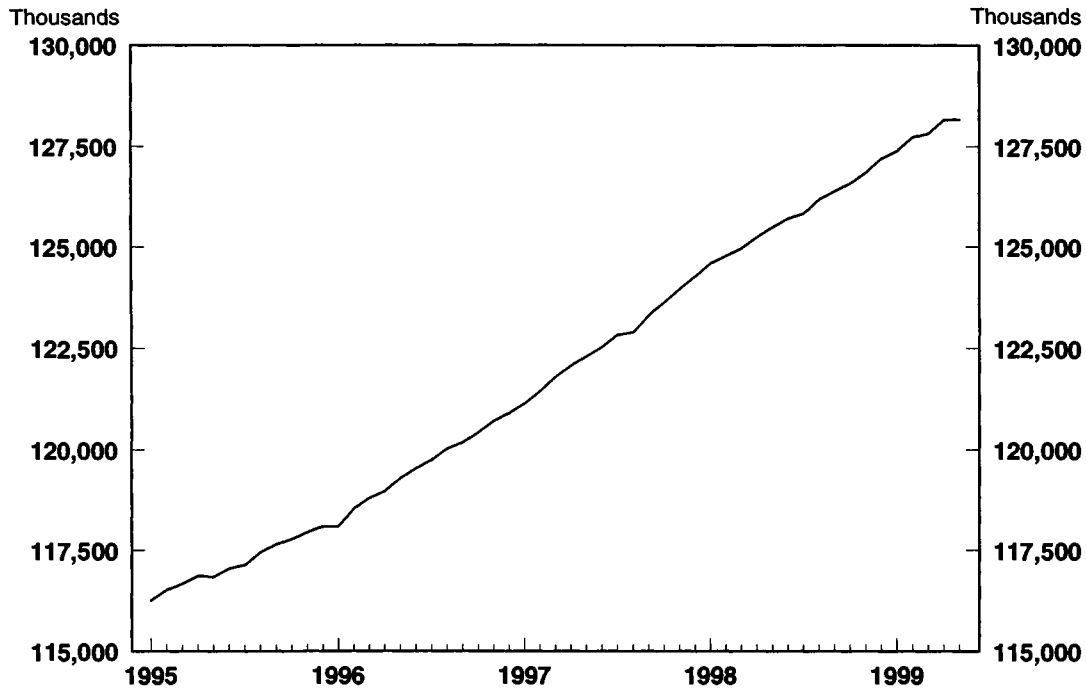
¹ Data relate to private production or nonsupervisory workers.

² The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.
N.A. = not available.

^P = preliminary.

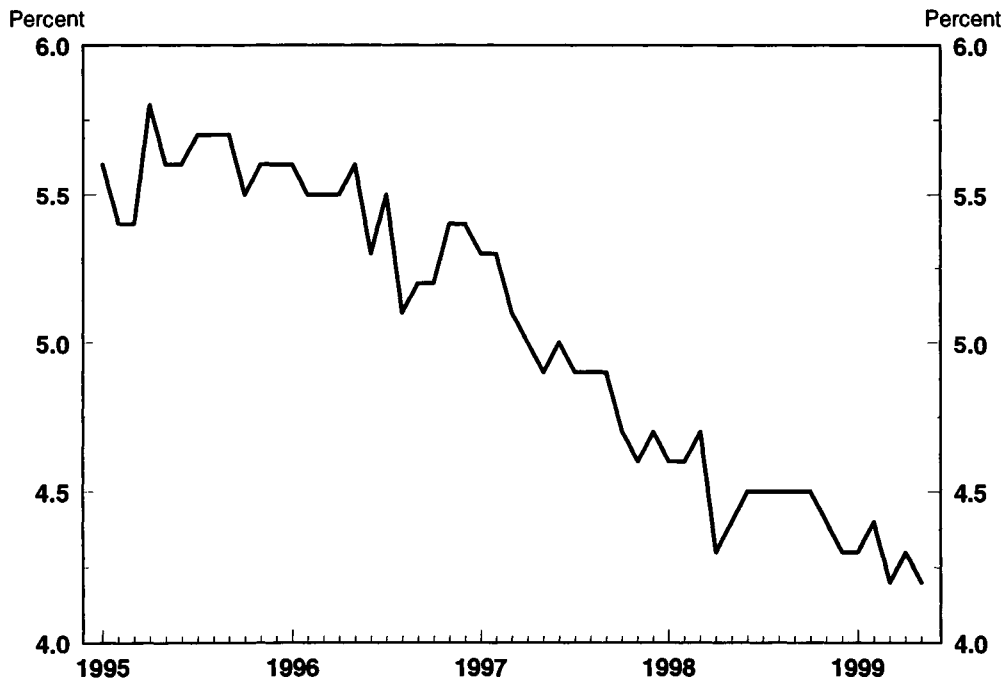
NOTE: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors.

Chart 1. Nonfarm payroll employment, seasonally adjusted, 1995-99



NOTE: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors.

Chart 2. Unemployment rate, seasonally adjusted, 1995-99



NOTE: Beginning in 1997, data incorporate revisions in the population controls. Beginning in 1998, data incorporate new composite estimation procedures and updated population controls. Beginning in 1999, data incorporate revisions in the population controls. These changes affect comparability with data for prior periods.

A-1. Employment status of the civilian noninstitutional population 16 years and over, 1965 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										
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
1998 ¹	205,220	137,673	67.1	131,463	64.1	3,378	128,085	6,210	4.5	67,547
Monthly data, seasonally adjusted ²										
1998:										
May	204,899	137,369	67.0	131,330	64.1	3,351	127,979	6,039	4.4	67,530
June	205,085	137,498	67.0	131,253	64.0	3,363	127,890	6,245	4.5	67,587
July	205,270	137,407	66.9	131,176	63.9	3,423	127,753	6,231	4.5	67,863
August	205,479	137,481	66.9	131,264	63.9	3,492	127,772	6,217	4.5	67,998
September	205,699	138,081	67.1	131,818	64.1	3,470	128,348	6,263	4.5	67,618
October	205,919	138,116	67.1	131,858	64.0	3,558	128,300	6,258	4.5	67,803
November	206,104	138,193	67.1	132,113	64.1	3,348	128,765	6,080	4.4	67,911
December	206,270	138,547	67.2	132,526	64.2	3,222	129,304	6,021	4.3	67,723
1999:										
January ³	206,719	139,347	67.4	133,396	64.5	3,299	130,097	5,950	4.3	67,372
February	206,873	139,271	67.3	133,144	64.4	3,328	129,817	6,127	4.4	67,602
March	207,036	138,816	67.0	133,033	64.3	3,281	129,752	5,783	4.2	68,220
April	207,236	139,091	67.1	133,069	64.2	3,384	129,685	6,022	4.3	68,145
May	207,427	139,019	67.0	133,224	64.2	3,295	129,929	5,795	4.2	68,408

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 1999, data are not strictly comparable with data

for 1998 and earlier years because of revisions in the population controls used in the household survey. For additional information, see "Revisions in the Current Population Survey Effective January 1999" in the February 1999 issue of this publication.

**HOUSEHOLD DATA
HISTORICAL**

A-2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1987 to date

(Numbers in thousands)

Sex, year, and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
MEN										
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	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	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	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
1998 ¹	98,758	73,959	74.9	70,693	71.6	2,553	68,140	3,266	4.4	24,799
Monthly data, seasonally adjusted²										
1998:										
May	98,591	73,792	74.8	70,603	71.6	2,508	68,095	3,189	4.3	24,799
June	98,691	73,866	74.8	70,592	71.5	2,541	68,051	3,274	4.4	24,825
July	98,785	73,989	74.9	70,629	71.5	2,589	68,040	3,360	4.5	24,796
August	98,892	73,754	74.6	70,503	71.3	2,631	67,872	3,251	4.4	25,138
September	99,006	74,202	74.9	70,841	71.6	2,644	68,197	3,361	4.5	24,804
October	99,121	74,189	74.8	70,925	71.6	2,734	68,191	3,264	4.4	24,932
November	99,217	74,345	74.9	71,182	71.7	2,578	68,604	3,163	4.3	24,872
December	99,309	74,437	75.0	71,204	71.7	2,414	68,790	3,233	4.3	24,872
1999:										
January ³	99,198	74,599	75.2	71,459	72.0	2,456	69,003	3,140	4.2	24,599
February	99,279	74,504	75.0	71,276	71.8	2,424	68,851	3,228	4.3	24,776
March	99,362	74,234	74.7	71,352	71.8	2,406	68,946	2,881	3.9	25,128
April	99,465	74,234	74.6	71,225	71.6	2,534	68,691	3,010	4.1	25,230
May	99,563	74,316	74.6	71,198	71.5	2,413	68,786	3,118	4.2	25,247
Annual averages										
WOMEN										
1987	95,853	53,658	56.0	50,334	52.5	666	49,668	3,324	6.2	42,195
1988	96,756	54,742	56.6	51,696	53.4	676	51,020	3,046	5.6	42,014
1989	97,630	56,030	57.4	53,027	54.3	687	52,341	3,003	5.4	41,601
1990	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	102,460	60,239	58.8	56,610	55.3	855	55,755	3,629	6.0	42,221
1995	103,406	60,944	58.9	57,523	55.6	881	56,642	3,421	5.6	42,462
1996	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
1998 ¹	106,462	63,714	59.8	60,771	57.1	825	59,945	2,944	4.6	42,748
Monthly data, seasonally adjusted²										
1998:										
May	106,308	63,577	59.8	60,727	57.1	843	59,884	2,850	4.5	42,731
June	106,394	63,632	59.8	60,661	57.0	822	59,839	2,971	4.7	42,762
July	106,484	63,418	59.6	60,547	56.9	834	59,713	2,871	4.5	43,066
August	106,587	63,727	59.8	60,761	57.0	861	59,900	2,966	4.7	42,860
September	106,693	63,879	59.9	60,977	57.2	826	60,151	2,902	4.5	42,814
October	106,798	63,927	59.9	60,933	57.1	824	60,109	2,994	4.7	42,871
November	106,887	63,848	59.7	60,931	57.0	770	60,161	2,917	4.6	43,039
December	106,960	64,110	59.9	61,322	57.3	808	60,514	2,788	4.3	42,850
1999:										
January ³	107,521	64,748	60.2	61,937	57.6	843	61,095	2,810	4.3	42,773
February	107,593	64,767	60.2	61,869	57.5	903	60,965	2,899	4.5	42,826
March	107,674	64,582	60.0	61,680	57.3	874	60,806	2,902	4.5	43,092
April	107,771	64,857	60.2	61,845	57.4	850	60,994	3,012	4.6	42,914
May	107,864	64,704	60.0	62,026	57.5	883	61,143	2,677	4.1	43,160

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

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

(Numbers in thousands)

Employment status, sex, and age	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
TOTAL													
Civilian noninstitutional population ¹ ..	204,899	205,085	205,270	205,479	205,699	205,919	206,104	206,270	206,719	206,873	207,036	207,236	207,427
Civilian labor force	137,369	137,498	137,407	137,481	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091	139,019
Percent of population	67.0	67.0	66.9	66.9	67.1	67.1	67.1	67.2	67.4	67.3	67.0	67.1	67.0
Employed	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224
Employment-population ratio	64.1	64.0	63.9	63.9	64.1	64.0	64.1	64.2	64.5	64.4	64.3	64.2	64.2
Unemployed	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795
Unemployment rate	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2
Men, 16 years and over													
Civilian noninstitutional population ¹ ..	98,591	98,691	98,785	98,892	99,006	99,121	99,217	99,309	99,198	99,279	99,362	99,465	99,563
Civilian labor force	73,792	73,866	73,989	73,754	74,202	74,189	74,345	74,437	74,599	74,504	74,234	74,234	74,316
Percent of population	74.8	74.8	74.9	74.6	74.9	74.8	74.9	75.0	75.2	75.0	74.7	74.6	74.6
Employed	70,603	70,592	70,629	70,503	70,841	70,925	71,182	71,204	71,459	71,276	71,352	71,225	71,198
Employment-population ratio	71.6	71.5	71.5	71.3	71.6	71.6	71.7	71.7	72.0	71.8	71.8	71.6	71.5
Agriculture	2,508	2,541	2,589	2,631	2,644	2,734	2,578	2,414	2,456	2,424	2,406	2,534	2,413
Nonagricultural industries	68,095	68,051	68,040	67,872	68,197	68,191	68,604	68,790	69,003	68,851	68,946	68,691	68,786
Unemployed	3,189	3,274	3,360	3,251	3,361	3,264	3,163	3,233	3,140	3,228	2,881	3,010	3,118
Unemployment rate	4.3	4.4	4.5	4.4	4.5	4.4	4.3	4.3	4.2	4.3	3.9	4.1	4.2
Not in labor force	24,799	24,825	24,796	25,138	24,804	24,932	24,872	24,872	24,599	24,776	25,128	25,230	25,247
Men, 20 years and over													
Civilian noninstitutional population ¹ ..	90,622	90,700	90,802	90,889	91,003	91,101	91,192	91,220	91,124	91,189	91,215	91,302	91,368
Civilian labor force	69,608	69,590	69,738	69,518	69,869	69,913	70,023	70,069	70,295	70,174	69,951	69,991	69,932
Percent of population	76.8	76.7	76.8	76.5	76.8	76.7	76.8	76.8	77.1	77.0	76.7	76.7	76.5
Employed	67,084	66,994	67,056	66,940	67,262	67,362	67,573	67,553	67,884	67,577	67,713	67,608	67,399
Employment-population ratio	74.0	73.9	73.8	73.7	73.9	73.9	74.1	74.1	74.5	74.1	74.2	74.0	73.8
Agriculture	2,331	2,337	2,382	2,420	2,402	2,449	2,374	2,237	2,312	2,212	2,222	2,353	2,212
Nonagricultural industries	64,753	64,657	64,674	64,520	64,860	64,913	65,199	65,316	65,572	65,365	65,492	65,255	65,186
Unemployed	2,524	2,596	2,682	2,578	2,607	2,551	2,450	2,516	2,411	2,598	2,238	2,383	2,534
Unemployment rate	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6
Not in labor force	21,014	21,110	21,064	21,371	21,134	21,188	21,169	21,151	20,829	21,014	21,263	21,312	21,436
Women, 16 years and over													
Civilian noninstitutional population ¹ ..	106,308	106,394	106,484	106,587	106,693	106,798	106,887	106,960	107,521	107,593	107,674	107,771	107,864
Civilian labor force	63,577	63,632	63,418	63,727	63,879	63,927	63,848	64,110	64,748	64,767	64,582	64,857	64,704
Percent of population	59.8	59.8	59.6	59.8	59.9	59.9	59.7	59.9	60.2	60.2	60.0	60.2	60.0
Employed	60,727	60,661	60,547	60,761	60,977	60,933	60,931	61,322	61,937	61,869	61,680	61,845	62,026
Employment-population ratio	57.1	57.0	56.9	57.0	57.2	57.1	57.0	57.3	57.6	57.5	57.3	57.4	57.5
Agriculture	843	822	834	861	826	824	770	808	843	903	874	850	883
Nonagricultural industries	59,884	59,839	59,713	59,900	60,151	60,109	60,161	60,514	61,095	60,965	60,806	60,994	61,143
Unemployed	2,850	2,971	2,871	2,966	2,902	2,994	2,917	2,788	2,810	2,899	2,902	3,012	2,677
Unemployment rate	4.5	4.7	4.5	4.7	4.5	4.7	4.6	4.3	4.3	4.5	4.5	4.6	4.1
Not in labor force	42,731	42,762	43,066	42,860	42,814	42,871	43,039	42,850	42,773	42,826	43,092	42,914	43,160
Women, 20 years and over													
Civilian noninstitutional population ¹ ..	98,668	98,735	98,778	98,901	98,994	99,037	99,135	99,181	99,686	99,746	99,833	99,923	100,008
Civilian labor force	59,583	59,613	59,465	59,708	59,804	59,826	59,896	60,078	60,718	60,622	60,533	60,788	60,729
Percent of population	60.4	60.4	60.2	60.4	60.4	60.4	60.4	60.6	60.9	60.8	60.6	60.8	60.7
Employed	57,235	57,190	57,078	57,295	57,426	57,437	57,503	57,745	58,466	58,291	58,183	58,320	58,520
Employment-population ratio	58.0	57.9	57.8	57.9	58.0	58.0	58.0	58.2	58.7	58.4	58.3	58.4	58.5
Agriculture	767	763	781	806	767	771	734	753	808	839	834	801	831
Nonagricultural industries	56,468	56,427	56,297	56,489	56,659	56,666	56,769	56,992	57,452	57,452	57,349	57,519	57,689
Unemployed	2,348	2,423	2,387	2,413	2,378	2,389	2,393	2,333	2,251	2,330	2,350	2,468	2,209
Unemployment rate	3.9	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6
Not in labor force	39,085	39,122	39,313	39,193	39,190	39,211	39,239	39,103	38,968	39,124	39,300	39,135	39,279
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹ ..	15,609	15,651	15,690	15,689	15,702	15,781	15,777	15,868	15,909	15,939	15,988	16,011	16,051
Civilian labor force	8,178	8,295	8,204	8,255	8,408	8,377	8,274	8,400	8,334	8,475	8,331	8,312	8,358
Percent of population	52.4	53.0	52.3	52.6	53.5	53.1	52.4	52.9	52.4	53.2	52.1	51.9	52.1
Employed	7,011	7,069	7,042	7,029	7,130	7,059	7,037	7,228	7,046	7,276	7,136	7,141	7,306
Employment-population ratio	44.9	45.2	44.9	44.8	45.4	44.7	44.6	45.5	44.3	45.7	44.6	44.6	45.5
Agriculture	253	263	260	266	301	338	240	232	179	277	224	230	252
Nonagricultural industries	6,758	6,806	6,782	6,763	6,829	6,721	6,797	6,996	6,867	6,999	6,912	6,911	7,054
Unemployed	1,167	1,226	1,162	1,226	1,278	1,318	1,237	1,172	1,288	1,199	1,195	1,171	1,052
Unemployment rate	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6
Not in labor force	7,431	7,356	7,486	7,434	7,294	7,404	7,503	7,468	7,575	7,464	7,657	7,698	7,693

¹ The population figures are not adjusted for seasonal variation.
NOTE: Detail for the seasonally adjusted data shown in tables A-3 through A-13 will not necessarily add to totals because of the independent seasonal

adjustment of the various series. Beginning in January 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
WHITE													
Civilian noninstitutional population ¹ ..	171,257	171,387	171,513	171,655	171,804	171,956	172,084	172,197	172,394	172,491	172,597	172,730	172,859
Civilian labor force	115,312	115,208	115,071	115,385	115,751	115,714	115,687	115,996	116,529	116,610	116,284	116,370	116,254
Percent of population	67.3	67.2	67.1	67.2	67.4	67.3	67.2	67.4	67.6	67.6	67.4	67.4	67.3
Employed	110,959	110,638	110,676	110,848	111,221	111,162	111,304	111,560	112,135	112,189	112,144	111,917	111,985
Employment-population ratio	64.8	64.6	64.5	64.6	64.7	64.6	64.7	64.8	65.0	65.0	65.0	64.8	64.8
Unemployed	4,353	4,570	4,395	4,537	4,530	4,552	4,383	4,436	4,394	4,420	4,140	4,454	4,269
Unemployment rate	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7
Men, 20 years and over													
Civilian labor force	59,338	59,298	59,406	59,384	59,587	59,579	59,634	59,712	59,751	59,799	59,698	59,664	59,500
Percent of population	77.2	77.1	77.2	77.1	77.3	77.2	77.2	77.2	77.5	77.5	77.3	77.2	77.0
Employed	57,452	57,348	57,447	57,450	57,615	57,646	57,806	57,813	57,920	57,830	58,010	57,874	57,615
Employment-population ratio	74.7	74.6	74.6	74.6	74.7	74.7	74.8	74.8	75.1	75.0	75.1	74.9	74.5
Unemployed	1,886	1,950	1,959	1,934	1,972	1,933	1,828	1,899	1,831	1,969	1,688	1,790	1,884
Unemployment rate	3.2	3.3	3.3	3.3	3.3	3.2	3.1	3.2	3.1	3.3	2.8	3.0	3.2
Women, 20 years and over													
Civilian labor force	49,048	48,930	48,770	49,025	49,108	49,062	49,065	49,230	49,759	49,721	49,602	49,672	49,669
Percent of population	59.8	59.6	59.4	59.7	59.8	59.7	59.6	59.8	60.2	60.1	59.9	60.0	60.0
Employed	47,423	47,244	47,129	47,321	47,456	47,401	47,415	47,585	48,110	48,109	47,983	47,862	48,067
Employment-population ratio	57.8	57.6	57.4	57.6	57.7	57.6	57.6	57.8	58.2	58.2	58.0	57.8	58.0
Unemployed	1,625	1,686	1,641	1,704	1,652	1,661	1,650	1,645	1,650	1,612	1,620	1,811	1,602
Unemployment rate	3.3	3.4	3.4	3.5	3.4	3.4	3.4	3.3	3.3	3.2	3.3	3.6	3.2
Both sexes, 16 to 19 years													
Civilian labor force	6,926	6,980	6,895	6,976	7,056	7,073	6,988	7,054	7,019	7,090	6,984	7,034	7,085
Percent of population	55.8	56.1	55.3	55.8	56.4	56.4	55.7	56.1	55.6	56.1	55.2	55.5	55.8
Employed	6,084	6,046	6,100	6,077	6,150	6,115	6,083	6,162	6,105	6,250	6,151	6,181	6,302
Employment-population ratio	49.0	48.6	48.9	48.6	49.1	48.8	48.5	49.0	48.4	49.5	48.6	48.8	49.7
Unemployed	842	934	795	899	906	958	905	892	913	840	833	853	783
Unemployment rate	12.2	13.4	11.5	12.9	12.8	13.5	13.0	12.6	13.0	11.8	11.9	12.1	11.0
Men	14.0	14.4	13.2	14.2	14.7	14.1	14.1	14.5	14.1	12.2	12.7	12.6	11.9
Women	10.1	12.3	9.7	11.5	10.8	13.0	11.6	10.6	11.9	11.4	11.1	11.6	10.1
BLACK													
Civilian noninstitutional population ¹ ..	24,317	24,349	24,381	24,418	24,458	24,496	24,529	24,561	24,665	24,697	24,729	24,765	24,798
Civilian labor force	15,760	16,025	16,045	15,937	16,027	16,163	16,201	16,157	16,356	16,242	16,212	16,286	16,303
Percent of population	64.8	65.8	65.8	65.3	65.5	66.0	66.0	65.8	66.3	65.8	65.6	65.8	65.7
Employed	14,351	14,662	14,511	14,517	14,584	14,776	14,804	14,884	15,085	14,900	14,904	15,029	15,079
Employment-population ratio	59.0	60.2	59.5	59.5	59.6	60.3	60.4	60.6	61.2	60.3	60.3	60.7	60.8
Unemployed	1,409	1,363	1,534	1,420	1,443	1,387	1,397	1,273	1,271	1,342	1,308	1,257	1,224
Unemployment rate	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5
Men, 20 years and over													
Civilian labor force	7,005	7,080	7,111	7,021	6,999	7,144	7,086	7,063	7,210	7,160	7,065	7,118	7,206
Percent of population	72.2	72.9	73.1	72.1	71.7	73.1	72.4	72.0	73.3	72.7	71.6	72.0	72.8
Employed	6,523	6,574	6,491	6,487	6,499	6,653	6,590	6,588	6,782	6,682	6,656	6,681	6,727
Employment-population ratio	67.2	67.7	66.7	66.6	66.6	68.0	67.3	67.2	68.9	67.8	67.4	67.6	68.0
Unemployed	482	506	620	534	500	491	496	475	428	477	409	437	479
Unemployment rate	6.9	7.1	8.7	7.6	7.1	6.9	7.0	6.7	5.9	6.7	5.8	6.1	6.6
Women, 20 years and over													
Civilian labor force	7,792	7,870	7,916	7,903	7,948	7,992	8,051	8,035	8,114	8,082	8,129	8,241	8,177
Percent of population	64.0	64.6	64.9	64.7	64.9	65.2	65.6	65.4	65.7	65.3	65.6	66.4	65.8
Employed	7,146	7,255	7,294	7,302	7,320	7,391	7,443	7,474	7,579	7,509	7,545	7,681	7,653
Employment-population ratio	58.7	59.5	59.8	59.7	59.8	60.3	60.6	60.8	61.3	60.7	60.9	61.9	61.6
Unemployed	646	615	622	601	628	601	608	561	535	573	584	560	524
Unemployment rate	8.3	7.8	7.9	7.6	7.9	7.5	7.6	7.0	6.6	7.1	7.2	6.8	6.4

See footnotes at end of table.

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	963	1,075	1,018	1,013	1,080	1,027	1,064	1,059	1,032	1,000	1,018	927	920
Percent of population	39.5	44.0	41.5	41.3	44.0	41.8	43.3	43.0	41.8	40.5	41.2	37.5	37.1
Employed	682	833	726	728	765	732	771	822	725	708	702	667	699
Employment-population ratio	27.9	34.1	29.6	29.7	31.1	29.8	31.4	33.4	29.3	28.6	28.4	26.9	28.2
Unemployed	281	242	292	285	315	295	293	237	307	293	316	260	222
Unemployment rate	29.2	22.5	28.7	28.1	29.2	28.7	27.5	22.4	29.8	29.2	31.0	28.1	24.1
Men	31.2	22.4	30.2	29.7	32.7	34.7	33.0	27.3	34.2	31.6	32.9	33.0	26.2
Women	27.4	22.6	27.0	26.8	25.7	23.5	22.1	17.6	25.0	27.0	29.1	23.5	22.0
HISPANIC ORIGIN													
Civilian noninstitutional population ¹ ..	20,975	21,036	21,097	21,159	21,224	21,286	21,349	21,405	21,296	21,355	21,414	21,483	21,548
Civilian labor force	14,378	14,375	14,267	14,316	14,457	14,437	14,389	14,488	14,511	14,591	14,570	14,543	14,535
Percent of population	68.5	68.3	67.6	67.7	68.1	67.8	67.4	67.7	68.1	68.3	68.0	67.7	67.5
Employed	13,387	13,301	13,245	13,257	13,394	13,382	13,345	13,383	13,550	13,610	13,732	13,541	13,558
Employment-population ratio	63.8	63.2	62.8	62.7	63.1	62.9	62.5	62.5	63.6	63.7	64.1	63.0	62.9
Unemployed	991	1,074	1,022	1,059	1,063	1,055	1,044	1,105	960	980	838	1,002	977
Unemployment rate	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Less than a high school diploma													
Civilian noninstitutional population ¹	29,931	30,064	29,027	29,204	29,290	28,713	29,084	29,094	28,901	28,112	28,442	27,991	28,298
Civilian labor force	12,630	12,784	12,561	12,496	12,563	12,408	12,463	12,500	12,379	12,164	12,094	11,753	11,743
Percent of population	42.2	42.5	43.3	42.8	42.9	43.2	42.9	43.0	42.8	43.3	42.5	42.0	41.5
Employed	11,762	11,873	11,665	11,612	11,692	11,556	11,574	11,626	11,459	11,257	11,356	10,972	10,959
Employment-population ratio	39.3	39.5	40.2	39.8	39.9	40.2	39.8	40.0	39.7	40.0	39.9	39.2	38.7
Unemployed	868	911	896	884	871	852	889	874	920	907	739	781	784
Unemployment rate	6.9	7.1	7.1	7.1	6.9	6.9	7.1	7.0	7.4	7.5	6.1	6.6	6.7
High school graduates, no college²													
Civilian noninstitutional population ¹	57,706	57,446	57,374	57,729	57,589	57,666	57,273	57,115	57,477	57,062	57,805	57,945	57,931
Civilian labor force	37,488	37,171	37,290	37,367	37,289	37,540	37,408	37,296	37,590	37,261	37,740	37,577	37,416
Percent of population	65.0	64.7	65.0	64.7	64.8	65.1	65.3	65.3	65.4	65.3	65.3	64.8	64.6
Employed	36,071	35,681	35,779	35,883	35,783	36,056	35,947	35,873	36,291	35,979	36,448	36,253	36,058
Employment-population ratio	62.5	62.1	62.4	62.2	62.1	62.5	62.8	62.8	63.1	63.1	63.1	62.6	62.2
Unemployed	1,417	1,490	1,511	1,484	1,506	1,484	1,461	1,423	1,299	1,282	1,292	1,324	1,359
Unemployment rate	3.8	4.0	4.1	4.0	4.0	4.0	3.9	3.8	3.5	3.4	3.4	3.5	3.6
Less than a bachelor's degree³													
Civilian noninstitutional population ¹	42,024	41,880	42,293	41,842	41,769	42,573	42,863	43,022	43,154	43,911	43,028	43,059	42,742
Civilian labor force	31,411	31,283	31,220	31,117	31,271	31,349	31,727	31,800	32,399	32,465	31,892	32,160	31,930
Percent of population	74.7	74.7	73.8	74.4	74.9	73.6	74.0	73.9	75.1	73.9	74.1	74.7	74.7
Employed	30,447	30,371	30,274	30,231	30,343	30,423	30,825	30,911	31,470	31,462	30,989	31,202	31,043
Employment-population ratio	72.5	72.5	71.6	72.3	72.6	71.5	71.9	71.8	72.9	71.6	72.0	72.5	72.6
Unemployed	964	912	946	886	928	926	902	889	929	1,003	903	958	886
Unemployment rate	3.1	2.9	3.0	2.8	3.0	3.0	2.8	2.8	2.9	3.1	2.8	3.0	2.8
College graduates													
Civilian noninstitutional population ¹	42,090	42,464	43,309	43,431	43,669	43,520	43,408	43,484	43,516	43,949	43,859	44,289	44,442
Civilian labor force	34,028	34,281	34,637	34,739	34,914	34,779	34,554	34,838	34,950	35,040	34,997	35,493	35,771
Percent of population	80.8	80.7	80.0	80.0	80.0	79.9	79.6	80.1	80.3	79.7	79.8	80.1	80.5
Employed	33,451	33,681	34,051	34,129	34,335	34,108	33,922	34,205	34,325	34,368	34,345	34,742	35,107
Employment-population ratio	79.5	79.3	78.6	78.6	78.6	78.4	78.1	78.7	78.9	78.2	78.3	78.4	79.0
Unemployed	577	600	586	610	579	671	632	633	624	673	652	752	664
Unemployment rate	1.7	1.8	1.7	1.8	1.7	1.9	1.8	1.8	1.8	1.9	1.9	2.1	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 1999, data reflect revised population controls used in the household survey.

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

(Numbers in thousands)

Full- and part-time status, sex, and age	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
EMPLOYED													
Full-time workers	108,048	107,748	107,856	108,150	108,512	108,561	109,016	109,483	110,307	109,985	110,104	109,668	109,990
Men, 16 years and over	63,055	63,108	63,138	63,202	63,216	63,417	63,726	63,829	64,138	63,857	64,047	63,650	63,624
Men, 20 years and over	61,721	61,721	61,729	61,808	61,911	62,039	62,312	62,375	62,795	62,493	62,660	62,326	62,197
Women, 16 years and over	44,943	44,656	44,845	45,097	45,344	45,154	45,289	45,604	46,042	46,013	45,957	45,955	46,271
Women, 20 years and over	43,967	43,756	43,819	44,019	44,265	44,231	44,387	44,675	45,148	45,169	45,105	45,052	45,299
Both sexes, 16 to 19 years	2,360	2,271	2,308	2,323	2,336	2,291	2,317	2,433	2,364	2,324	2,339	2,290	2,494
Part-time workers	23,239	23,460	23,231	22,975	23,284	23,281	23,249	23,258	23,198	23,157	23,160	23,351	23,261
Men, 16 years and over	7,468	7,485	7,496	7,332	7,644	7,490	7,554	7,490	7,236	7,376	7,365	7,500	7,505
Men, 20 years and over	5,294	5,256	5,322	5,181	5,364	5,295	5,332	5,272	5,070	5,058	5,145	5,219	5,163
Women, 16 years and over	15,769	16,027	15,732	15,638	15,682	15,797	15,690	15,770	15,862	15,780	15,776	15,880	15,757
Women, 20 years and over	13,245	13,446	13,258	13,230	13,154	13,197	13,125	13,134	13,348	13,131	13,160	13,295	13,227
Both sexes, 16 to 19 years	4,700	4,758	4,651	4,564	4,766	4,789	4,792	4,852	4,780	4,967	4,854	4,836	4,871
UNEMPLOYED													
Looking for full-time work	4,877	4,915	4,943	4,919	4,916	4,871	4,736	4,781	4,708	4,929	4,617	4,805	4,592
Men, 16 years and over	2,690	2,768	2,823	2,739	2,788	2,698	2,611	2,675	2,529	2,691	2,283	2,498	2,532
Men, 20 years and over	2,337	2,399	2,461	2,364	2,383	2,324	2,235	2,319	2,235	2,384	2,058	2,196	2,272
Women, 16 years and over	2,176	2,221	2,077	2,209	2,159	2,215	2,179	2,131	2,063	2,167	2,230	2,325	2,057
Women, 20 years and over	1,933	1,936	1,918	1,959	1,924	1,944	1,918	1,891	1,802	1,933	1,973	2,063	1,836
Both sexes, 16 to 19 years	607	580	564	596	609	603	583	571	671	612	585	546	484
Looking for part-time work	1,194	1,288	1,283	1,298	1,298	1,362	1,340	1,263	1,272	1,196	1,191	1,214	1,247
Men, 16 years and over	523	564	551	539	571	594	577	581	489	472	485	552	608
Men, 20 years and over	196	193	221	205	213	223	219	209	180	208	178	186	285
Women, 16 years and over	698	753	749	744	708	748	757	663	752	735	698	710	651
Women, 20 years and over	417	482	482	459	424	442	464	412	447	429	397	408	370
Both sexes, 16 to 19 years	581	613	580	634	661	697	657	642	645	560	615	621	592
UNEMPLOYMENT RATES¹													
Full-time workers	4.3	4.4	4.4	4.4	4.3	4.3	4.2	4.2	4.1	4.3	4.0	4.2	4.0
Men, 16 years and over	4.1	4.2	4.3	4.2	4.2	4.1	3.9	4.0	3.8	4.0	3.4	3.8	3.8
Men, 20 years and over	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.5
Women, 16 years and over	4.6	4.7	4.4	4.7	4.5	4.7	4.6	4.5	4.3	4.5	4.6	4.8	4.3
Women, 20 years and over	4.2	4.2	4.2	4.3	4.2	4.2	4.1	4.1	3.8	4.1	4.2	4.4	3.9
Both sexes, 16 to 19 years	20.5	20.3	19.6	20.4	20.7	20.8	20.1	19.0	22.1	20.8	20.0	19.3	16.2
Part-time workers	4.9	5.2	5.2	5.3	5.3	5.5	5.4	5.2	5.2	4.9	4.9	4.9	5.1
Men, 16 years and over	6.5	7.0	6.8	6.8	7.0	7.3	7.1	7.2	6.3	6.0	6.2	6.9	7.5
Men, 20 years and over	3.6	3.5	4.0	3.8	3.8	4.0	3.9	3.8	3.4	3.9	3.4	3.4	5.2
Women, 16 years and over	4.2	4.5	4.5	4.5	4.3	4.5	4.6	4.0	4.5	4.5	4.2	4.3	4.0
Women, 20 years and over	3.1	3.5	3.5	3.4	3.1	3.2	3.4	3.0	3.2	3.2	2.9	3.0	2.7
Both sexes, 16 to 19 years	11.0	11.4	11.1	12.2	12.2	12.7	12.1	11.7	11.9	10.1	11.2	11.4	10.8

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Category	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
MARITAL STATUS													
Total	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224
Married men, spouse present	42,560	42,648	42,850	42,874	43,170	43,090	43,209	43,227	43,542	43,016	43,114	43,190	42,882
Married women, spouse present	32,815	32,820	32,719	32,670	32,891	33,037	32,953	33,093	33,652	33,092	33,134	33,285	33,487
Women who maintain families	7,854	7,909	7,875	7,928	7,984	7,940	7,969	8,087	8,076	8,113	8,148	8,050	8,039
OCCUPATION													
Managerial and professional specialty	38,681	38,786	39,020	38,942	39,553	39,679	39,459	39,729	39,836	39,531	39,900	40,504	40,500
Technical, sales, and administrative support	38,493	38,573	38,513	38,843	38,478	38,431	38,430	38,307	38,846	39,254	38,893	38,866	39,103
Service occupations	17,776	17,856	17,683	17,770	17,926	17,692	18,024	17,976	18,070	18,163	18,074	17,868	18,111
Precision production, craft, and repair	14,766	14,466	14,334	14,158	14,045	14,192	14,552	14,685	14,751	14,742	14,661	14,518	14,432
Operators, fabricators, and laborers	18,284	18,152	18,157	17,968	18,118	18,168	18,067	18,480	18,476	18,021	18,177	17,656	17,813
Farming, forestry, and fishing	3,487	3,513	3,519	3,590	3,585	3,604	3,538	3,396	3,422	3,490	3,417	3,539	3,441
CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,920	1,857	2,010	2,111	2,145	2,247	2,005	1,912	1,987	1,895	1,893	1,908	1,919
Self-employed workers	1,391	1,445	1,374	1,342	1,290	1,282	1,304	1,304	1,298	1,381	1,376	1,439	1,348
Unpaid family workers	50	44	32	31	40	33	40	34	30	44	39	31	33
Nonagricultural industries:													
Wage and salary workers	118,852	118,733	118,647	118,840	119,148	119,275	119,718	120,380	121,115	121,066	121,005	120,785	121,168
Private industries	100,690	100,266	100,273	100,508	100,700	100,728	101,111	101,694	102,202	102,283	102,306	102,076	102,496
Private households	992	962	966	871	918	946	969	943	881	849	917	941	910
Other industries	99,698	99,304	99,307	99,637	99,782	99,782	100,142	100,751	101,321	101,434	101,389	101,135	101,586
Government	18,162	18,467	18,374	18,332	18,448	18,547	18,607	18,686	18,913	18,782	18,699	18,709	18,672
Self-employed workers	9,012	8,971	9,060	8,955	9,096	9,030	8,929	8,814	8,830	8,658	8,650	8,813	8,687
Unpaid family workers	95	97	91	88	88	95	112	122	121	114	125	63	60
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	3,754	3,792	3,757	3,503	3,419	3,404	3,340	3,417	3,562	3,426	3,564	3,408	3,422
Slack work or business conditions	2,119	2,183	2,299	2,019	1,913	2,031	1,910	1,927	2,093	1,984	2,045	1,920	1,946
Could only find part-time work	1,317	1,248	1,213	1,188	1,168	1,136	1,157	1,148	1,115	1,141	1,208	1,124	1,137
Part time for noneconomic reasons	18,544	18,619	18,589	18,653	18,687	18,667	18,634	18,674	18,485	18,642	18,545	18,882	18,632
Nonagricultural industries:													
Part time for economic reasons	3,608	3,618	3,606	3,339	3,191	3,253	3,191	3,257	3,413	3,298	3,374	3,224	3,247
Slack work or business conditions	2,033	2,102	2,193	1,926	1,800	1,927	1,824	1,841	1,989	1,906	1,955	1,831	1,838
Could only find part-time work	1,286	1,210	1,182	1,155	1,132	1,110	1,130	1,116	1,094	1,108	1,159	1,092	1,111
Part time for noneconomic reasons	17,956	17,992	17,982	18,031	18,161	18,107	18,110	18,155	17,921	18,061	17,944	18,320	18,098

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 1999, data reflect 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	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224
16 to 24 years	19,568	19,569	19,471	19,490	19,676	19,757	19,705	19,859	19,891	20,081	20,063	19,940	20,087
16 to 19 years	7,011	7,069	7,042	7,029	7,130	7,059	7,037	7,228	7,046	7,276	7,136	7,141	7,306
16 to 17 years	2,746	2,710	2,752	2,730	2,788	2,721	2,709	2,808	2,751	2,841	2,786	2,818	2,815
18 to 19 years	4,264	4,392	4,302	4,286	4,339	4,332	4,340	4,419	4,313	4,413	4,361	4,319	4,494
20 to 24 years	12,557	12,500	12,429	12,461	12,546	12,698	12,668	12,631	12,846	12,804	12,926	12,799	12,781
25 years and over	111,810	111,681	111,679	111,820	112,115	112,126	112,409	112,654	113,557	113,068	112,985	113,124	113,219
25 to 54 years	95,181	95,134	95,102	95,212	95,364	95,309	95,623	95,822	96,713	96,146	95,968	95,967	96,047
55 years and over	16,553	16,503	16,647	16,607	16,783	16,771	16,781	16,871	16,836	16,972	17,053	17,136	17,071
Men, 16 years and over	70,603	70,592	70,629	70,503	70,841	70,925	71,182	71,204	71,459	71,276	71,352	71,225	71,198
16 to 24 years	10,138	10,203	10,118	10,141	10,206	10,246	10,332	10,347	10,320	10,435	10,425	10,158	10,427
16 to 19 years	3,519	3,598	3,573	3,563	3,579	3,563	3,609	3,651	3,574	3,699	3,639	3,617	3,800
16 to 17 years	1,384	1,381	1,396	1,377	1,393	1,348	1,380	1,405	1,427	1,453	1,404	1,398	1,461
18 to 19 years	2,131	2,247	2,180	2,177	2,172	2,213	2,218	2,243	2,170	2,238	2,242	2,223	2,341
20 to 24 years	6,619	6,605	6,545	6,578	6,627	6,683	6,723	6,696	6,745	6,736	6,786	6,541	6,627
25 years and over	60,502	60,380	60,508	60,444	60,617	60,680	60,840	60,843	61,148	60,843	60,905	61,026	60,801
25 to 54 years	51,273	51,182	51,205	51,167	51,232	51,299	51,606	51,502	51,811	51,430	51,435	51,446	51,356
55 years and over	9,207	9,162	9,327	9,238	9,386	9,340	9,311	9,374	9,362	9,465	9,495	9,536	9,417
Women, 16 years and over	60,727	60,661	60,547	60,761	60,977	60,933	60,931	61,322	61,937	61,869	61,680	61,845	62,026
16 to 24 years	9,430	9,366	9,353	9,349	9,470	9,511	9,373	9,512	9,572	9,646	9,637	9,782	9,661
16 to 19 years	3,492	3,471	3,469	3,466	3,551	3,496	3,428	3,577	3,471	3,578	3,497	3,524	3,507
16 to 17 years	1,362	1,329	1,356	1,353	1,395	1,373	1,329	1,403	1,324	1,388	1,382	1,420	1,355
18 to 19 years	2,133	2,145	2,122	2,109	2,167	2,119	2,122	2,176	2,142	2,175	2,119	2,096	2,153
20 to 24 years	5,938	5,895	5,884	5,883	5,919	6,015	5,945	5,935	6,101	6,068	6,140	6,258	6,154
25 years and over	51,308	51,301	51,171	51,376	51,498	51,446	51,569	51,811	52,410	52,226	52,080	52,099	52,417
25 to 54 years	43,908	43,952	43,897	44,045	44,132	44,010	44,017	44,320	44,902	44,715	44,534	44,521	44,690
55 years and over	7,346	7,341	7,320	7,369	7,397	7,431	7,470	7,497	7,474	7,508	7,558	7,600	7,654

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795
16 to 24 years	2,215	2,329	2,267	2,366	2,400	2,320	2,171	2,153	2,240	2,274	2,223	2,217	2,092
16 to 19 years	1,167	1,226	1,162	1,226	1,278	1,318	1,237	1,172	1,288	1,199	1,195	1,171	1,052
16 to 17 years	535	593	513	565	596	607	595	573	619	520	554	572	531
18 to 19 years	640	634	646	669	679	704	646	611	653	666	640	608	531
20 to 24 years	1,048	1,103	1,105	1,140	1,122	1,002	934	981	952	1,075	1,028	1,046	1,040
25 years and over	3,845	3,901	3,930	3,865	3,894	3,931	3,879	3,864	3,743	3,835	3,573	3,792	3,718
25 to 54 years	3,385	3,455	3,437	3,419	3,416	3,475	3,377	3,340	3,257	3,359	3,087	3,271	3,218
55 years and over	423	432	483	449	464	466	516	517	509	501	504	513	462
Men, 16 years and over	3,189	3,274	3,360	3,251	3,361	3,264	3,163	3,233	3,140	3,228	2,881	3,010	3,118
16 to 24 years	1,263	1,276	1,289	1,286	1,374	1,255	1,190	1,247	1,241	1,179	1,151	1,192	1,180
16 to 19 years	665	678	678	673	754	713	713	717	729	630	643	627	584
16 to 17 years	309	356	307	320	352	357	344	349	349	262	286	332	313
18 to 19 years	361	332	365	360	386	351	373	364	375	368	354	310	277
20 to 24 years	598	598	611	613	620	542	477	530	512	548	508	565	597
25 years and over	1,949	1,991	2,068	1,983	1,994	2,006	1,952	1,987	1,900	2,036	1,721	1,827	1,958
25 to 54 years	1,677	1,748	1,777	1,739	1,711	1,739	1,652	1,688	1,646	1,750	1,481	1,562	1,662
55 years and over	238	238	288	247	286	276	296	300	273	295	252	258	261
Women, 16 years and over	2,850	2,971	2,871	2,966	2,902	2,994	2,917	2,788	2,810	2,899	2,902	3,012	2,677
16 to 24 years	952	1,053	978	1,080	1,026	1,065	981	906	999	1,095	1,071	1,025	912
16 to 19 years	502	548	484	553	524	605	524	455	559	568	551	544	468
16 to 17 years	226	237	206	245	244	250	251	224	270	259	267	240	217
18 to 19 years	279	302	281	309	293	353	273	247	278	298	286	298	255
20 to 24 years	450	505	494	527	502	460	457	451	440	527	520	481	444
25 years and over	1,896	1,910	1,862	1,882	1,900	1,925	1,927	1,877	1,842	1,799	1,852	1,965	1,760
25 to 54 years	1,708	1,707	1,660	1,680	1,705	1,736	1,725	1,652	1,611	1,609	1,606	1,709	1,556
55 years and over	185	194	195	202	178	190	220	217	236	206	251	256	201

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

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

(Percent)

Age and sex	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2
16 to 24 years	10.2	10.6	10.4	10.8	10.9	10.5	9.9	9.8	10.1	10.2	10.0	10.0	9.4
16 to 19 years	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6
16 to 17 years	16.3	18.0	15.7	17.1	17.6	18.2	18.0	16.9	18.4	15.5	16.6	16.9	15.9
18 to 19 years	13.1	12.6	13.1	13.5	13.5	14.0	13.0	12.1	13.1	13.1	12.8	12.3	10.6
20 to 24 years	7.7	8.1	8.2	8.4	8.2	7.3	6.9	7.2	6.9	7.7	7.4	7.6	7.5
25 years and over	3.3	3.4	3.4	3.3	3.4	3.4	3.3	3.3	3.2	3.3	3.1	3.2	3.2
25 to 54 years	3.4	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.3	3.4	3.1	3.3	3.2
55 years and over	2.5	2.6	2.8	2.6	2.7	2.7	3.0	3.0	2.9	2.9	2.9	2.9	2.6
Men, 16 years and over	4.3	4.4	4.5	4.4	4.5	4.4	4.3	4.3	4.2	4.3	3.9	4.1	4.2
16 to 24 years	11.1	11.1	11.3	11.3	11.9	10.9	10.3	10.8	10.7	10.1	9.9	10.5	10.2
16 to 19 years	15.9	15.9	15.9	15.9	17.4	16.7	16.5	16.4	16.9	14.6	15.0	14.8	13.3
16 to 17 years	18.3	20.5	18.0	18.9	20.2	20.9	20.0	19.9	19.7	15.3	16.9	19.2	17.7
18 to 19 years	14.5	12.9	14.3	14.2	15.1	13.7	14.4	14.0	14.7	14.1	13.6	12.2	10.6
20 to 24 years	8.3	8.3	8.5	8.5	8.6	7.5	6.6	7.3	7.1	7.5	7.0	8.0	8.3
25 years and over	3.1	3.2	3.3	3.2	3.2	3.2	3.1	3.2	3.0	3.2	2.7	2.9	3.1
25 to 54 years	3.2	3.3	3.4	3.3	3.2	3.3	3.1	3.2	3.1	3.3	2.8	2.9	3.1
55 years and over	2.5	2.5	3.0	2.6	3.0	2.9	3.1	3.1	2.8	3.0	2.6	2.6	2.7
Women, 16 years and over	4.5	4.7	4.5	4.7	4.5	4.7	4.6	4.3	4.3	4.5	4.5	4.6	4.1
16 to 24 years	9.2	10.1	9.5	10.4	9.8	10.1	9.5	8.7	9.5	10.2	10.0	9.5	8.6
16 to 19 years	12.6	13.6	12.2	13.8	12.9	14.8	13.3	11.3	13.9	13.7	13.6	13.4	11.8
16 to 17 years	14.2	15.1	13.2	15.3	14.9	15.4	15.9	13.8	16.9	15.7	16.2	14.5	13.8
18 to 19 years	11.6	12.3	11.7	12.8	11.9	14.3	11.4	10.2	11.5	12.1	11.9	12.5	10.6
20 to 24 years	7.0	7.9	7.7	8.2	7.8	7.1	7.1	7.1	6.7	8.0	7.8	7.1	6.7
25 years and over	3.6	3.6	3.5	3.5	3.6	3.6	3.6	3.5	3.4	3.3	3.4	3.6	3.2
25 to 54 years	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.6	3.5	3.5	3.5	3.7	3.4
55 years and over	2.5	2.6	2.6	2.7	2.3	2.5	2.9	2.8	3.1	2.7	3.2	3.3	2.6

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Percent)

Category	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
CHARACTERISTIC													
Total	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2
Men, 20 years and over	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6	3.4	3.7	3.2	3.4	3.6
Women, 20 years and over	3.9	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.7	3.8	3.9	4.1	3.6
Both sexes, 16 to 19 years	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0	15.5	14.1	14.3	14.1	12.6
White	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.6	3.8	3.7
Black and other	7.7	7.6	8.1	7.6	7.9	7.6	7.5	7.0	6.9	7.4	7.2	6.9	6.7
Black	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9	7.8	8.3	8.1	7.7	7.5
Hispanic origin	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6	6.6	6.7	5.8	6.9	6.7
Married men, spouse present	2.4	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.1	2.3	2.4
Married women, spouse present	2.8	2.9	2.8	3.1	2.7	2.8	2.9	2.8	2.8	2.8	2.7	2.9	2.5
Women who maintain families	7.5	7.1	6.9	6.8	7.6	6.9	6.9	6.3	6.1	6.5	6.7	7.2	6.0
OCCUPATION¹													
Managerial and professional specialty	1.7	1.7	1.7	1.9	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	2.0
Technical, sales, and administrative support	3.9	3.9	3.8	3.7	3.9	3.9	3.7	3.7	3.8	3.9	3.8	3.9	3.3
Precision production, craft, and repair	4.4	4.3	4.3	4.5	4.3	4.0	3.8	3.2	3.5	4.4	3.6	3.8	4.1
Operators, fabricators, and laborers	6.6	6.9	6.9	6.6	7.0	6.8	6.7	6.7	5.9	6.0	5.9	6.5	6.5
Farming, forestry, and fishing	6.5	6.4	6.6	5.9	7.0	5.4	6.3	7.5	7.7	7.8	6.9	7.3	8.0
INDUSTRY													
Nonagricultural private wage and salary workers ...	4.5	4.6	4.6	4.7	4.8	4.6	4.5	4.4	4.3	4.3	4.2	4.4	4.2
Goods-producing industries	4.6	4.7	4.8	4.8	5.1	4.6	4.6	4.6	4.6	4.7	4.3	4.5	4.4
Mining	1.6	4.0	3.9	3.6	3.0	2.4	2.2	4.3	7.4	7.7	5.3	9.3	5.9
Construction	8.0	7.9	6.8	7.4	8.6	6.7	7.0	6.4	7.3	7.5	6.7	7.4	7.2
Manufacturing	3.6	3.6	4.3	3.9	4.0	3.9	3.8	4.0	3.5	3.7	3.4	3.3	3.4
Durable goods	3.0	3.0	4.1	3.5	3.7	3.2	3.2	3.4	3.4	3.3	2.9	3.1	3.3
Nondurable goods	4.6	4.6	4.6	4.5	4.6	5.1	4.8	4.9	3.8	4.3	4.1	3.7	3.6
Service-producing industries	4.5	4.6	4.6	4.7	4.6	4.7	4.5	4.4	4.2	4.2	4.2	4.3	4.1
Transportation and public utilities	3.1	3.5	3.4	3.5	3.5	3.5	3.2	3.2	2.5	3.2	2.9	2.8	3.3
Wholesale and retail trade	5.3	5.6	5.6	5.6	5.7	5.6	5.2	5.5	5.2	5.2	5.4	5.4	5.3
Finance, insurance, and real estate	2.1	2.2	2.1	2.7	2.4	2.5	2.8	2.8	2.4	2.4	1.9	3.2	2.1
Services	4.7	4.6	4.6	4.7	4.5	4.7	4.6	4.1	4.1	4.0	4.2	4.1	3.9
Government workers	2.4	2.2	2.4	2.2	2.2	2.2	2.1	2.0	2.2	2.3	2.1	2.5	2.6
Agricultural wage and salary workers	8.0	8.4	8.2	7.4	7.9	6.7	7.6	8.3	9.6	11.3	9.5	9.7	10.7

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

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

(Numbers in thousands)

Reason	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
NUMBER OF UNEMPLOYED													
Job losers and persons who completed temporary jobs	2,822	2,832	2,865	2,834	2,865	2,813	2,758	2,754	2,696	2,738	2,563	2,700	2,663
On temporary layoff	816	851	931	937	909	857	850	841	864	849	812	838	821
Not on temporary layoff	2,006	1,981	1,934	1,897	1,956	1,956	1,908	1,913	1,832	1,889	1,751	1,862	1,842
Job leavers	749	754	770	734	727	730	677	709	699	751	780	841	789
Reentrants	2,081	2,112	2,072	2,124	2,161	2,142	2,130	2,031	1,993	2,110	1,988	2,044	2,040
New entrants	505	517	474	507	501	577	534	504	537	509	431	469	415
PERCENT DISTRIBUTION													
Job losers and persons who completed temporary jobs	45.8	45.6	46.4	45.7	45.8	44.9	45.2	45.9	45.5	44.8	44.5	44.6	45.1
On temporary layoff	13.3	13.7	15.1	15.1	14.5	13.7	13.9	14.0	14.6	13.9	14.1	13.9	13.9
Not on temporary layoff	32.6	31.9	31.3	30.6	31.3	31.2	31.3	31.9	30.9	30.9	30.4	30.8	31.2
Job leavers	12.2	12.1	12.5	11.8	11.6	11.7	11.1	11.8	11.8	12.3	13.5	13.9	13.4
Reentrants	33.8	34.0	33.5	34.3	34.6	34.2	34.9	33.9	33.6	34.5	34.5	33.8	34.5
New entrants	8.2	8.3	7.7	8.2	8.0	9.2	8.8	8.4	9.1	8.3	7.5	7.7	7.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers and persons who completed temporary jobs	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	1.8	1.9	1.9
Job leavers .....	.5	.5	.6	.5	.5	.5	.5	.5	.5	.5	.6	.6	.6
Reentrants	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.4	1.5	1.4	1.5	1.5
New entrants .....	.4	.4	.3	.4	.4	.4	.4	.4	.4	.4	.3	.3	.3

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

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

(Numbers in thousands)

Duration	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
NUMBER OF UNEMPLOYED													
Less than 5 weeks	2,608	2,553	2,626	2,652	2,638	2,754	2,546	2,614	2,353	2,601	2,478	2,788	2,467
5 to 14 weeks	1,967	2,022	1,975	1,956	1,968	1,896	1,983	1,839	2,071	1,944	1,891	1,867	1,816
15 weeks and over	1,509	1,641	1,606	1,644	1,636	1,598	1,611	1,578	1,469	1,550	1,434	1,446	1,523
15 to 26 weeks	671	833	783	810	732	732	752	754	753	766	736	773	794
27 weeks and over	838	808	823	834	904	866	859	824	716	784	697	673	729
Average (mean) duration, in weeks	14.7	14.1	14.3	13.7	14.3	14.1	14.4	14.1	13.4	13.8	13.5	13.1	13.4
Median duration, in weeks	6.1	6.7	6.7	6.8	6.6	5.9	6.7	6.7	6.9	7.0	6.9	6.1	6.7
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	42.9	41.1	42.3	42.4	42.3	44.1	41.5	43.3	39.9	42.7	42.7	45.7	42.5
5 to 14 weeks	32.3	32.5	31.8	31.3	31.5	30.3	32.3	30.5	35.1	31.9	32.6	30.6	31.3
15 weeks and over	24.8	26.4	25.9	26.3	26.2	25.6	26.2	26.2	24.9	25.4	24.7	23.7	26.2
15 to 26 weeks	11.0	13.4	12.6	13.0	11.7	11.7	12.2	12.5	12.8	12.6	12.7	12.7	13.7
27 weeks and over	13.8	13.0	13.3	13.3	14.5	13.9	14.0	13.7	12.1	12.9	12.0	11.0	12.6

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	May 1999									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force	
TOTAL										
16 years and over	207,427	138,919	67.0	133,411	64.3	3,489	129,923	5,507	4.0	68,508
16 to 19 years	16,051	8,240	51.3	7,150	44.5	297	6,852	1,091	13.2	7,810
16 to 17 years	8,092	3,204	39.6	2,671	33.0	125	2,546	533	16.6	4,888
18 to 19 years	7,959	5,036	63.3	4,478	56.3	172	4,306	558	11.1	2,923
20 to 24 years	17,963	13,788	76.8	12,752	71.0	350	12,402	1,036	7.5	4,175
25 to 54 years	117,995	99,283	84.1	96,339	81.6	2,067	94,273	2,943	3.0	18,712
25 to 34 years	38,018	32,132	84.5	30,968	81.5	692	30,275	1,164	3.6	5,887
25 to 29 years	18,382	15,478	84.2	14,901	81.1	350	14,552	577	3.7	2,904
30 to 34 years	19,636	16,654	84.8	16,066	81.8	343	15,724	577	3.5	2,982
35 to 44 years	44,587	37,900	85.0	36,771	82.5	784	35,988	1,129	3.0	6,688
35 to 39 years	22,362	18,977	84.9	18,420	82.4	380	18,040	557	2.9	3,385
40 to 44 years	22,225	18,923	85.1	18,351	82.6	403	17,948	571	3.0	3,303
45 to 54 years	35,389	29,251	82.7	28,601	80.8	591	28,010	651	2.2	6,138
45 to 49 years	19,240	16,326	84.9	15,978	83.0	338	15,640	348	2.1	2,914
50 to 54 years	16,149	12,925	80.0	12,622	78.2	253	12,369	303	2.3	3,224
55 to 64 years	22,987	13,564	59.0	13,239	57.6	470	12,769	325	2.4	9,423
55 to 59 years	12,654	8,796	69.5	8,584	67.8	257	8,327	212	2.4	3,858
60 to 64 years	10,333	4,768	46.1	4,656	45.1	214	4,442	113	2.4	5,565
65 years and over	32,432	4,043	12.5	3,931	12.1	305	3,626	113	2.8	28,388
65 to 69 years	9,293	2,139	23.0	2,089	22.5	132	1,956	51	2.4	7,153
70 to 74 years	8,509	1,155	13.6	1,117	13.1	85	1,032	38	3.3	7,354
75 years and over	14,630	749	5.1	725	5.0	87	638	24	3.2	13,881
Men										
16 years and over	99,563	74,376	74.7	71,470	71.8	2,593	68,877	2,906	3.9	25,187
16 to 19 years	8,195	4,307	52.6	3,732	45.5	237	3,496	575	13.3	3,888
16 to 17 years	4,156	1,706	41.1	1,408	33.9	93	1,315	298	17.5	2,450
18 to 19 years	4,040	2,601	64.4	2,324	57.5	143	2,181	277	10.6	1,439
20 to 24 years	8,869	7,215	81.4	6,636	74.8	267	6,370	579	8.0	1,654
25 to 54 years	57,793	53,081	91.8	51,572	89.2	1,521	50,051	1,509	2.8	4,712
25 to 34 years	18,587	17,376	93.5	16,816	90.5	552	16,264	560	3.2	1,212
25 to 29 years	8,968	8,325	92.8	8,040	89.7	285	7,756	284	3.4	643
30 to 34 years	9,620	9,051	94.1	8,776	91.2	268	8,508	275	3.0	569
35 to 44 years	21,954	20,358	92.7	19,743	89.9	565	19,179	615	3.0	1,596
35 to 39 years	11,024	10,279	93.2	10,002	90.7	292	9,710	277	2.7	745
40 to 44 years	10,930	10,079	92.2	9,741	89.1	272	9,468	338	3.4	851
45 to 54 years	17,252	15,348	89.0	15,013	87.0	404	14,609	335	2.2	1,904
45 to 49 years	9,435	8,580	90.9	8,394	89.0	233	8,161	186	2.2	855
50 to 54 years	7,817	6,768	86.6	6,619	84.7	171	6,448	149	2.2	1,049
55 to 64 years	10,964	7,409	67.6	7,240	66.0	329	6,911	170	2.3	3,555
55 to 59 years	6,070	4,764	78.5	4,655	76.7	173	4,481	109	2.3	1,307
60 to 64 years	4,894	2,646	54.1	2,585	52.8	156	2,429	60	2.3	2,248
65 years and over	13,741	2,363	17.2	2,290	16.7	240	2,050	73	3.1	11,378
65 to 69 years	4,292	1,222	28.5	1,186	27.6	106	1,079	37	3.0	3,070
70 to 74 years	3,766	698	18.5	678	18.0	65	613	20	2.9	3,068
75 years and over	5,684	443	7.8	427	7.5	69	358	16	3.6	5,241
Women										
16 years and over	107,864	64,543	59.8	61,941	57.4	896	61,045	2,602	4.0	43,321
16 to 19 years	7,856	3,933	50.1	3,417	43.5	61	3,357	516	13.1	3,922
16 to 17 years	3,936	1,498	38.1	1,264	32.1	32	1,231	234	15.7	2,438
18 to 19 years	3,920	2,435	62.1	2,154	54.9	28	2,125	282	11.6	1,484
20 to 24 years	9,094	6,573	72.3	6,116	67.2	83	6,033	457	7.0	2,521
25 to 54 years	60,201	46,201	76.7	44,768	74.4	546	44,222	1,434	3.1	14,000
25 to 34 years	19,431	14,756	75.9	14,152	72.8	140	14,012	604	4.1	4,675
25 to 29 years	9,415	7,153	76.0	6,861	72.9	65	6,796	292	4.1	2,261
30 to 34 years	10,016	7,603	75.9	7,291	72.8	75	7,216	312	4.1	2,414
35 to 44 years	22,633	17,542	77.5	17,028	75.2	219	16,809	514	2.9	5,092
35 to 39 years	11,338	8,698	76.7	8,418	74.2	88	8,330	280	3.2	2,640
40 to 44 years	11,295	8,844	78.3	8,610	76.2	131	8,479	233	2.6	2,452
45 to 54 years	18,137	13,904	76.7	13,588	74.9	187	13,401	316	2.3	4,233
45 to 49 years	9,805	7,747	79.0	7,584	77.4	105	7,480	162	2.1	2,058
50 to 54 years	8,332	6,157	73.9	6,003	72.1	82	5,921	153	2.5	2,175
55 to 64 years	12,023	6,155	51.2	6,000	49.9	141	5,859	155	2.5	5,868
55 to 59 years	6,583	4,032	61.2	3,929	59.7	83	3,846	103	2.5	2,551
60 to 64 years	5,440	2,123	39.0	2,071	38.1	58	2,013	52	2.5	3,317
65 years and over	18,690	1,680	9.0	1,641	8.8	65	1,576	39	2.3	17,010
65 to 69 years	5,001	917	18.3	903	18.1	26	877	14	1.5	4,084
70 to 74 years	4,743	457	9.6	439	9.3	21	418	17	3.8	4,287
75 years and over	8,946	307	3.4	298	3.3	18	280	8	2.6	8,639

See footnotes at end of table.

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

(Numbers in thousands)

Age, sex, and race	May 1999									
	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
WHITE										
16 years and over	172,859	116,198	67.2	112,160	64.9	3,285	108,875	4,038	3.5	56,661
16 to 19 years	12,692	7,014	55.3	6,189	48.8	276	5,913	825	11.8	5,678
16 to 17 years	8,351	2,736	43.1	2,323	36.6	121	2,201	413	15.1	3,615
18 to 19 years	6,341	4,278	67.5	3,867	61.0	155	3,712	412	9.6	2,063
20 to 24 years	14,360	11,244	78.3	10,515	73.2	329	10,186	730	6.5	3,115
25 to 54 years	97,247	82,383	84.7	80,272	82.5	1,949	78,324	2,110	2.6	14,864
25 to 34 years	30,593	25,959	84.9	25,163	82.2	667	24,495	796	3.1	4,634
25 to 29 years	14,666	12,392	84.5	11,999	81.8	341	11,658	392	3.2	2,274
30 to 34 years	15,927	13,567	85.2	13,163	82.6	326	12,837	404	3.0	2,360
35 to 44 years	36,750	31,432	85.5	30,629	83.3	734	29,895	803	2.6	5,318
35 to 39 years	18,399	15,703	85.3	15,333	83.3	355	14,977	370	2.4	2,696
40 to 44 years	18,351	15,729	85.7	15,297	83.4	379	14,918	432	2.7	2,622
45 to 54 years	29,904	24,992	83.6	24,481	81.9	548	23,933	512	2.0	4,912
45 to 49 years	16,099	13,806	85.8	13,538	84.1	313	13,225	267	1.9	2,294
50 to 54 years	13,805	11,187	81.0	10,942	79.3	234	10,708	244	2.2	2,618
55 to 64 years	19,791	11,925	60.3	11,646	58.8	438	11,208	278	2.3	7,866
55 to 59 years	10,888	7,728	71.0	7,546	69.3	233	7,313	183	2.4	3,160
60 to 64 years	8,902	4,196	47.1	4,101	46.1	206	3,895	95	2.3	4,706
65 years and over	28,769	3,632	12.6	3,537	12.3	293	3,244	95	2.6	25,137
65 to 69 years	8,020	1,900	23.7	1,858	23.2	121	1,737	42	2.2	6,121
70 to 74 years	7,579	1,052	13.9	1,019	13.4	85	934	33	3.1	6,527
75 years and over	13,170	681	5.2	660	5.0	86	574	21	3.0	12,490
Men										
16 years and over	83,815	63,322	75.5	61,144	73.0	2,427	58,717	2,179	3.4	20,493
16 to 19 years	6,495	3,687	56.8	3,240	49.9	218	3,022	447	12.1	2,808
16 to 17 years	3,271	1,463	44.7	1,224	37.4	91	1,133	240	16.4	1,808
18 to 19 years	3,224	2,224	69.0	2,016	62.5	127	1,890	207	9.3	1,001
20 to 24 years	7,227	6,075	84.0	5,653	78.2	251	5,402	421	6.9	1,153
25 to 54 years	48,289	44,808	92.8	43,708	90.5	1,426	42,282	1,100	2.5	3,482
25 to 34 years	15,189	14,322	94.3	13,918	91.6	530	13,387	404	2.8	867
25 to 29 years	7,265	6,791	93.5	6,595	90.8	276	6,320	195	2.9	474
30 to 34 years	7,925	7,331	92.5	7,323	92.4	255	7,068	209	2.8	393
35 to 44 years	18,338	17,170	93.6	16,728	91.2	522	16,206	442	2.6	1,168
35 to 39 years	9,182	8,642	94.1	8,461	92.2	273	8,188	181	2.1	540
40 to 44 years	9,156	8,528	93.1	8,267	90.3	249	8,018	261	3.1	629
45 to 54 years	14,762	13,316	90.2	13,062	88.5	373	12,689	254	1.9	1,446
45 to 49 years	7,979	7,339	92.0	7,205	90.3	216	6,989	134	1.8	640
50 to 54 years	6,783	5,977	88.1	5,857	86.3	157	5,700	120	2.0	806
55 to 64 years	9,548	6,596	69.1	6,445	67.5	301	6,143	151	2.3	2,952
55 to 59 years	5,288	4,253	80.4	4,147	78.4	151	3,996	106	2.5	1,035
60 to 64 years	4,260	2,343	55.0	2,297	53.9	150	2,147	45	1.9	1,917
65 years and over	12,255	2,157	17.6	2,098	17.1	231	1,867	59	2.8	10,098
65 to 69 years	3,735	1,102	29.5	1,074	28.8	98	976	28	2.5	2,634
70 to 74 years	3,384	647	19.1	629	18.6	65	564	18	2.8	2,738
75 years and over	5,135	409	8.0	395	7.7	68	327	14	3.4	4,727
Women										
16 years and over	89,043	52,876	59.4	51,016	57.3	858	50,158	1,859	3.5	36,168
16 to 19 years	6,197	3,327	53.7	2,949	47.6	59	2,891	378	11.4	2,869
16 to 17 years	3,080	1,272	41.3	1,099	35.7	30	1,069	173	13.6	1,807
18 to 19 years	3,117	2,055	65.9	1,850	59.4	28	1,822	204	9.9	1,062
20 to 24 years	7,132	5,170	72.5	4,861	68.2	77	4,784	309	6.0	1,962
25 to 54 years	48,957	37,575	76.8	36,564	74.7	523	36,041	1,011	2.7	11,382
25 to 34 years	15,404	11,637	75.5	11,245	73.0	137	11,108	392	3.4	3,767
25 to 29 years	7,401	5,601	75.7	5,404	73.0	65	5,339	197	3.5	1,800
30 to 34 years	8,003	6,036	75.4	5,841	73.0	72	5,769	195	3.2	1,967
35 to 44 years	18,412	14,262	77.5	13,901	75.5	212	13,689	361	2.5	4,150
35 to 39 years	9,217	7,061	76.6	6,871	74.5	82	6,789	190	2.7	2,157
40 to 44 years	9,195	7,202	78.3	7,030	76.5	130	6,900	172	2.4	1,993
45 to 54 years	15,142	11,676	77.1	11,419	75.4	174	11,244	258	2.2	3,466
45 to 49 years	8,120	6,467	79.6	6,333	78.0	97	6,236	133	2.1	1,653
50 to 54 years	7,022	5,210	74.2	5,086	72.4	77	5,008	124	2.4	1,812
55 to 64 years	10,243	5,329	52.0	5,202	50.8	137	5,065	127	2.4	4,914
55 to 59 years	5,600	3,475	62.0	3,398	60.7	82	3,317	77	2.2	2,125
60 to 64 years	4,643	1,854	39.9	1,804	38.8	56	1,748	50	2.7	2,789
65 years and over	16,514	1,475	8.9	1,439	8.7	62	1,377	36	2.4	15,039
65 to 69 years	4,285	798	18.6	784	18.3	23	761	14	1.8	3,487
70 to 74 years	4,194	405	9.7	390	9.3	21	369	15	3.7	3,789
75 years and over	8,035	272	3.4	265	3.3	18	247	7	2.4	7,763

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	May 1999									
	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	24,798	16,248	65.5	15,058	60.7	108	14,950	1,190	7.3	8,550
16 to 19 years	2,479	895	36.1	674	27.2	9	665	222	24.8	1,584
16 to 17 years	1,254	319	25.4	217	17.3	2	214	103	32.1	935
18 to 19 years	1,225	576	47.0	457	37.3	7	450	119	20.7	649
20 to 24 years	2,605	1,893	72.7	1,640	62.9	10	1,630	254	13.4	712
25 to 54 years	14,699	12,059	82.0	11,392	77.5	64	11,328	667	5.5	2,640
25 to 34 years	5,204	4,476	86.0	4,184	80.4	18	4,166	291	6.5	729
25 to 29 years	2,555	2,233	87.4	2,080	81.4	5	2,074	154	6.9	322
30 to 34 years	2,649	2,242	84.7	2,105	79.5	13	2,092	137	6.1	407
35 to 44 years	5,600	4,628	82.6	4,351	77.7	20	4,330	277	6.0	972
35 to 39 years	2,858	2,371	82.9	2,211	77.4	13	2,199	160	6.7	488
40 to 44 years	2,741	2,257	82.3	2,140	78.1	8	2,132	117	5.2	485
45 to 54 years	3,895	2,956	75.9	2,857	73.3	25	2,832	99	3.3	939
45 to 49 years	2,246	1,784	79.4	1,727	76.9	16	1,711	57	3.2	462
50 to 54 years	1,650	1,172	71.1	1,130	68.5	9	1,121	42	3.6	477
55 to 64 years	2,280	1,109	48.6	1,070	46.9	19	1,050	40	3.6	1,171
55 to 59 years	1,254	730	58.2	703	56.0	19	683	27	3.7	524
60 to 64 years	1,026	380	37.0	367	35.7	-	367	13	3.4	647
65 years and over	2,734	291	10.6	283	10.3	6	277	8	2.8	2,443
65 to 69 years	952	156	16.3	150	15.7	6	144	6	3.7	796
70 to 74 years	657	78	11.9	76	11.5	-	76	3	3.2	579
75 years and over	1,125	57	5.1	57	5.1	-	57	-	(1)	1,068
Men										
16 years and over	11,117	7,645	68.8	7,080	63.7	93	6,988	565	7.4	3,472
16 to 19 years	1,218	436	35.8	327	26.8	7	320	109	25.1	782
16 to 17 years	630	189	29.9	116	18.5	-	116	53	31.3	460
18 to 19 years	589	267	45.3	211	35.8	7	204	56	21.1	322
20 to 24 years	1,193	852	71.4	719	60.3	5	714	133	15.6	341
25 to 54 years	6,642	5,713	86.0	5,413	81.5	58	5,355	300	5.2	929
25 to 34 years	2,324	2,109	90.8	2,003	86.2	18	1,985	106	5.0	215
25 to 29 years	1,127	1,042	92.4	978	86.8	5	973	63	6.1	86
30 to 34 years	1,196	1,067	89.2	1,025	85.7	13	1,012	42	4.0	129
35 to 44 years	2,561	2,219	86.6	2,079	81.2	20	2,060	140	6.3	342
35 to 39 years	1,301	1,137	87.4	1,055	81.1	12	1,043	81	7.2	165
40 to 44 years	1,260	1,082	85.9	1,024	81.3	8	1,016	58	5.4	177
45 to 54 years	1,758	1,385	78.8	1,330	75.7	20	1,310	55	3.9	373
45 to 49 years	1,019	865	84.9	829	81.3	13	816	36	4.2	154
50 to 54 years	738	520	70.4	502	67.9	20	495	18	3.5	218
55 to 64 years	976	509	52.2	495	50.7	18	478	14	2.8	467
55 to 59 years	542	326	60.3	323	59.7	18	306	3	1.0	215
60 to 64 years	434	163	37.5	172	39.6	-	172	11	5.9	251
65 years and over	1,088	135	12.4	127	11.6	6	121	8	6.1	953
65 to 69 years	399	71	17.8	65	16.3	6	60	6	(1)	328
70 to 74 years	289	37	13.0	35	12.1	-	35	3	(1)	251
75 years and over	401	27	6.6	27	6.6	-	27	-	(1)	374
Women										
16 years and over	13,681	8,603	62.9	7,977	58.3	15	7,962	625	7.3	5,078
16 to 19 years	1,261	459	36.4	347	27.5	2	345	112	24.5	801
16 to 17 years	624	150	24.0	100	16.1	2	98	50	33.1	474
18 to 19 years	636	309	48.6	247	38.7	-	247	63	20.3	327
20 to 24 years	1,413	1,041	73.7	921	65.2	5	916	120	11.6	371
25 to 54 years	8,057	6,346	78.8	5,979	74.2	6	5,973	367	5.8	1,711
25 to 34 years	2,881	2,367	82.2	2,181	75.7	-	2,181	185	7.8	514
25 to 29 years	1,428	1,192	83.4	1,101	77.1	-	1,101	90	7.6	237
30 to 34 years	1,452	1,175	80.9	1,080	74.4	-	1,080	95	8.1	277
35 to 44 years	3,039	2,409	79.3	2,272	74.7	1	2,271	137	5.7	630
35 to 39 years	1,557	1,234	79.3	1,156	74.2	1	1,155	78	6.3	323
40 to 44 years	1,482	1,175	79.3	1,116	75.3	-	1,116	59	5.0	307
45 to 54 years	2,137	1,571	73.5	1,526	71.4	5	1,521	44	2.8	567
45 to 49 years	1,226	919	74.9	898	73.2	3	895	21	2.3	308
50 to 54 years	911	652	71.6	628	69.0	2	626	24	3.6	259
55 to 64 years	1,305	600	46.0	574	44.0	2	572	26	4.3	705
55 to 59 years	712	403	56.6	380	53.3	2	378	23	5.8	309
60 to 64 years	592	197	33.2	195	32.9	-	195	2	1.1	395
65 years and over	1,646	156	9.5	156	9.5	-	156	-	-	1,490
65 to 69 years	554	85	15.3	85	15.3	-	85	-	-	469
70 to 74 years	368	41	11.1	41	11.1	-	41	-	(1)	327
75 years and over	724	30	4.2	30	4.2	-	30	-	(1)	694

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

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

the household survey.

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	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
TOTAL								
Civilian noninstitutional population	204,899	207,427	90,622	91,368	98,668	100,008	15,609	16,051
Civilian labor force	137,240	138,919	69,752	70,069	59,434	60,609	8,054	8,240
Percent of population	67.0	67.0	77.0	76.7	60.2	60.6	51.6	51.3
Employed	131,476	133,411	67,413	67,738	57,216	58,524	6,847	7,150
Agriculture	3,552	3,489	2,482	2,356	774	835	296	297
Nonagricultural industries	127,924	129,923	64,930	65,382	56,442	57,689	6,552	6,852
Unemployed	5,764	5,507	2,339	2,331	2,218	2,086	1,207	1,091
Unemployment rate	4.2	4.0	3.4	3.3	3.7	3.4	15.0	13.2
Not in labor force	67,659	68,508	20,870	21,299	39,235	39,399	7,554	7,810
White								
Civilian noninstitutional population	171,257	172,859	76,861	77,320	81,990	82,847	12,406	12,692
Civilian labor force	115,261	116,198	59,488	59,635	48,920	49,549	6,853	7,014
Percent of population	67.3	67.2	77.4	77.1	59.7	59.8	55.2	55.3
Employed	111,127	112,160	57,746	57,904	47,416	48,067	5,965	6,189
Agriculture	3,346	3,285	2,331	2,209	735	799	280	276
Nonagricultural industries	107,781	108,875	55,415	55,695	46,681	47,267	5,685	5,913
Unemployed	4,134	4,038	1,743	1,732	1,504	1,482	888	825
Unemployment rate	3.6	3.5	2.9	2.9	3.1	3.0	13.0	11.8
Not in labor force	55,996	56,661	17,373	17,685	33,070	33,298	5,553	5,678
Black								
Civilian noninstitutional population	24,317	24,798	9,701	9,899	12,176	12,420	2,440	2,479
Civilian labor force	15,709	16,248	7,009	7,209	7,762	8,144	938	895
Percent of population	64.6	65.5	72.2	72.8	63.7	65.6	38.5	36.1
Employed	14,336	15,058	6,549	6,754	7,130	7,631	657	674
Agriculture	138	108	111	86	14	13	14	9
Nonagricultural industries	14,198	14,950	6,438	6,668	7,116	7,618	643	665
Unemployed	1,373	1,190	460	455	631	513	282	222
Unemployment rate	8.7	7.3	6.6	6.3	8.1	6.3	30.0	24.8
Not in labor force	8,608	8,550	2,692	2,690	4,414	4,277	1,502	1,584

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	May 1999									
	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	17,979	8,693	48.4	7,838	1,666	6,171	856	315	540	9.8
16 to 19 years	12,601	5,573	44.2	4,921	550	4,371	652	199	453	11.7
20 to 24 years	5,378	3,120	58.0	2,916	1,116	1,800	204	117	87	6.5
High school	10,539	4,430	42.0	3,846	270	3,576	585	153	431	13.2
College	7,440	4,263	57.3	3,992	1,397	2,595	271	162	109	6.4
Full-time students	6,244	3,259	52.2	3,019	778	2,241	240	142	97	7.4
Part-time students	1,196	1,004	84.0	973	619	354	32	20	12	3.1
Men, 16 to 24 years	8,942	4,323	48.3	3,868	907	2,961	455	163	291	10.5
16 to 19 years	6,366	2,811	44.2	2,461	291	2,170	350	115	236	12.5
20 to 24 years	2,577	1,512	58.7	1,407	617	791	104	49	56	6.9
High school	5,504	2,389	43.4	2,054	183	1,870	336	95	240	14.0
College	3,439	1,934	56.2	1,815	724	1,091	119	68	51	6.2
Full-time students	2,848	1,415	49.7	1,309	376	933	105	59	46	7.5
Part-time students	591	519	87.8	505	347	158	14	9	5	2.7
Women, 16 to 24 years	9,036	4,370	48.4	3,969	759	3,210	401	152	249	9.2
16 to 19 years	6,235	2,762	44.3	2,460	259	2,201	301	84	218	10.9
20 to 24 years	2,801	1,608	57.4	1,509	500	1,009	99	68	31	6.2
High school	5,035	2,041	40.5	1,792	86	1,706	249	58	191	12.2
College	4,001	2,329	58.2	2,177	673	1,504	152	94	58	6.5
Full-time students	3,397	1,844	54.3	1,710	402	1,308	134	83	51	7.3
Part-time students	604	485	80.2	467	271	196	18	11	7	3.6
White										
Total, 16 to 24 years	14,172	7,370	52.0	6,718	1,343	5,375	652	241	411	8.8
16 to 19 years	9,924	4,800	48.4	4,301	462	3,839	499	158	341	10.4
20 to 24 years	4,248	2,570	60.5	2,417	881	1,536	153	83	70	6.0
Men	7,104	3,735	52.6	3,371	757	2,614	364	134	229	9.7
Women	7,068	3,635	51.4	3,347	586	2,761	288	107	181	7.9
High school	8,254	3,793	46.0	3,348	219	3,130	445	118	327	11.7
College	5,918	3,576	60.4	3,370	1,124	2,246	206	123	84	5.8
Full-time students	4,963	2,750	55.4	2,566	620	1,946	184	112	72	6.7
Part-time students	955	827	86.6	804	504	300	23	11	12	2.7
Black										
Total, 16 to 24 years	2,636	895	33.9	732	231	501	162	62	101	18.1
16 to 19 years	1,925	537	27.9	413	74	340	124	37	87	23.1
20 to 24 years	711	358	50.3	319	158	162	38	25	13	10.7
Men	1,252	403	32.2	328	106	222	75	27	48	18.7
Women	1,384	492	35.5	405	125	279	87	34	53	17.7
High school	1,695	471	27.8	351	47	304	119	33	87	25.4
College	941	424	45.0	381	184	197	43	29	14	10.1
Full-time students	795	306	38.5	272	116	156	34	20	14	11.1
Part-time students	146	118	80.3	109	68	41	9	9	-	7.5
Hispanic origin										
Total, 16 to 24 years	2,033	762	37.5	666	183	483	96	49	47	12.6
16 to 19 years	1,544	464	30.1	398	69	329	66	27	38	14.2
20 to 24 years	490	298	60.9	268	114	154	31	22	9	10.3
Men	995	411	41.3	359	111	247	52	28	24	12.7
Women	1,039	352	33.9	307	72	236	44	21	23	12.6
High school	1,372	356	26.0	299	47	252	58	23	35	16.1
College	662	406	61.4	367	137	231	39	26	12	9.6
Full-time students	455	236	51.7	208	48	160	27	21	6	11.6
Part-time students	206	170	82.6	159	89	70	12	5	6	6.8

See footnotes at end of table.

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	May 1999									
	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	16,035	13,335	83.2	12,064	9,986	2,078	1,271	1,125	146	9.5
16 to 19 years	3,450	2,668	77.3	2,228	1,582	646	439	357	82	16.5
20 to 24 years	12,585	10,668	84.8	9,836	8,404	1,431	832	768	64	7.8
Less than a high school diploma	3,961	2,758	69.6	2,317	1,819	498	441	383	58	16.0
High school graduates, no college	6,660	5,683	85.3	5,187	4,297	890	496	450	46	8.7
Less than a bachelor's degree	4,097	3,653	89.2	3,370	2,782	588	283	241	42	7.7
College graduates	1,317	1,242	94.3	1,190	1,088	102	52	52	-	4.2
Men, 16 to 24 years	8,122	7,199	88.6	6,500	5,688	812	699	632	67	9.7
16 to 19 years	1,830	1,496	81.7	1,271	990	281	224	180	44	15.0
20 to 24 years	6,292	5,703	90.6	5,229	4,698	531	474	451	23	8.3
Less than a high school diploma	2,211	1,734	78.4	1,496	1,250	246	238	206	31	13.7
High school graduates, no college	3,488	3,168	90.8	2,879	2,540	339	290	263	26	9.1
Less than a bachelor's degree	1,910	1,801	94.3	1,661	1,459	202	140	130	10	7.8
College graduates	513	496	96.7	464	439	25	32	32	-	6.4
Women, 16 to 24 years	7,914	6,136	77.5	5,564	4,298	1,266	573	494	79	9.3
16 to 19 years	1,620	1,172	72.3	957	592	365	215	177	38	18.3
20 to 24 years	6,293	4,964	78.9	4,607	3,706	901	358	317	41	7.2
Less than a high school diploma	1,751	1,024	58.5	821	569	252	203	176	27	19.9
High school graduates, no college	3,172	2,514	79.3	2,308	1,757	551	206	187	19	8.2
Less than a bachelor's degree	2,187	1,852	84.7	1,709	1,323	386	143	110	33	7.7
College graduates	804	746	92.8	726	649	77	20	20	-	2.7
White										
Total, 16 to 24 years	12,880	10,889	84.5	9,986	8,334	1,652	903	788	115	8.3
16 to 19 years	2,768	2,214	80.0	1,888	1,374	514	326	264	61	14.7
20 to 24 years	10,111	8,675	85.8	8,098	6,960	1,138	577	523	54	6.6
Men	6,619	6,027	91.1	5,522	4,892	630	505	453	52	8.4
Women	6,260	4,862	77.7	4,464	3,442	1,022	398	335	63	8.2
Less than a high school diploma	3,074	2,216	72.1	1,910	1,537	373	307	258	49	13.8
High school graduates, no college	5,358	4,626	86.3	4,280	3,557	723	346	316	31	7.5
Less than a bachelor's degree	3,328	2,988	89.8	2,776	2,309	466	212	177	35	7.1
College graduates	1,120	1,058	94.5	1,021	931	90	37	37	-	3.5
Black										
Total, 16 to 24 years	2,448	1,894	77.4	1,581	1,264	317	313	285	28	16.5
16 to 19 years	554	358	64.7	260	166	95	98	80	18	27.3
20 to 24 years	1,894	1,536	81.1	1,320	1,098	222	215	205	10	14.0
Men	1,159	885	76.4	718	592	126	167	155	12	18.9
Women	1,289	1,009	78.3	863	672	191	146	130	16	14.4
Less than a high school diploma	721	425	59.0	305	212	93	120	112	9	28.3
High school graduates, no college	1,080	885	82.0	758	616	142	127	115	12	14.3
Less than a bachelor's degree	580	516	89.0	458	381	77	59	51	7	11.4
College graduates	68	67	(¹)	60	56	4	7	7	-	(¹)
Hispanic origin										
Total, 16 to 24 years	2,961	2,303	77.8	2,074	1,771	302	230	205	25	10.0
16 to 19 years	757	541	71.5	448	343	105	93	78	14	17.2
20 to 24 years	2,204	1,763	80.0	1,626	1,428	197	137	127	10	7.8
Men	1,584	1,411	89.0	1,269	1,134	135	142	127	15	10.1
Women	1,377	893	64.8	805	637	168	88	79	9	9.8
Less than a high school diploma	1,420	975	68.7	863	744	119	112	98	13	11.5
High school graduates, no college	1,021	845	82.8	756	623	133	90	79	10	10.6
Less than a bachelor's degree	486	454	93.5	426	376	50	28	28	1	6.2
College graduates	33	28	(¹)	28	28	1	-	-	-	(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 1999, data reflect revised population controls used in the household survey.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	Total		Men		Women		White		Black		Hispanic origin	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
TOTAL												
Civilian noninstitutional population ...	171,750	173,413	81,879	82,499	89,871	90,914	144,743	145,807	19,341	19,714	16,089	16,554
Civilian labor force	115,614	116,890	62,542	62,854	53,072	54,036	97,139	97,940	13,045	13,459	11,241	11,432
Percent of population	67.3	67.4	76.4	76.2	59.1	59.4	67.1	67.2	67.4	68.3	69.9	69.1
Employed	112,103	113,510	60,787	61,102	51,316	52,408	94,607	95,456	12,246	12,745	10,705	10,873
Employment-population ratio	65.3	65.5	74.2	74.1	57.1	57.6	65.4	65.5	63.3	64.6	66.5	65.7
Unemployed	3,510	3,381	1,755	1,752	1,755	1,628	2,531	2,484	799	715	536	559
Unemployment rate	3.0	2.9	2.8	2.8	3.3	3.0	2.6	2.5	6.1	5.3	4.8	4.9
Less than a high school diploma												
Civilian noninstitutional population ...	29,931	28,298	14,261	13,403	15,670	14,895	24,080	22,739	4,549	4,273	7,055	7,069
Civilian labor force	12,942	12,052	7,997	7,433	4,945	4,619	10,460	9,818	1,851	1,654	4,132	4,139
Percent of population	43.2	42.6	56.1	55.5	31.6	31.0	43.4	43.2	40.7	38.7	58.6	58.5
Employed	12,147	11,332	7,595	7,067	4,552	4,265	9,885	9,299	1,667	1,477	3,884	3,853
Employment-population ratio	40.6	40.0	53.3	52.7	29.0	28.6	41.1	40.9	36.6	34.6	55.1	54.5
Unemployed	796	720	402	366	394	354	575	519	184	177	248	286
Unemployment rate	6.1	6.0	5.0	4.9	8.0	7.7	5.5	5.3	10.0	10.7	6.0	6.9
High school graduates, no college												
Civilian noninstitutional population ...	57,706	57,931	26,091	26,281	31,615	31,650	49,068	48,970	6,711	7,008	4,253	4,605
Civilian labor force	37,627	37,548	19,927	19,850	17,701	17,699	31,587	31,342	4,728	4,953	3,138	3,312
Percent of population	65.2	64.8	76.4	75.5	56.0	55.9	64.4	64.0	70.5	70.7	73.8	71.9
Employed	36,366	36,346	19,270	19,220	17,097	17,126	30,704	30,524	4,404	4,626	2,999	3,174
Employment-population ratio	63.0	62.7	73.9	73.1	54.1	54.1	62.6	62.3	65.6	66.0	70.5	68.9
Unemployed	1,261	1,202	657	629	604	573	883	818	324	328	139	138
Unemployment rate	3.4	3.2	3.3	3.2	3.4	3.2	2.8	2.6	6.9	6.6	4.4	4.2
Less than a bachelor's degree¹												
Civilian noninstitutional population ...	42,024	42,742	19,606	19,757	22,417	22,985	35,282	35,772	5,111	5,255	2,972	3,081
Civilian labor force	31,114	31,640	15,929	16,008	15,185	15,631	25,914	26,206	3,980	4,137	2,451	2,472
Percent of population	74.0	74.0	81.2	81.0	67.7	68.0	73.4	73.3	77.9	78.7	82.5	80.2
Employed	30,193	30,795	15,495	15,602	14,698	15,193	25,248	25,553	3,766	3,998	2,342	2,365
Employment-population ratio	71.8	72.0	79.0	79.0	65.6	66.1	71.6	71.4	73.7	76.1	78.8	76.8
Unemployed	921	845	434	407	487	438	666	653	214	139	110	107
Unemployment rate	3.0	2.7	2.7	2.5	3.2	2.8	2.6	2.5	5.4	3.4	4.5	4.3
Some college, no degree												
Civilian noninstitutional population ...	29,774	30,051	14,177	14,070	15,597	15,981	24,829	25,006	3,844	3,909	2,191	2,206
Civilian labor force	21,440	21,766	11,210	11,176	10,230	10,590	17,698	17,874	2,939	3,053	1,776	1,742
Percent of population	72.0	72.4	79.1	79.4	65.6	66.3	71.3	71.5	76.5	78.1	81.1	79.0
Employed	20,755	21,153	10,873	10,889	9,881	10,264	17,204	17,425	2,772	2,930	1,695	1,670
Employment-population ratio	69.7	70.4	76.7	77.4	63.4	64.2	69.3	69.7	72.1	74.9	77.4	75.7
Unemployed	686	612	337	286	349	326	494	450	167	124	81	72
Unemployment rate	3.2	2.8	3.0	2.6	3.4	3.1	2.8	2.5	5.7	4.0	4.6	4.1
Associate degree												
Civilian noninstitutional population ...	12,250	12,691	5,429	5,687	6,821	7,004	10,453	10,766	1,267	1,345	781	875
Civilian labor force	9,673	9,874	4,719	4,833	4,954	5,041	8,216	8,332	1,041	1,084	675	730
Percent of population	79.0	77.8	86.9	85.0	72.6	72.0	78.6	77.4	82.2	80.6	86.5	83.4
Employed	9,438	9,642	4,622	4,713	4,817	4,929	8,044	8,128	995	1,069	647	695
Employment-population ratio	77.0	76.0	85.1	82.9	70.6	70.4	76.9	75.5	78.5	79.4	82.8	79.5
Unemployed	235	232	97	120	138	112	173	204	47	15	29	35
Unemployment rate	2.4	2.4	2.1	2.5	2.8	2.2	2.1	2.4	4.5	1.4	4.2	4.7
College graduates												
Civilian noninstitutional population ...	42,090	44,442	21,921	23,058	20,168	21,384	36,314	38,326	2,971	3,178	1,809	1,799
Civilian labor force	33,930	35,650	18,690	19,563	15,241	16,088	29,178	30,573	2,485	2,715	1,519	1,510
Percent of population	80.6	80.2	85.3	84.8	75.6	75.2	80.3	79.8	83.6	85.4	84.0	83.9
Employed	33,397	35,037	18,428	19,213	14,970	15,824	28,771	30,080	2,409	2,644	1,480	1,481
Employment-population ratio	79.3	78.8	84.1	83.3	74.2	74.0	79.2	78.5	81.1	83.2	81.8	82.3
Unemployed	533	613	262	350	271	263	407	493	76	71	39	29
Unemployment rate	1.6	1.7	1.4	1.8	1.8	1.6	1.4	1.6	3.0	2.6	2.6	1.9

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

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

(In thousands)

Age, sex, and race	May 1999									
	Employed ¹							Unemployed		
	Full-time workers				Part-time workers			Looking for full-time work	Looking for part-time work	
	Total	At work		Not at work	Total	At work ²				Not at work
35 hours or more		1 to 34 hours for economic or noneconomic reasons	Part time for economic reasons			Part time for noneconomic reasons				
TOTAL										
Total, 16 years and over	110,018	98,337	8,718	2,963	23,393	2,200	19,906	1,286	4,426	1,082
16 to 19 years	2,132	1,790	303	40	5,017	241	4,616	160	556	535
16 to 17 years	250	194	49	6	2,422	40	2,321	60	172	361
18 to 19 years	1,883	1,596	253	34	2,595	201	2,295	99	384	174
20 years and over	107,886	96,548	8,415	2,923	18,376	1,959	15,290	1,127	3,870	547
20 to 24 years	9,520	8,486	843	192	3,231	448	2,604	180	885	151
25 years and over	98,365	88,061	7,572	2,732	15,144	1,511	12,687	947	2,985	395
25 to 54 years	85,619	76,981	6,369	2,270	10,720	1,329	8,805	586	2,668	276
55 years and over	12,746	11,081	1,204	462	4,424	181	3,882	361	318	120
Men, 16 years and over	63,913	58,120	4,363	1,430	7,557	950	6,227	380	2,408	498
16 to 19 years	1,281	1,076	191	14	2,451	109	2,275	67	295	280
16 to 17 years	62,632	57,044	4,173	1,416	5,106	841	3,952	313	2,113	218
20 to 24 years	5,315	4,835	409	71	1,322	231	1,038	52	500	79
25 years and over	57,317	52,209	3,764	1,345	3,784	610	2,914	261	1,613	139
25 to 54 years	49,654	45,476	3,087	1,090	1,918	526	1,268	125	1,435	74
55 years and over	7,663	6,732	677	254	1,866	84	1,646	136	178	65
Women, 16 years and over	46,105	40,218	4,354	1,533	15,836	1,250	13,679	907	2,018	584
16 to 19 years	852	714	112	25	2,566	132	2,341	93	261	255
20 years and over	45,254	39,504	4,243	1,508	13,270	1,117	11,339	814	1,757	328
20 to 24 years	4,206	3,651	434	121	1,910	217	1,566	127	385	72
25 years and over	41,048	35,853	3,808	1,387	11,360	901	9,773	687	1,372	256
25 to 54 years	35,965	31,505	3,281	1,179	8,802	804	7,537	461	1,232	201
55 years and over	5,083	4,348	527	208	2,558	97	2,235	225	140	55
White										
Men, 16 years and over	54,665	49,664	3,795	1,206	6,479	698	5,443	337	1,797	382
16 to 19 years	1,112	949	153	11	2,128	82	1,982	64	233	214
20 years and over	53,553	48,715	3,642	1,196	4,351	616	3,461	273	1,564	168
20 to 24 years	4,537	4,135	348	54	1,117	167	904	45	354	67
25 years and over	49,016	44,580	3,294	1,142	3,234	449	2,557	228	1,210	100
25 to 54 years	42,178	38,600	2,683	895	1,530	376	1,053	100	1,051	48
55 years and over	6,838	5,980	611	246	1,704	73	1,504	127	159	52
Women, 16 years and over	37,159	32,400	3,503	1,256	13,858	930	12,099	829	1,429	430
16 to 19 years	724	604	98	22	2,225	94	2,045	86	189	188
20 years and over	36,434	31,796	3,405	1,234	11,633	836	10,053	743	1,240	242
20 to 24 years	3,303	2,883	326	95	1,558	161	1,293	104	253	56
25 years and over	33,131	28,913	3,079	1,139	10,075	675	8,761	639	988	186
25 to 54 years	28,823	25,232	2,623	968	7,741	600	6,712	429	869	141
55 years and over	4,308	3,682	455	171	2,334	75	2,048	210	118	44
Black										
Men, 16 years and over	6,341	5,781	383	178	739	212	506	21	478	87
16 to 19 years	128	95	29	4	199	14	182	3	57	53
20 years and over	6,213	5,686	354	174	540	197	325	18	421	34
20 to 24 years	570	523	30	16	149	53	96	-	126	7
25 years and over	5,644	5,162	323	158	391	144	229	18	295	27
25 to 54 years	5,136	4,687	294	155	277	140	127	10	282	18
55 years and over	508	475	29	3	114	5	101	8	13	9
Women, 16 years and over	6,618	5,790	631	198	1,359	268	1,042	49	500	126
16 to 19 years	111	101	7	4	236	33	197	5	60	52
20 years and over	6,507	5,689	624	194	1,124	235	845	44	440	73
20 to 24 years	686	586	76	24	235	49	167	18	104	16
25 years and over	5,820	5,103	548	170	889	186	678	25	336	57
25 to 54 years	5,255	4,612	502	141	724	168	537	19	318	49
55 years and over	566	491	46	29	165	18	141	6	18	8

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
Total	131,476	133,411	70,856	71,470	67,413	67,738	60,619	61,941	57,216	58,524
Managerial and professional specialty	38,672	40,477	19,584	20,393	19,468	20,255	19,088	20,084	18,946	19,928
Executive, administrative, and managerial	18,708	19,625	10,375	10,671	10,320	10,604	8,333	8,954	8,257	8,916
Officials and administrators, public administration	657	788	360	414	360	414	296	374	294	374
Other executive, administrative, and managerial	13,460	14,031	8,024	8,211	7,974	8,146	5,437	5,821	5,390	5,791
Management-related occupations	4,591	4,806	1,991	2,046	1,985	2,043	2,600	2,760	2,573	2,751
Professional specialty	19,964	20,852	9,208	9,722	9,148	9,651	10,755	11,130	10,689	11,012
Engineers	2,021	2,051	1,784	1,853	1,784	1,850	236	198	236	198
Mathematical and computer scientists	1,593	1,782	1,140	1,233	1,138	1,229	453	549	450	549
Natural scientists	452	573	295	405	295	405	157	168	157	165
Health diagnosing occupations	1,054	1,109	758	846	758	846	296	262	296	262
Health assessment and treating occupations	2,960	2,989	466	445	466	445	2,493	2,544	2,491	2,535
Teachers, college and university	853	938	526	559	519	557	327	379	324	369
Teachers, except college and university	5,239	5,471	1,238	1,317	1,225	1,305	4,001	4,154	3,959	4,095
Lawyers and judges	1,011	1,007	725	749	725	749	286	259	286	259
Other professional specialty occupations	4,782	4,931	2,276	2,314	2,238	2,266	2,506	2,617	2,489	2,580
Technical, sales, and administrative support	38,247	38,868	13,678	13,914	12,948	13,063	24,569	24,955	22,740	23,232
Technicians and related support	4,272	4,306	1,975	2,106	1,941	2,067	2,297	2,200	2,273	2,158
Health technologists and technicians	1,719	1,679	323	319	317	307	1,396	1,360	1,392	1,332
Engineering and science technicians	1,304	1,333	939	1,023	923	999	365	310	349	301
Technicians, except health, engineering, and science	1,250	1,294	712	764	701	760	537	529	532	525
Sales occupations	15,905	15,980	7,927	7,963	7,449	7,431	7,978	8,018	6,755	6,920
Supervisors and proprietors	4,850	4,856	2,948	2,921	2,928	2,914	1,901	1,935	1,866	1,910
Sales representatives, finance and business services	2,638	2,670	1,474	1,471	1,442	1,451	1,163	1,199	1,100	1,159
Sales representatives, commodities, except retail	1,495	1,483	1,094	1,106	1,094	1,104	400	376	394	363
Sales workers, retail and personal services	6,805	6,863	2,381	2,439	1,957	1,936	4,424	4,424	3,310	3,405
Sales-related occupations	118	109	29	25	27	25	89	84	86	82
Administrative support, including clerical	18,070	18,582	3,777	3,845	3,558	3,565	14,293	14,737	13,712	14,154
Supervisors	708	734	267	311	264	306	441	424	436	420
Computer equipment operators	366	287	158	119	155	113	208	168	208	168
Secretaries, stenographers, and typists	3,716	3,661	100	66	97	62	3,617	3,595	3,506	3,500
Financial records processing	2,038	2,190	137	192	124	188	1,900	1,997	1,875	1,975
Mail and message distributing	963	986	565	582	546	556	398	404	390	399
Other administrative support, including clerical	10,279	10,724	2,549	2,575	2,373	2,340	7,730	8,149	7,298	7,692
Service occupations	17,749	18,075	7,153	7,269	6,152	6,192	10,597	10,806	9,477	9,559
Private household	848	813	56	62	50	52	792	751	716	663
Protective service	2,346	2,380	1,928	1,965	1,907	1,910	419	415	373	376
Service, except private household and protective	14,555	14,882	5,169	5,242	4,195	4,230	9,386	9,641	8,389	8,521
Food service	6,137	6,171	2,561	2,652	1,820	1,846	3,576	3,519	2,854	2,740
Health service	2,456	2,544	324	285	299	271	2,132	2,258	2,048	2,144
Cleaning and building service	3,109	3,052	1,738	1,705	1,606	1,592	1,371	1,348	1,314	1,282
Personal service	2,853	3,116	546	600	470	521	2,307	2,516	2,173	2,355
Precision production, craft, and repair	14,839	14,519	13,617	13,213	13,286	12,915	1,221	1,306	1,204	1,276
Mechanics and repairers	4,955	4,934	4,729	4,693	4,611	4,589	226	241	225	234
Construction trades	5,706	5,567	5,610	5,397	5,444	5,232	95	169	87	163
Other precision production, craft, and repair	4,178	4,018	3,278	3,122	3,231	3,093	900	895	892	879
Operators, fabricators, and laborers	18,250	17,794	13,832	13,713	12,839	12,656	4,417	4,081	4,192	3,871
Machine operators, assemblers, and inspectors	7,653	7,173	4,692	4,647	4,513	4,471	2,961	2,526	2,870	2,449
Transportation and material moving occupations	5,487	5,527	4,951	4,987	4,844	4,834	536	540	519	528
Motor vehicle operators	4,055	4,115	3,586	3,609	3,511	3,487	468	506	451	495
Other transportation and material moving occupations	1,433	1,412	1,365	1,378	1,334	1,347	68	34	68	33
Handlers, equipment cleaners, helpers, and laborers	5,109	5,095	4,189	4,080	3,482	3,351	920	1,015	803	895
Construction laborers	829	870	794	829	761	769	35	41	35	33
Other handlers, equipment cleaners, helpers, and laborers	4,281	4,225	3,395	3,251	2,721	2,581	885	974	769	862
Farming, forestry, and fishing	3,719	3,678	2,992	2,969	2,720	2,658	727	709	656	656
Farm operators and managers	1,323	1,192	1,013	888	1,006	884	309	304	306	303
Other farming, forestry, and fishing occupations	2,396	2,486	1,979	2,081	1,714	1,775	418	405	350	354

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

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
TOTAL						
Total, 16 years and over (thousands)	131,476	133,411	70,856	71,470	60,619	61,941
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	29.4	30.3	27.6	28.5	31.5	32.4
Executive, administrative, and managerial	14.2	14.7	14.6	14.9	13.7	14.5
Professional specialty	15.2	15.6	13.0	13.6	17.7	18.0
Technical, sales, and administrative support	29.1	29.1	19.3	19.5	40.5	40.3
Technicians and related support	3.2	3.2	2.8	2.9	3.8	3.6
Sales occupations	12.1	12.0	11.2	11.1	13.2	12.9
Administrative support, including clerical	13.7	13.9	5.3	5.4	23.6	23.8
Service occupations	13.5	13.5	10.1	10.2	17.5	17.4
Private household .....	.6	.6	.1	.1	1.3	1.2
Protective service	1.8	1.8	2.7	2.7	.7	.7
Service, except private household and protective	11.1	11.2	7.3	7.3	15.5	15.6
Precision production, craft, and repair	11.3	10.9	19.2	18.5	2.0	2.1
Operators, fabricators, and laborers	13.9	13.3	19.5	19.2	7.3	6.6
Machine operators, assemblers, and inspectors	5.8	5.4	6.6	6.5	4.9	4.1
Transportation and material moving occupations	4.2	4.1	7.0	7.0	.9	.9
Handlers, equipment cleaners, helpers, and laborers	3.9	3.8	5.9	5.7	1.5	1.6
Farming, forestry, and fishing	2.8	2.8	4.2	4.2	1.2	1.1
White						
Total, 16 years and over (thousands)	111,127	112,160	60,773	61,144	50,354	51,016
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	30.4	31.3	28.6	29.5	32.6	33.4
Executive, administrative, and managerial	14.9	15.3	15.4	15.7	14.3	14.9
Professional specialty	15.5	16.0	13.2	13.8	18.3	18.6
Technical, sales, and administrative support	29.1	29.2	19.3	19.5	41.0	40.9
Technicians and related support	3.2	3.2	2.7	2.8	3.8	3.5
Sales occupations	12.4	12.4	11.6	11.6	13.3	13.3
Administrative support, including clerical	13.6	13.7	5.1	5.1	23.9	24.0
Service occupations	12.5	12.3	9.3	9.2	16.3	16.1
Private household .....	.6	.5	.1	.1	1.3	1.1
Protective service	1.7	1.7	2.6	2.6	.5	.6
Service, except private household and protective	10.2	10.1	6.6	6.6	14.5	14.4
Precision production, craft, and repair	11.7	11.4	19.8	19.1	2.0	2.2
Operators, fabricators, and laborers	13.1	12.7	18.3	18.2	6.7	6.2
Machine operators, assemblers, and inspectors	5.4	5.1	6.2	6.1	4.4	3.8
Transportation and material moving occupations	4.0	4.0	6.6	6.7	.9	.8
Handlers, equipment cleaners, helpers, and laborers	3.7	3.6	5.5	5.4	1.4	1.5
Farming, forestry, and fishing	3.1	3.0	4.6	4.5	1.4	1.3
Black						
Total, 16 years and over (thousands)	14,336	15,058	6,842	7,080	7,494	7,977
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	20.8	21.6	16.7	17.3	24.6	25.3
Executive, administrative, and managerial	9.3	10.0	8.1	8.2	10.4	11.7
Professional specialty	11.5	11.5	8.5	9.2	14.2	13.7
Technical, sales, and administrative support	28.0	28.5	16.5	17.4	38.6	38.4
Technicians and related support	3.1	3.3	2.5	3.0	3.6	3.5
Sales occupations	9.3	9.1	7.2	7.4	11.3	10.6
Administrative support, including clerical	15.6	16.2	6.8	7.1	23.7	24.3
Service occupations	20.7	22.4	15.7	18.3	25.2	26.1
Private household .....	.8	1.1	.1	.2	1.4	1.8
Protective service	3.1	3.1	4.3	5.0	1.9	1.4
Service, except private household and protective	16.8	18.3	11.4	13.1	21.8	22.9
Precision production, craft, and repair	8.8	8.1	16.4	15.4	1.7	1.6
Operators, fabricators, and laborers	20.5	18.3	32.4	29.4	9.7	8.4
Machine operators, assemblers, and inspectors	8.4	7.2	9.9	9.5	7.1	5.2
Transportation and material moving occupations	6.4	5.6	12.4	10.6	.9	1.1
Handlers, equipment cleaners, helpers, and laborers	5.7	5.5	10.0	9.3	1.7	2.1
Farming, forestry, and fishing	1.2	1.1	2.3	2.2	.2	.2

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-21. Employed persons by industry and occupation

(In thousands)

Industry	May 1999												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service ¹		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture	3,489	97	115	56	22	165	-	19	40	11	39	11	2,914
Mining	539	59	54	23	2	31	-	4	219	23	103	18	2
Construction	8,883	1,435	164	70	60	440	-	21	5,076	124	562	916	15
Manufacturing	20,162	3,028	1,983	608	699	1,931	-	265	4,042	5,712	753	1,050	91
Durable goods	12,099	1,839	1,240	426	314	1,117	-	132	2,810	3,185	434	518	83
Nondurable goods	8,063	1,189	743	183	385	813	-	132	1,232	2,527	318	532	8
Transportation and public utilities	9,298	1,289	589	357	273	2,301	-	340	1,253	114	2,231	544	7
Wholesale and retail trade	27,386	2,652	632	225	11,414	2,254	-	5,278	1,432	299	1,205	1,886	111
Wholesale trade	4,995	649	160	37	2,030	765	-	34	273	102	547	351	46
Retail trade	22,391	2,003	472	188	9,384	1,489	-	5,244	1,159	196	657	1,534	64
Finance, insurance, and real estate	8,747	2,608	336	185	2,165	2,884	-	280	183	11	12	33	51
Services	49,200	7,111	16,032	2,586	1,319	7,341	813	9,399	2,099	865	578	597	462
Private households	904	5	3	-	-	14	813	45	2	-	-	7	16
Other service industries	48,296	7,106	16,029	2,586	1,319	7,327	-	9,354	2,097	865	577	590	447
Professional services	32,766	4,313	13,905	2,108	224	5,361	-	5,709	489	156	312	82	107
Public administration	5,707	1,346	947	196	27	1,236	-	1,657	175	15	45	40	24

¹ Includes protective service, not shown separately.

used in the household survey.

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

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

(In thousands)

Age and sex	May 1999									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Wage and salary workers					Self-employed workers	Unpaid family workers
				Total	Private industries			Government		
Total					Private household workers	Other private industries				
Total, 16 years and over	2,067	1,387	35	121,110	102,344	899	101,445	18,766	8,748	65
16 to 19 years	241	37	19	6,814	6,533	119	6,414	281	36	3
16 to 17 years	100	15	10	2,533	2,456	71	2,385	77	10	3
18 to 19 years	142	22	8	4,280	4,077	48	4,029	204	26	-
20 to 24 years	325	22	3	12,166	11,131	112	11,019	1,035	236	-
25 to 34 years	503	186	3	28,693	25,098	158	24,940	3,595	1,573	9
35 to 44 years	485	297	1	33,446	28,065	192	27,873	5,381	2,526	16
45 to 54 years	271	319	1	25,630	19,886	149	19,737	5,744	2,366	14
55 to 64 years	172	292	7	11,362	9,109	92	9,017	2,253	1,393	14
65 years and over	70	233	2	2,999	2,522	77	2,445	477	618	9
Men, 16 years and over	1,566	1,003	24	63,660	55,544	85	55,459	8,116	5,211	6
16 to 19 years	186	37	13	3,480	3,348	21	3,327	132	15	-
16 to 17 years	72	15	5	1,309	1,266	7	1,258	43	5	-
18 to 19 years	114	22	8	2,171	2,082	13	2,069	89	10	-
20 to 24 years	247	17	3	6,225	5,773	21	5,752	452	145	-
25 to 34 years	398	151	3	15,420	13,854	12	13,842	1,566	842	2
35 to 44 years	359	205	-	17,700	15,454	12	15,442	2,246	1,479	-
45 to 54 years	191	213	-	13,190	10,747	6	10,741	2,444	1,418	-
55 to 64 years	119	205	5	6,022	4,981	8	4,973	1,041	888	-
65 years and over	65	174	-	1,623	1,388	6	1,382	236	423	4
Women, 16 years and over	501	384	11	57,450	46,800	814	45,986	10,650	3,537	58
16 to 19 years	55	-	6	3,334	3,185	98	3,087	148	20	3
16 to 17 years	27	-	5	1,224	1,191	64	1,127	34	5	3
18 to 19 years	28	-	1	2,110	1,995	34	1,960	115	16	-
20 to 24 years	78	5	-	5,941	5,358	92	5,267	583	91	-
25 to 34 years	105	35	-	13,273	11,244	146	11,098	2,029	732	7
35 to 44 years	126	92	1	15,746	12,611	180	12,431	3,135	1,047	16
45 to 54 years	80	106	1	12,440	9,139	143	8,996	3,300	947	14
55 to 64 years	52	87	2	5,340	4,128	84	4,044	1,212	505	14
65 years and over	4	59	2	1,376	1,135	72	1,063	241	194	5

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Hours of work	May 1999					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	129,162	3,373	125,789	100.0	100.0	100.0
1 to 34 hours	29,917	903	29,015	23.2	26.8	23.1
1 to 4 hours	1,199	71	1,128	.9	2.1	.9
5 to 14 hours	4,640	187	4,453	3.6	5.6	3.5
15 to 29 hours	15,395	429	14,966	11.9	12.7	11.9
30 to 34 hours	8,684	215	8,468	6.7	6.4	6.7
35 hours and over	99,244	2,470	96,774	76.8	73.2	76.9
35 to 39 hours	8,980	166	8,813	7.0	4.9	7.0
40 hours	48,713	884	47,828	37.7	26.2	38.0
41 hours and over	41,552	1,419	40,132	32.2	42.1	31.9
41 to 48 hours	15,141	277	14,863	11.7	8.2	11.8
49 to 59 hours	15,324	425	14,899	11.9	12.6	11.8
60 hours and over	11,087	717	10,370	8.6	21.3	8.2
Average hours, total at work	39.7	42.8	39.7	-	-	-
Average hours, persons who usually work full time	43.7	48.9	43.5	-	-	-

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

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

(Numbers in thousands)

Reason for working less than 35 hours	May 1999					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over	29,917	8,718	21,200	29,015	8,466	20,549
Economic reasons	3,281	1,217	2,064	3,127	1,146	1,981
Slack work or business conditions	1,835	921	914	1,748	884	864
Could only find part-time work	1,122	-	1,122	1,092	-	1,092
Seasonal work	112	84	28	88	63	25
Job started or ended during week	213	213	-	200	200	-
Noneconomic reasons	26,636	7,500	19,136	25,888	7,319	18,568
Child-care problems	825	84	742	822	84	739
Other family or personal obligations	6,073	861	5,212	5,927	831	5,096
Health or medical limitations	690	-	690	628	-	628
In school or training	6,632	102	6,530	6,464	92	6,373
Retired or Social Security limit on earnings	2,039	-	2,039	1,924	-	1,924
Vacation or personal day	3,316	3,316	-	3,256	3,256	-
Holiday, legal or religious	54	54	-	54	54	-
Weather-related curtailment	369	369	-	328	328	-
All other reasons	6,638	2,715	3,923	6,484	2,675	3,809
Average hours:						
Economic reasons	23.6	24.6	23.0	23.6	24.7	23.0
Other reasons	21.2	25.5	19.6	21.3	25.6	19.6

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

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

(Numbers in thousands)

Industry and class of worker	May 1999							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over	125,789	29,015	3,127	7,319	18,568	96,774	39.7	43.5
Wage and salary workers	117,485	26,572	2,873	6,822	16,877	90,913	39.6	43.3
Mining	512	34	5	21	7	478	47.9	48.4
Construction	7,155	1,279	284	579	416	5,876	41.0	42.7
Manufacturing	19,264	2,045	269	1,134	641	17,220	42.8	43.7
Durable goods	11,594	1,090	111	699	280	10,504	43.3	43.9
Nondurable goods	7,670	955	158	435	362	6,716	42.1	43.4
Transportation and public utilities	8,562	1,301	171	565	565	7,261	42.3	44.2
Wholesale and retail trade	24,960	8,010	921	1,035	6,055	16,950	37.4	43.7
Finance, insurance, and real estate	7,923	1,378	77	568	733	6,545	40.4	42.4
Service industries	43,558	11,724	1,110	2,436	8,177	31,834	38.2	43.0
Private households	882	506	59	51	397	376	28.6	41.9
All other industries	42,676	11,217	1,052	2,385	7,780	31,458	38.4	43.0
Public administration	5,551	801	35	483	283	4,750	41.0	42.3
Self-employed workers	8,239	2,415	254	491	1,670	5,824	40.8	47.3
Unpaid family workers	65	28	-	6	22	37	(¹)	(¹)

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

used in the household survey.

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-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	May 1999							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
TOTAL								
Total, 16 years and over	125,789	29,015	3,127	7,319	18,568	96,774	39.7	43.5
16 to 19 years	6,667	4,868	273	220	4,375	1,798	24.1	39.4
16 to 17 years	2,486	2,287	45	33	2,210	200	17.6	36.5
18 to 19 years	4,180	2,581	229	187	2,165	1,599	28.0	39.7
20 years and over	119,122	24,147	2,854	7,099	14,193	94,976	40.5	43.6
20 to 24 years	12,036	3,662	563	660	2,438	8,374	36.5	41.4
25 years and over	107,087	20,485	2,291	6,439	11,755	86,602	41.0	43.8
25 to 54 years	91,459	15,643	1,955	5,480	8,208	75,816	41.6	43.9
55 years and over	15,628	4,842	336	959	3,547	10,785	37.4	43.2
Men, 16 years and over	67,131	10,728	1,500	3,509	5,719	56,402	42.5	45.0
16 to 19 years	3,425	2,368	120	137	2,111	1,057	25.5	39.9
16 to 17 years	1,283	1,171	22	26	1,122	112	17.9	35.7
18 to 19 years	2,142	1,198	98	111	989	945	30.0	40.4
20 years and over	63,706	8,360	1,380	3,372	3,608	55,346	43.5	45.1
20 to 24 years	6,249	1,568	293	309	967	4,680	38.4	42.3
25 years and over	57,457	6,792	1,087	3,064	2,641	50,665	44.0	45.4
25 to 54 years	48,853	4,631	897	2,560	1,174	44,222	44.7	45.5
55 years and over	8,604	2,161	190	504	1,467	6,443	39.9	44.4
Women, 16 years and over	58,658	18,286	1,627	3,810	12,849	40,372	36.4	41.5
16 to 19 years	3,242	2,500	153	83	2,264	742	22.7	38.6
16 to 17 years	1,204	1,116	23	6	1,087	88	17.1	37.9
18 to 19 years	2,038	1,384	131	77	1,177	654	26.0	38.7
20 years and over	55,416	15,786	1,473	3,727	10,586	39,630	37.2	41.6
20 to 24 years	5,787	2,093	270	351	1,472	3,694	34.5	40.2
25 years and over	49,629	13,693	1,203	3,376	9,114	35,936	37.5	41.7
25 to 54 years	42,606	11,012	1,058	2,920	7,035	31,594	38.0	41.7
55 years and over	7,023	2,681	146	456	2,079	4,342	34.3	41.3
Race								
White, 16 years and over	105,360	24,823	2,381	6,119	16,323	80,537	39.7	43.8
Men	57,237	9,210	1,165	3,059	4,986	48,026	42.7	45.2
Women	48,123	15,612	1,216	3,059	11,337	32,511	36.1	41.6
Black, 16 years and over	14,505	2,929	588	883	1,458	11,575	39.3	42.1
Men	6,789	1,044	270	310	464	5,746	41.3	43.5
Women	7,716	1,886	318	573	994	5,830	37.5	40.7
Marital status								
Men, 16 years and over:								
Married, spouse present	40,207	4,527	572	2,183	1,772	35,680	44.4	45.6
Widowed, divorced, or separated	8,348	1,088	225	464	399	7,260	43.5	45.0
Single (never married)	18,576	5,114	703	862	3,548	13,462	38.1	43.4
Women, 16 years and over:								
Married, spouse present	31,497	9,748	689	1,985	7,074	21,749	36.4	41.4
Widowed, divorced, or separated	11,697	2,833	353	895	1,585	8,863	38.8	42.1
Single (never married)	15,464	5,705	584	930	4,191	9,759	34.4	41.1

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

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

(Numbers in thousands)

Occupation and sex	May 1999							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over ¹	125,589	28,979	3,119	7,305	18,555	96,610	39.7	43.5
Managerial and professional specialty	39,169	6,655	474	2,284	3,896	32,514	42.4	45.1
Executive, administrative, and managerial	19,068	2,428	142	1,049	1,238	16,639	44.3	46.1
Professional specialty	20,101	4,227	332	1,235	2,659	15,875	40.6	44.2
Technical, sales, and administrative support	37,550	10,217	833	2,221	7,163	27,334	37.7	42.4
Technicians and related support	4,162	841	67	282	493	3,321	39.6	42.2
Sales occupations	15,377	4,420	422	702	3,296	10,956	38.7	44.7
Administrative support, including clerical	18,011	4,955	344	1,237	3,374	13,056	36.5	40.5
Service occupations	17,504	6,831	843	835	5,154	10,673	34.5	42.0
Private household	796	461	51	51	360	334	28.5	41.5
Protective service	2,296	377	33	126	217	1,919	41.9	44.7
Service, except private household and protective	14,413	5,993	759	657	4,577	8,420	33.7	41.4
Precision production, craft, and repair	14,104	1,848	326	952	570	12,257	42.3	43.5
Operators, fabricators, and laborers	17,261	3,428	643	1,012	1,772	13,831	40.6	43.4
Machine operators, assemblers, and inspectors	6,957	928	204	391	333	6,029	41.3	42.5
Transportation and material moving occupations	5,330	977	171	302	504	4,353	43.1	45.8
Handlers, equipment cleaners, helpers, and laborers	4,974	1,524	268	320	935	3,451	37.0	41.9
Men, 16 years and over ¹	66,750	10,598	1,482	3,482	5,635	56,152	42.6	45.0
Managerial and professional specialty	19,880	2,192	226	987	979	17,688	45.6	47.1
Executive, administrative, and managerial	10,446	960	77	495	388	9,485	46.9	48.0
Professional specialty	9,434	1,232	148	493	591	8,202	44.1	46.1
Technical, sales, and administrative support	13,595	2,327	204	618	1,505	11,267	42.0	45.1
Technicians and related support	2,049	285	18	116	151	1,765	42.1	43.9
Sales occupations	7,788	1,307	107	290	910	6,481	43.4	46.8
Administrative support, including clerical	3,758	736	80	213	444	3,022	39.2	42.1
Service occupations	7,076	2,029	279	267	1,484	5,047	37.5	43.2
Private household	62	26	3	7	16	36	(²)	(²)
Protective service	1,906	243	16	101	126	1,663	43.4	45.2
Service, except private household and protective	5,108	1,760	260	158	1,342	3,348	35.3	42.2
Precision production, craft, and repair	12,863	1,601	307	852	443	11,262	42.6	43.6
Operators, fabricators, and laborers	13,336	2,449	467	757	1,224	10,888	41.5	44.1
Machine operators, assemblers, and inspectors	4,540	490	117	226	147	4,050	42.5	43.4
Transportation and material moving occupations	4,818	760	151	274	334	4,058	43.9	46.0
Handlers, equipment cleaners, helpers, and laborers	3,978	1,198	199	257	743	2,780	37.3	42.3
Women, 16 years and over ¹	58,839	18,381	1,637	3,823	12,920	40,458	36.3	41.5
Managerial and professional specialty	19,289	4,463	249	1,297	2,917	14,826	39.2	42.9
Executive, administrative, and managerial	8,622	1,468	65	554	849	7,154	41.2	43.6
Professional specialty	10,667	2,994	184	743	2,068	7,672	37.6	42.2
Technical, sales, and administrative support	23,955	7,889	629	1,603	5,658	16,066	35.3	40.6
Technicians and related support	2,113	557	49	166	342	1,556	37.2	40.4
Sales occupations	7,589	3,114	315	413	2,386	4,476	34.0	41.7
Administrative support, including clerical	14,253	4,219	265	1,024	2,930	10,034	35.8	40.1
Service occupations	10,429	4,802	564	568	3,670	5,626	32.6	40.9
Private household	734	435	48	43	344	299	28.3	41.9
Protective service	390	134	18	25	91	256	34.2	41.0
Service, except private household and protective	9,305	4,233	498	500	3,235	5,072	32.8	40.9
Precision production, craft, and repair	1,241	247	19	100	127	994	39.4	41.9
Operators, fabricators, and laborers	3,925	980	177	255	548	2,946	37.6	40.8
Machine operators, assemblers, and inspectors	2,417	437	87	164	186	1,980	38.9	40.7
Transportation and material moving occupations	512	217	20	28	169	295	35.3	42.6
Handlers, equipment cleaners, helpers, and laborers	996	325	70	63	193	671	35.7	40.1

¹ Excludes farming, forestry, and fishing occupations.
² Data not shown where base is less than 75,000.

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
Total, 16 years and over	2,997	2,906	4.1	3.9	2,767	2,602	4.4	4.0
Married, spouse present	946	944	2.2	2.2	835	770	2.5	2.2
Widowed, divorced, or separated	404	395	4.3	4.3	546	571	4.3	4.4
Single (never married)	1,647	1,567	7.9	7.3	1,386	1,260	8.1	7.2
White, 16 years and over	2,248	2,179	3.6	3.4	1,886	1,859	3.6	3.5
Married, spouse present	729	739	1.9	1.9	702	648	2.4	2.2
Widowed, divorced, or separated	319	312	4.1	4.1	363	430	3.6	4.2
Single (never married)	1,200	1,127	7.0	6.6	821	782	6.4	6.1
Black, 16 years and over	590	565	7.9	7.4	783	625	9.5	7.3
Married, spouse present	131	128	3.9	3.9	95	91	3.7	3.4
Widowed, divorced, or separated	79	77	6.2	6.0	172	109	7.8	4.9
Single (never married)	380	360	13.5	11.6	516	426	14.7	11.5
Total, 25 years and over	1,755	1,752	2.8	2.8	1,755	1,628	3.3	3.0
Married, spouse present	889	885	2.1	2.1	756	691	2.3	2.1
Widowed, divorced, or separated	387	381	4.2	4.2	514	533	4.2	4.3
Single (never married)	479	486	4.3	4.3	485	404	5.7	4.6
White, 25 years and over	1,326	1,310	2.5	2.4	1,206	1,173	2.8	2.6
Married, spouse present	677	687	1.8	1.8	628	579	2.2	2.0
Widowed, divorced, or separated	302	299	4.0	4.0	336	403	3.5	4.1
Single (never married)	346	324	4.0	3.7	241	191	4.1	3.2
Black, 25 years and over	311	322	5.0	5.1	487	393	7.1	5.5
Married, spouse present	125	124	3.9	3.9	92	83	3.7	3.2
Widowed, divorced, or separated	79	77	6.2	6.1	168	104	7.7	4.8
Single (never married)	107	121	6.3	6.4	227	206	10.3	8.7

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-29. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
Total, 16 years and over ¹	5,764	5,507	4.2	4.0	4.1	3.9	4.4	4.0
Managerial and professional specialty	622	774	1.6	1.9	1.5	1.7	1.7	2.0
Executive, administrative, and managerial	286	401	1.5	2.0	1.4	1.8	1.6	2.2
Professional specialty	337	373	1.7	1.8	1.6	1.6	1.7	1.9
Technical, sales, and administrative support	1,566	1,334	3.9	3.3	3.3	3.2	4.3	3.4
Technicians and related support	132	115	3.0	2.6	2.8	3.2	3.2	2.1
Sales occupations	695	657	4.2	3.9	3.0	3.2	5.4	4.6
Administrative support, including clerical	738	562	3.9	2.9	4.2	3.1	3.9	2.9
Service occupations	1,082	1,075	5.7	5.6	5.4	5.6	6.0	5.6
Private household	86	84	9.2	9.4	(²)	(²)	8.9	9.7
Protective service	62	75	2.6	3.1	2.1	2.4	4.8	6.0
Service, except private household and protective	933	916	6.0	5.8	6.4	6.8	5.8	5.3
Precision production, craft, and repair	615	557	4.0	3.7	4.0	3.6	4.1	4.6
Mechanics and repairers	149	132	2.9	2.6	3.1	2.6	-	3.6
Construction trades	334	287	5.5	4.9	5.4	4.7	13.3	9.6
Other precision production, craft, and repair	132	138	3.1	3.3	2.8	3.2	4.1	3.8
Operators, fabricators, and laborers	1,170	1,117	6.0	5.9	5.8	5.6	6.8	6.9
Machine operators, assemblers, and inspectors	440	402	5.4	5.3	5.0	4.2	6.2	7.3
Transportation and material moving occupations	239	200	4.2	3.5	4.1	3.5	4.6	3.1
Handlers, equipment cleaners, helpers, and laborers	490	515	8.8	9.2	8.5	9.5	9.7	7.9
Construction laborers	116	149	12.3	14.7	12.3	14.5	(²)	(²)
Other handlers, equipment cleaners, helpers, and laborers	374	366	8.0	8.0	7.6	8.1	9.6	7.4
Farming, forestry, and fishing	190	235	4.9	6.0	4.8	5.3	5.1	8.7
No previous work experience	486	394	-	-	-	-	-	-
16 to 19 years	364	250	-	-	-	-	-	-
20 to 24 years	63	76	-	-	-	-	-	-
25 years and over	60	68	-	-	-	-	-	-

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-30. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
Total, 16 years and over	5,764	5,507	4.2	4.0	4.1	3.9	4.4	4.0
Nonagricultural private wage and salary workers	4,605	4,348	4.4	4.1	4.2	4.0	4.6	4.2
Mining	9	30	1.4	5.4	1.6	6.0	-	-
Construction	515	470	7.2	6.4	7.3	6.6	5.9	5.1
Manufacturing	756	700	3.6	3.4	3.0	3.0	4.9	4.3
Durable goods	371	400	3.0	3.3	2.5	3.2	4.1	3.4
Lumber and wood products	42	40	5.2	5.1	5.8	5.8	2.8	2.1
Furniture and fixtures	23	21	3.5	3.0	3.9	2.6	2.5	4.1
Stone, clay, and glass products	10	13	1.7	2.0	1.7	1.8	1.9	2.9
Primary metal industries	27	20	3.3	2.6	3.3	2.0	3.0	5.5
Fabricated metal products	51	34	3.8	2.6	3.8	2.2	3.7	3.5
Machinery and computing equipment	62	92	2.5	3.6	1.9	3.7	4.0	3.3
Electrical machinery, equipment, and supplies	54	62	2.8	3.3	1.8	3.3	4.4	3.1
Transportation equipment	54	71	2.2	3.2	1.8	2.9	3.5	4.0
Automobiles	26	38	1.9	3.3	1.7	2.6	2.8	5.3
Other transportation equipment	28	32	2.6	3.1	2.0	3.4	4.3	2.2
Professional and photographic equipment	13	15	1.7	2.1	1.3	2.0	2.2	2.2
Other durable goods industries	35	32	5.4	5.2	1.2	6.1	11.3	3.6
Nondurable goods	385	300	4.6	3.7	3.8	2.7	5.8	5.3
Food and kindred products	107	50	6.2	3.0	5.7	2.0	7.1	5.3
Textile mill products	17	25	3.1	4.7	3.0	4.2	3.3	5.3
Apparel and other textile products	69	60	8.3	7.9	7.4	5.1	8.7	9.3
Paper and allied products	29	28	3.9	4.1	3.9	4.5	3.9	3.0
Printing and publishing	73	65	4.0	3.5	3.5	3.3	4.5	3.8
Chemicals and allied products	41	28	3.1	2.2	2.0	2.1	5.5	2.3
Rubber and miscellaneous plastics products	22	22	2.3	2.2	1.3	1.7	4.4	3.6
Other nondurable goods industries	26	23	7.6	5.8	6.8	.6	9.4	17.1
Transportation and public utilities	199	212	2.7	2.8	2.7	2.9	2.6	2.5
Transportation	155	142	3.4	3.1	3.6	3.2	2.7	2.6
Communications and other public utilities	44	70	1.5	2.4	1.0	2.4	2.5	2.4
Wholesale and retail trade	1,372	1,384	5.1	5.1	4.3	4.3	6.0	6.0
Wholesale trade	183	139	3.9	2.9	3.1	1.8	5.7	5.2
Retail trade	1,189	1,245	5.4	5.6	4.7	5.1	6.0	6.2
Finance, insurance, and real estate	164	164	2.1	2.0	2.1	2.3	2.1	1.8
Service industries	1,589	1,387	4.6	3.9	5.0	4.0	4.4	3.8
Professional services	560	540	2.7	2.5	2.3	2.3	2.9	2.7
Other service industries	1,029	846	7.4	5.8	7.3	5.4	7.6	6.2
Agricultural wage and salary workers	120	162	5.5	7.3	5.3	7.5	6.0	6.5
Government, self-employed, and unpaid family workers	553	603	1.9	2.0	1.9	2.2	1.9	1.9
No previous work experience	486	394	-	-	-	-	-	-

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

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

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
NUMBER OF UNEMPLOYED												
Total unemployed	5,764	5,507	2,339	2,331	2,218	2,086	1,207	1,091	4,134	4,038	1,373	1,190
Job losers and persons who completed temporary jobs	2,517	2,362	1,382	1,329	985	897	149	137	1,853	1,751	569	502
On temporary layoff	608	609	340	331	217	234	51	45	507	483	81	104
Not on temporary layoff	1,908	1,753	1,042	998	769	663	98	92	1,346	1,268	488	399
Permanent job losers	1,357	1,295	738	730	553	498	66	67	953	945	351	291
Persons who completed temporary jobs	551	458	304	268	215	164	32	25	393	323	137	108
Job leavers	664	699	358	339	234	257	72	102	517	542	115	117
Reentrants	2,098	2,052	550	624	925	827	623	602	1,430	1,489	570	460
New entrants	486	394	49	39	74	105	364	250	333	256	119	110
PERCENT DISTRIBUTION												
Job losers and persons who completed temporary jobs	43.7	42.9	59.1	57.0	44.4	43.0	12.3	12.6	44.8	43.4	41.5	42.2
On temporary layoff	10.5	11.1	14.6	14.2	9.8	11.2	4.2	4.1	12.3	12.0	5.9	8.7
Not on temporary layoff	33.1	31.8	44.5	42.8	34.7	31.8	8.1	8.4	32.6	31.4	35.5	33.5
Job leavers	11.5	12.7	15.3	14.6	10.6	12.3	6.0	9.4	12.5	13.4	8.3	9.8
Reentrants	36.4	37.3	23.5	26.8	41.7	39.6	51.6	55.2	34.6	36.9	41.5	38.7
New entrants	8.4	7.2	2.1	1.7	3.3	5.0	30.1	22.9	8.1	6.3	8.7	9.3
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers and persons who completed temporary jobs	1.8	1.7	2.0	1.9	1.7	1.5	1.9	1.7	1.6	1.5	3.6	3.1
Job leavers .....	.5	.5	.5	.5	.4	.4	.9	1.2	.4	.5	.7	.7
Reentrants	1.5	1.5	.8	.9	1.6	1.4	7.7	7.3	1.2	1.3	3.6	2.8
New entrants .....	.4	.3	.1	.1	.1	.2	4.5	3.0	.3	.2	.8	.7

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Reason, sex, and age	May 1999						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over	5,507	100.0	45.3	26.7	28.0	15.3	12.7
Job losers and persons who completed temporary jobs	2,362	100.0	41.9	27.7	30.4	19.6	10.8
On temporary layoff	609	100.0	56.8	25.1	18.1	13.5	4.6
Not on temporary layoff	1,753	100.0	36.7	28.6	34.7	21.8	12.9
Permanent job losers	1,295	100.0	36.0	27.8	36.1	22.4	13.7
Persons who completed temporary jobs	458	100.0	38.5	30.8	30.7	20.1	10.6
Job leavers	699	100.0	56.4	25.1	18.5	9.6	9.0
Reentrants	2,052	100.0	45.9	25.5	28.6	13.4	15.3
New entrants	394	100.0	43.1	29.3	27.6	10.1	17.4
Men, 20 years and over	2,331	100.0	42.7	25.5	31.8	17.7	14.0
Job losers and persons who completed temporary jobs	1,329	100.0	39.7	26.4	33.9	22.1	11.8
On temporary layoff	331	100.0	51.8	24.5	23.7	18.9	4.8
Not on temporary layoff	998	100.0	35.6	27.1	37.3	23.2	14.1
Permanent job losers	730	100.0	34.8	27.0	38.2	23.0	15.2
Persons who completed temporary jobs	268	100.0	37.8	27.3	34.9	23.6	11.3
Job leavers	339	100.0	58.1	22.8	19.1	11.5	7.6
Reentrants	624	100.0	40.9	24.5	34.6	12.8	21.8
New entrants	39	100.0	(1)	(1)	(1)	(1)	(1)
Women, 20 years and over	2,086	100.0	43.8	25.8	30.3	17.0	13.3
Job losers and persons who completed temporary jobs	897	100.0	42.9	28.3	28.8	18.4	10.3
On temporary layoff	234	100.0	61.3	25.1	13.7	8.4	5.2
Not on temporary layoff	663	100.0	36.5	29.4	34.1	22.0	12.1
Permanent job losers	498	100.0	34.9	27.7	37.3	23.8	13.5
Persons who completed temporary jobs	164	100.0	41.1	34.7	24.3	16.4	7.9
Job leavers	257	100.0	49.3	28.4	22.3	10.9	11.4
Reentrants	827	100.0	43.6	22.5	33.9	16.9	17.0
New entrants	105	100.0	40.2	24.8	35.1	20.6	14.5
Both sexes, 16 to 19 years	1,091	100.0	53.5	30.8	15.7	7.1	8.6
Job losers and persons who completed temporary jobs	137	100.0	56.4	36.1	7.5	3.5	4.0
On temporary layoff	45	100.0	(1)	(1)	(1)	(1)	(1)
Not on temporary layoff	92	100.0	49.6	39.3	11.1	5.2	5.9
Permanent job losers	67	100.0	(1)	(1)	(1)	(1)	(1)
Persons who completed temporary jobs	25	100.0	(1)	(1)	(1)	(1)	(1)
Job leavers	102	100.0	68.2	24.5	7.3	-	7.3
Reentrants	602	100.0	54.1	30.8	15.1	9.1	6.0
New entrants	250	100.0	44.5	30.5	25.0	7.0	18.0

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

used in the household survey.

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

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

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
Total, 16 years and over	5,764	5,507	100.0	100.0	4,715	4,426	100.0	100.0
Less than 5 weeks	2,634	2,494	45.7	45.3	2,042	1,886	43.3	42.6
5 to 14 weeks	1,597	1,469	27.7	26.7	1,297	1,214	27.5	27.4
5 to 10 weeks	1,122	1,045	19.5	19.0	905	850	19.2	19.2
11 to 14 weeks	475	425	8.2	7.7	392	364	8.3	8.2
15 weeks and over	1,534	1,544	26.6	28.0	1,376	1,325	29.2	29.9
15 to 26 weeks	724	845	12.6	15.3	657	747	13.9	16.9
27 weeks and over	809	699	14.0	12.7	719	578	15.3	13.1
27 to 51 weeks	286	320	5.0	5.8	250	253	5.3	5.7
52 weeks and over	523	380	9.1	6.9	469	325	9.9	7.3
Average (mean) duration, in weeks	15.0	13.6	-	-	15.9	14.4	-	-
Median duration, in weeks	5.9	6.4	-	-	6.6	7.2	-	-

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

used in the household survey.

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

Sex, age, race, and marital status	May 1999							Average (mean) duration	Median duration
	Thousands of persons								
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
TOTAL									
Total, 16 years and over	5,507	2,494	1,469	1,544	845	699	13.6	6.4	
16 to 19 years	1,091	584	336	171	77	94	9.3	4.1	
20 to 24 years	1,036	521	282	233	162	71	11.0	4.5	
25 to 34 years	1,164	515	291	358	190	168	14.3	6.7	
35 to 44 years	1,129	482	304	343	187	157	14.6	7.1	
45 to 54 years	651	221	165	264	135	129	18.2	10.3	
55 to 64 years	325	115	68	142	84	58	18.3	10.2	
65 years and over	113	56	24	32	10	22	21.4	4.8	
Men, 16 years and over	2,906	1,273	789	843	459	384	14.2	6.7	
16 to 19 years	575	278	195	103	46	56	9.9	4.8	
20 to 24 years	579	297	166	116	77	39	10.6	4.4	
25 to 34 years	560	233	137	190	104	86	16.0	7.6	
35 to 44 years	615	265	160	190	106	84	14.2	7.0	
45 to 54 years	335	113	87	135	76	59	17.9	10.3	
55 to 64 years	170	55	31	84	44	39	22.5	13.7	
65 years and over	73	33	14	26	7	20	(¹)	(¹)	
Women, 16 years and over	2,602	1,221	680	701	386	315	12.9	5.9	
16 to 19 years	516	306	141	69	31	38	8.8	3.5	
20 to 24 years	457	224	116	117	85	31	11.5	4.9	
25 to 34 years	604	283	153	168	86	82	12.7	5.9	
35 to 44 years	514	217	143	154	81	73	15.0	7.2	
45 to 54 years	316	108	79	129	59	70	18.5	10.3	
55 to 64 years	155	60	37	59	40	19	13.8	8.5	
65 years and over	39	23	11	6	3	2	(¹)	(¹)	
Race									
White, 16 years and over	4,038	1,924	1,039	1,076	610	465	12.9	5.4	
Men	2,179	1,014	541	624	367	257	13.4	5.8	
Women	1,859	910	498	452	244	208	12.3	4.9	
Black, 16 years and over	1,190	438	362	391	195	196	15.9	8.8	
Men	565	184	202	179	72	106	17.5	9.4	
Women	625	254	159	212	122	90	14.4	8.1	
Marital status									
Men, 16 years and over:									
Married, spouse present	944	410	210	324	190	134	15.1	7.4	
Widowed, divorced, or separated	395	150	99	146	81	65	16.0	8.3	
Single (never married)	1,567	713	481	373	188	185	13.3	5.9	
Women, 16 years and over:									
Married, spouse present	770	335	201	235	115	120	14.1	7.1	
Widowed, divorced, or separated	571	240	142	188	112	76	14.2	7.4	
Single (never married)	1,260	645	337	278	159	119	11.6	4.4	

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

used in the household survey.

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Occupation and industry	May 1999							
	Thousands of persons						Weeks	
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over			Average (mean) duration	Median duration
				Total	15 to 26 weeks	27 weeks and over		
OCCUPATION								
Managerial and professional specialty	774	360	178	236	150	86	13.9	6.2
Technical, sales, and administrative support	1,334	619	389	327	177	149	12.5	5.8
Service occupations	1,075	528	253	294	131	163	13.7	4.8
Precision production, craft, and repair	557	216	176	164	102	63	13.9	8.3
Operators, fabricators, and laborers	1,117	496	296	325	183	142	14.2	6.9
Farming, forestry, and fishing	235	105	57	73	46	27	11.9	6.3
INDUSTRY¹								
Agriculture	162	76	39	47	26	21	11.8	5.7
Construction	476	161	177	137	80	57	15.2	8.6
Manufacturing	712	316	195	201	116	86	13.2	6.4
Durable goods	409	201	108	101	61	39	12.0	4.8
Nondurable goods	303	115	87	100	54	46	14.9	7.9
Transportation and public utilities	727	111	68	75	47	28	12.7	6.7
Wholesale and retail trade	4,194	709	329	354	193	161	12.5	4.4
Finance, insurance, and real estate	506	67	42	58	29	29	14.5	7.8
Services	2,999	754	424	435	239	196	13.2	5.8
Public administration	342	48	23	43	21	22	20.6	8.4
No previous work experience	394	170	116	109	40	69	15.1	6.9

¹ Includes wage and salary workers only.

used in the household survey.

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

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

(In thousands)

Category	Total		Age						Sex			
	May 1998	May 1999	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
	Total not in the labor force	67,659	68,508	11,522	11,985	18,913	18,712	37,223	37,811	24,738	25,187	42,921	43,321
Do not want a job now ¹	62,346	63,242	8,974	9,348	16,819	16,740	36,553	37,154	22,501	22,865	39,845	40,377
Want a job ¹	5,313	5,267	2,548	2,638	2,095	1,972	671	657	2,237	2,323	3,076	2,944
Did not search for work in previous year	3,080	2,898	1,365	1,302	1,232	1,100	482	496	1,241	1,287	1,839	1,611
Searched for work in previous year ²	2,234	2,369	1,183	1,335	863	872	189	162	997	1,036	1,237	1,333
Not available to work now	1,021	1,221	699	890	290	297	31	34	427	530	593	691
Available to work now	1,213	1,148	483	446	572	575	157	128	570	506	644	642
Reason not currently looking:												
Discouragement over job prospects ³	268	256	88	62	129	156	50	38	161	134	106	122
Reasons other than discouragement	946	892	395	384	443	419	108	90	408	373	537	520
Family responsibilities	166	143	58	36	99	97	9	9	24	28	141	115
In school or training	234	208	201	170	29	38	3	-	129	86	105	122
Ill health or disability	111	70	19	6	70	42	22	23	55	31	56	40
Other ⁴	435	471	117	172	244	241	74	57	200	228	235	243

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

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

(Numbers in thousands)

Characteristic	Both sexes				Men				Women			
	Number		Rate ¹		Number		Rate ¹		Number		Rate ¹	
	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999	May 1998	May 1999
AGE												
Total, 16 years and over ²	8,126	7,895	6.2	5.9	4,438	4,117	6.3	5.8	3,688	3,778	6.1	6.1
16 to 19 years	317	323	4.6	4.5	137	146	4.0	3.9	181	177	5.3	5.2
20 years and over	7,809	7,572	6.3	6.0	4,302	3,971	6.4	5.9	3,507	3,601	6.1	6.2
20 to 24 years	799	738	6.4	5.8	390	290	5.9	4.4	409	448	6.9	7.3
25 years and over	7,009	6,834	6.3	6.0	3,911	3,681	6.4	6.0	3,098	3,153	6.0	6.0
25 to 54 years	6,229	6,018	6.5	6.2	3,460	3,196	6.7	6.2	2,770	2,821	6.3	6.3
55 years and over	780	817	4.7	4.8	452	485	4.9	5.1	328	331	4.5	4.3
55 to 64 years	660	706	5.1	5.3	379	415	5.3	5.7	281	291	4.9	4.8
65 years and over	119	111	3.1	2.8	72	70	3.3	3.1	47	41	3.0	2.5
RACE AND HISPANIC ORIGIN												
White	7,019	6,783	6.3	6.0	3,853	3,539	6.3	5.8	3,166	3,244	6.3	6.4
Black	792	825	5.5	5.5	436	452	6.4	6.4	356	373	4.7	4.7
Hispanic origin	596	494	4.4	3.6	357	262	4.4	3.3	239	232	4.5	4.1
MARITAL STATUS												
Married, spouse present	4,649	4,331	6.2	5.7	2,885	2,571	6.8	6.0	1,765	1,760	5.4	5.3
Widowed, divorced, or separated	1,412	1,375	6.7	6.5	528	509	5.8	5.7	885	866	7.3	7.0
Single (never married)	2,064	2,190	5.9	6.1	1,026	1,038	5.3	5.2	1,038	1,152	6.6	7.1
FULL- OR PART-TIME STATUS												
Primary job full time, secondary job part time	4,660	4,420	-	-	2,811	2,595	-	-	1,849	1,825	-	-
Primary and secondary jobs both part time	1,571	1,639	-	-	496	493	-	-	1,075	1,146	-	-
Primary and secondary jobs both full time	265	264	-	-	206	190	-	-	59	74	-	-
Hours vary on primary or secondary job	1,606	1,537	-	-	912	823	-	-	694	714	-	-

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	May 1998	May 1999	Total		Employed		Unemployed			
			May 1998	May 1999	May 1998	May 1999	Number		Percent of labor force	
							May 1998	May 1999	May 1998	May 1999
VIETNAM-ERA VETERANS										
Total, 40 years and over	7,812	7,768	6,571	6,415	6,391	6,242	180	172	2.7	2.7
40 to 54 years	6,002	5,566	5,365	4,909	5,211	4,786	154	123	2.9	2.5
40 to 44 years	788	536	713	489	670	451	42	37	5.9	7.7
45 to 49 years	2,292	1,909	2,051	1,671	2,016	1,638	35	33	1.7	2.0
50 to 54 years	2,922	3,121	2,602	2,750	2,525	2,697	77	53	3.0	1.9
55 years and over	1,810	2,202	1,206	1,505	1,180	1,456	26	49	2.1	3.3
NONVETERANS										
Total, 40 to 54 years	20,299	21,157	18,379	19,204	17,900	18,708	480	496	2.6	2.6
40 to 44 years	9,208	9,405	8,488	8,673	8,274	8,407	214	267	2.5	3.1
45 to 49 years	6,721	7,286	6,115	6,690	5,950	6,544	166	147	2.7	2.2
50 to 54 years	4,370	4,467	3,776	3,840	3,676	3,757	100	82	2.7	2.1

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who

have never served in the Armed Forces. Beginning in January 1999, data reflect revised population controls used in the household survey.

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

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

(In thousands)

Year and month	Total	Total private	Goods-producing				Service-producing						Government		
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Federal	State	Local
Annual averages															
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,478	6,477	1,728	5,025	1,892	(1)	(1)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,612	6,659	1,800	5,181	1,863	(1)	(1)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,610	6,654	1,828	5,239	1,908	(1)	(1)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,643	6,743	1,888	5,356	1,928	(1)	(1)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,735	7,007	1,956	5,547	2,302	(1)	(1)
1952	48,793	42,185	20,198	898	2,668	16,632	28,595	4,248	2,821	7,184	2,035	5,699	2,420	(1)	(1)
1953	50,202	43,556	21,074	866	2,659	17,549	29,128	4,290	2,862	7,385	2,111	5,835	2,305	(1)	(1)
1954	48,990	42,238	19,751	791	2,646	16,314	29,239	4,084	2,875	7,360	2,200	5,969	2,188	(1)	(1)
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	2,934	7,601	2,298	6,240	2,187	1,168	3,558
1956	52,369	45,091	21,104	822	3,039	17,243	31,264	4,244	3,027	7,831	2,389	6,497	2,209	1,250	3,819
1957	52,855	45,239	20,967	828	2,962	17,176	31,889	4,241	3,037	7,848	2,389	6,708	2,217	1,328	4,071
1958	51,322	43,483	19,513	751	2,817	15,945	31,811	3,976	2,989	7,761	2,481	6,765	2,191	1,415	4,230
1959 ²	53,270	45,186	20,411	732	3,004	16,675	32,857	4,011	3,092	8,035	2,549	7,087	2,233	1,484	4,366
1960	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	3,153	8,238	2,628	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,142	8,195	2,688	7,619	2,279	1,607	4,708
1962	55,549	46,660	20,451	650	2,948	16,853	35,098	3,906	3,207	8,359	2,754	7,982	2,340	1,668	4,881
1963	56,653	47,429	20,640	635	3,010	16,995	36,013	3,903	3,258	8,520	2,830	8,277	2,358	1,747	5,121
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	3,347	8,812	2,911	8,660	2,348	1,856	5,392
1965	60,763	50,689	21,926	632	3,232	18,062	38,839	4,036	3,477	9,239	2,977	9,036	2,378	1,996	5,700
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	3,608	9,637	3,058	9,498	2,564	2,141	6,080
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	3,700	9,906	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,158	4,318	3,791	10,308	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	3,919	10,785	3,512	11,169	2,758	2,533	6,904
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	4,006	11,034	3,645	11,548	2,731	2,664	7,158
1971	71,211	58,331	22,935	609	3,704	18,623	48,276	4,476	4,014	11,338	3,772	11,797	2,696	2,747	7,437
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	4,127	11,822	3,908	12,276	2,684	2,859	7,790
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	4,291	12,315	4,046	12,857	2,663	2,923	8,146
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	4,447	12,539	4,148	13,441	2,724	3,039	8,407
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	4,430	12,630	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,562	4,562	13,193	4,271	14,551	2,733	3,273	8,865
1977	82,471	67,344	24,346	813	3,851	19,682	58,125	4,713	4,723	13,792	4,467	15,302	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,985	14,556	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	5,221	14,972	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,292	15,018	5,160	17,890	2,866	3,610	9,765
1981	91,152	75,121	25,497	1,139	4,188	20,170	65,655	5,165	5,375	15,171	5,298	18,615	2,772	3,640	9,619
1982	89,544	73,707	23,812	1,128	3,904	18,780	65,732	5,081	5,295	15,158	5,340	19,021	2,739	3,640	9,458
1983	90,152	74,282	23,330	952	3,946	18,432	66,821	4,952	5,283	15,587	5,466	19,664	2,774	3,662	9,434
1984	94,408	78,384	24,718	966	4,380	19,372	69,690	5,156	5,568	16,512	5,684	20,746	2,807	3,734	9,482
1985	97,387	80,992	24,842	927	4,668	19,248	72,544	5,233	5,727	17,315	5,948	21,927	2,875	3,832	9,687
1986	99,344	82,651	24,533	777	4,810	18,947	74,811	5,247	5,761	17,880	6,273	22,957	2,899	3,893	9,901
1987	101,958	84,948	24,674	717	4,958	18,999	77,284	5,362	5,848	18,422	6,533	24,110	2,943	3,967	10,100
1988	105,209	87,823	25,125	713	5,098	19,314	80,084	5,512	6,030	19,023	6,630	25,504	2,971	4,076	10,339
1989	107,884	90,105	25,254	692	5,171	19,391	82,630	5,614	6,187	19,475	6,668	26,907	2,988	4,182	10,609
1990	109,403	91,098	24,905	709	5,120	19,076	84,497	5,777	6,173	19,601	6,709	27,934	3,085	4,305	10,914
1991	108,249	89,847	23,745	689	4,650	18,406	84,504	5,755	6,081	19,284	6,646	28,336	2,966	4,355	11,081
1992	108,601	89,956	23,231	635	4,492	18,104	85,370	5,718	5,997	19,356	6,602	29,052	2,969	4,408	11,267
1993	110,713	91,872	23,352	610	4,668	18,075	87,361	5,811	5,981	19,773	6,757	30,197	2,915	4,488	11,438
1994	114,163	95,036	23,908	601	4,986	18,321	90,256	5,984	6,162	20,507	6,896	31,579	2,870	4,576	11,682
1995	117,191	97,885	24,265	581	5,160	18,524	92,925	6,132	6,378	21,187	6,806	33,117	2,822	4,635	11,849
1996	119,608	100,189	24,493	580	5,418	18,495	95,115	6,253	6,482	21,597	6,911	34,454	2,757	4,606	12,056
1997	122,690	103,133	24,962	596	5,691	18,675	97,727	6,408	6,648	21,966	7,109	36,040	2,699	4,582	12,276
1998	125,826	106,007	25,347	590	5,985	18,772	100,480	6,600	6,831	22,296	7,407	37,526	2,686	4,612	12,521
Monthly data, seasonally adjusted															
1998:															
May	125,478	105,715	25,379	595	5,932	18,852	100,099	6,577	6,814	22,237	7,374	37,334	2,675	4,597	12,491
June	125,689	105,913	25,381	593	5,962	18,826	100,308	6,589	6,826	22,257	7,400	37,460	2,677	4,598	12,501
July	125,808	106,009	25,240	588	5,990	18,662	100,568	6,606	6,836	22,321	7,430	37,576	2,675	4,612	12,512
August	126,170	106,301	25,344	585	6,005	18,754	100,826	6,625	6,846	22,353	7,445	37,688	2,688	4,633	12,548
September	126,361	106,470	25,333	583	6,009	18,741	101,028	6,637	6,871	22,382	7,467	37,780	2,689	4,647	12,555
October	126,567	106,654	25,306	578	6,042	18,686	101,261	6,657	6,876	22,392	7,494	37,929	2,711	4,633	12,569
November	126,841	106,893	25,298	574	6,085	18,639	101,543	6,671	6,891	22,443	7,520	38,070	2,723	4,637	12,588
December	127,186	107,213	25,354	570	6,173	18,611	101,832	6,684	6,901	22,525	7,542	38,207	2,701	4,652	12,620
1999:															
January	127,378	107,386	25,315	560	6,170	18,585	102,063	6,708	6,924	22,556	7,570	38,313	2,702	4,644	12,646
February	127,730	107,676	25,329	553	6,238	18,538	102,401	6,723	6,937	22,648	7,581	38,458	2,713	4,670	12,671
March	127,813	107,726	25,285	550	6,232	18,503	102,528	6,732	6,947	22,611	7,595	38,556	2,710	4,680	12,697
April ^P	128,156	108,057	25,289	538	6,276	18,475	102,867	6,752	6,965	22,738	7,614	38,699	2,689	4,690	12,720
May ^P	128,167	108,075	25,197	531	6,236	18,430	102,970	6,765	6,962	22,755	7,626	38,770	2,673	4,687	12,732

¹ Not available.

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

P = preliminary.

NOTE: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.54	531.70	37.8	12.71	480.44
1988	34.7	9.28	322.02	42.3	12.80	541.44	37.9	13.08	495.73
1989	34.6	9.66	334.24	43.0	13.26	570.18	37.9	13.54	513.17
1990	34.5	10.01	345.35	44.1	13.68	603.29	38.2	13.77	526.01
1991	34.3	10.32	353.98	44.4	14.19	630.04	38.1	14.00	533.40
1992	34.4	10.57	363.61	43.9	14.54	638.31	38.0	14.15	537.70
1993	34.5	10.83	373.64	44.3	14.60	646.78	38.5	14.38	553.63
1994	34.7	11.12	385.86	44.8	14.88	666.62	38.9	14.73	573.00
1995	34.5	11.43	394.34	44.7	15.30	683.91	38.9	15.09	587.00
1996	34.4	11.82	406.61	45.3	15.62	707.59	39.0	15.47	603.33
1997	34.6	12.28	424.89	45.4	16.15	733.21	39.0	16.04	625.56
1998	34.6	12.78	442.19	43.9	16.90	741.91	38.8	16.59	643.69
Monthly data, not seasonally adjusted									
1998:									
May	34.6	\$12.71	\$439.77	44.3	\$16.67	\$738.48	39.3	\$16.44	\$646.09
June	34.7	12.68	440.00	44.0	16.68	733.92	39.2	16.47	645.62
July	34.8	12.68	441.26	43.9	16.76	735.76	40.2	16.66	669.73
August	35.2	12.76	449.15	44.0	16.88	742.72	40.2	16.77	674.15
September	34.3	12.90	442.47	42.9	17.11	734.02	37.5	16.79	629.63
October	34.6	12.93	447.38	44.0	17.07	751.08	40.0	16.89	675.60
November	34.7	13.00	451.10	43.8	17.29	757.30	38.6	16.82	649.25
December	34.7	13.00	451.10	43.7	17.29	755.57	39.1	16.87	659.62
1999:									
January	34.0	13.11	445.74	42.3	17.23	728.83	37.9	16.74	634.45
February	34.3	13.10	449.33	42.7	17.08	729.32	38.0	16.66	633.08
March	34.2	13.12	448.70	42.2	17.01	717.82	37.7	16.79	632.98
April ^p	34.3	13.16	451.39	43.2	16.94	731.81	38.6	16.85	650.41
May ^p	34.6	13.20	456.72	43.9	16.85	739.72	39.3	17.04	669.67

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Manufacturing				Transportation and public utilities			Wholesale trade		
	Weekly hours	Hourly earnings	Hourly earnings, excluding overtime	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages										
1964	40.7	\$2.53	\$2.43	\$102.97	41.1	\$2.89	\$118.78	40.7	\$2.52	\$102.56
1965	41.2	2.61	2.50	107.53	41.3	3.03	125.14	40.8	2.60	106.08
1966	41.4	2.71	2.59	112.19	41.2	3.11	128.13	40.7	2.73	111.11
1967	40.6	2.82	2.71	114.49	40.5	3.23	130.82	40.3	2.87	115.66
1968	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.04	121.90
1969	40.6	3.19	3.05	129.51	40.7	3.63	147.74	40.2	3.23	129.85
1970	39.8	3.35	3.23	133.33	40.5	3.85	155.93	39.9	3.43	136.86
1971	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.4	3.64	143.42
1972	40.5	3.82	3.66	154.71	40.4	4.65	187.86	39.4	3.85	151.69
1973	40.7	4.09	3.91	166.46	40.5	5.02	203.31	39.2	4.07	159.54
1974	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.38	169.94
1975	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.6	4.72	182.19
1976	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.02	194.27
1977	40.3	5.68	5.44	228.90	39.9	6.99	278.90	38.8	5.39	209.13
1978	40.4	6.17	5.91	249.27	40.0	7.57	302.80	38.8	5.88	228.14
1979	40.2	6.70	6.43	269.34	39.9	8.16	325.58	38.8	6.39	247.93
1980	39.7	7.27	7.02	288.62	39.6	8.87	351.25	38.4	6.95	266.88
1981	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.55	290.68
1982	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.08	309.46
1983	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.54	328.79
1984	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.88	341.88
1985	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.15	351.36
1986	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.34	357.72
1987	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
1988	41.1	10.19	9.73	418.81	38.2	12.24	467.57	38.1	9.98	380.24
1989	41.0	10.48	10.02	429.68	38.3	12.57	481.43	38.0	10.39	394.82
1990	40.8	10.83	10.37	441.86	38.4	12.92	496.13	38.1	10.79	411.10
1991	40.7	11.18	10.71	455.03	38.1	13.20	502.92	38.1	11.15	424.82
1992	41.0	11.46	10.95	469.86	38.3	13.43	514.37	38.2	11.39	435.10
1993	41.4	11.74	11.18	486.04	39.3	13.55	532.52	38.2	11.74	448.47
1994	42.0	12.07	11.43	506.94	39.7	13.78	547.07	38.4	12.06	463.10
1995	41.6	12.37	11.74	514.59	39.4	14.13	556.72	38.3	12.43	476.07
1996	41.6	12.77	12.12	531.23	39.6	14.45	572.22	38.3	12.87	492.92
1997	42.0	13.17	12.45	553.14	39.7	14.92	592.32	38.4	13.45	516.48
1998	41.7	13.49	12.79	562.53	39.5	15.31	604.75	38.4	14.06	539.90
Monthly data, not seasonally adjusted										
1998:										
May	41.8	\$13.48	\$12.78	\$563.46	39.5	\$15.18	\$599.61	38.4	\$14.00	\$537.60
June	41.8	13.44	12.74	561.79	39.6	15.19	601.52	38.4	13.94	535.30
July	41.1	13.38	12.70	549.92	39.7	15.27	606.22	38.3	14.04	537.73
August	41.7	13.45	12.74	560.87	39.9	15.30	610.47	38.7	14.18	548.77
September	41.5	13.60	12.88	564.40	39.3	15.41	605.61	38.1	14.16	539.50
October	41.9	13.55	12.83	567.75	39.3	15.39	604.83	38.3	14.19	543.48
November	42.2	13.60	12.87	573.92	39.7	15.48	614.56	38.7	14.34	554.96
December	42.6	13.69	12.94	583.19	39.1	15.50	606.05	38.4	14.32	549.89
1999:										
January	41.3	13.66	12.98	564.16	38.7	15.57	602.56	38.0	14.42	547.96
February	41.3	13.66	13.00	564.16	39.0	15.56	606.84	38.3	14.38	550.75
March	41.4	13.73	13.04	568.42	38.8	15.51	601.79	38.2	14.34	547.79
April ^P	41.6	13.80	13.10	574.08	38.7	15.57	602.56	38.3	14.48	554.58
May ^P	41.7	13.84	13.14	577.13	38.9	15.58	606.06	38.6	14.53	560.86

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976	32.1	3.57	114.60	36.4	4.27	155.43	33.3	4.31	143.52
1977	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987	29.2	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988	29.1	6.31	183.62	35.9	9.06	325.25	32.6	8.88	289.49
1989	28.9	6.53	188.72	35.8	9.53	341.17	32.6	9.38	305.79
1990	28.8	6.75	194.40	35.8	9.97	356.93	32.5	9.83	319.48
1991	28.6	6.94	198.48	35.7	10.39	370.92	32.4	10.23	331.45
1992	28.8	7.12	205.06	35.8	10.82	387.36	32.5	10.54	342.55
1993	28.8	7.29	209.95	35.8	11.35	406.33	32.5	10.78	350.35
1994	28.9	7.49	216.46	35.8	11.83	423.51	32.5	11.04	358.80
1995	28.8	7.69	221.47	35.9	12.32	442.29	32.4	11.39	369.04
1996	28.8	7.99	230.11	35.9	12.80	459.52	32.4	11.79	382.00
1997	28.9	8.33	240.74	36.1	13.34	481.57	32.6	12.28	400.33
1998	29.0	8.73	253.17	36.4	14.06	511.78	32.6	12.85	418.91
Monthly data, not seasonally adjusted									
1998:									
May	29.0	\$8.69	\$252.01	36.1	\$13.99	\$505.04	32.5	\$12.76	\$414.70
June	29.3	8.68	254.32	36.0	13.94	501.84	32.7	12.71	415.62
July	29.8	8.69	258.96	36.1	13.94	503.23	32.9	12.68	417.17
August	29.9	8.72	260.73	36.9	14.12	521.03	33.2	12.75	423.30
September	29.1	8.88	258.41	35.9	14.10	506.19	32.3	12.97	418.93
October	28.9	8.84	255.48	36.1	14.20	512.62	32.6	13.01	424.13
November	28.9	8.86	256.05	36.9	14.43	532.47	32.8	13.15	431.32
December	29.2	8.88	259.30	36.2	14.40	521.28	32.6	13.18	429.67
1999:									
January	28.1	9.00	252.90	36.0	14.48	521.28	32.3	13.30	429.59
February	28.6	8.98	256.83	36.3	14.55	528.17	32.5	13.32	432.90
March	28.6	9.00	257.40	36.0	14.53	523.08	32.4	13.33	431.89
April ^P	28.7	9.03	259.16	35.9	14.61	524.50	32.4	13.32	431.57
May ^P	29.1	9.04	263.06	36.4	14.76	537.26	32.8	13.34	437.55

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: Data have been revised to reflect March 1998 benchmarks. See the article in this issue for additional information.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
Total	125,478	125,689	125,808	126,170	126,361	126,567	126,841	127,186	127,378	127,730	127,813	128,156	128,167
Total private	105,715	105,913	106,009	106,301	106,470	106,654	106,893	107,213	107,386	107,676	107,726	108,057	108,075
Goods-producing	25,379	25,381	25,240	25,344	25,333	25,306	25,298	25,354	25,315	25,329	25,285	25,289	25,197
Mining	595	593	588	585	583	578	574	570	560	553	550	538	531
Metal mining	50	50	50	50	50	50	50	50	50	50	50	49	49
Coal mining	93	91	90	90	90	90	90	90	89	88	87	86	85
Oil and gas extraction	343	343	339	336	334	329	325	320	312	306	305	294	289
Nonmetallic minerals, except fuels	109	109	109	109	109	109	109	110	109	109	108	109	108
Construction	5,932	5,962	5,990	6,005	6,009	6,042	6,085	6,173	6,170	6,238	6,232	6,276	6,236
General building contractors	1,361	1,369	1,377	1,381	1,382	1,389	1,394	1,404	1,410	1,426	1,429	1,426	1,425
Heavy construction, except building	833	835	842	842	837	843	850	876	871	869	864	874	857
Special trade contractors	3,738	3,758	3,771	3,782	3,790	3,810	3,841	3,893	3,889	3,943	3,939	3,976	3,954
Manufacturing	18,852	18,826	18,662	18,754	18,741	18,686	18,639	18,611	18,585	18,538	18,503	18,475	18,430
Durable goods	11,225	11,210	11,066	11,177	11,159	11,128	11,092	11,074	11,050	11,027	11,014	10,995	10,969
Lumber and wood products	811	811	812	813	815	817	820	823	826	827	827	825	823
Furniture and fixtures	531	531	532	532	532	532	532	534	534	535	535	536	537
Stone, clay, and glass products	561	562	563	564	565	566	568	570	569	571	569	570	570
Primary metal industries	716	716	705	713	712	705	700	699	696	695	693	692	689
Fabricated metal products	1,507	1,503	1,491	1,502	1,500	1,498	1,494	1,493	1,495	1,491	1,490	1,489	1,489
Industrial machinery and equipment	2,215	2,215	2,208	2,203	2,197	2,188	2,177	2,167	2,148	2,146	2,139	2,132	2,124
Computer and office equipment	381	380	379	378	377	374	373	370	362	362	360	361	358
Electronic and other electrical equipment	1,718	1,715	1,705	1,698	1,692	1,683	1,673	1,669	1,663	1,659	1,659	1,658	1,655
Electronic components and accessories	668	664	659	655	651	647	643	640	637	636	636	634	634
Transportation equipment	1,897	1,891	1,788	1,894	1,891	1,892	1,887	1,882	1,884	1,871	1,873	1,863	1,854
Motor vehicles and equipment	1,001	994	887	997	996	998	996	994	996	989	992	996	994
Aircraft and parts	525	526	526	526	525	523	520	518	517	510	511	503	497
Instruments and related products	874	872	869	866	863	859	855	851	849	847	844	843	842
Miscellaneous manufacturing	395	394	393	392	392	388	386	386	386	385	385	387	386
Nondurable goods	7,627	7,616	7,596	7,577	7,582	7,558	7,547	7,537	7,535	7,511	7,489	7,480	7,461
Food and kindred products	1,687	1,686	1,684	1,675	1,687	1,685	1,690	1,693	1,699	1,695	1,693	1,688	1,688
Tobacco products	41	40	40	40	40	40	40	40	40	40	39	38	38
Textile mill products	604	601	597	594	593	590	586	582	579	575	571	567	563
Apparel and other textile products	773	768	764	755	751	738	729	724	718	707	702	699	691
Paper and allied products	678	676	674	673	672	669	666	666	664	664	662	662	659
Printing and publishing	1,566	1,568	1,567	1,566	1,565	1,565	1,564	1,560	1,561	1,559	1,557	1,555	1,552
Chemicals and allied products	1,044	1,044	1,044	1,044	1,043	1,042	1,043	1,042	1,041	1,041	1,037	1,038	1,036
Petroleum and coal products	141	141	140	140	140	140	140	140	139	139	139	139	139
Rubber and misc. plastics products	1,009	1,009	1,004	1,009	1,010	1,009	1,010	1,012	1,016	1,015	1,014	1,019	1,020
Leather and leather products	84	83	82	81	81	80	79	78	78	76	75	75	75
Service-producing	100,099	100,308	100,568	100,826	101,028	101,261	101,543	101,832	102,063	102,401	102,528	102,867	102,970
Transportation and public utilities	6,577	6,589	6,606	6,625	6,637	6,657	6,671	6,684	6,708	6,723	6,732	6,752	6,765
Transportation	4,254	4,265	4,281	4,305	4,313	4,327	4,335	4,340	4,356	4,367	4,378	4,397	4,409
Railroad transportation	230	231	231	232	233	232	230	231	233	233	235	234	235
Local and interurban passenger transit	465	466	469	475	471	473	474	474	474	475	476	483	482
Trucking and warehousing	1,738	1,744	1,749	1,755	1,759	1,766	1,770	1,769	1,786	1,789	1,796	1,800	1,805
Water transportation	179	178	181	184	183	183	184	183	182	181	177	180	180
Transportation by air	1,175	1,179	1,183	1,190	1,196	1,199	1,201	1,205	1,204	1,213	1,218	1,220	1,225
Pipelines, except natural gas	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services	453	453	454	455	457	460	462	464	463	462	462	466	468
Communications and public utilities	2,323	2,324	2,325	2,320	2,324	2,330	2,336	2,344	2,352	2,356	2,354	2,355	2,356
Communications	1,467	1,470	1,472	1,467	1,472	1,480	1,484	1,492	1,502	1,507	1,506	1,510	1,513
Electric, gas, and sanitary services	856	854	853	853	852	850	852	852	850	849	848	845	843
Wholesale trade	6,814	6,826	6,836	6,846	6,871	6,876	6,891	6,901	6,924	6,937	6,947	6,965	6,962
Durable goods	4,032	4,039	4,046	4,055	4,066	4,068	4,074	4,077	4,088	4,100	4,103	4,113	4,120
Nondurable goods	2,782	2,787	2,790	2,791	2,805	2,808	2,817	2,824	2,836	2,837	2,844	2,852	2,842

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
Retail trade	22,237	22,257	22,321	22,353	22,382	22,392	22,443	22,525	22,556	22,648	22,611	22,738	22,755
Building materials and garden supplies	942	945	947	950	954	957	961	967	972	979	982	982	977
General merchandise stores	2,725	2,725	2,728	2,733	2,745	2,744	2,750	2,758	2,773	2,781	2,794	2,815	2,806
Department stores	2,422	2,423	2,426	2,429	2,437	2,441	2,447	2,456	2,470	2,475	2,489	2,516	2,507
Food stores	3,478	3,474	3,484	3,483	3,486	3,485	3,488	3,487	3,481	3,492	3,490	3,493	3,480
Automotive dealers and service stations	2,333	2,338	2,343	2,345	2,349	2,356	2,361	2,370	2,377	2,390	2,392	2,398	2,404
New and used car dealers	1,044	1,046	1,048	1,048	1,050	1,052	1,055	1,059	1,061	1,065	1,069	1,074	1,078
Apparel and accessory stores	1,142	1,145	1,148	1,149	1,150	1,144	1,148	1,147	1,152	1,167	1,167	1,162	1,164
Furniture and home furnishings stores	1,019	1,022	1,026	1,031	1,033	1,038	1,042	1,048	1,055	1,064	1,070	1,081	1,086
Eating and drinking places	7,736	7,740	7,767	7,779	7,782	7,787	7,808	7,857	7,843	7,855	7,785	7,863	7,886
Miscellaneous retail establishments	2,862	2,868	2,878	2,883	2,883	2,881	2,885	2,891	2,903	2,920	2,931	2,944	2,952
Finance, insurance, and real estate	7,374	7,400	7,430	7,445	7,467	7,494	7,520	7,542	7,570	7,581	7,595	7,614	7,626
Finance	3,574	3,589	3,606	3,616	3,623	3,642	3,651	3,663	3,675	3,681	3,690	3,700	3,708
Depository institutions	2,043	2,043	2,043	2,043	2,040	2,044	2,044	2,047	2,049	2,051	2,051	2,052	2,055
Commercial banks	1,470	1,468	1,468	1,467	1,465	1,466	1,466	1,467	1,469	1,470	1,469	1,469	1,472
Savings institutions	258	258	258	258	258	258	258	257	258	258	258	257	257
Nondepository institutions	647	655	663	669	673	684	693	698	705	708	712	717	719
Mortgage bankers and brokers	319	324	331	337	342	350	355	360	362	365	368	370	373
Security and commodity brokers	639	644	650	653	656	660	658	661	663	661	664	668	671
Holding and other investment offices	245	247	250	251	254	254	256	257	258	261	263	263	263
Insurance	2,336	2,343	2,349	2,355	2,362	2,367	2,375	2,379	2,383	2,386	2,392	2,395	2,398
Insurance carriers	1,592	1,597	1,602	1,607	1,611	1,614	1,619	1,624	1,627	1,628	1,632	1,631	1,635
Insurance agents, brokers, and service	744	746	747	748	751	753	756	755	756	758	760	764	763
Real estate	1,464	1,468	1,475	1,474	1,482	1,485	1,494	1,500	1,512	1,514	1,513	1,519	1,520
Services ¹	37,334	37,460	37,576	37,688	37,780	37,929	38,070	38,207	38,313	38,458	38,556	38,699	38,770
Agricultural services	694	698	704	709	712	716	726	739	747	751	747	756	748
Hotels and other lodging places	1,774	1,777	1,782	1,784	1,785	1,784	1,782	1,783	1,785	1,786	1,789	1,792	1,781
Personal services	1,197	1,196	1,197	1,197	1,195	1,194	1,198	1,202	1,205	1,201	1,200	1,203	1,198
Business services	8,513	8,573	8,601	8,649	8,654	8,729	8,779	8,829	8,869	8,922	8,963	9,015	9,057
Services to buildings	948	948	952	952	956	959	962	964	971	971	973	979	982
Personnel supply services	3,212	3,248	3,234	3,249	3,230	3,254	3,267	3,292	3,308	3,331	3,343	3,355	3,368
Help supply services	2,858	2,886	2,873	2,887	2,874	2,891	2,903	2,922	2,933	2,954	2,967	2,981	2,987
Computer and data processing services	1,573	1,593	1,613	1,626	1,639	1,658	1,675	1,691	1,708	1,724	1,734	1,750	1,766
Auto repair, services, and parking	1,137	1,142	1,146	1,150	1,153	1,155	1,160	1,163	1,168	1,175	1,176	1,178	1,182
Miscellaneous repair services	380	381	381	382	384	386	388	390	392	392	393	396	399
Motion pictures	573	564	573	575	577	577	575	577	573	582	580	585	588
Amusement and recreation services	1,584	1,587	1,599	1,608	1,622	1,626	1,641	1,647	1,653	1,656	1,660	1,671	1,679
Health services	9,830	9,842	9,847	9,859	9,873	9,883	9,892	9,899	9,905	9,919	9,932	9,951	9,952
Offices and clinics of medical doctors	1,793	1,798	1,803	1,811	1,818	1,825	1,831	1,833	1,840	1,844	1,850	1,856	1,859
Nursing and personal care facilities	1,766	1,765	1,762	1,760	1,761	1,759	1,757	1,756	1,756	1,755	1,754	1,753	1,755
Hospitals	3,918	3,925	3,931	3,937	3,943	3,948	3,950	3,952	3,954	3,959	3,963	3,966	3,967
Home health care services	675	674	665	661	658	654	651	651	645	651	653	655	653
Legal services	968	971	974	977	980	985	986	988	989	992	995	998	998
Educational services	2,164	2,171	2,177	2,176	2,189	2,206	2,214	2,223	2,218	2,237	2,243	2,247	2,265
Social services	2,624	2,638	2,650	2,660	2,672	2,682	2,695	2,708	2,721	2,734	2,744	2,756	2,762
Child day care services	600	604	607	610	610	612	615	618	621	625	627	629	633
Residential care	744	743	746	749	753	757	760	762	765	768	769	773	775
Museums and botanical and zoological gardens	92	92	92	93	93	93	94	94	94	94	95	94	93
Membership organizations	2,357	2,360	2,362	2,365	2,369	2,374	2,375	2,380	2,385	2,389	2,392	2,393	2,391
Engineering and management services	3,158	3,178	3,201	3,214	3,231	3,248	3,273	3,292	3,316	3,335	3,354	3,370	3,383
Engineering and architectural services	901	906	910	912	913	915	919	922	926	930	933	938	936
Management and public relations	1,016	1,025	1,037	1,046	1,058	1,068	1,081	1,090	1,103	1,111	1,123	1,131	1,141
Government	19,763	19,776	19,799	19,869	19,891	19,913	19,948	19,973	19,992	20,054	20,087	20,099	20,092
Federal	2,675	2,677	2,675	2,688	2,689	2,711	2,723	2,701	2,702	2,713	2,710	2,689	2,673
Federal, except Postal Service	1,812	1,813	1,809	1,818	1,815	1,833	1,843	1,819	1,822	1,834	1,831	1,809	1,794
State	4,597	4,598	4,612	4,633	4,647	4,633	4,637	4,652	4,644	4,670	4,680	4,690	4,687
Education	1,908	1,911	1,915	1,931	1,939	1,923	1,923	1,932	1,920	1,941	1,948	1,958	1,951
Other State government	2,689	2,687	2,697	2,702	2,708	2,710	2,714	2,720	2,724	2,729	2,732	2,732	2,736
Local	12,491	12,501	12,512	12,548	12,555	12,569	12,588	12,620	12,646	12,671	12,697	12,720	12,732
Education	7,052	7,060	7,078	7,109	7,103	7,108	7,132	7,148	7,165	7,181	7,200	7,203	7,222
Other local government	5,439	5,441	5,434	5,439	5,452	5,461	5,456	5,472	5,481	5,490	5,497	5,517	5,510

¹ Includes other industries, not shown separately.

P = preliminary.

NOTE: Data have been revised to reflect March 1998 benchmarks and

recomputed seasonal adjustment factors. See the article in this issue for additional information.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1998										1999		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Total	60,425	60,512	60,661	60,781	60,848	60,990	61,146	61,221	61,315	61,464	61,599	61,767	61,852
Total private	49,437	49,502	49,631	49,731	49,819	49,910	50,006	50,074	50,160	50,275	50,394	50,524	50,591
Goods-producing	6,778	6,766	6,765	6,760	6,720	6,734	6,731	6,700	6,680	6,675	6,674	6,658	6,647
Mining	85	84	84	84	84	84	83	83	82	82	82	82	82
Construction	651	653	658	663	667	670	673	674	677	679	682	687	689
Manufacturing	6,042	6,029	6,023	6,013	5,969	5,980	5,975	5,943	5,921	5,914	5,910	5,889	5,876
Durable goods	2,998	2,995	2,993	2,987	2,956	2,974	2,969	2,956	2,943	2,939	2,936	2,930	2,924
Lumber and wood products	142	142	142	143	144	144	145	145	146	147	147	148	149
Furniture and fixtures	166	167	168	168	169	169	169	168	168	169	169	170	169
Stone, clay, and glass products	106	105	106	105	105	105	105	105	105	104	104	104	104
Primary metal industries	105	105	104	105	102	105	105	105	104	103	103	102	102
Fabricated metal products	336	337	337	337	338	338	339	338	337	337	338	338	336
Industrial machinery and equipment	489	488	486	485	481	480	477	475	472	472	467	466	464
Electronic and other electrical equipment	716	713	711	708	704	700	696	689	684	682	679	677	675
Transportation equipment	405	406	408	407	384	405	406	408	406	405	408	405	407
Instruments and related products	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing	174	174	173	172	172	172	171	169	169	169	169	168	168
Nondurable goods	3,044	3,034	3,030	3,026	3,013	3,006	3,006	2,987	2,978	2,975	2,974	2,959	2,952
Food and kindred products	554	554	555	554	554	553	555	551	555	558	560	557	557
Tobacco products	13	13	13	13	13	13	13	13	13	13	13	13	12
Textile mill products	279	279	279	278	277	275	276	274	271	270	269	267	266
Apparel and other textile products	579	571	566	562	558	550	548	536	529	525	521	513	508
Paper and allied products	167	165	165	164	163	163	162	162	161	161	161	161	161
Printing and publishing	704	704	705	707	706	705	705	705	703	702	702	701	701
Chemicals and allied products	333	333	334	334	335	335	336	335	335	335	335	335	336
Petroleum and coal products	25	25	24	25	24	24	24	24	24	24	24	25	25
Rubber and misc. plastics products	345	345	345	345	340	345	345	345	345	345	348	346	346
Leather and leather products	45	45	44	44	43	43	42	42	42	42	41	41	40
Service-producing	53,647	53,746	53,896	54,021	54,128	54,256	54,415	54,521	54,635	54,789	54,925	55,109	55,205
Transportation and public utilities	1,958	1,964	1,970	1,976	1,983	1,993	2,004	2,016	2,015	2,025	2,032	2,048	2,049
Wholesale trade	2,085	2,090	2,095	2,099	2,102	2,105	2,106	2,110	2,115	2,118	2,121	2,127	2,132
Retail trade	11,677	11,678	11,717	11,739	11,777	11,786	11,806	11,804	11,813	11,842	11,874	11,923	11,937
Finance, insurance, and real estate	4,601	4,619	4,633	4,647	4,662	4,670	4,678	4,697	4,712	4,726	4,743	4,751	4,753
Services	22,338	22,385	22,451	22,510	22,575	22,622	22,681	22,747	22,825	22,889	22,950	23,017	23,073
Government	10,988	11,010	11,030	11,050	11,029	11,080	11,140	11,147	11,155	11,189	11,205	11,243	11,261
Federal	1,138	1,139	1,139	1,142	1,128	1,132	1,138	1,148	1,151	1,141	1,141	1,148	1,149
State	2,349	2,351	2,355	2,359	2,365	2,372	2,384	2,382	2,385	2,394	2,390	2,403	2,407
Local	7,501	7,520	7,536	7,549	7,536	7,576	7,618	7,617	7,619	7,654	7,674	7,692	7,705

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: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**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	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	May ^P
Total private	86,526	86,679	86,744	86,973	87,106	87,253	87,448	87,702	87,855	88,077	88,170	88,367	88,383
Goods-producing	18,046	18,038	17,885	17,982	17,976	17,962	17,959	18,014	17,988	17,976	17,963	17,922	17,869
Mining	453	451	447	444	442	438	435	432	423	416	413	404	397
Construction	4,594	4,617	4,637	4,647	4,641	4,675	4,716	4,787	4,792	4,830	4,836	4,826	4,813
Manufacturing	12,999	12,970	12,801	12,891	12,893	12,849	12,808	12,795	12,773	12,730	12,714	12,692	12,659
Durable goods	7,686	7,668	7,521	7,634	7,628	7,605	7,577	7,568	7,548	7,529	7,527	7,516	7,499
Lumber and wood products	666	666	668	668	669	670	673	675	678	679	679	677	676
Furniture and fixtures	423	422	423	424	424	423	424	426	426	426	427	427	428
Stone, clay, and glass products	437	438	439	440	441	442	443	446	445	446	445	446	446
Primary metal industries	561	561	550	558	557	552	547	546	543	542	541	539	537
Fabricated metal products	1,137	1,131	1,124	1,129	1,130	1,127	1,125	1,123	1,126	1,121	1,119	1,118	1,119
Industrial machinery and equipment	1,398	1,400	1,392	1,391	1,389	1,383	1,376	1,369	1,357	1,355	1,351	1,347	1,341
Electronic and other electrical equipment	1,079	1,075	1,067	1,061	1,059	1,051	1,042	1,040	1,037	1,031	1,035	1,037	1,032
Transportation equipment	1,274	1,266	1,150	1,257	1,255	1,258	1,250	1,247	1,243	1,236	1,239	1,230	1,229
Motor vehicles and equipment	774	767	648	758	759	760	757	755	753	749	754	756	760
Instruments and related products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing	276	275	275	274	273	269	269	269	267	267	267	269	268
Nondurable goods	5,313	5,302	5,280	5,257	5,265	5,244	5,231	5,227	5,225	5,201	5,187	5,176	5,160
Food and kindred products	1,255	1,254	1,252	1,240	1,253	1,252	1,257	1,261	1,266	1,264	1,264	1,258	1,258
Tobacco products	32	31	31	31	31	31	31	31	31	30	29	29	28
Textile mill products	513	510	505	503	502	499	495	492	490	486	483	480	477
Apparel and other textile products	622	618	614	606	603	591	581	579	574	564	560	559	552
Paper and allied products	517	515	513	512	511	509	507	506	505	503	502	502	500
Printing and publishing	847	847	846	844	844	843	840	836	837	835	833	829	827
Chemicals and allied products	588	588	587	586	586	585	585	586	584	583	582	583	582
Petroleum and coal products	92	93	92	92	92	92	93	94	93	93	92	92	91
Rubber and misc. plastics products	783	783	778	782	783	782	783	784	788	786	786	788	790
Leather and leather products	64	63	62	61	60	60	59	58	57	57	56	56	55
Service-producing	68,480	68,641	68,859	68,991	69,130	69,291	69,489	69,688	69,867	70,101	70,207	70,445	70,514
Transportation and public utilities	5,442	5,450	5,474	5,502	5,509	5,527	5,540	5,561	5,579	5,592	5,595	5,601	5,611
Wholesale trade	5,460	5,470	5,482	5,488	5,507	5,510	5,523	5,534	5,551	5,565	5,579	5,586	5,577
Retail trade	19,558	19,568	19,623	19,633	19,651	19,657	19,699	19,750	19,798	19,888	19,888	19,993	19,998
Finance, insurance, and real estate	5,416	5,440	5,462	5,473	5,484	5,508	5,528	5,542	5,565	5,569	5,571	5,583	5,590
Services	32,604	32,713	32,818	32,895	32,979	33,089	33,199	33,301	33,374	33,487	33,574	33,682	33,738

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: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**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 industries¹												
Over 1-month span:												
1995	63.8	58.0	54.6	56.5	47.5	54.8	55.6	59.1	57.9	56.9	55.2	57.7
1996	49.6	64.9	59.4	55.1	61.9	60.8	57.0	62.5	57.3	63.5	59.7	61.2
1997	56.2	61.0	61.9	62.8	58.8	56.3	60.7	61.0	59.4	65.4	63.6	62.1
1998	63.8	57.9	58.8	60.5	55.9	57.9	58.0	55.8	54.6	52.9	59.1	58.6
1999	54.4	58.3	52.1	P59.0	P49.4							
Over 3-month span:												
1995	63.8	62.9	58.0	53.5	53.9	52.7	59.3	61.0	59.4	58.6	57.3	55.3
1996	62.6	62.5	63.3	63.1	63.1	64.3	64.3	62.2	64.6	64.2	66.2	63.2
1997	63.8	63.6	67.7	67.3	62.6	61.7	61.4	66.2	67.3	69.9	70.8	71.2
1998	66.7	66.2	64.5	63.9	61.4	58.7	60.0	58.4	57.6	57.6	59.0	60.4
1999	60.7	55.9	P59.7	P52.7								
Over 6-month span:												
1995	66.7	59.7	58.6	56.5	59.0	60.0	57.7	61.0	60.5	59.3	61.7	63.2
1996	62.6	65.2	64.5	65.2	64.7	64.6	67.0	65.4	65.9	66.7	66.9	66.7
1997	67.4	68.3	65.6	67.0	65.6	64.9	66.3	68.4	69.7	71.3	71.3	71.9
1998	70.6	66.9	65.9	62.4	62.6	61.1	58.0	59.8	60.0	60.8	60.8	58.0
1999	P61.1	P58.3										
Over 12-month span:												
1995	63.6	62.4	62.6	63.3	61.7	61.9	58.7	62.2	62.2	61.5	63.5	65.4
1996	64.5	66.7	64.5	65.6	68.5	67.3	67.7	66.4	68.0	69.9	68.7	66.9
1997	69.0	67.3	68.3	69.7	69.5	70.1	70.1	70.4	70.5	69.7	69.8	71.3
1998	70.4	68.3	67.1	64.0	62.1	61.7	61.8	63.8	59.8	P59.6	P58.7	
1999												
Manufacturing payrolls, 139 industries¹												
Over 1-month span:												
1995	57.2	50.4	47.1	52.9	41.4	45.3	45.0	51.1	48.6	51.1	45.3	48.2
1996	42.4	55.4	46.8	41.0	55.8	51.4	47.1	56.5	48.9	55.0	50.7	54.0
1997	50.0	52.9	53.6	56.1	52.2	53.2	51.1	55.4	53.6	62.2	61.2	55.4
1998	58.6	51.8	50.4	50.4	40.6	46.8	40.3	45.3	42.1	36.3	39.9	45.0
1999	40.3	42.4	39.6	P46.0	P37.4							
Over 3-month span:												
1995	55.4	51.4	44.2	41.7	43.5	37.4	42.1	43.9	48.2	46.8	44.6	41.4
1996	46.8	46.0	43.5	46.0	48.2	51.1	51.8	49.6	53.2	52.5	55.0	50.7
1997	51.8	51.4	57.6	56.8	54.3	51.8	53.6	55.4	59.7	68.3	65.8	64.4
1998	59.4	57.9	51.8	44.2	41.7	34.9	37.4	37.1	38.1	34.2	35.6	35.3
1999	37.4	31.7	P37.8	P30.2								
Over 6-month span:												
1995	55.4	45.7	43.2	38.1	41.7	42.8	41.0	42.1	43.5	43.2	44.2	45.0
1996	41.4	46.0	45.7	47.1	46.0	48.6	52.9	50.4	51.8	51.4	52.5	51.8
1997	54.7	54.0	51.4	54.3	52.5	52.2	55.4	61.2	61.5	64.7	66.2	65.1
1998	59.7	49.3	48.2	36.7	36.7	36.7	28.4	31.3	33.5	35.3	32.7	28.1
1999	P32.0	P29.5										
Over 12-month span:												
1995	46.0	44.2	46.0	47.8	41.0	41.7	38.5	38.8	36.3	38.5	39.9	44.6
1996	43.5	47.5	45.3	45.3	50.4	49.6	50.4	48.6	51.1	55.0	54.3	50.7
1997	54.7	52.5	54.0	54.0	55.4	56.8	57.2	57.9	58.3	56.5	55.4	57.2
1998	54.0	49.3	46.0	40.6	35.6	33.8	30.9	32.0	26.6	P27.0	P25.5	
1999												

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. Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	
	Total ¹													
Alabama	1,899.0	1,904.3	1,911.3	1,916.6	1,918.8	1,917.3	1,916.4	1,916.8	1,923.0	1,927.3	1,929.8	1,929.4	1,933.3	
Alaska	274.6	274.9	274.5	275.2	275.5	276.3	276.8	276.6	276.1	277.8	277.5	278.0	277.4	
Arizona	2,055.5	2,070.2	2,080.0	2,084.8	2,091.0	2,099.6	2,101.3	2,113.4	2,117.7	2,114.4	2,117.3	2,125.0	2,133.2	
Arkansas	1,118.7	1,120.2	1,122.1	1,124.3	1,124.7	1,125.4	1,129.8	1,132.0	1,131.4	1,131.4	1,131.9	1,133.2	1,133.5	
California	13,486.6	13,525.6	13,554.6	13,606.4	13,648.4	13,679.8	13,717.2	13,748.8	13,782.9	13,827.9	13,833.8	13,852.4	13,878.6	
Colorado	2,030.4	2,045.5	2,050.6	2,063.1	2,064.8	2,070.0	2,073.7	2,074.6	2,076.2	2,085.1	2,084.8	2,086.3	2,073.0	
Connecticut	1,638.5	1,640.8	1,643.3	1,649.3	1,651.3	1,645.8	1,651.4	1,652.5	1,660.3	1,660.5	1,663.4	1,663.9	1,664.8	
Delaware	396.2	397.9	398.6	398.5	401.3	401.7	401.8	403.9	406.1	408.1	408.8	408.7	409.3	
District of Columbia	614.3	615.2	616.9	610.8	618.7	617.8	615.3	616.4	615.4	615.1	615.3	614.8	615.3	
Florida	6,606.6	6,644.0	6,675.9	6,698.5	6,723.1	6,751.8	6,757.8	6,773.0	6,791.4	6,809.6	6,825.1	6,839.6	6,863.6	
Georgia	3,702.8	3,721.9	3,733.3	3,741.5	3,761.4	3,774.8	3,772.9	3,782.9	3,796.3	3,800.7	3,813.7	3,831.6	3,836.8	
Hawaii	530.0	530.4	530.3	529.3	531.2	536.2	530.7	528.3	527.2	526.5	527.5	527.6	528.9	
Idaho	518.9	520.2	520.4	521.1	523.2	522.8	525.9	527.1	532.8	536.8	537.2	536.5	536.2	
Illinois	5,865.3	5,878.7	5,886.2	5,918.1	5,921.4	5,921.4	5,929.0	5,937.5	5,947.1	5,943.9	5,942.8	5,944.1	5,970.7	
Indiana	2,905.4	2,914.2	2,921.0	2,906.5	2,926.6	2,937.6	2,933.8	2,931.5	2,940.7	2,940.5	2,954.5	2,956.8	2,962.0	
Iowa	1,436.6	1,441.3	1,445.4	1,457.3	1,454.2	1,457.1	1,460.1	1,460.8	1,466.9	1,459.7	1,467.2	1,466.7	1,474.4	
Kansas	1,303.9	1,309.8	1,314.0	1,312.0	1,316.8	1,316.3	1,322.4	1,328.4	1,330.6	1,333.8	1,334.7	1,334.5	1,341.8	
Kentucky	1,746.7	1,749.2	1,754.2	1,757.5	1,761.8	1,760.6	1,763.7	1,763.3	1,765.6	1,772.8	1,773.8	1,775.7	1,783.4	
Louisiana	1,891.8	1,896.2	1,896.3	1,904.9	1,905.1	1,907.9	1,908.2	1,913.3	1,918.3	1,910.8	1,909.7	1,908.1	1,913.2	
Maine	567.3	567.1	569.8	570.0	570.2	573.0	574.7	576.1	577.1	578.6	579.9	580.8	581.5	
Maryland	2,305.7	2,309.9	2,315.9	2,329.5	2,334.2	2,339.7	2,342.5	2,346.6	2,346.3	2,355.3	2,361.3	2,359.3	2,362.1	
Massachusetts	3,166.6	3,170.6	3,172.1	3,183.5	3,185.8	3,187.9	3,189.9	3,191.6	3,198.5	3,193.9	3,203.9	3,209.9	3,218.2	
Michigan	4,507.8	4,516.5	4,520.8	4,466.8	4,525.6	4,535.3	4,540.1	4,543.9	4,547.1	4,541.7	4,537.4	4,551.7	4,558.4	
Minnesota	2,551.1	2,557.3	2,564.0	2,563.2	2,568.8	2,559.4	2,578.4	2,584.8	2,592.3	2,593.2	2,589.9	2,590.7	2,599.8	
Mississippi	1,130.1	1,130.7	1,132.6	1,141.4	1,134.5	1,133.2	1,134.5	1,133.8	1,134.9	1,135.9	1,135.5	1,135.4	1,133.1	
Missouri	2,673.8	2,687.6	2,694.1	2,688.4	2,693.0	2,698.6	2,702.8	2,708.5	2,717.6	2,711.8	2,706.4	2,704.0	2,710.1	
Montana	371.7	372.7	372.0	374.4	374.6	375.1	375.3	376.4	378.8	378.2	378.2	379.4	380.2	
Nebraska	872.2	872.5	875.0	882.8	880.1	881.3	882.7	882.6	886.7	880.5	879.6	875.9	877.5	
Nevada	914.5	919.4	923.4	927.7	931.9	934.0	943.3	943.9	946.7	949.9	949.9	952.4	954.7	
New Hampshire	585.9	586.5	586.9	586.5	586.7	587.8	590.7	591.2	591.5	593.7	595.7	597.5	596.3	
New Jersey	3,789.8	3,797.9	3,796.4	3,800.9	3,808.7	3,821.0	3,817.3	3,821.1	3,833.2	3,832.7	3,840.3	3,846.7	3,855.8	
New Mexico	719.8	720.0	720.3	721.5	722.6	722.2	723.9	725.3	725.8	726.4	726.7	729.1	729.0	
New York	8,198.2	8,222.7	8,231.0	8,213.9	8,239.6	8,258.3	8,275.4	8,289.1	8,311.4	8,303.3	8,328.0	8,336.5	8,345.2	
North Carolina	3,747.2	3,757.3	3,758.0	3,795.8	3,816.9	3,806.3	3,811.0	3,814.5	3,823.2	3,831.5	3,830.3	3,824.8	3,835.1	
North Dakota	319.9	319.7	315.9	316.1	314.9	317.0	317.1	317.5	319.3	319.9	319.4	319.7	321.4	
Ohio	5,469.0	5,474.9	5,478.9	5,445.0	5,485.3	5,489.0	5,497.2	5,498.2	5,501.3	5,489.4	5,499.2	5,498.4	5,510.4	
Oklahoma	1,437.6	1,443.0	1,443.6	1,440.8	1,447.0	1,447.0	1,449.7	1,451.6	1,454.2	1,455.8	1,459.9	1,465.0	1,469.1	
Oregon	1,550.5	1,555.7	1,556.0	1,557.4	1,559.5	1,561.1	1,565.7	1,571.2	1,573.6	1,578.7	1,580.1	1,584.2	1,586.4	
Pennsylvania	5,483.9	5,495.2	5,487.2	5,503.2	5,508.2	5,516.8	5,508.7	5,515.5	5,526.4	5,518.8	5,532.1	5,528.1	5,532.9	
Rhode Island	454.8	457.3	456.8	459.9	459.9	462.1	461.5	460.9	461.0	458.3	459.9	461.1	464.0	
South Carolina	1,775.8	1,782.6	1,786.1	1,789.2	1,793.6	1,800.0	1,803.2	1,806.0	1,812.0	1,818.8	1,821.1	1,822.6	1,824.7	
South Dakota	359.5	360.9	361.0	361.7	361.2	362.1	363.6	363.7	364.9	365.2	366.4	366.2	367.8	
Tennessee	2,626.5	2,633.0	2,641.3	2,646.5	2,657.0	2,644.4	2,650.5	2,653.9	2,655.8	2,652.4	2,652.7	2,650.7	2,657.1	
Texas	8,878.2	8,908.9	8,926.6	8,955.4	8,978.9	9,001.5	9,026.8	9,046.6	9,063.9	9,077.0	9,099.4	9,118.6	9,135.8	
Utah	1,017.2	1,020.3	1,023.3	1,024.9	1,027.9	1,032.3	1,030.6	1,034.2	1,036.9	1,037.7	1,040.1	1,042.4	1,046.2	
Vermont	285.6	285.7	285.9	286.0	286.8	287.0	286.1	287.1	288.6	288.9	288.8	290.1	290.8	
Virginia	3,289.0	3,303.0	3,313.3	3,309.3	3,321.3	3,329.0	3,337.8	3,341.7	3,348.8	3,347.2	3,358.3	3,363.9	3,366.2	
Washington	2,580.7	2,589.8	2,595.7	2,606.3	2,612.5	2,608.7	2,613.7	2,619.0	2,625.6	2,628.6	2,631.6	2,639.9	2,644.1	
West Virginia	713.6	727.5	717.4	717.4	718.9	721.3	722.6	722.6	724.3	726.5	728.9	725.8	725.2	
Wisconsin	2,709.0	2,714.7	2,717.9	2,712.1	2,722.8	2,718.3	2,720.0	2,725.1	2,731.5	2,727.9	2,730.9	2,734.6	2,738.9	
Wyoming	228.6	229.5	227.3	228.6	227.5	226.6	227.3	227.4	228.0	229.1	230.3	229.6	231.8	

See footnotes at end of table.

ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED

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

(In thousands)

State	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
	Construction													
Alabama	101.0	101.0	101.9	102.8	103.7	103.0	103.7	104.6	106.2	107.1	106.9	106.6	106.6	
Alaska	13.7	13.3	13.1	13.2	13.1	13.1	13.2	13.4	13.4	14.1	13.9	14.4	14.2	
Arizona	140.3	141.9	143.6	144.5	145.2	147.0	147.3	148.9	150.1	153.5	154.0	154.9	155.1	
Arkansas	48.1	48.0	48.0	47.7	47.6	47.6	48.1	48.4	48.4	49.3	49.5	49.4	49.4	
California	585.6	591.8	600.1	608.7	612.0	614.3	621.5	625.2	627.1	641.7	632.1	631.5	636.3	
Colorado	128.7	130.3	131.6	133.4	134.1	136.2	137.3	136.7	135.9	138.8	137.4	138.5	137.2	
Connecticut	58.4	57.9	57.7	57.6	57.8	58.3	58.4	58.8	60.5	61.0	61.1	61.0	61.1	
Delaware	22.2	22.0	22.3	22.2	22.3	22.3	21.9	22.3	22.9	23.9	24.8	24.3	24.4	
District of Columbia	9.1	9.1	9.2	9.0	9.0	9.0	8.8	8.8	8.7	8.9	8.9	8.9	9.1	
Florida	347.5	349.5	351.8	352.6	355.1	356.3	357.9	358.4	359.7	361.6	360.9	364.7	365.2	
Georgia	174.9	178.5	182.0	183.7	185.5	186.1	187.8	189.0	192.1	192.6	191.0	191.6	193.2	
Hawaii ²	21.8	21.9	21.7	21.4	21.3	21.0	20.5	20.1	20.2	20.7	20.7	20.6	20.6	
Idaho	32.0	31.9	31.9	32.7	32.8	32.9	33.4	33.8	34.1	35.3	34.1	34.1	35.0	
Illinois	236.5	236.4	235.7	240.0	239.4	239.3	240.2	240.7	241.8	243.1	243.2	241.2	247.9	
Indiana	144.2	145.4	145.4	145.2	144.7	144.4	144.9	145.3	145.9	144.4	145.5	144.1	146.4	
Iowa	61.6	61.9	62.3	63.0	62.8	62.8	62.6	62.1	62.9	63.4	64.2	62.5	62.9	
Kansas	61.3	61.6	61.8	62.3	62.2	62.0	62.6	62.5	63.8	64.8	65.1	64.1	66.3	
Kentucky	83.8	83.8	83.9	84.4	84.6	84.7	85.5	84.9	85.3	86.2	87.1	84.2	86.4	
Louisiana	128.4	129.0	128.9	130.3	129.4	128.8	129.9	130.7	130.6	131.5	131.7	132.7	133.1	
Maine	25.2	24.8	24.8	24.9	25.0	25.1	25.1	25.0	25.1	26.2	26.6	26.7	27.4	
Maryland	139.1	138.9	139.7	142.2	143.0	143.4	143.9	143.7	143.8	144.9	146.2	144.9	144.8	
Massachusetts	107.9	106.5	106.2	108.0	108.3	108.5	109.0	109.2	110.6	113.1	114.7	116.1	115.6	
Michigan	186.7	185.8	185.8	184.7	183.6	184.7	186.8	188.3	189.6	184.1	190.4	190.6	193.2	
Minnesota	101.4	101.1	100.9	101.0	101.3	101.9	103.3	104.5	106.5	107.7	109.0	109.2	110.7	
Mississippi	53.5	53.2	54.0	54.4	55.1	55.4	56.0	56.7	56.8	58.1	58.5	58.2	57.2	
Missouri	123.5	124.6	124.9	133.5	128.7	128.8	129.4	132.0	134.7	130.0	132.9	131.7	133.9	
Montana	18.9	18.9	18.8	18.8	18.7	18.5	18.5	18.6	18.9	18.9	19.3	19.4	19.6	
Nebraska	40.2	40.4	40.3	41.7	42.0	42.0	42.0	41.0	42.7	41.8	42.1	40.7	41.2	
Nevada	83.7	85.5	86.3	85.8	86.6	86.1	86.3	86.6	87.0	88.6	87.1	86.6	87.0	
New Hampshire	22.5	22.4	22.5	22.6	22.8	22.9	23.5	23.7	24.0	23.6	24.2	24.2	24.7	
New Jersey	135.0	134.3	134.6	135.1	135.2	136.0	135.4	135.6	136.7	137.4	138.2	137.9	136.9	
New Mexico	43.7	43.9	43.6	43.7	43.6	43.4	43.6	43.6	43.9	44.2	44.4	43.5	43.5	
New York	280.3	280.1	281.3	281.1	283.0	283.6	285.0	287.9	290.1	292.0	296.8	296.5	297.4	
North Carolina	212.0	214.1	215.5	216.2	216.1	215.5	217.5	218.4	219.3	220.5	220.9	218.7	219.8	
North Dakota	15.8	15.5	15.3	15.1	14.9	15.0	14.9	14.9	15.3	14.5	15.6	15.2	15.1	
Ohio	227.7	226.2	226.7	227.7	226.8	226.3	226.5	226.8	227.6	228.7	231.5	227.4	228.5	
Oklahoma	54.1	54.5	54.4	54.4	54.4	54.7	54.7	55.1	55.5	55.6	54.8	55.3	55.3	
Oregon	82.3	81.4	81.9	82.5	82.5	81.6	83.7	83.3	84.3	85.6	85.1	85.5	85.7	
Pennsylvania	218.9	218.0	219.0	219.8	220.6	220.6	220.6	222.3	224.5	222.3	230.7	228.8	229.5	
Rhode Island	15.6	15.4	15.3	15.3	15.7	15.8	15.9	15.6	15.8	15.2	15.3	15.8	16.4	
South Carolina	103.6	105.2	105.3	106.3	106.8	107.9	108.6	108.8	109.6	109.8	110.2	111.0	111.3	
South Dakota	15.9	16.3	16.1	16.1	16.0	15.9	16.2	16.2	16.4	16.4	16.6	16.7	17.0	
Tennessee	120.9	121.7	122.5	123.9	124.6	124.9	125.7	126.0	126.8	128.8	128.0	126.2	128.1	
Texas	488.5	491.7	495.0	501.6	503.1	503.0	507.1	508.2	508.8	512.5	518.0	518.7	523.6	
Utah	66.5	67.1	67.7	68.0	68.7	69.3	70.1	70.7	71.5	71.6	71.2	70.9	71.3	
Vermont	14.8	14.4	14.2	14.3	14.1	14.0	13.9	13.9	14.4	15.1	15.0	15.1	15.8	
Virginia	187.0	188.1	189.1	188.8	189.7	190.4	192.1	192.4	192.9	193.0	194.7	194.9	196.7	
Washington	140.6	141.7	141.8	142.9	143.0	142.7	143.5	144.0	145.0	146.3	146.6	147.3	147.9	
West Virginia	34.1	34.0	34.5	34.3	33.9	34.3	34.9	35.0	35.7	35.5	36.9	34.6	35.3	
Wisconsin	112.7	111.9	111.7	112.5	112.9	112.8	113.5	114.9	116.7	116.2	117.7	118.5	120.2	
Wyoming	15.9	16.3	15.8	15.9	15.7	15.5	15.6	15.7	15.9	16.6	16.7	16.5	16.9	

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
	Manufacturing													
Alabama	379.9	380.4	380.1	380.6	379.6	379.6	377.6	374.4	374.9	375.5	373.1	372.6	371.4	
Alaska	14.3	14.2	13.9	14.2	14.4	14.7	15.1	15.1	13.4	15.7	15.4	14.3	13.3	
Arizona	216.4	216.8	217.3	217.0	217.4	217.8	218.1	218.2	218.6	217.4	217.5	218.0	218.4	
Arkansas	253.9	254.1	254.2	253.6	253.7	254.1	254.0	253.8	254.1	254.5	254.2	253.7	253.1	
California	1,959.2	1,963.3	1,963.8	1,963.6	1,964.6	1,965.6	1,965.7	1,960.6	1,959.5	1,959.0	1,952.9	1,948.9	1,949.7	
Colorado	208.7	208.7	208.9	208.3	207.3	206.3	206.3	206.0	205.6	206.0	206.3	206.5	206.4	
Connecticut	279.3	278.4	277.7	279.2	279.3	278.0	277.4	276.4	275.6	276.3	276.0	276.7	276.4	
Delaware	59.7	60.0	60.2	58.0	59.9	59.8	60.1	60.5	60.6	59.8	59.7	59.7	59.0	
District of Columbia	12.4	12.4	12.4	12.4	12.6	12.5	12.5	12.5	12.6	12.1	12.2	12.1	12.1	
Florida	495.7	496.1	497.2	498.9	499.1	499.6	497.8	498.0	498.5	497.5	498.0	496.9	498.5	
Georgia	591.0	592.6	593.5	589.6	595.1	594.4	595.2	595.7	597.0	596.3	596.2	596.0	595.4	
Hawaii	16.3	16.4	16.3	16.3	16.2	16.5	16.2	16.2	16.2	16.2	16.2	16.1	16.2	
Idaho	76.3	76.5	76.5	76.6	75.9	76.0	75.9	76.2	76.1	75.9	76.4	76.3	76.5	
Illinois	978.1	977.8	979.2	979.6	978.0	978.4	975.8	973.2	973.1	973.1	974.4	972.0	971.0	
Indiana	684.7	684.4	684.8	675.1	685.1	684.1	685.1	684.6	684.9	686.5	686.9	685.4	686.9	
Iowa	260.0	260.8	261.4	263.4	263.3	262.9	263.3	263.4	263.6	262.4	265.0	264.8	265.8	
Kansas	212.9	213.7	213.2	211.1	213.7	213.9	214.1	214.2	214.4	214.8	214.9	213.8	213.3	
Kentucky	321.4	322.0	321.6	321.2	321.6	321.4	322.8	321.9	321.4	321.2	320.3	320.2	319.6	
Louisiana	192.9	193.3	190.6	190.9	192.4	191.8	191.2	191.9	192.0	191.5	191.5	191.1	190.8	
Maine	87.7	87.3	87.2	86.5	86.2	86.9	85.9	85.9	85.4	86.6	86.4	85.7	84.6	
Maryland	178.3	178.6	178.7	176.4	176.1	176.7	177.2	176.6	176.7	176.5	177.0	177.0	176.9	
Massachusetts	451.8	450.8	449.5	450.1	447.1	445.3	443.4	441.5	440.2	438.4	436.4	436.0	436.0	
Michigan	974.0	973.6	969.9	915.3	972.2	971.5	970.6	966.9	966.7	962.8	957.9	963.4	960.9	
Minnesota	443.9	444.3	444.7	443.5	444.6	444.2	445.1	445.1	445.0	443.9	443.7	441.0	441.1	
Mississippi	244.7	244.9	245.2	245.5	243.7	244.4	244.9	244.3	244.9	244.3	241.4	240.6	240.5	
Missouri	421.5	422.8	423.4	415.5	423.3	423.4	421.6	419.6	420.0	420.6	417.0	416.8	414.4	
Montana	24.5	24.7	24.5	24.5	24.5	24.6	24.8	25.0	25.0	24.8	24.9	24.8	24.6	
Nebraska	120.0	119.9	119.7	119.4	118.7	118.6	118.3	117.8	118.0	118.3	117.9	117.7	117.6	
Nevada	41.5	42.0	42.3	42.5	42.4	42.5	42.5	42.5	42.4	42.1	41.9	42.3	42.2	
New Hampshire	109.2	109.0	108.7	107.7	107.2	107.3	107.3	107.3	107.3	107.1	106.8	106.8	106.3	
New Jersey	480.3	480.4	478.6	475.7	476.9	476.2	474.5	473.7	473.6	474.4	470.7	469.0	469.1	
New Mexico	45.7	45.3	45.2	44.8	44.6	44.4	44.1	44.1	44.1	44.3	44.3	44.1	44.2	
New York	918.9	917.7	917.5	906.4	918.8	917.7	916.8	914.6	915.0	915.0	912.5	909.3	907.4	
North Carolina	830.4	829.1	825.8	826.0	825.3	823.8	821.7	820.4	818.4	817.7	815.7	811.6	811.5	
North Dakota	23.9	24.0	24.1	24.0	24.1	24.1	23.8	24.2	24.3	23.9	23.7	23.7	23.7	
Ohio	1,101.1	1,099.2	1,096.9	1,059.4	1,095.8	1,096.0	1,097.7	1,093.8	1,091.8	1,093.6	1,088.9	1,086.1	1,086.8	
Oklahoma	186.1	186.1	186.9	183.7	186.3	185.9	186.2	186.3	186.1	186.7	186.2	186.5	186.1	
Oregon	247.3	247.4	245.9	244.3	243.2	242.0	241.5	241.7	241.9	242.8	242.2	242.0	241.4	
Pennsylvania	948.4	948.1	947.3	947.2	945.5	942.9	939.8	939.7	938.1	935.3	935.2	934.2	933.5	
Rhode Island	78.7	78.9	78.9	78.7	78.5	78.6	78.4	78.1	77.9	77.9	78.4	78.3	78.4	
South Carolina	364.9	364.3	363.4	364.4	362.6	364.5	363.1	363.1	363.2	363.7	362.7	361.9	362.0	
South Dakota	49.2	49.3	49.4	49.6	49.7	49.8	49.8	49.8	50.0	50.2	50.1	49.9	49.8	
Tennessee	517.5	517.5	516.6	515.3	514.0	512.3	511.2	510.0	509.7	509.8	508.1	505.8	505.7	
Texas	1,107.2	1,107.9	1,108.2	1,107.5	1,108.5	1,107.7	1,107.2	1,106.5	1,106.7	1,104.5	1,102.1	1,100.3	1,098.4	
Utah	134.3	133.8	133.7	133.9	133.6	133.6	133.2	134.1	134.1	133.6	133.6	134.2	134.0	
Vermont	48.1	48.2	48.4	48.4	48.5	48.5	48.5	48.5	48.8	48.5	48.3	48.5	48.4	
Virginia	406.6	406.1	405.2	403.4	404.7	404.6	403.3	402.5	401.9	401.8	402.3	401.0	393.0	
Washington	380.9	381.6	382.2	381.9	380.4	378.7	376.4	375.4	374.6	373.4	371.8	371.9	369.1	
West Virginia	82.3	82.9	82.6	82.7	82.2	82.0	82.2	82.2	82.1	80.5	80.9	81.8	81.9	
Wisconsin	618.1	619.0	619.0	611.3	618.4	616.5	615.4	616.1	615.8	616.5	615.0	614.7	613.2	
Wyoming	10.9	10.9	10.9	10.9	11.0	10.9	10.8	10.8	10.9	10.9	11.1	10.8	11.1	

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
Transportation and public utilities													
Alabama	92.1	92.5	92.5	92.7	92.7	92.6	92.5	92.6	92.7	93.6	93.9	93.4	94.1
Alaska	25.4	25.6	25.5	25.6	25.9	25.7	25.8	25.8	25.9	25.8	25.8	25.8	25.8
Arizona	99.7	100.1	100.6	101.0	101.4	102.8	102.8	103.2	104.0	105.0	104.6	105.3	106.1
Arkansas	67.5	67.4	67.6	68.0	68.2	68.3	69.0	69.1	69.2	68.4	68.6	68.5	68.8
California	694.6	694.8	695.0	695.0	695.0	696.2	697.3	699.2	701.8	705.6	706.9	707.5	709.4
Colorado	127.6	128.3	129.0	129.6	130.4	131.1	131.4	132.0	132.2	132.1	132.5	133.0	133.6
Connecticut	76.0	76.2	76.3	77.0	76.8	70.5	76.4	76.2	76.2	76.2	76.6	76.5	75.9
Delaware	15.9	16.0	16.0	16.1	16.3	16.5	16.5	16.8	16.9	17.3	17.3	17.3	17.3
District of Columbia	16.3	16.3	16.1	16.1	16.1	15.8	15.8	15.8	15.8	16.1	16.0	15.8	15.8
Florida	332.4	334.1	334.8	336.5	339.2	341.4	341.8	343.0	344.6	347.4	347.3	347.2	349.5
Georgia	240.8	241.6	241.1	242.8	243.6	244.3	245.2	246.2	247.2	247.7	249.8	251.4	252.5
Hawaii	41.1	41.1	41.1	41.4	41.1	41.2	40.7	40.4	40.1	40.2	40.2	40.1	40.4
Idaho	25.2	25.4	25.5	25.7	25.9	25.9	26.0	25.8	25.9	26.4	26.3	26.4	26.3
Illinois	346.2	347.4	347.4	346.4	347.6	348.0	349.4	350.4	352.0	350.8	350.4	352.0	352.3
Indiana	143.0	143.7	144.2	145.0	144.8	144.8	145.2	145.5	145.8	146.4	146.3	146.4	145.6
Iowa	68.4	68.6	68.9	69.8	69.8	70.0	70.4	70.5	70.8	70.3	70.6	71.0	71.7
Kansas	73.8	73.9	73.6	74.5	74.8	75.2	76.2	76.5	77.2	76.9	77.0	76.7	76.6
Kentucky	101.4	101.7	101.5	101.8	102.3	102.6	102.5	102.2	102.8	103.3	103.9	104.2	105.7
Louisiana	112.6	113.0	113.3	114.0	114.4	114.6	115.0	115.6	116.3	115.2	115.6	115.0	115.4
Maine	23.4	23.5	23.5	23.6	23.6	23.6	23.9	23.9	24.0	24.2	24.2	24.2	24.1
Maryland	108.1	107.9	108.2	108.8	109.7	109.5	109.8	109.9	110.0	110.8	110.6	111.3	113.2
Massachusetts	135.8	136.2	136.4	137.0	136.2	136.2	135.6	135.4	135.4	137.4	137.7	137.2	137.7
Michigan	177.6	178.0	178.4	178.1	178.1	177.8	178.4	178.5	178.2	180.4	179.1	180.1	180.4
Minnesota	128.3	128.4	128.7	128.9	128.9	116.3	129.2	129.6	130.3	130.5	130.4	130.5	131.6
Mississippi	53.9	53.8	53.8	53.8	53.9	53.7	53.8	53.0	53.5	54.1	54.3	54.4	54.5
Missouri	166.1	166.5	166.3	165.1	164.9	165.4	165.7	166.1	166.9	167.3	166.9	165.5	165.5
Montana	21.7	21.6	21.6	21.6	21.4	21.4	21.7	21.7	21.8	22.0	22.0	22.1	22.0
Nebraska	55.1	55.3	55.7	56.3	56.6	57.1	57.4	57.8	58.2	58.1	58.7	58.6	58.8
Nevada	48.0	48.0	47.9	47.8	47.9	48.0	48.2	48.2	48.3	48.7	48.7	48.7	48.6
New Hampshire	20.0	20.1	20.3	20.6	20.9	20.8	21.0	21.1	21.1	21.3	21.0	20.9	20.9
New Jersey	258.9	260.7	260.8	261.2	261.7	262.9	262.0	261.5	261.6	262.6	263.4	263.4	264.0
New Mexico	33.0	33.2	33.5	33.6	33.8	33.7	33.7	33.9	33.9	34.1	34.0	34.3	34.0
New York	411.8	412.5	412.9	412.6	412.5	413.5	413.1	412.9	412.7	415.5	415.8	415.0	417.2
North Carolina	171.2	171.2	171.9	172.2	172.6	172.8	172.8	173.7	173.3	175.2	174.9	174.9	175.2
North Dakota	18.0	18.0	17.9	17.8	17.5	17.6	17.7	17.6	17.7	17.8	17.7	17.7	17.9
Ohio	241.3	241.2	241.8	241.7	242.4	242.9	243.2	243.0	242.7	242.7	242.4	242.7	243.6
Oklahoma	81.9	82.1	82.2	82.4	82.9	82.9	83.2	83.5	83.5	84.0	84.5	83.9	84.2
Oregon	76.6	76.8	76.9	76.4	76.1	77.0	76.7	76.8	77.0	77.6	77.9	78.4	78.3
Pennsylvania	285.6	285.8	286.2	286.0	286.4	286.8	287.1	287.5	287.3	288.2	288.8	288.8	289.8
Rhode Island	15.3	16.0	16.2	16.1	16.1	16.2	16.1	16.1	16.0	16.2	16.0	16.2	16.3
South Carolina	77.0	76.7	76.8	76.8	76.8	77.3	77.5	77.6	78.0	79.0	79.6	79.1	79.7
South Dakota	16.4	16.4	16.5	16.7	16.7	16.9	16.7	16.8	16.9	16.6	16.8	17.0	16.9
Tennessee	158.4	157.8	158.6	158.9	158.3	158.6	158.6	158.2	158.2	159.9	159.7	159.9	160.5
Texas	536.6	539.4	539.6	543.2	545.9	547.5	549.1	550.5	551.6	556.2	557.4	557.5	559.6
Utah	57.8	58.3	58.3	58.6	59.1	59.2	59.3	59.3	59.5	59.5	59.8	59.8	59.9
Vermont	12.6	12.6	12.6	12.5	12.5	12.7	12.6	12.6	12.5	12.5	12.6	12.5	12.5
Virginia	172.0	173.0	173.5	173.5	173.7	173.8	174.7	174.9	175.6	176.2	176.2	176.3	178.3
Washington	135.3	135.6	135.6	136.4	137.1	137.4	137.6	138.4	138.8	138.6	139.4	139.3	139.8
West Virginia	38.7	38.7	38.8	39.0	38.9	39.3	39.4	39.3	39.2	39.4	39.6	39.5	39.0
Wisconsin	126.5	126.9	127.7	128.0	128.0	128.2	128.2	128.4	128.9	128.8	128.4	128.6	129.4
Wyoming	14.0	13.9	13.9	13.9	13.9	13.9	14.0	13.9	14.0	13.8	14.0	14.2	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	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P
Trade													
Alabama	436.5	438.4	440.5	444.1	444.0	442.8	443.4	443.3	444.9	446.4	448.5	450.7	450.1
Alaska	56.9	57.0	56.9	56.9	57.0	57.4	57.0	56.6	57.3	56.9	57.2	57.7	58.1
Arizona	493.3	496.6	500.3	500.0	502.5	503.6	504.0	504.5	506.1	509.7	510.6	513.5	513.7
Arkansas	255.0	255.7	256.4	256.2	256.6	257.3	257.9	258.2	258.3	258.4	258.0	259.9	259.1
California	3,104.0	3,112.0	3,117.4	3,127.6	3,135.5	3,138.4	3,141.4	3,148.8	3,158.5	3,154.9	3,153.5	3,157.4	3,152.5
Colorado	488.4	490.5	491.8	495.7	497.2	498.9	499.3	500.1	500.8	503.4	504.3	504.5	505.4
Connecticut	354.8	355.6	355.8	355.1	355.4	354.5	355.4	356.9	358.9	357.8	359.5	359.1	358.0
Delaware	86.2	86.5	86.3	86.7	87.1	87.8	87.8	88.0	88.4	88.6	88.8	89.0	89.4
District of Columbia	48.2	48.0	48.5	48.9	48.7	49.3	48.5	48.5	48.5	47.4	48.0	47.8	48.3
Florida	1,671.2	1,677.3	1,683.5	1,687.0	1,693.5	1,697.2	1,699.1	1,700.5	1,702.9	1,709.0	1,707.1	1,714.4	1,717.6
Georgia	922.8	928.4	930.1	931.5	932.7	935.4	934.5	935.3	936.4	935.6	940.1	947.8	949.2
Hawaii	132.0	132.3	131.9	131.0	131.8	131.7	131.7	131.1	130.7	130.7	130.6	130.7	130.6
Idaho	131.7	132.5	132.6	132.2	132.9	132.9	133.5	134.2	134.3	135.4	135.8	135.1	134.2
Illinois	1,326.9	1,329.9	1,330.9	1,338.1	1,337.2	1,337.9	1,342.3	1,345.4	1,347.4	1,352.9	1,354.3	1,355.4	1,357.4
Indiana	685.2	688.1	689.7	691.5	690.5	690.5	689.9	686.2	688.7	698.9	699.5	699.9	696.8
Iowa	351.6	352.8	353.7	355.0	355.1	355.7	356.1	357.0	358.2	358.7	360.8	360.5	362.0
Kansas	317.0	318.4	319.7	319.0	319.1	319.1	319.0	321.0	322.3	322.9	323.9	325.2	325.7
Kentucky	414.8	415.8	417.2	417.7	418.2	417.6	418.7	418.8	419.8	421.2	420.7	424.6	426.3
Louisiana	439.8	441.6	442.6	443.9	445.6	446.0	445.8	447.5	448.8	446.2	444.6	444.7	445.7
Maine	141.7	142.5	142.9	142.2	143.0	143.9	145.2	146.2	146.1	145.2	144.9	145.8	145.4
Maryland	538.3	538.2	538.9	540.2	539.1	538.7	538.4	539.3	537.4	540.7	540.5	541.1	540.0
Massachusetts	716.5	718.9	717.9	723.7	724.8	726.2	725.8	726.7	727.2	722.1	728.0	730.3	733.5
Michigan	1,062.8	1,066.3	1,064.5	1,066.5	1,067.7	1,071.2	1,072.3	1,075.0	1,076.1	1,079.3	1,078.4	1,082.8	1,085.5
Minnesota	609.4	611.4	613.8	617.5	617.6	617.9	618.8	620.1	621.3	622.7	620.5	620.5	622.2
Mississippi	243.9	244.5	245.0	246.0	244.9	244.4	244.9	244.0	243.6	244.0	247.3	248.3	245.9
Missouri	628.7	631.2	632.3	634.5	635.4	636.4	636.1	635.7	638.3	637.2	640.2	640.1	640.2
Montana	100.2	100.3	100.2	100.6	100.9	100.7	100.4	100.6	100.8	101.2	101.4	101.5	101.7
Nebraska	210.6	211.1	212.3	213.6	213.3	214.3	214.6	214.9	214.4	212.7	211.8	211.6	212.3
Nevada	186.9	188.5	188.8	190.2	190.5	191.1	192.1	192.3	193.6	194.5	194.7	195.6	195.9
New Hampshire	151.6	151.9	152.1	152.4	152.5	152.7	154.3	153.9	154.9	154.2	155.0	155.8	154.2
New Jersey	882.0	883.7	883.5	883.9	885.2	889.0	888.4	890.5	895.5	896.2	898.2	900.0	901.8
New Mexico	170.0	170.3	170.7	170.8	170.6	171.2	171.8	172.0	172.2	171.5	172.4	173.0	172.9
New York	1,652.7	1,658.7	1,659.2	1,664.5	1,665.5	1,668.9	1,671.2	1,675.3	1,678.4	1,675.8	1,676.7	1,678.2	1,673.3
North Carolina	846.6	848.8	849.9	858.2	859.9	862.1	864.8	863.6	867.2	873.0	873.9	875.5	878.1
North Dakota	80.8	80.7	80.7	81.0	81.0	81.1	81.0	80.6	80.7	81.3	81.2	81.5	82.0
Ohio	1,321.4	1,323.9	1,323.8	1,326.5	1,328.0	1,328.4	1,328.6	1,332.1	1,334.8	1,332.0	1,333.9	1,336.7	1,335.3
Oklahoma	331.9	332.7	332.1	331.2	331.8	331.7	332.6	333.9	334.8	334.2	335.7	337.2	337.3
Oregon	382.9	384.2	384.4	385.0	384.2	384.7	385.6	386.5	387.7	386.6	386.5	387.8	390.0
Pennsylvania	1,225.6	1,227.7	1,228.7	1,233.5	1,235.5	1,235.5	1,234.5	1,235.8	1,238.7	1,235.3	1,239.3	1,242.9	1,239.3
Rhode Island	97.8	98.2	98.1	99.5	99.7	100.1	99.7	99.9	100.2	99.8	99.8	99.6	100.5
South Carolina	426.5	428.3	429.1	430.4	431.6	433.1	435.1	437.4	440.2	438.0	440.4	440.0	441.0
South Dakota	89.6	90.1	90.0	89.3	89.1	89.2	89.1	89.3	89.8	91.1	90.6	89.8	91.1
Tennessee	620.2	622.6	623.8	626.1	626.0	626.8	627.8	629.4	629.8	627.0	627.7	628.7	633.8
Texas	2,098.0	2,105.6	2,108.0	2,108.5	2,112.4	2,117.9	2,121.3	2,124.7	2,128.4	2,126.3	2,134.2	2,142.1	2,141.0
Utah	242.7	243.1	243.8	242.9	243.4	243.3	243.2	242.6	242.8	245.4	244.9	246.6	247.1
Vermont	65.4	65.5	65.5	65.7	65.7	65.8	65.8	66.0	66.0	64.9	65.5	65.7	65.6
Virginia	728.8	731.4	733.5	731.7	734.8	735.3	739.5	739.1	739.9	739.9	742.4	744.8	745.2
Washington	620.2	622.6	623.9	625.7	627.8	629.4	631.4	633.4	635.7	635.5	636.3	639.5	641.4
West Virginia	162.2	162.6	163.8	163.1	163.4	164.2	164.6	164.5	164.4	165.6	166.8	166.9	167.1
Wisconsin	609.6	610.9	612.3	610.2	610.7	609.6	610.5	609.6	612.1	609.6	611.5	613.2	614.5
Wyoming	53.0	53.5	52.9	52.6	52.4	52.2	52.4	52.4	52.6	52.6	53.3	52.8	53.4

See footnotes at end of table.

ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED

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

(In thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
	Finance, insurance, and real estate												
Alabama	87.4	87.5	87.5	87.3	87.6	87.7	87.8	87.9	88.1	88.4	88.5	88.5	88.9
Alaska	12.5	12.5	12.5	12.5	12.6	12.5	12.5	12.6	12.6	12.7	12.7	12.8	12.7
Arizona	137.3	139.1	140.4	140.9	141.4	141.5	142.1	142.6	143.4	142.8	143.5	144.1	144.3
Arkansas	45.0	44.9	45.0	45.0	45.0	45.0	44.9	45.0	45.0	45.1	45.2	45.6	45.4
California	791.4	795.4	798.5	802.0	803.6	806.0	808.3	807.6	808.2	809.1	808.7	808.0	809.8
Colorado	133.8	134.5	135.4	136.5	137.0	137.1	137.1	137.1	137.8	138.3	138.3	138.4	139.0
Connecticut	134.0	134.3	134.8	137.2	137.5	137.5	137.6	137.8	138.5	138.8	138.8	139.1	138.6
Delaware	47.7	48.1	48.7	48.8	48.9	49.1	48.9	49.2	49.6	50.1	50.0	50.2	49.9
District of Columbia	28.9	29.0	29.1	29.1	29.2	28.9	28.9	29.0	29.1	29.0	29.0	28.9	28.9
Florida	426.2	428.6	430.8	431.5	433.6	435.2	436.4	437.7	438.9	439.2	439.0	441.8	442.3
Georgia	197.6	198.5	199.3	200.6	201.5	202.1	202.4	203.0	203.9	204.9	206.0	206.7	207.7
Hawaii	35.5	35.5	35.6	35.6	35.5	35.5	35.6	35.3	35.2	35.3	35.2	34.9	35.3
Idaho	22.5	22.4	22.6	22.9	23.0	23.1	23.2	23.2	23.3	23.7	23.5	23.8	23.9
Illinois	405.1	402.9	403.9	404.9	406.5	406.6	406.7	406.6	408.0	408.8	407.9	408.6	411.2
Indiana	140.0	140.2	140.4	141.2	141.8	142.4	143.3	143.6	144.0	146.2	146.5	146.9	146.4
Iowa	82.3	82.5	83.0	83.5	83.6	83.9	84.3	84.2	84.1	83.5	83.9	83.9	84.5
Kansas	61.5	61.7	61.9	62.2	62.2	62.3	62.4	62.6	62.7	62.9	63.0	63.1	63.2
Kentucky	69.6	69.8	69.9	70.1	70.1	70.2	70.3	70.4	70.5	70.9	71.0	70.9	71.0
Louisiana	86.5	86.7	86.7	87.1	87.1	87.1	86.8	86.8	87.0	86.5	86.6	86.5	86.9
Maine	29.6	29.6	29.8	30.0	29.7	29.7	30.0	30.2	30.3	30.7	30.8	30.7	31.0
Maryland	133.5	133.9	134.2	135.0	135.3	135.5	133.3	134.5	134.9	136.3	137.1	137.1	136.9
Massachusetts	215.7	216.1	216.2	217.4	217.6	218.3	218.6	219.2	220.0	219.3	220.2	220.6	221.5
Michigan	210.1	209.9	209.4	209.3	208.7	209.2	209.3	209.5	209.1	210.0	209.0	209.9	209.3
Minnesota	154.5	155.1	155.9	157.3	157.9	158.2	158.7	159.5	160.0	159.3	159.3	159.5	159.2
Mississippi	42.6	42.4	42.3	42.2	42.3	42.3	42.3	42.3	42.2	42.7	42.6	42.1	42.2
Missouri	159.5	160.8	161.6	161.3	162.0	163.1	163.8	164.4	164.9	165.1	165.4	165.1	165.3
Montana	16.9	16.9	16.9	17.0	17.1	17.3	17.2	17.3	17.3	17.4	17.4	17.3	17.4
Nebraska	57.2	57.0	57.4	57.9	58.1	58.1	58.2	58.5	58.6	58.7	58.8	58.6	58.4
Nevada	42.6	43.0	43.2	43.5	43.6	44.0	44.2	44.7	44.8	44.9	45.1	45.0	44.8
New Hampshire	31.1	31.1	31.3	31.3	31.3	31.4	31.3	31.5	31.5	31.4	31.5	31.5	31.6
New Jersey	247.1	247.9	248.1	247.4	248.5	249.2	249.9	249.8	250.7	253.1	254.1	254.9	256.6
New Mexico	31.7	31.8	31.9	31.9	31.8	32.0	32.1	32.1	32.2	32.1	32.3	32.1	32.3
New York	732.4	734.2	736.3	735.9	737.3	737.7	739.2	739.7	742.0	740.8	740.1	739.2	739.6
North Carolina	175.5	176.8	177.5	178.8	180.2	181.6	181.8	182.6	183.1	182.8	183.4	183.5	184.7
North Dakota	15.7	15.7	15.7	15.6	15.6	15.5	15.8	15.9	16.0	16.1	15.9	15.8	15.9
Ohio	297.6	298.8	298.8	299.1	299.9	300.1	301.4	301.7	301.9	303.0	302.9	303.2	303.2
Oklahoma	72.5	72.8	73.0	73.2	73.6	74.0	74.5	74.6	74.8	75.4	75.5	75.3	75.4
Oregon	94.8	94.9	95.2	95.4	95.5	95.7	95.6	95.4	95.5	96.1	96.6	96.9	97.0
Pennsylvania	317.3	317.6	317.6	318.6	319.3	319.2	319.4	319.7	320.0	320.0	321.1	321.4	322.3
Rhode Island	27.7	28.3	28.5	28.7	28.9	29.0	29.3	29.4	29.3	29.0	29.1	29.5	29.4
South Carolina	79.1	79.8	79.9	80.0	80.5	80.8	81.1	81.2	81.7	82.1	82.3	82.6	83.0
South Dakota	21.9	22.1	22.3	22.4	22.5	23.0	23.0	23.2	23.3	23.3	23.3	23.3	23.4
Tennessee	124.6	125.2	125.4	125.9	126.1	126.9	127.1	127.3	127.1	127.4	127.4	126.3	126.4
Texas	490.6	492.7	494.3	497.5	499.3	500.8	502.9	504.6	507.1	509.3	510.2	510.6	512.5
Utah	54.4	54.8	55.2	55.6	56.2	56.3	56.6	56.5	56.3	56.4	56.8	57.0	57.2
Vermont	12.2	12.2	12.2	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.7	12.7	12.9
Virginia	173.8	175.1	175.5	175.8	176.2	176.8	177.4	177.6	177.1	177.7	179.0	179.2	178.5
Washington	133.3	133.9	134.6	135.7	136.6	136.7	137.2	137.5	138.2	139.3	139.0	139.6	140.5
West Virginia	28.5	28.5	28.4	28.6	28.6	28.7	28.9	28.9	29.0	29.7	29.7	29.5	29.2
Wisconsin	142.8	143.1	143.5	144.0	144.3	144.5	144.9	145.4	145.8	146.3	146.6	146.9	147.1
Wyoming	8.5	8.7	8.6	8.6	8.6	8.7	8.6	8.7	8.6	8.7	8.7	8.7	8.7

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
Services														
Alabama	444.9	447.1	451.0	452.2	453.7	453.0	452.6	454.7	456.2	457.0	458.5	456.8	460.8	
Alaska	68.1	68.4	68.7	68.7	68.8	68.8	69.4	69.3	69.4	69.5	69.2	69.2	69.8	
Arizona	618.3	623.1	627.6	630.9	634.5	637.1	637.5	640.7	643.4	632.0	633.3	636.2	640.8	
Arkansas	261.2	261.6	262.0	263.8	264.0	263.8	265.7	266.4	267.0	266.3	267.1	266.8	268.1	
California	4,174.2	4,187.3	4,194.9	4,228.5	4,245.7	4,260.7	4,273.4	4,289.9	4,304.2	4,334.1	4,352.0	4,366.3	4,382.1	
Colorado	609.2	618.2	618.3	621.9	623.0	623.5	625.4	625.5	626.9	629.1	627.5	626.5	612.8	
Connecticut	509.0	511.2	513.5	514.7	515.4	515.7	516.3	517.0	520.1	520.0	521.4	520.5	523.7	
Delaware	110.5	111.0	111.0	112.2	112.6	112.1	112.5	112.9	113.2	113.4	113.4	113.0	114.0	
District of Columbia	272.1	273.3	275.2	274.4	274.8	275.5	275.0	275.8	275.6	275.6	275.4	275.8	275.9	
Florida	2,374.0	2,396.9	2,416.1	2,428.2	2,440.2	2,455.5	2,457.5	2,464.6	2,475.3	2,485.8	2,498.7	2,499.1	2,512.4	
Georgia	984.4	991.0	996.0	1,000.6	1,006.2	1,007.8	1,011.8	1,017.6	1,022.1	1,024.4	1,031.1	1,037.1	1,039.1	
Hawaii	171.8	172.0	172.5	171.9	172.7	172.5	173.4	173.1	172.9	172.6	173.6	174.1	174.4	
Idaho	126.0	126.3	125.6	125.5	126.9	126.4	127.4	127.3	131.8	133.7	133.4	133.1	132.7	
Illinois	1,751.9	1,762.1	1,764.2	1,775.9	1,777.7	1,778.1	1,787.3	1,794.1	1,801.4	1,790.9	1,793.9	1,794.4	1,811.1	
Indiana	703.2	706.5	710.8	714.2	714.6	718.8	715.6	715.6	718.6	708.9	714.9	718.5	725.8	
Iowa	375.4	377.2	379.0	384.4	382.3	382.0	384.2	385.0	386.7	381.3	383.1	385.1	388.4	
Kansas	330.3	331.7	335.1	335.2	335.3	336.0	337.4	340.3	340.8	342.0	341.9	342.2	343.8	
Kentucky	439.6	440.9	443.2	444.5	445.1	445.3	445.8	447.1	447.7	450.7	452.2	452.6	455.3	
Louisiana	506.5	507.1	509.5	513.7	512.1	514.0	514.4	516.4	519.2	517.2	517.9	517.2	520.9	
Maine	165.5	165.8	166.9	169.0	169.1	170.4	171.4	171.9	172.5	172.1	172.7	173.2	174.5	
Maryland	776.8	779.1	783.3	790.4	792.7	794.1	798.5	800.4	802.9	804.0	808.3	807.1	809.9	
Massachusetts	1,127.9	1,130.1	1,133.9	1,134.5	1,137.1	1,138.4	1,141.7	1,143.5	1,147.2	1,146.0	1,149.2	1,151.7	1,157.3	
Michigan	1,232.0	1,237.2	1,241.4	1,243.1	1,247.8	1,250.5	1,254.9	1,257.4	1,259.6	1,258.2	1,256.7	1,259.0	1,262.0	
Minnesota	723.7	726.7	729.5	729.9	731.4	731.7	732.9	735.0	736.3	736.3	733.5	735.2	740.7	
Mississippi	263.7	263.5	263.8	263.8	264.0	262.5	261.1	261.9	262.2	261.4	259.9	260.0	260.4	
Missouri	754.7	758.7	758.6	759.7	759.5	758.5	763.4	767.0	766.9	767.5	761.0	758.5	765.3	
Montana	106.1	106.8	106.7	107.6	108.1	108.3	108.2	108.5	108.6	109.2	109.4	109.7	110.5	
Nebraska	236.3	236.3	237.2	240.6	240.6	239.5	240.7	241.6	243.2	240.0	239.3	238.1	238.2	
Nevada	387.7	388.9	390.3	392.7	394.6	395.7	403.6	403.1	403.6	403.0	404.1	404.7	406.2	
New Hampshire	171.7	171.8	171.8	172.1	172.6	172.9	173.2	173.7	173.4	176.2	176.9	178.0	178.6	
New Jersey	1,213.3	1,218.3	1,220.2	1,227.6	1,231.2	1,233.2	1,234.7	1,238.1	1,242.3	1,236.7	1,244.4	1,249.9	1,255.3	
New Mexico	201.9	202.3	202.6	203.3	204.6	205.6	206.6	207.7	207.9	207.1	207.8	208.5	209.3	
New York	2,775.8	2,791.1	2,797.4	2,806.8	2,814.0	2,817.5	2,828.1	2,837.2	2,848.5	2,848.4	2,857.3	2,867.5	2,879.6	
North Carolina	919.1	926.1	931.5	939.9	938.6	944.6	946.9	951.1	956.7	960.9	960.5	959.2	964.5	
North Dakota	89.7	89.8	89.7	89.6	89.5	89.7	89.9	89.9	90.6	90.6	90.4	90.7	91.3	
Ohio	1,506.4	1,510.3	1,515.2	1,512.3	1,513.7	1,516.1	1,521.6	1,521.9	1,522.5	1,518.6	1,520.2	1,521.2	1,530.6	
Oklahoma	401.6	404.7	405.0	406.0	406.9	407.2	407.4	408.1	409.1	411.1	413.6	415.4	419.0	
Oregon	412.8	415.0	414.9	416.7	420.2	421.3	423.2	424.8	425.9	428.4	430.0	431.3	431.0	
Pennsylvania	1,765.4	1,773.3	1,777.2	1,782.3	1,784.4	1,784.5	1,784.4	1,785.2	1,789.9	1,787.2	1,788.4	1,785.3	1,792.4	
Rhode Island	157.1	157.5	156.7	157.7	157.7	158.3	158.4	158.0	157.9	156.2	158.1	158.0	159.1	
South Carolina	416.2	418.7	419.4	420.5	422.2	423.4	424.3	426.0	427.2	431.6	431.9	434.1	434.3	
South Dakota	94.2	94.4	94.2	94.4	94.5	94.3	95.8	95.6	95.9	94.9	95.9	96.7	97.2	
Tennessee	698.6	701.4	706.2	707.7	708.3	707.1	711.9	714.2	715.9	712.9	713.7	715.8	714.7	
Texas	2,488.6	2,500.4	2,510.1	2,523.9	2,532.8	2,540.6	2,549.7	2,559.7	2,569.3	2,577.0	2,583.3	2,592.9	2,606.0	
Utah	278.3	279.3	280.2	280.4	281.4	281.8	282.6	284.2	285.2	287.3	288.9	288.8	291.0	
Vermont	86.0	86.5	86.5	86.6	86.9	86.7	85.9	86.6	87.2	87.9	87.8	88.4	88.4	
Virginia	1,011.9	1,019.9	1,024.8	1,023.1	1,028.7	1,033.3	1,036.7	1,042.1	1,045.7	1,045.2	1,048.3	1,050.7	1,055.2	
Washington	703.0	707.2	708.5	711.3	714.7	715.3	718.2	720.7	723.2	721.1	725.4	727.5	729.5	
West Virginia	205.1	205.8	206.8	208.5	208.5	208.9	209.8	210.2	211.1	212.1	212.5	211.4	210.7	
Wisconsin	705.3	707.1	708.3	709.7	711.2	711.0	711.3	712.5	713.2	710.3	712.7	714.5	716.4	
Wyoming	50.7	50.6	50.3	50.5	50.5	50.4	50.7	51.0	51.2	51.6	51.5	51.7	52.3	

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

State	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	
Government														
Alabama	346.6	346.5	347.2	346.5	346.7	347.8	348.0	348.6	349.4	348.7	349.8	350.5	351.2	
Alaska	73.4	73.5	73.5	73.7	73.3	73.8	73.3	73.3	73.5	73.4	73.6	73.9	74.0	
Arizona	337.3	339.6	337.4	337.6	335.8	337.1	336.8	342.7	339.6	341.5	341.3	340.6	342.2	
Arkansas	184.5	185.0	185.5	186.7	186.3	186.1	187.0	187.9	186.2	186.2	186.2	186.1	186.3	
California	2,151.8	2,155.4	2,159.4	2,155.6	2,166.8	2,173.6	2,184.7	2,192.9	2,199.0	2,198.8	2,203.6	2,209.1	2,215.0	
Colorado	319.8	320.8	321.4	323.4	321.7	322.8	322.8	323.3	323.2	323.9	325.0	325.4	325.5	
Connecticut	226.2	226.4	226.8	227.8	228.4	230.5	229.1	228.6	229.7	229.6	229.2	230.2	230.2	
Delaware	53.9	54.2	54.0	54.4	54.1	54.0	54.0	54.1	54.4	54.9	54.7	55.1	55.2	
District of Columbia	227.2	227.0	226.3	220.8	228.2	225.7	225.7	225.9	225.0	225.9	225.7	225.4	225.1	
Florida	952.9	954.8	954.9	957.0	955.7	959.9	960.5	964.0	964.6	963.3	967.3	968.6	971.2	
Georgia	583.6	583.5	583.5	584.9	589.0	596.9	588.1	588.2	589.7	591.3	591.5	593.2	591.8	
Hawaii	111.5	111.2	111.2	111.7	112.6	117.8	112.6	112.1	111.9	110.8	111.0	111.1	111.4	
Idaho	102.2	102.2	102.8	102.5	102.8	103.5	103.6	103.6	104.3	103.5	104.7	104.8	104.6	
Illinois	809.7	811.3	814.0	822.4	824.2	822.3	816.6	816.5	812.8	813.7	808.2	809.9	809.2	
Indiana	398.3	399.1	398.9	387.4	398.2	405.8	403.0	403.8	406.0	402.1	407.6	408.5	407.1	
Iowa	235.1	235.3	234.9	235.9	235.0	237.5	236.9	236.3	238.2	237.9	237.3	236.8	237.0	
Kansas	239.5	241.3	241.3	240.4	242.3	240.8	243.8	244.4	242.4	242.5	242.0	242.5	245.9	
Kentucky	293.0	292.1	293.9	294.3	296.5	295.6	294.9	294.8	294.7	296.6	296.1	296.0	296.2	
Louisiana	366.7	367.1	366.5	367.0	366.5	368.4	368.3	368.0	368.1	367.0	366.8	366.2	366.2	
Maine	94.1	93.5	94.6	93.7	93.5	93.3	93.1	92.9	93.6	93.5	94.2	94.4	94.4	
Maryland	430.3	432.0	431.5	435.3	437.0	440.5	440.1	440.9	439.3	440.8	440.2	439.4	439.0	
Massachusetts	409.7	410.7	410.7	411.5	413.4	413.7	414.5	414.8	416.6	416.3	416.3	416.7	415.3	
Michigan	656.8	657.9	663.5	662.0	659.7	662.5	660.0	660.5	660.0	659.2	658.3	656.2	659.7	
Minnesota	381.8	382.2	382.4	377.0	379.0	381.1	382.4	382.9	384.8	384.6	385.2	386.9	386.2	
Mississippi	221.5	221.9	222.1	229.3	224.0	224.1	225.1	225.2	225.5	225.1	225.3	225.6	226.3	
Missouri	415.0	418.2	422.2	414.0	414.4	418.1	417.9	418.8	420.9	419.0	418.0	421.3	420.3	
Montana	78.2	78.3	78.2	79.3	78.9	79.2	79.3	79.5	79.4	79.4	78.4	79.5	79.2	
Nebraska	151.7	151.3	151.3	152.2	149.7	150.5	150.3	149.8	150.4	149.8	149.8	149.5	149.9	
Nevada	110.5	110.0	111.2	112.0	113.1	113.5	113.2	113.5	113.9	114.9	115.0	116.2	116.7	
New Hampshire	79.4	79.7	79.7	79.3	78.9	79.3	79.6	79.5	78.9	79.5	79.9	79.9	79.6	
New Jersey	571.1	570.6	568.6	568.0	568.0	572.4	570.3	569.9	570.8	570.3	569.2	569.5	570.0	
New Mexico	178.3	177.9	177.6	178.4	178.7	177.2	177.4	177.5	177.5	179.1	177.6	179.7	178.9	
New York	1,421.7	1,423.9	1,421.9	1,402.1	1,404.0	1,414.9	1,417.4	1,417.0	1,420.3	1,411.2	1,424.2	1,426.4	1,426.2	
North Carolina	588.4	587.2	581.9	600.5	620.2	601.8	601.5	600.7	601.2	597.5	597.1	597.4	597.3	
North Dakota	71.9	71.9	68.5	69.0	68.3	70.1	70.0	70.4	70.6	71.7	71.1	71.3	71.5	
Ohio	760.3	762.2	762.6	765.2	765.6	766.1	765.0	765.8	766.9	757.7	766.2	768.1	769.4	
Oklahoma	277.0	277.5	277.6	278.0	279.4	278.8	279.5	278.9	279.3	278.0	279.1	280.9	282.0	
Oregon	252.0	254.3	255.0	255.3	256.0	257.0	257.6	260.9	259.5	259.8	260.0	260.5	261.1	
Pennsylvania	701.8	704.0	690.4	694.9	695.7	706.4	701.9	704.3	707.0	709.8	707.6	706.1	705.9	
Rhode Island	62.4	62.8	62.9	63.7	63.1	63.9	63.5	63.6	63.7	63.9	63.1	63.5	63.7	
South Carolina	306.7	307.8	310.4	309.0	311.3	311.2	311.7	310.1	310.3	312.8	312.2	312.1	311.6	
South Dakota	70.6	70.6	70.9	71.5	71.1	71.4	71.3	71.2	71.0	71.1	71.5	71.1	70.8	
Tennessee	382.0	382.5	384.0	384.5	395.4	383.6	383.9	384.6	384.1	382.4	383.9	383.8	383.8	
Texas	1,500.0	1,502.7	1,503.2	1,506.5	1,510.9	1,519.0	1,525.8	1,529.9	1,529.9	1,531.6	1,534.7	1,538.2	1,539.7	
Utah	174.9	175.8	176.4	177.4	177.5	180.9	177.9	179.1	179.9	176.2	177.1	177.4	178.0	
Vermont	45.9	45.8	45.9	45.7	46.2	46.4	46.5	46.4	46.5	46.9	46.5	46.9	46.6	
Virginia	598.3	598.9	601.5	602.5	603.0	604.2	603.5	602.5	605.0	602.9	605.2	606.8	609.1	
Washington	464.1	463.9	465.8	469.0	469.5	465.2	466.0	466.2	468.8	470.9	469.6	471.4	472.6	
West Virginia	138.7	151.1	138.8	138.3	140.7	141.2	140.0	139.7	140.0	141.2	140.1	140.1	140.7	
Wisconsin	391.1	393.0	392.6	393.7	394.6	393.1	393.5	395.5	396.3	397.6	396.3	395.5	395.4	
Wyoming	58.4	58.5	57.9	59.4	58.7	58.4	58.6	58.3	58.2	58.0	58.1	58.1	58.4	

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

NOTE: All data have been adjusted to March 1998 benchmarks and incorporate updated seasonal adjustment factors.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

Industry	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
Total private	34.7	34.6	34.6	34.6	34.5	34.6	34.6	34.6	34.6	34.6	34.5	34.4	34.5
Goods-producing	41.1	41.1	41.2	41.1	40.9	41.1	41.0	41.1	41.1	41.0	40.8	40.8	41.0
Mining	44.3	43.7	44.3	43.7	43.3	43.7	43.3	43.3	42.9	43.0	42.9	43.7	43.8
Construction	38.9	38.8	39.2	39.2	38.6	39.2	39.1	39.4	39.5	39.2	38.5	38.6	38.9
Manufacturing	41.8	41.8	41.7	41.7	41.6	41.7	41.7	41.7	41.6	41.6	41.5	41.6	41.7
<i>Overtime hours</i>	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.6
Durable goods	42.4	42.3	42.3	42.3	42.2	42.3	42.3	42.2	42.2	42.2	42.0	42.1	42.2
<i>Overtime hours</i>	4.8	4.8	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.4	4.6
Lumber and wood products	41.1	41.1	41.2	41.2	40.7	41.1	41.2	41.5	41.7	41.1	41.2	41.2	41.2
Furniture and fixtures	40.8	40.9	40.7	40.6	40.2	40.5	40.3	40.2	40.4	40.3	40.3	40.4	40.3
Stone, clay, and glass products	43.6	43.4	43.6	43.6	43.4	43.6	43.6	43.8	43.8	43.4	42.9	43.1	43.4
Primary metal industries	44.3	44.4	44.0	44.1	43.9	43.7	43.8	43.7	43.7	43.8	43.9	44.1	44.2
Blast furnaces and basic steel products	45.3	45.0	44.4	44.4	44.2	43.7	43.7	43.3	43.8	43.8	43.9	44.7	44.8
Fabricated metal products	42.5	42.4	42.4	42.3	42.2	42.3	42.2	42.2	42.1	42.1	42.1	41.8	42.1
Industrial machinery and equipment	43.0	43.1	42.9	42.9	42.6	42.6	42.4	42.1	42.1	42.1	41.9	41.9	42.1
Electronic and other electrical equipment	41.4	41.4	41.4	41.5	41.4	41.5	41.4	41.1	41.2	41.2	41.0	41.0	41.6
Transportation equipment	43.3	42.9	43.0	43.0	43.8	43.9	44.1	44.1	43.5	44.0	43.7	44.0	43.5
Motor vehicles and equipment	43.3	42.7	42.5	43.0	44.3	44.1	44.6	44.9	44.3	45.0	44.7	45.1	44.3
Instruments and related products	41.4	41.4	41.4	41.3	41.1	41.2	41.1	41.1	41.2	41.3	41.2	41.8	41.7
Miscellaneous manufacturing	40.1	40.1	40.0	40.0	39.5	39.7	39.4	39.6	39.6	39.7	39.8	39.7	40.2
Nondurable goods	40.9	40.9	41.0	40.9	40.8	40.9	40.8	40.9	40.8	40.8	40.8	40.9	41.0
<i>Overtime hours</i>	4.4	4.3	4.4	4.3	4.3	4.3	4.3	4.3	4.4	4.3	4.4	4.2	4.5
Food and kindred products	41.7	41.7	41.8	41.7	41.7	41.6	41.7	42.0	41.8	41.7	41.7	41.9	41.9
Tobacco products	39.1	38.8	40.1	39.2	37.7	38.5	38.5	36.6	38.1	38.5	38.8	38.4	39.0
Textile mill products	41.2	41.2	41.0	41.0	40.4	41.1	40.8	40.8	40.6	40.4	41.0	41.0	40.7
Apparel and other textile products	37.4	37.3	37.4	37.4	37.2	37.3	37.3	37.3	37.0	37.5	37.4	37.5	37.9
Paper and allied products	43.5	43.5	43.6	43.3	43.6	43.5	43.5	43.4	43.5	43.5	43.7	43.6	43.6
Printing and publishing	38.4	38.3	38.4	38.5	38.2	38.2	38.1	38.1	38.2	38.1	37.9	38.1	38.2
Chemicals and allied products	43.1	43.2	43.1	43.2	43.2	43.2	42.9	42.7	42.9	42.8	42.8	43.0	43.1
Petroleum and coal products	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products	41.8	41.9	41.9	41.7	41.7	41.8	41.6	41.7	41.4	41.7	41.8	41.4	41.7
Leather and leather products	37.5	37.6	37.3	37.9	37.4	37.4	37.4	37.5	37.3	37.7	37.7	38.0	38.0
Service-producing	33.0	32.9	33.0	32.9	32.8	32.9	32.9	32.9	32.9	33.0	32.8	32.8	32.8
Transportation and public utilities	39.7	39.5	39.5	39.4	39.3	39.3	39.2	39.1	39.3	39.2	39.1	39.1	38.9
Wholesale trade	38.4	38.3	38.4	38.4	38.3	38.3	38.4	38.4	38.4	38.5	38.4	38.4	38.3
Retail trade	29.1	29.0	29.1	29.0	29.0	29.1	29.0	29.0	29.0	29.2	29.0	29.0	29.1
Finance, insurance, and real estate	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Services	32.7	32.6	32.7	32.7	32.5	32.7	32.7	32.7	32.7	32.7	32.6	32.5	32.6

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

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

components, cannot be separated with sufficient precision.

P = preliminary.

NOTE: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**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	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
Total private	145.0	144.8	145.2	145.5	145.1	146.0	146.1	146.6	146.8	147.3	146.8	147.0	147.3
Goods-producing	115.8	115.5	114.8	115.4	114.7	115.2	115.0	115.5	115.2	115.0	114.2	114.2	114.3
Mining	57.2	56.2	56.5	55.3	54.6	54.6	53.7	53.4	51.8	51.0	50.5	50.4	49.6
Construction	162.3	162.7	165.1	165.4	162.7	166.4	167.5	171.3	171.9	171.9	169.1	169.2	170.0
Manufacturing	109.6	109.2	107.8	108.5	108.3	108.1	107.7	107.5	107.1	106.8	106.5	106.5	106.5
Durable goods	113.7	113.3	110.9	112.6	112.4	112.3	111.8	111.5	111.0	110.8	110.4	110.4	110.4
Lumber and wood products	144.7	144.7	145.5	145.5	144.0	145.6	146.6	148.1	149.5	147.6	147.9	147.5	147.3
Furniture and fixtures	135.6	135.6	135.3	135.3	134.0	134.6	134.3	134.6	135.3	134.9	135.2	135.6	135.6
Stone, clay, and glass products	115.2	114.9	115.7	116.0	115.7	116.5	116.8	118.1	117.8	117.0	115.4	116.2	117.0
Primary metal industries	94.2	94.4	91.7	93.3	92.7	91.4	90.8	90.4	89.9	90.0	90.0	90.1	90.0
Blast furnaces and basic steel products	73.6	72.7	71.7	71.3	70.6	69.0	68.3	68.0	68.0	68.0	68.2	69.0	69.2
Fabricated metal products	120.0	119.1	118.4	118.6	118.4	118.4	117.9	117.7	117.7	117.2	117.0	116.1	117.0
Industrial machinery and equipment	110.9	111.3	110.1	110.0	109.1	108.6	107.6	106.3	105.4	105.2	104.4	104.1	104.1
Electronic and other electrical equipment	110.7	110.3	109.4	109.1	108.6	108.1	106.9	105.9	105.9	105.2	105.1	105.3	106.4
Transportation equipment	127.7	125.7	114.5	125.1	127.2	127.8	127.6	127.3	125.1	125.9	125.3	125.3	123.7
Motor vehicles and equipment	161.8	158.1	132.9	157.3	162.3	161.8	163.0	163.6	161.0	162.7	162.7	164.6	162.5
Instruments and related products	77.0	76.8	76.6	76.3	75.7	75.7	75.2	75.0	75.0	75.2	74.7	76.1	75.4
Miscellaneous manufacturing	104.2	103.8	103.5	103.2	101.5	100.5	99.8	100.3	99.5	99.8	100.0	100.5	101.4
Nondurable goods	103.9	103.7	103.4	102.8	102.7	102.4	102.0	102.1	101.8	101.5	101.2	101.2	101.1
Food and kindred products	117.9	117.8	117.9	116.5	117.7	117.4	118.1	119.3	119.3	118.8	118.8	118.8	118.8
Tobacco products	62.0	59.6	61.6	60.2	57.9	59.1	59.1	56.2	58.5	57.2	55.7	55.2	54.1
Textile mill products	87.8	87.3	86.0	85.7	84.3	85.2	83.9	83.4	83.1	82.0	81.1	81.8	80.7
Apparel and other textile products	68.3	67.7	67.4	66.5	65.8	64.7	63.6	63.4	62.3	62.1	61.5	61.5	61.4
Paper and allied products	109.6	109.2	109.0	108.1	108.6	108.0	107.5	107.1	107.1	106.7	107.0	106.7	106.3
Printing and publishing	125.6	125.2	125.4	125.4	124.5	124.3	123.5	123.0	123.4	122.8	121.9	121.9	121.9
Chemicals and allied products	103.6	103.8	103.4	103.4	103.4	103.3	102.5	102.2	102.4	102.0	101.8	102.4	102.5
Petroleum and coal products	76.1	76.6	77.7	76.6	76.3	76.3	77.3	79.4	76.2	77.4	76.4	74.9	74.2
Rubber and misc. plastics products	148.2	148.6	147.6	147.7	147.9	148.1	147.5	148.1	147.8	148.5	148.8	147.8	149.2
Leather and leather products	36.9	36.4	35.5	35.5	34.5	34.5	33.9	33.4	32.7	33.0	32.4	32.7	32.1
Service-producing	158.1	157.9	158.9	159.0	158.8	159.8	160.1	160.5	161.0	161.8	161.5	161.7	162.1
Transportation and public utilities	132.2	131.7	132.3	132.6	132.5	132.9	132.9	133.0	134.1	134.1	133.8	134.0	133.5
Wholesale trade	128.5	128.4	129.0	129.2	129.3	129.3	130.0	130.2	130.6	131.3	131.3	131.5	130.9
Retail trade	140.1	139.6	140.5	140.1	140.2	140.8	140.6	140.9	141.3	142.9	141.9	142.7	143.2
Finance, insurance, and real estate	135.8	136.0	136.9	137.2	137.5	138.1	138.6	138.9	139.1	139.6	139.3	139.2	139.0
Services	193.7	193.7	195.0	195.4	194.7	196.6	197.2	197.8	198.3	198.9	198.8	198.9	199.8

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: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**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		
	March 1999 ^r	April 1999 ^r	May 1999 ^p	May 1998 to May 1999 ^p	March 1999 to April 1999 ^r	April 1999 To May 1999 ^p
Total	233,907	234,900	234,441	1.7	0.4	-0.2
Private sector	195,824	196,544	196,670	1.7	.4	.1
Mining	1,225	1,221	1,216	-11.7	-4	-3
Construction	12,476	12,597	12,614	5.1	1.0	.1
Manufacturing	40,028	40,016	39,989	-2.4	.0	-.1
Durable goods	24,083	24,066	24,054	-2.6	-.1	-.1
Nondurable goods	15,945	15,949	15,935	-2.1	.0	-.1
Transportation and public utilities	13,724	13,742	13,729	.8	.1	-.1
Wholesale trade	13,872	13,908	13,866	1.9	.3	-.3
Retail trade	34,097	34,289	34,433	2.3	.6	.4
Finance, insurance, and real estate	14,299	14,299	14,292	2.4	.0	-.1
Services	66,102	66,473	66,532	3.6	.6	.1
Government	38,083	38,356	37,771	1.5	.7	-1.5

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

^p = preliminary.

^r = revised.

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

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

SOURCE: Office of Productivity and Technology (202—606-5606). Historical data for this series also are available on the Internet at the following address:

<ftp://ftp.bls.gov/pub/special.requests/opt/tableb10.txt>

**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	1998								1999				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	May ^P
Average hourly earnings													
Total private (in current dollars)	\$12.73	\$12.76	\$12.80	\$12.85	\$12.88	\$12.91	\$12.94	\$12.98	\$13.04	\$13.06	\$13.11	\$13.14	\$13.19
Goods-producing	14.29	14.31	14.33	14.39	14.41	14.44	14.47	14.51	14.53	14.56	14.61	14.67	14.75
Mining	16.72	16.71	16.87	17.00	17.06	17.15	17.27	17.18	17.07	16.97	17.00	16.88	16.90
Construction	16.50	16.54	16.63	16.67	16.60	16.72	16.76	16.80	16.80	16.83	16.92	16.97	17.10
Manufacturing	13.48	13.48	13.46	13.53	13.58	13.57	13.58	13.60	13.64	13.67	13.71	13.79	13.84
Excluding overtime ²	12.77	12.77	12.75	12.82	12.86	12.87	12.88	12.90	12.93	12.97	13.00	13.09	13.13
Service-producing	12.22	12.26	12.30	12.35	12.38	12.41	12.45	12.49	12.56	12.58	12.63	12.65	12.70
Transportation and public utilities	15.27	15.27	15.31	15.33	15.37	15.38	15.41	15.47	15.49	15.51	15.53	15.60	15.68
Wholesale trade	14.02	14.05	14.09	14.17	14.18	14.23	14.27	14.30	14.36	14.36	14.42	14.44	14.48
Retail trade	8.70	8.71	8.76	8.80	8.84	8.83	8.85	8.89	8.93	8.95	8.98	9.03	9.05
Finance, insurance, and real estate	14.00	14.05	14.08	14.14	14.16	14.23	14.32	14.40	14.46	14.49	14.51	14.58	14.64
Services	12.79	12.85	12.89	12.94	12.98	13.02	13.05	13.08	13.17	13.22	13.27	13.28	13.33
Total private (in constant (1982) dollars) ³	7.74	7.75	7.76	7.78	7.80	7.80	7.80	7.81	7.83	7.84	7.86	7.83	(4)
Goods-producing	8.69	8.69	8.69	8.72	8.72	8.73	8.73	8.74	8.73	8.74	8.76	8.74	(4)
Service-producing	7.43	7.45	7.46	7.48	7.49	7.50	7.51	7.52	7.54	7.56	7.58	7.53	(4)
Average weekly earnings													
Total private (in current dollars)	441.73	441.50	442.88	444.61	444.36	446.69	447.72	449.11	451.18	451.88	452.30	452.02	455.06
Goods-producing	587.32	588.14	590.40	591.43	589.37	593.48	593.27	596.36	597.18	596.96	596.09	598.54	604.75
Mining	740.70	730.23	747.34	742.90	738.70	749.46	747.79	743.89	732.30	729.71	729.30	737.66	740.22
Construction	641.85	641.75	651.90	653.46	640.76	655.42	655.32	661.92	663.60	659.74	651.42	655.04	665.19
Manufacturing	563.46	563.46	561.28	564.20	564.93	565.87	566.29	567.12	567.42	568.67	568.97	573.66	577.13
Service-producing	403.26	403.35	405.90	406.32	406.06	408.29	409.61	410.92	413.22	415.14	414.26	414.92	416.56
Transportation and public utilities	606.22	603.17	604.75	604.00	604.04	604.43	604.07	604.88	608.76	607.99	607.22	609.96	609.95
Wholesale trade	538.37	538.12	541.06	544.13	543.09	545.01	547.97	549.12	551.42	552.86	553.73	554.50	554.58
Retail trade	253.17	252.59	254.92	255.20	256.36	256.95	256.65	257.81	258.97	261.34	260.42	261.87	263.36
Finance, insurance, and real estate	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Services	418.23	418.91	421.50	423.14	421.85	425.75	426.74	427.72	430.66	432.29	432.60	431.60	434.56
Total private (in constant (1982) dollars) ³	268.53	268.23	268.57	269.30	268.98	269.90	270.04	270.39	270.98	271.40	271.33	269.22	(4)
Goods-producing	357.03	357.31	358.04	358.23	356.76	358.60	357.82	359.04	358.67	358.53	357.58	356.49	(4)
Service-producing	245.14	245.05	246.15	246.11	245.80	246.70	247.05	247.39	248.18	249.33	248.51	247.12	(4)

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

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

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

⁴ Not available.

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

^P = preliminary.

NOTE: Data have been revised to reflect March 1998 benchmarks and recomputed seasonal adjustment factors. See the article in this issue for additional information.

**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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Total		125,826	125,082	126,867	128,011	128,852	-	-	-	-	-
Total private		106,007	104,992	106,385	107,543	108,350	86,762	85,862	86,892	87,902	88,641
Mining		590	593	540	533	532	448	450	404	399	397
Metal mining	10	50.4	50.0	49.1	48.6	48.8	38.3	38.1	37.2	36.8	-
Iron ores	101	8.4	8.4	8.1	8.2	-	6.9	6.9	6.7	6.8	-
Copper ores	102	15.1	15.2	14.3	14.2	-	11.3	11.4	10.7	10.6	-
Coal mining	12	91.6	92.8	87.1	85.8	85.2	75.1	75.8	72.0	71.1	-
Bituminous coal and lignite mining	122	85.6	87.0	81.1	79.8	-	70.0	70.9	66.8	65.8	-
Oil and gas extraction	13	339.2	341.2	300.2	289.6	286.8	252.0	252.7	217.3	208.4	-
Crude petroleum and natural gas	131	138.4	139.0	128.6	126.9	-	81.8	81.0	75.1	74.8	-
Oil and gas field services	138	196.1	197.4	167.2	158.8	-	166.1	167.6	138.0	130.2	-
Nonmetallic minerals, except fuels	14	108.8	108.5	103.4	108.5	111.0	82.6	82.9	77.3	82.2	-
Crushed and broken stone	142	42.2	41.8	40.6	42.7	-	32.8	32.8	31.4	33.5	-
Sand and gravel	144	36.0	35.7	33.6	35.9	-	-	-	-	-	-
Chemical and fertilizer minerals	147	11.7	11.9	11.4	11.4	-	-	-	-	-	-
Construction		5,985	5,778	5,806	6,102	6,302	4,641	4,461	4,417	4,696	4,885
General building contractors	15	1,372.3	1,323.0	1,358.1	1,390.7	1,423.0	962.6	922.4	933.9	961.3	-
Residential building construction	152	699.6	675.4	700.5	721.2	-	473.1	454.8	465.5	482.6	-
Operative builders	153	27.1	26.6	27.3	27.9	-	10.7	10.6	10.8	11.1	-
Nonresidential building construction	154	645.6	621.0	630.3	641.6	-	478.7	457.0	457.6	467.6	-
Heavy construction, except building	16	838.3	805.8	761.6	845.8	890.7	702.5	672.3	623.0	703.9	-
Highway and street construction	161	253.2	236.9	202.8	254.6	-	206.6	191.2	156.0	206.2	-
Heavy construction, except highway	162	585.2	568.9	558.8	591.2	-	495.9	481.1	467.0	497.7	-
Special trade contractors	17	3,774.1	3,649.2	3,686.2	3,865.8	3,988.1	2,975.9	2,866.7	2,859.8	3,030.5	-
Plumbing, heating, and air conditioning	171	827.4	801.9	832.4	845.3	-	610.4	588.7	610.0	620.3	-
Painting and paper hanging	172	203.7	195.1	185.5	202.6	-	168.7	161.0	149.7	167.8	-
Electrical work	173	726.8	699.2	737.6	741.9	-	576.1	551.3	577.6	580.8	-
Masonry, stonework, and plastering	174	498.5	481.5	504.4	525.4	-	431.1	414.9	435.0	455.4	-
Carpentry and floor work	175	273.7	259.9	277.2	283.6	-	208.0	196.1	207.4	212.4	-
Roofing, siding, and sheet metal work	176	249.9	241.5	229.1	252.1	-	197.8	190.2	174.9	196.8	-
Manufacturing		18,772	18,808	18,427	18,410	18,407	12,930	12,982	12,666	12,646	12,648
Durable goods		11,170	11,226	10,991	10,984	10,978	7,643	7,707	7,522	7,517	7,516
Lumber and wood products	24	813.0	800.5	813.4	814.5	821.0	668.1	657.1	666.3	668.0	674.2
Logging	241	79.4	73.7	73.3	70.9	-	62.5	57.2	57.4	55.6	-
Sawmills and planing mills	242	183.3	183.9	180.0	180.7	-	159.8	160.4	156.8	157.5	-
Sawmills and planing mills, general	2421	143.5	144.6	139.3	140.3	-	124.6	125.6	120.9	121.8	-
Hardwood dimension and flooring mills	2426	37.3	37.0	37.7	37.4	-	33.1	32.8	33.5	33.3	-
Millwork, plywood, and structural members	243	307.5	301.0	316.3	319.2	-	247.0	241.4	253.0	255.9	-
Millwork	2431	123.0	120.4	125.6	127.0	-	95.4	93.2	97.2	98.6	-
Wood kitchen cabinets	2434	87.0	84.7	91.2	91.7	-	70.5	68.5	73.8	74.4	-
Hardwood veneer and plywood	2435	28.2	28.1	28.7	28.8	-	24.0	24.0	24.5	24.5	-
Softwood veneer and plywood	2436	27.6	27.6	27.7	27.7	-	25.1	24.9	24.7	24.6	-
Wood containers	244	55.2	56.1	55.5	55.0	-	47.2	48.0	47.7	47.3	-
Wood buildings and mobile homes	245	99.1	97.6	100.2	100.4	-	79.3	78.2	79.3	79.8	-
Mobile homes	2451	75.8	74.4	77.2	76.7	-	63.5	62.5	64.4	64.4	-
Miscellaneous wood products	249	88.5	88.2	88.1	88.3	-	72.2	71.9	72.1	71.9	-
Furniture and fixtures	25	530.4	530.1	535.9	536.7	537.1	422.5	423.4	428.3	428.5	429.3
Household furniture	251	282.6	285.3	285.2	285.8	-	239.4	241.9	242.9	243.2	-
Wood household furniture	2511	128.7	129.0	130.0	129.5	-	111.5	111.9	113.2	112.7	-
Upholstered household furniture	2512	88.9	89.2	89.7	91.0	-	75.5	75.6	76.6	77.6	-
Metal household furniture	2514	18.8	20.9	19.0	19.1	-	15.7	17.7	16.0	16.1	-
Mattresses and bedsprings	2515	34.4	34.4	34.7	34.5	-	26.7	26.8	27.1	26.8	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Furniture and fixtures—Continued											
Office furniture	252	69.4	68.7	68.5	67.8	-	51.1	50.9	49.4	49.0	-
Public building and related furniture	253	45.9	45.6	47.6	48.1	-	35.8	35.7	37.3	37.5	-
Partitions and fixtures	254	92.6	91.2	93.8	93.7	-	69.4	68.5	70.8	70.7	-
Miscellaneous furniture and fixtures	259	39.8	39.3	40.8	41.3	-	26.9	26.4	27.9	28.1	-
Stone, clay, and glass products	32	563.2	559.5	556.4	568.8	574.4	439.8	436.8	434.1	444.5	450.0
Flat glass	321	16.7	16.6	16.6	16.7	-	13.3	13.3	13.3	13.4	-
Glass and glassware, pressed or blown	322	71.3	71.4	69.5	69.2	-	58.8	58.9	57.2	56.8	-
Glass containers	3221	25.4	25.2	24.6	23.9	-	22.5	22.5	21.5	20.7	-
Pressed and blown glass, nec	3229	45.9	46.2	44.9	45.3	-	36.3	36.4	35.7	36.1	-
Products of purchased glass	323	63.1	62.6	62.6	62.6	-	48.8	48.6	48.1	47.8	-
Cement, hydraulic	324	17.4	17.1	17.2	17.3	-	13.1	13.0	12.8	12.8	-
Structural clay products	325	33.4	33.6	33.2	33.3	-	25.8	26.1	25.7	25.8	-
Pottery and related products	326	38.4	38.8	38.1	37.7	-	30.2	30.6	30.0	29.4	-
Concrete, gypsum, and plaster products	327	229.0	226.1	225.1	237.4	-	177.1	174.2	173.8	185.2	-
Concrete block and brick	3271	19.0	18.8	18.9	19.9	-	12.1	11.8	12.3	13.0	-
Concrete products, nec	3272	76.6	75.5	80.1	81.8	-	59.0	57.8	61.9	63.6	-
Ready-mixed concrete	3273	115.4	114.0	108.2	117.6	-	91.8	90.6	85.2	94.3	-
Misc. nonmetallic mineral products	329	78.5	78.1	78.2	78.5	-	60.9	60.4	60.9	61.0	-
Abrasive products	3291	19.5	19.6	18.7	19.0	-	15.5	15.6	14.8	15.0	-
Asbestos products	3292	2.4	2.4	2.3	2.3	-	2.0	2.0	1.9	1.9	-
Mineral wool	3296	24.4	24.0	24.6	24.7	-	-	-	-	-	-
Primary metal industries	33	711.6	716.9	693.1	690.9	688.5	557.4	563.4	541.1	538.8	536.3
Blast furnaces and basic steel products	331	231.5	232.7	222.7	221.8	221.6	179.1	180.4	172.6	171.8	172.0
Blast furnaces and steel mills	3312	159.8	160.8	154.0	153.5	-	124.7	125.6	120.4	119.9	-
Steel pipe and tubes	3317	28.3	28.2	27.7	27.8	-	21.4	21.3	21.1	21.2	-
Iron and steel foundries	332	131.0	133.0	127.8	127.1	-	107.2	109.2	104.6	104.2	-
Gray and ductile iron foundries	3321	79.0	80.4	77.3	77.0	-	65.3	66.4	64.0	63.8	-
Malleable iron foundries	3322	4.6	4.8	4.7	4.7	-	3.5	3.7	3.6	3.6	-
Steel foundries, nec	3325	28.9	29.0	28.7	28.7	-	23.7	23.9	23.5	23.7	-
Primary nonferrous metals	333	39.0	39.4	37.5	37.5	-	30.3	30.8	28.9	28.9	-
Primary aluminum	3334	22.3	22.4	21.6	21.5	-	18.2	18.3	17.6	17.5	-
Nonferrous rolling and drawing	335	170.3	170.5	167.5	166.9	-	130.5	131.2	126.5	125.8	-
Copper rolling and drawing	3351	22.9	23.0	22.0	21.7	-	18.5	18.6	17.8	17.6	-
Aluminum sheet, plate, and foil	3353	20.9	21.1	19.9	19.7	-	15.5	15.7	14.7	14.5	-
Nonferrous wire drawing and insulating	3357	73.0	73.4	72.4	72.2	-	55.0	55.9	54.2	53.8	-
Nonferrous foundries (castings)	336	92.5	93.7	91.0	91.0	-	75.0	76.0	74.1	73.8	-
Aluminum foundries	3365	26.2	26.4	26.0	26.1	-	21.5	21.6	21.3	21.4	-
Fabricated metal products	34	1,500.8	1,506.4	1,488.5	1,487.0	1,488.0	1,131.4	1,138.1	1,119.6	1,117.3	1,118.5
Metal cans and shipping containers	341	36.6	36.6	35.5	35.7	-	31.0	31.1	30.2	30.4	-
Metal cans	3411	29.5	29.4	28.6	28.7	-	25.5	25.5	24.8	24.9	-
Cutlery, handtools, and hardware	342	126.2	126.8	125.2	125.1	-	97.2	98.1	96.6	96.5	-
Hand and edge tools, and blades and handsaws ...	3423,5	43.6	44.0	42.6	42.7	-	33.7	34.1	33.2	33.2	-
Hardware, nec	3429	69.7	70.0	69.8	69.7	-	53.7	54.2	53.8	53.7	-
Plumbing and heating, except electric	343	57.5	56.8	57.6	57.9	-	40.7	40.0	41.0	41.2	-
Plumbing fixture fittings and trim	3432	23.7	23.7	24.2	24.1	-	17.2	17.2	17.6	17.5	-
Heating equipment, except electric	3433	19.5	18.9	18.8	19.1	-	12.7	12.1	12.4	12.7	-
Fabricated structural metal products	344	463.7	460.2	462.6	464.0	-	339.3	336.3	337.3	337.3	-
Fabricated structural metal	3441	81.6	80.6	82.8	83.1	-	59.7	58.6	60.2	60.1	-
Metal doors, sash, and trim	3442	78.8	77.0	80.0	80.9	-	57.9	56.5	58.9	59.5	-
Fabricated plate work (boiler shops)	3443	103.7	105.1	100.9	99.9	-	74.8	76.0	72.3	71.4	-
Sheet metal work	3444	123.4	122.3	122.3	122.9	-	94.8	93.8	93.6	93.9	-
Architectural metal work	3446	31.8	31.1	32.8	33.0	-	23.3	22.7	24.1	24.0	-
Screw machine products, bolts, etc	345	106.5	107.6	105.1	104.5	-	83.5	84.5	82.2	81.8	-
Screw machine products	3451	54.8	55.6	54.0	53.6	-	44.7	45.2	43.8	43.5	-
Bolts, nuts, rivets, and washers	3452	51.7	52.0	51.1	50.9	-	38.8	39.3	38.4	38.3	-
Metal forgings and stampings	346	257.2	260.0	259.0	257.7	-	202.7	205.8	203.3	202.5	-
Iron and steel forgings	3462	32.9	33.1	32.0	31.7	-	25.1	25.3	24.0	23.7	-
Automotive stampings	3465	114.1	117.0	116.4	115.7	-	92.9	95.8	94.9	94.4	-
Metal stampings, nec	3469	96.5	96.0	96.7	96.5	-	74.2	74.1	73.7	73.8	-

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Fabricated metal products—Continued											
Metal services, nec	347	144.0	146.6	142.2	141.6	—	116.2	118.8	114.3	113.3	—
Plating and polishing	3471	87.7	89.0	86.6	86.1	—	71.7	72.8	70.5	69.8	—
Metal coating and allied services	3479	56.2	57.6	55.6	55.5	—	44.6	46.0	43.8	43.5	—
Ordnance and accessories, nec	348	41.2	41.9	39.3	39.5	—	24.1	24.2	23.4	23.7	—
Ammunition, except for small arms, nec	3483	19.8	20.1	18.4	18.5	—	9.1	9.2	8.7	8.9	—
Miscellaneous fabricated metal products	349	267.9	269.9	262.0	261.0	—	196.6	199.3	191.3	190.6	—
Valves and pipe fittings, nec	3494	25.0	25.6	24.4	24.2	—	18.2	18.8	18.0	17.8	—
Misc. fabricated wire products	3496	57.3	57.0	57.7	57.2	—	43.1	43.1	43.5	43.2	—
Industrial machinery and equipment	35	2,202.7	2,220.2	2,144.1	2,136.6	2,129.4	1,390.8	1,405.3	1,359.4	1,353.1	1,346.4
Engines and turbines	351	83.5	84.1	83.3	83.5	—	53.2	53.0	54.8	55.3	—
Turbines and turbine generator sets	3511	24.4	25.0	24.6	24.2	—	13.7	14.1	13.4	13.2	—
Internal combustion engines, nec	3519	59.1	59.1	58.7	59.3	—	39.5	38.9	41.4	42.1	—
Farm and garden machinery	352	104.3	109.1	101.1	99.4	—	75.1	79.5	72.6	71.1	—
Farm machinery and equipment	3523	78.2	80.6	72.5	71.1	—	56.0	58.3	51.0	49.9	—
Construction and related machinery	353	253.4	254.6	245.3	243.6	—	164.8	166.3	155.6	155.1	—
Construction machinery	3531	92.4	93.0	91.3	91.4	—	63.1	64.0	61.9	62.5	—
Mining machinery	3532	17.0	17.1	16.3	16.2	—	10.0	10.1	9.4	9.2	—
Oil and gas field machinery	3533	50.4	51.4	42.7	41.4	—	33.7	34.8	26.0	25.0	—
Conveyors and conveying equipment	3535	41.1	40.9	41.3	41.0	—	22.3	21.9	21.7	21.7	—
Industrial trucks and tractors	3537	33.8	33.5	34.5	34.4	—	23.5	23.4	23.9	23.9	—
Metalworking machinery	354	352.4	354.9	343.2	341.0	—	251.7	254.3	245.0	242.7	—
Machine tools, metal cutting types	3541	43.4	43.7	41.8	41.4	—	27.4	27.6	25.8	25.4	—
Machine tools, metal forming types	3542	17.5	17.6	16.8	16.8	—	11.0	11.0	10.4	10.3	—
Special dies, tools, jigs, and fixtures	3544	168.3	169.5	165.5	164.7	—	128.5	130.1	126.3	125.5	—
Machine tool accessories	3545	55.4	55.9	53.8	53.1	—	39.6	39.9	38.5	37.9	—
Power driven handtools	3546	21.0	21.2	20.4	20.3	—	14.9	15.0	14.9	14.9	—
Special industry machinery	355	179.1	182.2	170.9	169.9	—	97.3	98.6	93.6	92.7	—
Textile machinery	3552	14.3	14.4	13.8	13.7	—	9.2	9.4	8.8	8.6	—
Printing trades machinery	3555	22.1	22.3	20.8	20.8	—	12.4	12.6	11.9	11.9	—
Food products machinery	3556	25.0	25.1	24.7	24.6	—	14.9	14.9	14.7	14.8	—
General industrial machinery	356	269.1	269.8	263.5	262.0	—	171.5	172.8	167.9	166.2	—
Pumps and pumping equipment	3561	31.6	31.8	30.9	30.9	—	18.4	18.6	17.7	17.6	—
Ball and roller bearings	3562	41.4	41.5	40.4	39.9	—	32.0	32.1	31.0	30.5	—
Air and gas compressors	3563	26.3	26.4	27.1	27.2	—	14.9	15.3	15.1	15.1	—
Blowers and fans	3564	36.6	36.3	36.5	36.3	—	25.2	24.8	25.4	25.4	—
Speed changers, drives, and gears	3566	18.1	18.2	17.3	17.1	—	13.1	13.1	12.7	12.6	—
Power transmission equipment, nec	3568	22.3	22.4	22.0	21.7	—	15.6	15.8	15.4	15.0	—
Computer and office equipment	357	379.1	380.6	359.1	359.3	357.5	146.0	146.2	144.3	143.5	—
Electronic computers	3571	199.9	200.7	182.1	182.0	—	72.2	71.2	70.7	71.1	—
Computer terminals, calculators, and office machines, nec	3575,8,9	60.7	60.1	60.4	61.3	—	23.5	23.6	23.1	23.2	—
Refrigeration and service machinery	358	200.0	201.6	202.0	203.2	—	143.8	145.6	144.4	145.9	—
Refrigeration and heating equipment	3585	137.6	139.4	141.0	142.2	—	104.5	106.6	106.5	107.9	—
Misc. industrial and commercial machinery	359	381.9	383.3	375.7	374.7	—	287.4	289.0	281.2	280.6	—
Carburetors, pistons, rings, valves	3592	23.8	23.6	24.0	24.1	—	19.1	19.1	19.3	19.4	—
Scales, balances, and industrial machinery, nec	3596,9	310.1	311.8	304.7	303.9	—	238.1	239.7	232.5	231.9	—
Electronic and other electrical equipment	36	1,703.9	1,718.8	1,658.4	1,655.1	1,651.6	1,068.2	1,080.3	1,036.5	1,035.1	1,031.2
Electric distribution equipment	361	82.2	82.0	82.1	82.1	—	55.2	55.3	55.9	56.2	—
Transformers, except electronic	3612	38.0	37.9	37.5	37.5	—	25.6	25.7	25.7	25.9	—
Switchgear and switchboard apparatus	3613	44.2	44.1	44.6	44.6	—	29.7	29.6	30.2	30.3	—
Electrical industrial apparatus	362	153.2	154.5	148.3	148.5	—	106.1	107.7	102.2	102.8	—
Motors and generators	3621	75.4	76.3	73.1	72.9	—	58.2	59.3	56.3	56.3	—
Relays and industrial controls	3625	57.8	58.2	55.9	55.8	—	33.5	33.9	32.3	32.3	—
Household appliances	363	116.7	117.3	117.0	117.8	—	92.8	92.9	95.4	96.6	—
Household refrigerators and freezers	3632	26.7	27.5	26.6	28.1	—	21.3	21.8	22.0	23.6	—
Household laundry equipment	3633	16.1	16.2	17.3	17.5	—	13.1	12.8	15.0	15.3	—
Electric housewares and fans	3634	25.0	24.9	22.1	21.3	—	18.6	18.6	16.7	15.9	—

See footnotes at end of table.

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Electronic and other electrical equipment—Continued											
Electric lighting and wiring equipment	364	182.8	183.5	177.8	177.7	—	130.5	130.3	127.8	126.8	—
Electric lamps	3641	20.2	21.0	19.3	19.3	—	15.8	16.1	15.6	15.4	—
Current-carrying wiring devices	3643	62.8	63.3	59.9	59.5	—	41.3	41.6	40.0	39.8	—
Noncurrent-carrying wiring devices	3644	19.3	19.1	19.8	20.0	—	14.4	14.2	14.8	15.0	—
Residential lighting fixtures	3645	21.5	21.3	21.0	20.8	—	16.2	15.8	15.7	15.1	—
Household audio and video equipment	365	81.5	80.8	80.1	81.1	—	52.1	51.6	51.7	52.1	—
Household audio and video equipment	3651	55.0	54.6	53.7	53.7	—	32.1	31.8	31.7	31.6	—
Communications equipment	366	281.6	284.3	273.4	272.3	—	130.2	131.6	123.4	122.1	—
Telephone and telegraph apparatus	3661	125.9	126.1	121.1	120.3	—	58.2	59.0	54.4	53.9	—
Electronic components and accessories	367	660.0	669.9	636.9	633.6	633.8	396.9	406.1	378.6	377.4	—
Electron tubes	3671	20.4	20.7	19.8	19.8	—	14.8	15.2	14.6	14.6	—
Semiconductors and related devices	3674	284.0	288.8	266.9	265.5	—	127.6	131.5	115.0	114.9	—
Electronic components, nec	3679	147.7	149.6	143.8	143.2	—	101.3	102.9	97.1	96.6	—
Misc. electrical equipment and supplies	369	146.0	146.5	142.8	142.0	—	104.4	104.8	101.5	101.1	—
Storage batteries	3691	25.9	25.9	25.8	26.1	—	20.1	20.0	20.1	20.3	—
Engine electrical equipment	3694	64.3	64.5	62.9	62.5	—	49.3	49.3	48.1	48.0	—
Transportation equipment	37	1,884.0	1,902.3	1,874.4	1,864.4	1,860.0	1,258.2	1,288.7	1,244.2	1,236.1	1,238.0
Motor vehicles and equipment	371	989.8	1,006.5	994.1	997.5	999.9	760.3	786.3	758.9	761.4	768.2
Motor vehicles and car bodies	3711	341.8	349.8	340.7	341.5	—	248.4	261.4	242.3	242.9	—
Truck and bus bodies	3713	42.5	42.7	44.5	44.7	—	33.6	34.0	35.5	35.8	—
Motor vehicle parts and accessories	3714	546.8	555.2	547.5	549.4	—	430.4	442.8	431.4	432.7	—
Truck trailers	3715	38.9	38.9	40.2	40.5	—	31.4	31.5	31.8	31.9	—
Aircraft and parts	372	523.7	524.7	509.7	501.7	495.8	264.9	268.2	252.8	248.8	—
Aircraft	3721	269.8	270.2	257.6	254.0	—	114.1	114.6	108.0	106.1	—
Aircraft engines and engine parts	3724	103.4	103.4	103.4	101.3	—	54.1	56.6	50.6	50.3	—
Aircraft parts and equipment, nec	3728	150.5	151.1	148.7	146.4	—	96.6	97.0	94.2	92.4	—
Ship and boat building and repairing	373	165.9	165.4	168.3	162.1	—	125.8	125.6	126.2	119.2	—
Ship building and repairing	3731	105.7	105.3	105.2	98.4	—	75.8	75.3	73.5	66.3	—
Boat building and repairing	3732	60.2	60.1	63.1	63.7	—	50.0	50.3	52.7	52.9	—
Railroad equipment	374	36.9	36.6	36.9	36.5	—	27.5	28.2	25.9	25.7	—
Guided missiles, space vehicles, and parts	376	91.7	93.1	86.1	86.7	—	24.4	25.1	22.6	22.5	—
Guided missiles and space vehicles	3761	63.1	63.8	59.6	59.6	—	15.2	15.6	13.9	13.7	—
Miscellaneous transportation equipment	379	54.5	54.4	57.0	57.5	—	39.9	39.9	42.3	42.9	—
Travel trailers and campers	3792	22.0	22.0	22.8	23.1	—	18.6	18.6	19.4	19.7	—
Instruments and related products	38	867.6	875.1	843.1	842.4	841.4	432.2	435.5	425.8	426.3	423.2
Search and navigation equipment	381	161.5	162.6	156.9	156.3	—	43.1	43.0	43.7	43.0	—
Measuring and controlling devices	382	304.2	307.3	293.9	292.1	—	155.7	157.5	150.5	149.0	—
Environmental controls	3822	39.5	40.3	38.5	38.5	—	27.1	27.3	26.9	26.5	—
Process control instruments	3823	67.0	67.5	65.6	64.7	—	34.2	34.5	33.4	32.9	—
Instruments to measure electricity	3825	76.9	77.5	72.7	72.1	—	31.7	32.6	29.0	28.7	—
Medical instruments and supplies	384	279.1	280.0	276.9	279.0	—	166.0	166.3	167.1	169.1	—
Surgical and medical instruments	3841	111.9	112.4	111.1	111.0	—	72.2	72.4	71.8	71.6	—
Surgical appliances and supplies	3842	95.3	95.5	95.3	95.5	—	59.2	59.4	60.2	60.1	—
Ophthalmic goods	385	34.9	35.2	34.0	33.8	—	23.8	23.4	24.2	24.1	—
Photographic equipment and supplies	386	81.1	83.1	75.0	74.8	—	38.1	39.6	35.0	35.8	—
Watches, clocks, watchcases, and parts	387	6.7	6.9	6.4	6.4	—	5.6	5.7	5.3	5.3	—
Miscellaneous manufacturing industries	39	392.5	396.1	383.8	387.3	386.2	274.2	278.3	266.6	269.0	268.7
Jewelry, silverware, and plated ware	391	50.1	49.2	50.3	49.8	—	34.6	34.2	34.3	33.9	—
Jewelry, precious metal	3911	37.4	36.8	37.2	36.8	—	25.3	25.2	24.8	24.5	—
Musical instruments	393	16.3	16.2	16.2	16.0	—	12.9	12.8	13.0	12.9	—
Toys and sporting goods	394	105.6	110.7	99.5	103.0	—	71.8	76.3	67.3	69.9	—
Dolls, games, toys, and children's vehicles	3942.4	33.7	34.3	30.6	30.9	—	21.6	22.1	19.6	19.7	—
Sporting and athletic goods, nec	3949	71.9	76.4	68.9	72.1	—	50.2	54.2	47.7	50.2	—
Pens, pencils, office, and art supplies	395	30.7	31.0	29.9	30.0	—	21.3	21.6	20.7	20.5	—
Costume jewelry and notions	396	22.0	21.9	20.6	20.8	—	15.8	15.7	14.9	15.2	—
Costume jewelry	3961	12.3	12.0	11.3	11.5	—	9.0	8.8	8.0	8.3	—
Miscellaneous manufactures	399	167.8	167.1	167.3	167.7	—	117.9	117.7	116.4	116.6	—
Signs and advertising specialties	3993	72.8	71.7	74.6	74.5	—	47.5	46.9	48.8	48.5	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods		7,602	7,582	7,436	7,426	7,429	5,287	5,275	5,144	5,129	5,132
Food and kindred products	20	1,685.6	1,645.6	1,654.0	1,647.8	1,658.8	1,252.8	1,215.7	1,230.0	1,220.7	1,229.7
Meat products	201	494.2	490.0	499.3	497.2	-	420.0	415.9	426.1	423.6	-
Meat packing plants	2011	150.3	150.2	151.2	151.3	-	125.3	125.0	126.9	126.6	-
Sausages and other prepared meats	2013	97.7	95.3	98.4	98.9	-	76.5	74.3	78.1	78.3	-
Poultry slaughtering and processing	2015	246.3	244.5	249.7	247.0	-	218.2	216.6	221.1	218.7	-
Dairy products	202	140.3	139.8	139.4	140.2	-	95.4	94.8	96.2	96.0	-
Cheese, natural and processed	2022	39.2	38.7	38.3	38.3	-	31.8	31.4	31.4	31.2	-
Fluid milk	2026	62.1	61.9	62.1	62.6	-	36.4	36.1	37.0	36.9	-
Preserved fruits and vegetables	203	229.4	208.3	206.1	206.9	-	193.1	172.0	170.4	170.6	-
Canned specialties	2032	17.1	16.8	15.4	15.5	-	13.6	13.3	11.9	12.1	-
Canned fruits and vegetables	2033	70.3	58.8	54.6	54.9	-	58.7	47.5	44.2	44.3	-
Frozen fruits and vegetables	2037	48.8	42.8	44.3	44.8	-	42.5	36.5	37.9	38.4	-
Grain mill products	204	124.9	123.9	124.3	124.1	-	88.6	88.1	88.8	88.6	-
Flour and other grain mill products	2041	19.1	18.8	18.9	19.0	-	11.6	11.5	11.8	11.9	-
Prepared feeds, nec	2048	39.7	39.5	39.6	39.6	-	25.7	25.7	26.0	25.9	-
Bakery products	205	206.4	203.7	204.1	204.8	-	139.7	136.5	138.4	139.2	-
Bread, cake, and related products	2051	146.3	145.2	142.8	143.6	-	88.6	87.6	86.2	86.9	-
Cookies, crackers, and frozen bakery products, except bread	2052.3	60.2	58.5	61.3	61.2	-	51.1	48.9	52.2	52.3	-
Sugar and confectionery products	206	97.3	91.1	91.7	88.0	-	76.0	69.8	71.4	67.7	-
Raw cane sugar	2061	4.6	3.8	5.4	4.7	-	3.5	2.8	4.2	3.4	-
Cane sugar refining	2062	3.8	3.8	3.8	3.8	-	2.9	2.8	3.0	3.1	-
Beet sugar	2063	8.4	7.2	7.1	7.7	-	7.4	6.2	6.1	6.6	-
Candy and other confectionery products	2064	54.0	50.7	50.9	47.4	-	42.3	39.0	40.1	36.8	-
Fats and oils	207	33.1	31.6	34.3	34.3	-	22.6	22.1	23.7	23.7	-
Beverages	208	182.3	179.9	179.8	180.0	-	88.5	87.6	87.2	86.8	-
Malt beverages	2082	32.6	32.8	31.8	31.7	-	20.5	20.7	19.4	19.3	-
Bottled and canned soft drinks	2086	97.2	96.0	95.7	96.4	-	40.0	39.9	39.2	39.3	-
Misc. food and kindred products	209	177.7	177.3	175.0	172.3	-	128.9	128.9	127.8	124.5	-
Tobacco products	21	40.6	40.1	38.1	36.4	35.1	31.6	30.8	28.6	27.0	25.2
Cigarettes	211	26.7	27.3	25.4	25.5	-	19.9	20.4	18.4	18.4	-
Textile mill products	22	598.1	605.9	569.3	567.4	564.5	506.5	514.2	481.9	480.3	478.2
Broadwoven fabric mills, cotton	221	71.0	72.5	66.9	65.7	-	63.5	64.8	59.4	59.0	-
Broadwoven fabric mills, synthetics	222	62.9	63.7	60.4	60.0	-	53.4	54.0	51.2	51.1	-
Broadwoven fabric mills, wool	223	12.7	13.7	11.3	10.6	-	10.6	11.5	9.4	9.0	-
Narrow fabric mills	224	21.2	21.2	20.9	21.2	-	17.4	17.4	17.1	17.3	-
Knitting mills	225	159.4	162.0	146.8	146.9	-	135.6	138.2	124.0	124.3	-
Women's hosiery, except socks	2251	17.4	17.4	16.3	16.3	-	15.1	15.1	14.1	14.1	-
Hosiery, nec	2252	36.8	36.4	35.6	35.6	-	32.0	31.7	31.0	31.0	-
Knit outerwear mills	2253	48.3	49.6	41.9	41.9	-	41.3	42.6	35.9	36.0	-
Knit underwear mills	2254	11.5	11.9	9.9	9.9	-	10.2	10.6	8.7	8.7	-
Welf knit fabric mills	2257	24.1	24.9	22.2	22.5	-	20.2	21.0	18.2	18.5	-
Textile finishing, except wool	226	65.1	66.9	61.8	61.2	-	53.5	54.8	51.7	51.2	-
Finishing plants, cotton	2261	29.9	30.9	28.8	28.5	-	24.5	25.2	24.4	24.0	-
Finishing plants, synthetics	2262	20.6	21.1	19.1	18.9	-	16.7	17.0	15.6	15.5	-
Carpets and rugs	227	63.9	63.3	64.4	64.4	-	53.2	53.0	54.2	53.3	-
Yarn and thread mills	228	87.1	87.9	83.4	83.7	-	76.9	78.1	73.6	73.8	-
Yarn spinning mills	2281	62.9	63.6	60.0	60.7	-	56.2	57.1	53.3	53.7	-
Throwing and winding mills	2282	17.2	17.1	16.7	16.4	-	14.6	14.6	14.4	14.3	-
Miscellaneous textile goods	229	54.9	54.7	53.4	53.7	-	42.5	42.4	41.3	41.3	-
Apparel and other textile products	23	763.3	778.5	700.3	697.2	693.7	614.0	627.1	558.6	557.4	554.8
Men's and boys' suits and coats	231	26.7	27.2	24.1	23.6	-	21.6	22.2	19.0	18.7	-
Men's and boys' furnishings	232	185.0	189.9	160.6	160.2	-	155.8	159.7	133.8	133.5	-
Men's and boys' shirts	2321	37.0	38.8	30.9	30.4	-	32.0	33.6	26.5	26.1	-
Men's and boys' trousers and slacks	2325	63.3	63.8	55.0	54.9	-	54.7	55.0	46.8	46.7	-
Men's and boys' work clothing	2326	28.8	29.1	25.9	26.2	-	24.8	24.7	22.4	22.5	-
Women's and misses' outerwear	233	229.6	236.0	209.6	208.7	-	181.4	186.8	163.5	163.8	-
Women's and misses' blouses and shirts	2331	20.5	21.0	19.5	19.1	-	15.5	16.0	14.4	14.2	-
Women's, juniors', and misses' dresses	2335	33.2	34.3	30.9	30.5	-	25.6	26.4	23.9	23.6	-
Women's and misses' suits and coats	2337	19.6	19.5	16.6	16.1	-	15.1	15.1	12.2	12.0	-
Women's and misses' outerwear, nec	2339	156.3	161.2	142.6	143.0	-	125.2	129.3	113.0	114.0	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	31.1	31.6	28.4	27.9	—	24.4	24.8	22.7	22.2	—
Women's and children's underwear	2341	22.7	23.3	20.5	20.1	—	18.1	18.7	16.2	15.8	—
Brassieres, girdles, and allied garments	2342	8.4	8.3	7.9	7.8	—	6.3	6.1	6.5	6.4	—
Girls' and children's outerwear	236	25.5	25.4	21.1	21.0	—	20.8	20.8	17.1	17.0	—
Girls' and children's dresses and blouses	2361	9.5	9.5	8.4	8.1	—	8.2	8.2	7.4	7.2	—
Misc. apparel and accessories	238	32.2	33.2	30.0	30.5	—	25.6	26.6	23.3	24.2	—
Misc. fabricated textile products	239	216.3	218.2	210.5	209.3	—	171.0	172.7	166.7	165.4	—
Curtains and draperies	2391	18.9	19.9	17.7	17.8	—	14.6	15.1	13.9	14.0	—
House furnishings, nec	2392	54.6	54.7	54.4	53.5	—	46.0	46.0	45.7	45.0	—
Automotive and apparel trimmings	2396	61.4	61.7	60.6	59.8	—	47.7	48.4	47.3	46.3	—
Paper and allied products	26	674.7	675.6	659.7	658.7	657.3	514.2	515.0	499.1	498.5	498.2
Paper mills	262	154.8	155.2	149.3	148.9	—	121.2	121.4	116.5	116.3	—
Paperboard mills	263	48.2	48.2	47.1	46.9	—	37.1	37.2	36.2	36.0	—
Paperboard containers and boxes	265	219.2	219.4	214.3	214.5	—	170.0	170.0	165.5	165.5	—
Corrugated and solid fiber boxes	2653	133.3	133.8	131.1	131.2	—	99.6	99.9	97.8	97.9	—
Sanitary food containers	2656	17.4	17.3	17.1	17.1	—	15.7	15.6	15.4	15.4	—
Folding paperboard boxes	2657	46.9	47.1	45.8	45.9	—	38.0	38.3	36.9	36.8	—
Misc. converted paper products	267	240.6	240.8	237.3	236.7	—	176.4	176.8	171.6	171.4	—
Paper, coated and laminated, nec	2672	46.7	46.6	45.1	44.9	—	23.8	24.1	21.3	21.1	—
Bags: plastics, laminated, and coated	2673	39.3	39.7	38.6	38.0	—	30.8	31.2	30.0	29.6	—
Envelopes	2677	23.9	24.1	23.9	23.8	—	18.5	18.8	18.4	18.4	—
Printing and publishing	27	1,564.7	1,563.0	1,553.7	1,553.3	1,550.1	845.0	845.9	831.2	828.4	825.5
Newspapers	271	442.5	441.6	439.8	440.0	—	146.9	146.8	146.0	145.6	—
Periodicals	272	138.3	137.9	140.1	139.9	—	45.1	45.8	43.2	42.5	—
Books	273	127.2	128.2	123.3	123.3	—	63.2	65.9	57.2	57.1	—
Book publishing	2731	87.4	88.3	85.2	85.4	—	31.8	34.2	27.3	27.1	—
Book printing	2732	39.8	39.9	38.1	37.9	—	31.4	31.7	29.9	30.0	—
Miscellaneous publishing	274	91.0	90.7	92.6	92.6	—	43.2	42.3	45.3	45.7	—
Commercial printing	275	581.4	581.1	579.0	580.2	—	414.1	413.1	411.9	411.4	—
Commercial printing, lithographic	2752	377.3	375.9	378.2	378.8	—	268.7	266.7	269.9	269.2	—
Commercial printing, nec	2759	184.0	184.6	181.3	181.8	—	129.8	130.4	126.6	126.8	—
Manifold business forms	276	41.3	41.6	41.1	39.9	—	28.8	29.3	27.6	26.5	—
Blankbooks and bookbinding	278	63.9	63.4	61.2	60.6	—	48.6	48.4	46.4	46.1	—
Printing trade services	279	50.3	50.1	49.2	49.1	—	33.7	33.5	32.9	32.8	—
Chemicals and allied products	28	1,042.8	1,038.6	1,034.6	1,034.0	1,035.5	586.0	585.2	581.7	581.4	582.4
Industrial inorganic chemicals	281	115.4	115.5	112.2	111.6	—	62.4	61.0	60.8	59.6	—
Industrial inorganic chemicals, nec	2819	69.5	69.4	68.4	67.8	—	36.0	35.5	36.7	36.3	—
Plastics materials and synthetics	282	157.0	157.2	151.6	151.3	—	103.6	105.1	99.3	98.9	—
Plastics materials and resins	2821	79.1	78.7	77.8	77.6	—	48.4	48.7	47.1	46.8	—
Organic fibers, noncellulosic	2824	43.7	44.7	40.9	40.3	—	34.5	35.4	32.3	31.7	—
Drugs	283	279.0	275.4	285.2	286.4	—	126.7	126.3	131.0	131.8	—
Pharmaceutical preparations	2834	219.2	216.5	223.8	224.6	—	101.6	100.9	106.1	106.5	—
Soap, cleaners, and toilet goods	284	155.5	154.3	151.4	151.6	—	97.1	96.4	95.8	96.6	—
Soap and other detergents	2841	39.3	39.2	39.4	39.5	—	21.9	21.7	24.9	25.6	—
Polishing, sanitation, and finishing preparations	2842,3	40.2	39.6	40.4	40.2	—	22.8	22.5	22.6	22.6	—
Toilet preparations	2844	75.9	75.5	71.6	71.9	—	52.5	52.2	48.3	48.4	—
Paints and allied products	285	52.3	51.8	53.0	52.7	—	27.6	27.4	28.0	27.6	—
Industrial organic chemicals	286	137.7	137.8	136.2	135.7	—	80.0	80.1	77.8	77.9	—
Cyclic crudes and intermediates	2865	22.6	22.7	21.5	21.3	—	13.7	13.7	12.6	12.5	—
Industrial organic chemicals, nec	2869	112.8	112.8	112.4	112.0	—	64.6	64.7	63.5	63.7	—
Agricultural chemicals	287	52.0	52.7	52.3	52.4	—	31.5	32.2	31.6	31.8	—
Miscellaneous chemical products	289	93.9	93.9	92.7	92.3	—	57.0	56.7	57.4	57.2	—
Petroleum and coal products	29	140.3	140.3	135.4	137.7	139.8	92.5	92.1	89.1	91.2	92.6
Petroleum refining	291	96.0	96.7	93.4	93.3	—	62.5	62.7	60.9	60.8	—
Asphalt paving and roofing materials	295	29.8	29.3	27.2	29.5	—	22.2	21.6	20.1	22.4	—
Rubber and misc. plastics products	30	1,008.9	1,009.2	1,015.4	1,018.8	1,019.7	782.5	784.7	787.4	788.6	790.3
Tires and inner tubes	301	79.2	79.5	77.4	77.0	—	58.4	58.4	57.8	55.3	—
Rubber and plastics footwear	302	6.3	6.5	5.3	5.5	—	4.7	5.1	3.9	4.1	—
Hose, belting, gaskets, and packing	305	70.8	71.5	70.8	70.2	—	54.5	55.0	54.6	54.1	—
Rubber and plastics hose and belting	3052	29.2	29.0	30.3	29.6	—	22.8	22.7	24.0	23.5	—
Fabricated rubber products, nec	306	112.3	112.9	111.6	111.3	—	86.0	86.7	85.5	85.2	—
Miscellaneous plastics products, nec	308	740.4	738.8	750.3	754.8	—	579.1	579.5	585.6	589.9	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Leather and leather products	31	82.9	85.2	75.4	74.9	74.9	62.3	64.4	56.3	55.9	55.4
Leather tanning and finishing	311	12.3	13.0	11.1	10.8	—	10.1	10.8	9.1	8.9	—
Footwear, except rubber	314	35.8	36.9	32.3	31.9	—	28.6	29.4	25.6	25.5	—
Men's footwear, except athletic	3143	20.0	20.4	18.3	18.0	—	15.5	15.8	13.9	13.7	—
Women's footwear, except athletic	3144	8.9	9.4	7.7	7.4	—	7.0	7.3	6.4	6.2	—
Luggage	316	9.4	9.7	8.0	8.1	—	6.5	6.6	6.0	6.0	—
Handbags and personal leather goods	317	8.9	9.0	8.2	8.3	—	5.1	5.1	4.6	4.5	—
Transportation and public utilities		6,600	6,527	6,685	6,721	6,778	5,471	5,384	5,545	5,562	5,620
Transportation		4,276	4,211	4,336	4,371	4,420	—	—	—	—	—
Railroad transportation	40	230.7	229.6	232.4	234.1	235.9	—	—	—	—	—
Class I railroads plus Amtrak ²	4011	205.1	204.0	205.5	207.0	—	—	—	—	—	—
Local and interurban passenger transit	41	467.9	472.7	491.4	493.6	500.6	427.4	433.0	450.4	452.9	—
Local and suburban transportation	411	235.3	233.4	238.6	240.3	—	213.3	211.5	216.3	218.0	—
Taxicabs	412	31.1	31.0	31.7	31.2	—	—	—	—	—	—
Intercity and rural bus transportation	413	25.6	24.6	27.9	28.3	—	22.8	22.0	24.6	24.9	—
School buses	415	140.8	147.5	159.0	158.6	—	—	—	—	—	—
Trucking and warehousing	42	1,744.9	1,707.3	1,758.9	1,775.3	1,800.9	1,528.9	1,494.2	1,537.2	1,552.0	—
Trucking and courier services, except air	421	1,573.1	1,540.1	1,582.1	1,597.6	—	1,385.3	1,354.5	1,389.4	1,403.9	—
Public warehousing and storage	422	166.3	162.0	171.5	172.1	—	138.7	135.0	143.0	143.1	—
Water transportation	44	180.0	174.6	171.1	177.5	181.4	—	—	—	—	—
Water transportation of freight, nec	444	14.7	14.2	15.1	15.0	—	—	—	—	—	—
Water transportation services	449	120.4	117.4	111.7	117.3	—	105.7	102.5	96.1	101.4	—
Transportation by air	45	1,183.2	1,160.9	1,206.7	1,210.5	1,219.2	—	—	—	—	—
Air transportation, scheduled	451	1,007.8	988.6	1,025.0	1,027.9	—	—	—	—	—	—
Air transportation, scheduled	4512	532.8	526.1	545.9	548.7	—	—	—	—	—	—
Airports, flying fields, and services	458	128	125	133	134	—	—	—	—	—	—
Pipelines, except natural gas	46	13.9	13.7	13.7	13.7	13.8	11.3	11.1	11.3	11.4	—
Transportation services	47	455.2	452.4	461.9	465.9	468.4	372.2	369.9	377.3	381.1	—
Passenger transportation arrangement	472	219.4	219.6	221.1	222.8	—	184.5	184.8	184.9	186.5	—
Travel agencies	4724	172.7	173.0	173.5	174.5	—	145.4	145.6	145.2	146.1	—
Freight transportation arrangement	473	182.9	180.2	189.5	191.6	—	143.6	140.9	150.1	152.1	—
Communications and public utilities		2,324	2,316	2,349	2,350	2,358	—	—	—	—	—
Communications	48	1,469.4	1,462.2	1,503.5	1,507.5	1,514.3	1,069.4	1,048.0	1,099.2	1,085.4	—
Telephone communications	481	1,006.8	1,003.9	1,033.9	1,036.8	—	703.8	684.8	732.0	718.0	—
Telephone communications, except radio	4813	847.3	843.1	872.8	875.7	—	584.7	569.1	606.9	593.3	—
Radio and television broadcasting	483	246.9	246.4	246.4	247.2	—	202.9	203.2	200.8	200.7	—
Radio broadcasting stations	4832	115.6	115.3	116.1	116.5	—	—	—	—	—	—
Television broadcasting stations	4833	131.2	131.1	130.3	130.7	—	—	—	—	—	—
Cable and other pay television services	484	181.1	178.9	186.5	186.6	—	148.1	146.1	151.7	151.7	—
Electric, gas, and sanitary services	49	854.7	853.3	845.8	842.5	843.9	684.2	680.5	679.5	677.7	—
Electric services	491	364.2	363.0	363.4	360.0	—	294.4	292.3	293.4	289.7	—
Gas production and distribution	492	136.4	136.3	132.9	132.8	—	105.8	105.7	103.7	104.0	—
Combination utility services	493	158.6	159.4	154.8	154.4	—	124.0	123.7	123.2	123.4	—
Sanitary services	495	162.4	161.7	161.4	161.8	—	133.8	133.0	133.0	134.4	—
Wholesale trade		6,831	6,781	6,909	6,948	6,971	5,476	5,427	5,538	5,565	5,582
Durable goods	50	4,042	4,021	4,091	4,111	4,127	3,188	3,166	3,233	3,243	—
Motor vehicles, parts, and supplies	501	518.0	515.5	526.3	530.0	—	412.9	412.6	412.8	414.9	—
Automobiles and other motor vehicles	5012	150.3	149.1	155.9	158.0	—	—	—	—	—	—
Motor vehicle supplies and new parts	5013	289.4	288.4	291.5	292.0	—	—	—	—	—	—
Furniture and home furnishings	502	165.7	163.5	168.3	168.3	—	132.0	129.5	134.2	133.5	—
Furniture	5021	80.0	78.2	80.9	81.5	—	—	—	—	—	—
Home furnishings	5023	85.7	85.3	87.4	86.8	—	—	—	—	—	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Wholesale trade—Continued											
Durable goods—Continued											
Lumber and other construction materials	503	263.6	261.0	266.4	273.6	—	218.7	216.3	221.0	227.7	—
Lumber, plywood, and millwork	5031	133.3	131.4	136.7	138.1	—	—	—	—	—	—
Construction materials, nec	5039	39.6	39.1	40.0	41.5	—	—	—	—	—	—
Professional and commercial equipment	504	918.3	904.5	962.1	966.4	—	712.7	697.1	762.6	763.7	—
Office equipment	5044	201.0	198.4	208.8	208.6	—	—	—	—	—	—
Computers, peripherals and software	5045	386.5	381.1	408.1	409.2	—	—	—	—	—	—
Medical and hospital equipment	5047	189.2	185.4	199.1	201.6	—	152.4	149.2	161.4	163.9	—
Metals and minerals, except petroleum	505	152.6	152.7	153.1	153.3	—	123.2	123.4	122.4	122.4	—
Electrical goods	506	548.3	546.4	549.3	549.4	—	400.0	397.4	401.8	399.9	—
Electrical apparatus and equipment	5063	230.2	228.7	233.7	234.2	—	—	—	—	—	—
Electrical appliances, television and radio sets	5064	47.9	47.5	49.7	49.6	—	—	—	—	—	—
Electronic parts and equipment	5065	270.1	270.2	265.9	265.6	—	—	—	—	—	—
Hardware, plumbing, and heating equipment	507	306.0	304.9	305.3	305.7	—	249.5	248.8	250.6	250.7	—
Hardware	5072	111.2	111.0	110.7	109.9	—	—	—	—	—	—
Plumbing and hydronic heating supplies	5074	119.5	119.4	120.1	120.9	—	—	—	—	—	—
Machinery, equipment, and supplies	508	834.9	836.3	833.6	835.8	—	667.2	668.8	663.5	665.6	—
Construction and mining machinery	5082	91.2	90.6	93.3	93.8	—	—	—	—	—	—
Farm and garden machinery	5083	121.7	122.5	121.2	123.0	—	—	—	—	—	—
Industrial machinery and equipment	5084	336.2	337.4	331.7	332.1	—	—	—	—	—	—
Industrial supplies	5085	156.9	157.4	155.9	155.1	—	—	—	—	—	—
Misc. wholesale trade durable goods	509	334.7	336.2	326.4	328.4	—	271.3	272.1	263.7	264.8	—
Scrap and waste materials	5093	124.4	126.5	118.3	118.3	—	—	—	—	—	—
Nondurable goods	51	2,789	2,760	2,818	2,837	2,844	2,288	2,261	2,305	2,322	—
Paper and paper products	511	278.9	275.5	284.9	285.9	—	233.1	230.1	235.8	236.6	—
Stationery and office supplies	5112	164.6	162.7	169.0	169.0	—	—	—	—	—	—
Drugs, proprietaries, and sundries	512	238.4	233.4	254.2	254.7	—	198.7	193.0	211.6	211.6	—
Apparel, piece goods, and notions	513	224.3	220.7	223.1	225.4	—	182.3	178.8	181.8	183.9	—
Groceries and related products	514	921.6	907.0	926.3	925.9	—	774.2	760.6	775.9	776.1	—
Groceries, general line	5141	287.7	287.6	284.6	284.5	—	—	—	—	—	—
Meats and meat products	5147	56.1	54.9	57.1	56.9	—	—	—	—	—	—
Fresh fruits and vegetables	5148	106.0	100.7	104.4	103.0	—	—	—	—	—	—
Farm-product raw materials	515	107.6	105.7	105.9	107.0	—	87.3	85.4	85.2	86.4	—
Chemicals and allied products	516	155.3	153.9	159.3	161.1	—	113.3	112.6	116.5	117.3	—
Petroleum and petroleum products	517	155.0	154.2	154.1	154.0	—	127.9	127.3	126.8	126.0	—
Petroleum bulk stations and terminals	5171	63.5	62.3	63.2	63.2	—	—	—	—	—	—
Petroleum products, nec	5172	91.6	91.9	90.9	90.8	—	—	—	—	—	—
Beer, wine, and distilled beverages	518	155.9	153.8	157.1	157.3	—	126.2	124.0	126.7	126.8	—
Beer and ale	5181	99.0	97.4	99.6	100.2	—	—	—	—	—	—
Wine and distilled beverages	5182	56.9	56.4	57.5	57.1	—	—	—	—	—	—
Misc. wholesale trade nondurable goods	519	552.3	555.7	552.7	565.7	—	445.4	449.3	444.7	457.5	—
Farm supplies	5191	165.0	170.4	165.6	174.6	—	—	—	—	—	—
Retail trade		22,296	21,933	22,174	22,489	22,786	19,591	19,246	19,452	19,741	20,016
Building materials and garden supplies	52	947.7	953.7	949.8	992.3	1,022.0	788.8	794.3	787.2	827.5	—
Lumber and other building materials	521	574.9	571.8	582.7	598.7	—	485.9	482.2	491.7	506.9	—
Paint, glass, and wallpaper stores	523	64.4	63.7	64.9	65.3	—	49.6	49.1	48.3	48.8	—
Hardware stores	525	166.3	164.3	165.8	169.2	—	137.1	135.0	136.9	139.8	—
Retail nurseries and garden stores	526	97.5	109.4	91.9	113.5	—	81.0	92.6	75.4	96.4	—
General merchandise stores	53	2,729.7	2,617.8	2,688.7	2,717.3	2,724.3	2,535.6	2,419.6	2,499.8	2,526.6	—
Department stores	531	2,425.5	2,324.6	2,396.0	2,425.5	2,432.6	2,275.2	2,170.1	2,250.4	2,277.0	—
Variety stores	533	120.7	118.0	116.4	114.9	—	102.3	99.5	99.2	98.2	—
Miscellaneous general merchandise stores	539	183.5	175.2	176.3	176.9	—	158.1	150.0	150.2	151.4	—
Food stores	54	3,481.5	3,430.6	3,443.6	3,448.4	3,462.4	3,155.7	3,108.6	3,115.4	3,118.3	—
Grocery stores	541	3,065.8	3,023.8	3,034.8	3,032.2	—	2,799.7	2,760.3	2,767.8	2,764.1	—
Meat and fish markets	542	47.6	47.7	46.5	46.7	—	—	—	—	—	—
Dairy products stores	545	13.3	12.6	12.2	13.2	—	—	—	—	—	—
Retail bakeries	546	206.4	205.0	205.5	206.3	—	179.5	178.3	177.8	179.3	—
Automotive dealers and service stations	55	2,341.2	2,317.0	2,370.0	2,387.5	2,409.8	1,944.5	1,923.6	1,966.3	1,982.6	—
New and used car dealers	551	1,047.8	1,041.1	1,066.7	1,072.1	1,077.7	878.7	871.7	895.3	899.5	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Retail trade—Continued											
Automotive dealers and service stations—Continued											
Auto and home supply stores	553	398.0	390.3	400.6	404.8	—	303.3	299.5	305.4	309.7	—
Gasoline service stations	554	689.4	679.2	690.3	694.1	—	597.3	586.9	595.5	599.4	—
Automotive dealers, nec	559	9.7	9.6	10.0	10.0	—	7.9	7.8	8.2	8.1	—
Apparel and accessory stores											
Men's and boys' clothing stores	56	1,142.7	1,111.4	1,129.8	1,133.9	1,138.0	957.5	927.4	943.8	948.7	—
Women's clothing stores	561	82.3	82.4	78.5	78.5	—	66.9	66.9	63.1	63.4	—
Family clothing stores	562	272.2	268.8	267.8	269.9	—	226.0	222.9	221.1	223.0	—
Shoe stores	565	380.6	359.7	378.6	378.6	—	340.5	319.5	336.0	336.0	—
Shoe stores	566	216.2	214.2	214.9	215.6	—	171.1	170.5	169.3	171.2	—
Furniture and home furnishings stores											
Furniture and home furnishings stores	57	1,026.0	1,001.6	1,060.6	1,069.7	1,073.5	844.7	822.7	872.5	879.1	—
Furniture stores	571	525.7	515.8	535.4	539.3	—	428.2	419.1	435.3	437.8	—
Household appliance stores	5712	306.3	302.8	315.5	317.6	—	—	—	—	—	—
Radio, television, and computer stores	572	67.5	66.7	68.0	68.1	—	54.5	53.8	55.2	55.1	—
Radio, television, and electronic stores	573	432.8	419.1	457.2	462.3	—	362.0	349.8	382.0	386.2	—
Record and prerecorded tape stores	5731	187.1	181.7	193.5	195.2	—	156.5	151.7	160.9	161.8	—
Record and prerecorded tape stores	5735	80.9	75.6	88.4	90.9	—	68.6	63.2	74.2	76.8	—
Eating and drinking places	58	7,760.1	7,708.3	7,663.1	7,853.0	8,039.0	6,971.3	6,923.5	6,878.3	7,049.7	—
Miscellaneous retail establishments											
Drug stores and proprietary stores	59	2,867.3	2,792.6	2,868.3	2,887.1	2,917.2	2,393.0	2,326.4	2,389.0	2,408.6	—
Liquor stores	591	645.6	638.3	665.8	665.6	—	540.6	536.6	561.2	563.6	—
Used merchandise stores	592	111.0	109.5	108.5	109.5	—	—	—	—	—	—
Miscellaneous shopping goods stores	593	119.6	118.7	122.8	123.8	—	99.7	99.1	101.9	103.0	—
Sporting goods and bicycle shops	594	1,013.0	968.9	1,005.0	1,005.3	—	848.2	804.9	840.2	839.1	—
Book stores	5941	189.3	183.0	186.4	189.0	—	—	—	—	—	—
Stationery stores	5942	137.0	130.3	137.2	135.8	—	—	—	—	—	—
Jewelry stores	5943	94.5	93.0	95.6	95.9	—	—	—	—	—	—
Gift, novelty, and souvenir shops	5944	145.3	139.9	146.0	145.5	—	—	—	—	—	—
Sewing, needlework, and piece goods	5947	234.2	221.5	229.2	232.2	—	—	—	—	—	—
Nonstore retailers	5949	48.3	48.2	48.1	46.6	—	—	—	—	—	—
Catalog and mail-order houses	596	346.4	334.3	332.2	332.5	—	293.6	283.1	280.1	280.6	—
Merchandising machine operators	5961	226.6	212.4	215.3	214.8	—	—	—	—	—	—
Fuel dealers	5962	67.1	67.9	66.7	67.4	—	—	—	—	—	—
Retail stores, nec	598	95.5	94.4	98.6	96.8	—	79.0	78.1	81.6	80.2	—
Florists, tobacco stores, and newsstands	599	536.1	528.5	535.4	553.6	—	441.8	435.8	436.3	453.3	—
Optical goods stores	5992,3,4	153.0	154.3	152.1	159.3	—	—	—	—	—	—
Miscellaneous retail stores, nec	5995	70.1	69.2	70.6	71.9	—	56.4	55.6	55.3	56.4	—
Miscellaneous retail stores, nec	5999	313.0	305.0	312.7	322.4	—	255.6	249.5	253.3	262.3	—
Finance, insurance, and real estate³		7,407	7,321	7,547	7,586	7,625	5,442	5,375	5,528	5,560	5,593
Finance											
Depository institutions		3,593	3,551	3,681	3,691	3,703	—	—	—	—	—
Commercial banks	60	2,042.2	2,035.9	2,045.1	2,045.4	2,051.6	1,468.4	1,462.7	1,469.2	1,470.4	—
State commercial banks	602	1,468.4	1,465.3	1,463.5	1,464.1	1,468.5	1,040.7	1,037.1	1,034.9	1,037.9	—
National and commercial banks, nec	6022	578.4	572.2	589.8	591.7	—	414.7	408.8	424.1	425.5	—
Savings institutions	6021,9	890.0	893.1	873.7	872.4	—	626.0	628.3	610.8	612.4	—
Federal savings institutions	603	257.7	257.5	257.6	257.2	257.3	—	—	—	—	—
Savings institutions, except federal	6035	151.1	151.4	150.5	150.0	—	—	—	—	—	—
Credit unions	6036	106.6	106.1	107.1	107.2	—	—	—	—	—	—
Credit unions	606	178.8	177.3	183.6	184.2	—	142.4	141.3	146.4	146.4	—
Nondepository institutions	61	658.1	639.5	711.9	716.0	719.0	454.8	443.9	489.4	489.6	—
Personal credit institutions	614	185.2	183.7	190.0	191.3	—	109.5	110.4	106.3	106.1	—
Business credit institutions	615	122.7	119.7	130.7	130.8	—	—	—	—	—	—
Mortgage bankers and brokers	616	327.9	313.7	367.8	370.6	374.3	—	—	—	—	—
Security and commodity brokers	62	644.8	631.2	661.0	665.4	668.3	—	—	—	—	—
Security brokers and dealers	621	481.9	472.0	492.6	495.8	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges	622,3	26.4	26.2	26.1	25.9	—	—	—	—	—	—
Security and commodity services	628	136.4	133.0	142.3	143.7	—	91.7	88.9	96.7	97.4	—
Holding and other investment offices	67	248.0	244.3	262.5	264.0	263.7	—	—	—	—	—
Holding offices	671	107.3	105.6	113.4	113.9	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Finance, insurance, and real estate—Continued											
Insurance	63,64	2,344	2,323	2,388	2,392	2,396	-	-	-	-	-
Insurance carriers	63	1,597.5	1,582.9	1,627.5	1,629.3	1,632.4	1,208.4	1,194.2	1,242.6	1,244.7	-
Life insurance	631	532.1	528.9	540.2	540.7	-	355.4	352.4	363.0	363.8	-
Medical service and health insurance	632	356.2	353.4	365.8	366.6	-	287.4	286.7	292.4	293.2	-
Hospital and medical service plans	6324	289.7	287.4	298.0	298.7	-	237.7	237.1	241.9	242.3	-
Fire, marine, and casualty insurance	633	548.3	543.8	549.5	550.4	-	435.4	428.4	444.2	445.2	-
Title insurance	636	85.4	82.2	94.6	94.3	-	-	-	-	-	-
Insurance agents, brokers, and service	64	746.3	740.3	760.0	762.6	763.1	-	-	-	-	-
Real estate	65	1,471	1,447	1,478	1,503	1,526	-	-	-	-	-
Real estate operators and lessors	651	582.8	575.3	575.8	579.8	-	-	-	-	-	-
Real estate agents and managers	653	727.9	714.5	741.2	752.4	-	-	-	-	-	-
Subdividers and developers	655	122.0	120.8	119.9	129.5	-	-	-	-	-	-
Services		37,526	37,251	38,297	38,754	38,949	32,763	32,537	33,342	33,733	33,900
Agricultural services	07	705.5	701.8	663.5	761.3	805.0	596.4	592.5	554.5	644.1	-
Veterinary services	074	192.7	189.7	196.6	197.7	-	162.5	159.5	165.7	166.8	-
Landscape and horticultural services	078	459.1	459.6	413.8	510.1	-	389.3	389.5	344.8	433.0	-
Hotels and other lodging places	70	1,775.8	1,724.8	1,715.4	1,744.8	1,798.2	-	-	-	-	-
Hotels and motels	701	1,718.6	1,678.9	1,668.3	1,693.7	-	1,509.3	1,471.1	1,462.1	1,482.5	-
Personal services	72	1,194.7	1,257.1	1,260.1	1,265.6	1,189.3	-	-	-	-	-
Laundry, cleaning, and garment services	721	435.9	435.0	429.2	431.1	-	384.0	382.9	376.5	379.0	-
Photographic studios, portrait	722	59.9	62.3	45.6	48.8	-	-	-	-	-	-
Beauty shops	723	410.5	407.8	417.9	418.1	-	362.6	360.8	368.2	367.9	-
Funeral service and crematories	726	99.4	99.2	98.8	99.2	-	-	-	-	-	-
Miscellaneous personal services	729	174.1	237.9	254.4	254.3	-	148.9	210.7	224.6	225.1	-
Business services	73	8,584.0	8,376.2	8,829.5	8,928.6	9,033.0	7,609.3	7,421.1	7,796.0	7,877.8	-
Advertising	731	268.2	263.7	277.0	278.8	-	192.6	189.3	197.4	198.2	-
Advertising agencies	7311	176.7	174.3	181.8	183.6	-	-	-	-	-	-
Credit reporting and collection	732	143.9	143.8	147.5	148.7	-	-	-	-	-	-
Mailing, reproduction, and stenographic services	733	316.1	314.2	321.3	323.1	-	-	-	-	-	-
Photocopying and duplicating services	7334	81.7	82.2	83.8	84.4	-	69.2	70.1	69.4	69.7	-
Services to buildings	734	950.3	941.6	966.7	977.5	989.2	849.8	842.2	858.6	868.6	-
Disinfecting and pest control services	7342	87.0	87.0	89.1	91.6	-	70.6	70.4	71.4	74.1	-
Building maintenance services, nec	7349	863.3	854.6	877.6	885.9	-	779.2	771.8	787.2	794.5	-
Miscellaneous equipment rental and leasing	735	258.3	253.6	255.2	262.5	-	205.5	200.5	201.5	209.8	-
Medical equipment rental	7352	39.7	39.1	39.2	39.5	-	29.2	28.5	30.3	31.0	-
Heavy construction equipment rental	7353	49.1	48.2	49.1	50.4	-	41.6	41.0	41.2	42.5	-
Equipment rental and leasing, nec	7359	169.6	166.3	166.9	172.6	-	134.6	131.0	130.0	136.3	-
Personnel supply services	736	3,229.7	3,137.1	3,235.5	3,294.6	3,349.9	-	-	-	-	-
Employment agencies	7361	358.2	353.4	371.5	375.8	-	-	-	-	-	-
Help supply services	7363	2,871.6	2,783.7	2,864.0	2,918.8	2,970.6	2,784.4	2,703.0	2,767.0	2,816.6	-
Computer and data processing services	737	1,599.3	1,556.3	1,738.5	1,751.6	1,762.8	1,279.7	1,240.3	1,399.6	1,406.1	-
Computer programming services	7371	369.8	359.7	398.8	401.1	-	315.7	305.9	340.6	341.6	-
Prepackaged software	7372	252.2	245.1	280.7	283.8	-	-	-	-	-	-
Computer integrated systems design	7373	178.4	173.6	192.9	195.0	-	126.2	119.8	141.1	141.6	-
Data processing and preparation	7374	254.0	248.8	274.4	277.2	-	-	-	-	-	-
Information retrieval services	7375	98.3	95.1	111.4	112.4	-	71.7	67.6	84.1	85.2	-
Computer maintenance and repair	7378	60.0	59.4	62.5	62.4	-	42.6	40.9	45.3	45.3	-
Miscellaneous business services	738	1,818.2	1,765.9	1,887.8	1,891.8	-	1,580.9	1,532.7	1,643.1	1,643.2	-
Detective and armored car services	7381	587.8	575.4	604.3	606.3	-	541.2	529.9	556.0	557.3	-
Security systems services	7382	61.6	61.5	63.3	63.0	-	50.6	49.9	51.9	51.7	-
Photofinishing laboratories	7384	77.3	73.4	75.3	76.6	-	-	-	-	-	-
Auto repair, services, and parking	75	1,144.1	1,129.1	1,173.8	1,177.0	1,183.6	928.1	917.2	950.8	953.7	-
Automotive rentals, without drivers	751	199.9	196.0	204.3	205.4	-	163.2	159.2	166.3	166.9	-
Passenger car rental	7514	131.8	129.5	134.4	135.5	-	108.7	106.5	109.9	110.9	-
Automobile parking	752	73.4	72.9	72.3	72.8	-	64.0	63.7	63.2	64.1	-
Automotive repair shops	753	635.6	625.4	652.8	656.4	-	499.9	493.7	511.8	515.5	-
Automotive and tire repair shops	7532.4	220.3	216.2	230.8	231.6	-	179.5	176.6	187.4	187.9	-
General automotive repair shops	7538	272.0	268.4	275.9	277.0	-	208.1	206.9	209.2	210.9	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers ¹				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Services—Continued											
Auto repair, services, and parking—Continued											
Automotive services, except repair	754	235.2	234.8	244.4	242.4	—	200.9	200.6	209.5	207.2	—
Carwashes	7542	126.0	127.4	134.3	134.4	—	111.7	113.3	119.1	118.7	—
Miscellaneous repair services	76	381.9	377.6	389.6	395.9	398.9	312.7	308.7	318.4	324.8	—
Electrical repair shops	762	113.4	112.2	116.0	117.6	—	—	—	—	—	—
Motion pictures	78	573.4	568.5	582.0	582.7	588.1	478.7	475.3	489.9	490.0	—
Motion picture production and services	781	252.1	249.9	256.0	257.0	—	209.8	208.1	217.1	218.6	—
Motion picture theaters	783	138.1	135.0	138.6	138.3	—	—	—	—	—	—
Video tape rental	784	165.3	165.4	167.5	168.4	—	132.5	133.3	134.9	135.3	—
Amusement and recreation services	79	1,600.8	1,562.7	1,514.9	1,651.8	1,769.2	1,401.7	1,363.5	1,305.1	1,435.7	—
Bowling centers	793	81.8	87.0	88.0	86.3	—	72.6	77.7	78.7	76.7	—
Misc. amusement and recreation services	799	1,189.3	1,152.4	1,110.1	1,211.4	—	1,042.8	1,007.0	957.5	1,057.2	—
Physical fitness facilities	7991	175.8	174.8	187.1	187.2	—	156.3	155.9	166.4	165.9	—
Membership sports and recreation clubs	7997	336.6	312.4	281.9	331.2	—	296.7	273.4	240.1	288.1	—
Health services	80	9,845.9	9,803.9	9,918.8	9,938.2	9,945.3	8,723.7	8,686.4	8,786.0	8,800.8	—
Offices and clinics of medical doctors	801	1,802.9	1,784.0	1,845.7	1,852.7	1,855.8	1,485.8	1,470.3	1,518.9	1,523.5	—
Offices and clinics of dentists	802	645.9	640.0	660.0	663.2	—	562.7	558.0	576.9	579.3	—
Offices and clinics of other health practitioners	804	449.7	449.6	449.7	450.9	—	373.1	371.5	375.1	376.3	—
Offices and clinics of chiropractors and optometrists	8041,2	165.8	166.0	165.7	166.0	—	—	—	—	—	—
Nursing and personal care facilities	805	1,762.0	1,761.4	1,750.2	1,748.6	1,750.5	1,584.6	1,584.2	1,572.2	1,569.5	—
Skilled nursing care facilities	8051	1,348.0	1,346.9	1,340.0	1,337.7	—	—	—	—	—	—
Intermediate care facilities	8052	200.8	200.4	201.4	202.1	—	180.5	180.4	180.4	180.7	—
Nursing and personal care, nec	8059	213.1	214.1	208.8	208.8	—	—	—	—	—	—
Hospitals	806	3,926.1	3,905.5	3,957.9	3,960.0	3,961.3	3,597.9	3,579.3	3,627.2	3,630.2	—
General medical and surgical hospitals	8062	3,624.6	3,606.3	3,650.2	3,651.2	—	—	—	—	—	—
Psychiatric hospitals	8063	79.9	79.2	82.0	82.1	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric	8069	221.6	220.0	225.7	226.7	—	—	—	—	—	—
Medical and dental laboratories	807	198.5	197.1	200.9	200.8	—	—	—	—	—	—
Home health care services	808	671.6	680.3	652.0	655.8	655.3	618.2	626.0	600.3	603.5	—
Legal services	81	972.5	958.7	989.5	992.0	992.1	776.8	763.7	790.8	792.5	—
Educational services	82	2,177.1	2,295.5	2,385.8	2,390.7	2,298.9	—	—	—	—	—
Elementary and secondary schools	821	653.6	658.0	697.0	693.8	—	—	—	—	—	—
Colleges and universities	822	1,248.8	1,361.3	1,395.1	1,399.8	—	—	—	—	—	—
Vocational schools	824	86.2	86.5	92.4	93.7	—	—	—	—	—	—
Social services	83	2,643.8	2,626.5	2,752.4	2,772.5	2,787.9	2,290.0	2,274.1	2,381.5	2,397.8	—
Individual and family services	832	713.5	703.6	743.8	747.5	—	618.8	609.7	646.3	649.4	—
Job training and related services	833	369.4	357.9	375.6	380.9	—	319.8	306.8	324.6	329.4	—
Child day care services	835	604.5	616.0	642.2	647.4	653.9	534.0	546.4	565.7	569.9	—
Residential care	836	746.7	740.8	768.5	772.9	774.7	647.3	641.9	665.5	668.5	—
Social services, nec	839	209.8	208.2	222.3	223.8	—	170.2	169.3	179.4	180.6	—
Museums and botanical and zoological gardens	84	92.6	91.1	88.9	93.0	97.1	—	—	—	—	—
Membership organizations	86	2,361.1	2,344.3	2,378.7	2,380.8	2,390.7	—	—	—	—	—
Business associations	861	108.7	107.3	110.0	110.6	—	—	—	—	—	—
Professional organizations	862	61.5	61.0	64.1	65.6	—	44.5	44.1	46.6	47.7	—
Labor organizations	863	142.9	144.2	151.4	146.4	—	—	—	—	—	—
Civic and social associations	864	455.2	441.1	454.0	456.3	—	—	—	—	—	—
Engineering and management services	87	3,185.3	3,145.2	3,361.5	3,386.0	3,378.5	2,432.9	2,408.4	2,535.8	2,543.9	—
Engineering and architectural services	871	905.2	888.9	923.3	928.7	934.2	744.1	729.1	755.0	759.7	—
Engineering services	8711	686.7	676.0	697.3	700.5	—	570.9	561.1	576.8	579.5	—
Architectural services	8712	158.9	155.0	165.8	166.9	—	124.4	120.7	129.5	130.7	—
Surveying services	8713	59.6	57.9	60.2	61.3	—	48.8	47.3	48.7	49.5	—
Accounting, auditing, and bookkeeping	872	632.2	649.1	682.5	684.7	—	446.8	464.9	478.1	477.5	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Services—Continued											
Engineering and management services—Continued											
Research and testing services	873	614.0	606.5	638.0	641.6	—	470.8	467.2	477.9	476.1	—
Commercial physical research	8731	231.7	228.2	239.4	240.0	—	160.4	158.7	156.2	151.9	—
Noncommercial research organizations	8732	140.3	139.4	148.6	148.8	—	117.3	117.1	123.0	123.1	—
Management and public relations	8733	142.6	140.9	149.9	151.4	—	112.0	111.0	117.7	118.8	—
Management services	874	1,033.9	1,000.7	1,117.7	1,131.0	1,143.0	771.2	747.2	824.8	830.6	—
Management consulting services	8741	337.6	325.8	369.0	373.2	—	251.8	242.4	273.2	275.2	—
Public relations services	8742	380.0	365.8	417.0	420.0	—	281.3	271.6	303.9	305.3	—
Management consulting services	8743	41.8	40.5	46.5	47.1	—	28.0	27.2	30.5	30.6	—
Services, nec	8743	41.8	40.5	46.5	47.1	—	28.0	27.2	30.5	30.6	—
Services, nec	89	52.1	50.8	54.7	55.6	56.0	41.0	40.1	43.3	44.1	—
Government		19,819	20,090	20,482	20,468	20,502	—	—	—	—	—
Federal Government ⁴		2,686	2,668	2,697	2,681	2,673	—	—	—	—	—
Executive, by agency ⁴		2,624.6	2,605.4	2,635.3	—	—	—	—	—	—	—
Department of Defense		665.3	666.4	645.2	—	—	—	—	—	—	—
Postal Service ⁵		866.9	853.2	872.3	—	—	—	—	—	—	—
Other executive agencies		1,092.4	1,085.8	1,117.8	—	—	—	—	—	—	—
Legislative		30.7	31.7	30.2	—	—	—	—	—	—	—
Judicial		30.8	30.5	31.3	—	—	—	—	—	—	—
Federal Government, except Postal Service		1,819.3	1,814.4	1,824.5	1,810.0	1,803.3	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities		49.4	49.4	47.9	47.7	—	—	—	—	—	—
Ship building and repairing	3731	21.6	21.5	21.1	21.1	—	—	—	—	—	—
Transportation and public utilities, except Postal Service		13.6	13.6	13.3	13.4	—	—	—	—	—	—
Services		351.4	352.0	340.7	344.1	—	—	—	—	—	—
Hospitals	806	223.1	223.9	220.1	220.2	—	—	—	—	—	—
State government		4,612	4,709	4,800	4,812	4,749	—	—	—	—	—
Construction		87.5	86.2	87.1	87.1	—	—	—	—	—	—
Transportation and public utilities		52.2	52.4	52.0	52.5	—	—	—	—	—	—
Services		2,632.0	2,745.2	2,809.1	2,809.4	—	—	—	—	—	—
Hospitals	806	347.9	347.3	349.7	346.4	—	—	—	—	—	—
Education	82	1,916.3	2,034.6	2,086.1	2,088.5	2,012.8	—	—	—	—	—
Social services		208.1	206.5	211.5	212.1	—	—	—	—	—	—
Services, except hospitals, education, and social services		159.8	156.8	161.8	162.4	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		1,839.7	1,824.7	1,852.2	1,862.9	—	—	—	—	—	—
State government, except education		2,695.1	2,673.9	2,714.3	2,723.4	2,736.5	—	—	—	—	—
Local government		12,521	12,713	12,985	12,975	13,080	—	—	—	—	—
Transportation and public utilities		452.9	452.0	452.2	454.3	—	—	—	—	—	—
Services		8,258.7	8,540.9	8,765.2	8,734.1	—	—	—	—	—	—
Hospitals	806	635.2	630.9	642.9	643.3	—	—	—	—	—	—
Education	82	7,081.5	7,380.3	7,592.4	7,553.3	7,593.6	—	—	—	—	—
Social services		140.5	138.7	140.4	141.3	—	—	—	—	—	—
Services, except hospitals, education, and social services		401.4	391.0	389.5	396.2	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions		3,809.4	3,719.9	3,767.3	3,786.2	—	—	—	—	—	—
Local government, except education		5,439.5	5,332.5	5,392.3	5,421.3	5,486.7	—	—	—	—	—

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

² 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: Data have been revised to reflect March 1998 benchmarks. See the article in this issue for additional information.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	Avg. 1998	Mar. 1998	Jan. 1999	Feb. 1999	Mar. 1999
Total	60,834	60,332	60,997	61,484	61,755
Total private	49,770	49,035	49,756	49,979	50,179
Goods-producing	6,739	6,728	6,616	6,599	6,595
Mining	84	84	81	81	81
Construction	664	636	664	667	672
Manufacturing	5,991	6,008	5,871	5,851	5,842
Durable goods	2,974	2,993	2,930	2,924	2,921
Lumber and wood products	143.6	139.7	145.3	145.2	146.2
Furniture and fixtures	167.7	166.5	169.3	169.5	169.5
Stone, clay, and glass products	105.1	104.5	103.2	102.7	102.6
Primary metal industries	104.4	104.4	102.5	102.0	101.3
Fabricated metal products	336.9	335.6	338.4	337.2	335.7
Industrial machinery and equipment	481.9	491.1	467.5	467.5	466.6
Electronic and other electrical equipment	702.6	715.6	679.7	676.2	675.7
Transportation equipment	403.9	404.0	407.8	405.2	406.0
Instruments and related products	356.2	358.8	351.6	351.7	349.8
Miscellaneous manufacturing	171.9	173.0	165.1	166.3	167.5
Nondurable goods	3,017	3,015	2,941	2,927	2,921
Food and kindred products	554.2	533.4	543.2	536.8	536.9
Tobacco products	13.0	13.0	13.9	13.4	11.7
Textile mill products	276.8	277.9	266.8	265.4	264.3
Apparel and other textile products	557.1	576.4	514.4	509.8	506.3
Paper and allied products	163.8	165.0	160.1	159.9	159.2
Printing and publishing	704.8	702.1	699.0	697.9	697.8
Chemicals and allied products	334.3	331.9	332.0	333.3	334.4
Petroleum and coal products	24.5	24.2	23.8	24.0	24.0
Rubber and misc. plastics products	344.8	345.6	347.6	346.5	346.6
Leather and leather products	43.8	45.0	40.6	40.2	39.9
Service-producing	54,095	53,604	54,381	54,885	55,160
Transportation and public utilities	1,985	1,954	2,024	2,042	2,045
Wholesale trade	2,100	2,073	2,108	2,114	2,120
Retail trade	11,749	11,387	11,679	11,613	11,640
Finance, insurance, and real estate	4,650	4,586	4,718	4,728	4,738
Services	22,548	22,307	22,611	22,883	23,041
Government	11,064	11,297	11,241	11,505	11,576
Federal	1,139	1,132	1,131	1,141	1,143
State	2,366	2,415	2,360	2,456	2,474
Local	7,559	7,750	7,750	7,908	7,959

NOTE: Data have been revised to reflect March 1998 benchmarks.

See the article in this issue for additional information.

**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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Alabama	1,904.5	1,929.0	1,936.5	10.6	10.3	10.2	102.2	105.2	107.1
Birmingham	475.0	479.6	482.4	3.3	2.7	2.7	28.4	30.0	30.5
Huntsville	178.0	177.1	177.9	(1)	(1)	(1)	6.3	6.4	6.7
Mobile	227.1	230.2	232.2	(1)	(1)	(1)	18.9	17.8	18.3
Montgomery	160.4	164.9	165.5	(1)	(1)	(1)	8.7	8.8	9.0
Tuscaloosa	80.3	83.1	83.2	2.7	2.8	2.8	5.3	5.6	5.7
Alaska	268.4	267.5	270.5	10.1	9.6	9.3	11.7	10.8	11.8
Anchorage	126.5	127.8	129.1	2.6	2.6	2.4	5.9	5.7	6.2
Arizona	2,074.3	2,143.4	2,146.1	12.9	12.4	12.5	138.4	152.4	153.1
Phoenix-Mesa	1,453.2	1,503.4	1,504.5	5.6	5.5	5.6	101.5	111.5	111.8
Tucson	326.9	337.8	337.9	2.2	2.1	2.0	19.2	21.4	21.6
Arkansas	1,120.0	1,129.4	1,136.0	3.5	3.1	3.2	47.2	47.4	48.8
Fayetteville-Springdale-Rogers	140.7	143.1	144.4	(1)	(1)	(1)	5.4	5.3	5.6
Fort Smith	97.2	97.9	98.3	.9	.7	.7	4.2	4.2	4.2
Little Rock-North Little Rock	307.5	308.9	309.1	(1)	(1)	(1)	14.0	14.1	14.1
Pine Bluff	35.8	36.2	36.2	(1)	(1)	(1)	.9	.9	.9
California	13,446.1	13,822.1	13,857.1	25.4	23.5	23.5	570.4	611.3	621.1
Bakersfield	183.4	187.2	188.2	9.3	8.5	8.4	9.9	10.0	10.4
Fresno	274.0	280.7	282.6	.4	.3	.3	13.3	14.3	14.5
Los Angeles-Long Beach	3,924.6	4,007.9	4,008.3	4.8	4.5	4.5	113.0	119.0	120.5
Modesto	134.8	137.1	138.7	(2)	(2)	(2)	7.7	7.8	8.2
Oakland	967.9	994.3	997.3	1.7	1.7	1.7	49.7	54.3	55.1
Orange County	1,282.9	1,325.9	1,329.3	.9	.9	.9	60.7	64.6	64.6
Riverside-San Bernardino	867.6	905.9	906.6	1.0	1.0	1.0	58.0	60.0	61.2
Sacramento	642.3	660.6	662.3	.2	.2	.2	33.4	36.6	37.1
Salinas	118.9	122.4	123.6	.1	.1	.1	5.2	5.6	5.6
San Diego	1,089.8	1,116.3	1,119.3	.3	.3	.3	58.6	61.4	61.3
San Francisco	1,001.9	1,023.4	1,026.9	.5	.5	.5	36.0	38.8	39.9
San Jose	953.3	957.1	957.0	.1	.1	.1	39.4	41.9	42.6
Santa Barbara-Santa Maria-Lompoc	154.6	156.4	157.3	.8	.7	.7	6.6	6.9	6.9
Santa Rosa	172.1	178.1	177.8	.4	.5	.5	9.3	9.6	9.9
Stockton-Lodi	168.7	171.8	172.3	.1	.1	.1	7.9	8.4	8.8
Vallejo-Fairfield-Napa	153.0	158.4	160.4	.5	.5	.5	10.3	11.0	11.1
Ventura	249.0	257.8	259.1	1.3	1.2	1.1	11.6	13.6	14.0
Colorado	2,020.2	2,083.3	2,069.5	13.9	13.3	12.9	125.9	133.3	134.7
Boulder-Longmont	162.2	167.0	167.1	(1)	(1)	(1)	7.2	7.5	7.5
Colorado Springs	221.9	226.1	226.6	(1)	(1)	(1)	12.7	12.3	12.6
Denver	1,082.1	1,109.8	1,114.7	6.8	6.4	6.2	65.6	71.1	72.0
Connecticut	1,635.7	1,647.7	1,659.1	.8	.7	.9	56.9	55.0	58.7
Bridgeport	186.4	185.4	186.7	(2)	(2)	(2)	6.2	5.9	6.6
Danbury	88.0	87.4	87.8	(1)	(1)	(1)	3.7	3.6	3.8
Hartford	603.2	606.8	606.8	(1)	(1)	(1)	19.5	17.9	19.3
New Haven-Meriden	254.2	255.0	257.0	(1)	(1)	(1)	9.4	9.1	9.6
New London-Norwich	135.7	137.3	137.9	(1)	(1)	(1)	4.5	4.4	4.6
Stamford-Norwalk	205.0	203.2	204.8	(1)	(1)	(1)	5.8	5.6	5.8
Waterbury	86.0	85.6	85.5	(2)	(2)	(2)	3.3	3.2	3.5
Delaware	395.7	403.6	407.8	.1	.1	.1	21.8	22.6	23.9
Dover	52.7	54.0	54.1	.1	.1	.1	2.5	2.5	2.5
Wilmington-Newark	308.4	316.5	319.5	.2	.2	.2	15.7	16.6	17.6
District of Columbia	612.5	613.4	614.1	.1	.1	.1	9.0	8.9	9.0
Washington PMSA	2,519.9	2,587.6	2,594.3	1.1	1.2	1.2	128.5	130.4	134.0
Florida	6,661.5	6,902.9	6,905.3	6.7	6.9	6.9	346.7	362.8	362.8
Daytona Beach	154.4	160.0	159.3	(2)	(2)	(2)	7.9	8.1	8.0
Fort Lauderdale	644.2	661.4	661.2	.1	.1	.1	35.0	35.7	35.8
Fort Myers-Cape Coral	159.9	164.3	163.8	(2)	(2)	(2)	13.9	14.5	14.5
Gainesville	115.2	118.3	119.5	(2)	(2)	(2)	4.7	4.6	4.8
Jacksonville	530.9	546.9	547.0	(2)	(2)	(2)	28.5	29.0	29.1
Lakeland-Winter Haven	175.5	181.3	181.8	3.2	3.1	3.1	9.9	10.0	10.1
Melbourne-Titusville-Palm Bay	180.3	187.2	187.3	(2)	(2)	(2)	9.3	10.1	10.0
Miami	971.5	992.3	992.4	.3	.3	.3	33.6	35.5	35.7
Orlando	834.3	873.3	873.4	(2)	(2)	(2)	46.1	49.4	48.9
Pensacola	155.6	160.1	162.1	(2)	(2)	(2)	10.9	11.3	11.3
Sarasota-Bradenton	253.0	259.7	261.8	(2)	(2)	(2)	12.9	13.3	13.4
Tallahassee	152.4	156.8	156.1	(2)	(2)	(2)	5.9	6.2	6.1
Tampa-St. Petersburg-Clearwater	1,117.9	1,176.3	1,175.9	.4	.5	.5	54.2	57.0	57.4
West Palm Beach-Boca Raton	473.1	497.4	500.8	(2)	(2)	(2)	26.3	27.6	27.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Alabama	380.4	372.5	371.1	91.3	93.1	93.8	435.8	446.7	447.7
Birmingham	52.4	52.4	52.2	30.5	31.2	31.4	114.8	115.4	115.8
Huntsville	39.5	36.9	36.9	4.0	4.1	4.2	35.1	36.0	36.0
Mobile	28.0	27.5	27.3	12.7	13.0	12.9	59.4	62.4	62.6
Montgomery	18.4	18.5	18.3	6.6	6.8	6.9	37.7	38.6	38.7
Tuscaloosa	11.9	12.6	12.5	2.5	2.5	2.5	18.8	19.9	20.0
Alaska	14.0	15.0	13.4	24.4	24.3	24.7	54.5	53.8	55.4
Anchorage	2.0	2.0	2.0	12.9	13.0	13.2	30.4	30.7	30.9
Arizona	215.9	217.6	217.6	99.3	104.9	105.6	496.1	516.5	515.9
Phoenix-Mesa	169.3	170.4	170.4	73.0	78.7	79.0	351.5	365.8	365.1
Tucson	28.9	29.4	29.6	13.5	13.4	13.6	69.9	72.7	72.3
Arkansas	253.5	253.2	253.1	66.7	67.9	68.4	254.3	256.6	258.1
Fayetteville-Springdale-Rogers	33.8	34.3	34.3	9.6	10.2	10.2	39.7	40.5	40.9
Fort Smith	27.3	27.4	27.6	6.5	6.4	6.4	19.6	19.9	19.8
Little Rock-North Little Rock	33.6	33.4	33.4	21.5	21.7	21.7	70.2	71.2	71.0
Pine Bluff	8.4	8.4	8.4	1.7	1.8	1.8	7.1	7.1	7.1
California	1,947.0	1,941.6	1,939.1	685.3	700.4	703.7	3,070.0	3,123.7	3,121.9
Bakersfield	9.8	9.7	9.7	10.4	10.4	10.7	42.1	43.2	43.1
Fresno	29.0	29.2	29.6	13.2	13.9	14.1	66.6	67.3	67.2
Los Angeles-Long Beach	668.6	667.5	665.7	221.3	227.5	227.9	861.2	877.9	878.8
Modesto	24.9	26.3	26.3	5.2	5.1	5.1	34.1	33.8	34.0
Oakland	122.7	122.5	123.7	61.7	64.1	64.1	215.3	220.6	220.0
Orange County	234.2	241.1	240.8	45.9	48.0	48.4	316.3	322.6	322.3
Riverside-San Bernardino	108.0	114.4	114.9	45.0	47.2	47.6	219.6	227.3	226.5
Sacramento	46.1	45.5	45.7	25.6	26.6	26.7	137.4	139.1	139.4
Salinas	9.2	9.3	9.4	5.4	5.2	5.4	30.5	31.7	32.0
San Diego	126.6	126.6	125.5	44.0	45.6	46.0	242.7	249.0	249.3
San Francisco	77.3	77.3	76.0	80.5	80.7	81.1	207.9	212.4	213.0
San Jose	265.0	254.7	253.6	28.6	29.0	29.1	182.7	182.8	182.2
Santa Barbara-Santa Maria-Lompoc	17.9	17.5	17.6	5.2	5.0	5.1	36.7	37.7	38.1
Santa Rosa	27.7	28.2	28.2	6.4	6.8	6.8	42.3	43.2	43.2
Stockton-Lodi	22.3	23.3	23.0	11.9	11.7	12.0	40.1	40.1	40.3
Vallejo-Fairfield-Napa	18.1	19.1	18.8	6.4	6.3	6.4	39.2	40.3	40.6
Ventura	34.5	34.3	34.6	10.3	10.2	10.2	59.1	60.4	60.2
Colorado	206.9	205.5	205.4	127.4	132.5	132.7	483.1	500.7	500.6
Boulder-Longmont	32.0	32.5	32.6	3.9	4.3	4.3	34.4	35.0	35.1
Colorado Springs	27.2	27.2	27.1	11.2	12.1	12.1	48.2	50.1	50.5
Denver	93.1	92.2	92.0	90.2	95.4	95.8	255.5	265.8	267.3
Connecticut	279.3	276.2	276.0	74.8	75.9	75.5	349.8	351.7	351.9
Bridgeport	39.2	38.2	38.3	7.0	7.0	6.9	41.6	41.3	41.0
Danbury	19.8	18.9	18.8	2.7	2.7	2.7	21.5	21.4	21.5
Hartford	95.6	95.5	95.1	26.0	27.0	26.6	122.4	123.4	122.9
New Haven-Meriden	40.0	40.5	40.5	16.1	16.7	16.6	53.2	53.3	53.6
New London-Norwich	24.2	24.1	24.1	6.6	6.6	6.7	26.7	27.2	27.0
Stamford-Norwalk	27.8	26.5	26.4	10.4	10.1	10.1	43.6	42.7	42.4
Waterbury	18.9	18.6	18.6	3.6	3.7	3.7	17.7	18.1	17.9
Delaware	59.7	59.7	59.0	16.1	17.3	17.3	84.6	85.9	87.5
Dover	6.2	6.1	6.1	2.0	2.0	2.0	12.2	12.2	12.1
Wilmington-Newark	45.4	45.4	45.2	13.8	14.9	15.0	61.6	62.8	63.4
District of Columbia	12.4	12.1	12.1	16.1	15.6	15.7	47.7	47.2	48.1
Washington PMSA	101.8	104.0	104.0	115.4	120.7	121.6	465.0	473.0	472.0
Florida	495.8	498.1	497.2	332.9	348.5	349.8	1,682.6	1,729.9	1,723.2
Daytona Beach	14.0	14.5	14.3	4.7	5.1	5.1	43.1	44.0	43.5
Fort Lauderdale	39.7	39.7	39.5	30.3	30.7	30.4	181.1	187.1	185.8
Fort Myers-Cape Coral	7.0	7.2	7.2	7.4	7.8	7.7	44.9	46.1	45.7
Gainesville	5.5	5.2	5.2	2.4	2.6	2.7	23.2	24.0	24.1
Jacksonville	39.0	40.1	40.3	37.3	38.5	38.5	127.6	129.8	129.6
Lakeland-Winter Haven	20.6	20.8	20.7	8.8	8.9	9.0	48.6	51.1	51.1
Melbourne-Titusville-Palm Bay	26.8	27.2	27.0	5.5	5.9	6.0	42.7	44.9	44.9
Miami	74.9	75.5	75.9	85.0	88.4	88.5	253.7	258.0	257.6
Orlando	53.8	54.3	54.0	42.8	44.5	44.5	202.6	210.7	211.1
Pensacola	10.7	10.3	10.2	7.3	7.7	7.7	40.1	42.1	43.0
Sarasota-Bradenton	21.1	21.9	22.0	5.3	5.2	5.2	60.4	62.0	61.7
Tallahassee	4.9	4.9	4.9	4.1	4.2	4.2	30.4	31.2	30.8
Tampa-St. Petersburg-Clearwater	89.1	89.3	89.1	48.1	52.7	53.2	260.7	266.8	264.2
West Palm Beach-Boca Raton	31.1	32.7	32.0	16.0	16.4	16.4	119.5	127.2	126.1

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Alabama	87.1	88.2	88.6	447.3	457.3	462.2	349.8	355.7	355.8
Birmingham	35.0	36.6	36.6	141.4	143.2	145.4	69.2	68.1	67.8
Huntsville	4.8	4.7	4.7	49.4	50.4	50.8	38.9	38.6	38.6
Mobile	9.9	10.0	10.0	63.1	63.6	65.1	35.1	35.9	36.0
Montgomery	9.8	9.8	9.8	42.3	44.7	45.0	36.9	37.7	37.8
Tuscaloosa	2.4	2.5	2.5	14.7	14.5	14.5	22.0	22.7	22.7
Alaska	12.2	12.4	12.4	66.5	66.5	67.8	75.0	75.1	75.7
Anchorage	7.4	7.4	7.4	36.4	36.9	37.5	28.9	29.5	29.5
Arizona	138.4	144.2	144.6	623.2	641.3	644.0	350.1	354.1	352.8
Phoenix-Mesa	116.1	122.3	122.6	450.0	457.9	459.5	186.2	191.3	190.5
Tucson	12.7	13.3	13.4	106.0	110.1	110.3	74.5	75.4	75.1
Arkansas	44.8	45.4	45.4	262.0	265.7	268.6	188.0	190.1	190.4
Fayetteville-Springdale-Rogers	5.1	5.3	5.3	27.8	27.9	28.5	19.3	19.6	19.6
Fort Smith	3.1	3.1	3.2	25.5	25.9	26.1	10.1	10.3	10.3
Little Rock-North Little Rock	17.9	17.9	17.9	90.0	89.8	90.4	60.3	60.8	60.6
Pine Bluff	1.3	1.3	1.3	8.6	8.6	8.6	7.8	8.1	8.1
California	789.7	808.0	809.0	4,175.4	4,366.3	4,386.5	2,182.9	2,247.3	2,252.3
Bakersfield	7.0	7.5	7.5	44.9	47.0	47.5	50.0	50.9	50.9
Fresno	13.9	14.0	14.1	70.5	72.4	73.2	67.1	69.3	69.6
Los Angeles-Long Beach	225.6	229.6	230.0	1,286.1	1,326.3	1,324.7	544.0	555.6	556.2
Modesto	4.5	4.4	4.5	34.1	35.6	36.0	24.3	24.1	24.6
Oakland	55.5	55.7	55.8	290.3	300.0	300.9	171.0	175.4	176.0
Orange County	98.4	101.6	101.8	388.5	403.8	407.2	138.0	143.3	143.3
Riverside-San Bernardino	30.3	30.5	30.6	232.5	242.7	241.9	175.2	182.8	182.9
Sacramento	46.4	48.7	48.7	180.2	189.0	189.2	173.0	174.9	175.3
Salinas	5.9	6.1	6.1	33.7	35.1	35.5	28.9	29.3	29.5
San Diego	64.0	64.5	64.6	357.1	366.0	368.5	196.5	202.9	203.8
San Francisco	107.6	106.3	106.1	369.6	381.3	383.3	122.5	126.1	127.0
San Jose	31.7	32.5	32.5	315.9	324.5	325.5	89.9	91.6	91.4
Santa Barbara-Santa Maria-Lompoc	7.5	7.4	7.4	47.4	48.0	48.3	32.5	33.2	33.2
Santa Rosa	9.9	10.5	10.4	49.6	51.7	51.3	26.5	27.6	27.5
Stockton-Lodi	8.6	8.4	8.5	42.7	44.1	43.9	35.1	35.7	35.7
Vallejo-Fairfield-Napa	6.1	6.2	6.3	40.4	42.4	43.0	32.0	32.6	33.7
Ventura	13.3	14.2	14.0	76.1	79.0	80.1	42.8	44.9	44.9
Colorado	133.7	138.6	138.9	603.7	628.4	613.4	325.6	331.0	330.9
Boulder-Longmont	5.8	6.3	6.3	52.0	54.2	54.4	26.9	27.2	26.9
Colorado Springs	12.6	12.9	12.9	74.0	74.8	74.8	36.0	36.7	36.6
Denver	88.2	90.2	90.7	334.4	339.4	341.5	148.3	149.3	149.2
Connecticut	133.6	138.4	138.0	509.6	514.3	523.2	230.9	235.5	234.9
Bridgeport	10.4	10.6	10.6	60.2	61.0	61.7	21.8	21.4	21.6
Danbury	4.6	5.0	4.9	25.2	25.1	25.6	10.5	10.7	10.5
Hartford	69.8	70.9	70.2	174.6	174.4	175.8	95.3	97.7	96.9
New Haven-Meriden	13.4	13.5	13.5	91.0	90.9	92.3	31.1	31.0	30.9
New London-Norwich	3.6	3.8	3.8	35.0	35.0	35.6	35.1	36.2	36.1
Stamford-Norwalk	24.7	25.5	25.3	74.6	75.2	77.0	18.1	17.6	17.8
Waterbury	3.6	3.7	3.6	26.6	26.3	26.4	12.3	12.0	11.8
Delaware	47.3	50.0	50.0	110.9	112.1	113.7	55.2	55.9	56.3
Dover	2.1	2.2	2.2	12.2	13.0	12.8	15.5	16.0	16.4
Wilmington-Newark	41.6	44.3	44.2	90.3	91.6	93.3	39.8	40.7	40.6
District of Columbia	28.6	28.9	28.7	271.9	277.5	276.7	226.7	223.1	223.7
Washington PMSA	138.0	141.2	140.9	987.5	1,028.8	1,031.8	582.6	588.3	588.8
Florida	427.4	442.2	442.3	2,398.9	2,524.1	2,532.5	970.5	990.4	990.6
Daytona Beach	6.9	7.0	7.0	54.6	58.1	58.2	23.2	23.2	23.2
Fort Lauderdale	47.8	49.8	50.0	223.9	231.9	232.8	86.3	86.4	86.8
Fort Myers-Cape Coral	9.1	9.3	9.2	51.7	53.2	53.1	25.7	26.0	26.2
Gainesville	5.1	5.1	5.1	35.2	37.0	37.9	39.1	39.8	39.7
Jacksonville	55.8	57.1	56.9	174.6	182.7	182.6	67.7	69.2	69.5
Lakeland-Winter Haven	8.4	8.8	8.8	49.8	52.1	52.6	26.2	26.5	26.4
Melbourne-Titusville-Palm Bay	6.3	6.5	6.5	64.7	67.3	67.4	25.0	25.3	25.5
Miami	67.0	65.9	66.7	318.4	327.3	326.5	138.6	141.4	141.2
Orlando	48.3	51.5	51.9	351.4	371.2	371.3	88.9	91.2	91.2
Pensacola	6.0	6.2	6.3	51.0	52.5	53.7	29.4	29.8	29.7
Sarasota-Bradenton	12.4	12.8	12.8	116.6	119.7	122.1	24.2	24.7	24.5
Tallahassee	6.2	6.4	6.5	41.3	43.1	42.9	59.4	60.6	60.5
Tampa-St. Petersburg-Clearwater	81.7	86.7	86.6	448.2	482.6	484.6	135.5	140.7	140.3
West Palm Beach-Boca Raton	33.9	35.8	35.9	191.0	201.8	206.6	55.3	55.9	56.2

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	Total			Mining			Construction		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Georgia	3,695.7	3,814.7	3,825.6	7.7	7.8	7.9	174.7	189.1	191.7
Albany	59.2	59.5	59.5	(2)	(2)	(2)	3.5	3.5	3.5
Athens	72.2	75.1	73.2	(1)	(1)	(1)	2.8	2.7	2.9
Atlanta	2,011.7	2,079.0	2,085.4	1.6	1.5	1.5	98.1	104.6	106.4
Augusta-Aiken	197.6	197.8	201.4	.4	.4	.4	11.5	11.7	12.0
Columbus	117.0	121.5	122.2	(1)	(1)	(1)	5.3	5.5	5.6
Macon	147.6	149.8	150.3	1.1	1.1	1.1	6.1	5.9	5.9
Savannah	132.7	135.6	136.7	(1)	(1)	(1)	8.0	8.6	8.6
Hawaii	531.8	531.3	530.5	(1)	(1)	(1)	21.3	20.4	20.4
Honolulu	402.2	400.8	399.8	(1)	(1)	(1)	16.6	15.1	15.0
Idaho	514.7	527.8	530.8	2.9	2.6	2.9	30.5	31.2	33.8
Boise City	200.8	204.8	206.2	(1)	(1)	(1)	13.5	12.7	13.3
Illinois	5,852.0	5,886.6	5,953.0	10.7	10.3	10.5	230.7	216.2	239.9
Bloomington-Normal	83.4	84.2	84.9	(1)	(1)	(1)	2.7	2.7	2.8
Champaign-Urbana	98.1	98.9	98.9	(1)	(1)	(1)	3.3	2.9	3.1
Chicago	4,089.5	4,145.4	4,187.8	1.6	1.7	1.8	158.7	152.1	166.7
Davenport-Moline-Rock Island	181.4	180.2	181.7	(1)	(1)	(1)	8.8	7.9	9.1
Decatur	56.5	56.4	56.9	(1)	(1)	(1)	3.9	3.5	3.9
Kankakee	43.0	43.6	43.8	(1)	(1)	(1)	1.8	1.8	1.9
Peoria-Pekin	174.5	174.4	177.1	(1)	(1)	(1)	8.0	7.1	8.1
Rockford	177.8	176.5	177.0	(1)	(1)	(1)	6.7	6.7	6.9
Springfield	113.3	113.5	114.3	(1)	(1)	(1)	4.6	3.7	4.6
Indiana	2,913.7	2,936.2	2,959.7	6.8	6.9	6.9	143.3	131.6	143.0
Bloomington	65.4	64.5	65.2	(1)	(1)	(1)	2.8	2.6	2.9
Elkhart-Goshen	120.4	123.7	124.3	(1)	(1)	(1)	4.7	4.7	5.0
Evansville-Henderson	154.5	158.5	159.4	1.2	1.2	1.2	10.3	9.9	10.2
Fort Wayne	272.9	274.1	274.5	(1)	(1)	(1)	12.6	12.6	12.8
Gary	268.1	268.0	271.3	(1)	(1)	(1)	20.2	20.4	21.5
Indianapolis	843.8	858.0	863.5	.7	.7	.7	44.4	46.1	48.0
Kokomo	52.2	52.1	52.7	(1)	(1)	(1)	1.8	1.7	1.9
Lafayette	95.5	96.2	97.6	(1)	(1)	(1)	3.9	3.5	3.7
Muncie	60.5	60.6	61.3	(1)	(1)	(1)	2.3	2.2	2.4
South Bend	135.2	136.8	137.4	(1)	(1)	(1)	7.1	6.8	7.1
Terre Haute	67.3	67.7	67.7	.2	(2)	(2)	2.9	3.0	3.1
Iowa	1,440.7	1,453.4	1,479.3	2.2	2.0	2.2	59.1	53.5	61.1
Cedar Rapids	115.5	117.7	118.3	(1)	(1)	(1)	6.3	5.6	5.9
Des Moines	277.3	282.4	284.8	(1)	(1)	(1)	12.0	11.3	12.7
Dubuque	51.6	51.2	51.7	(1)	(1)	(1)	1.7	1.5	1.8
Iowa City	69.2	68.6	70.0	(1)	(1)	(1)	2.3	2.2	2.4
Sioux City	65.8	66.8	67.6	(1)	(1)	(1)	2.7	2.7	3.0
Waterloo-Cedar Falls	74.3	73.9	73.9	(1)	(1)	(1)	2.7	2.3	2.5
Kansas	1,313.7	1,332.3	1,348.9	7.6	6.8	7.0	61.1	60.6	65.4
Lawrence	48.4	49.0	49.1	(1)	(1)	(1)	2.2	1.9	2.1
Topeka	101.0	101.2	102.7	(1)	(1)	(1)	4.4	4.1	4.8
Wichita	286.5	289.8	291.3	1.2	1.2	1.2	14.9	14.9	15.3
Kentucky	1,750.6	1,761.1	1,783.9	23.1	23.0	22.9	82.5	79.3	85.0
Lexington	277.2	280.4	283.9	.3	.3	.3	13.1	13.3	13.8
Louisville	561.1	572.0	577.9	.6	.6	.6	28.7	28.4	29.6
Owensboro	43.7	44.6	44.7	.3	.3	.3	3.3	3.4	3.5
Louisiana	1,893.1	1,906.5	1,913.6	57.7	54.3	53.9	126.6	132.2	131.7
Alexandria	55.1	56.1	56.3	.1	.1	.1	3.3	3.6	3.8
Baton Rouge	290.4	299.9	300.0	1.0	1.0	.9	33.5	34.3	33.9
Houma	79.2	79.5	79.7	7.6	6.4	6.4	4.4	4.2	4.2
Lafayette	166.6	167.9	168.4	18.0	17.2	17.0	9.5	9.3	9.5
Lake Charles	88.2	88.3	88.0	1.3	1.2	1.2	11.2	11.2	11.0
Monroe	70.2	71.2	71.3	.2	.2	.2	3.6	3.7	3.7
New Orleans	621.8	624.1	625.2	14.9	14.7	14.3	34.3	35.4	35.4
Shreveport-Bossier City	173.2	176.8	177.0	2.8	2.4	2.3	9.3	10.2	10.0
Maine	557.4	562.5	571.4	.1	.1	.1	23.0	22.4	25.1
Lewiston-Auburn	41.8	43.0	43.2	(2)	(2)	(2)	1.5	1.4	1.5
Portland	142.6	146.6	148.7	(2)	(2)	(2)	6.4	7.3	7.5

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Georgia	589.1	595.0	594.0	239.4	249.9	251.0	918.4	936.5	940.9
Albany	8.8	8.4	8.4	3.5	3.7	3.6	13.8	13.8	13.9
Athens	11.4	11.8	11.6	1.8	1.8	1.8	17.7	18.6	18.2
Atlanta	220.0	221.8	221.6	171.0	178.5	179.4	531.5	540.9	543.9
Augusta-Aiken	41.3	40.7	40.8	6.6	7.0	7.0	42.5	42.3	43.6
Columbus	21.9	22.2	22.1	4.1	4.1	4.2	25.5	25.9	26.2
Macon	19.3	19.2	19.2	5.4	5.3	5.4	33.4	34.2	34.3
Savannah	17.9	18.2	18.0	8.9	8.9	8.8	33.1	34.2	34.9
Hawaii	16.2	16.1	16.1	40.8	40.2	40.3	131.1	130.4	129.6
Honolulu	12.6	12.4	12.4	32.6	31.7	31.6	96.3	95.0	94.4
Idaho	74.9	75.1	74.6	24.7	26.0	25.9	130.1	132.3	132.8
Boise City	36.5	36.1	36.1	10.1	10.7	11.1	47.7	47.7	48.0
Illinois	976.9	970.2	970.8	343.9	350.2	351.2	1,307.8	1,334.5	1,340.4
Bloomington-Normal	8.7	8.4	8.4	3.1	3.2	3.1	17.8	17.6	17.7
Champaign-Urbana	11.5	11.2	11.3	2.6	2.5	2.5	20.9	21.2	21.2
Chicago	658.1	651.3	651.5	252.4	258.5	258.8	904.3	934.9	938.6
Davenport-Moline-Rock Island	31.6	31.5	31.5	10.2	10.3	10.2	47.4	47.6	47.5
Decatur	13.5	13.6	13.5	5.0	5.2	5.2	12.1	11.9	12.0
Kankakee	8.1	8.1	8.1	2.1	2.1	2.2	10.6	10.7	10.8
Peoria-Pekin	33.3	33.7	33.7	10.0	10.2	10.3	41.9	42.0	42.5
Rockford	53.6	52.9	52.9	9.1	9.0	9.0	36.6	36.4	36.4
Springfield	4.7	4.8	4.7	4.8	4.9	4.9	23.0	23.2	23.2
Indiana	683.7	683.6	685.6	142.7	145.1	145.4	680.4	687.8	689.5
Bloomington	9.5	9.1	9.1	1.9	1.8	1.8	14.5	14.5	14.3
Elkhart-Goshen	60.8	63.2	63.5	2.9	3.1	3.1	22.3	22.8	22.9
Evansville-Henderson	32.6	33.6	33.7	7.3	7.4	7.4	37.8	38.9	39.1
Fort Wayne	76.1	74.6	74.7	13.2	13.1	13.1	64.1	63.2	63.2
Gary	50.5	49.8	50.1	14.8	14.3	14.4	61.5	61.3	61.8
Indianapolis	127.7	128.9	129.2	52.0	54.2	54.5	216.4	219.7	220.2
Kokomo	20.9	20.4	20.4	1.2	1.1	1.1	11.3	11.4	11.3
Lafayette	22.4	22.3	22.3	2.3	2.3	2.3	19.0	19.5	19.8
Muncie	10.4	10.7	10.5	3.5	3.7	3.7	13.8	13.6	14.0
South Bend	22.7	22.5	22.6	5.8	5.8	5.9	34.3	33.4	33.6
Terre Haute	11.8	12.1	12.0	2.9	3.1	3.0	18.4	18.1	18.0
Iowa	259.5	263.3	264.8	68.4	70.5	71.7	349.7	352.7	359.4
Cedar Rapids	22.1	22.4	22.6	8.2	8.4	8.5	25.5	25.3	25.5
Des Moines	25.3	25.1	25.1	14.6	14.6	15.3	71.2	72.9	72.9
Dubuque	12.0	12.3	12.1	2.1	1.9	1.9	12.3	12.4	12.3
Iowa City	5.1	5.3	5.2	2.2	2.1	2.1	13.5	13.2	13.6
Sioux City	13.5	13.6	13.9	4.0	3.9	3.9	15.8	16.4	16.3
Waterloo-Cedar Falls	15.1	14.7	14.7	2.6	2.6	2.6	17.1	17.0	17.0
Kansas	213.8	213.5	213.7	73.8	76.5	76.9	315.4	321.9	324.7
Lawrence	5.5	5.3	5.3	1.4	1.3	1.4	11.6	11.8	11.9
Topeka	10.2	10.1	10.1	5.9	5.7	5.7	21.8	21.8	22.1
Wichita	74.0	74.3	74.5	10.8	11.0	11.0	62.6	64.2	64.2
Kentucky	320.4	319.0	318.0	101.9	102.6	105.4	412.1	417.5	423.1
Lexington	48.4	49.7	49.6	11.1	10.9	11.2	61.2	62.5	63.1
Louisville	89.1	88.6	88.4	43.1	43.0	44.3	135.3	138.7	140.4
Owensboro	7.0	6.8	6.8	2.3	2.4	2.4	10.8	11.2	11.2
Louisiana	191.0	189.0	189.9	112.4	114.5	114.9	438.5	442.2	443.3
Alexandria	3.5	3.5	3.4	2.8	2.8	2.8	13.1	13.2	13.4
Baton Rouge	24.2	24.3	24.4	13.0	13.6	13.6	68.5	70.0	70.1
Houma	8.5	8.3	8.5	8.7	8.9	9.0	18.0	18.8	18.7
Lafayette	15.2	14.6	14.7	9.8	10.1	10.0	42.6	44.2	44.1
Lake Charles	12.1	11.9	11.9	4.6	4.7	4.6	18.5	18.8	18.8
Monroe	7.9	7.9	7.9	3.8	3.7	3.7	17.2	17.5	17.8
New Orleans	49.0	49.2	49.6	41.4	41.4	41.1	152.2	152.6	152.4
Shreveport-Bossier City	19.0	19.0	18.9	8.4	8.7	8.8	39.5	40.5	40.7
Maine	86.8	84.6	83.7	23.1	23.6	23.8	134.8	135.3	138.3
Lewiston-Auburn	7.9	7.8	7.7	1.7	1.7	1.7	10.3	10.6	10.7
Portland	14.8	15.0	15.1	6.9	6.7	6.8	39.3	40.0	41.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Georgia	197.5	206.0	206.9	981.7	1,030.9	1,037.0	587.2	599.5	596.2
Albany	2.0	2.1	2.1	14.7	15.1	15.2	12.9	12.9	12.8
Athens	2.4	2.5	2.5	16.1	16.5	16.4	20.0	21.2	19.8
Atlanta	133.8	139.2	139.7	597.9	631.9	634.8	257.8	260.6	258.1
Augusta-Aiken	8.2	6.3	6.3	48.5	48.3	50.2	40.6	41.1	41.1
Columbus	8.1	8.8	8.9	31.6	34.0	34.3	20.5	21.0	20.9
Macon	8.9	9.1	9.6	39.3	39.9	39.6	34.1	35.1	35.2
Savannah	4.6	4.6	4.7	39.1	40.2	40.8	21.1	20.9	20.9
Hawaii	35.4	34.9	35.2	172.2	174.7	174.5	114.8	114.6	114.4
Honolulu	28.3	27.9	28.1	123.5	126.3	126.2	92.3	92.4	92.1
Idaho	22.4	23.6	23.7	125.5	130.3	130.8	103.7	106.5	106.3
Boise City	10.8	11.2	11.3	50.7	53.5	53.7	31.5	32.9	32.7
Illinois	404.5	407.0	410.0	1,751.9	1,772.9	1,805.7	825.6	825.3	824.5
Bloomington-Normal	15.4	16.5	16.6	21.0	20.6	21.1	14.7	15.2	15.2
Champaign-Urbana	3.8	3.9	3.9	21.4	21.5	21.5	34.6	35.7	35.4
Chicago	315.5	317.5	318.5	1,303.0	1,336.3	1,356.2	495.9	493.1	495.7
Davenport-Moline-Rock Island	8.2	8.2	8.3	48.2	48.4	48.5	27.0	26.3	26.6
Decatur	2.0	2.1	2.0	13.5	13.4	13.5	6.5	6.7	6.8
Kankakee	1.7	1.7	1.7	11.9	12.1	12.2	6.8	7.1	6.9
Peoria-Pekin	7.6	7.8	7.9	54.4	54.3	54.8	19.3	19.3	19.8
Rockford	7.2	7.2	7.2	46.6	46.5	46.8	18.0	17.8	17.8
Springfield	7.8	7.7	7.8	34.2	35.1	35.1	34.2	34.1	34.0
Indiana	139.3	145.9	145.8	707.7	717.1	727.3	409.8	418.2	416.2
Bloomington	2.4	2.4	2.4	13.2	13.2	13.5	21.1	20.9	21.2
Elkhart-Goshen	2.7	3.0	3.0	19.1	18.6	18.7	7.9	8.3	8.1
Evansville-Henderson	7.0	7.5	7.6	43.1	44.0	44.2	15.2	16.0	16.0
Fort Wayne	14.7	14.9	14.9	65.1	68.8	69.0	27.1	26.9	26.8
Gary	9.0	9.2	9.2	74.2	73.0	74.4	37.9	40.0	39.9
Indianapolis	62.7	64.6	65.1	231.9	233.1	235.0	107.8	110.7	110.8
Kokomo	1.5	1.5	1.5	8.4	8.9	9.4	7.1	7.1	7.1
Lafayette	4.1	4.2	4.3	18.9	19.6	19.7	24.9	24.8	25.5
Muncie	1.8	1.9	1.9	15.9	15.9	16.3	12.8	12.6	12.5
South Bend	6.8	6.8	6.8	44.6	46.8	47.0	13.9	14.7	14.4
Terre Haute	2.2	2.3	2.3	16.7	16.8	16.9	12.2	12.2	12.3
Iowa	81.9	83.5	84.2	379.4	385.5	392.7	240.5	242.4	243.2
Cedar Rapids	6.3	6.3	6.4	35.6	36.4	36.2	11.5	13.3	13.2
Des Moines	38.8	39.4	39.6	80.5	84.7	85.0	34.9	34.4	34.2
Dubuque	1.8	1.9	1.9	17.9	17.3	17.8	3.8	3.9	3.9
Iowa City	2.1	2.2	2.2	15.5	15.1	15.4	28.5	28.5	29.1
Sioux City	2.7	2.8	2.8	19.3	19.5	19.8	7.8	7.9	7.9
Waterloo-Cedar Falls	3.2	3.0	3.0	20.6	21.1	21.0	13.0	13.2	13.1
Kansas	61.5	62.8	63.1	333.6	340.5	345.2	246.9	249.7	252.9
Lawrence	1.9	2.1	2.1	11.8	11.2	11.2	14.0	15.4	15.1
Topeka	6.8	6.7	6.7	29.4	30.4	30.9	22.5	22.4	22.4
Wichita	11.4	11.7	11.7	77.1	77.4	78.1	34.5	35.1	35.3
Kentucky	69.2	70.5	70.9	440.8	448.5	456.2	300.6	300.7	302.4
Lexington	10.1	10.4	10.4	76.2	76.8	79.0	56.8	56.5	56.5
Louisville	29.4	29.8	29.9	164.7	171.3	172.8	70.2	71.6	71.9
Owensboro	1.9	2.0	2.0	10.9	11.3	11.3	7.2	7.2	7.2
Louisiana	86.5	86.5	86.9	509.4	518.2	521.9	371.0	369.6	371.1
Alexandria	2.4	2.4	2.4	16.7	16.7	16.8	13.2	13.6	13.6
Baton Rouge	18.3	18.4	18.4	73.5	77.3	77.6	58.4	61.0	61.1
Houma	2.1	2.0	2.0	16.4	16.4	16.5	13.5	14.5	14.4
Lafayette	6.2	6.4	6.5	41.6	42.2	42.8	23.7	23.9	23.8
Lake Charles	2.6	2.5	2.5	24.5	24.3	24.3	13.4	13.7	13.7
Monroe	5.1	5.3	5.3	19.2	19.5	19.4	13.2	13.4	13.3
New Orleans	31.9	31.6	31.8	192.2	192.9	194.1	105.9	106.3	106.5
Shreveport-Bossier City	6.3	6.4	6.4	54.7	56.0	56.3	33.2	33.6	33.6
Maine	29.5	30.5	30.9	162.6	167.8	171.6	97.5	96.2	97.9
Lewiston-Auburn	2.1	2.4	2.4	13.4	14.0	14.1	5.0	5.1	5.1
Portland	12.8	13.2	13.2	43.5	44.8	45.5	18.9	19.6	19.4

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Maryland	2,301.4	2,339.8	2,358.0	1.3	1.3	1.4	137.9	138.4	143.1
Baltimore PMSA	1,178.6	1,195.4	1,204.9	.3	.4	.4	62.4	61.8	63.4
Baltimore City	398.3	405.8	408.0	(1)	(1)	(1)	11.6	12.5	12.9
Suburban Maryland-D.C.	847.1	865.8	870.2	(1)	(1)	(1)	61.3	62.1	63.8
Massachusetts	3,159.6	3,172.9	3,207.2	1.3	1.2	1.3	103.0	103.0	111.3
Barnstable-Yarmouth	54.7	54.6	57.7	(1)	(1)	(1)	2.6	2.7	2.8
Boston	1,944.0	1,946.3	1,963.8	.4	.4	.4	58.2	59.6	63.6
Brockton	96.4	97.5	98.8	(2)	(2)	(2)	3.4	3.5	3.9
Fitchburg-Leominster	52.7	52.6	53.6	(2)	(2)	(2)	1.6	1.7	1.9
Lawrence	152.4	152.1	153.9	(2)	(2)	(2)	5.6	5.4	6.0
Lowell	118.1	120.8	121.4	(1)	(1)	(1)	5.2	4.8	5.4
New Bedford	64.5	65.8	66.6	(2)	(2)	(2)	2.4	2.3	2.5
Pittsfield	41.4	41.6	41.9	.1	.1	.1	1.7	1.5	1.7
Springfield	253.2	253.4	255.7	.1	.1	.1	7.7	7.0	8.0
Worcester	230.1	228.5	230.7	.2	.2	.2	7.0	6.4	7.0
Michigan	4,493.4	4,512.3	4,544.8	7.8	7.2	7.4	176.2	168.4	182.8
Ann Arbor	272.7	276.6	276.4	(1)	(1)	(1)	9.8	9.3	9.8
Benton Harbor	70.3	70.5	71.1	(1)	(1)	(1)	2.3	2.3	2.4
Detroit	2,104.9	2,124.3	2,140.3	.9	.9	1.0	77.7	80.0	85.4
Flint	177.6	176.6	175.5	(1)	(1)	(1)	6.8	7.5	7.7
Grand Rapids-Muskegon-Holland ..	559.5	571.0	576.0	(1)	(1)	(1)	26.0	24.8	27.8
Jackson	60.9	61.3	62.0	(1)	(1)	(1)	2.4	2.2	2.5
Kalamazoo-Battle Creek	210.8	211.7	212.3	(1)	(1)	(1)	8.1	7.8	8.4
Lansing-East Lansing	234.5	232.5	236.7	(1)	(1)	(1)	8.5	7.9	8.7
Saginaw-Bay City-Midland	176.3	177.5	178.2	(1)	(1)	(1)	8.2	8.2	8.3
Minnesota	2,538.5	2,555.1	2,583.2	8.0	7.4	7.9	93.2	90.9	99.9
Duluth-Superior	111.4	112.2	113.5	4.9	4.8	4.8	3.9	3.7	4.2
Minneapolis-St. Paul	1,648.6	1,683.5	1,701.1	(2)	(2)	(2)	60.0	59.3	64.8
Rochester	77.0	78.5	79.1	(1)	(1)	(1)	3.0	2.9	3.1
St. Cloud	87.5	87.6	88.9	(1)	(1)	(1)	4.0	3.8	4.2
Mississippi	1,132.4	1,131.0	1,134.3	6.3	6.2	6.1	53.4	56.0	56.3
Jackson	226.1	225.6	226.0	(2)	(2)	(2)	10.8	11.1	11.4
Missouri	2,688.1	2,690.2	2,723.3	4.8	4.9	5.1	122.0	125.8	131.9
Kansas City	940.0	959.1	966.0	(1)	(1)	(1)	46.8	48.7	51.0
St. Louis	1,304.2	1,307.9	1,320.1	(1)	(1)	(1)	65.6	66.3	69.1
Springfield	164.1	165.6	167.5	(1)	(1)	(1)	6.8	7.0	7.1
Montana	368.2	371.6	376.7	5.1	4.9	5.1	17.8	16.1	18.2
Nebraska	871.4	871.7	878.5	1.1	1.1	1.1	39.3	37.5	40.6
Lincoln	146.1	148.3	149.1	(1)	(1)	(1)	6.4	6.3	7.0
Omaha	401.4	402.3	406.2	(1)	(1)	(1)	19.4	18.4	19.6
Nevada	912.7	948.9	953.4	13.3	13.0	13.0	82.5	84.3	85.7
Las Vegas	653.2	685.8	689.0	2.1	2.2	2.2	66.6	68.3	68.6
Reno	180.4	182.6	184.1	.5	.5	.5	11.8	12.3	13.1
New Hampshire	581.1	589.5	591.5	.4	.4	.4	21.7	21.8	23.8
Manchester	99.6	101.2	101.4	(1)	(1)	(1)	4.4	4.2	4.5
Nashua	93.2	93.8	94.3	(1)	(1)	(1)	3.0	2.9	3.1
Portsmouth-Rochester	115.9	116.7	118.0	(1)	(1)	(1)	3.5	3.9	3.9
New Jersey	3,770.9	3,808.3	3,839.6	2.1	1.9	2.1	132.3	127.5	134.4
Atlantic-Cape May	176.1	173.4	177.8	(1)	(1)	(1)	6.6	6.5	6.6
Bergen-Passaic	648.8	658.3	661.8	(1)	(1)	(1)	22.5	21.2	22.8
Camden	480.4	488.2	491.3	(1)	(1)	(1)	21.9	21.4	21.6
Jersey City	242.2	246.1	247.3	(1)	(1)	(1)	5.0	4.8	5.0
Middlesex-Somerset-Hunterdon ..	617.4	624.5	628.2	.5	.5	.5	19.0	18.0	19.2
Monmouth-Ocean	364.8	364.7	370.0	(1)	(1)	(1)	18.3	17.5	18.6
Newark	962.0	973.1	978.9	.8	.8	.9	32.0	30.9	31.6
Trenton	198.9	198.5	197.9	(1)	(1)	(1)	4.6	4.5	4.5
Vineland-Milville-Bridgeton	58.9	58.8	59.6	.3	.3	.3	2.0	1.9	2.0
New Mexico	719.2	726.1	728.3	15.4	13.6	13.7	43.4	42.2	43.1
Albuquerque	338.7	341.4	343.3	(1)	(1)	(1)	21.8	21.5	21.7
Las Cruces	52.5	53.8	53.7	(1)	(1)	(1)	3.2	3.3	3.2
Santa Fe	72.1	72.4	73.1	(1)	(1)	(1)	3.4	3.3	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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Maryland	177.8	176.2	176.5	107.4	110.8	112.0	530.6	529.6	532.0
Baltimore PMSA	100.5	100.2	99.9	57.1	58.2	58.6	269.1	265.4	268.9
Baltimore City	30.6	29.5	29.4	19.4	19.9	20.2	62.7	63.2	64.0
Suburban Maryland-D.C.	39.2	39.8	39.8	35.2	36.8	37.2	195.4	197.6	196.6
Massachusetts	450.7	435.2	435.8	135.9	136.7	137.2	703.3	712.2	719.5
Barnstable-Yarmouth	2.0	2.2	2.2	2.8	2.9	3.0	17.7	17.5	19.0
Boston	225.8	216.1	215.6	84.0	85.3	85.8	409.0	415.5	417.9
Brockton	10.7	10.1	10.1	4.9	4.7	4.8	32.1	32.6	32.8
Fitchburg-Leominster	13.7	13.5	13.6	2.0	2.1	2.0	12.3	12.5	12.7
Lawrence	39.2	37.6	37.5	5.2	5.5	5.5	34.4	35.6	36.0
Lowell	28.7	28.4	28.3	7.1	7.4	7.6	24.7	25.8	25.8
New Bedford	13.3	13.2	13.1	3.6	3.9	3.9	16.4	16.6	17.0
Pittsfield	7.4	7.4	7.3	1.2	1.3	1.2	10.1	10.3	10.3
Springfield	39.0	38.5	38.8	9.8	10.0	9.9	58.0	58.8	59.0
Worcester	41.2	40.9	41.0	9.8	9.4	9.4	51.1	51.7	51.8
Michigan	974.0	961.7	961.4	176.2	177.9	178.9	1,046.5	1,059.5	1,069.0
Ann Arbor	53.0	52.9	52.8	6.4	6.7	6.6	53.9	55.2	55.0
Benton Harbor	19.6	19.4	19.5	2.8	2.9	2.9	15.6	15.5	15.8
Detroit	443.2	437.1	438.7	96.0	95.9	95.4	488.1	501.1	500.8
Flint	40.5	38.8	37.6	5.8	5.9	5.8	43.8	43.5	43.7
Grand Rapids-Muskegon-Holland	157.3	159.4	158.9	18.9	19.3	19.5	138.2	142.3	144.0
Jackson	12.6	12.8	12.8	3.5	3.5	3.5	15.4	15.5	15.8
Kalamazoo-Battle Creek	49.7	49.4	49.3	7.3	7.4	7.4	46.0	46.0	46.4
Lansing-East Lansing	29.8	28.5	28.8	6.2	5.9	6.0	51.5	52.0	52.1
Saginaw-Bay City-Midland	39.6	39.3	39.3	7.2	7.2	7.2	44.0	43.9	44.4
Minnesota	439.9	436.7	437.8	127.9	129.7	131.1	601.9	608.2	614.6
Duluth-Superior	8.4	8.6	8.5	7.3	7.3	7.6	27.0	26.8	27.1
Minneapolis-St. Paul	277.8	280.3	281.4	91.3	94.5	94.9	385.1	396.7	399.5
Rochester	13.3	13.2	13.1	2.4	2.4	2.4	14.9	15.5	15.7
St. Cloud	16.0	15.9	15.9	3.3	3.4	3.4	25.6	25.9	26.1
Mississippi	245.1	240.1	240.6	53.4	53.9	54.2	243.2	245.5	245.6
Jackson	20.2	19.9	19.7	16.3	16.4	16.6	54.8	53.5	53.9
Missouri	422.3	416.6	414.4	165.8	165.5	166.2	625.2	630.8	637.7
Kansas City	108.5	107.4	109.2	76.3	78.5	78.6	228.2	232.5	232.7
St. Louis	196.1	192.3	191.6	83.7	82.3	82.7	303.9	308.6	309.9
Springfield	23.8	23.7	23.9	11.0	11.3	11.4	45.3	45.5	46.1
Montana	23.8	24.1	24.0	21.5	21.7	21.8	98.2	98.3	99.5
Nebraska	119.5	117.5	117.3	55.1	58.7	58.9	208.6	209.3	211.2
Lincoln	17.8	17.7	17.7	9.7	9.8	9.9	30.3	30.6	30.9
Omaha	40.1	39.4	39.3	29.2	30.4	30.7	94.7	96.9	97.9
Nevada	41.4	42.2	42.3	47.6	48.4	48.3	185.8	193.9	194.5
Las Vegas	22.5	23.0	23.1	34.1	34.9	34.9	135.8	142.2	142.3
Reno	13.5	13.8	13.7	11.9	11.9	11.9	40.2	41.2	41.6
New Hampshire	109.5	107.3	106.9	19.7	20.8	20.8	147.1	150.7	150.7
Manchester	14.9	15.0	15.0	5.8	5.9	5.9	24.2	24.9	24.9
Nashua	28.2	27.4	27.4	2.3	3.0	3.0	22.4	22.6	22.6
Portsmouth-Rochester	18.9	18.5	18.4	3.9	3.8	3.9	29.9	30.5	30.7
New Jersey	478.8	466.8	467.4	258.2	262.9	263.7	866.1	880.5	886.5
Atlantic-Cape May	6.4	6.0	6.0	6.9	6.8	6.6	34.1	33.5	35.1
Bergen-Passaic	105.6	102.9	103.3	36.0	37.3	37.2	174.5	178.1	177.9
Camden	54.6	54.2	54.5	22.7	22.9	22.9	124.4	128.5	129.7
Jersey City	27.2	26.4	26.9	29.6	31.1	31.3	56.9	57.5	57.2
Middlesex-Somerset-Hunterdon	93.6	91.2	90.9	48.8	48.7	48.5	142.2	143.8	143.5
Monmouth-Ocean	20.7	20.3	20.2	20.0	19.6	19.9	95.9	96.2	97.5
Newark	135.7	133.7	133.4	81.4	83.9	84.3	191.0	194.7	194.6
Trenton	18.3	16.4	16.1	7.0	7.1	7.0	32.3	32.7	32.8
Vineland-Millville-Bridgeton	12.7	12.5	12.8	2.6	2.7	2.7	11.6	11.5	11.7
New Mexico	45.0	43.2	43.4	33.0	34.4	34.0	168.7	170.3	171.4
Albuquerque	29.0	27.7	27.6	15.7	17.1	16.8	81.5	81.4	82.1
Las Cruces	2.7	2.9	2.9	2.0	2.1	2.2	10.8	10.7	10.7
Santa Fe	2.1	1.9	1.9	1.3	1.3	1.3	14.8	14.9	15.0

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Maryland	132.9	136.3	136.5	777.5	799.8	810.7	436.0	447.4	445.8
Baltimore PMSA	73.2	75.8	75.6	399.9	412.8	418.3	216.1	220.8	219.8
Baltimore City	33.4	35.7	35.5	153.8	158.0	159.1	86.8	87.0	86.9
Suburban Maryland-D.C.	50.5	51.6	52.3	297.2	304.8	307.9	168.3	173.1	172.6
Massachusetts	215.0	219.3	219.9	1,133.7	1,142.9	1,160.6	416.7	422.4	421.6
Barnstable-Yarmouth	3.0	2.8	2.9	19.1	18.6	19.9	7.5	7.9	7.9
Boston	161.1	165.0	165.5	763.3	767.9	777.9	232.2	236.5	237.1
Brockton	3.0	3.2	3.1	25.9	26.4	26.9	16.4	17.0	17.2
Fitchburg-Leominster	1.5	1.5	1.5	13.3	12.8	13.3	8.3	8.5	8.6
Lawrence	4.5	4.6	4.6	43.8	43.2	43.9	19.7	20.2	20.4
Lowell	3.4	3.5	3.5	33.0	34.7	34.7	16.0	16.2	16.1
New Bedford	1.7	1.7	1.7	17.2	18.1	18.2	9.9	10.0	10.2
Pittsfield	1.9	1.9	1.9	13.9	13.8	14.2	5.1	5.3	5.2
Springfield	12.9	12.9	12.9	79.5	79.2	80.2	46.2	46.9	46.8
Worcester	14.9	14.1	14.3	69.9	69.6	72.3	36.0	36.2	34.7
Michigan	209.5	208.7	208.8	1,229.4	1,247.7	1,259.5	673.8	681.2	677.0
Ann Arbor	10.0	10.2	10.3	66.3	67.4	68.4	73.3	74.9	73.5
Benton Harbor	2.3	2.3	2.3	19.0	19.0	19.3	8.7	9.1	8.9
Detroit	112.9	113.1	112.8	649.9	657.6	668.7	236.2	238.6	237.5
Flint	6.5	6.5	6.5	48.8	48.5	48.6	25.4	25.9	25.6
Grand Rapids-Muskegon-Holland	23.3	24.4	24.7	140.7	142.1	143.3	55.1	58.7	57.8
Jackson	1.9	1.9	1.9	14.8	14.7	14.9	10.3	10.7	10.6
Kalamazoo-Battle Creek	10.7	10.3	10.2	53.6	54.0	54.3	35.4	36.8	36.3
Lansing-East Lansing	13.9	14.4	14.6	57.1	57.9	58.5	67.5	65.9	68.0
Saginaw-Bay City-Midland	6.7	6.7	6.9	48.1	49.0	49.1	22.5	23.2	23.0
Minnesota	154.6	158.2	158.7	721.5	728.6	737.7	391.5	395.4	395.5
Duluth-Superior	3.4	3.5	3.5	32.4	33.2	33.5	24.1	24.3	24.3
Minneapolis-St. Paul	122.4	127.2	128.7	483.6	494.5	500.2	227.8	230.5	231.1
Rochester	2.4	2.3	2.4	33.7	34.8	35.1	7.3	7.4	7.3
St. Cloud	3.1	3.4	3.4	22.3	22.4	23.0	13.2	12.8	12.9
Mississippi	42.4	41.9	42.2	264.7	259.8	261.4	223.9	227.6	227.9
Jackson	15.9	16.4	16.4	60.5	60.1	60.1	46.7	47.2	47.0
Missouri	159.3	163.9	164.5	761.2	750.9	769.9	427.5	431.8	433.6
Kansas City	66.7	69.2	69.3	277.5	283.5	285.8	136.0	139.3	139.4
St. Louis	81.5	82.6	83.1	415.0	418.5	426.4	158.4	157.3	157.3
Springfield	7.4	7.6	7.6	49.2	49.2	50.0	20.6	21.3	21.4
Montana	16.8	17.2	17.3	105.1	107.6	109.1	79.9	81.7	81.7
Nebraska	57.0	58.2	58.4	237.8	237.9	239.6	153.0	151.5	151.4
Lincoln	9.7	10.1	10.2	39.7	40.6	40.6	32.5	33.2	32.8
Omaha	33.5	34.1	34.3	132.4	132.4	133.6	52.1	50.7	50.8
Nevada	42.7	44.9	44.7	386.8	403.1	405.9	112.6	119.1	119.0
Las Vegas	32.1	34.0	33.9	288.8	304.9	307.3	71.2	76.3	76.7
Reno	8.2	8.6	8.4	70.2	69.6	70.1	24.1	24.7	24.8
New Hampshire	30.9	31.4	31.5	169.2	174.4	174.7	82.6	82.7	82.7
Manchester	7.2	7.0	6.9	32.0	32.6	32.5	11.1	11.6	11.7
Nashua	5.0	5.6	5.6	23.7	23.9	24.3	8.6	8.4	8.3
Portsmouth-Rochester	6.5	6.7	6.9	31.1	31.2	32.0	22.1	22.1	22.2
New Jersey	245.5	252.5	254.6	1,209.3	1,238.2	1,252.4	578.6	578.0	578.5
Atlantic-Cape May	5.8	5.8	5.8	87.8	86.0	88.6	28.5	28.8	29.1
Bergen-Passaic	36.7	37.7	37.9	202.3	209.5	211.4	71.2	71.6	71.3
Camden	24.3	26.6	26.8	150.8	153.6	155.0	81.7	81.0	80.8
Jersey City	26.3	27.5	27.8	58.8	60.1	60.4	38.4	38.7	38.7
Middlesex-Somerset-Hunterdon	45.6	46.0	46.8	188.1	195.9	197.8	79.6	80.4	81.0
Monmouth-Ocean	18.4	18.5	18.5	126.7	128.8	131.5	64.8	63.8	63.8
Newark	73.7	75.5	76.3	304.2	309.9	313.4	143.2	143.7	144.4
Trenton	11.1	11.0	11.1	73.0	74.9	75.0	52.6	51.9	51.4
Vineland-Millville-Bridgeton	2.8	2.9	2.9	12.6	12.8	13.0	14.3	14.2	14.2
New Mexico	31.6	31.9	32.2	202.0	208.1	208.7	180.1	182.4	181.8
Albuquerque	16.8	17.2	17.2	107.7	109.6	111.0	66.2	66.9	66.9
Las Cruces	2.0	2.0	2.0	13.1	14.0	14.1	18.7	18.8	18.6
Santa Fe	3.4	3.5	3.5	21.9	21.9	22.3	25.2	25.6	25.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
New York	8,161.8	8,264.7	8,313.4	4.5	3.9	4.4	268.5	266.7	284.3
Albany-Schenectady-Troy	437.8	438.5	441.9	.5	.4	.5	15.2	14.0	15.5
Binghamton	113.6	114.5	115.1	(1)	(1)	(1)	3.5	3.4	3.9
Buffalo-Niagara Falls	540.6	541.0	542.5	(1)	(1)	(1)	18.2	17.1	18.9
Dutchess County	108.3	110.5	111.6	(1)	(1)	(1)	4.1	4.0	4.3
Elmira	43.0	43.3	43.3	(1)	(1)	(1)	1.5	1.5	1.6
Glens Falls	47.5	47.6	48.4	(1)	(1)	(1)	1.9	1.6	2.0
Nassau-Suffolk	1,136.2	1,156.2	1,164.3	(1)	(1)	(1)	51.8	52.8	56.7
New York PMSA	4,021.0	4,095.3	4,109.3	(1)	(1)	(1)	122.9	127.4	131.0
New York City	3,503.0	3,568.9	3,579.5	.3	.3	.3	96.9	101.0	103.0
Newburgh	121.6	125.0	125.3	(1)	(1)	(1)	4.2	4.2	4.4
Rochester	534.0	533.6	538.1	.4	.3	.4	17.4	16.3	17.6
Rockland County	103.4	106.9	107.2	(1)	(1)	(1)	4.2	4.9	4.9
Syracuse	337.1	339.7	343.1	(1)	(1)	(1)	12.2	10.9	11.9
Utica-Rome	127.6	128.5	129.7	(1)	(1)	(1)	3.2	2.8	3.1
Westchester County	393.5	397.9	400.7	(1)	(1)	(1)	19.9	19.8	21.2
North Carolina	3,749.7	3,819.4	3,838.1	4.0	4.0	4.0	211.7	215.1	218.4
Asheville	109.6	112.4	112.9	(1)	(1)	(1)	6.0	6.5	6.6
Charlotte-Gastonia-Rock Hill	774.1	787.8	794.0	(1)	(1)	(1)	48.4	49.4	50.1
Greensboro--Winston-Salem--High Point	646.0	656.1	660.5	(1)	(1)	(1)	32.6	33.3	33.7
Raleigh-Durham-Chapel Hill	648.6	674.7	674.9	(1)	(1)	(1)	36.8	40.8	41.0
North Dakota	318.3	315.7	319.8	3.9	3.6	3.8	14.1	12.1	13.5
Bismarck	49.3	49.3	50.3	(1)	(1)	(1)	2.5	2.2	2.7
Fargo-Moorhead	99.3	98.9	99.8	(1)	(1)	(1)	5.3	4.8	5.1
Grand Forks	48.6	48.0	48.7	(1)	(1)	(1)	2.8	2.5	2.9
Ohio	5,454.3	5,443.6	5,495.3	13.1	12.8	13.0	219.9	205.0	222.2
Akron	325.3	324.6	328.0	.5	.5	.5	13.2	12.4	13.6
Canton-Massillon	182.4	183.6	185.2	.5	.5	.5	8.6	8.5	9.4
Cincinnati	857.2	870.0	880.6	.7	.7	.7	38.1	37.0	39.0
Cleveland-Lorain-Elyria	1,148.2	1,147.1	1,155.1	.8	1.0	1.0	43.2	40.0	43.4
Columbus	831.4	837.0	843.0	.6	.6	.6	34.7	33.4	35.0
Dayton-Springfield	477.9	476.2	479.1	.4	.3	.3	17.2	17.0	17.9
Hamilton-Middletown	122.4	123.0	123.4	(1)	(1)	(1)	6.7	7.0	7.4
Lima	77.1	77.7	78.6	(1)	(1)	(1)	3.7	3.9	4.2
Mansfield	79.6	79.9	79.9	(1)	(1)	(1)	2.6	2.4	2.6
Steubenville-Weirton	52.0	50.8	51.2	.4	.4	.4	2.0	1.5	1.6
Toledo	321.8	321.4	324.7	.2	.2	.2	14.9	14.7	15.9
Youngstown-Warren	247.2	246.4	249.9	.5	.4	.4	9.8	9.7	10.7
Oklahoma	1,440.0	1,462.8	1,469.8	32.0	30.3	29.6	53.5	54.4	55.0
Enid	25.2	24.4	25.0	.9	.7	.7	.9	.9	.9
Lawton	38.0	38.6	38.7	.1	.1	.1	1.4	1.5	1.6
Oklahoma City	513.3	522.7	524.9	7.4	6.7	6.6	19.4	19.3	19.4
Tulsa	390.8	401.8	405.7	7.6	7.8	7.7	16.0	16.3	16.7
Oregon	1,544.9	1,570.8	1,581.2	1.8	1.7	1.8	78.8	80.4	81.9
Eugene-Springfield	139.4	141.9	142.6	.2	.2	.2	6.8	6.9	7.0
Medford-Ashland	68.4	70.5	70.9	.1	.1	.1	3.0	3.2	3.3
Portland-Vancouver	933.7	950.4	954.2	1.2	1.2	1.2	52.2	53.9	54.4
Salem	132.8	133.7	134.9	.3	.2	.2	7.2	7.2	7.3
Pennsylvania	5,490.2	5,480.3	5,536.2	20.9	20.0	20.1	214.1	207.9	222.7
Allentown-Bethlehem-Easton	272.9	275.5	277.0	(1)	(1)	(1)	10.7	10.4	11.2
Altoona	58.7	59.3	59.8	(1)	(1)	(1)	2.6	2.5	2.7
Erie	130.0	130.9	132.3	(1)	(1)	(1)	4.3	3.8	4.2
Harrisburg-Lebanon-Carlisle	356.0	357.6	360.6	(1)	(1)	(1)	13.8	13.5	14.4
Johnstown	86.9	87.1	87.7	(1)	(1)	(1)	4.3	3.9	4.4
Lancaster	215.8	217.6	220.0	.4	.4	.4	12.4	12.7	13.4
Philadelphia PMSA	2,311.2	2,315.6	2,341.8	(1)	(1)	(1)	88.4	87.7	91.4
Philadelphia City	680.6	670.7	682.6	(1)	(1)	(1)	11.0	9.6	10.4
Pittsburgh	1,088.1	1,091.3	1,104.7	4.7	4.2	4.2	48.9	46.6	51.1
Reading	166.8	166.1	167.8	(1)	(1)	(1)	6.9	6.6	7.1
Scranton--Wilkes-Barre--Hazleton	276.8	277.0	279.5	.5	.4	.4	10.0	9.1	10.1
Sharon	49.0	48.5	49.0	(1)	(1)	(1)	1.5	1.2	1.5
State College	69.7	69.3	71.2	(1)	(1)	(1)	2.3	2.0	2.3
Williamsport	54.2	53.9	54.2	(1)	(1)	(1)	2.1	1.9	2.1
York	164.8	165.0	166.5	.4	.4	.4	8.3	8.1	8.4

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
New York	913.2	904.6	903.5	408.1	412.5	414.7	1,618.3	1,641.9	1,645.0
Albany-Schenectady-Troy	38.8	38.9	39.2	17.2	17.4	17.4	89.3	90.1	90.0
Binghamton	25.0	23.9	24.0	4.9	5.1	5.1	23.8	24.6	24.3
Buffalo-Niagara Falls	88.8	87.9	87.9	25.1	25.6	26.1	127.4	127.7	128.4
Dutchess County	17.5	18.1	18.3	3.9	4.2	4.2	19.9	20.5	20.6
Elmira	9.5	9.4	9.3	1.6	1.5	1.5	10.0	10.3	10.3
Glens Falls	8.0	8.0	8.1	1.4	1.4	1.4	10.7	11.0	11.0
Nassau-Suffolk	112.6	114.6	113.6	52.2	52.8	53.0	284.1	289.8	287.7
New York PMSA	310.6	310.2	309.1	232.6	234.2	234.6	687.9	701.4	701.8
New York City	259.2	257.5	256.4	205.6	207.0	207.2	576.4	586.2	587.5
Newburgh	12.0	12.2	12.1	7.1	7.3	7.4	33.0	34.2	34.0
Rochester	124.0	120.5	120.4	16.9	17.4	17.5	110.8	111.6	111.7
Rockland County	11.7	12.1	12.1	6.1	5.9	6.0	23.5	24.8	24.8
Syracuse	50.5	50.4	50.8	19.0	19.7	19.8	75.5	75.8	76.2
Utica-Rome	20.0	20.2	20.0	3.7	3.7	3.7	25.3	25.3	25.8
Westchester County	37.8	38.6	38.6	20.3	20.6	20.6	83.7	86.1	85.3
North Carolina	827.2	809.5	807.7	170.4	174.0	174.3	840.3	866.9	872.3
Asheville	19.5	19.0	18.8	4.6	4.9	4.9	26.7	27.6	27.7
Charlotte-Gastonia-Rock Hill	142.9	139.8	139.4	49.8	49.4	49.8	182.5	183.2	183.2
Greensboro-Winston-Salem-High Point	163.0	161.6	161.5	36.2	35.8	35.9	144.3	146.7	148.9
Raleigh-Durham-Chapel Hill	85.0	84.0	83.6	28.7	29.1	29.1	133.2	140.1	140.0
North Dakota	23.7	23.4	23.6	17.9	17.7	17.8	80.5	80.1	81.2
Bismarck	2.7	2.6	2.8	3.1	3.1	3.1	12.1	12.0	12.2
Fargo-Moorhead	7.9	7.7	7.8	5.1	5.0	5.0	27.9	27.8	28.1
Grand Forks	3.6	4.0	4.0	2.2	2.1	2.2	13.0	13.0	13.2
Ohio	1,099.4	1,084.3	1,085.4	240.1	240.0	242.1	1,305.9	1,312.6	1,320.9
Akron	65.7	64.3	64.2	15.0	14.9	15.0	79.6	80.7	80.9
Canton-Massillon	47.0	46.6	46.5	4.9	5.1	5.0	44.3	45.0	45.6
Cincinnati	141.3	142.7	142.7	47.0	47.6	48.0	216.1	221.4	222.4
Cleveland-Lorain-Elyria	224.3	221.0	220.7	45.7	45.6	46.3	269.8	271.6	273.3
Columbus	93.8	93.2	93.5	37.7	38.0	38.2	214.5	215.0	215.4
Dayton-Springfield	100.5	96.6	97.0	21.2	21.2	21.1	108.3	109.3	109.6
Hamilton-Middletown	22.1	21.9	21.8	4.8	4.6	4.6	32.6	32.1	32.3
Lima	19.9	19.5	19.7	3.2	3.4	3.4	18.1	18.2	18.5
Mansfield	23.2	23.5	23.4	3.4	3.3	3.3	18.1	17.7	17.7
Steubenville-Weirton	13.6	12.8	12.7	2.7	2.8	2.8	10.8	10.9	11.0
Toledo	61.6	58.9	59.2	14.3	14.9	15.2	77.8	78.7	79.3
Youngstown-Warren	57.4	55.8	56.2	10.8	10.8	11.0	61.8	62.4	63.5
Oklahoma	185.7	186.3	185.8	81.4	83.2	83.8	331.0	333.7	335.3
Enid	2.3	2.4	2.4	2.2	2.2	2.3	6.2	6.2	6.3
Lawton	3.8	3.8	3.9	1.6	1.6	1.6	9.0	8.9	9.0
Oklahoma City	54.8	54.7	54.6	24.2	24.2	24.5	120.9	122.0	122.4
Tulsa	58.1	58.2	58.0	31.9	33.9	34.2	90.3	92.9	93.7
Oregon	243.5	237.3	237.8	75.9	78.0	78.5	377.6	380.2	385.0
Eugene-Springfield	22.1	22.2	22.4	4.7	4.4	4.3	34.3	34.6	35.0
Medford-Ashland	9.1	8.8	8.8	3.4	3.6	3.6	19.4	20.1	20.3
Portland-Vancouver	149.7	144.8	144.3	53.4	54.7	55.4	230.3	232.8	233.7
Salem	17.0	16.6	16.7	3.9	3.8	3.8	28.1	28.1	28.5
Pennsylvania	944.0	929.6	930.8	286.1	288.8	290.4	1,211.9	1,218.8	1,227.4
Allentown-Bethlehem-Easton	56.6	55.9	55.7	15.8	16.1	16.1	57.4	56.6	58.9
Altoona	10.1	10.0	10.1	4.4	4.5	4.5	15.6	15.7	15.7
Erie	34.4	34.5	34.4	4.8	4.7	4.7	28.5	28.5	28.9
Harrisburg-Lebanon-Carlisle	46.9	46.2	45.7	23.7	24.5	24.7	78.5	79.8	80.4
Johnstown	13.1	12.9	12.9	5.2	5.1	5.2	19.8	20.4	20.6
Lancaster	57.0	56.2	56.7	8.1	8.0	8.0	53.3	53.3	54.0
Philadelphia PMSA	305.6	300.7	299.5	109.3	111.6	111.8	498.7	506.4	507.9
Philadelphia City	57.9	56.6	56.8	33.6	35.8	36.2	111.8	110.2	111.9
Pittsburgh	139.7	139.0	139.6	67.8	69.3	69.7	253.8	255.0	256.1
Reading	43.6	42.4	42.4	8.5	9.1	9.1	38.0	37.8	38.0
Scranton-Wilkes-Barre-Hazleton	54.8	55.3	55.1	16.3	16.3	16.5	65.4	65.4	66.0
Sharon	12.0	11.5	11.5	2.0	1.9	1.9	12.3	12.4	12.5
State College	8.8	8.9	8.9	2.1	2.1	2.1	12.7	12.9	13.3
Williamsport	13.6	13.5	13.6	2.2	2.2	2.2	13.1	13.1	13.1
York	48.2	47.2	47.1	8.2	8.6	8.7	39.2	40.2	40.7

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
New York	728.0	734.0	735.8	2,784.3	2,856.0	2,882.5	1,438.9	1,445.1	1,443.2
Albany-Schenectady-Troy	25.7	25.7	25.8	139.6	141.8	142.7	111.4	110.2	110.8
Binghamton	3.7	3.8	3.8	29.9	30.8	31.1	22.8	23.0	23.0
Buffalo-Niagara Falls	29.1	29.4	29.4	164.6	164.6	164.7	87.5	88.7	87.1
Dutchess County	4.7	5.0	5.0	34.9	35.3	36.0	23.2	23.3	23.2
Elmira	1.2	1.2	1.3	11.8	11.8	11.8	7.4	7.5	7.5
Glens Falls	2.2	2.3	2.3	13.0	13.0	13.1	10.2	10.4	10.5
Nassau-Suffolk	79.1	79.0	79.8	371.5	379.0	383.7	184.8	188.3	189.7
New York PMSA	511.0	517.5	517.1	1,511.6	1,561.2	1,573.6	644.5	643.4	642.1
New York City	477.6	484.1	483.6	1,326.6	1,374.5	1,384.0	560.4	558.4	557.8
Newburgh	5.6	5.5	5.5	31.8	32.5	32.7	27.9	29.2	29.1
Rochester	20.7	20.6	20.6	160.7	163.2	165.8	83.1	83.7	84.2
Rockland County	5.0	5.1	5.1	33.5	34.6	34.9	19.4	19.5	19.3
Syracuse	17.8	17.9	17.9	99.5	101.8	103.1	62.5	63.3	63.4
Utica-Rome	8.3	8.2	8.2	39.0	40.3	40.8	28.2	28.0	28.0
Westchester County	26.8	26.7	26.8	144.6	145.1	147.5	60.4	61.0	60.7
North Carolina	175.0	182.4	184.0	919.0	952.5	961.6	602.1	615.0	615.8
Asheville	3.5	3.7	3.8	33.2	33.9	34.2	16.1	16.8	16.9
Charlotte-Gastonia-Rock Hill	59.2	63.1	64.5	198.7	208.7	212.6	92.6	94.2	94.4
Greensboro-Winston-Salem-High Point	34.1	34.5	34.6	165.8	174.4	176.3	70.0	69.8	69.6
Raleigh-Durham-Chapel Hill	30.0	30.7	30.7	205.8	214.9	215.5	129.1	135.1	135.0
North Dakota	15.6	15.7	15.9	89.5	90.4	91.3	73.1	72.7	72.7
Bismarck	2.4	2.4	2.5	16.0	16.1	16.1	10.5	10.9	10.9
Fargo-Moorhead	6.7	7.0	7.0	30.6	30.8	31.1	15.8	15.8	15.7
Grand Forks	1.5	1.4	1.5	12.6	12.1	12.2	12.9	12.9	12.7
Ohio	296.5	301.4	302.5	1,507.6	1,502.9	1,529.1	771.8	784.6	780.1
Akron	13.3	13.4	13.5	88.6	87.8	90.2	49.4	50.6	50.1
Canton-Massillon	6.5	6.3	6.5	50.6	50.8	51.2	20.0	20.8	20.5
Cincinnati	54.7	56.0	56.6	256.0	258.9	264.9	103.3	105.7	106.3
Cleveland-Lorain-Elyria	74.8	76.2	76.5	346.0	344.7	347.9	143.6	147.0	146.0
Columbus	74.6	76.8	76.9	237.4	240.9	243.9	138.1	139.1	139.5
Dayton-Springfield	18.8	18.9	19.2	140.8	141.0	142.4	70.7	71.9	71.6
Hamilton-Middletown	6.4	6.9	6.9	28.4	29.5	29.6	21.4	21.0	20.8
Lima	2.1	2.0	2.0	19.6	20.1	20.2	10.5	10.6	10.6
Mansfield	2.6	2.5	2.5	19.3	19.1	19.2	10.4	11.4	11.2
Steubenville-Weirton	1.5	1.4	1.4	14.5	14.4	14.8	6.5	6.6	6.5
Toledo	11.2	11.2	11.1	93.0	93.2	94.4	48.8	49.6	49.4
Youngstown-Warren	9.4	9.3	9.3	65.8	65.2	66.3	31.7	32.8	32.5
Oklahoma	72.3	75.0	75.4	403.0	413.7	418.6	281.1	286.2	286.3
Enid	1.1	1.1	1.1	7.5	6.8	7.2	4.1	4.1	4.1
Lawton	1.8	1.9	1.8	8.2	8.5	8.4	12.1	12.3	12.3
Oklahoma City	29.6	30.4	30.9	154.1	159.1	160.2	103.0	106.3	106.3
Tulsa	21.2	22.1	22.4	122.8	126.3	129.0	42.9	44.3	44.0
Oregon	94.7	96.2	96.5	414.3	429.6	432.3	258.3	267.4	287.4
Eugene-Springfield	7.2	7.4	7.4	38.0	39.4	39.5	26.1	26.8	26.8
Medford-Ashland	3.1	3.0	3.0	19.2	20.1	20.3	11.1	11.6	11.5
Portland-Vancouver	67.1	68.4	68.9	260.5	269.5	271.0	119.3	125.1	125.3
Salem	6.6	6.7	6.8	32.2	32.2	32.7	37.5	38.9	38.9
Pennsylvania	315.8	318.8	320.7	1,775.9	1,776.4	1,803.2	721.5	720.0	720.9
Allentown-Bethlehem-Easton	13.8	14.2	14.0	86.9	88.0	88.9	31.7	32.3	32.2
Altoona	1.7	1.6	1.6	16.2	16.4	16.8	8.1	8.6	8.4
Erie	5.5	5.4	5.5	36.8	38.1	38.9	15.7	15.9	15.7
Harrisburg-Lebanon-Carlisle	25.2	25.5	25.5	100.3	100.9	102.6	67.6	67.2	67.3
Johnstown	4.1	4.2	4.2	26.1	26.5	26.1	14.3	14.1	14.3
Lancaster	9.7	9.9	9.9	55.8	57.7	58.2	19.1	19.4	19.4
Philadelphia PMSA	160.3	162.0	163.3	848.5	849.9	870.5	300.4	297.3	297.4
Philadelphia City	52.3	51.1	51.4	295.2	293.1	301.5	118.8	114.3	114.4
Pittsburgh	64.3	64.8	65.0	383.7	386.0	392.8	125.2	126.4	126.2
Reading	8.3	8.5	8.5	42.1	41.7	42.7	19.4	20.0	20.0
Scranton-Wilkes-Barre-Hazleton	13.7	14.1	14.3	80.8	81.1	81.9	35.3	35.3	35.2
Sharon	1.5	1.5	1.5	14.0	14.4	14.5	5.7	5.6	5.6
State College	2.1	2.1	2.1	14.3	14.2	14.7	27.4	27.1	27.8
Williamsport	2.1	2.1	2.1	14.7	14.8	14.9	6.4	6.3	6.2
York	5.1	5.1	5.0	38.9	38.8	39.5	16.5	16.6	16.7

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Rhode Island	453.4	455.2	460.6	.2	.2	.2	15.1	14.2	15.9
Providence-Fall River-Warwick	511.0	514.1	519.9	.2	.2	.2	16.9	16.1	18.0
South Carolina	1,784.0	1,817.4	1,830.4	1.8	1.8	1.8	103.7	110.4	111.2
Charleston-North Charleston	231.1	240.3	242.6	(1)	(1)	(1)	16.7	18.1	18.4
Columbia	290.5	299.0	301.5	(1)	(1)	(1)	16.0	16.9	17.2
Greenville-Spartanburg-Anderson	468.3	476.4	479.2	(1)	(1)	(1)	30.2	31.7	32.1
South Dakota	356.7	360.3	365.0	1.6	1.6	1.6	14.9	14.2	16.1
Rapid City	46.8	48.0	48.7	(1)	(1)	(1)	2.9	2.6	3.0
Sioux Falls	104.2	106.9	108.7	(1)	(1)	(1)	4.9	4.5	5.1
Tennessee	2,626.1	2,642.5	2,660.6	4.3	4.1	4.1	119.8	121.5	127.3
Chattanooga	219.4	217.8	219.3	(1)	(1)	(1)	9.5	9.2	9.2
Johnson City-Kingsport-Bristol	196.2	195.3	195.1	(1)	(1)	(1)	11.1	10.6	10.8
Knoxville	324.6	319.0	322.3	.6	.6	.6	16.5	15.9	16.3
Memphis	572.5	592.4	590.6	(1)	(1)	(1)	26.1	27.4	27.6
Nashville	646.2	654.2	656.2	(1)	(1)	(1)	31.8	32.6	32.9
Texas	8,881.9	9,089.9	9,131.5	167.5	157.5	154.3	487.3	514.9	519.4
Abilene	56.7	57.6	57.9	1.4	1.1	1.0	2.3	2.3	2.4
Amarillo	95.6	97.5	97.7	.7	.6	.6	4.7	4.4	4.5
Austin-San Marcos	596.9	616.3	621.3	1.3	1.3	1.3	32.7	34.6	35.4
Beaumont-Port Arthur	160.0	163.8	162.9	.8	.9	.9	16.5	18.0	17.4
Brazoria	75.2	76.0	75.4	1.5	1.5	1.5	10.8	11.4	11.2
Brownsville-Harlingen-San Benito	99.6	100.9	100.9	(1)	(1)	(1)	3.8	4.0	4.0
Bryan-College Station	73.2	74.9	75.3	.9	.8	.8	2.9	3.2	3.3
Corpus Christi	156.9	158.4	159.3	2.5	2.1	2.1	12.6	12.0	12.1
Dallas	1,820.1	1,873.3	1,885.0	11.7	11.5	11.5	88.2	94.3	95.5
El Paso	246.3	247.2	249.1	(1)	(1)	(1)	11.9	11.9	12.0
Ft. Worth-Arlington	735.1	753.3	759.1	4.5	4.4	4.5	37.5	40.1	41.1
Galveston-Texas City	88.8	89.2	88.8	.8	.7	.7	4.4	4.3	4.3
Houston	1,972.4	2,011.6	2,013.8	68.5	66.5	65.2	135.8	140.7	141.3
Killeen-Temple	99.7	100.6	101.3	(1)	(1)	(1)	4.4	4.3	4.4
Laredo	63.5	65.8	66.0	2.7	1.7	1.6	2.3	2.4	2.4
Longview-Marshall	90.4	91.0	91.3	3.6	3.3	3.2	4.0	4.2	4.2
Lubbock	115.4	116.8	116.9	.1	.1	.1	4.2	4.3	4.4
McAllen-Edinburg-Mission	140.4	143.2	143.3	1.2	1.1	1.2	7.0	6.9	6.9
Odessa-Midland	107.4	104.1	104.5	13.5	11.5	11.5	6.8	6.9	6.9
San Angelo	44.4	44.8	44.8	.7	.5	.5	1.9	2.0	2.0
San Antonio	677.9	696.3	698.9	1.8	1.8	1.8	34.8	36.4	36.4
Sherman-Denison	44.0	44.9	44.9	(1)	(1)	(1)	2.3	2.6	2.6
Texarkana	50.8	51.6	51.9	(1)	(1)	(1)	2.2	2.2	2.2
Tyler	78.3	80.9	81.2	1.6	1.6	1.6	3.2	3.4	3.4
Victoria	36.0	36.1	35.8	1.8	1.7	1.6	2.4	2.5	2.5
Waco	96.9	98.4	99.6	(1)	(1)	(1)	4.6	4.8	4.8
Wichita Falls	60.4	60.5	60.6	1.1	1.0	1.0	2.5	2.6	2.5
Utah	1,014.9	1,035.6	1,042.5	8.1	7.6	7.6	64.1	66.5	68.9
Provo-Orem	140.3	143.7	144.0	(1)	(1)	(1)	9.6	9.6	9.9
Salt Lake City-Ogden	679.5	694.7	698.2	2.9	2.8	2.9	42.4	44.3	45.6
Vermont	283.2	290.2	288.1	.6	.3	.6	12.9	12.6	13.7
Barre-Montpelier	30.0	31.4	31.5	(1)	(1)	(1)	1.4	1.0	1.3
Burlington	100.3	100.7	101.4	(1)	(1)	(1)	4.9	5.4	5.7
Virginia	3,286.7	3,346.3	3,365.2	10.6	10.2	10.2	185.3	189.2	194.6
Bristol	37.8	39.4	39.7	(1)	(1)	(1)	1.5	1.6	1.7
Charlottesville	84.0	85.0	86.8	(1)	(1)	(1)	4.3	4.3	4.5
Danville	45.9	44.9	44.9	(1)	(1)	(1)	2.4	2.5	2.6
Lynchburg	97.8	99.2	99.4	(1)	(1)	(1)	5.6	5.9	5.9
Norfolk-Virginia Beach-Newport News	671.6	680.1	678.9	(1)	(1)	(1)	39.5	39.3	40.1
Northern Virginia	1,023.9	1,062.1	1,073.2	.8	.8	.8	57.0	59.2	61.3
Richmond-Petersburg	532.3	539.9	542.3	.8	.8	.8	32.3	32.7	33.1
Roanoke	143.8	146.1	146.7	(1)	(1)	(1)	8.5	8.5	8.7
Washington	2,570.1	2,612.0	2,632.1	3.2	3.3	3.3	136.2	139.4	143.6
Seattle-Bellevue-Everett	1,337.2	1,355.9	1,364.5	.6	.7	.7	68.4	69.7	72.3
Spokane	188.3	188.5	190.6	(1)	(1)	(1)	9.8	9.1	9.9
Tacoma	232.9	239.1	240.9	.2	.2	.2	12.6	13.3	13.8

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Rhode Island	78.8	78.1	78.2	15.3	16.0	16.1	95.5	96.4	97.9
Providence-Fall River-Warwick	100.9	100.9	100.6	17.5	18.6	18.7	112.9	114.4	115.3
South Carolina	364.8	361.3	360.9	76.6	78.6	79.2	426.6	433.8	440.4
Charleston-North Charleston	22.0	22.4	22.5	12.8	12.8	13.0	57.4	59.4	60.3
Columbia	26.2	26.3	26.4	12.9	13.4	13.7	65.9	67.8	68.2
Greenville-Spartanburg-Anderson	122.3	120.9	121.0	20.9	20.7	21.1	118.2	121.5	122.3
South Dakota	48.8	49.4	49.3	16.4	16.9	16.8	88.5	87.7	89.8
Rapid City	4.5	4.7	4.4	2.0	2.0	2.0	13.6	13.5	14.0
Sioux Falls	13.9	14.7	14.8	6.6	7.0	6.9	26.5	26.7	27.2
Tennessee	518.9	507.1	508.0	156.6	159.4	160.2	616.3	620.5	629.0
Chattanooga	43.1	44.2	44.2	11.4	11.6	11.8	50.0	47.2	48.3
Johnson City-Kingsport-Bristol	49.9	47.5	47.2	7.7	7.8	7.8	45.0	45.3	45.3
Knoxville	49.3	46.7	46.8	14.3	14.2	14.1	87.1	85.2	86.7
Memphis	63.2	62.7	62.8	66.4	72.5	71.4	141.6	145.5	145.2
Nashville	96.8	95.0	95.7	32.0	32.4	32.5	155.6	159.3	159.6
Texas	1,103.6	1,097.0	1,095.5	533.7	555.3	557.9	2,087.7	2,119.3	2,127.9
Abilene	3.5	3.6	3.6	2.5	2.5	2.5	14.8	15.5	15.4
Amarillo	9.3	9.4	9.3	5.2	5.4	5.4	28.4	27.2	27.3
Austin-San Marcos	81.5	82.4	82.3	19.5	21.0	21.1	126.4	132.7	133.4
Beaumont-Port Arthur	25.4	25.5	25.4	8.0	8.0	8.0	35.8	36.8	36.8
Brazoria	15.7	15.4	14.8	2.9	2.8	2.8	14.5	15.1	15.2
Brownsville-Harlingen-San Benito	12.1	11.9	11.8	4.9	4.8	4.8	24.1	24.4	24.6
Bryan-College Station	4.6	4.9	4.9	1.5	1.6	1.8	15.2	15.5	15.6
Corpus Christi	13.3	13.5	13.5	6.7	6.6	6.7	36.2	36.2	36.4
Dallas	250.6	253.8	254.4	123.6	128.7	129.4	440.5	450.1	451.6
El Paso	42.2	40.8	40.6	13.7	14.4	14.5	58.8	58.3	59.3
Ft. Worth-Arlington	110.7	112.1	112.0	68.7	72.2	72.7	183.3	186.8	188.6
Galveston-Texas City	8.2	8.1	8.0	3.9	4.2	4.2	19.6	19.8	19.7
Houston	218.5	214.7	214.5	139.1	141.9	143.1	444.0	458.8	458.0
Killeen-Temple	9.3	9.5	9.5	3.5	3.4	3.4	23.2	23.3	23.4
Laredo	1.6	1.7	1.7	10.9	11.6	11.7	18.7	17.1	17.2
Longview-Marshall	19.3	19.4	19.3	4.2	4.0	3.9	22.7	23.1	23.4
Lubbock	7.8	7.3	7.2	5.7	5.8	5.8	31.9	32.3	32.3
McAllen-Edinburg-Mission	12.2	12.6	12.2	5.3	5.3	5.4	39.1	39.5	39.9
Odessa-Midland	7.5	6.8	6.8	4.1	3.9	3.9	28.1	27.6	27.6
San Angelo	5.1	4.8	4.9	2.8	3.0	3.0	10.3	10.2	10.3
San Antonio	51.0	52.2	52.5	32.5	31.8	31.9	162.6	166.1	166.1
Sherman-Denison	10.6	10.0	9.9	1.4	1.6	1.6	9.7	9.8	9.8
Texarkana	5.6	5.5	5.6	2.5	2.8	2.8	13.3	13.7	13.9
Tyler	10.8	10.7	10.7	3.8	3.8	3.8	19.7	21.3	21.3
Victoria	3.2	3.2	3.1	1.5	1.7	1.6	9.6	9.6	9.6
Waco	16.2	16.3	16.6	4.0	4.0	4.0	22.0	22.3	22.6
Wichita Falls	8.7	8.5	8.4	3.0	3.0	3.0	14.1	14.2	14.4
Utah	133.6	133.6	133.4	57.5	59.5	59.5	240.0	242.1	243.7
Provo-Orem	19.8	20.1	20.1	2.3	2.3	2.3	30.8	31.8	31.8
Salt Lake City-Ogden	82.9	81.8	81.8	45.5	46.6	46.8	163.2	165.4	164.8
Vermont	47.8	47.9	48.0	12.5	12.4	12.4	63.9	64.5	64.3
Barre-Montpelier	3.3	3.6	3.7	1.1	1.3	1.3	6.5	6.8	6.8
Burlington	18.5	18.4	18.2	4.6	4.6	4.6	22.4	21.5	21.7
Virginia	405.6	400.0	392.2	170.7	175.5	177.1	719.9	730.7	736.5
Bristol	9.2	9.2	9.0	1.3	1.3	1.3	10.6	11.1	11.3
Charlottesville	8.4	8.5	8.6	2.5	2.5	2.6	16.7	16.4	16.8
Danville	14.9	14.4	14.1	1.0	1.0	1.0	9.6	9.4	9.5
Lynchburg	25.2	25.3	25.1	3.6	3.5	3.5	20.4	20.1	20.1
Norfolk-Virginia Beach-Newport News	70.6	70.9	62.3	31.5	30.9	31.3	155.2	157.6	159.5
Northern Virginia	44.0	43.9	44.0	63.1	67.2	68.0	212.8	218.3	220.6
Richmond-Petersburg	61.5	59.8	59.9	27.8	28.8	28.9	122.8	126.3	126.5
Roanoke	19.0	18.7	18.7	8.6	9.0	9.0	35.8	37.2	37.3
Washington	376.0	367.1	365.9	134.2	137.6	138.4	811.2	625.0	631.5
Seattle-Bellevue-Everett	228.3	222.8	221.3	79.5	81.4	82.1	310.3	315.3	318.4
Spokane	22.5	21.7	21.7	8.0	8.0	8.2	47.4	48.0	48.4
Tacoma	25.6	24.3	24.5	9.1	9.7	9.7	57.3	58.4	58.7

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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Rhode Island	27.6	29.3	29.3	157.8	156.4	158.6	63.1	64.6	64.4
Providence-Fall River-Warwick	29.4	31.1	31.1	168.1	166.7	169.8	65.1	66.1	66.2
South Carolina	79.0	82.1	82.9	419.2	431.1	436.5	312.3	318.3	317.5
Charleston-North Charleston	8.6	8.5	8.6	63.8	67.6	68.6	49.8	51.5	51.2
Columbia	21.3	22.3	22.4	72.3	75.9	76.8	75.9	76.4	76.8
Greenville-Spartanburg-Anderson	16.1	16.5	16.2	101.3	105.1	106.4	59.3	60.0	60.1
South Dakota	21.8	23.2	23.4	92.8	95.2	96.0	71.9	72.1	72.0
Rapid City	2.6	2.9	3.0	13.8	14.5	14.6	7.4	7.8	7.7
Sioux Falls	11.2	12.3	12.3	31.1	32.0	32.7	10.0	9.7	9.7
Tennessee	124.6	126.1	126.3	697.9	711.5	714.0	387.7	392.3	391.7
Chattanooga	15.6	15.8	15.8	56.4	57.0	57.6	33.4	32.8	32.6
Johnson City-Kingsport-Bristol	6.0	6.1	6.1	47.4	48.2	48.3	29.1	29.8	29.6
Knoxville	14.3	14.7	14.6	87.4	86.2	87.6	55.1	55.5	55.6
Memphis	28.1	28.9	28.9	165.3	171.5	171.1	81.8	83.9	83.6
Nashville	41.7	42.0	42.0	205.1	207.2	207.4	83.2	85.7	86.1
Texas	489.8	508.3	510.9	2,490.9	2,579.9	2,604.5	1,521.4	1,557.7	1,561.1
Abilene	2.5	2.6	2.6	19.6	19.8	20.1	10.1	10.2	10.3
Amarillo	5.1	5.2	5.2	27.1	27.8	27.9	17.1	17.5	17.5
Austin-San Marcos	31.4	32.2	32.4	171.7	178.7	180.8	132.4	133.4	134.6
Beaumont-Port Arthur	5.2	5.2	5.2	41.9	42.6	42.5	26.4	26.8	26.7
Brazoria	1.9	1.9	1.9	13.8	13.6	13.7	14.1	14.3	14.3
Brownsville-Harlingen-San Benito	3.6	3.6	3.7	27.5	28.2	28.1	23.6	24.0	23.9
Bryan-College Station	2.6	2.7	2.7	15.8	16.0	16.2	29.7	30.2	30.2
Corpus Christi	6.4	6.4	6.4	48.5	50.9	51.4	30.7	30.7	30.7
Dallas	148.9	155.6	156.1	556.0	570.8	577.4	200.7	208.5	209.1
El Paso	9.6	9.7	9.7	57.0	58.4	59.1	53.1	53.7	53.9
Ft. Worth-Arlington	34.2	35.5	35.8	201.7	205.9	208.1	94.5	96.3	96.3
Galveston-Texas City	5.9	6.1	6.1	19.0	19.4	19.3	27.0	26.6	26.5
Houston	104.9	108.9	109.3	601.3	619.9	621.7	260.3	260.2	260.7
Killeen-Temple	4.2	4.2	4.3	27.2	27.7	28.2	27.9	28.2	28.1
Laredo	2.3	2.4	2.4	12.3	13.3	13.4	14.7	15.6	15.6
Longview-Marshall	3.5	3.7	3.8	21.5	21.6	21.7	11.6	11.7	11.8
Lubbock	5.8	5.9	5.9	34.7	35.2	35.3	25.2	25.9	25.9
McAllen-Edinburg-Mission	5.0	5.3	5.3	32.4	33.5	33.1	38.2	39.0	39.3
Odessa-Midland	3.9	3.9	3.9	25.3	25.1	25.4	18.2	18.4	18.5
San Angelo	1.8	1.9	1.9	12.7	12.9	12.8	9.1	9.5	9.4
San Antonio	45.0	46.5	46.7	214.5	225.4	227.9	135.7	136.1	135.6
Sherman-Denison	2.5	2.6	2.6	11.7	12.2	12.4	5.8	6.1	6.0
Texarkana	1.7	1.7	1.7	14.1	14.4	14.5	11.4	11.3	11.2
Tyler	3.9	4.0	4.0	24.0	24.6	24.9	11.3	11.5	11.5
Victoria	1.5	1.5	1.5	9.6	9.5	9.5	6.4	6.4	6.4
Waco	5.9	6.0	6.1	29.1	29.6	30.0	15.1	15.4	15.5
Wichita Falls	2.3	2.3	2.3	16.1	16.1	16.2	12.6	12.8	12.8
Utah	54.3	56.8	57.0	277.7	288.2	289.8	179.6	181.3	182.6
Provo-Orem	4.1	4.5	4.5	53.8	55.2	55.0	19.9	20.2	20.4
Salt Lake City-Ogden	44.6	46.2	46.3	182.5	191.9	194.0	115.5	115.7	116.0
Vermont	12.1	12.6	12.8	85.4	90.9	87.3	48.0	49.0	49.0
Barre-Montpelier	2.4	2.5	2.5	8.1	9.0	8.7	7.2	7.2	7.2
Burlington	4.8	4.8	4.8	28.9	29.7	29.8	16.2	16.3	16.6
Virginia	172.4	178.1	177.3	1,013.6	1,045.4	1,057.1	608.6	617.2	620.2
Bristol	1.3	1.4	1.5	8.2	8.9	9.0	5.7	5.9	5.9
Charlottesville	4.3	4.6	4.6	20.8	21.2	21.9	27.0	27.5	27.8
Danville	1.4	1.5	1.5	10.4	10.1	10.2	6.2	6.0	6.0
Lynchburg	4.4	4.2	4.2	25.8	26.7	27.1	12.8	13.5	13.5
Norfolk-Virginia Beach-Newport News	31.9	33.1	33.3	198.6	203.2	207.5	144.3	145.1	144.9
Northern Virginia	57.5	60.9	61.3	409.7	428.7	433.9	179.0	183.1	183.3
Richmond-Petersburg	44.4	46.2	46.2	139.7	140.9	142.0	103.0	104.4	104.9
Roanoke	9.3	10.4	10.3	44.7	44.5	44.9	17.9	17.8	17.8
Washington	133.0	139.0	140.3	702.9	722.4	729.5	471.4	478.2	479.6
Seattle-Bellevue-Everett	80.1	83.6	83.6	385.7	392.9	396.0	184.3	189.5	190.1
Spokane	11.0	11.2	11.4	57.7	58.2	58.7	31.9	32.3	32.3
Tacoma	12.3	12.8	12.8	67.2	70.6	71.4	48.6	49.8	49.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
West Virginia	711.5	716.1	723.2	23.8	21.6	21.3	33.3	30.1	34.3
Charleston	131.3	132.8	133.4	1.9	1.9	1.9	6.9	6.1	6.5
Huntington-Ashland	122.9	123.9	124.6	1.3	1.5	1.5	6.1	4.9	5.1
Parkersburg-Marietta	68.8	69.9	71.0	.3	.3	.3	4.0	3.8	4.2
Wheeling	65.5	66.5	67.0	1.7	1.5	1.5	2.3	2.3	2.7
Wisconsin	2,691.7	2,690.8	2,722.9	2.8	2.1	2.5	106.3	101.3	112.5
Appleton-Oshkosh-Neenah	194.7	197.8	199.7	(1)	(1)	(1)	10.2	10.6	11.5
Eau Claire	73.8	74.9	76.2	(1)	(1)	(1)	2.9	2.4	3.0
Green Bay	136.0	137.1	138.3	(1)	(1)	(1)	6.2	5.9	6.6
Janesville-Beloit	70.2	69.7	70.1	(1)	(1)	(1)	2.7	2.5	2.8
Kenosha	53.0	53.6	53.6	(1)	(1)	(1)	2.2	2.2	2.3
La Crosse	70.5	70.9	71.6	(1)	(1)	(1)	2.6	2.3	2.7
Madison	274.9	279.5	282.7	(1)	(1)	(1)	12.2	12.6	13.6
Milwaukee-Waukesha	840.3	844.5	852.0	(1)	(1)	(1)	29.3	29.3	31.7
Racine	81.4	81.6	82.4	(1)	(1)	(1)	3.2	3.2	3.6
Sheboygan	59.6	59.5	59.9	(1)	(1)	(1)	2.2	2.2	2.3
Wausau	65.5	67.3	67.7	(1)	(1)	(1)	2.7	3.0	3.1
Wyoming	222.6	221.1	224.2	16.5	16.3	16.2	14.6	13.8	15.1
Casper	30.4	30.6	31.0	2.0	2.0	1.9	1.8	1.8	1.9
Puerto Rico	984.8	(2)	(2)	1.3	(2)	(2)	57.9	(2)	(2)
Caguas	68.4	(2)	(2)	(1)	(1)	(1)	3.0	(2)	(2)
Mayaguez	70.0	(2)	(2)	(1)	(1)	(1)	4.1	(2)	(2)
Ponce	75.1	(2)	(2)	(1)	(1)	(1)	4.4	(2)	(2)
San Juan-Bayamon	614.9	(2)	(2)	.6	(2)	(2)	40.7	(2)	(2)
Virgin Islands	41.7	(2)	(2)	(1)	(1)	(1)	1.8	(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		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
West Virginia	82.2	81.4	81.8	38.5	39.1	38.8	160.7	163.0	165.5
Charleston	10.1	10.1	10.1	9.3	9.1	9.1	31.2	32.3	32.6
Huntington-Ashland	16.6	16.1	16.3	6.6	7.0	7.0	31.2	31.3	31.6
Parkersburg-Marietta	13.0	12.7	12.8	2.7	2.7	2.7	16.8	17.6	18.0
Wheeling	6.2	6.2	6.3	2.7	2.7	2.7	16.6	17.1	17.2
Wisconsin	612.6	608.8	608.9	126.1	127.8	129.7	597.9	597.1	604.6
Appleton-Oshkosh-Neenah	58.9	59.6	59.6	8.0	8.5	8.7	40.8	41.3	41.7
Eau Claire	13.1	14.1	14.3	3.5	3.5	3.6	19.7	20.1	20.3
Green Bay	28.7	28.5	28.5	9.8	9.9	10.0	31.2	31.9	32.1
Janesville-Beloit	20.8	20.0	19.9	2.9	3.0	3.0	16.2	16.4	16.6
Kenosha	12.1	11.9	11.8	1.8	1.9	1.8	12.4	12.5	12.4
La Crosse	12.2	12.0	11.8	3.2	3.3	3.4	18.4	18.9	19.1
Madison	29.2	29.5	29.6	8.9	9.4	9.5	58.4	59.3	59.9
Milwaukee-Waukesha	177.9	177.9	177.7	39.8	41.3	41.9	178.7	178.2	179.6
Racine	25.6	24.8	24.6	2.5	2.5	2.5	16.3	17.1	17.2
Sheboygan	25.0	25.1	25.4	1.7	1.8	1.7	10.8	10.6	10.8
Wausau	18.7	19.0	19.1	3.3	3.1	3.1	16.3	16.8	16.9
Wyoming	10.5	10.5	10.8	13.7	13.9	14.0	51.0	50.3	51.1
Casper	1.5	1.5	1.5	1.7	1.8	1.8	8.3	8.3	8.4
Puerto Rico	148.4	(²)	(²)	26.7	(²)	(²)	199.4	(²)	(²)
Caguas	16.0	(²)	(²)	1.0	(²)	(²)	15.5	(²)	(²)
Mayaguez	17.4	(²)	(²)	.7	(²)	(²)	11.9	(²)	(²)
Ponce	9.9	(²)	(²)	2.4	(²)	(²)	13.4	(²)	(²)
San Juan-Bayamon	68.3	(²)	(²)	20.8	(²)	(²)	130.9	(²)	(²)
Virgin Islands	2.4	(²)	(²)	2.4	(²)	(²)	9.1	(²)	(²)

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1998	March 1999	April 1999 ^P	April 1998	March 1999	April 1999 ^P	April 1998	March 1999	April 1999 ^P
West Virginia	28.4	29.3	29.3	204.9	209.5	210.5	139.7	142.1	141.7
Charleston	7.8	8.1	8.0	40.5	41.1	41.2	23.6	24.1	24.0
Huntington-Ashland	3.9	4.6	4.6	35.2	36.5	36.4	22.0	22.0	22.1
Parkersburg-Marietta	2.7	2.7	2.7	19.8	20.8	20.9	9.5	9.3	9.4
Wheeling	2.7	2.7	2.7	23.2	24.0	23.6	10.1	10.0	10.3
Wisconsin	142.4	145.7	146.7	699.7	704.5	711.4	403.9	403.4	406.5
Appleton-Oshkosh-Neenah	9.6	9.9	10.0	44.6	44.6	45.0	22.7	23.3	23.3
Eau Claire	2.6	2.7	2.7	19.6	20.0	20.1	12.3	12.2	12.3
Green Bay	9.9	10.1	10.0	33.8	34.3	34.4	16.3	16.5	16.7
Janesville-Beloit	1.9	2.0	2.0	16.9	17.0	17.0	8.7	8.8	8.7
Kenosha	1.7	1.7	1.7	14.4	14.8	14.8	8.3	8.6	8.7
La Crosse	2.5	2.7	2.6	21.1	21.2	21.4	10.6	10.4	10.6
Madison	21.6	21.9	22.0	70.9	72.8	73.2	73.6	74.1	74.8
Milwaukee-Waukesha	57.8	58.3	58.6	264.7	267.9	270.4	92.2	91.5	92.0
Racine	2.3	2.5	2.5	21.8	22.0	22.2	9.6	9.7	9.7
Sheboygan	2.1	2.2	2.2	11.2	11.3	11.1	6.5	6.3	6.4
Wausau	5.0	5.3	5.3	12.0	12.4	12.4	7.7	7.6	7.7
Wyoming	8.5	8.6	8.6	47.7	48.1	48.6	60.1	59.6	59.8
Casper	1.2	1.2	1.2	8.4	8.4	8.7	5.5	5.6	5.6
Puerto Rico	47.4	(²)	(²)	199.7	(²)	(²)	304.0	(²)	(²)
Caguas	1.7	(²)	(²)	12.7	(²)	(²)	18.5	(²)	(²)
Mayaguez	2.1	(²)	(²)	11.9	(²)	(²)	21.9	(²)	(²)
Ponce	2.3	(²)	(²)	17.3	(²)	(²)	25.4	(²)	(²)
San Juan-Bayamon	36.8	(²)	(²)	133.6	(²)	(²)	183.2	(²)	(²)
Virgin Islands	1.9	(²)	(²)	10.5	(²)	(²)	13.6	(²)	(²)

¹ Combined with construction.
² Not available.
P = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1998 benchmarks.

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Employment and Unemployment:

Employment, hours, and earnings by industry
National <http://stats.bls.gov/ceshome.htm>
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Consumer price indexes <http://stats.bls.gov/cpihome.htm>
Producer price indexes <http://stats.bls.gov/ppihome.htm>
Consumer Expenditure Survey <http://stats.bls.gov/csxhome.htm>

Compensation and Working Conditions:

National Compensation Survey <http://stats.bls.gov/comhome.htm>
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Employee Benefits Survey <http://stats.bls.gov/ebshome.htm>
Occupational Compensation Survey <http://stats.bls.gov/ocshome.htm>
Safety and health <http://stats.bls.gov/oshhome.htm>

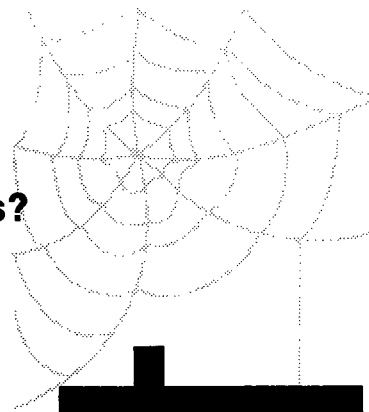
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Quarterly labor productivity <http://stats.bls.gov/lprhome.htm>
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International data:

Foreign labor statistics <http://stats.bls.gov/flshome.htm>
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**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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Total private		34.6	34.2	34.2	34.3	34.6	-	-	-	-	-
Goods-producing		41.0	40.2	40.5	40.9	41.1	-	-	-	-	-
Mining		43.9	43.3	42.2	43.2	43.9	-	-	-	-	-
Metal mining	10	44.5	45.7	43.5	44.3	-	-	-	-	-	-
Iron ores	101	44.8	44.2	46.0	45.1	-	-	-	-	-	-
Copper ores	102	46.6	49.4	43.8	47.0	-	-	-	-	-	-
Coal mining	12	44.7	44.2	45.2	44.7	-	-	-	-	-	-
Bituminous coal and lignite mining	122	44.7	44.0	45.3	44.7	-	-	-	-	-	-
Oil and gas extraction	13	42.7	41.8	40.3	41.3	-	-	-	-	-	-
Crude petroleum and natural gas	131	41.7	40.7	39.4	40.0	-	-	-	-	-	-
Oil and gas field services	138	43.1	42.2	40.8	42.0	-	-	-	-	-	-
Nonmetallic minerals, except fuels	14	46.4	46.4	44.2	46.3	-	-	-	-	-	-
Crushed and broken stone	142	48.3	48.8	45.8	48.9	-	-	-	-	-	-
Construction		38.8	38.1	37.7	38.6	39.3	-	-	-	-	-
General building contractors	15	38.0	37.6	37.4	38.1	-	-	-	-	-	-
Residential building construction	152	36.7	36.4	36.1	36.9	-	-	-	-	-	-
Operative builders	153	37.8	38.9	38.6	38.8	-	-	-	-	-	-
Nonresidential building construction	154	39.3	38.8	38.7	39.4	-	-	-	-	-	-
Heavy construction, except building	16	42.3	41.3	40.3	41.8	-	-	-	-	-	-
Highway and street construction	161	42.9	41.2	39.1	41.4	-	-	-	-	-	-
Heavy construction, except highway	162	42.1	41.3	40.7	42.0	-	-	-	-	-	-
Special trade contractors	17	38.3	37.5	37.3	38.1	-	-	-	-	-	-
Plumbing, heating, and air conditioning	171	39.4	38.6	38.5	39.2	-	-	-	-	-	-
Painting and paper hanging	172	37.0	36.0	36.0	37.1	-	-	-	-	-	-
Electrical work	173	39.8	39.3	39.2	39.7	-	-	-	-	-	-
Masonry, stonework, and plastering	174	36.0	35.7	35.3	36.0	-	-	-	-	-	-
Carpentry and floor work	175	36.1	35.5	36.3	36.8	-	-	-	-	-	-
Roofing, siding, and sheet metal work	176	34.5	33.0	31.8	34.0	-	-	-	-	-	-
Manufacturing		41.7	40.8	41.4	41.6	41.7	4.6	4.0	4.4	4.5	4.5
Durable goods		42.3	41.3	42.0	42.2	42.3	4.8	4.1	4.5	4.7	4.6
Lumber and wood products	24	41.1	40.8	40.8	41.2	41.4	4.4	4.1	4.2	4.4	-
Logging	241	40.7	40.7	40.6	40.5	-	5.5	5.1	5.0	5.0	-
Sawmills and planing mills	242	42.2	41.9	42.2	42.3	-	4.9	4.7	5.1	5.1	-
Sawmills and planing mills, general	2421	42.5	42.3	42.9	42.9	-	5.3	5.1	5.5	5.5	-
Hardwood dimension and flooring mills	2426	41.0	40.5	40.3	40.9	-	3.4	3.1	3.5	3.5	-
Millwork, plywood, and structural members	243	41.7	41.3	41.5	42.0	-	4.8	4.3	4.5	4.9	-
Millwork	2431	41.1	40.4	40.7	41.2	-	3.8	3.2	3.4	3.8	-
Wood kitchen cabinets	2434	41.4	41.6	41.4	42.1	-	5.3	5.1	4.9	5.5	-
Hardwood veneer and plywood	2435	42.0	41.5	42.4	42.4	-	5.2	4.7	5.4	5.1	-
Softwood veneer and plywood	2436	43.4	43.4	43.9	42.8	-	6.0	5.8	6.4	6.1	-
Wood containers	244	38.7	37.7	39.0	38.9	-	3.4	2.9	3.5	3.4	-
Wood buildings and mobile homes	245	39.6	39.8	37.8	38.9	-	3.0	2.8	2.3	2.6	-
Mobile homes	2451	39.7	39.9	38.1	39.1	-	2.9	2.9	2.4	2.5	-
Miscellaneous wood products	249	40.4	39.9	40.2	40.2	-	3.5	3.3	3.4	3.5	-
Furniture and fixtures	25	40.6	39.7	40.0	40.2	39.7	3.6	3.2	3.6	3.5	-
Household furniture	251	39.7	39.3	39.4	39.5	-	3.1	2.9	3.2	3.1	-
Wood household furniture	2511	40.0	39.9	39.0	39.6	-	3.0	2.9	3.2	3.2	-
Upholstered household furniture	2512	39.2	38.6	39.9	39.4	-	2.6	2.4	3.0	2.7	-
Metal household furniture	2514	40.2	38.8	41.0	42.1	-	4.3	4.2	3.8	4.3	-
Mattresses and bedsprings	2515	39.8	39.3	39.6	38.4	-	3.8	3.7	3.9	3.6	-
Office furniture	252	41.7	39.4	41.2	41.6	-	4.1	3.6	3.8	3.8	-
Public building and related furniture	253	41.4	40.1	39.7	39.8	-	4.8	4.1	4.1	4.2	-
Partitions and fixtures	254	42.4	41.3	41.8	41.9	-	4.5	3.5	4.5	4.4	-
Miscellaneous furniture and fixtures	259	39.8	38.7	38.6	39.9	-	3.9	3.7	3.4	3.6	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Total private		\$12.78	\$12.70	\$13.12	\$13.16	\$13.20	\$442.19	\$434.34	\$448.70	\$451.39	\$456.72
Goods-producing		14.34	14.24	14.53	14.64	14.75	587.94	572.45	588.47	598.78	606.23
Mining		16.90	16.79	17.01	16.94	16.85	741.91	727.01	717.82	731.81	739.72
Metal mining	10	18.24	18.26	18.20	18.12	—	811.68	834.48	791.70	802.72	—
Iron ores	101	19.90	19.97	20.08	20.05	—	891.52	882.67	923.68	904.26	—
Copper ores	102	16.53	16.37	16.32	16.42	—	770.30	808.68	714.82	771.74	—
Coal mining	12	19.15	19.10	19.12	19.11	—	856.01	844.22	864.22	854.22	—
Bituminous coal and lignite mining	122	19.41	19.39	19.37	19.38	—	867.63	853.16	877.46	866.29	—
Oil and gas extraction	13	16.77	16.64	16.83	16.78	—	716.08	695.55	678.25	693.01	—
Crude petroleum and natural gas	131	22.60	22.19	22.80	22.83	—	942.42	903.13	898.32	913.20	—
Oil and gas field services	138	13.94	13.99	13.64	13.46	—	600.81	590.38	556.51	565.32	—
Nonmetallic minerals, except fuels	14	14.70	14.55	14.91	14.98	—	682.08	675.12	659.02	693.57	—
Crushed and broken stone	142	14.03	13.94	14.14	14.35	—	677.65	680.27	647.61	701.72	—
Construction		16.59	16.36	16.79	16.85	17.04	643.69	623.32	632.98	650.41	669.67
General building contractors	15	15.91	15.84	16.32	16.31	—	604.58	595.58	610.37	621.41	—
Residential building construction	152	14.89	14.99	15.25	15.28	—	546.46	545.64	550.53	563.83	—
Operative builders	153	15.16	14.90	14.91	15.07	—	573.05	579.61	575.53	584.72	—
Nonresidential building construction	154	16.88	16.65	17.36	17.33	—	663.38	646.02	671.83	682.80	—
Heavy construction, except building	16	16.10	15.64	16.03	16.34	—	681.03	645.93	646.01	683.01	—
Highway and street construction	161	16.24	15.40	15.61	16.20	—	696.70	634.48	610.35	670.68	—
Heavy construction, except highway	162	16.04	15.73	16.17	16.40	—	675.28	649.65	658.12	688.80	—
Special trade contractors	17	16.94	16.72	17.12	17.15	—	648.80	627.00	638.58	653.42	—
Plumbing, heating, and air conditioning	171	17.22	17.06	17.44	17.47	—	678.47	658.52	671.44	684.82	—
Painting and paper hanging	172	15.19	15.02	15.43	15.42	—	562.03	540.72	555.48	572.08	—
Electrical work	173	18.47	18.13	18.70	18.75	—	735.11	712.51	733.04	744.38	—
Masonry, stonework, and plastering	174	16.71	16.60	16.80	16.91	—	601.56	592.62	593.04	608.76	—
Carpentry and floor work	175	16.46	16.27	17.05	17.09	—	594.21	577.59	618.92	628.91	—
Roofing, siding, and sheet metal work	176	14.81	14.47	14.79	14.93	—	510.95	477.51	470.32	507.62	—
Manufacturing		13.49	13.46	13.73	13.80	13.84	562.53	549.17	568.42	574.08	577.13
Durable goods		13.98	13.95	14.20	14.27	14.32	591.35	576.14	596.40	602.19	605.74
Lumber and wood products	24	11.10	10.98	11.31	11.38	11.42	456.21	447.98	461.45	468.86	472.79
Logging	241	12.48	12.12	12.80	12.91	—	507.94	493.28	519.68	522.86	—
Sawmills and planing mills	242	11.12	11.06	11.36	11.34	—	469.26	463.41	479.39	479.68	—
Sawmills and planing mills, general	2421	11.57	11.51	11.81	11.80	—	491.73	486.87	506.65	506.22	—
Hardwood dimension and flooring mills	2426	9.43	9.36	9.71	9.64	—	386.63	379.08	391.31	394.28	—
Millwork, plywood, and structural members	243	11.25	11.16	11.46	11.55	—	469.13	460.91	475.59	485.10	—
Millwork	2431	11.26	11.17	11.31	11.50	—	462.79	451.27	460.32	473.80	—
Wood kitchen cabinets	2434	11.22	11.15	11.63	11.69	—	464.51	463.84	481.48	492.15	—
Hardwood veneer and plywood	2435	10.02	9.97	10.29	10.29	—	420.84	413.76	436.30	436.30	—
Softwood veneer and plywood	2436	13.43	13.36	13.62	13.79	—	582.86	579.82	597.92	590.21	—
Wood containers	244	8.85	8.68	9.04	9.15	—	342.50	327.24	352.56	355.94	—
Wood buildings and mobile homes	245	11.34	11.27	11.49	11.60	—	449.06	448.55	434.32	451.24	—
Mobile homes	2451	11.50	11.43	11.65	11.80	—	456.55	456.06	443.87	461.38	—
Miscellaneous wood products	249	10.47	10.36	10.71	10.85	—	422.99	413.36	430.54	436.17	—
Furniture and fixtures	25	10.90	10.86	11.10	11.14	11.17	442.54	431.14	444.00	447.83	443.45
Household furniture	251	10.28	10.23	10.55	10.61	—	408.12	402.04	415.67	419.10	—
Wood household furniture	2511	9.85	9.73	10.05	10.13	—	394.00	388.23	391.95	401.15	—
Upholstered household furniture	2512	10.99	11.06	11.43	11.43	—	430.81	426.92	456.06	450.34	—
Metal household furniture	2514	9.74	9.77	9.66	9.69	—	391.55	379.08	396.06	407.95	—
Mattresses and bedsprings	2515	10.80	10.70	11.21	11.43	—	429.84	420.51	443.92	438.91	—
Office furniture	252	11.79	11.85	11.73	11.79	—	491.64	466.89	483.28	490.46	—
Public building and related furniture	253	12.05	12.02	12.53	12.46	—	498.87	482.00	497.44	495.91	—
Partitions and fixtures	254	11.64	11.63	11.66	11.69	—	493.54	480.32	487.39	489.81	—
Miscellaneous furniture and fixtures	259	11.00	10.99	11.21	11.29	—	437.80	425.31	432.71	450.47	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Stone, clay, and glass products	32	43.5	42.9	42.2	43.2	43.8	6.3	5.9	5.6	6.1	-
Flat glass	321	44.2	43.6	41.1	42.4	-	7.5	8.7	5.4	5.5	-
Glass and glassware, pressed or blown	322	42.5	41.7	42.4	42.3	-	5.2	5.2	5.1	5.2	-
Glass containers	3221	45.0	45.4	43.8	44.1	-	6.9	7.4	6.2	6.8	-
Pressed and blown glass, nec	3229	41.0	39.4	41.5	41.2	-	4.1	3.9	4.4	4.2	-
Products of purchased glass	323	42.3	40.9	41.4	42.4	-	4.9	4.0	4.2	4.7	-
Cement, hydraulic	324	45.5	46.2	46.3	44.6	-	6.2	6.9	7.6	6.6	-
Structural clay products	325	41.9	41.8	41.6	42.7	-	4.8	4.7	4.9	5.3	-
Pottery and related products	326	41.1	40.5	41.7	41.7	-	4.9	4.6	5.3	4.9	-
Concrete, gypsum, and plaster products	327	45.1	44.6	42.5	44.2	-	7.9	7.4	6.4	7.4	-
Concrete block and brick	3271	47.2	46.6	44.6	46.8	-	9.2	8.6	7.5	8.9	-
Concrete products, nec	3272	44.3	43.2	43.6	44.1	-	7.0	5.9	6.7	7.1	-
Ready-mixed concrete	3273	44.6	44.4	40.4	43.1	-	8.1	7.8	5.5	7.0	-
Misc. nonmetallic mineral products	329	42.9	42.2	42.6	43.1	-	5.2	4.4	5.3	5.5	-
Abrasive products	3291	41.7	40.5	42.2	42.5	-	3.0	3.0	3.0	3.2	-
Asbestos products	3292	47.9	44.3	46.4	51.0	-	8.9	4.8	8.3	12.5	-
Primary metal industries	33	44.2	43.4	43.9	44.2	44.3	6.3	5.7	6.1	6.4	-
Blast furnaces and basic steel products	331	44.6	44.8	43.9	44.8	44.9	6.1	6.2	5.6	6.1	-
Blast furnaces and steel mills	3312	45.1	45.7	43.8	45.0	-	6.4	6.6	5.7	6.3	-
Steel pipe and tubes	3317	44.2	42.0	44.9	45.2	-	6.1	4.8	5.8	5.9	-
Iron and steel foundries	332	44.6	43.8	44.2	44.4	-	6.2	5.8	6.3	6.6	-
Gray and ductile iron foundries	3321	45.4	44.3	45.5	46.1	-	7.0	6.4	7.5	8.0	-
Malleable iron foundries	3322	47.8	51.2	43.5	42.1	-	6.9	8.4	6.7	5.8	-
Steel foundries, nec	3325	43.1	42.0	42.1	42.0	-	5.1	4.7	4.7	5.0	-
Primary nonferrous metals	333	43.6	44.3	44.0	43.9	-	6.5	6.3	6.4	6.3	-
Primary aluminum	3334	44.3	45.3	43.9	44.5	-	7.0	7.1	6.9	6.7	-
Nonferrous rolling and drawing	335	44.3	42.7	44.0	43.8	-	7.4	6.3	7.5	7.3	-
Copper rolling and drawing	3351	43.4	41.4	43.2	43.4	-	7.4	6.0	7.8	7.8	-
Aluminum sheet, plate, and foil	3353	44.7	43.6	43.4	43.7	-	10.1	10.3	9.4	9.6	-
Nonferrous wire drawing and insulating	3357	44.2	42.5	44.3	43.6	-	6.9	5.7	7.4	6.9	-
Nonferrous foundries (castings)	336	42.9	40.8	43.1	43.6	-	5.0	3.6	4.9	5.4	-
Aluminum foundries	3365	43.1	40.6	43.8	45.3	-	5.3	3.8	5.3	6.2	-
Fabricated metal products	34	42.3	40.9	41.8	42.1	42.1	4.8	3.8	4.5	4.5	-
Metal cans and shipping containers	341	43.7	42.4	43.6	44.1	-	6.6	5.7	6.7	7.0	-
Metal cans	3411	43.7	42.6	43.5	44.2	-	6.4	5.7	6.6	7.0	-
Cutlery, handtools, and hardware	342	42.2	40.6	41.4	41.9	-	4.2	3.1	4.0	4.0	-
Hand and edge tools, and blades and handsaws	3423,5	43.1	41.7	42.7	43.2	-	4.6	3.4	4.5	4.3	-
Hardware, nec	3429	42.0	40.4	41.2	41.8	-	4.2	3.1	4.0	4.0	-
Plumbing and heating, except electric	343	41.9	39.7	41.9	42.3	-	3.7	3.1	4.0	3.9	-
Plumbing fixture fittings and trim	3432	41.0	38.7	41.6	42.6	-	3.7	3.5	3.9	4.1	-
Heating equipment, except electric	3433	41.2	39.4	40.0	40.8	-	3.6	2.3	2.5	2.9	-
Fabricated structural metal products	344	42.2	41.0	41.5	41.6	-	4.8	3.6	4.3	4.3	-
Fabricated structural metal	3441	43.5	41.8	43.0	42.4	-	6.4	4.7	5.5	5.4	-
Metal doors, sash, and trim	3442	41.2	40.4	40.2	40.9	-	3.7	2.7	3.2	3.3	-
Fabricated plate work (boiler shops)	3443	43.1	41.9	42.7	42.2	-	5.3	4.1	5.1	4.6	-
Sheet metal work	3444	41.2	40.4	41.0	41.2	-	4.1	3.4	3.8	3.9	-
Architectural metal work	3446	41.9	41.1	40.7	41.2	-	4.5	3.7	3.8	3.8	-
Screw machine products, bolts, etc	345	43.4	42.5	42.7	42.4	-	5.5	5.0	5.0	4.9	-
Screw machine products	3451	42.2	41.9	41.1	41.1	-	4.9	4.8	4.2	4.0	-
Bolts, nuts, rivets, and washers	3452	44.8	43.2	44.6	43.9	-	6.2	5.3	6.0	5.9	-
Metal forgings and stampings	346	42.8	40.6	42.9	43.3	-	5.3	3.9	5.1	5.2	-
Iron and steel forgings	3462	43.8	42.2	42.4	40.9	-	6.1	5.2	5.0	3.8	-
Automotive stampings	3465	43.2	40.3	43.9	44.8	-	5.4	3.5	5.4	5.9	-
Metal stampings, nec	3469	41.3	40.2	41.4	41.6	-	4.3	3.5	4.3	4.3	-
Metal services, nec	347	41.5	40.4	41.1	41.8	-	4.8	4.0	4.7	4.9	-
Plating and polishing	3471	41.0	39.9	40.8	41.0	-	4.7	3.9	4.6	4.6	-
Metal coating and allied services	3479	42.1	41.2	41.6	43.0	-	5.0	4.2	4.8	5.5	-
Ordnance and accessories, nec	348	40.2	39.9	41.2	41.6	-	3.5	3.0	3.7	3.5	-
Ammunition, except for small arms, nec	3483	42.0	42.1	42.3	42.6	-	3.5	3.4	3.4	2.9	-
Misc. fabricated metal products	349	42.0	41.1	41.3	41.6	-	4.1	3.5	3.9	4.0	-
Valves and pipe fittings, nec	3494	41.7	40.9	40.7	41.3	-	4.1	3.3	3.0	3.6	-
Misc. fabricated wire products	3496	40.5	40.0	40.0	40.6	-	3.6	3.0	3.4	3.6	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Stone, clay, and glass products	32	\$13.60	\$13.63	\$13.70	\$13.74	\$13.86	\$591.60	\$584.73	\$578.14	\$593.57	\$607.07
Flat glass	321	18.60	20.03	17.77	17.42	—	822.12	873.31	730.35	738.61	—
Glass and glassware, pressed or blown	322	15.52	15.60	15.54	15.65	—	659.60	650.52	658.90	662.00	—
Glass containers	3221	16.38	16.50	16.59	17.12	—	737.10	749.10	726.64	754.99	—
Pressed and blown glass, nec	3229	14.93	14.96	14.88	14.74	—	612.13	589.42	617.52	607.29	—
Products of purchased glass	323	12.12	12.15	12.47	12.52	—	512.68	496.94	516.26	530.85	—
Cement, hydraulic	324	18.54	18.79	19.32	19.39	—	843.57	868.10	894.52	864.79	—
Structural clay products	325	11.88	11.76	12.27	12.33	—	497.77	491.57	510.43	526.49	—
Pottery and related products	326	11.96	12.05	12.06	12.08	—	491.56	488.03	502.90	503.74	—
Concrete, gypsum, and plaster products	327	13.11	12.98	13.13	13.27	—	591.26	578.91	558.03	586.53	—
Concrete block and brick	3271	12.46	12.42	12.76	12.97	—	588.11	578.77	569.10	607.00	—
Concrete products, nec	3272	11.71	11.55	11.86	11.88	—	518.75	498.96	517.10	523.91	—
Ready-mixed concrete	3273	13.95	13.82	13.97	14.13	—	622.17	613.61	564.39	609.00	—
Misc. nonmetallic mineral products	329	13.83	13.98	14.01	13.95	—	593.31	589.96	596.83	601.25	—
Abrasive products	3291	12.41	12.37	12.82	12.87	—	517.50	500.99	541.00	546.98	—
Asbestos products	3292	15.42	15.47	14.67	14.81	—	738.62	685.32	680.69	755.31	—
Primary metal industries	33	15.49	15.66	15.53	15.65	15.73	684.66	679.64	681.77	691.73	696.84
Blast furnaces and basic steel products	331	18.43	18.67	18.56	18.66	18.82	821.98	836.42	814.78	835.97	845.02
Blast furnaces and steel mills	3312	20.10	20.33	20.34	20.39	—	906.51	929.08	890.89	917.55	—
Steel pipe and tubes	3317	14.18	14.23	13.84	14.15	—	626.76	597.66	621.42	639.58	—
Iron and steel foundries	332	13.98	14.13	14.28	14.57	—	623.51	618.89	631.18	646.91	—
Gray and ductile iron foundries	3321	14.70	15.02	14.84	15.17	—	667.38	665.39	675.22	699.34	—
Malleable iron foundries	3322	15.57	15.94	14.42	14.74	—	744.25	816.13	627.27	620.55	—
Steel foundries, nec	3325	13.27	12.99	13.60	13.79	—	571.94	545.58	572.56	579.18	—
Primary nonferrous metals	333	17.04	17.27	17.07	17.08	—	742.94	765.06	751.08	749.81	—
Primary aluminum	3334	16.97	17.24	17.06	16.87	—	751.77	780.97	748.93	750.72	—
Nonferrous rolling and drawing	335	14.62	14.77	14.34	14.35	—	647.67	630.68	630.96	628.53	—
Copper rolling and drawing	3351	15.18	15.11	15.51	15.47	—	658.81	625.55	670.03	671.40	—
Aluminum sheet, plate, and foil	3353	16.78	17.05	17.11	16.83	—	750.07	743.38	742.57	735.47	—
Nonferrous wire drawing and insulating	3357	14.71	14.98	13.91	14.07	—	650.18	636.65	616.21	613.45	—
Nonferrous foundries (castings)	336	12.36	12.30	12.55	12.60	—	530.24	501.84	540.91	549.36	—
Aluminum foundries	3365	11.84	11.73	11.94	12.01	—	510.30	476.24	522.97	544.05	—
Fabricated metal products	34	13.06	12.88	13.33	13.37	13.44	552.44	526.79	557.19	562.88	565.82
Metal cans and shipping containers	341	16.70	16.72	16.76	16.78	—	729.79	708.93	730.74	740.00	—
Metal cans	3411	17.79	17.74	17.80	17.80	—	777.42	755.72	774.30	786.76	—
Cutlery, handtools, and hardware	342	12.34	12.28	12.41	12.45	—	520.75	498.57	513.77	521.66	—
Hand and edge tools, and blades and handsaws	3423,5	12.26	12.13	12.57	12.71	—	528.41	505.82	536.74	549.07	—
Hardware, nec	3429	12.55	12.56	12.36	12.38	—	527.10	507.42	509.23	517.48	—
Plumbing and heating, except electric	343	11.88	11.89	11.89	11.93	—	497.77	472.03	498.19	504.64	—
Plumbing fixture fittings and trim	3432	11.54	11.51	11.59	11.61	—	473.14	445.44	482.14	494.59	—
Heating equipment, except electric	3433	12.10	11.90	12.20	12.17	—	498.52	468.86	488.00	496.54	—
Fabricated structural metal products	344	12.51	12.33	12.80	12.82	—	527.92	505.53	531.20	533.31	—
Fabricated structural metal	3441	12.82	12.69	13.07	13.10	—	557.67	530.44	562.01	555.44	—
Metal doors, sash, and trim	3442	10.61	10.50	10.81	10.84	—	437.13	424.20	434.56	443.36	—
Fabricated plate work (boiler shops)	3443	13.77	13.47	14.08	14.14	—	593.49	564.39	601.22	596.71	—
Sheet metal work	3444	12.78	12.64	13.16	13.20	—	526.54	510.66	539.56	543.84	—
Architectural metal work	3446	11.82	11.71	12.18	12.04	—	495.26	481.28	495.73	496.05	—
Screw machine products, bolts, etc	345	13.31	13.19	13.77	13.74	—	577.65	560.58	587.98	582.58	—
Screw machine products	3451	12.62	12.49	12.85	12.93	—	532.56	523.33	528.14	531.42	—
Bolts, nuts, rivets, and washers	3452	14.06	13.97	14.74	14.60	—	629.89	603.50	657.40	640.94	—
Metal forgings and stampings	346	15.16	14.84	15.48	15.59	—	648.85	602.50	664.09	675.05	—
Iron and steel forgings	3462	14.63	14.48	14.87	14.80	—	640.79	611.06	630.49	605.32	—
Automotive stampings	3465	17.26	16.68	17.49	17.67	—	745.63	672.20	767.81	791.62	—
Metal stampings, nec	3469	12.64	12.55	12.99	13.07	—	522.03	504.51	537.79	543.71	—
Metal services, nec	347	11.15	11.03	11.45	11.47	—	462.73	445.61	470.60	479.45	—
Plating and polishing	3471	11.03	10.91	11.30	11.37	—	452.23	435.31	461.04	466.17	—
Metal coating and allied services	3479	11.33	11.22	11.69	11.63	—	476.99	462.26	486.30	500.09	—
Ordnance and accessories, nec	348	15.46	15.37	15.51	15.13	—	621.49	613.26	639.01	629.41	—
Ammunition, except for small arms, nec	3483	16.41	16.24	16.62	16.09	—	689.22	683.70	703.03	685.43	—
Misc. fabricated metal products	349	12.52	12.34	12.77	12.83	—	525.84	507.17	527.40	533.73	—
Valves and pipe fittings, nec	3494	12.81	12.61	12.84	13.01	—	534.18	515.75	522.59	537.31	—
Misc. fabricated wire products	3496	11.14	10.93	11.33	11.30	—	451.17	437.20	453.20	458.78	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Industrial machinery and equipment	35	42.8	41.9	42.1	42.2	42.2	5.0	4.3	4.8	4.7	—
Engines and turbines	351	44.6	43.4	44.7	44.3	—	6.1	5.0	7.0	6.6	—
Turbines and turbine generator sets	3511	42.8	40.5	44.3	44.9	—	4.4	3.2	5.6	5.5	—
Internal combustion engines, nec	3519	45.2	44.5	44.8	44.1	—	6.7	5.6	7.4	6.9	—
Farm and garden machinery	352	41.5	40.9	41.5	41.4	—	3.7	3.5	3.5	3.2	—
Farm machinery and equipment	3523	42.0	41.4	41.4	41.5	—	3.8	3.9	3.5	3.4	—
Construction and related machinery	353	43.7	42.7	42.6	42.6	—	5.6	4.9	5.0	4.9	—
Construction machinery	3531	43.2	42.9	43.5	43.2	—	5.0	4.6	5.5	5.2	—
Mining machinery	3532	41.3	40.7	39.9	39.8	—	3.9	3.6	2.7	2.0	—
Oil and gas field machinery	3533	47.4	45.1	42.8	43.6	—	8.7	7.6	6.8	7.5	—
Conveyors and conveying equipment	3535	42.5	41.3	41.4	41.4	—	4.9	3.5	3.8	4.0	—
Industrial trucks and tractors	3537	41.5	40.4	41.5	41.5	—	4.0	3.4	3.5	3.3	—
Metalworking machinery	354	43.2	42.1	42.8	42.8	—	5.7	5.0	5.5	5.4	—
Machine tools, metal cutting types	3541	43.4	42.2	42.8	42.5	—	5.3	4.6	4.7	4.3	—
Machine tools, metal forming types	3542	44.1	42.1	43.1	43.2	—	6.1	4.4	5.5	5.9	—
Special dies, tools, jigs, and fixtures	3544	43.5	42.4	43.4	43.5	—	6.3	5.5	6.2	6.1	—
Machine tool accessories	3545	42.4	41.7	41.5	41.8	—	4.4	4.1	4.3	4.2	—
Power driven handtools	3546	41.8	39.7	40.7	41.8	—	3.9	2.5	3.5	3.7	—
Special industry machinery	355	42.2	41.7	41.8	41.7	—	4.6	4.0	4.5	4.4	—
Textile machinery	3552	40.5	39.6	39.4	39.7	—	3.4	2.6	3.3	3.4	—
Printing trades machinery	3555	41.9	40.9	41.1	41.0	—	4.8	4.0	4.3	3.9	—
Food products machinery	3556	42.3	42.1	41.8	42.2	—	4.6	4.2	4.2	4.4	—
General industrial machinery	356	42.4	41.3	41.6	41.7	—	4.7	3.8	4.2	4.3	—
Pumps and pumping equipment	3561	41.0	40.3	40.6	40.9	—	4.3	3.8	3.4	3.7	—
Ball and roller bearings	3562	43.1	41.6	41.6	41.9	—	5.9	5.3	4.6	5.1	—
Air and gas compressors	3563	42.8	41.6	44.0	43.2	—	4.6	3.7	5.2	5.1	—
Blowers and fans	3564	42.9	41.2	41.5	42.0	—	3.9	2.2	2.9	3.0	—
Speed changers, drives, and gears	3566	42.6	41.4	41.7	41.7	—	5.4	4.2	4.9	4.8	—
Power transmission equipment, nec	3568	42.3	41.2	40.6	41.2	—	4.5	3.4	4.2	4.9	—
Computer and office equipment	357	41.8	41.4	40.9	40.6	—	4.1	3.3	3.6	3.1	—
Electronic computers	3571	42.1	42.1	40.8	40.5	—	4.6	3.9	4.0	3.3	—
Computer terminals, calculators, and office machines, nec	3575,8,9	41.8	40.6	41.3	41.5	—	4.0	2.9	3.8	4.4	—
Refrigeration and service machinery	358	43.6	42.1	41.9	43.1	—	4.9	3.5	4.7	5.5	—
Refrigeration and heating equipment	3585	44.3	42.5	42.4	43.7	—	5.3	3.8	5.3	6.2	—
Misc. industrial and commercial machinery	359	42.5	41.9	42.2	42.2	—	5.3	4.8	5.0	4.9	—
Carburetors, pistons, rings, valves	3592	41.1	40.3	40.4	40.9	—	5.3	4.5	5.4	5.7	—
Scales, balances, and industrial machinery, nec ..	3596,9	42.6	42.0	42.4	42.4	—	5.3	4.9	5.1	5.0	—
Electronic and other electrical equipment	36	41.4	40.4	40.8	41.0	41.3	3.8	3.2	3.6	3.6	—
Electric distribution equipment	361	40.6	39.2	40.4	40.9	—	3.9	2.9	3.8	4.0	—
Transformers, except electronic	3612	41.7	40.5	42.1	42.7	—	3.5	2.8	3.4	4.1	—
Switchgear and switchboard apparatus	3613	39.7	38.0	39.0	39.3	—	4.3	3.0	4.1	4.0	—
Electrical industrial apparatus	362	41.4	39.9	40.9	41.2	—	3.5	2.8	3.2	3.4	—
Motors and generators	3621	41.5	39.6	41.1	41.7	—	3.5	2.5	3.2	3.5	—
Relays and industrial controls	3625	40.6	38.9	40.2	40.3	—	3.3	2.7	3.0	3.0	—
Household appliances	363	40.4	38.2	40.7	40.2	—	2.5	1.6	2.1	2.1	—
Household refrigerators and freezers	3632	41.5	37.3	41.3	41.0	—	2.6	1.7	1.9	1.8	—
Household laundry equipment	3633	40.1	40.5	39.2	39.7	—	2.4	2.7	3.8	3.8	—
Electric housewares and fans	3634	40.1	38.6	41.1	40.4	—	2.1	1.1	2.2	1.4	—
Electric lighting and wiring equipment	364	41.2	39.8	41.1	41.4	—	3.9	2.9	4.1	4.2	—
Electric lamps	3641	41.1	41.0	42.9	41.5	—	3.9	2.8	5.5	4.9	—
Current-carrying wiring devices	3643	41.0	39.7	40.2	40.5	—	4.0	3.1	4.0	4.0	—
Noncurrent-carrying wiring devices	3644	42.5	40.8	41.3	41.4	—	3.7	2.3	4.1	3.9	—
Residential lighting fixtures	3645	39.1	38.2	39.8	39.4	—	3.1	2.7	3.1	3.0	—
Household audio and video equipment	365	40.5	39.9	38.4	38.0	—	4.6	3.9	4.4	4.6	—
Household audio and video equipment	3651	39.4	38.3	38.1	39.0	—	3.3	2.8	2.7	3.6	—
Communications equipment	366	42.5	41.6	40.2	41.2	—	3.4	2.6	2.6	2.9	—
Telephone and telegraph apparatus	3661	44.6	43.7	42.0	42.9	—	4.1	3.3	3.2	3.4	—
Electronic components and accessories	367	41.4	40.7	41.2	41.1	—	4.0	3.7	3.9	3.8	—
Electron tubes	3671	42.0	41.4	42.5	42.9	—	3.6	3.4	2.9	3.2	—
Semiconductors and related devices	3674	42.5	42.3	41.5	41.8	—	4.9	5.0	4.3	4.2	—
Electronic components, nec	3679	41.2	40.2	41.1	41.0	—	3.6	3.1	3.5	3.5	—
Misc. electrical equipment and supplies	369	42.0	41.4	41.2	41.8	—	4.4	3.9	3.9	4.2	—
Storage batteries	3691	42.5	38.5	40.7	40.6	—	4.5	2.9	3.4	3.5	—
Engine electrical equipment	3694	42.4	43.1	41.8	43.1	—	5.2	5.3	4.7	5.4	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Industrial machinery and equipment	35	\$14.47	\$14.34	\$14.81	\$14.85	\$14.93	\$619.32	\$600.85	\$623.50	\$626.67	\$630.05
Engines and turbines	351	17.24	16.77	18.10	18.16	—	768.90	727.82	809.07	804.49	—
Turbines and turbine generator sets	3511	19.69	19.70	20.23	20.46	—	842.73	797.85	896.19	918.65	—
Internal combustion engines, nec	3519	16.44	15.80	17.42	17.42	—	743.09	703.10	780.42	768.22	—
Farm and garden machinery	352	14.00	14.39	13.48	13.43	—	581.00	588.55	559.42	556.00	—
Farm machinery and equipment	3523	14.80	15.38	14.48	14.36	—	621.60	636.73	599.47	595.94	—
Construction and related machinery	353	13.72	13.58	14.01	14.03	—	599.56	579.87	596.83	597.68	—
Construction machinery	3531	13.96	13.91	14.13	14.15	—	603.07	596.74	614.66	611.28	—
Mining machinery	3532	14.58	14.45	14.44	14.35	—	602.15	588.12	576.16	571.13	—
Oil and gas field machinery	3533	13.69	13.38	14.46	14.49	—	648.91	603.44	618.89	631.76	—
Conveyors and conveying equipment	3535	13.87	13.71	14.18	14.31	—	589.48	566.22	587.05	592.43	—
Industrial trucks and tractors	3537	12.83	12.63	12.95	12.85	—	532.45	510.25	537.43	533.28	—
Metalworking machinery	354	15.33	15.16	15.81	15.82	—	662.26	638.24	676.67	677.10	—
Machine tools, metal cutting types	3541	15.01	14.79	15.66	15.65	—	651.43	624.14	670.25	665.13	—
Machine tools, metal forming types	3542	15.77	15.48	16.23	16.43	—	695.46	651.71	699.51	709.78	—
Special dies, tools, jigs, and fixtures	3544	16.07	15.85	16.50	16.52	—	699.05	672.04	716.10	718.62	—
Machine tool accessories	3545	13.41	13.35	13.94	13.96	—	568.58	556.70	578.51	583.53	—
Power driven handtools	3546	12.53	12.54	12.63	12.70	—	523.75	497.84	514.04	530.86	—
Special industry machinery	355	15.09	14.94	15.47	15.51	—	636.80	623.00	646.65	646.77	—
Textile machinery	3552	13.15	13.05	13.46	13.34	—	532.58	516.78	530.32	529.60	—
Printing trades machinery	3555	16.16	16.09	16.11	15.86	—	677.10	658.08	662.12	650.26	—
Food products machinery	3556	14.82	14.58	15.18	15.23	—	626.89	613.82	634.52	642.71	—
General industrial machinery	356	14.06	13.97	14.21	14.32	—	596.14	576.96	591.14	597.14	—
Pumps and pumping equipment	3561	14.85	14.77	15.06	15.16	—	608.85	595.23	611.44	620.04	—
Ball and roller bearings	3562	15.13	15.26	14.80	15.23	—	652.10	634.82	615.68	638.14	—
Air and gas compressors	3563	14.86	14.79	14.46	14.52	—	636.01	615.26	636.24	627.26	—
Blowers and fans	3564	11.68	11.50	11.73	11.70	—	501.07	473.80	486.80	491.40	—
Speed changers, drives, and gears	3566	15.02	14.83	15.62	15.69	—	639.85	613.96	651.35	654.27	—
Power transmission equipment, nec	3568	13.57	13.36	13.99	14.22	—	574.01	550.43	567.99	585.86	—
Computer and office equipment	357	15.34	15.10	15.89	16.00	—	641.21	625.14	649.90	649.60	—
Electronic computers	3571	16.80	16.51	17.82	17.95	—	707.28	695.07	727.06	726.98	—
Computer terminals, calculators, and office machines, nec	3575,8,9	13.86	13.61	14.48	14.48	—	579.35	552.57	598.02	600.92	—
Refrigeration and service machinery	358	12.99	12.98	13.40	13.49	—	566.36	546.46	561.46	581.42	—
Refrigeration and heating equipment	3585	13.29	13.35	13.75	13.83	—	588.75	567.38	583.00	604.37	—
Misc. industrial and commercial machinery	359	14.07	13.89	14.36	14.36	—	597.98	581.99	605.99	605.99	—
Carburetors, pistons, rings, valves	3592	14.63	14.57	14.83	14.79	—	601.29	587.17	599.13	604.91	—
Scales, balances, and industrial machinery, nec ..	3596,9	13.93	13.74	14.23	14.24	—	593.42	577.08	603.35	603.78	—
Electronic and other electrical equipment	36	13.09	13.06	13.27	13.34	13.40	541.93	527.62	541.42	546.94	553.42
Electric distribution equipment	361	13.06	13.07	13.13	13.16	—	530.24	512.34	530.45	538.24	—
Transformers, except electronic	3612	12.05	12.13	12.07	12.23	—	502.49	491.27	508.15	522.22	—
Switchgear and switchboard apparatus	3613	13.98	13.95	14.11	14.01	—	555.01	530.10	550.29	550.59	—
Electrical industrial apparatus	362	12.50	12.39	12.85	12.96	—	517.50	494.36	525.57	533.95	—
Motors and generators	3621	11.57	11.42	11.75	11.84	—	480.16	452.23	482.93	493.73	—
Relays and industrial controls	3625	14.22	14.13	14.76	14.76	—	577.33	549.66	593.35	594.83	—
Household appliances	363	12.46	12.38	12.76	12.80	—	503.38	472.92	519.33	514.56	—
Household refrigerators and freezers	3632	13.61	13.28	14.88	14.51	—	564.82	495.34	614.54	594.91	—
Household laundry equipment	3633	13.97	14.00	14.01	13.95	—	560.20	567.00	549.19	553.82	—
Electric housewares and fans	3634	10.81	10.56	11.08	11.07	—	433.48	407.62	455.39	447.23	—
Electric lighting and wiring equipment	364	12.65	12.60	12.81	12.86	—	521.18	501.48	526.49	532.40	—
Electric lamps	3641	16.69	16.35	17.49	17.53	—	685.96	670.35	750.32	727.50	—
Current-carrying wiring devices	3643	13.08	12.81	13.18	13.23	—	536.28	508.56	529.84	535.82	—
Noncurrent-carrying wiring devices	3644	11.70	11.45	12.15	12.26	—	497.25	467.16	501.80	507.56	—
Residential lighting fixtures	3645	9.27	9.17	9.50	9.83	—	362.46	350.29	378.10	387.30	—
Household audio and video equipment	365	11.93	11.77	12.12	12.24	—	483.17	469.62	465.41	465.12	—
Household audio and video equipment	3651	11.48	11.29	11.92	12.08	—	452.31	432.41	454.15	471.12	—
Communications equipment	366	14.01	13.80	14.03	13.93	—	595.43	574.08	564.01	573.92	—
Telephone and telegraph apparatus	3661	14.87	14.74	14.69	14.63	—	663.20	644.14	616.98	627.63	—
Electronic components and accessories	367	13.25	13.22	13.49	13.59	—	548.55	538.05	555.79	558.55	—
Electron tubes	3671	14.86	15.02	14.69	14.67	—	624.12	621.83	624.33	629.34	—
Semiconductors and related devices	3674	17.58	17.48	17.93	18.07	—	747.15	739.40	744.10	755.33	—
Electronic components, nec	3679	10.79	10.74	11.07	11.15	—	444.55	431.75	454.98	457.15	—
Misc. electrical equipment and supplies	369	13.62	13.93	13.68	13.75	—	572.04	576.70	563.62	574.75	—
Storage batteries	3691	15.06	15.12	15.07	15.30	—	640.05	582.12	613.35	621.18	—
Engine electrical equipment	3694	13.74	14.53	13.65	13.82	—	582.58	626.24	570.57	595.64	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Transportation equipment	37	43.4	41.4	43.9	44.2	43.9	5.5	4.9	5.3	5.6	—
Motor vehicles and equipment	371	43.5	41.2	45.1	45.6	45.1	5.6	5.2	6.0	6.6	—
Motor vehicles and car bodies	3711	42.8	39.6	45.1	45.9	—	5.4	4.4	6.0	6.7	—
Truck and bus bodies	3713	43.8	44.0	43.9	44.7	—	5.7	6.4	4.7	5.7	—
Motor vehicle parts and accessories	3714	44.2	42.0	45.5	46.0	—	6.0	5.8	6.3	7.0	—
Truck trailers	3715	42.1	41.1	41.9	43.1	—	4.2	4.2	3.3	3.7	—
Aircraft and parts	372	44.2	42.8	42.9	42.5	—	6.1	5.2	4.6	4.1	—
Aircraft	3721	44.2	42.7	42.3	42.2	—	5.9	5.0	4.0	3.9	—
Aircraft engines and engine parts	3724	44.4	42.9	44.1	44.3	—	6.0	4.8	5.8	5.2	—
Aircraft parts and equipment, nec	3728	44.1	42.9	42.8	41.9	—	6.3	5.6	4.5	3.8	—
Ship and boat building and repairing	373	42.3	40.4	40.9	41.2	—	4.7	3.3	4.4	4.2	—
Ship building and repairing	3731	43.5	40.6	41.6	41.2	—	5.5	3.5	5.1	4.2	—
Boat building and repairing	3732	40.5	40.0	39.8	41.2	—	3.5	3.1	3.3	4.2	—
Railroad equipment	374	43.1	42.3	41.5	42.5	—	4.2	3.0	3.6	3.8	—
Guided missiles, space vehicles, and parts	376	42.1	40.6	42.0	41.6	—	3.8	3.1	3.8	3.8	—
Guided missiles and space vehicles	3761	41.7	41.0	41.1	40.6	—	3.6	3.1	3.3	3.3	—
Misc. transportation equipment	379	40.6	39.9	41.3	41.8	—	3.4	3.3	3.5	4.0	—
Travel trailers and campers	3792	38.8	37.7	39.8	40.6	—	2.1	2.1	2.2	2.7	—
Instruments and related products	38	41.3	40.7	41.4	41.6	41.5	3.3	2.9	3.2	3.1	—
Search and navigation equipment	381	42.3	42.4	41.5	41.7	—	3.5	3.3	3.1	3.3	—
Measuring and controlling devices	382	41.2	40.5	41.3	41.4	—	3.1	2.5	3.1	3.2	—
Environmental controls	3822	40.5	37.6	42.5	43.5	—	3.9	2.5	4.3	4.9	—
Process control instruments	3823	41.1	40.7	40.4	40.5	—	3.1	2.6	3.0	3.0	—
Instruments to measure electricity	3825	41.5	41.3	41.0	40.5	—	2.1	1.7	2.5	2.1	—
Medical instruments and supplies	384	41.0	39.9	41.3	41.3	—	3.4	2.9	3.4	3.2	—
Surgical and medical instrument	3841	41.0	39.8	41.4	41.3	—	3.3	2.6	3.8	3.5	—
Surgical appliances and supplies	3842	40.6	39.3	41.4	41.1	—	3.6	3.2	3.5	3.1	—
Ophthalmic goods	385	41.0	41.5	41.6	41.8	—	2.5	3.2	2.3	3.0	—
Photographic equipment and supplies	386	42.4	42.7	42.3	42.9	—	4.2	4.2	2.9	2.8	—
Watches, clocks, watchcases, and parts	387	40.3	37.0	40.4	40.4	—	2.4	1.6	1.9	1.3	—
Miscellaneous manufacturing industries	39	39.9	39.5	40.0	40.0	40.1	3.0	2.6	3.1	3.1	—
Jewelry, silverware, and plated ware	391	39.2	39.0	38.2	38.2	—	2.6	2.0	2.5	2.5	—
Jewelry, precious metal	3911	38.3	38.2	37.3	37.3	—	2.5	1.9	2.5	2.4	—
Musical instruments	393	40.4	39.6	39.8	40.1	—	2.7	2.1	2.5	2.3	—
Toys and sporting goods	394	39.9	39.9	41.6	41.1	—	2.4	2.5	3.7	3.3	—
Dolls, games, toys, and children's vehicles	3942,4	39.1	37.9	37.8	37.4	—	2.0	1.6	1.7	1.4	—
Sporting and athletic goods, nec	3949	40.3	40.7	43.1	42.6	—	2.6	2.9	4.6	4.0	—
Pens, pencils, office, and art supplies	395	38.6	38.1	38.9	39.0	—	3.1	2.7	2.7	2.7	—
Costume jewelry and notions	396	38.6	38.3	38.1	37.8	—	2.4	1.8	1.9	1.6	—
Costume jewelry	3961	38.0	37.6	37.2	36.1	—	2.0	1.0	1.4	0.5	—
Miscellaneous manufactures	399	40.5	39.7	40.1	40.2	—	3.5	3.0	3.2	3.4	—
Signs and advertising specialties	3993	41.2	41.1	40.4	40.5	—	4.2	3.8	3.5	3.8	—
Nondurable goods		40.9	40.0	40.6	40.7	40.8	4.3	3.8	4.2	4.2	4.3
Food and kindred products	20	41.7	40.4	41.1	41.2	41.7	5.2	4.2	4.9	4.9	—
Meat products	201	41.2	39.7	41.0	41.2	—	4.8	3.9	4.9	5.0	—
Meat packing plants	2011	43.3	41.4	43.7	43.1	—	5.7	3.9	6.6	6.4	—
Sausages and other prepared meats	2013	42.1	40.8	42.4	43.0	—	6.0	5.6	6.1	6.4	—
Poultry slaughtering and processing	2015	39.6	38.4	38.9	39.5	—	3.9	3.2	3.5	3.6	—
Dairy products	202	42.0	41.4	42.4	42.6	—	5.2	4.7	5.1	5.3	—
Cheese, natural and processed	2022	41.7	40.6	42.8	43.3	—	4.6	4.1	4.7	5.2	—
Fluid milk	2026	41.7	40.7	41.9	42.1	—	5.0	4.5	4.8	4.7	—
Preserved fruits and vegetables	203	41.6	39.5	40.2	40.3	—	5.7	3.7	4.5	4.8	—
Canned specialties	2032	43.2	40.7	40.8	40.7	—	7.3	4.2	5.1	5.1	—
Canned fruits and vegetables	2033	41.2	38.9	38.7	39.1	—	6.2	4.0	3.3	4.3	—
Frozen fruits and vegetables	2037	40.9	40.3	40.9	40.5	—	5.1	3.8	4.7	4.9	—
Grain mill products	204	45.7	44.7	43.3	43.8	—	7.4	6.0	6.5	6.4	—
Flour and other grain mill products	2041	46.2	44.5	44.0	43.9	—	7.3	4.9	6.3	6.4	—
Prepared feeds, nec	2048	44.0	43.6	42.0	42.2	—	6.5	5.6	6.5	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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Durable goods—Continued											
Transportation equipment	37	\$17.53	\$17.67	\$17.66	\$17.87	\$17.87	\$760.80	\$731.54	\$775.27	\$789.85	\$784.49
Motor vehicles and equipment	371	17.86	18.26	17.98	18.30	18.22	776.91	752.31	810.90	834.48	821.72
Motor vehicles and car bodies	3711	21.81	22.22	21.65	21.95	—	933.47	879.91	976.42	1,007.51	—
Truck and bus bodies	3713	15.54	15.96	14.88	15.18	—	680.65	702.24	653.23	678.55	—
Motor vehicle parts and accessories	3714	16.48	16.96	16.81	17.16	—	728.42	712.32	764.86	789.36	—
Truck trailers	3715	11.42	11.22	11.46	11.53	—	480.78	461.14	480.17	496.94	—
Aircraft and parts	372	19.17	18.83	19.33	19.34	—	847.31	805.92	829.26	821.95	—
Aircraft	3721	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Aircraft engines and engine parts	3724	18.93	18.58	19.32	19.30	—	840.49	797.08	852.01	854.99	—
Aircraft parts and equipment, nec	3728	17.06	16.86	16.98	17.02	—	752.35	723.29	726.74	713.14	—
Ship and boat building and repairing	373	13.41	13.15	13.68	13.61	—	567.24	531.26	559.51	560.73	—
Ship building and repairing	3731	14.65	14.43	15.04	15.05	—	637.28	585.86	625.66	620.06	—
Boat building and repairing	3732	11.38	11.21	11.69	11.81	—	460.89	448.40	465.26	486.57	—
Railroad equipment	374	16.90	16.95	16.06	16.21	—	728.39	716.99	666.49	688.93	—
Guided missiles, space vehicles, and parts	376	19.96	19.58	20.38	20.13	—	840.32	794.95	855.96	837.41	—
Guided missiles and space vehicles	3761	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Misc. transportation equipment	379	11.93	11.91	12.29	12.50	—	484.36	475.21	507.58	522.50	—
Travel trailers and campers	3792	12.01	12.05	12.36	12.57	—	465.99	454.29	491.93	510.34	—
Instruments and related products	38	13.81	13.78	13.97	14.07	14.10	570.35	560.85	578.36	585.31	585.15
Search and navigation equipment	381	17.47	17.33	17.62	17.66	—	738.98	734.79	731.23	736.42	—
Measuring and controlling devices	382	13.89	13.77	14.17	14.24	—	572.27	557.69	585.22	589.54	—
Environmental controls	3822	12.01	11.90	12.07	12.17	—	486.41	447.44	512.98	529.40	—
Process control instruments	3823	13.85	13.68	14.46	14.48	—	569.24	556.78	584.18	586.44	—
Instruments to measure electricity	3825	16.10	15.86	16.30	16.45	—	668.15	655.02	668.30	666.23	—
Medical instruments and supplies	384	12.77	12.83	12.81	12.92	—	523.57	511.92	529.05	533.60	—
Surgical and medical instrument	3841	12.00	12.05	12.17	12.17	—	492.00	479.59	503.84	502.62	—
Surgical appliances and supplies	3842	12.00	11.97	12.12	12.11	—	487.20	470.42	501.77	497.72	—
Ophthalmic goods	385	10.26	10.39	10.58	10.60	—	420.66	431.19	440.13	443.08	—
Photographic equipment and supplies	386	16.32	16.10	16.92	17.17	—	691.97	687.47	715.72	736.59	—
Watches, clocks, watchcases, and parts	387	10.42	10.46	10.66	10.59	—	419.93	387.02	430.66	427.84	—
Miscellaneous manufacturing industries	39	10.89	10.77	11.19	11.25	11.27	434.51	425.42	447.60	450.00	451.93
Jewelry, silverware, and plated ware	391	11.36	11.28	11.77	11.86	—	445.31	439.92	449.61	453.05	—
Jewelry, precious metal	3911	11.45	11.40	11.68	11.77	—	438.54	435.48	435.66	439.02	—
Musical instruments	393	11.06	11.05	11.78	11.77	—	446.82	437.58	468.84	471.98	—
Toys and sporting goods	394	10.42	10.34	10.67	10.72	—	415.76	412.57	443.87	440.59	—
Dolls, games, toys, and children's vehicles	3942,4	10.01	9.84	10.27	10.30	—	391.39	372.94	388.21	385.22	—
Sporting and athletic goods, nec	3949	10.60	10.53	10.81	10.87	—	427.18	428.57	465.91	463.06	—
Pens, pencils, office, and art supplies	395	11.22	11.11	11.37	11.53	—	433.09	423.29	442.29	449.67	—
Costume jewelry and notions	396	9.74	9.71	10.01	10.03	—	375.96	371.89	381.38	379.13	—
Costume jewelry	3961	8.81	8.85	9.04	8.94	—	334.78	332.76	336.29	322.73	—
Miscellaneous manufactures	399	11.10	10.96	11.39	11.45	—	449.55	435.11	456.74	460.29	—
Signs and advertising specialties	3993	11.78	11.53	12.18	12.32	—	485.34	473.88	492.07	498.96	—
Nondurable goods		12.76	12.72	13.03	13.08	13.12	521.88	508.80	529.02	532.36	535.30
Food and kindred products	20	11.80	11.74	11.93	12.07	12.10	492.06	474.30	490.32	497.28	504.57
Meat products	201	9.66	9.50	9.77	9.85	—	397.99	377.15	400.57	405.82	—
Meat packing plants	2011	10.34	10.07	10.52	10.69	—	447.72	416.90	459.72	460.74	—
Sausages and other prepared meats	2013	11.03	11.16	11.07	11.09	—	464.36	455.33	469.37	476.87	—
Poultry slaughtering and processing	2015	8.73	8.55	8.79	8.82	—	345.71	328.32	341.93	348.39	—
Dairy products	202	13.58	13.41	13.90	13.96	—	570.36	555.17	589.36	594.70	—
Cheese, natural and processed	2022	12.41	12.30	12.76	12.79	—	517.50	499.38	546.13	553.81	—
Fluid milk	2026	14.23	14.03	14.60	14.66	—	593.39	571.02	611.74	617.19	—
Preserved fruits and vegetables	203	11.32	11.30	11.59	11.74	—	470.91	446.35	465.92	473.12	—
Canned specialties	2032	14.83	14.29	14.88	15.58	—	640.66	581.60	607.10	634.11	—
Canned fruits and vegetables	2033	12.24	12.40	12.96	13.04	—	504.29	482.36	501.55	509.86	—
Frozen fruits and vegetables	2037	10.50	10.58	10.82	10.87	—	429.45	426.37	442.54	440.24	—
Grain mill products	204	14.86	14.78	14.83	14.99	—	679.10	660.67	642.14	656.56	—
Flour and other grain mill products	2041	13.02	12.77	13.19	13.17	—	601.52	568.27	580.36	578.16	—
Prepared feeds, nec	2048	11.72	11.65	12.30	12.29	—	515.68	507.94	516.60	518.64	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	40.9	40.2	39.9	40.4	—	4.9	4.6	4.2	4.5	—
Bread, cake, and related products	2051	40.7	40.3	40.6	40.9	—	5.1	5.0	4.7	5.1	—
Cookies, crackers, and frozen bakery products, except bread	2052,3	41.2	40.1	38.7	39.5	—	4.7	3.9	3.4	3.7	—
Sugar and confectionery products	206	41.1	39.0	40.7	39.1	—	4.3	2.6	3.9	3.3	—
Raw cane sugar	2061	53.2	51.0	56.2	44.5	—	11.4	7.3	13.8	6.8	—
Cane sugar refining	2062	49.3	45.7	49.3	48.3	—	9.8	7.3	7.8	7.2	—
Beet sugar	2063	41.6	40.5	41.1	40.2	—	4.3	4.2	4.0	3.3	—
Candy and other confectionery products	2064	40.3	38.7	39.3	38.1	—	3.8	2.2	3.1	3.0	—
Fats and oils	207	43.1	42.5	41.3	41.8	—	6.2	6.3	5.7	5.9	—
Beverages	208	43.8	42.9	43.6	44.2	—	5.6	5.5	5.2	5.4	—
Malt beverages	2082	47.6	48.7	44.9	47.1	—	8.0	9.0	6.7	7.7	—
Bottled and canned soft drinks	2086	43.7	42.5	44.8	44.9	—	5.6	5.4	6.2	5.8	—
Misc. food and kindred products	209	39.7	38.8	40.2	39.4	—	4.7	3.6	5.1	4.4	—
Tobacco products	21	38.3	37.0	38.1	38.2	38.9	2.6	1.9	2.7	2.0	—
Cigarettes	211	37.6	35.9	38.7	38.6	—	2.7	1.4	3.6	2.3	—
Textile mill products	22	41.0	40.2	40.3	40.9	40.6	4.5	4.0	4.1	4.3	—
Broadwoven fabric mills, cotton	221	42.0	41.1	40.2	41.0	—	5.6	4.6	4.7	5.4	—
Broadwoven fabric mills, synthetics	222	41.3	39.7	40.3	40.8	—	4.9	4.0	4.2	4.1	—
Broadwoven fabric mills, wool	223	38.5	38.5	36.5	39.3	—	3.4	3.3	3.0	3.4	—
Narrow fabric mills	224	40.3	39.9	41.1	40.3	—	2.9	2.6	2.9	2.7	—
Knitting mills	225	39.9	38.4	39.1	39.6	—	3.5	3.0	3.3	3.6	—
Women's hosiery, except socks	2251	38.6	37.2	39.7	39.6	—	2.5	1.4	2.9	3.2	—
Hosiery, nec	2252	38.2	36.3	37.5	37.3	—	3.0	2.7	2.8	2.7	—
Knit outerwear mills	2253	40.8	39.3	38.1	39.7	—	3.5	3.2	2.9	3.3	—
Knit underwear mills	2254	38.1	34.6	41.5	41.2	—	1.6	0.5	1.7	1.9	—
Weft knit fabric mills	2257	39.7	39.9	39.7	40.7	—	4.5	4.7	4.4	5.2	—
Textile finishing, except wool	226	41.7	40.7	41.9	42.0	—	5.0	4.4	4.8	5.0	—
Finishing plants, cotton	2261	42.1	40.0	42.3	42.1	—	5.3	4.3	4.7	5.1	—
Finishing plants, synthetics	2262	41.9	41.3	42.9	43.1	—	4.8	4.0	5.4	5.3	—
Carpets and rugs	227	42.3	41.6	41.6	41.9	—	5.5	5.2	4.6	4.6	—
Yarn and thread mills	228	41.0	41.1	40.1	41.1	—	4.3	4.1	4.1	4.3	—
Yarn spinning mills	2281	41.9	42.4	40.9	41.7	—	4.7	4.7	4.4	4.5	—
Throwing and winding mills	2282	37.2	36.6	37.2	38.4	—	3.0	2.2	3.4	3.5	—
Miscellaneous textile goods	229	41.9	41.4	41.4	42.1	—	4.7	4.3	4.1	4.7	—
Apparel and other textile products	23	37.3	36.5	37.4	37.6	37.9	2.1	1.7	2.3	2.3	—
Men's and boys' suits and coats	231	37.2	36.8	36.8	36.4	—	0.9	0.6	0.8	0.7	—
Men's and boys' furnishings	232	36.6	36.0	35.9	35.6	—	1.5	1.4	1.3	1.4	—
Men's and boys' shirts	2321	35.8	35.4	35.1	34.6	—	1.3	1.1	1.5	1.3	—
Men's and boys' trousers and slacks	2325	35.7	34.6	35.8	34.7	—	1.3	1.1	1.4	1.6	—
Men's and boys' work clothing	2326	37.1	36.6	35.8	36.8	—	1.6	1.5	1.3	1.6	—
Women's and misses' outerwear	233	36.2	35.5	37.0	36.8	—	1.5	1.1	1.9	1.7	—
Women's and misses' blouses and shirts	2331	35.0	34.8	34.6	35.9	—	1.7	1.4	2.4	1.7	—
Women's, juniors', and misses' dresses	2335	36.9	37.3	38.4	37.7	—	1.9	2.0	3.0	2.5	—
Women's and misses' suits and coats	2337	37.1	36.2	36.7	36.7	—	1.4	1.0	2.0	1.8	—
Women's and misses' outerwear, nec	2339	36.1	35.1	37.1	36.7	—	1.4	0.9	1.6	1.5	—
Women's and children's undergarments	234	36.9	35.0	36.1	35.8	—	1.7	1.2	1.6	1.4	—
Women's and children's underwear	2341	36.8	34.6	35.9	36.0	—	1.5	1.1	1.1	1.2	—
Brassieres, girdles, and allied garments	2342	37.2	36.3	36.5	35.2	—	2.4	1.4	2.8	2.1	—
Girls' and children's outerwear	236	36.3	35.0	35.4	36.2	—	2.9	2.4	2.7	2.8	—
Girls' and children's dresses and blouses	2361	36.9	33.8	37.2	37.9	—	3.8	2.9	4.6	3.9	—
Misc. apparel and accessories	238	36.8	36.4	36.9	37.2	—	1.3	1.5	1.8	1.8	—
Misc. fabricated textile products	239	39.2	38.3	39.5	40.5	—	3.4	2.8	3.8	4.0	—
Curtains and draperies	2391	35.6	36.2	37.4	38.0	—	1.4	1.1	2.2	2.8	—
House furnishings, nec	2392	40.3	39.2	39.4	39.9	—	4.1	2.3	3.8	3.6	—
Automotive and apparel trimmings	2396	39.8	38.4	41.5	42.4	—	3.5	3.1	4.4	4.5	—
Paper and allied products	26	43.4	42.5	43.4	43.6	43.4	5.6	4.9	5.4	5.5	—
Paper mills	262	45.1	45.5	45.3	45.7	—	6.7	6.9	6.8	7.1	—
Paperboard mills	263	44.8	44.6	44.4	44.5	—	7.4	7.6	7.2	7.5	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Food and kindred products—Continued											
Bakery products	205	\$12.78	\$12.83	\$12.97	\$13.04	—	\$522.70	\$515.77	\$517.50	\$526.82	—
Bread, cake, and related products	2051	12.86	12.90	13.00	13.09	—	523.40	519.87	527.80	535.38	—
Cookies, crackers, and frozen bakery products, except bread	2052,3	12.64	12.69	12.92	12.96	—	520.77	508.87	500.00	511.92	—
Sugar and confectionery products	206	13.08	13.08	13.43	13.74	—	537.59	510.12	546.60	537.23	—
Raw cane sugar	2061	11.27	12.08	11.94	11.42	—	599.56	616.08	671.03	508.19	—
Cane sugar refining	2062	18.06	17.94	17.82	17.70	—	890.36	819.86	878.53	854.91	—
Beet sugar	2063	13.99	14.60	14.82	14.67	—	581.98	591.30	609.10	589.73	—
Candy and other confectionery products	2064	12.26	12.13	12.63	13.03	—	494.08	469.43	496.36	496.44	—
Fats and oils	207	12.85	12.86	13.09	13.27	—	553.84	546.55	540.62	554.69	—
Beverages	208	16.06	16.27	16.01	16.24	—	703.43	697.98	698.04	717.81	—
Malt beverages	2082	22.71	22.80	23.54	23.80	—	1,081.00	1,110.36	1,056.95	1,120.98	—
Bottled and canned soft drinks	2086	13.34	13.50	13.30	13.35	—	582.96	573.75	595.84	599.42	—
Misc. food and kindred products	209	10.66	10.47	10.76	11.04	—	423.20	406.24	432.55	434.98	—
Tobacco products	21	18.55	18.84	19.33	19.98	\$20.87	710.47	697.08	736.47	763.24	\$811.84
Cigarettes	211	24.34	24.17	24.48	24.31	—	915.18	867.70	947.38	938.37	—
Textile mill products	22	10.39	10.39	10.62	10.67	10.72	425.99	417.68	427.99	436.40	435.23
Broadwoven fabric mills, cotton	221	10.91	10.83	10.93	11.04	—	458.22	445.11	439.39	452.64	—
Broadwoven fabric mills, synthetics	222	11.24	11.15	11.41	11.40	—	464.21	442.66	459.82	465.12	—
Broadwoven fabric mills, wool	223	10.82	10.73	11.29	11.09	—	416.57	413.11	412.09	435.84	—
Narrow fabric mills	224	9.52	9.50	9.70	9.70	—	383.66	379.05	398.67	390.91	—
Knitting mills	225	9.47	9.50	9.84	9.88	—	377.85	364.80	384.74	391.25	—
Women's hosiery, except socks	2251	8.82	8.68	8.79	8.84	—	340.45	322.90	348.96	350.06	—
Hosiery, nec	2252	9.49	9.41	9.71	9.71	—	362.52	341.58	364.13	362.18	—
Knit outerwear mills	2253	8.82	9.02	9.42	9.49	—	359.86	354.49	358.90	376.75	—
Knit underwear mills	2254	9.69	9.95	9.75	9.83	—	369.19	344.27	404.63	405.00	—
Weft knit fabric mills	2257	10.26	10.23	10.53	10.57	—	407.32	408.18	418.04	430.20	—
Textile finishing, except wool	226	10.64	10.63	10.72	10.88	—	443.69	432.64	449.17	456.96	—
Finishing plants, cotton	2261	10.52	10.55	10.25	10.54	—	442.89	422.00	433.58	443.73	—
Finishing plants, synthetics	2262	11.12	11.03	11.49	11.54	—	465.93	455.54	492.92	497.37	—
Carpets and rugs	227	10.36	10.63	10.69	10.73	—	438.23	442.21	444.70	449.59	—
Yarn and thread mills	228	10.06	9.94	10.35	10.37	—	412.46	408.53	415.04	426.21	—
Yarn spinning mills	2281	10.09	9.92	10.41	10.39	—	422.77	420.61	425.77	433.26	—
Throwing and winding mills	2282	10.05	10.09	10.20	10.39	—	373.86	369.29	379.44	398.98	—
Miscellaneous textile goods	229	11.88	11.94	11.98	12.02	—	497.77	494.32	495.97	506.04	—
Apparel and other textile products	23	8.52	8.48	8.78	8.84	8.83	317.80	309.52	328.37	332.38	334.66
Men's and boys' suits and coats	231	8.68	8.63	8.82	8.94	—	322.90	317.58	324.58	325.42	—
Men's and boys' furnishings	232	7.97	8.05	8.20	8.28	—	291.70	289.80	294.38	294.77	—
Men's and boys' shirts	2321	7.83	7.89	8.03	8.13	—	280.31	279.31	281.85	281.30	—
Men's and boys' trousers and slacks	2325	8.18	8.32	8.53	8.61	—	292.03	287.87	305.37	298.77	—
Men's and boys' work clothing	2326	7.76	7.79	8.07	8.16	—	287.90	285.11	288.91	300.29	—
Women's and misses' outerwear	233	8.15	8.07	8.29	8.35	—	295.03	286.49	306.73	307.28	—
Women's and misses' blouses and shirts	2331	7.39	7.22	8.03	7.88	—	258.65	251.26	277.84	282.89	—
Women's, juniors', and misses' dresses	2335	9.33	9.27	9.56	9.75	—	344.28	345.77	367.10	367.58	—
Women's and misses' suits and coats	2337	8.07	7.94	8.40	8.26	—	299.40	287.43	308.28	303.14	—
Women's and misses' outerwear, nec	2339	8.01	7.93	8.03	8.11	—	289.16	278.34	297.91	297.64	—
Women's and children's undergarments	234	8.14	8.12	8.32	8.49	—	300.37	284.20	300.35	303.94	—
Women's and children's underwear	2341	7.96	7.93	8.20	8.28	—	292.93	274.38	294.38	298.08	—
Brassieres, girdles, and allied garments	2342	8.65	8.66	8.62	9.02	—	321.78	314.36	314.63	317.50	—
Girls' and children's outerwear	236	8.08	8.02	8.32	8.38	—	293.30	280.70	294.53	303.36	—
Girls' and children's dresses and blouses	2361	7.87	7.68	8.19	8.03	—	290.40	259.58	304.67	304.34	—
Misc. apparel and accessories	238	8.13	8.20	8.20	8.22	—	299.18	298.48	302.58	305.78	—
Misc. fabricated textile products	239	9.44	9.32	9.78	9.78	—	370.05	356.96	386.31	396.09	—
Curtains and draperies	2391	8.27	8.21	8.24	8.25	—	294.41	297.20	308.18	313.50	—
House furnishings, nec	2392	9.05	8.87	9.30	9.46	—	364.72	347.70	366.42	377.45	—
Automotive and apparel trimmings	2396	11.08	10.87	11.68	11.42	—	440.98	417.41	484.72	484.21	—
Paper and allied products	26	15.51	15.45	15.78	15.83	15.95	673.13	656.63	684.85	690.19	692.23
Paper mills	262	19.80	19.62	20.07	20.27	—	892.98	892.71	909.17	926.34	—
Paperboard mills	263	19.56	19.56	20.08	20.04	—	876.29	872.38	891.55	891.78	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	42.9	40.9	43.2	43.5	—	5.3	4.1	5.2	5.5	—
Corrugated and solid fiber boxes	2653	43.5	41.1	44.0	44.2	—	5.7	4.3	5.6	5.9	—
Sanitary food containers	2656	42.4	41.8	41.5	42.1	—	4.9	4.3	4.6	4.7	—
Folding paperboard boxes	2657	42.2	39.7	42.5	42.8	—	5.3	3.7	5.0	5.1	—
Misc. converted paper products	267	42.4	41.4	42.0	42.1	—	4.6	3.9	4.2	4.3	—
Paper, coated and laminated, nec	2672	42.7	42.7	42.0	42.2	—	4.0	3.9	3.6	3.7	—
Bags: plastics, laminated, and coated	2673	42.5	41.6	41.8	42.8	—	5.0	4.3	4.7	5.2	—
Envelopes	2677	41.2	40.7	41.2	41.3	—	3.8	3.1	4.0	3.9	—
Printing and publishing	27	38.3	37.8	37.9	38.1	37.9	3.2	2.9	3.0	3.0	—
Newspapers	271	33.1	32.9	32.7	33.0	—	1.5	1.3	1.4	1.4	—
Periodicals	272	36.1	35.6	35.3	36.1	—	2.3	1.8	2.2	2.5	—
Books	273	39.3	39.0	39.5	41.1	—	3.7	3.2	3.0	3.7	—
Book publishing	2731	37.3	37.3	36.7	38.1	—	2.6	2.8	1.5	2.0	—
Book printing	2732	41.4	40.8	42.1	43.7	—	4.9	3.6	4.4	5.3	—
Miscellaneous publishing	274	36.4	36.4	35.4	35.3	—	2.6	2.6	2.5	2.2	—
Commercial printing	275	39.9	39.5	39.6	39.6	—	3.9	3.7	3.6	3.5	—
Commercial printing, lithographic	2752	39.9	39.5	39.3	39.4	—	3.9	3.6	3.5	3.4	—
Commercial printing, nec	2759	40.1	39.3	40.0	39.9	—	3.8	3.5	3.9	3.8	—
Manifold business forms	276	41.8	40.3	42.1	42.4	—	3.9	2.3	4.1	4.2	—
Blankbooks and bookbinding	278	39.4	38.7	38.5	38.1	—	3.0	2.3	2.8	2.4	—
Printing trade services	279	39.9	39.7	40.5	40.2	—	4.1	4.2	4.3	4.0	—
Chemicals and allied products	28	43.2	42.9	42.8	42.7	42.9	5.1	4.9	4.9	4.8	—
Industrial inorganic chemicals	281	44.9	46.0	42.4	42.6	—	5.9	6.5	4.7	5.0	—
Industrial inorganic chemicals, nec	2819	44.9	45.4	42.9	42.6	—	5.9	6.7	5.0	5.4	—
Plastics materials and synthetics	282	43.4	44.1	42.7	42.8	—	5.4	5.9	4.7	4.4	—
Plastics materials and resins	2821	44.3	44.3	44.2	43.7	—	5.2	5.5	4.9	4.8	—
Organic fibers, noncellulosic	2824	42.8	45.5	41.2	42.0	—	4.8	5.9	4.0	3.8	—
Drugs	283	42.1	41.0	42.5	41.5	—	4.7	3.9	4.9	4.5	—
Pharmaceutical preparations	2834	42.3	40.7	42.9	41.8	—	4.6	3.6	4.7	4.4	—
Soap, cleaners, and toilet goods	284	41.3	40.5	41.5	41.2	—	3.8	2.9	3.7	3.7	—
Soap and other detergents	2841	43.9	41.9	44.3	43.7	—	5.4	4.1	5.4	5.4	—
Polishing, sanitation, and finishing preparations	2842,3	41.1	40.3	41.3	40.4	—	3.8	3.2	3.6	3.4	—
Toilet preparations	2844	40.4	40.0	40.2	40.2	—	3.0	2.2	2.8	2.9	—
Paints and allied products	285	42.7	42.4	42.1	42.9	—	4.5	3.9	4.3	4.5	—
Industrial organic chemicals	286	44.7	44.2	44.8	45.0	—	6.4	6.3	6.4	6.0	—
Cyclic crudes and intermediates	2865	44.6	41.9	45.3	44.6	—	5.7	4.7	5.6	5.3	—
Industrial organic chemicals, nec	2869	44.7	44.7	44.7	45.0	—	6.5	6.6	6.5	6.1	—
Agricultural chemicals	287	45.3	45.7	45.2	45.6	—	6.8	7.0	6.7	7.1	—
Miscellaneous chemical products	289	43.2	42.1	42.9	42.9	—	4.7	4.1	4.7	4.7	—
Petroleum and coal products	29	43.6	42.8	43.7	42.9	42.3	6.6	6.2	6.7	6.9	—
Petroleum refining	291	43.4	42.7	43.9	42.2	—	5.9	5.9	6.9	6.6	—
Asphalt paving and roofing materials	295	44.4	43.6	43.6	44.8	—	8.7	7.4	6.8	8.2	—
Rubber and misc. plastics products	30	41.7	41.0	41.8	41.7	41.7	4.4	4.0	4.3	4.4	—
Tires and inner tubes	301	43.0	43.0	43.1	42.0	—	5.8	6.2	5.5	5.4	—
Rubber and plastics footwear	302	40.1	38.6	40.0	39.5	—	3.7	4.3	4.1	3.4	—
Hose, belting, gaskets, and packing	305	42.2	40.8	42.7	43.3	—	4.4	3.8	4.4	4.6	—
Rubber and plastics hose and belting	3052	44.0	41.9	43.3	43.9	—	5.5	4.6	4.6	4.5	—
Fabricated rubber products, nec	306	42.1	40.8	41.9	42.5	—	4.3	3.4	4.1	4.3	—
Miscellaneous plastics products, nec	308	41.5	40.9	41.5	41.4	—	4.3	3.9	4.3	4.3	—
Leather and leather products	31	37.6	36.5	37.6	37.8	37.9	2.2	1.6	2.0	2.0	—
Leather tanning and finishing	311	40.4	40.2	43.1	42.5	—	4.3	3.9	4.6	5.2	—
Footwear, except rubber	314	36.6	35.2	36.3	37.3	—	1.7	1.2	1.3	1.2	—
Men's footwear, except athletic	3143	36.4	35.0	36.0	36.5	—	1.7	1.1	0.9	1.1	—
Women's footwear, except athletic	3144	37.0	35.8	37.3	39.1	—	1.9	1.7	1.8	1.1	—
Luggage	316	36.9	35.6	35.8	35.5	—	1.6	1.1	1.8	1.3	—
Handbags and personal leather goods	317	38.1	37.3	36.3	36.0	—	1.7	1.0	2.0	1.8	—
Service-producing		32.9	32.6	32.6	32.6	33.0	—	—	—	—	—
Transportation and public utilities		39.5	39.1	38.8	38.7	38.9	—	—	—	—	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Nondurable goods—Continued											
Paper and allied products—Continued											
Paperboard containers and boxes	265	\$13.13	\$13.06	\$13.33	\$13.32	—	\$563.28	\$534.15	\$575.86	\$579.42	—
Corrugated and solid fiber boxes	2653	13.10	13.02	13.27	13.29	—	569.85	535.12	583.88	587.42	—
Sanitary food containers	2656	13.32	13.38	13.66	13.61	—	564.77	559.28	566.89	572.98	—
Folding paperboard boxes	2657	13.88	13.73	14.03	13.94	—	585.74	545.08	596.28	596.63	—
Misc. converted paper products	267	13.51	13.32	13.77	13.84	—	572.82	551.45	578.34	582.66	—
Paper, coated and laminated, nec	2672	15.48	15.36	16.05	16.08	—	661.00	655.87	674.10	678.58	—
Bags: plastics, laminated, and coated	2673	12.23	12.21	12.52	12.64	—	519.78	507.94	523.34	540.99	—
Envelopes	2677	12.45	12.14	12.71	12.72	—	512.94	494.10	523.65	525.34	—
Printing and publishing	27	13.45	13.34	13.73	13.73	\$13.74	515.14	504.25	520.37	523.11	\$520.75
Newspapers	271	13.22	13.16	13.41	13.46	—	437.58	432.96	438.51	444.18	—
Periodicals	272	14.82	14.57	15.21	15.34	—	535.00	518.69	536.91	553.77	—
Books	273	12.70	12.43	13.13	13.35	—	499.11	484.77	518.64	548.69	—
Book publishing	2731	11.99	11.79	12.56	12.67	—	447.23	439.77	460.95	482.73	—
Book printing	2732	13.36	13.06	13.58	13.88	—	553.10	532.85	571.72	606.56	—
Miscellaneous publishing	274	12.93	13.05	12.98	13.11	—	470.65	475.02	459.49	462.78	—
Commercial printing	275	13.70	13.58	13.99	13.92	—	546.63	536.41	554.00	551.23	—
Commercial printing, lithographic	2752	13.95	13.79	14.30	14.22	—	556.61	544.71	561.99	560.27	—
Commercial printing, nec	2759	12.96	12.90	13.16	13.14	—	519.70	506.97	526.40	524.29	—
Manifold business forms	276	14.31	13.96	14.27	14.07	—	598.16	562.59	600.77	596.57	—
Blankbooks and bookbinding	278	10.53	10.40	10.74	10.73	—	414.88	402.48	413.49	408.81	—
Printing trade services	279	16.85	16.89	17.14	17.17	—	672.32	670.53	694.17	690.23	—
Chemicals and allied products	28	17.12	17.15	17.18	17.27	17.35	739.58	735.74	735.30	737.43	744.32
Industrial inorganic chemicals	281	19.09	19.71	18.81	19.04	—	857.14	906.66	797.54	811.10	—
Industrial inorganic chemicals, nec	2819	19.59	20.21	19.38	19.75	—	879.59	917.53	831.40	841.35	—
Plastics materials and synthetics	282	17.87	17.94	18.03	18.18	—	775.56	791.15	769.88	778.10	—
Plastics materials and resins	2821	19.88	19.97	20.14	20.52	—	880.68	884.67	890.19	896.72	—
Organic fibers, noncellulosic	2824	15.07	15.22	15.10	15.24	—	645.00	692.51	622.12	640.08	—
Drugs	283	17.06	16.95	16.78	16.95	—	718.23	694.95	713.15	703.43	—
Pharmaceutical preparations	2834	16.92	16.86	16.67	16.88	—	715.72	686.20	715.14	705.58	—
Soap, cleaners, and toilet goods	284	13.86	13.67	14.54	14.63	—	572.42	553.64	603.41	602.76	—
Soap and other detergents	2841	17.60	17.39	18.50	18.38	—	772.64	728.64	819.55	803.21	—
Polishing, sanitation, and finishing preparations ..	2842,3	13.49	13.43	13.77	13.94	—	554.44	541.23	568.70	563.18	—
Toilet preparations	2844	12.32	12.16	12.66	12.80	—	497.73	486.40	508.93	514.56	—
Paints and allied products	285	14.44	14.25	14.72	14.71	—	616.59	604.20	619.71	631.06	—
Industrial organic chemicals	286	20.52	20.54	20.46	20.26	—	917.24	907.87	916.61	911.70	—
Cyclic crudes and intermediates	2865	20.34	20.43	20.24	20.40	—	907.16	856.02	916.87	909.84	—
Industrial organic chemicals, nec	2869	20.68	20.69	20.64	20.35	—	924.40	924.84	922.61	915.75	—
Agricultural chemicals	287	17.17	16.83	17.26	17.36	—	777.80	769.13	780.15	791.62	—
Miscellaneous chemical products	289	15.33	15.25	15.66	15.80	—	662.26	642.03	671.81	677.82	—
Petroleum and coal products	29	20.92	21.02	21.59	21.57	21.31	912.11	899.66	943.48	925.35	901.41
Petroleum refining	291	23.52	23.71	24.40	24.62	—	1,020.77	1,012.42	1,071.16	1,038.96	—
Asphalt paving and roofing materials	295	15.63	15.19	15.43	15.73	—	693.97	662.28	672.75	704.70	—
Rubber and misc. plastics products	30	11.87	11.83	12.20	12.20	12.24	494.98	485.03	509.96	508.74	510.41
Tires and inner tubes	301	18.65	19.11	19.14	19.24	—	801.95	821.73	824.93	808.08	—
Rubber and plastics footwear	302	10.06	10.00	10.19	10.29	—	403.41	386.00	407.60	406.46	—
Hose, belting, gaskets, and packing	305	11.82	11.78	12.21	12.19	—	498.80	480.62	521.37	527.83	—
Rubber and plastics hose and belting	3052	11.89	11.88	12.22	12.17	—	523.16	497.77	529.13	534.26	—
Fabricated rubber products, nec	306	11.60	11.45	11.87	11.97	—	488.36	467.16	497.35	508.73	—
Miscellaneous plastics products, nec	308	11.22	11.14	11.55	11.57	—	465.63	455.63	479.33	479.00	—
Leather and leather products	31	9.32	9.27	9.55	9.59	9.57	350.43	338.36	359.08	362.50	362.70
Leather tanning and finishing	311	12.07	12.00	12.16	12.29	—	487.63	482.40	524.10	522.33	—
Footwear, except rubber	314	8.93	8.83	9.19	9.24	—	326.84	310.82	333.60	344.65	—
Men's footwear, except athletic	3143	9.62	9.47	9.90	9.95	—	350.17	331.45	356.40	363.18	—
Women's footwear, except athletic	3144	7.75	7.68	7.79	7.89	—	286.75	274.94	290.57	308.50	—
Luggage	316	9.16	8.99	8.83	8.82	—	338.00	320.04	316.11	313.11	—
Handbags and personal leather goods	317	8.22	8.19	8.44	8.37	—	313.18	305.49	306.37	301.32	—
Service-producing		12.27	12.20	12.67	12.69	12.71	403.68	397.72	413.04	413.69	419.43
Transportation and public utilities		15.31	15.24	15.51	15.57	15.58	604.75	595.88	601.79	602.56	606.06

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Transportation and public utilities—Continued											
Railroad transportation:											
Class I railroads plus Amtrak ³	4011	47.1	48.4	44.0	46.0	-	-	-	-	-	-
Local and interurban passenger transit	41	34.5	33.5	34.0	33.6	-	-	-	-	-	-
Local and suburban transportation	411	38.8	38.5	38.8	38.4	-	-	-	-	-	-
Intercity and rural bus transportation	413	39.3	39.5	39.2	39.3	-	-	-	-	-	-
Trucking and warehousing	42	40.0	39.2	39.3	39.8	-	-	-	-	-	-
Trucking and courier services, except air	421	40.0	39.2	39.2	39.8	-	-	-	-	-	-
Public warehousing and storage	422	40.4	39.2	40.0	40.1	-	-	-	-	-	-
Water transportation:											
Water transportation services	449	38.0	38.6	37.0	36.4	-	-	-	-	-	-
Pipelines, except natural gas	46	44.5	44.1	42.6	43.9	-	-	-	-	-	-
Transportation services											
Passenger transportation arrangement	472	38.0	37.6	39.6	38.9	-	-	-	-	-	-
Travel agencies	4724	38.4	37.8	39.9	39.1	-	-	-	-	-	-
Freight transportation arrangement	473	37.7	37.1	38.2	37.8	-	-	-	-	-	-
Communications											
Telephone communications	481	42.5	41.9	41.7	41.6	-	-	-	-	-	-
Telephone communications, except radio	4813	43.0	42.2	42.3	42.1	-	-	-	-	-	-
Radio and television broadcasting	483	35.7	35.6	35.2	35.5	-	-	-	-	-	-
Cable and other pay television services	484	39.9	39.8	41.4	40.6	-	-	-	-	-	-
Electric, gas, and sanitary services											
Electric services	491	41.8	41.4	41.8	42.0	-	-	-	-	-	-
Gas production and distribution	492	42.3	41.2	42.9	42.4	-	-	-	-	-	-
Combination utility services	493	42.9	41.8	42.9	42.9	-	-	-	-	-	-
Sanitary services	495	42.9	42.3	43.3	43.4	-	-	-	-	-	-
Wholesale trade		38.4	38.1	38.2	38.3	38.6	-	-	-	-	-
Durable goods											
Motor vehicles, parts, and supplies	501	37.5	37.1	37.3	37.4	-	-	-	-	-	-
Furniture and home furnishings	502	37.5	37.4	37.2	37.1	-	-	-	-	-	-
Lumber and other construction materials	503	39.9	39.6	39.6	40.1	-	-	-	-	-	-
Professional and commercial equipment	504	39.9	39.3	39.7	39.6	-	-	-	-	-	-
Medical and hospital equipment	5047	39.4	39.1	39.7	39.3	-	-	-	-	-	-
Metals and minerals, except petroleum	505	41.1	40.6	41.0	41.2	-	-	-	-	-	-
Electrical goods	506	39.2	38.9	39.4	39.5	-	-	-	-	-	-
Hardware, plumbing, and heating equipment	507	39.0	39.0	39.1	38.8	-	-	-	-	-	-
Machinery, equipment, and supplies	508	39.5	39.3	39.2	39.4	-	-	-	-	-	-
Misc. wholesale trade durable goods	509	37.1	37.1	37.1	37.2	-	-	-	-	-	-
Nondurable goods											
Paper and paper products	511	37.0	36.5	36.7	36.7	-	-	-	-	-	-
Drugs, proprietaries, and sundries	512	36.5	36.1	36.6	36.2	-	-	-	-	-	-
Apparel, piece goods, and notions	513	37.0	36.7	36.6	36.7	-	-	-	-	-	-
Groceries and related products	514	38.4	38.1	38.2	38.4	-	-	-	-	-	-
Farm-product raw materials	515	34.3	33.8	33.1	33.3	-	-	-	-	-	-
Chemicals and allied products	516	40.1	39.3	40.3	40.3	-	-	-	-	-	-
Petroleum and petroleum products	517	37.8	37.2	37.4	37.5	-	-	-	-	-	-
Beer, wine, and distilled beverages	518	37.8	37.7	37.2	37.3	-	-	-	-	-	-
Misc. wholesale trade nondurable goods	519	36.2	36.5	36.4	37.1	-	-	-	-	-	-
Retail trade		29.0	28.7	28.6	28.7	29.1	-	-	-	-	-
Building materials and garden supplies											
Lumber and other building materials	521	36.5	36.3	36.1	36.8	-	-	-	-	-	-
Paint, glass, and wallpaper stores	523	35.3	35.7	35.0	35.1	-	-	-	-	-	-
Hardware stores	525	30.8	30.6	29.7	30.1	-	-	-	-	-	-
Retail nurseries and garden stores	526	31.7	31.6	31.0	32.7	-	-	-	-	-	-

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Transportation and public utilities—Continued											
Railroad transportation:											
Class I railroads plus Amtrak ³	4011	\$17.95	\$18.25	\$18.15	\$17.99	—	\$845.45	\$883.30	\$798.60	\$827.54	—
Local and interurban passenger transit	41	11.22	11.13	11.49	11.48	—	387.09	372.86	390.66	385.73	—
Local and suburban transportation	411	11.71	11.62	12.04	11.95	—	454.35	447.37	467.15	458.88	—
Intercity and rural bus transportation	413	13.51	13.70	13.27	13.36	—	530.94	541.15	520.18	525.05	—
Trucking and warehousing	42	13.62	13.59	13.80	13.88	—	544.80	532.73	542.34	552.42	—
Trucking and courier services, except air	421	13.86	13.83	14.03	14.10	—	554.40	542.14	549.98	561.18	—
Public warehousing and storage	422	11.16	11.14	11.56	11.60	—	450.86	436.69	462.40	465.16	—
Water transportation:											
Water transportation services	449	20.01	19.93	19.66	19.05	—	760.38	769.30	727.42	693.42	—
Pipelines, except natural gas	46	20.64	20.34	21.55	21.71	—	918.48	896.99	918.03	953.07	—
Transportation services	47	13.63	13.59	14.08	14.15	—	517.94	509.63	550.53	544.78	—
Passenger transportation arrangement	472	14.04	14.11	14.44	14.59	—	533.52	530.54	571.82	567.55	—
Travel agencies	4724	14.35	14.56	14.88	14.99	—	551.04	550.37	593.71	586.11	—
Freight transportation arrangement	473	13.54	13.33	14.08	14.10	—	510.46	494.54	537.86	532.98	—
Communications	48	17.31	17.00	17.31	17.42	—	706.25	685.10	701.06	702.03	—
Telephone communications	481	17.79	17.43	17.72	17.85	—	756.08	730.32	738.92	742.56	—
Telephone communications, except radio	4813	18.30	17.90	18.17	18.18	—	786.90	755.38	768.59	765.38	—
Radio and television broadcasting	483	17.83	17.72	17.97	18.07	—	636.53	630.83	632.54	641.49	—
Cable and other pay television services	484	14.14	13.77	14.40	14.39	—	564.19	548.05	596.16	584.23	—
Electric, gas, and sanitary services	49	19.99	19.87	20.46	20.49	—	843.58	826.59	867.50	868.78	—
Electric services	491	21.00	20.97	21.45	21.47	—	877.80	868.16	896.61	901.74	—
Gas production and distribution	492	18.58	18.67	18.78	18.81	—	785.93	769.20	805.66	797.54	—
Combination utility services	493	24.30	23.88	24.93	24.84	—	1,042.47	998.18	1,069.50	1,065.64	—
Sanitary services	495	15.73	15.52	16.32	16.50	—	674.82	656.50	706.66	716.10	—
Wholesale trade		14.06	13.95	14.34	14.48	\$14.53	539.90	531.50	547.79	554.58	\$560.86
Durable goods	50	14.70	14.58	15.03	15.20	—	574.77	564.25	584.67	592.80	—
Motor vehicles, parts, and supplies	501	13.01	12.98	13.19	13.36	—	487.88	481.56	491.99	499.66	—
Furniture and home furnishings	502	13.01	12.90	13.09	13.47	—	487.88	482.46	486.95	499.74	—
Lumber and other construction materials	503	13.18	13.01	13.39	13.56	—	525.88	515.20	530.24	543.76	—
Professional and commercial equipment	504	17.39	17.27	17.84	18.11	—	693.86	678.71	708.25	717.16	—
Medical and hospital equipment	5047	17.13	17.06	17.40	17.64	—	674.92	667.05	690.78	693.25	—
Metals and minerals, except petroleum	505	13.96	13.95	14.22	14.28	—	573.76	566.37	583.02	588.34	—
Electrical goods	506	15.73	15.76	15.74	15.76	—	616.62	613.06	620.16	622.52	—
Hardware, plumbing, and heating equipment	507	13.76	13.55	14.06	14.25	—	536.64	528.45	549.75	552.90	—
Machinery, equipment, and supplies	508	14.73	14.55	15.14	15.37	—	581.84	571.82	593.49	605.58	—
Misc. wholesale trade durable goods	509	11.41	11.41	11.63	11.64	—	423.31	423.31	431.47	433.01	—
Nondurable goods	51	13.14	13.03	13.34	13.44	—	491.44	484.72	496.25	502.66	—
Paper and paper products	511	13.51	13.39	13.49	13.72	—	499.87	488.74	495.08	503.52	—
Drugs, proprietaries, and sundries	512	17.17	16.82	17.34	17.87	—	626.71	607.20	634.64	646.89	—
Apparel, piece goods, and notions	513	12.81	12.86	13.08	13.24	—	473.97	471.96	478.73	485.91	—
Groceries and related products	514	13.26	13.24	13.37	13.36	—	509.18	504.44	510.73	513.02	—
Farm-product raw materials	515	10.01	9.93	10.31	10.40	—	343.34	335.63	341.26	346.32	—
Chemicals and allied products	516	15.04	14.76	15.70	16.14	—	603.10	580.07	632.71	650.44	—
Petroleum and petroleum products	517	11.92	11.86	12.14	12.11	—	450.58	441.19	454.04	454.13	—
Beer, wine, and distilled beverages	518	15.34	15.36	15.35	15.71	—	579.85	579.07	571.02	585.98	—
Misc. wholesale trade nondurable goods	519	10.83	10.68	11.01	11.03	—	392.05	389.82	400.76	409.21	—
Retail trade		8.73	8.69	9.00	9.03	9.04	253.17	249.40	257.40	259.16	263.06
Building materials and garden supplies	52	10.28	10.10	10.61	10.67	—	358.77	350.47	364.98	374.52	—
Lumber and other building materials	521	10.73	10.55	11.04	11.16	—	391.65	382.97	398.54	410.69	—
Paint, glass, and wallpaper stores	523	10.64	10.44	10.68	10.77	—	375.59	372.71	373.80	378.03	—
Hardware stores	525	8.57	8.58	8.77	8.80	—	263.96	262.55	260.47	264.88	—
Retail nurseries and garden stores	526	9.21	8.96	9.75	9.58	—	291.96	283.14	302.25	313.27	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Retail trade—Continued											
General merchandise stores	53	29.8	29.2	29.7	29.3	-	-	-	-	-	-
Department stores	531	29.9	29.3	29.8	29.4	-	-	-	-	-	-
Variety stores	533	27.6	27.1	26.9	27.4	-	-	-	-	-	-
Misc. general merchandise stores	539	30.2	30.1	29.4	29.2	-	-	-	-	-	-
Food stores	54	29.9	29.5	29.3	29.4	-	-	-	-	-	-
Grocery stores	541	30.1	29.6	29.3	29.5	-	-	-	-	-	-
Retail bakeries	546	29.0	28.8	28.4	28.4	-	-	-	-	-	-
Automotive dealers and service stations	55	35.5	35.4	35.1	35.3	-	-	-	-	-	-
New and used car dealers	551	36.9	36.9	36.5	36.7	-	-	-	-	-	-
Auto and home supply stores	553	38.0	37.9	37.6	38.1	-	-	-	-	-	-
Gasoline service stations	554	31.9	31.7	31.5	31.7	-	-	-	-	-	-
Automotive dealers, nec	559	35.5	35.3	34.0	34.1	-	-	-	-	-	-
Apparel and accessory stores	56	26.8	26.5	26.1	26.1	-	-	-	-	-	-
Men's and boys' clothing stores	561	28.5	28.2	28.2	28.8	-	-	-	-	-	-
Women's clothing stores	562	24.3	24.6	23.2	23.5	-	-	-	-	-	-
Family clothing stores	565	27.7	27.3	27.3	27.2	-	-	-	-	-	-
Shoe stores	566	26.7	26.0	26.2	26.2	-	-	-	-	-	-
Furniture and home furnishings stores	57	33.1	32.6	32.7	32.6	-	-	-	-	-	-
Furniture and home furnishings stores	571	32.9	32.4	32.6	32.6	-	-	-	-	-	-
Household appliance stores	572	34.3	33.8	33.2	33.7	-	-	-	-	-	-
Radio, television, and computer stores	573	33.2	32.6	32.7	32.6	-	-	-	-	-	-
Radio, television, and electronic stores	5731	33.0	32.3	32.3	32.2	-	-	-	-	-	-
Record and prerecorded tape stores	5735	25.8	25.7	26.3	25.5	-	-	-	-	-	-
Eating and drinking places ⁴	58	25.5	25.2	25.1	25.3	-	-	-	-	-	-
Miscellaneous retail establishments	59	29.6	29.2	28.9	29.1	-	-	-	-	-	-
Drug stores and proprietary stores	591	28.8	28.6	28.6	28.6	-	-	-	-	-	-
Used merchandise stores	593	30.3	30.2	29.8	29.9	-	-	-	-	-	-
Miscellaneous shopping goods stores	594	27.9	27.4	26.9	27.1	-	-	-	-	-	-
Nonstore retailers	596	32.7	31.9	32.7	33.0	-	-	-	-	-	-
Fuel dealers	598	37.5	36.8	38.0	36.6	-	-	-	-	-	-
Retail stores, nec	599	30.8	30.5	29.6	30.1	-	-	-	-	-	-
Optical goods stores	5995	33.7	33.3	33.7	33.4	-	-	-	-	-	-
Miscellaneous retail stores, nec	5999	30.9	30.6	29.9	30.3	-	-	-	-	-	-
Finance, insurance, and real estate⁵		36.4	36.1	36.0	35.9	36.4	-	-	-	-	-
Depository institutions	60	35.5	35.1	35.0	35.2	-	-	-	-	-	-
Commercial banks	602	35.4	34.8	34.9	35.1	-	-	-	-	-	-
State commercial banks	6022	35.3	35.0	34.8	35.0	-	-	-	-	-	-
National and commercial banks, nec	6021,9	35.4	34.7	35.0	35.1	-	-	-	-	-	-
Credit unions	606	35.9	35.7	35.4	35.6	-	-	-	-	-	-
Nondepository institutions	61	38.5	38.0	38.3	37.6	-	-	-	-	-	-
Personal credit institutions	614	38.8	38.0	39.8	37.8	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services	628	38.5	38.4	37.9	37.2	-	-	-	-	-	-
Insurance carriers	63	39.0	38.8	38.5	38.4	-	-	-	-	-	-
Life insurance	631	39.0	39.0	38.9	38.5	-	-	-	-	-	-
Medical service and health insurance	632	39.0	38.8	38.5	38.3	-	-	-	-	-	-
Hospital and medical service plans	6324	39.4	39.4	38.9	38.6	-	-	-	-	-	-
Fire, marine, and casualty insurance	633	39.1	38.7	38.1	38.5	-	-	-	-	-	-
Services		32.6	32.4	32.4	32.4	32.8	-	-	-	-	-
Agricultural services	07	34.6	34.9	32.8	34.8	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Retail trade—Continued											
General merchandise stores	53	\$8.59	\$8.72	\$8.84	\$8.94	—	\$255.98	\$254.62	\$262.55	\$261.94	—
Department stores	531	8.65	8.79	8.89	9.00	—	258.64	257.55	264.92	264.60	—
Variety stores	533	7.66	7.72	7.96	7.99	—	211.42	209.21	214.12	218.93	—
Misc. general merchandise stores	539	8.36	8.35	8.59	8.58	—	252.47	251.34	252.55	250.54	—
Food stores	54	9.05	8.98	9.28	9.30	—	270.60	264.91	271.90	273.42	—
Grocery stores	541	9.15	9.08	9.37	9.39	—	275.42	268.77	274.54	277.01	—
Retail bakeries	546	8.11	8.02	8.35	8.36	—	235.19	230.98	237.14	237.42	—
Automotive dealers and service stations	55	12.06	12.01	12.35	12.52	—	428.13	425.15	433.49	441.96	—
New and used car dealers	551	15.22	15.16	15.50	15.81	—	561.62	559.40	565.75	580.23	—
Auto and home supply stores	553	10.00	9.92	10.24	10.30	—	380.00	375.97	385.02	392.43	—
Gasoline service stations	554	7.83	7.76	8.06	8.11	—	249.78	245.99	253.89	257.09	—
Automotive dealers, nec	559	13.21	12.58	13.18	12.87	—	468.96	444.07	448.12	438.87	—
Apparel and accessory stores	56	8.47	8.42	8.71	8.77	—	227.00	223.13	227.33	228.90	—
Men's and boys' clothing stores	561	10.21	10.09	10.16	10.28	—	290.99	284.54	286.51	296.06	—
Women's clothing stores	562	8.36	8.22	8.80	8.81	—	203.15	202.21	204.16	207.04	—
Family clothing stores	565	8.30	8.27	8.44	8.47	—	229.91	225.77	230.41	230.38	—
Shoe stores	566	8.23	8.30	8.34	8.42	—	219.74	215.80	218.51	220.60	—
Furniture and home furnishings stores	57	11.88	11.72	12.09	12.10	—	393.23	382.07	395.34	394.46	—
Furniture and home furnishings stores	571	11.18	10.96	11.48	11.54	—	367.82	355.10	374.25	376.20	—
Household appliance stores	572	11.25	11.07	11.41	11.41	—	385.88	374.17	378.81	384.52	—
Radio, television, and computer stores	573	12.80	12.73	12.87	12.85	—	424.96	415.00	420.85	418.91	—
Radio, television, and electronic stores	5731	11.78	11.70	11.74	11.78	—	388.74	377.91	379.20	379.32	—
Record and prerecorded tape stores	5735	7.17	7.13	7.34	7.38	—	184.99	183.24	193.04	188.19	—
Eating and drinking places ⁴	58	6.35	6.29	6.52	6.55	—	161.93	158.51	163.65	165.72	—
Miscellaneous retail establishments	59	9.46	9.41	9.84	9.78	—	280.02	274.77	284.38	284.60	—
Drug stores and proprietary stores	591	10.06	10.01	10.30	10.34	—	289.73	286.29	294.58	295.72	—
Used merchandise stores	593	7.91	7.87	8.11	8.07	—	239.67	237.67	241.68	241.29	—
Miscellaneous shopping goods stores	594	8.74	8.68	9.16	9.04	—	243.85	237.83	246.40	244.98	—
Nonstore retailers	596	10.01	10.02	10.39	10.40	—	327.33	319.64	339.75	343.20	—
Fuel dealers	598	12.74	12.65	13.21	12.96	—	477.75	465.52	501.98	474.34	—
Retail stores, nec	599	9.56	9.49	9.97	9.94	—	294.45	289.45	295.11	299.19	—
Optical goods stores	5995	11.19	10.98	11.74	11.86	—	377.10	365.63	395.64	396.12	—
Miscellaneous retail stores, nec	5999	9.92	9.95	10.30	10.29	—	306.53	304.47	307.97	311.79	—
Finance, insurance, and real estate⁵		14.06	13.98	14.53	14.61	\$14.76	511.78	504.68	523.08	524.50	\$537.26
Depository institutions	60	10.82	10.70	11.25	11.20	—	384.11	375.57	393.75	394.24	—
Commercial banks	602	10.40	10.22	10.89	10.79	—	368.16	355.66	380.06	378.73	—
State commercial banks	6022	10.16	10.09	10.47	10.50	—	358.65	353.15	364.36	367.50	—
National and commercial banks, nec	6021,9	10.57	10.31	11.18	10.98	—	374.18	357.76	391.30	385.40	—
Credit unions	606	10.60	10.55	10.85	10.89	—	380.54	376.64	384.09	387.68	—
Nondepository institutions	61	14.63	14.59	15.01	15.26	—	563.26	554.42	574.88	573.78	—
Personal credit institutions	614	12.19	12.21	12.44	12.51	—	472.97	463.98	495.11	472.88	—
Security and commodity brokers:											
Security and commodity services	628	20.78	20.36	21.98	21.86	—	800.03	781.82	833.04	813.19	—
Insurance carriers	63	16.64	16.60	16.80	17.05	—	648.96	644.08	646.80	654.72	—
Life insurance	631	15.09	14.99	15.30	15.46	—	588.51	584.61	595.17	595.21	—
Medical service and health insurance	632	15.74	15.61	16.20	16.14	—	613.86	605.67	623.70	618.16	—
Hospital and medical service plans	6324	16.11	15.98	16.67	16.60	—	634.73	629.61	648.46	640.76	—
Fire, marine, and casualty insurance	633	18.13	18.26	18.12	18.64	—	708.88	706.66	690.37	717.64	—
Services		12.85	12.77	13.33	13.32	13.34	418.91	413.75	431.89	431.57	437.55
Agricultural services	07	9.97	9.78	10.31	10.19	—	344.96	341.32	338.17	354.61	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	28.9	28.9	28.5	28.9	-	-	-	-	-	-
Landscape and horticultural services	078	37.2	37.6	34.9	37.2	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels ⁴	701	31.3	31.1	30.3	30.5	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services	721	34.2	34.3	33.9	34.4	-	-	-	-	-	-
Beauty shops ⁴	723	28.1	28.1	28.1	28.2	-	-	-	-	-	-
Miscellaneous personal services	729	26.7	26.2	26.1	26.8	-	-	-	-	-	-
Business services	73	33.5	33.1	33.6	33.7	-	-	-	-	-	-
Advertising	731	36.7	36.5	36.4	36.7	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	36.6	36.1	36.3	36.2	-	-	-	-	-	-
Services to buildings	734	28.4	28.4	28.3	28.8	-	-	-	-	-	-
Disinfecting and pest control services	7342	37.7	37.2	37.2	37.2	-	-	-	-	-	-
Building maintenance services, nec	7349	27.6	27.6	27.5	28.0	-	-	-	-	-	-
Miscellaneous equipment rental and leasing	735	38.9	38.6	38.2	38.8	-	-	-	-	-	-
Medical equipment rental	7352	36.8	36.7	36.4	36.0	-	-	-	-	-	-
Heavy construction equipment rental	7353	40.9	40.6	40.3	41.0	-	-	-	-	-	-
Equipment rental and leasing, nec	7359	38.8	38.4	38.0	38.8	-	-	-	-	-	-
Personnel supply services:											
Help supply services	7363	32.4	31.6	32.6	32.5	-	-	-	-	-	-
Computer and data processing services	737	38.5	38.2	38.5	38.4	-	-	-	-	-	-
Computer programming services	7371	38.1	37.7	38.0	37.8	-	-	-	-	-	-
Computer integrated systems design	7373	39.8	39.7	39.5	39.4	-	-	-	-	-	-
Information retrieval services	7375	38.5	38.3	39.3	39.3	-	-	-	-	-	-
Computer maintenance and repair	7378	39.6	38.9	40.0	39.2	-	-	-	-	-	-
Miscellaneous business services	738	33.1	32.7	32.8	33.1	-	-	-	-	-	-
Detective and armored car services	7381	34.6	34.2	34.8	35.0	-	-	-	-	-	-
Security systems services	7382	36.3	35.7	35.9	36.0	-	-	-	-	-	-
Auto repair, services, and parking	75	35.9	35.5	35.4	35.6	-	-	-	-	-	-
Automotive rentals, without drivers	751	36.9	37.1	35.8	35.8	-	-	-	-	-	-
Passenger car rental	7514	36.9	37.4	35.3	35.3	-	-	-	-	-	-
Automobile parking	752	32.8	32.1	33.9	32.9	-	-	-	-	-	-
Automotive repair shops	753	38.0	37.8	37.6	38.0	-	-	-	-	-	-
Automotive and tire repair shops	7532,4	38.0	37.9	37.8	37.9	-	-	-	-	-	-
General automotive repair shops	7538	37.7	37.6	37.4	37.6	-	-	-	-	-	-
Automotive services, except repair	754	30.8	29.9	30.1	30.2	-	-	-	-	-	-
Carwashes	7542	27.8	26.7	26.7	26.7	-	-	-	-	-	-
Miscellaneous repair services	76	38.3	38.2	37.8	37.9	-	-	-	-	-	-
Motion pictures	78	30.0	29.4	30.1	29.6	-	-	-	-	-	-
Motion picture production and services	781	39.2	38.2	39.2	38.2	-	-	-	-	-	-
Video tape rental	784	23.5	23.0	23.9	23.2	-	-	-	-	-	-
Amusement and recreation services	79	26.7	26.2	25.6	25.8	-	-	-	-	-	-
Bowling centers	793	24.9	24.7	25.2	25.4	-	-	-	-	-	-
Misc. amusement and recreation services	799	26.5	25.9	24.9	25.3	-	-	-	-	-	-
Physical fitness facilities	7991	19.6	18.9	19.2	19.2	-	-	-	-	-	-
Membership sports and recreation clubs	7997	28.3	28.1	27.1	27.8	-	-	-	-	-	-
Health services	80	33.1	33.0	32.8	32.8	-	-	-	-	-	-
Offices and clinics of medical doctors	801	33.0	33.0	32.7	32.7	-	-	-	-	-	-
Offices and clinics of dentists	802	28.3	28.1	27.9	27.9	-	-	-	-	-	-
Offices and clinics of other health practitioners	804	30.2	29.9	30.0	29.8	-	-	-	-	-	-
Nursing and personal care facilities	805	32.6	32.4	32.0	32.2	-	-	-	-	-	-
Intermediate care facilities	8052	31.8	31.7	31.4	31.4	-	-	-	-	-	-
Hospitals	806	35.0	34.9	34.9	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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Services—Continued											
Agricultural services—Continued											
Veterinary services	074	\$10.00	\$9.97	\$10.19	\$10.26	—	\$289.00	\$288.13	\$290.42	\$296.51	—
Landscape and horticultural services	078	10.01	9.77	10.40	10.19	—	372.37	367.35	362.96	379.07	—
Hotels and other lodging places:											
Hotels and motels ⁴	701	8.93	8.91	9.18	9.16	—	279.51	277.10	278.15	279.38	—
Personal services:											
Laundry, cleaning, and garment services	721	8.40	8.32	8.67	8.68	—	287.28	285.38	293.91	298.59	—
Beauty shops ⁴	723	9.40	9.34	9.68	9.60	—	264.14	262.45	272.01	270.72	—
Miscellaneous personal services	729	9.01	8.66	9.35	9.53	—	240.57	226.89	244.04	255.40	—
Business services											
Advertising	731	12.58	12.48	13.10	13.14	—	421.43	413.09	440.16	442.82	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services	7334	11.25	11.12	11.79	11.97	—	411.75	401.43	427.98	433.31	—
Services to buildings	734	8.23	8.18	8.39	8.42	—	233.73	232.31	237.44	242.50	—
Disinfecting and pest control services	7342	11.32	11.15	11.50	11.70	—	426.76	414.78	427.80	435.24	—
Building maintenance services, nec	7349	7.84	7.81	8.01	8.02	—	216.38	215.56	220.28	224.56	—
Miscellaneous equipment rental and leasing	735	12.74	12.54	13.23	13.19	—	495.59	484.04	505.39	511.77	—
Medical equipment rental	7352	12.51	12.22	13.05	12.80	—	460.37	448.47	475.02	460.80	—
Heavy construction equipment rental	7353	16.40	16.10	17.06	17.19	—	670.76	653.66	687.52	704.79	—
Equipment rental and leasing, nec	7359	11.60	11.42	11.99	11.96	—	450.08	438.53	455.62	464.05	—
Personnel supply services:											
Help supply services	7363	10.18	10.14	10.57	10.52	—	329.83	320.42	344.58	341.90	—
Computer and data processing services	737	21.31	21.05	21.96	22.17	—	820.44	804.11	845.46	851.33	—
Computer programming services	7371	24.43	24.12	25.18	25.42	—	930.78	909.32	956.84	960.88	—
Computer integrated systems design	7373	20.87	20.88	20.91	21.24	—	830.63	828.94	825.95	836.86	—
Information retrieval services	7375	15.86	15.89	15.75	15.91	—	610.61	608.59	618.98	625.26	—
Computer maintenance and repair	7378	16.41	15.75	17.18	17.06	—	649.84	612.68	687.20	668.75	—
Miscellaneous business services	738	10.15	10.11	10.33	10.49	—	335.97	330.60	338.82	347.22	—
Detective and armored car services	7381	8.25	8.17	8.52	8.58	—	285.45	279.41	296.50	300.30	—
Security systems services	7382	13.39	13.37	13.97	14.22	—	486.06	477.31	501.52	511.92	—
Auto repair, services, and parking											
Automotive rentals, without drivers	751	10.57	10.49	10.83	10.88	—	390.03	389.18	387.71	389.50	—
Passenger car rental	7514	9.56	9.55	9.82	10.00	—	352.76	357.17	346.65	353.00	—
Automobile parking	752	8.24	8.20	8.56	8.53	—	270.27	263.22	290.18	280.64	—
Automotive repair shops	753	12.43	12.32	12.69	12.73	—	472.34	465.70	477.14	483.74	—
Automotive and tire repair shops	7532,4	13.04	12.89	13.33	13.36	—	495.52	488.53	503.87	506.34	—
General automotive repair shops	7538	12.35	12.27	12.53	12.62	—	465.60	461.35	468.62	474.51	—
Automotive services, except repair	754	8.43	8.33	8.61	8.64	—	259.64	249.07	259.16	260.93	—
Carwashes	7542	7.42	7.37	7.54	7.69	—	206.28	196.78	201.32	205.32	—
Miscellaneous repair services	76	13.28	13.19	13.82	13.92	—	508.62	503.86	522.40	527.57	—
Motion pictures											
Motion picture production and services	781	20.22	19.99	22.73	22.42	—	792.62	763.62	891.02	856.44	—
Video tape rental	784	7.23	7.32	7.17	7.22	—	169.91	168.36	171.36	167.50	—
Amusement and recreation services											
Bowling centers	793	7.61	7.53	7.61	7.64	—	189.49	185.99	191.77	194.06	—
Misc. amusement and recreation services	799	8.86	8.98	9.42	9.33	—	234.79	232.58	234.56	236.05	—
Physical fitness facilities	7991	8.78	8.81	9.21	9.22	—	172.09	166.51	176.83	177.02	—
Membership sports and recreation clubs	7997	9.40	9.55	9.96	9.80	—	266.02	268.36	269.92	272.44	—
Health services											
Offices and clinics of medical doctors	801	14.31	14.24	14.65	14.78	—	472.23	469.92	479.06	483.31	—
Offices and clinics of dentists	802	14.16	14.09	14.56	14.71	—	400.73	395.93	406.22	410.41	—
Offices and clinics of other health practitioners	804	13.12	13.23	12.96	12.90	—	396.22	395.58	388.80	384.42	—
Nursing and personal care facilities	805	9.77	9.71	10.01	10.04	—	318.50	314.60	320.32	323.29	—
Intermediate care facilities	8052	9.29	9.17	9.58	9.62	—	295.42	290.69	300.81	302.07	—
Hospitals	806	15.46	15.37	15.83	15.86	—	541.10	536.41	552.47	550.34	—

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				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Services—Continued											
Health services—Continued											
Home health care services	808	29.0	29.0	28.7	28.9	-	-	-	-	-	-
Legal services	81	35.0	34.7	34.8	34.7	-	-	-	-	-	-
Social services	83	31.3	31.1	30.8	30.9	-	-	-	-	-	-
Individual and family services	832	31.4	31.1	31.0	31.2	-	-	-	-	-	-
Job training and related services	833	30.7	30.5	30.3	30.5	-	-	-	-	-	-
Child day care services	835	30.0	29.8	29.1	29.2	-	-	-	-	-	-
Residential care	836	32.3	32.1	32.0	32.1	-	-	-	-	-	-
Social services, nec	839	32.3	32.1	32.2	32.1	-	-	-	-	-	-
Membership organizations:											
Professional organizations	862	35.2	34.8	35.2	35.3	-	-	-	-	-	-
Engineering and management services	87	37.3	37.4	37.3	37.3	-	-	-	-	-	-
Engineering and architectural services	871	39.4	39.2	39.0	38.8	-	-	-	-	-	-
Engineering services	8711	39.7	39.4	39.4	39.1	-	-	-	-	-	-
Architectural services	8712	38.4	38.4	37.8	37.9	-	-	-	-	-	-
Surveying services	8713	38.3	38.2	36.7	37.7	-	-	-	-	-	-
Accounting, auditing, and bookkeeping	872	36.8	38.7	38.1	38.8	-	-	-	-	-	-
Research and testing services	873	36.5	36.1	36.4	36.3	-	-	-	-	-	-
Commercial physical research	8731	39.9	39.8	39.4	39.2	-	-	-	-	-	-
Commercial nonphysical research	8732	30.4	29.5	31.7	31.3	-	-	-	-	-	-
Noncommercial research organizations	8733	36.0	35.5	35.8	35.8	-	-	-	-	-	-
Management and public relations	874	36.2	35.8	35.8	35.7	-	-	-	-	-	-
Management services	8741	35.2	34.7	34.4	34.5	-	-	-	-	-	-
Management consulting services	8742	36.6	36.2	36.2	36.1	-	-	-	-	-	-
Public relations services	8743	35.2	35.1	35.1	35.1	-	-	-	-	-	-
Services, nec	89	34.8	34.2	34.8	35.2	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999 ^P	May 1999 ^P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999 ^P	May 1999 ^P
Services—Continued											
Health services—Continued											
Home health care services	808	\$11.49	\$11.40	\$11.83	\$11.84	—	\$333.21	\$330.60	\$339.52	\$342.18	—
Legal services	81	18.09	17.80	18.74	18.73	—	633.15	617.66	652.15	649.93	—
Social services	83	9.19	9.08	9.48	9.49	—	287.65	282.39	291.98	293.24	—
Individual and family services	832	9.71	9.59	9.96	9.99	—	304.89	298.25	308.76	311.69	—
Job training and related services	833	8.92	8.77	9.19	9.19	—	273.84	267.49	278.46	280.30	—
Child day care services	835	7.91	7.84	8.20	8.20	—	237.30	233.63	238.62	239.44	—
Residential care	836	9.30	9.21	9.60	9.64	—	300.39	295.64	307.20	309.44	—
Social services, nec	839	11.16	11.03	11.44	11.45	—	360.47	354.06	368.37	367.55	—
Membership organizations:											
Professional organizations	862	18.35	18.26	18.44	18.39	—	645.92	635.45	649.09	649.17	—
Engineering and management services	87	17.87	17.72	18.25	18.34	—	666.55	662.73	680.73	684.08	—
Engineering and architectural services	871	19.59	19.54	20.02	20.12	—	771.85	765.97	780.78	780.66	—
Engineering services	8711	20.50	20.44	20.91	21.03	—	813.85	805.34	823.85	822.27	—
Architectural services	8712	17.60	17.59	18.01	18.16	—	675.84	675.46	680.78	688.26	—
Surveying services	8713	13.76	13.60	14.24	14.25	—	527.01	519.52	522.61	537.23	—
Accounting, auditing, and bookkeeping	872	15.40	15.09	15.55	15.66	—	566.72	583.98	592.46	607.61	—
Research and testing services	873	18.31	18.31	18.43	18.39	—	668.32	660.99	670.85	667.56	—
Commercial physical research	8731	20.20	20.18	20.29	20.16	—	805.98	803.16	799.43	790.27	—
Commercial nonphysical research	8732	15.01	14.84	14.77	14.68	—	456.30	437.78	468.21	459.48	—
Noncommercial research organizations	8733	21.58	21.76	21.98	22.13	—	776.88	772.48	786.88	792.25	—
Management and public relations	874	17.25	17.17	18.03	18.22	—	624.45	614.69	645.47	650.45	—
Management services	8741	15.52	15.45	15.95	16.01	—	546.30	536.12	548.68	552.35	—
Management consulting services	8742	19.47	19.17	20.78	20.95	—	712.60	693.95	752.24	756.30	—
Public relations services	8743	15.95	15.92	16.47	16.43	—	561.44	558.79	578.10	576.69	—
Services, nec	89	17.66	17.62	18.26	18.26	—	614.57	602.60	635.45	642.75	—

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: Data have been revised to reflect March 1998 benchmarks. See the article in this issue for additional information.

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)			
	Mar. 1998	Apr. 1998	Mar. 1999	Apr. 1999 ^P	Mar. 1998	Apr. 1998	Mar. 1999	Apr. 1999 ^P
Average hourly earnings, excluding lump-sum payments	\$21.03	\$20.62	\$21.42	\$21.35	\$21.33	\$20.81	\$22.01	\$21.72
Average hourly earnings, including lump-sum payments	21.07	20.67	21.47	21.40	21.57	21.03	22.10	21.82

^P = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Manufacturing	\$12.79	\$12.83	\$13.04	\$13.10	\$13.14
Durable goods	13.24	13.28	13.47	13.53	13.57
Lumber and wood products	10.53	10.45	10.75	10.80	(2)
Furniture and fixtures	10.43	10.43	10.62	10.67	(2)
Stone, clay, and glass products	12.68	12.75	12.85	12.84	(2)
Primary metal industries	14.46	14.70	14.51	14.59	(2)
Fabricated metal products	12.36	12.31	12.65	12.68	(2)
Industrial machinery and equipment	13.66	13.63	14.02	14.06	(2)
Electronic and other electrical equipment	12.52	12.57	12.72	12.77	(2)
Transportation equipment	16.48	16.69	16.65	16.80	(2)
Instruments and related products	13.27	13.31	13.46	13.56	(2)
Miscellaneous manufacturing	10.50	10.43	10.77	10.84	(2)
Nondurable goods	12.12	12.15	12.39	12.44	\$12.47
Food and kindred products	11.11	11.16	11.26	11.39	(2)
Tobacco products	17.94	18.38	18.68	19.48	(2)
Textile mill products	9.85	9.90	10.11	10.14	(2)
Apparel and other textile products	8.30	8.29	8.52	8.57	(2)
Paper and allied products	14.58	14.60	14.85	14.88	(2)
Printing and publishing	12.91	12.85	13.21	13.21	(2)
Chemicals and allied products	16.16	16.22	16.25	16.36	(2)
Petroleum and coal products	19.46	19.60	20.05	19.97	(2)
Rubber and misc. plastics products	11.27	11.28	11.60	11.59	(2)
Leather and leather products	9.06	9.06	9.31	9.35	(2)

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

² Not available.

P = preliminary.

NOTE: Data have been revised to reflect March 1998 benchmarks. See the article in this issue for additional information.

**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				
	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P	Avg. 1998	Apr. 1998	Mar. 1999	Apr. 1999P	May 1999P
Total private:										
Current dollars	\$12.78	\$12.70	\$13.12	\$13.16	\$13.20	\$442.19	\$434.34	\$448.70	\$451.39	\$456.72
Constant (1982) dollars	7.75	7.73	7.88	7.84	(2)	268.32	264.52	269.33	268.84	(2)
Mining:										
Current dollars	16.90	16.79	17.01	16.94	\$16.85	741.91	727.01	717.82	731.81	\$739.72
Constant (1982) dollars	10.25	10.23	10.21	10.09	(2)	450.19	442.76	430.86	435.86	(2)
Construction:										
Current dollars	16.59	16.36	16.79	16.85	\$17.04	643.69	623.32	632.98	650.41	\$669.67
Constant (1982) dollars	10.07	9.96	10.08	10.04	(2)	390.59	379.61	379.94	387.38	(2)
Manufacturing:										
Current dollars	13.49	13.46	13.73	13.80	\$13.84	562.53	549.17	568.42	574.08	\$577.13
Constant (1982) dollars	8.19	8.20	8.24	8.22	(2)	341.34	334.45	341.19	341.92	(2)
Transportation and public utilities:										
Current dollars	15.31	15.24	15.51	15.57	\$15.58	604.75	595.88	601.79	602.56	\$606.06
Constant (1982) dollars	9.29	9.28	9.31	9.27	(2)	366.96	362.90	361.22	358.88	(2)
Wholesale trade:										
Current dollars	14.06	13.95	14.34	14.48	\$14.53	539.90	531.50	547.79	554.58	\$560.86
Constant (1982) dollars	8.53	8.50	8.61	8.62	(2)	327.61	323.69	328.81	330.30	(2)
Retail trade:										
Current dollars	8.73	8.69	9.00	9.03	\$9.04	253.17	249.40	257.40	259.16	\$263.06
Constant (1982) dollars	5.30	5.29	5.40	5.38	(2)	153.62	151.89	154.50	154.35	(2)
Finance, insurance, and real estate:										
Current dollars	14.06	13.98	14.53	14.61	\$14.76	511.78	504.68	523.08	524.50	\$537.26
Constant (1982) dollars	8.53	8.51	8.72	8.70	(2)	310.55	307.36	313.97	312.39	(2)
Services:										
Current dollars	12.85	12.77	13.33	13.32	\$13.34	418.91	413.75	431.89	431.57	\$437.55
Constant (1982) dollars	7.80	7.78	8.00	7.93	(2)	254.19	251.98	259.24	257.04	(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. Data have been revised to reflect March 1998 benchmarks. See the article in this issue for additional information.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Alabama	41.5	42.1	41.9	\$12.00	\$12.33	\$12.54	\$498.00	\$519.09	\$525.43
Birmingham	41.9	41.8	42.1	12.73	12.89	12.91	533.39	538.80	543.51
Mobile	44.9	44.8	45.7	14.13	14.12	14.35	634.44	632.58	655.80
Alaska	43.8	53.8	41.2	11.33	10.67	12.37	496.25	574.05	509.64
Arizona	40.4	40.3	40.6	11.90	12.65	12.58	480.76	509.80	510.75
Arkansas	40.5	41.7	41.5	11.02	11.41	11.47	446.31	475.80	476.01
Fayetteville-Springdale-Rogers	40.5	42.6	41.7	10.71	11.01	10.92	433.76	469.03	455.36
Fort Smith	39.7	41.5	41.3	10.94	11.49	11.58	434.32	476.84	478.25
Little Rock-North Little Rock	41.8	42.7	42.1	11.77	12.16	12.30	491.99	519.23	517.83
Pine Bluff	40.7	40.2	40.2	12.84	13.15	13.21	522.59	528.63	531.04
California	40.8	41.9	41.6	13.52	13.85	13.84	551.62	580.32	575.74
Bakersfield	41.7	41.8	41.0	13.94	13.85	13.92	581.30	578.93	570.72
Fresno	39.4	40.0	40.1	11.99	12.26	12.24	472.41	490.40	490.82
Los Angeles-Long Beach	41.8	42.7	42.5	12.69	12.90	12.93	530.44	550.83	549.53
Modesto	40.8	41.9	41.5	13.72	13.95	13.96	559.78	584.51	579.34
Oakland	41.1	42.4	42.0	15.58	15.67	15.67	640.34	684.41	658.14
Orange County	42.5	43.4	43.1	13.02	13.32	13.32	553.35	578.09	574.09
Riverside-San Bernardino	42.2	42.1	42.3	12.03	12.30	12.31	507.67	517.83	520.71
Sacramento	40.7	40.9	41.0	14.57	14.90	14.95	593.00	609.41	612.95
Salinas	39.0	38.5	39.8	14.26	14.25	14.15	556.14	548.63	563.17
San Diego	39.8	40.4	39.9	13.56	13.61	13.69	539.69	549.84	546.23
San Francisco	40.9	40.3	40.2	14.63	14.81	14.72	598.37	596.84	591.74
San Jose	42.3	42.6	42.3	16.70	17.13	17.18	706.41	729.74	726.71
Santa Barbara-Santa Maria-Lompoc	41.0	41.4	41.7	14.09	14.29	14.15	577.69	591.61	590.06
Santa Rosa	40.0	40.3	39.9	14.95	15.41	15.43	598.00	621.02	615.68
Stockton-Lodi	40.1	41.7	40.9	13.56	13.43	13.43	543.76	560.03	549.29
Vallejo-Fairfield-Napa	41.6	42.4	41.3	15.58	15.79	15.85	648.13	669.50	654.61
Ventura	43.2	42.9	42.5	12.40	12.56	12.53	535.68	538.82	532.53
Colorado	41.6	41.4	40.6	13.57	14.04	14.18	564.51	581.26	575.71
Denver	42.7	42.6	38.9	12.65	13.16	13.38	540.16	560.62	520.48
Connecticut	42.5	42.4	42.4	14.73	15.06	15.15	626.03	638.54	642.36
Bridgeport	40.9	41.5	41.3	15.06	15.34	15.30	615.95	636.61	631.89
Danbury	42.3	40.6	41.2	14.68	14.88	14.80	620.96	604.13	609.76
Hartford	41.6	42.7	42.6	15.49	15.98	16.03	644.38	682.35	682.88
New Haven-Meriden	41.1	42.4	42.4	14.64	14.84	14.87	601.70	629.22	630.49
New London-Norwich	41.0	42.7	42.2	15.28	15.68	15.71	626.48	669.54	662.96
Stamford-Norwalk	39.7	38.7	39.6	13.62	13.76	13.73	540.71	532.51	543.71
Waterbury	42.7	44.2	44.1	13.78	14.33	14.24	588.41	633.39	627.98
Delaware	41.2	42.1	42.5	15.31	15.56	15.63	630.77	655.08	664.28
Dover	39.8	38.8	39.3	13.74	14.01	14.03	546.85	543.59	551.38
Wilmington-Newark	43.3	44.2	42.8	18.58	18.68	18.75	804.51	825.66	802.50
District of Columbia:									
Washington PMSA	38.1	37.9	40.7	14.25	15.23	14.92	542.93	577.22	607.24
Florida	40.9	42.2	42.0	11.36	11.70	11.65	464.62	493.74	489.30
Georgia	41.0	41.4	41.6	11.98	12.28	12.36	491.18	508.39	514.18
Atlanta	39.9	40.7	40.5	12.85	13.14	13.27	512.72	534.80	537.44
Savannah	45.4	46.7	46.5	14.97	15.91	15.98	679.64	743.00	743.07
Hawaii	36.6	40.0	38.4	13.36	13.25	13.14	488.98	530.00	504.58
Honolulu	39.2	41.6	40.3	13.18	13.07	12.96	516.66	543.71	522.29
Idaho	37.7	39.2	39.4	12.85	12.92	13.09	484.45	506.46	515.75
Illinois	41.6	41.5	41.7	13.68	13.94	13.96	569.09	578.51	582.13
Bloomington-Normal	39.2	39.8	39.8	17.39	17.99	18.13	681.69	716.00	721.57
Champaign-Urbana	41.2	41.0	38.6	11.11	11.28	11.54	457.73	462.48	445.44
Chicago	41.4	41.8	42.0	13.48	13.65	13.68	558.07	570.57	574.56
Davenport-Moline-Rock Island	43.3	41.7	41.9	15.53	15.51	15.65	672.45	646.77	655.74
Decatur	42.0	42.2	42.4	16.81	16.78	16.80	706.02	708.12	712.32
Kankakee	42.9	40.6	40.4	15.25	15.76	15.72	654.23	639.86	635.09
Peoria-Pekin	42.8	42.1	41.9	16.63	16.53	16.51	711.76	695.91	691.77
Rockford	43.0	42.6	42.4	15.51	16.15	15.99	666.93	687.99	677.98
Springfield	41.9	41.7	41.6	12.13	12.41	12.43	508.25	517.50	517.09

See footnotes at end of table.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
Indiana	41.6	42.7	43.6	\$15.19	\$15.03	\$14.97	\$631.90	\$641.78	\$652.69
Bloomington	39.9	40.6	40.8	12.02	12.59	12.55	479.60	511.15	512.04
Elkhart-Goshen	39.3	39.8	40.1	12.54	12.72	12.73	492.82	506.26	510.47
Evansville-Henderson	42.2	44.3	44.7	14.92	14.48	14.25	629.62	641.46	636.98
Fort Wayne	40.0	40.3	40.7	15.67	15.54	15.49	626.80	626.26	630.44
Gary	43.7	44.3	43.5	18.85	19.34	18.98	823.75	856.76	825.63
Indianapolis	41.6	44.3	44.3	16.35	15.57	15.53	680.16	689.75	687.98
Kokomo	45.3	46.8	48.5	22.61	22.62	22.32	1,024.23	1,058.62	1,082.52
Lafayette	39.5	43.5	43.5	16.25	15.67	15.58	641.88	681.65	677.73
Muncie	45.5	45.6	45.6	15.18	15.02	15.03	690.69	684.91	685.37
South Bend	40.0	41.1	41.0	12.47	11.99	12.17	498.80	492.79	498.97
Terre Haute	42.7	43.6	43.8	15.52	14.53	14.63	662.70	633.51	640.79
Iowa	41.2	40.2	41.5	14.00	14.19	14.07	576.80	570.44	583.91
Cedar Rapids	39.4	38.9	41.0	17.46	18.20	16.79	687.92	707.98	688.39
Des Moines	41.5	37.6	38.8	14.35	14.03	14.02	595.53	527.53	543.98
Dubuque	40.0	37.9	38.9	15.31	15.49	15.25	612.40	587.07	593.23
Sioux City	40.5	37.1	37.4	11.69	12.09	12.13	473.45	448.54	453.66
Kansas	41.3	40.8	41.2	13.66	14.15	14.28	564.16	577.32	588.34
Topeka	41.7	41.1	39.6	15.75	16.67	16.73	656.78	685.14	662.51
Wichita	42.1	41.3	41.4	15.94	16.33	16.38	671.07	674.43	678.13
Kentucky	41.0	41.4	41.5	13.68	14.24	14.24	560.88	589.54	590.96
Lexington	42.0	42.2	42.1	13.86	14.11	14.16	582.12	595.44	596.14
Louisville	41.0	42.4	42.1	15.21	15.88	15.87	623.61	673.31	668.13
Louisiana	43.1	43.3	43.4	14.72	15.05	15.08	634.43	651.67	654.47
Baton Rouge	42.4	42.6	41.9	17.72	17.67	17.47	751.33	752.74	731.99
New Orleans	43.0	43.7	44.0	14.76	15.01	15.04	634.68	655.94	661.76
Shreveport-Bossier City	41.9	41.7	42.3	14.31	14.18	14.43	599.59	591.31	610.39
Maine	40.6	40.5	40.4	13.43	13.85	13.89	545.26	560.93	561.16
Lewiston-Auburn	38.9	41.1	42.7	11.89	12.09	11.99	462.52	496.90	511.97
Portland	42.1	41.8	40.3	11.24	11.45	11.21	473.20	478.61	451.76
Maryland	40.8	41.2	41.4	14.35	14.59	14.44	585.48	601.11	597.82
Baltimore PMSA	41.0	41.2	40.8	15.03	15.40	15.33	616.23	634.48	625.46
Massachusetts	41.8	42.1	41.9	13.70	14.08	14.13	572.66	592.77	592.05
Boston	41.4	41.5	41.0	14.81	15.36	15.43	613.13	637.44	632.63
Springfield	41.0	41.7	41.8	13.42	13.70	13.76	550.22	571.29	575.17
Worcester	42.8	42.1	42.0	13.89	14.30	14.41	594.49	602.03	605.22
Michigan	40.7	43.8	43.8	17.33	18.15	18.17	705.33	794.97	795.85
Ann Arbor	43.1	44.3	44.5	18.72	19.77	19.81	806.83	875.81	881.55
Detroit	42.5	44.9	44.3	19.10	20.36	20.17	811.75	914.16	893.53
Flint	43.6	44.6	45.2	24.57	25.29	25.87	1,071.25	1,127.93	1,169.32
Grand Rapids-Muskegon-Holland	40.0	41.7	41.9	14.45	14.93	14.92	578.00	622.58	625.15
Jackson	40.1	41.2	43.0	12.66	13.03	13.00	507.67	536.84	559.00
Kalamazoo-Battle Creek	42.1	43.0	42.6	15.65	15.69	15.45	658.87	674.67	658.17
Lansing East Lansing	40.0	42.6	42.1	19.39	19.68	19.50	775.60	838.37	820.95
Saginaw-Bay City-Midland	43.3	45.6	46.0	20.98	22.47	22.79	908.43	1,024.63	1,048.34
Minnesota	40.9	40.6	40.9	13.82	14.20	14.17	565.24	576.52	579.55
Duluth-Superior	40.8	39.2	38.8	12.49	12.41	12.58	509.59	486.47	488.10
Minneapolis-St. Paul	41.6	41.1	41.0	14.83	15.35	15.22	616.93	630.89	624.02
St. Cloud	43.2	40.9	41.4	12.99	13.35	13.26	561.17	546.02	548.96
Mississippi	40.3	41.2	41.3	10.61	11.02	11.07	427.58	454.02	457.19
Jackson	40.0	41.3	40.8	11.91	12.94	13.07	476.40	534.42	533.26
Missouri	39.9	41.0	41.9	13.03	13.65	13.84	519.90	559.65	579.90
Kansas City	42.2	42.0	41.5	14.32	14.38	14.33	604.30	603.96	594.70
St. Louis	40.4	42.0	43.2	15.33	15.89	16.06	619.33	667.38	693.79
Springfield	40.2	39.3	40.6	11.24	11.71	11.62	451.85	460.20	471.77
Montana	39.1	38.1	38.5	13.73	14.31	14.29	536.84	545.21	550.17
Nebraska	40.8	41.4	41.7	12.25	12.69	12.75	499.80	525.37	531.68
Lincoln	43.6	43.9	45.2	14.25	14.41	14.66	621.30	632.60	662.63
Omaha	42.6	42.4	44.1	13.37	13.00	13.37	569.56	551.20	589.62
Nevada	41.5	40.8	41.6	14.76	14.06	14.18	612.54	573.65	589.89
Las Vegas	41.3	36.1	37.5	16.92	16.54	16.19	698.80	597.09	607.13

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P	April 1998	March 1999	April 1999P
New Hampshire	41.0	40.8	40.9	\$12.73	\$12.95	\$13.11	\$521.93	\$528.36	\$536.20
Manchester	40.0	40.9	39.4	13.74	13.32	13.61	549.60	544.79	536.23
Nashua	40.6	41.2	41.3	14.64	14.78	14.62	594.38	608.94	603.81
Portsmouth-Rochester	41.9	40.7	40.8	11.96	12.59	12.82	501.12	512.41	523.06
New Jersey	40.7	41.8	41.5	14.52	14.94	14.96	590.96	624.49	620.84
New Mexico	37.9	38.1	38.4	12.59	12.59	12.39	477.16	479.68	475.78
Albuquerque	36.7	37.7	38.5	13.73	14.53	14.15	503.89	547.78	544.78
New York	40.3	41.2	41.4	13.52	13.88	13.96	544.86	571.86	577.94
Albany-Schenectady-Troy	41.3	43.3	42.8	14.42	15.09	15.33	595.55	653.40	656.12
Binghamton	40.4	40.4	40.2	10.78	11.05	10.99	435.51	446.42	441.80
Buffalo-Niagara Falls	42.2	42.8	43.9	17.26	17.73	18.14	728.37	758.84	796.35
Dutchess County	39.9	40.3	39.8	12.16	12.18	12.23	485.18	490.85	486.75
Elmira	39.8	41.5	41.4	12.55	12.76	12.73	499.49	529.54	527.02
Nassau-Suffolk	38.9	40.1	40.4	12.41	12.91	12.96	482.75	517.69	523.58
New York PMSA	38.3	39.3	39.1	12.48	12.62	12.67	477.98	495.97	495.40
New York City	38.1	38.8	38.5	12.23	12.36	12.40	465.96	479.57	477.40
Newburgh	39.1	41.3	41.2	11.25	11.41	11.59	439.88	471.23	477.51
Rochester	41.9	42.5	42.0	14.91	15.36	15.35	624.73	652.80	644.70
Rockland County	41.1	44.4	44.2	15.58	16.13	16.08	640.34	716.17	710.74
Syracuse	42.4	42.1	41.9	14.47	14.80	15.01	613.53	623.08	628.92
Utica-Rome	39.9	40.3	41.0	11.68	12.26	12.29	466.03	494.08	503.89
Westchester County	39.3	41.4	41.6	13.28	12.89	13.12	521.90	533.65	545.79
North Carolina	40.2	40.5	40.9	11.71	12.18	12.22	470.74	493.29	499.80
Asheville	39.6	40.9	42.0	11.42	11.67	11.59	452.23	477.30	486.78
Charlotte-Gastonia-Rock Hill	40.1	40.8	40.6	12.71	13.16	13.31	509.67	536.93	540.39
Greensboro--Winston-Salem--High Point	39.5	39.7	39.7	11.94	12.40	12.40	471.63	492.28	492.28
Raleigh-Durham-Chapel Hill	40.7	42.8	42.6	12.79	13.27	13.33	520.55	567.96	567.86
North Dakota	40.4	39.9	40.5	11.51	11.61	11.81	465.00	463.24	478.31
Fargo-Moorhead	40.1	38.9	40.3	10.69	11.22	11.51	428.67	436.46	463.85
Ohio	41.8	42.6	43.2	15.60	16.17	16.26	652.08	688.84	702.43
Akron	41.6	43.0	42.3	12.96	13.42	13.41	539.14	577.06	567.24
Canton-Massillon	41.4	40.6	40.6	13.97	14.18	14.03	578.36	575.71	569.62
Cincinnati	42.7	42.6	43.2	14.87	15.57	15.64	634.95	663.28	675.65
Cleveland-Lorain-Elyria	42.2	43.5	43.6	15.14	15.84	15.86	638.91	689.04	691.50
Columbus	41.6	41.3	42.0	14.63	15.00	15.00	608.61	619.50	630.00
Dayton-Springfield	42.2	43.0	43.7	16.62	17.13	17.34	701.36	736.59	757.76
Hamilton-Middletown	45.8	46.0	46.4	17.47	17.46	17.55	800.13	803.16	814.32
Lima	42.2	43.0	42.8	15.87	16.63	16.43	669.71	715.09	703.20
Mansfield	40.8	43.6	43.8	15.42	16.36	16.42	629.14	713.30	719.20
Staubenville-Weirton	42.5	40.7	41.0	17.51	17.90	17.99	744.18	728.53	737.59
Toledo	42.3	43.3	44.9	16.92	18.22	18.48	715.72	788.93	829.75
Youngstown-Warren	41.2	42.2	42.2	17.78	17.96	17.98	732.54	757.91	758.76
Oklahoma	40.7	40.1	39.9	12.58	12.75	12.80	512.01	511.28	510.72
Oklahoma City	42.0	39.4	39.9	13.97	13.67	13.60	586.74	538.60	542.64
Tulsa	41.3	41.8	41.9	12.88	13.44	13.33	531.94	561.79	558.53
Oregon	40.7	40.3	40.1	13.98	14.39	14.40	568.99	579.92	577.44
Eugene-Springfield	41.0	41.5	40.9	13.40	13.84	13.86	549.40	574.36	566.87
Medford-Ashland	38.8	38.4	38.7	12.67	13.36	13.30	491.60	513.02	514.71
Portland-Vancouver	40.9	40.0	38.9	14.21	14.92	14.94	581.19	596.80	581.17
Salem	40.0	40.6	40.2	12.09	12.59	12.71	483.60	511.15	510.94
Pennsylvania	41.1	41.8	41.7	13.93	14.24	14.23	572.52	595.23	593.39
Allentown-Bethlem-Easton	41.9	41.7	41.8	14.49	14.81	14.75	607.13	617.58	616.55
Alltoona	39.6	40.0	39.4	11.98	12.47	12.26	474.41	498.80	483.04
Erie	42.3	45.2	45.2	13.92	14.61	14.69	588.82	660.37	663.99
Harrisburg-Lebanon-Carlisle	39.3	39.7	40.0	13.33	14.00	14.04	523.87	555.80	561.60
Johnstown	39.1	39.1	40.2	10.29	10.65	10.56	402.34	416.42	424.51
Lancaster	40.0	41.0	40.9	12.80	13.12	13.17	512.00	537.92	538.65
Philadelphia PMSA	40.6	40.5	40.7	15.12	15.34	15.32	613.87	621.27	623.52
Pittsburgh	42.8	42.3	42.3	14.88	15.15	15.01	636.86	640.85	634.92
Reading	40.4	41.2	41.6	14.93	14.94	14.98	603.17	615.53	623.17
Scranton--Wilkes-Barre--Hazleton	40.9	40.3	40.6	12.41	12.85	12.94	507.57	517.86	525.36
Sharon	39.2	42.4	41.5	13.65	14.15	14.17	535.08	599.96	588.06
State College	40.4	41.7	41.4	11.88	12.41	12.49	479.95	517.50	517.09
Williamsport	39.9	41.3	41.0	11.45	11.68	11.60	456.86	482.38	475.60
York	41.1	42.8	42.5	14.12	14.75	14.74	580.33	631.30	626.45

See footnotes at end of table.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	April 1998	March 1999	April 1999 ^P	April 1998	March 1999	April 1999 ^P	April 1998	March 1999	April 1999 ^P
Rhode Island	40.4	39.9	40.1	\$11.53	\$11.93	\$11.91	\$465.81	\$476.01	\$477.59
Providence-Fall River-Warwick	40.4	40.6	40.5	11.70	12.22	12.18	472.68	496.13	493.29
South Carolina	42.3	42.5	42.7	10.51	10.70	10.73	444.57	454.75	458.17
South Dakota	42.5	42.6	42.7	10.12	10.51	10.53	430.10	447.73	449.63
Rapid City	41.1	40.3	40.5	10.30	10.51	10.63	423.33	423.55	430.52
Sioux Falls	43.5	43.7	43.8	10.54	10.99	11.02	458.49	480.26	482.68
Tennessee	39.7	40.4	40.7	12.06	12.32	12.41	478.78	497.73	505.09
Chattanooga	41.7	41.3	41.3	10.91	11.53	11.67	454.95	476.19	481.97
Johnson City-Kingsport-Bristol	38.1	39.2	39.3	13.33	12.74	12.70	507.87	499.41	499.11
Knoxville	39.1	41.2	41.1	11.82	12.08	12.09	462.16	497.70	496.90
Memphis	40.0	39.8	39.3	12.63	13.25	13.33	505.20	527.35	523.87
Nashville	40.4	38.7	39.1	12.88	13.11	13.22	520.35	507.36	516.90
Texas	42.7	43.3	43.4	12.14	12.23	12.21	518.38	529.56	529.91
Dallas	42.6	42.6	42.7	12.35	12.44	12.50	526.11	529.94	533.75
Ft. Worth-Arlington	42.8	42.9	43.3	13.09	13.31	13.29	560.25	571.00	575.46
Houston	44.9	44.1	44.7	14.24	14.21	14.21	639.38	626.66	635.19
San Antonio	42.6	42.2	42.1	9.63	9.94	9.90	418.76	419.47	416.79
Utah	39.6	40.5	40.3	12.96	13.49	13.64	513.22	546.35	549.69
Salt Lake City-Ogden	40.1	41.1	40.8	12.78	13.05	13.08	512.48	536.36	533.66
Vermont	38.6	38.9	39.0	12.94	13.52	13.34	499.48	525.93	520.26
Burlington	42.7	41.9	40.6	13.42	14.48	14.53	573.03	606.71	589.92
Virginia	41.2	41.6	42.0	12.84	13.29	13.24	529.01	552.86	556.08
Bristol	38.4	50.0	50.5	10.36	11.58	11.60	397.82	579.00	585.80
Charlottesville	44.4	36.2	40.2	10.20	10.62	10.71	452.88	384.44	430.54
Danville	42.9	44.0	42.6	13.34	13.60	13.53	572.29	598.40	576.38
Lynchburg	42.2	42.8	44.5	12.40	13.07	13.09	523.28	559.40	582.51
Norfolk-Virginia Beach-Newport News	41.7	43.2	43.5	14.76	14.68	14.68	615.49	634.18	638.58
Northern Virginia	39.9	41.8	41.9	13.23	13.70	13.77	527.88	572.66	576.96
Richmond-Petersburg	40.5	41.9	42.0	16.28	16.42	16.61	659.34	688.00	697.62
Roanoke	38.9	40.2	40.2	13.59	14.17	13.99	528.65	569.63	562.40
Washington	40.1	41.0	40.2	15.51	15.98	16.05	621.95	655.18	645.21
West Virginia	41.1	40.5	41.7	13.78	13.78	13.75	566.36	558.09	573.38
Charleston	47.4	47.8	47.4	15.58	15.80	15.92	738.49	755.24	754.61
Huntington-Ashland	43.1	41.3	41.6	15.88	15.18	15.05	684.43	626.93	626.08
Parkersburg-Marietta	41.2	41.8	42.4	17.38	17.54	17.36	716.06	733.17	736.06
Wheeling	36.9	38.6	41.3	16.14	17.16	16.93	627.85	662.38	699.21
Wisconsin	41.1	41.6	41.6	13.90	14.49	14.51	571.29	602.78	603.62
Appleton-Oshkosh-Neenah	43.9	43.3	43.2	14.92	15.70	15.67	654.99	679.81	676.94
Eau Claire	41.6	40.9	40.8	12.48	12.53	11.53	519.17	512.48	470.42
Green Bay	40.6	41.5	42.6	15.46	15.30	15.52	627.68	634.95	661.15
Janesville-Beloit	41.6	42.8	42.6	17.55	19.05	18.98	730.88	815.34	808.55
Kenosha	38.6	38.9	39.6	15.28	15.84	16.16	589.81	616.18	639.94
La Crosse	41.8	39.9	40.5	12.14	12.56	12.72	507.45	501.14	515.16
Madison	39.0	40.0	39.7	13.02	13.39	13.57	507.78	535.60	538.73
Milwaukee-Waukesha	40.7	41.7	41.8	14.87	15.46	15.50	605.21	644.68	647.90
Racine	38.3	40.9	41.3	14.46	14.88	14.39	553.82	608.59	594.31
Sheboygan	41.7	42.0	44.4	13.78	14.51	14.80	574.63	609.42	657.12
Wausau	42.2	41.9	42.3	13.45	13.90	14.04	567.59	582.41	593.89
Wyoming	41.2	39.9	40.6	15.73	15.57	15.60	648.08	621.24	633.36
Puerto Rico	38.6	(¹)	(¹)	8.16	(¹)	(¹)	314.98	(¹)	(¹)
Virgin Islands	39.1	(¹)	(¹)	18.86	(¹)	(¹)	737.43	(¹)	(¹)

¹ Not available.
P = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1998 benchmarks.

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

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

(Numbers in thousands)

Census region and division	1998										1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P	
NORTHEAST														
Civilian labor force	26,045.2	26,055.9	26,027.2	26,024.4	26,035.0	26,081.6	26,092.3	26,115.2	26,147.6	26,178.3	26,245.8	26,241.0	26,249.2	
Employed	24,823.1	24,831.6	24,825.3	24,838.3	24,851.8	24,883.0	24,910.0	24,944.2	24,988.5	25,043.3	25,118.7	25,123.9	25,150.1	
Unemployed	1,222.1	1,224.2	1,201.9	1,186.1	1,183.2	1,198.6	1,182.3	1,171.0	1,159.2	1,135.0	1,127.1	1,117.1	1,099.1	
Unemployment rate	4.7	4.7	4.6	4.6	4.5	4.6	4.5	4.5	4.4	4.3	4.3	4.3	4.2	
New England														
Civilian labor force	7,092.4	7,101.6	7,097.0	7,104.3	7,107.4	7,125.5	7,135.9	7,140.1	7,149.3	7,159.3	7,162.0	7,162.9	7,183.3	
Employed	6,845.6	6,845.9	6,849.5	6,866.4	6,865.9	6,876.3	6,891.8	6,905.1	6,919.5	6,930.2	6,942.3	6,948.5	6,967.0	
Unemployed	246.8	255.8	247.5	237.9	241.5	249.3	244.0	235.0	229.7	229.1	219.8	214.3	216.3	
Unemployment rate	3.5	3.6	3.5	3.3	3.4	3.5	3.4	3.3	3.2	3.2	3.1	3.0	3.0	
Middle Atlantic														
Civilian labor force	18,952.8	18,954.2	18,930.2	18,920.1	18,927.6	18,956.0	18,956.4	18,975.1	18,998.4	19,019.0	19,083.8	19,078.1	19,065.9	
Employed	17,977.5	17,985.8	17,975.8	17,971.9	17,985.8	18,006.7	18,018.2	18,039.2	18,068.9	18,113.1	18,176.4	18,175.4	18,183.0	
Unemployed	975.3	968.5	954.3	948.2	941.8	949.3	938.3	935.9	929.4	905.9	907.4	902.7	882.8	
Unemployment rate	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.7	4.6	
SOUTH														
Civilian labor force	47,558.9	47,635.6	47,744.2	47,867.6	47,944.9	48,056.0	48,192.6	48,312.9	48,458.9	48,631.6	48,639.5	48,606.0	48,700.0	
Employed	45,427.9	45,519.3	45,615.4	45,751.7	45,835.6	45,956.7	46,114.1	46,247.0	46,409.3	46,608.6	46,609.5	46,582.0	46,684.4	
Unemployed	2,130.9	2,116.3	2,128.8	2,115.9	2,109.2	2,099.3	2,078.6	2,065.9	2,049.6	2,023.0	2,030.0	2,024.1	2,015.6	
Unemployment rate	4.5	4.4	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.2	4.2	4.2	4.1	
South Atlantic														
Civilian labor force	24,548.5	24,581.0	24,623.6	24,698.6	24,745.3	24,813.9	24,902.2	24,979.1	25,072.6	25,170.3	25,178.7	25,144.2	25,229.1	
Employed	23,529.3	23,568.3	23,615.9	23,699.7	23,750.9	23,830.3	23,919.4	24,006.0	24,111.5	24,223.7	24,215.0	24,180.7	24,273.7	
Unemployed	1,019.2	1,012.8	1,007.6	998.9	994.4	983.6	982.7	973.1	961.1	946.5	963.7	963.5	955.5	
Unemployment rate	4.2	4.1	4.1	4.0	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.8	3.8	
East South Central														
Civilian labor force	8,074.9	8,082.6	8,095.0	8,108.2	8,114.5	8,128.1	8,147.8	8,160.1	8,181.9	8,207.9	8,195.7	8,220.5	8,209.0	
Employed	7,703.9	7,715.8	7,734.9	7,756.9	7,757.9	7,769.7	7,793.3	7,809.1	7,831.2	7,853.8	7,850.5	7,853.3	7,852.3	
Unemployed	371.0	366.8	360.2	351.3	356.7	358.3	354.5	351.0	350.7	354.1	345.2	367.2	356.8	
Unemployment rate	4.6	4.5	4.4	4.3	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.5	4.3	
West South Central														
Civilian labor force	14,935.5	14,971.9	15,025.7	15,060.8	15,085.0	15,114.0	15,142.7	15,173.7	15,204.5	15,253.4	15,265.0	15,241.3	15,261.8	
Employed	14,194.7	14,235.3	14,264.6	14,295.1	14,326.8	14,356.6	14,401.4	14,431.9	14,466.6	14,531.1	14,543.9	14,548.0	14,558.5	
Unemployed	740.7	736.7	761.0	765.8	758.2	757.4	741.3	741.8	737.8	722.4	721.1	693.3	703.4	
Unemployment rate	5.0	4.9	5.1	5.1	5.0	5.0	4.9	4.9	4.9	4.7	4.7	4.5	4.6	

See footnotes at end of table.

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

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

(Numbers in thousands)

Census region and division	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P
MIDWEST													
Civilian labor force	32,964.4	33,012.1	33,071.8	33,109.8	33,149.1	33,250.3	33,358.5	33,442.1	33,524.7	33,585.8	33,609.3	33,576.6	33,607.8
Employed	31,764.5	31,792.2	31,822.9	31,802.2	31,909.8	32,005.1	32,131.7	32,229.2	32,342.5	32,426.9	32,443.4	32,456.6	32,461.3
Unemployed	1,199.9	1,219.9	1,248.9	1,307.6	1,239.3	1,245.3	1,226.7	1,212.8	1,182.2	1,159.0	1,165.9	1,119.9	1,146.5
Unemployment rate	3.6	3.7	3.8	3.9	3.7	3.7	3.7	3.6	3.5	3.5	3.5	3.3	3.4
East North Central													
Civilian labor force	22,842.6	22,866.7	22,914.9	22,937.8	22,965.2	23,035.6	23,107.8	23,154.2	23,210.4	23,267.8	23,294.3	23,276.9	23,297.8
Employed	21,981.9	21,988.2	22,004.6	21,966.0	22,053.3	22,117.7	22,196.9	22,253.3	22,323.7	22,385.9	22,401.4	22,433.3	22,433.4
Unemployed	860.7	878.5	910.2	971.8	911.8	917.9	910.8	900.9	886.7	881.9	892.9	843.6	864.4
Unemployment rate	3.8	3.8	4.0	4.2	4.0	4.0	3.9	3.9	3.8	3.8	3.8	3.6	3.7
West North Central													
Civilian labor force	10,121.8	10,145.4	10,156.9	10,172.0	10,184.0	10,214.8	10,250.7	10,287.9	10,314.3	10,318.0	10,315.0	10,299.7	10,310.0
Employed	9,782.6	9,804.0	9,818.3	9,836.3	9,856.5	9,887.4	9,934.8	9,976.0	10,018.8	10,041.0	10,042.0	10,023.3	10,027.9
Unemployed	339.2	341.4	338.7	335.8	327.5	327.4	315.9	311.9	295.5	277.1	273.0	276.4	282.0
Unemployment rate	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.7	2.7
WEST													
Civilian labor force	30,583.8	30,663.0	30,717.4	30,819.4	30,831.4	30,921.5	30,971.5	31,038.5	31,055.4	31,134.3	31,155.3	31,250.0	31,259.0
Employed	28,933.7	29,004.5	29,054.9	29,163.7	29,173.7	29,250.9	29,326.2	29,402.6	29,423.7	29,537.4	29,575.6	29,634.9	29,675.6
Unemployed	1,650.1	1,658.5	1,662.4	1,655.7	1,657.7	1,670.5	1,645.3	1,635.9	1,631.7	1,596.8	1,579.8	1,615.1	1,583.4
Unemployment rate	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.1	5.1	5.2	5.1
Mountain													
Civilian labor force	8,639.6	8,669.1	8,701.0	8,728.8	8,746.3	8,780.2	8,810.5	8,837.7	8,862.0	8,903.9	8,911.9	8,931.0	8,961.3
Employed	8,247.9	8,278.3	8,304.1	8,338.4	8,359.7	8,396.7	8,433.4	8,468.0	8,502.0	8,553.9	8,568.8	8,576.9	8,596.0
Unemployed	391.6	390.9	396.9	390.4	386.6	383.4	377.0	369.7	360.0	350.0	343.2	354.1	365.4
Unemployment rate	4.5	4.5	4.6	4.5	4.4	4.4	4.3	4.2	4.1	3.9	3.9	4.0	4.1
Pacific													
Civilian labor force	21,944.3	21,993.8	22,016.3	22,090.5	22,085.1	22,141.3	22,161.0	22,200.8	22,193.4	22,230.4	22,243.4	22,319.0	22,297.7
Employed	20,685.8	20,726.2	20,750.8	20,825.2	20,814.0	20,854.2	20,892.7	20,934.6	20,921.7	20,983.5	21,006.8	21,058.0	21,079.7
Unemployed	1,258.5	1,267.6	1,265.5	1,265.3	1,271.1	1,287.1	1,268.3	1,266.2	1,271.7	1,246.8	1,236.6	1,261.0	1,218.0
Unemployment rate	5.7	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.7	5.6	5.6	5.6	5.5

^P = preliminary.

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

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

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

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
Alabama													
Civilian labor force	2,153.3	2,151.6	2,152.1	2,152.0	2,150.3	2,150.4	2,152.1	2,154.2	2,158.7	2,162.3	2,161.7	2,176.1	2,173.7
Employed	2,060.9	2,059.1	2,061.4	2,064.8	2,061.8	2,061.4	2,063.3	2,065.9	2,071.5	2,077.0	2,076.4	2,079.8	2,073.7
Unemployed	92.4	92.5	90.8	87.3	88.5	89.0	88.7	88.3	87.3	85.3	85.3	96.3	100.0
Unemployment rate	4.3	4.3	4.2	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.9	4.4	4.6
Alaska													
Civilian labor force	316.4	317.7	318.7	317.3	317.2	317.1	317.3	316.4	315.7	316.6	318.6	318.1	315.8
Employed	298.7	299.3	299.7	299.4	299.5	299.2	299.6	298.9	298.0	297.9	298.2	298.0	297.3
Unemployed	17.7	18.4	19.1	18.0	17.7	17.8	17.7	17.5	17.7	18.7	20.5	20.1	18.5
Unemployment rate	5.6	5.8	6.0	5.7	5.6	5.6	5.6	5.5	5.6	5.9	6.4	6.3	5.9
Arizona													
Civilian labor force	2,244.3	2,254.0	2,262.9	2,276.2	2,288.5	2,303.1	2,311.2	2,326.1	2,341.6	2,362.1	2,378.2	2,383.3	2,398.6
Employed	2,147.5	2,158.1	2,168.0	2,182.0	2,193.5	2,208.8	2,218.9	2,233.3	2,249.5	2,269.3	2,283.9	2,283.5	2,295.8
Unemployed	96.8	95.9	94.9	94.3	95.0	94.3	92.3	92.8	92.2	92.9	94.3	99.8	102.8
Unemployment rate	4.3	4.3	4.2	4.1	4.2	4.1	4.0	4.0	3.9	3.9	4.0	4.2	4.3
Arkansas													
Civilian labor force	1,199.5	1,199.3	1,202.0	1,207.7	1,215.4	1,224.5	1,235.4	1,246.0	1,255.0	1,255.7	1,252.7	1,248.1	1,248.4
Employed	1,131.9	1,133.4	1,137.3	1,143.0	1,148.7	1,156.3	1,166.1	1,177.6	1,189.6	1,191.2	1,193.5	1,193.3	1,194.4
Unemployed	67.6	65.9	64.8	64.7	66.7	68.2	69.3	68.4	65.4	64.5	59.3	54.8	54.1
Unemployment rate	5.6	5.5	5.4	5.4	5.5	5.6	5.6	5.5	5.2	5.1	4.7	4.4	4.3
California													
Civilian labor force	16,265.0	16,299.5	16,319.9	16,380.9	16,370.6	16,404.3	16,401.1	16,437.1	16,421.3	16,456.9	16,447.4	16,532.8	16,534.9
Employed	15,297.4	15,329.2	15,355.6	15,415.3	15,400.7	15,425.6	15,438.3	15,473.0	15,452.9	15,509.3	15,521.8	15,569.0	15,601.2
Unemployed	967.6	970.3	964.3	965.6	969.9	978.6	962.8	964.1	968.4	947.6	925.5	963.8	933.7
Unemployment rate	5.9	6.0	5.9	5.9	5.9	6.0	5.9	5.9	5.9	5.8	5.6	5.8	5.6
Colorado													
Civilian labor force	2,231.7	2,242.2	2,251.3	2,256.6	2,254.2	2,261.8	2,265.3	2,264.0	2,261.1	2,272.0	2,257.1	2,265.5	2,275.0
Employed	2,143.5	2,153.0	2,158.2	2,166.3	2,165.1	2,172.6	2,179.1	2,182.3	2,183.7	2,201.8	2,197.3	2,204.7	2,207.6
Unemployed	88.2	89.2	93.0	90.4	89.1	89.2	86.3	81.7	77.4	70.1	59.8	60.8	67.5
Unemployment rate	4.0	4.0	4.1	4.0	4.0	3.9	3.8	3.6	3.4	3.1	2.7	2.7	3.0
Connecticut													
Civilian labor force	1,702.9	1,703.4	1,704.1	1,706.7	1,710.0	1,715.8	1,714.2	1,718.0	1,722.0	1,729.5	1,722.8	1,718.6	1,732.4
Employed	1,644.8	1,646.2	1,648.8	1,655.2	1,655.6	1,657.2	1,658.7	1,662.3	1,666.9	1,677.4	1,669.6	1,664.4	1,674.4
Unemployed	58.2	57.2	55.2	51.5	54.4	58.6	55.5	55.7	55.1	52.2	53.3	54.2	58.1
Unemployment rate	3.4	3.4	3.2	3.0	3.2	3.4	3.2	3.2	3.2	3.0	3.1	3.2	3.4
Delaware													
Civilian labor force	389.7	390.4	391.6	393.6	392.9	394.4	396.3	397.5	398.8	400.4	397.5	399.2	398.0
Employed	373.7	374.5	375.9	377.4	378.5	380.4	382.4	384.2	386.1	387.9	385.1	386.6	384.9
Unemployed	15.9	15.9	15.6	16.2	14.5	14.0	13.9	13.3	12.7	12.5	12.4	12.6	13.1
Unemployment rate	4.1	4.1	4.0	4.1	3.7	3.6	3.5	3.4	3.2	3.1	3.1	3.2	3.3
District of Columbia													
Civilian labor force	269.1	269.3	269.8	268.5	269.0	267.5	266.8	265.7	264.2	266.0	270.2	268.3	269.0
Employed	244.4	245.0	245.4	244.5	245.3	244.2	244.1	243.9	243.6	245.7	250.1	249.1	250.6
Unemployed	24.6	24.3	24.4	24.0	23.7	23.3	22.7	21.9	20.6	20.3	20.1	19.2	18.4
Unemployment rate	9.2	9.0	9.1	8.9	8.8	8.7	8.5	8.2	7.8	7.6	7.4	7.2	6.8
Florida													
Civilian labor force	7,165.5	7,174.1	7,199.1	7,221.1	7,242.6	7,276.3	7,309.9	7,346.0	7,386.5	7,424.5	7,433.4	7,414.2	7,449.2
Employed	6,850.9	6,863.4	6,890.3	6,920.7	6,941.6	6,972.3	7,001.6	7,035.2	7,075.5	7,107.9	7,115.4	7,105.6	7,136.1
Unemployed	314.5	310.6	308.9	300.3	301.0	303.9	308.3	310.8	310.9	316.6	318.0	308.6	313.1
Unemployment rate	4.4	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.2	4.2

See footnotes at end of table.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
Georgia													
Civilian labor force	4,015.6	4,020.5	4,027.9	4,031.3	4,030.3	4,034.2	4,032.1	4,031.5	4,026.0	4,040.1	4,038.7	4,041.2	4,063.8
Employed	3,841.3	3,847.5	3,854.4	3,858.6	3,863.8	3,868.8	3,870.0	3,871.9	3,869.7	3,881.8	3,873.7	3,870.9	3,903.9
Unemployed	174.3	173.1	173.5	172.8	166.5	165.4	162.1	159.7	156.3	158.2	165.0	170.3	160.0
Unemployment rate	4.3	4.3	4.3	4.3	4.1	4.1	4.0	4.0	3.9	3.9	4.1	4.2	3.9
Hawaii													
Civilian labor force	593.1	595.5	595.7	596.9	597.8	600.6	600.7	601.4	602.5	600.4	597.6	598.9	598.0
Employed	557.0	557.5	557.8	559.5	560.8	562.5	563.3	564.6	565.7	563.7	562.0	563.3	565.1
Unemployed	36.1	38.0	37.9	37.3	37.0	38.1	37.3	36.8	36.9	36.7	35.6	35.6	33.0
Unemployment rate	6.1	6.4	6.4	6.3	6.2	6.3	6.2	6.1	6.1	6.1	6.0	5.9	5.5
Idaho													
Civilian labor force	647.1	649.2	651.9	653.3	655.6	658.8	661.3	663.5	665.8	662.2	662.0	662.5	659.4
Employed	614.4	617.4	618.7	620.9	623.5	625.9	628.5	631.0	632.9	632.2	631.4	631.3	628.3
Unemployed	32.7	31.8	33.2	32.5	32.1	32.9	32.8	32.4	32.9	30.0	30.6	31.2	31.2
Unemployment rate	5.0	4.9	5.1	5.0	4.9	5.0	5.0	4.9	4.9	4.5	4.6	4.7	4.7
Illinois													
Civilian labor force	6,195.4	6,194.5	6,215.2	6,229.1	6,224.1	6,239.9	6,249.0	6,246.4	6,248.0	6,283.6	6,284.4	6,296.4	6,312.2
Employed	5,928.0	5,932.5	5,932.0	5,947.8	5,946.0	5,958.3	5,970.7	5,971.3	5,983.3	6,030.6	6,031.2	6,058.1	6,065.9
Unemployed	267.5	262.0	283.1	281.2	278.1	281.6	278.3	275.1	264.7	253.0	253.2	238.3	246.3
Unemployment rate	4.3	4.2	4.6	4.5	4.5	4.5	4.5	4.4	4.2	4.0	4.0	3.8	3.9
Indiana													
Civilian labor force	3,072.3	3,070.4	3,072.1	3,076.4	3,084.8	3,097.5	3,107.2	3,116.5	3,127.3	3,124.8	3,138.4	3,130.7	3,110.3
Employed	2,980.3	2,977.9	2,982.8	2,981.1	2,991.3	3,000.9	3,014.5	3,022.1	3,034.1	3,028.7	3,048.4	3,048.8	3,032.0
Unemployed	92.0	92.5	89.2	95.3	93.5	96.7	92.7	94.4	93.2	96.1	90.0	81.8	78.3
Unemployment rate	3.0	3.0	2.9	3.1	3.0	3.1	3.0	3.0	3.0	3.1	2.9	2.6	2.5
Iowa													
Civilian labor force	1,565.7	1,564.8	1,565.2	1,564.6	1,568.4	1,572.3	1,572.7	1,576.5	1,580.8	1,589.6	1,585.2	1,579.0	1,588.1
Employed	1,521.8	1,522.3	1,521.9	1,522.6	1,526.0	1,529.9	1,531.0	1,534.5	1,538.9	1,543.4	1,543.4	1,536.8	1,545.7
Unemployed	43.9	42.4	43.4	42.0	42.4	42.4	41.7	42.1	41.9	46.2	41.9	42.2	42.3
Unemployment rate	2.8	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.9	2.6	2.7	2.7
Kansas													
Civilian labor force	1,397.9	1,403.2	1,407.7	1,413.5	1,416.2	1,420.0	1,427.4	1,434.2	1,436.4	1,444.8	1,446.3	1,446.8	1,445.7
Employed	1,343.7	1,348.3	1,352.2	1,357.3	1,361.5	1,365.3	1,373.4	1,380.4	1,384.6	1,395.4	1,398.5	1,396.6	1,397.4
Unemployed	54.2	54.9	55.5	56.2	54.7	54.7	54.0	53.8	51.8	49.4	47.9	50.1	48.3
Unemployment rate	3.9	3.9	3.9	4.0	3.9	3.8	3.8	3.8	3.6	3.4	3.3	3.5	3.3
Kentucky													
Civilian labor force	1,919.6	1,920.7	1,923.0	1,920.6	1,924.1	1,926.4	1,930.6	1,932.6	1,936.1	1,941.0	1,942.5	1,944.9	1,945.1
Employed	1,827.8	1,829.3	1,831.4	1,833.9	1,836.1	1,839.4	1,845.5	1,849.9	1,855.9	1,859.3	1,860.1	1,860.4	1,863.0
Unemployed	91.8	91.4	91.6	86.7	88.0	87.0	85.1	82.8	80.2	81.7	82.4	84.5	82.1
Unemployment rate	4.8	4.8	4.8	4.5	4.6	4.5	4.4	4.3	4.1	4.2	4.2	4.3	4.2
Louisiana													
Civilian labor force	2,064.1	2,073.3	2,076.4	2,076.8	2,073.0	2,066.4	2,065.9	2,061.8	2,061.3	2,068.3	2,065.9	2,051.7	2,055.8
Employed	1,939.8	1,952.0	1,953.5	1,950.3	1,949.7	1,947.9	1,956.1	1,951.6	1,952.4	1,960.5	1,950.4	1,947.0	1,951.4
Unemployed	124.3	121.2	122.9	126.5	123.3	118.5	109.8	110.3	108.9	107.8	115.5	104.6	104.4
Unemployment rate	6.0	5.8	5.9	6.1	5.9	5.7	5.3	5.3	5.3	5.2	5.6	5.1	5.1
Maine													
Civilian labor force	643.6	645.6	646.4	648.6	650.4	653.1	658.6	662.2	664.7	660.5	663.8	662.8	663.2
Employed	616.4	617.1	617.8	619.8	621.4	624.7	630.1	635.5	639.5	637.7	641.8	640.2	639.5
Unemployed	27.1	28.5	28.6	28.8	28.9	28.3	28.5	26.7	25.2	22.8	22.0	22.6	23.8
Unemployment rate	4.2	4.4	4.4	4.4	4.4	4.3	4.3	4.0	3.8	3.5	3.3	3.4	3.6

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P
Maryland													
Civilian labor force	2,734.7	2,733.6	2,736.6	2,750.1	2,754.6	2,760.0	2,774.8	2,788.6	2,806.7	2,805.9	2,813.2	2,808.7	2,810.0
Employed	2,603.6	2,603.2	2,608.9	2,619.8	2,629.1	2,641.6	2,659.7	2,676.1	2,696.7	2,705.0	2,706.9	2,704.8	2,703.3
Unemployed	131.1	130.3	127.7	130.3	125.5	118.4	115.2	112.5	109.9	100.9	106.3	103.9	106.6
Unemployment rate	4.8	4.8	4.7	4.7	4.6	4.3	4.2	4.0	3.9	3.6	3.8	3.7	3.8
Massachusetts													
Civilian labor force	3,272.9	3,280.3	3,274.9	3,274.4	3,270.0	3,274.2	3,272.7	3,264.4	3,259.5	3,264.6	3,265.2	3,264.7	3,272.3
Employed	3,167.4	3,165.6	3,164.9	3,169.0	3,164.6	3,164.9	3,166.5	3,163.1	3,159.2	3,161.7	3,170.8	3,172.8	3,178.7
Unemployed	105.5	114.7	110.0	105.4	105.5	109.3	106.3	101.3	100.4	102.9	94.5	91.8	93.6
Unemployment rate	3.2	3.5	3.4	3.2	3.2	3.3	3.2	3.1	3.1	3.2	2.9	2.8	2.9
Michigan													
Civilian labor force	5,017.5	5,020.9	5,031.9	5,011.5	5,027.0	5,038.8	5,054.1	5,057.3	5,057.8	5,059.6	5,066.2	5,071.7	5,076.7
Employed	4,831.8	4,832.6	4,839.4	4,796.2	4,806.0	4,846.7	4,861.9	4,867.2	4,864.5	4,869.4	4,862.3	4,870.9	4,876.6
Unemployed	185.6	188.2	192.5	215.3	191.0	192.1	192.2	190.2	193.2	190.2	203.9	200.8	200.1
Unemployment rate	3.7	3.7	3.8	4.3	3.8	3.8	3.8	3.8	3.8	3.8	4.0	4.0	3.9
Minnesota													
Civilian labor force	2,664.5	2,674.6	2,679.4	2,683.4	2,689.2	2,695.9	2,704.0	2,712.5	2,715.6	2,716.3	2,711.6	2,705.8	2,702.3
Employed	2,599.5	2,605.7	2,612.4	2,617.6	2,623.9	2,623.5	2,637.4	2,644.1	2,650.7	2,650.7	2,647.8	2,645.7	2,646.2
Unemployed	65.0	68.9	67.0	65.8	65.2	72.3	66.6	68.3	64.9	65.6	63.9	60.1	56.1
Unemployment rate	2.4	2.6	2.5	2.5	2.4	2.7	2.5	2.5	2.4	2.4	2.4	2.2	2.1
Mississippi													
Civilian labor force	1,262.1	1,262.0	1,262.4	1,268.1	1,266.7	1,272.3	1,276.6	1,281.1	1,287.4	1,290.9	1,276.5	1,289.1	1,275.7
Employed	1,192.7	1,194.0	1,195.6	1,200.9	1,199.5	1,204.4	1,210.4	1,214.7	1,219.9	1,223.3	1,221.8	1,223.1	1,216.7
Unemployed	69.4	68.0	66.8	67.3	67.2	68.0	66.2	66.4	67.5	67.6	54.7	66.0	58.9
Unemployment rate	5.5	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	4.3	5.1	4.6
Missouri													
Civilian labor force	2,841.8	2,848.5	2,846.6	2,846.8	2,846.1	2,858.7	2,874.0	2,886.6	2,900.1	2,885.6	2,892.4	2,891.8	2,900.2
Employed	2,712.8	2,721.0	2,722.0	2,724.1	2,729.3	2,747.6	2,766.3	2,784.5	2,806.1	2,811.5	2,815.0	2,809.1	2,806.5
Unemployed	129.0	127.5	124.6	122.6	116.8	111.1	107.6	102.0	94.1	74.1	77.4	82.7	93.7
Unemployment rate	4.5	4.5	4.4	4.3	4.1	3.9	3.7	3.5	3.2	2.6	2.7	2.9	3.2
Montana													
Civilian labor force	465.8	466.8	467.7	468.4	468.3	469.3	471.3	472.8	472.8	476.2	475.3	472.9	474.8
Employed	439.5	440.3	441.3	442.5	442.5	443.0	444.7	446.2	447.1	451.4	449.5	447.2	449.0
Unemployed	26.3	26.5	26.4	25.9	25.8	26.2	26.6	26.6	25.7	24.8	25.7	25.7	25.8
Unemployment rate	5.7	5.7	5.7	5.5	5.5	5.6	5.6	5.6	5.4	5.2	5.4	5.4	5.4
Nebraska													
Civilian labor force	907.4	908.9	912.3	918.4	919.1	922.5	927.4	932.6	936.9	935.2	932.4	930.8	931.1
Employed	883.2	884.3	887.4	892.2	893.6	897.6	902.7	907.8	913.4	912.9	910.3	909.5	908.1
Unemployed	24.2	24.6	24.8	26.3	25.5	24.9	24.8	24.8	23.5	22.4	22.2	21.3	22.9
Unemployment rate	2.7	2.7	2.7	2.9	2.8	2.7	2.7	2.7	2.5	2.4	2.4	2.3	2.5
Nevada													
Civilian labor force	913.4	916.3	921.2	922.2	923.6	925.5	930.3	932.3	933.5	937.9	940.8	942.0	949.4
Employed	869.7	873.5	877.9	881.3	884.6	889.0	895.6	899.1	903.0	906.5	908.3	906.3	910.1
Unemployed	43.7	42.8	43.3	40.9	39.1	36.5	34.7	33.2	30.5	31.4	32.4	35.8	39.4
Unemployment rate	4.8	4.7	4.7	4.4	4.2	3.9	3.7	3.6	3.3	3.3	3.4	3.8	4.1
New Hampshire													
Civilian labor force	648.1	648.0	647.4	647.8	648.9	652.4	658.3	661.9	666.5	669.6	673.7	674.3	672.0
Employed	628.5	628.7	628.9	630.6	631.5	634.2	639.0	642.9	648.0	651.2	653.8	654.3	655.6
Unemployed	19.6	19.3	18.5	17.3	17.4	18.3	19.3	19.0	18.5	18.3	19.9	20.0	16.4
Unemployment rate	3.0	3.0	2.9	2.7	2.7	2.8	2.9	2.9	2.8	2.7	3.0	3.0	2.4

See footnotes at end of table.

**STATE LABOR FORCE DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
New Jersey													
Civilian labor force	4,147.0	4,145.9	4,140.5	4,138.4	4,141.9	4,153.4	4,162.4	4,173.2	4,193.7	4,216.3	4,219.1	4,217.2	4,232.7
Employed	3,950.1	3,950.9	3,947.5	3,948.0	3,953.4	3,963.6	3,975.6	3,987.1	4,009.1	4,031.9	4,047.3	4,027.7	4,043.3
Unemployed	196.8	195.0	193.1	190.4	188.5	189.7	186.7	186.1	184.6	184.5	171.9	189.5	189.4
Unemployment rate	4.7	4.7	4.7	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.1	4.5	4.5
New Mexico													
Civilian labor force	827.9	828.8	830.6	831.1	832.4	833.5	836.0	838.2	839.4	838.6	839.7	837.9	838.0
Employed	778.3	778.0	778.8	779.6	780.1	780.7	782.5	784.3	785.4	786.6	786.4	785.9	784.3
Unemployed	49.6	50.8	51.8	51.5	52.3	52.7	53.5	53.9	53.9	52.0	53.3	52.1	53.7
Unemployment rate	6.0	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.2	6.3	6.2	6.4
New York													
Civilian labor force	8,868.2	8,871.5	8,862.3	8,850.1	8,854.9	8,870.5	8,868.0	8,873.5	8,874.4	8,857.0	8,878.1	8,860.8	8,849.0
Employed	8,363.5	8,373.8	8,375.9	8,365.8	8,374.6	8,383.5	8,385.5	8,389.3	8,391.8	8,394.7	8,403.6	8,413.5	8,404.4
Unemployed	504.8	497.7	486.4	484.3	480.3	487.0	482.4	484.2	482.6	462.3	474.6	447.2	444.6
Unemployment rate	5.7	5.6	5.5	5.5	5.4	5.5	5.4	5.5	5.4	5.2	5.3	5.0	5.0
North Carolina													
Civilian labor force	3,779.7	3,773.3	3,767.2	3,784.8	3,791.7	3,797.8	3,812.6	3,820.0	3,833.8	3,858.3	3,846.4	3,850.0	3,856.5
Employed	3,644.5	3,643.2	3,639.7	3,658.6	3,659.1	3,669.0	3,683.5	3,696.1	3,713.9	3,740.3	3,727.4	3,728.3	3,747.0
Unemployed	135.3	130.1	127.6	126.2	132.6	128.9	129.1	124.0	119.9	118.0	119.0	121.7	109.5
Unemployment rate	3.6	3.4	3.4	3.3	3.5	3.4	3.4	3.2	3.1	3.1	3.1	3.2	2.8
North Dakota													
Civilian labor force	347.7	347.8	347.5	346.8	346.5	346.1	345.6	345.4	345.1	346.5	345.9	344.9	343.3
Employed	336.4	336.3	335.6	335.3	334.7	335.0	335.2	335.5	336.0	337.3	336.3	334.8	334.3
Unemployed	11.3	11.5	11.9	11.5	11.8	11.0	10.4	9.9	9.1	9.2	9.7	10.0	9.0
Unemployment rate	3.2	3.3	3.4	3.3	3.4	3.2	3.0	2.9	2.6	2.6	2.8	2.9	2.6
Ohio													
Civilian labor force	5,625.0	5,641.3	5,649.8	5,665.4	5,676.3	5,699.3	5,728.1	5,754.6	5,791.1	5,802.5	5,820.1	5,802.1	5,831.2
Employed	5,395.6	5,399.2	5,402.2	5,392.1	5,429.2	5,455.9	5,487.2	5,520.8	5,561.7	5,565.8	5,574.6	5,575.5	5,583.4
Unemployed	229.4	242.1	247.6	273.3	247.1	243.4	240.9	233.8	229.4	236.7	245.5	226.7	247.8
Unemployment rate	4.1	4.3	4.4	4.8	4.4	4.3	4.2	4.1	4.0	4.1	4.2	3.9	4.2
Oklahoma													
Civilian labor force	1,619.2	1,620.9	1,625.0	1,633.2	1,630.2	1,634.6	1,639.0	1,642.6	1,647.9	1,644.9	1,646.9	1,648.0	1,643.5
Employed	1,545.7	1,547.9	1,549.3	1,551.5	1,555.4	1,559.7	1,564.1	1,569.1	1,574.7	1,580.5	1,579.2	1,577.5	1,576.5
Unemployed	73.5	73.0	75.8	81.7	74.9	74.8	74.9	73.5	73.2	64.3	67.8	70.5	67.1
Unemployment rate	4.5	4.5	4.7	5.0	4.6	4.6	4.6	4.5	4.4	3.9	4.1	4.3	4.1
Oregon													
Civilian labor force	1,752.0	1,752.6	1,752.7	1,756.8	1,759.7	1,768.6	1,777.5	1,778.0	1,775.7	1,775.3	1,790.4	1,786.7	1,766.8
Employed	1,654.9	1,654.6	1,653.1	1,658.3	1,659.7	1,667.5	1,676.8	1,679.4	1,677.5	1,676.0	1,687.7	1,686.9	1,672.7
Unemployed	97.0	98.0	99.6	98.5	99.9	101.2	100.7	98.7	98.2	99.3	102.7	99.8	94.1
Unemployment rate	5.5	5.6	5.7	5.6	5.7	5.7	5.7	5.5	5.5	5.6	5.7	5.6	5.3
Pennsylvania													
Civilian labor force	5,937.5	5,936.9	5,927.4	5,931.5	5,930.8	5,932.1	5,926.1	5,928.4	5,930.2	5,945.7	5,986.5	6,000.2	5,984.1
Employed	5,663.9	5,661.1	5,652.5	5,658.1	5,657.8	5,659.6	5,657.0	5,662.8	5,668.0	5,686.5	5,725.6	5,734.2	5,735.3
Unemployed	273.7	275.8	274.9	273.5	273.0	272.6	269.1	265.7	262.2	259.2	260.9	266.0	248.8
Unemployment rate	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.4	4.2
Rhode Island													
Civilian labor force	497.3	496.4	495.7	496.8	497.1	498.7	499.2	499.2	500.7	499.0	497.7	502.8	505.1
Employed	471.6	471.4	471.5	472.9	472.8	474.9	475.8	477.1	480.1	476.6	478.3	487.7	489.4
Unemployed	25.7	24.9	24.2	23.9	24.3	23.9	23.4	22.1	20.6	22.4	19.4	15.1	15.7
Unemployment rate	5.2	5.0	4.9	4.8	4.9	4.8	4.7	4.4	4.1	4.5	3.9	3.0	3.1

See footnotes at end of table.

STATE LABOR FORCE DATA
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1998									1999			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^P
South Carolina													
Civilian labor force	1,952.7	1,955.7	1,959.1	1,967.3	1,965.0	1,962.8	1,966.7	1,967.2	1,966.9	1,973.4	1,981.7	1,969.0	1,985.5
Employed	1,881.7	1,881.9	1,884.8	1,890.1	1,887.9	1,887.3	1,889.1	1,889.4	1,890.2	1,900.3	1,899.0	1,895.2	1,902.9
Unemployed	71.0	73.9	74.3	77.2	77.1	75.5	77.6	77.8	76.7	73.1	82.7	73.8	82.6
Unemployment rate	3.6	3.8	3.8	3.9	3.9	3.8	3.9	4.0	3.9	3.7	4.2	3.7	4.2
South Dakota													
Civilian labor force	396.7	397.7	398.4	398.5	398.4	399.3	399.7	400.1	399.5	400.0	401.1	400.6	399.4
Employed	385.1	386.2	386.8	387.1	387.5	388.3	388.8	389.1	389.3	389.7	390.9	390.8	389.8
Unemployed	11.6	11.5	11.6	11.5	11.0	10.9	10.9	11.1	10.2	10.3	10.1	9.9	9.6
Unemployment rate	2.9	2.9	2.9	2.9	2.8	2.7	2.7	2.8	2.6	2.6	2.5	2.5	2.4
Tennessee													
Civilian labor force	2,739.9	2,748.4	2,757.5	2,767.5	2,773.4	2,779.0	2,788.6	2,792.2	2,799.6	2,813.6	2,815.1	2,810.4	2,814.6
Employed	2,622.6	2,633.4	2,646.4	2,657.5	2,660.5	2,664.6	2,674.1	2,678.6	2,683.9	2,694.2	2,692.2	2,690.0	2,698.8
Unemployed	117.3	115.0	111.0	110.0	112.9	114.4	114.5	113.6	115.7	119.4	122.8	120.4	115.7
Unemployment rate	4.3	4.2	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.2	4.4	4.3	4.1
Texas													
Civilian labor force	10,052.7	10,078.5	10,122.2	10,143.0	10,166.3	10,188.5	10,202.4	10,223.3	10,240.3	10,284.5	10,299.4	10,293.6	10,314.0
Employed	9,577.3	9,601.8	9,624.6	9,650.3	9,673.1	9,692.6	9,715.0	9,733.6	9,749.9	9,798.8	9,820.8	9,830.2	9,836.2
Unemployed	475.3	476.6	497.6	492.8	493.3	495.9	487.4	489.7	490.3	485.6	478.6	463.4	477.8
Unemployment rate	4.7	4.7	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.7	4.6	4.5	4.6
Utah													
Civilian labor force	1,052.4	1,053.7	1,057.0	1,062.1	1,064.7	1,069.1	1,075.2	1,081.0	1,088.1	1,094.5	1,098.5	1,106.3	1,105.3
Employed	1,010.3	1,012.4	1,015.5	1,019.4	1,023.8	1,029.9	1,036.7	1,044.2	1,052.5	1,057.7	1,063.4	1,068.9	1,071.8
Unemployed	42.1	41.3	41.5	42.7	40.9	39.2	38.4	36.8	35.6	36.7	35.0	37.4	33.4
Unemployment rate	4.0	3.9	3.9	4.0	3.8	3.7	3.6	3.4	3.3	3.4	3.2	3.4	3.0
Vermont													
Civilian labor force	327.6	327.9	328.6	330.0	331.1	331.4	332.8	334.3	335.8	336.1	338.7	339.7	338.2
Employed	317.0	316.8	317.6	318.9	320.0	320.4	321.7	324.0	325.8	325.6	328.0	329.1	329.5
Unemployed	10.6	11.1	11.1	11.1	11.1	11.0	11.0	10.3	10.0	10.5	10.7	10.6	8.7
Unemployment rate	3.2	3.4	3.4	3.4	3.3	3.3	3.3	3.1	3.0	3.1	3.2	3.1	2.6
Virginia													
Civilian labor force	3,444.8	3,460.1	3,472.9	3,481.0	3,499.9	3,521.3	3,540.5	3,560.3	3,585.9	3,589.3	3,587.5	3,581.1	3,584.3
Employed	3,347.1	3,360.3	3,372.7	3,383.8	3,400.2	3,419.8	3,438.4	3,456.7	3,480.2	3,494.6	3,493.6	3,481.8	3,487.1
Unemployed	97.7	99.8	100.2	97.2	99.8	101.4	102.1	103.6	105.6	94.7	93.9	99.3	97.2
Unemployment rate	2.8	2.9	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.6	2.6	2.8	2.7
Washington													
Civilian labor force	3,017.7	3,028.6	3,029.2	3,038.7	3,039.9	3,050.7	3,064.5	3,068.0	3,078.2	3,081.1	3,089.4	3,082.6	3,082.1
Employed	2,877.7	2,885.7	2,884.7	2,892.7	2,893.3	2,899.4	2,914.7	2,918.8	2,927.6	2,936.6	2,937.1	2,940.8	2,943.4
Unemployed	140.0	142.9	144.6	146.0	146.5	151.3	149.8	149.2	150.6	144.5	152.3	141.7	138.8
Unemployment rate	4.6	4.7	4.8	4.8	4.8	5.0	4.9	4.9	4.9	4.7	4.9	4.6	4.5
West Virginia													
Civilian labor force	796.8	804.0	799.2	800.8	799.2	799.5	802.3	802.1	803.8	812.4	810.2	812.5	812.8
Employed	742.0	749.2	743.8	746.2	745.4	746.8	750.7	752.5	755.5	760.1	763.8	758.3	758.0
Unemployed	54.8	54.8	55.4	54.6	53.7	52.7	51.7	49.6	48.4	52.3	46.4	54.3	54.9
Unemployment rate	6.9	6.8	6.9	6.8	6.7	6.6	6.4	6.2	6.0	6.4	5.7	6.7	6.7
Wisconsin													
Civilian labor force	2,932.4	2,939.6	2,945.9	2,955.5	2,952.9	2,960.0	2,969.4	2,979.3	2,986.2	2,997.3	2,985.2	2,976.0	2,967.5
Employed	2,846.2	2,846.0	2,848.1	2,848.7	2,850.8	2,856.0	2,862.6	2,872.0	2,879.9	2,891.3	2,884.8	2,880.1	2,875.5
Unemployed	86.2	93.7	97.8	106.8	102.1	104.1	106.8	107.4	106.3	105.9	100.4	95.9	91.9
Unemployment rate	2.9	3.2	3.3	3.6	3.5	3.5	3.6	3.6	3.6	3.5	3.4	3.2	3.1
Wyoming													
Civilian labor force	256.9	258.1	258.5	259.0	259.0	259.1	259.8	259.9	259.6	260.5	260.4	260.5	260.7
Employed	244.7	245.6	245.7	246.6	246.6	246.7	247.5	247.6	247.9	248.4	248.4	249.1	249.2
Unemployed	12.2	12.5	12.7	12.4	12.4	12.4	12.4	12.3	11.7	12.1	12.0	11.3	11.6
Unemployment rate	4.8	4.9	4.9	4.8	4.8	4.8	4.8	4.7	4.5	4.6	4.6	4.4	4.4

P = preliminary.

revised when new benchmark and population information becomes available.

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

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
Alabama	2,132.4	2,157.8	2,146.3	2,166.8	82.3	83.5	83.9	91.5	3.9	3.9	3.9	4.2
Anniston	54.3	55.1	54.7	55.2	2.1	2.3	2.3	2.4	3.9	4.2	4.2	4.4
Birmingham	467.7	476.3	471.4	479.2	11.7	12.0	11.9	13.7	2.5	2.5	2.5	2.9
Decatur	72.5	73.0	72.6	72.6	2.7	2.7	2.7	2.9	3.8	3.7	3.6	3.9
Dothan	65.5	66.4	65.6	66.9	2.1	2.2	2.0	2.5	3.2	3.4	3.0	3.7
Florence	68.3	68.5	68.5	69.1	4.8	3.4	5.4	3.6	7.0	4.9	7.9	5.2
Gadsden	49.4	50.7	49.8	51.2	1.8	3.3	1.8	3.5	3.7	6.5	3.6	6.8
Huntsville	169.6	171.5	172.1	171.8	4.6	4.9	4.7	4.9	2.7	2.9	2.7	2.9
Mobile	266.6	273.9	269.5	276.5	9.0	10.0	9.3	11.1	3.4	3.7	3.5	4.0
Montgomery	160.3	165.3	160.7	165.8	4.8	4.6	4.8	5.1	3.0	2.8	3.0	3.1
Tuscaloosa	83.0	85.7	83.2	85.6	2.0	2.0	2.0	2.2	2.4	2.4	2.5	2.5
Alaska	310.4	312.4	310.6	310.0	20.7	22.4	17.9	18.7	6.7	7.2	5.8	6.0
Anchorage	139.6	141.4	140.1	140.3	6.4	6.8	5.8	5.9	4.6	4.8	4.1	4.2
Arizona	2,207.3	2,359.2	2,222.7	2,376.5	82.9	87.1	83.9	89.8	3.8	3.7	3.8	3.8
Flagstaff	59.1	59.2	60.2	62.1	4.6	4.3	3.9	3.5	7.8	7.2	6.5	5.6
Phoenix-Mesa	1,465.1	1,572.6	1,468.5	1,579.4	37.0	43.6	34.5	44.1	2.5	2.8	2.4	2.8
Tucson	362.2	389.6	368.4	390.8	10.3	9.4	9.5	9.3	2.8	2.4	2.6	2.4
Yuma	56.9	62.9	61.9	67.9	10.3	9.9	17.0	14.2	18.2	15.8	27.5	21.0
Arkansas	1,195.4	1,241.9	1,198.7	1,248.3	73.7	57.9	64.2	51.3	6.2	4.7	5.4	4.1
Fayetteville-Springdale-Rogers	135.9	143.1	136.7	145.2	5.5	3.7	4.7	3.3	4.1	2.6	3.4	2.3
Fort Smith	93.7	97.3	94.0	97.3	5.5	4.2	4.8	3.6	5.9	4.3	5.1	3.7
Jonesboro	40.3	42.3	40.5	42.4	1.9	1.4	1.7	1.3	4.8	3.3	4.3	3.0
Little Rock-North Little Rock	291.0	302.7	292.1	304.3	12.8	9.2	11.4	8.3	4.4	3.0	3.9	2.7
Pine Bluff	35.4	36.8	35.3	36.8	3.1	2.6	2.8	2.4	8.8	7.1	7.8	6.6
California	16,183.6	16,469.7	16,154.9	16,424.0	979.7	975.9	940.0	905.2	6.1	5.9	5.8	5.5
Bakersfield	274.7	279.1	274.0	282.6	39.6	40.9	34.6	37.4	14.4	14.7	12.6	13.2
Chico-Paradise	85.0	87.8	85.3	87.6	8.0	7.3	7.5	6.4	9.4	8.3	8.8	7.3
Fresno	413.2	422.9	423.1	433.4	69.1	71.4	65.1	67.6	16.7	16.9	15.4	15.6
Los Angeles-Long Beach	4,616.1	4,638.4	4,591.5	4,566.1	289.0	295.6	287.2	274.2	6.3	6.4	6.3	6.0
Merced	84.2	86.6	84.6	86.5	15.7	14.8	14.5	13.5	18.6	17.1	17.2	15.6
Modesto	197.7	201.4	199.0	202.1	27.5	26.3	26.6	25.0	13.9	13.1	13.4	12.3
Oakland	1,181.3	1,211.4	1,180.2	1,213.0	44.8	42.9	44.4	40.4	3.8	3.5	3.8	3.3
Orange County	1,422.6	1,469.8	1,420.2	1,472.1	38.7	39.6	38.1	37.5	2.7	2.7	2.7	2.6
Redding	72.3	71.3	72.1	70.8	7.6	7.0	6.9	5.8	10.5	9.8	9.6	8.3
Riverside-San Bernardino	1,373.3	1,422.3	1,363.8	1,417.7	78.8	73.5	76.9	70.7	5.7	5.2	5.6	5.0
Sacramento	754.4	770.2	750.5	769.3	37.5	34.3	36.0	31.2	5.0	4.4	4.8	4.1
Salinas	183.6	186.8	184.8	189.7	27.4	27.2	20.9	20.9	14.9	14.6	11.3	11.0
San Diego	1,304.2	1,336.8	1,304.3	1,338.7	43.9	43.6	42.6	41.2	3.4	3.3	3.3	3.1
San Francisco	935.6	952.4	937.9	952.8	27.1	24.7	26.6	23.4	2.9	2.6	2.8	2.5
San Jose	959.8	966.7	954.8	965.1	26.6	33.4	27.4	31.6	2.8	3.5	2.9	3.3
San Luis Obispo-Atascadero-Paso Robles	107.3	108.6	107.9	109.2	4.4	4.0	4.7	3.7	4.1	3.6	4.3	3.4
Santa Barbara-Santa Maria-Lompoc	195.0	195.6	195.9	197.7	10.2	9.6	8.4	8.1	5.2	4.9	4.3	4.1
Santa Cruz-Watsonville	141.2	142.4	141.6	143.8	13.8	13.1	12.2	11.6	9.8	9.2	8.6	8.1
Santa Rosa	244.5	253.1	246.5	251.3	8.5	7.9	8.3	7.0	3.5	3.1	3.4	2.8
Stockton-Lodi	247.8	249.5	246.8	248.9	28.8	26.6	27.2	24.4	11.6	10.7	11.0	9.8
Vallejo-Fairfield-Napa	239.3	247.1	239.0	249.4	13.0	12.5	12.5	11.4	5.4	5.0	5.2	4.6
Ventura	384.5	394.8	384.0	395.7	18.5	17.8	17.1	16.3	4.8	4.5	4.5	4.1
Visalia-Tulare-Porterville	162.0	164.4	161.7	168.5	28.9	34.4	25.6	33.0	17.9	20.9	15.8	19.6
Yolo	86.8	87.7	86.5	87.5	5.8	5.3	5.1	4.3	6.7	6.0	5.9	4.9
Yuba City	56.5	57.0	56.7	57.0	10.5	9.5	10.1	8.5	18.5	16.7	17.8	14.9
Colorado	2,198.5	2,236.8	2,195.3	2,238.3	88.7	63.1	82.3	61.5	4.0	2.8	3.7	2.7
Boulder-Longmont	169.4	173.5	168.7	174.6	5.5	4.2	5.0	4.1	3.3	2.4	3.0	2.4
Colorado Springs	248.0	251.6	248.7	253.7	11.6	7.9	10.7	7.9	4.7	3.1	4.3	3.1
Denver	1,101.6	1,125.3	1,101.8	1,132.9	36.2	25.8	33.8	25.1	3.3	2.3	3.1	2.2
Fort Collins-Loveland	135.2	140.3	137.4	138.6	5.4	4.3	4.8	4.0	4.0	3.0	3.5	2.9
Grand Junction	57.2	58.0	57.3	56.7	3.1	2.3	2.7	2.0	5.4	3.9	4.7	3.6
Greeley	83.2	82.1	82.7	82.4	3.8	2.8	3.4	2.7	4.5	3.4	4.1	3.3
Pueblo	61.8	60.2	61.5	59.1	5.1	2.9	4.6	2.7	8.3	4.8	7.5	4.6
Connecticut	1,694.9	1,708.8	1,687.1	1,715.7	62.2	56.1	53.2	53.1	3.7	3.3	3.2	3.1
Bridgeport	218.5	217.6	215.2	218.4	9.3	8.9	7.7	8.1	4.3	4.1	3.6	3.7
Danbury	108.5	109.4	108.7	109.8	2.7	2.8	2.5	2.6	2.5	2.5	2.3	2.4
Hartford	578.8	585.1	573.6	584.5	21.9	19.9	18.0	18.3	3.8	3.4	3.1	3.1
New Haven-Meriden	267.3	272.7	268.8	275.2	9.4	8.3	8.6	8.2	3.5	3.0	3.2	3.0
New London-Norwich	149.9	151.0	148.6	152.0	6.4	4.9	5.7	4.7	4.3	3.2	3.8	3.1
Stamford-Norwalk	190.5	191.4	190.5	193.1	4.6	4.3	3.8	4.0	2.4	2.3	2.0	2.1
Waterbury	114.5	115.1	114.0	115.1	5.2	4.8	4.4	4.8	4.6	4.1	3.9	4.1
Delaware	388.4	398.9	386.0	394.1	16.5	13.5	14.4	11.6	4.2	3.4	3.7	2.9
Dover	67.8	69.9	67.7	68.6	3.3	2.7	2.9	2.2	4.9	3.9	4.3	3.2
Wilmington-Newark	293.8	299.9	290.2	296.2	12.9	9.5	11.5	8.4	4.4	3.2	4.0	2.8

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999 ^P	1998	1999	1998	1999 ^P	1998	1999	1998	1999 ^P
District of Columbia	265.9	267.4	267.7	267.8	24.7	19.0	23.1	16.9	9.3	7.1	8.6	6.3
Washington	2,510.6	2,609.7	2,515.8	2,610.4	82.1	67.5	76.2	61.3	3.3	2.6	3.0	2.3
Florida	7,085.8	7,364.2	7,112.9	7,393.8	294.0	287.0	294.3	293.4	4.1	3.9	4.1	4.0
Daytona Beach	186.4	193.4	186.9	193.1	6.5	6.7	6.4	6.5	3.5	3.5	3.4	3.4
Fort Lauderdale	745.7	764.6	746.6	767.8	34.8	33.1	35.2	34.6	4.7	4.3	4.7	4.5
Fort Myers-Cape Coral	173.2	178.2	173.7	177.7	5.1	4.6	5.0	4.3	2.9	2.6	2.9	2.4
Fort Pierce-Port St. Lucie	118.7	120.9	118.3	120.3	7.7	7.2	7.5	7.0	6.5	6.0	6.3	5.9
Fort Walton Beach	77.9	81.1	78.9	81.8	2.7	2.7	2.5	2.6	3.5	3.3	3.2	3.2
Gainesville	100.8	104.4	101.8	105.8	2.6	2.4	2.7	2.4	2.6	2.3	2.6	2.3
Jacksonville	520.6	542.0	525.2	543.6	16.6	16.9	16.3	16.8	3.2	3.1	3.1	3.1
Lakeland-Winter Haven	193.9	199.4	193.2	200.2	8.6	8.2	8.3	8.1	4.5	4.1	4.3	4.0
Melbourne-Titusville-Palm Bay	199.3	207.6	200.0	208.0	8.4	8.6	8.5	8.5	4.2	4.1	4.3	4.1
Miami	1,025.6	1,038.9	1,019.2	1,044.1	65.0	64.5	67.1	68.5	6.3	6.2	6.6	6.6
Naples	91.5	98.2	90.8	97.4	2.7	2.5	2.7	2.5	3.0	2.6	2.9	2.5
Ocala	94.0	98.1	94.6	98.8	3.8	3.7	3.6	3.9	4.0	3.7	3.8	3.9
Orlando	820.6	863.4	824.8	865.3	23.9	24.1	23.9	24.1	2.9	2.8	2.9	2.8
Panama City	65.1	67.0	65.3	68.4	4.5	4.0	3.6	4.0	6.9	6.0	5.5	5.9
Pensacola	167.5	174.8	170.7	177.2	6.7	6.2	7.0	6.2	4.0	3.6	4.1	3.5
Punta Gorda	44.8	45.9	44.6	46.1	1.6	1.6	1.6	1.8	3.6	3.5	3.6	3.9
Sarasota-Bradenton	252.7	265.0	259.1	268.7	6.1	5.6	6.5	6.3	2.4	2.1	2.5	2.3
Tallahassee	143.0	146.9	143.2	147.1	4.3	3.9	4.2	4.1	3.0	2.7	3.0	2.8
Tampa-St. Petersburg-Clearwater	1,147.2	1,209.9	1,149.2	1,210.8	35.8	33.8	35.2	34.4	3.1	2.8	3.1	2.8
West Palm Beach-Boca Raton	490.7	524.1	501.8	530.5	24.5	24.4	25.9	25.3	5.0	4.7	5.2	4.8
Georgia	4,006.2	4,039.6	4,000.8	4,047.3	174.2	168.8	157.8	143.5	4.3	4.2	3.9	3.5
Albany	58.5	57.0	58.2	56.2	4.8	5.0	4.3	4.0	8.2	8.8	7.4	7.1
Athens	76.0	73.0	73.5	71.2	2.5	2.2	2.3	1.8	3.2	3.1	3.1	2.5
Atlanta	2,140.2	2,115.6	2,134.9	2,118.3	72.7	70.9	66.4	60.2	3.4	3.4	3.1	2.8
Augusta-Aiken	206.2	202.1	209.2	205.5	10.7	9.7	10.2	9.1	5.2	4.8	4.9	4.4
Columbus	125.9	126.0	125.1	126.1	5.7	6.2	5.5	5.5	4.5	4.9	4.4	4.3
Macon	153.9	149.5	154.0	149.1	8.3	7.4	7.8	6.3	5.4	4.9	5.1	4.2
Savannah	134.5	132.5	135.2	133.4	5.7	5.5	5.3	4.8	4.3	4.1	3.9	3.6
Hawaii	591.9	597.2	593.5	598.6	36.0	33.8	36.2	33.0	6.1	5.7	6.1	5.5
Honolulu	426.2	429.3	427.6	430.5	21.5	21.2	22.1	20.9	5.0	4.9	5.2	4.9
Idaho	639.3	656.2	640.7	653.0	40.1	37.8	34.4	32.9	6.3	5.8	5.4	5.0
Boise City	220.4	228.3	219.8	225.5	8.7	8.3	8.0	7.3	4.0	3.6	3.6	3.2
Pocatello	40.2	40.5	40.5	41.5	2.3	2.0	1.9	1.9	5.6	5.0	4.8	4.5
Illinois	6,165.7	6,248.2	6,153.2	6,265.5	297.0	250.7	257.2	236.0	4.8	4.0	4.2	3.8
Bloomington-Normal	83.8	85.3	85.2	86.3	2.4	1.8	2.0	1.6	2.9	2.1	2.4	1.8
Champaign-Urbana	94.1	94.7	93.5	94.2	3.1	2.3	2.5	2.1	3.3	2.5	2.6	2.2
Chicago	4,115.9	4,191.7	4,105.8	4,210.8	186.4	159.3	164.8	151.8	4.5	3.8	4.0	3.6
Davenport-Moline-Rock Island	185.2	185.2	184.5	185.4	7.3	8.1	6.1	7.4	3.9	4.4	3.3	4.0
Decatur	57.1	56.5	57.1	56.9	3.4	2.3	3.1	2.4	5.9	4.1	5.4	4.2
Kankakee	51.8	52.1	51.4	51.8	3.4	2.9	3.0	2.6	6.5	5.5	5.8	4.9
Peoria-Pekin	182.3	184.5	182.5	186.1	7.6	6.5	5.9	6.1	4.2	3.5	3.2	3.3
Rockford	194.5	194.8	194.3	194.1	9.2	8.3	7.8	7.7	4.8	4.3	4.0	3.9
Springfield	105.7	106.2	105.5	106.4	4.7	3.7	3.8	3.3	4.5	3.4	3.6	3.1
Indiana	3,050.0	3,104.4	3,070.7	3,108.7	109.8	91.3	93.0	78.9	3.6	2.9	3.0	2.5
Bloomington	61.5	60.9	61.9	61.3	1.5	1.4	1.7	1.2	2.5	2.4	2.8	2.0
Elkhart-Goshen	93.4	96.8	94.8	96.8	2.6	1.8	2.2	1.5	2.7	1.8	2.4	1.6
Evansville-Henderson	154.1	158.4	155.3	158.6	6.0	4.8	6.0	4.4	3.9	3.0	3.8	2.8
Fort Wayne	261.8	267.0	264.2	265.4	8.1	7.5	6.5	6.5	3.1	2.8	2.5	2.4
Gary	298.7	303.5	301.8	303.8	13.9	12.1	11.3	10.4	4.7	4.0	3.7	3.4
Indianapolis	823.9	841.8	826.3	841.8	22.8	19.3	20.3	16.8	2.8	2.3	2.5	2.0
Kokomo	50.2	50.8	50.8	50.9	1.7	1.4	1.5	1.2	3.4	2.7	2.9	2.4
Lafayette	89.6	91.5	90.8	92.4	2.4	2.0	2.0	1.8	2.7	2.2	2.3	2.0
Muncie	62.8	62.6	63.1	62.8	3.0	2.2	2.7	1.9	4.7	3.6	4.3	3.0
South Bend	134.5	137.0	134.8	136.7	4.5	3.8	3.7	3.2	3.3	2.7	2.7	2.4
Terre Haute	69.8	69.9	69.9	69.3	4.2	3.1	3.7	2.6	6.0	4.5	5.3	3.8
Iowa	1,559.8	1,571.0	1,560.8	1,583.2	55.9	51.3	44.4	42.8	3.6	3.3	2.8	2.7
Cedar Rapids	111.4	111.2	109.9	111.1	2.8	2.5	2.2	2.1	2.5	2.3	2.0	1.9
Des Moines	254.2	257.5	254.0	258.2	7.1	5.9	5.4	4.9	2.8	2.3	2.1	1.9
Dubuque	48.9	48.3	48.8	48.7	2.1	1.8	1.7	1.6	4.4	3.7	3.4	3.3
Iowa City	67.0	66.1	66.9	67.3	1.6	1.5	1.4	1.4	2.3	2.3	2.0	2.1
Sioux City	64.6	65.5	64.6	66.0	2.3	2.1	2.0	1.8	3.5	3.1	3.1	2.7
Waterloo-Cedar Falls	70.2	69.4	70.2	69.3	2.8	2.9	2.4	2.6	4.0	4.1	3.4	3.8

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
Kansas	1,385.4	1,438.3	1,390.6	1,438.5	56.1	51.5	52.6	46.7	4.0	3.6	3.8	3.2
Lawrence	54.3	56.5	54.3	56.1	2.4	2.1	2.2	1.8	4.4	3.7	4.1	3.3
Topeka	89.2	91.1	88.8	91.6	4.5	3.4	3.7	2.9	5.1	3.7	4.2	3.1
Wichita	282.7	295.4	282.6	295.5	8.7	10.0	8.7	10.1	3.1	3.4	3.1	3.4
Kentucky	1,893.3	1,920.8	1,905.8	1,931.9	95.2	86.6	87.3	78.0	5.0	4.5	4.6	4.0
Lexington	248.6	254.5	252.1	257.0	5.8	5.6	5.5	5.1	2.3	2.2	2.2	2.0
Louisville	539.6	551.0	541.0	555.7	19.1	16.0	17.4	15.6	3.5	2.9	3.2	2.8
Owensboro	48.3	49.4	48.0	49.5	2.3	2.3	1.9	2.2	4.7	4.6	3.9	4.5
Louisiana	2,032.5	2,038.5	2,054.7	2,046.6	111.1	97.5	115.1	95.1	5.5	4.8	5.6	4.6
Alexandria	58.6	59.1	59.3	59.5	3.0	2.4	3.0	2.4	5.2	4.1	5.0	4.0
Baton Rouge	293.1	300.4	296.4	301.3	12.7	10.4	13.3	10.4	4.3	3.4	4.5	3.5
Houma	93.3	95.1	94.6	95.4	3.0	4.1	3.1	3.9	3.2	4.3	3.3	4.0
Lafayette	178.4	180.5	180.7	181.3	9.8	10.1	10.0	9.8	5.5	5.6	5.5	5.4
Lake Charles	91.5	91.0	92.4	91.0	4.5	3.9	4.8	4.0	5.0	4.3	5.1	4.4
Monroe	70.1	70.4	71.1	70.7	3.7	2.6	3.7	2.5	5.3	3.8	5.2	3.5
New Orleans	613.7	612.4	621.0	614.2	28.7	23.8	30.3	23.4	4.7	3.9	4.9	3.8
Shreveport-Bossier City	185.3	186.0	187.2	186.6	11.3	8.3	11.4	8.1	6.1	4.5	6.1	4.3
Maine	638.7	656.4	635.2	654.7	36.3	29.1	30.1	26.7	5.7	4.4	4.7	4.1
Bangor	49.6	51.0	49.2	50.8	2.0	1.5	1.6	1.3	4.1	3.0	3.2	2.5
Lewiston-Auburn	50.8	53.0	50.0	52.0	2.9	2.1	2.4	1.8	5.7	4.0	4.8	3.4
Portland	129.4	136.2	128.8	136.4	3.8	2.8	3.1	2.3	3.0	2.0	2.4	1.7
Maryland	2,709.7	2,780.6	2,703.5	2,778.4	131.7	103.5	119.2	94.6	4.9	3.7	4.4	3.4
Baltimore	1,279.2	1,309.0	1,273.5	1,311.0	68.0	52.9	61.7	51.1	5.3	4.0	4.8	3.9
Cumberland	44.7	46.0	45.0	45.5	3.9	3.9	3.4	2.9	8.8	8.4	7.6	6.5
Hagerstown	68.9	70.4	69.0	70.0	3.7	3.1	2.7	2.3	5.4	4.4	3.9	3.3
Massachusetts	3,263.4	3,247.0	3,238.0	3,236.4	133.2	109.1	98.3	86.4	4.1	3.4	3.0	2.7
Barnstable-Yarmouth	67.5	68.7	68.8	70.6	4.7	3.6	2.9	2.3	7.0	5.3	4.2	3.2
Boston	1,815.4	1,804.8	1,799.9	1,798.5	58.7	48.4	45.6	40.1	3.2	2.7	2.5	2.2
Brockton	129.7	132.1	130.9	132.1	5.9	4.6	4.4	3.7	4.6	3.5	3.3	2.8
Fitchburg-Leominster	69.4	69.0	68.9	69.1	3.2	2.8	2.3	2.3	4.6	4.1	3.3	3.3
Lawrence	198.2	198.6	196.8	198.2	9.4	9.1	8.1	7.5	4.8	4.6	4.1	3.8
Lowell	164.7	167.6	164.0	166.2	6.3	5.6	4.8	4.5	3.8	3.3	2.9	2.7
New Bedford	82.6	82.5	80.9	81.8	7.2	5.6	4.9	4.0	8.7	6.7	6.0	4.9
Pittsfield	39.6	39.2	39.0	39.1	2.3	2.0	1.6	1.4	5.8	5.0	4.2	3.7
Springfield	285.4	281.4	281.5	279.4	13.6	10.7	9.9	8.4	4.8	3.8	3.5	3.0
Worcester	254.0	251.8	253.4	250.4	9.7	8.3	7.2	6.6	3.8	3.3	2.9	2.6
Michigan	4,979.5	5,037.6	4,947.8	5,008.0	218.5	225.2	175.6	190.0	4.4	4.5	3.5	3.8
Ann Arbor	296.2	299.7	293.7	295.8	7.2	7.6	5.7	6.0	2.4	2.5	1.9	2.0
Benton Harbor	81.5	81.8	81.1	81.4	4.2	3.9	3.5	3.4	5.2	4.7	4.3	4.2
Detroit	2,237.1	2,259.5	2,223.9	2,248.1	82.9	86.8	70.8	75.1	3.7	3.8	3.2	3.3
Flint	199.8	198.8	198.7	196.3	10.7	10.8	9.3	11.0	5.4	5.5	4.7	5.6
Grand Rapids-Muskegon-Holland	586.3	600.2	583.5	598.1	20.1	21.3	15.7	17.8	3.4	3.6	2.7	3.0
Jackson	75.7	76.6	75.3	76.1	3.2	3.3	2.6	2.8	4.2	4.3	3.4	3.7
Kalamazoo-Battle Creek	230.8	231.6	228.7	229.7	9.0	9.3	7.2	7.9	3.9	4.0	3.1	3.4
Lansing-East Lansing	244.4	241.3	242.1	242.4	8.9	7.4	6.0	6.0	3.7	3.0	2.5	2.5
Saginaw-Bay City-Midland	197.1	199.4	196.1	197.2	10.3	10.7	8.4	9.0	5.2	5.4	4.3	4.6
Minnesota	2,634.5	2,681.1	2,656.1	2,693.9	82.6	70.8	68.1	59.1	3.1	2.6	2.6	2.2
Duluth-Superior	123.0	123.3	123.6	123.4	6.1	5.1	5.4	4.8	5.0	4.1	4.4	3.9
Minneapolis-St. Paul	1,649.3	1,688.8	1,660.2	1,691.5	36.5	32.0	31.2	27.5	2.2	1.9	1.9	1.6
Rochester	68.9	70.3	68.9	70.3	1.3	1.2	1.1	1.1	1.9	1.8	1.6	1.5
St. Cloud	93.3	93.5	94.3	94.0	3.8	3.1	2.8	2.3	4.1	3.3	3.0	2.5
Mississippi	1,260.1	1,286.8	1,251.9	1,265.4	72.6	66.5	61.7	51.1	5.8	5.2	4.9	4.0
Biloxi-Gulfport-Pascagoula	165.6	174.0	165.6	172.1	6.3	5.6	6.0	4.8	3.8	3.2	3.6	2.8
Hattiesburg	50.9	50.4	50.5	49.8	2.0	1.5	1.5	1.2	3.8	3.0	2.9	2.5
Jackson	222.1	227.2	222.2	224.6	7.6	7.1	6.8	5.9	3.4	3.1	3.0	2.6
Missouri	2,811.3	2,865.1	2,837.6	2,895.8	137.4	87.5	124.5	89.3	4.9	3.1	4.4	3.1
Columbia	81.8	83.0	83.9	84.4	1.4	0.8	1.3	0.9	1.7	1.0	1.5	1.0
Joplin	81.8	83.6	82.8	84.1	3.3	2.1	3.3	2.5	4.0	2.5	3.9	3.0
Kansas City	949.6	988.6	951.5	990.6	39.7	30.0	37.0	27.9	4.2	3.0	3.9	2.8
St. Joseph	48.7	49.3	49.3	49.8	3.0	1.9	2.5	1.8	6.1	3.9	5.1	3.6
St. Louis LMA	1,308.8	1,323.3	1,310.6	1,337.0	60.5	41.5	58.6	45.5	4.6	3.1	4.5	3.4
Springfield	160.6	167.3	163.1	169.1	6.1	3.4	5.6	3.6	3.8	2.1	3.4	2.1
Montana	462.3	470.7	465.9	474.9	30.7	29.8	26.1	25.6	6.6	6.3	5.6	5.4
Billings	71.2	73.0	71.5	73.6	3.7	3.1	3.0	2.5	5.2	4.3	4.1	3.4
Great Falls	38.1	37.9	38.4	38.1	2.4	2.4	2.0	2.0	6.2	6.3	5.2	5.3
Missoula	52.0	51.4	52.4	52.1	2.5	2.3	2.1	2.0	4.9	4.6	4.0	3.9

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
Nebraska	897.1	923.3	901.7	925.3	27.7	23.2	19.9	18.5	3.1	2.5	2.2	2.0
Lincoln	140.9	146.5	139.4	146.5	3.6	2.9	2.6	2.3	2.5	1.9	1.6	
Omaha	380.7	393.1	380.8	394.7	11.2	9.1	8.2	7.5	3.0	2.3	2.1	1.9
Nevada	900.9	933.0	905.2	941.1	41.9	33.6	42.6	38.4	4.7	3.6	4.7	4.1
Las Vegas	681.4	717.2	685.4	722.3	29.5	24.6	30.1	28.5	4.3	3.4	4.4	3.9
Reno	172.6	174.9	173.3	175.9	7.6	6.3	7.4	6.6	4.4	3.6	4.3	3.8
New Hampshire	643.7	669.1	643.0	666.8	22.4	22.3	20.7	17.5	3.5	3.3	3.2	2.6
Manchester	102.2	107.1	101.9	106.6	3.0	3.2	2.6	2.4	2.9	3.0	2.5	2.2
Nashua	101.7	105.4	101.4	105.2	3.1	3.5	2.9	2.8	3.0	3.3	2.9	2.7
Portsmouth-Rochester	121.2	125.8	121.8	126.4	3.4	3.4	3.0	2.8	2.8	2.7	2.5	2.2
New Jersey	4,126.1	4,198.6	4,113.2	4,198.6	203.7	197.0	183.8	176.2	4.9	4.7	4.5	4.2
Atlantic-Cape May	168.0	168.5	167.5	169.1	17.1	16.4	14.4	13.3	10.2	9.7	8.6	7.9
Bergen-Passaic	669.3	685.1	664.4	683.8	31.0	31.5	27.8	28.9	4.6	4.6	4.2	4.2
Jersey City	281.8	286.0	278.0	285.1	20.9	20.6	19.5	19.5	7.4	7.2	7.0	6.8
Middlesex-Somerset-Hunterdon	630.1	642.9	628.7	642.9	21.6	20.3	20.2	18.4	3.4	3.2	3.2	2.9
Monmouth-Ocean	504.9	514.2	508.0	517.4	24.0	23.0	21.5	19.9	4.7	4.5	4.2	3.8
Newark	1,002.4	1,026.5	1,000.5	1,024.8	46.7	46.4	42.7	41.8	4.7	4.5	4.3	4.1
Trenton	167.7	168.4	165.9	166.7	7.3	7.0	6.1	6.2	4.3	4.2	3.7	3.7
Vineland-Millville-Bridgeton	65.0	65.1	64.7	65.2	6.6	5.9	5.8	5.2	10.2	9.0	9.0	8.0
New Mexico	826.8	837.3	826.7	836.8	50.2	52.6	47.7	51.8	6.1	6.3	5.8	6.2
Albuquerque	360.2	366.9	361.1	365.7	14.7	15.7	14.1	15.1	4.1	4.3	3.9	4.1
Las Cruces	68.5	69.5	68.2	70.2	6.5	6.3	6.1	6.3	9.5	9.1	8.9	9.0
Santa Fe	73.7	74.4	74.3	74.5	2.4	2.1	2.2	2.1	3.2	2.8	3.0	2.8
New York	8,856.0	8,838.9	8,790.8	8,770.7	556.5	486.9	489.7	428.9	6.3	5.5	5.6	4.9
Albany-Schenectady-Troy	449.2	452.4	448.2	449.0	19.7	18.2	16.1	14.9	4.4	4.0	3.6	3.3
Binghamton	124.0	125.3	122.6	124.0	6.0	6.1	4.7	5.1	4.8	4.8	3.9	4.1
Buffalo-Niagara Falls	573.4	574.8	568.0	565.7	33.5	34.8	30.8	29.2	5.8	6.0	5.4	5.2
Dutchess County	117.9	120.9	117.3	120.3	4.4	4.7	3.8	4.0	3.8	3.9	3.3	3.3
Elmira	44.3	44.9	43.8	44.1	2.2	2.5	1.8	2.0	4.9	5.5	4.0	4.6
Glens Falls	57.9	58.5	57.9	58.3	4.7	4.2	3.5	3.3	8.1	7.1	6.1	5.7
Jamestown	67.5	68.0	66.7	66.9	4.0	4.1	3.5	3.4	5.9	6.0	5.2	5.0
Nassau-Suffolk	1,383.1	1,407.3	1,377.3	1,397.9	49.0	46.2	45.7	40.8	3.5	3.3	3.3	2.9
New York	4,114.1	4,042.6	4,074.1	4,010.2	323.9	255.9	290.9	234.6	7.9	6.3	7.1	5.9
New York City	3,476.6	3,391.7	3,438.5	3,363.8	302.0	233.8	271.1	214.9	8.7	6.9	7.9	6.4
Newburgh	171.3	175.9	170.2	174.1	6.9	6.7	6.0	5.7	4.0	3.8	3.6	3.3
Rochester	571.9	574.0	568.2	570.5	25.4	26.9	22.0	23.0	4.4	4.7	3.9	4.0
Syracuse	360.8	364.6	358.5	362.4	18.1	17.4	14.4	13.9	5.0	4.8	4.0	3.8
Utica-Rome	140.8	142.0	140.0	141.0	8.1	7.7	6.6	6.2	5.8	5.4	4.7	4.4
North Carolina	3,749.6	3,814.9	3,749.0	3,826.4	137.7	120.1	124.1	98.2	3.7	3.1	3.3	2.6
Asheville	108.4	111.4	108.5	111.6	3.4	2.7	2.7	2.1	3.1	2.4	2.5	1.9
Charlotte-Gastonia-Rock Hill	737.5	750.1	738.0	757.0	20.3	16.2	18.6	15.3	2.8	2.2	2.5	2.0
Fayetteville	112.9	114.2	111.4	114.2	4.6	4.3	3.9	3.6	4.1	3.8	3.5	3.2
Goldensboro	47.3	47.2	46.9	47.2	2.0	1.9	1.8	1.7	4.1	4.1	3.9	3.6
Greensboro-Winston-Salem-High Point	625.7	636.4	627.6	640.1	18.1	13.9	17.3	11.6	2.9	2.2	2.8	1.8
Greenville	63.8	64.4	63.2	64.5	2.7	2.5	2.7	2.3	4.3	3.9	4.3	3.5
Hickory-Morganton-Lenoir	169.4	170.6	167.9	170.7	5.3	3.8	5.1	2.9	3.1	2.2	3.1	1.7
Jacksonville	44.8	45.5	44.2	45.4	1.8	1.8	1.4	1.4	4.0	3.9	3.1	3.1
Raleigh-Durham-Chapel Hill	609.6	640.4	613.9	641.1	10.9	9.5	9.8	8.1	1.8	1.5	1.6	1.3
Rocky Mount	67.7	66.3	67.0	66.1	5.1	4.0	4.5	3.5	7.6	6.1	6.8	5.3
Wilmington	104.8	106.3	104.4	107.1	4.9	3.6	4.0	2.8	4.7	3.3	3.8	2.6
North Dakota	341.5	337.3	345.8	341.3	14.4	11.6	11.4	9.1	4.2	3.4	3.3	2.7
Bismarck	53.5	53.4	53.4	53.9	2.3	1.7	1.7	1.2	4.4	3.1	3.2	2.2
Fargo-Moorhead	102.5	102.6	103.2	103.1	2.4	2.0	1.8	1.6	2.3	2.0	1.7	1.5
Grand Forks	53.6	53.0	53.7	53.3	1.7	1.5	1.4	1.3	3.2	2.9	2.6	2.4
Ohio	5,565.7	5,738.3	5,558.8	5,763.1	258.4	246.4	211.8	230.0	4.6	4.3	3.8	4.0
Akron	354.4	364.9	354.0	366.4	16.4	15.9	12.8	14.3	4.6	4.4	3.6	3.9
Canton-Massillon	197.9	204.9	196.8	205.0	9.4	9.8	7.6	8.9	4.8	4.8	3.9	4.3
Cincinnati	819.6	849.6	820.8	858.9	29.2	26.5	25.1	25.9	3.6	3.1	3.1	3.0
Cleveland-Lorain-Elyria	1,086.3	1,115.0	1,082.6	1,120.0	53.3	50.2	43.2	47.7	4.9	4.5	4.0	4.3
Columbus	793.2	821.1	794.0	825.9	23.0	21.3	19.4	20.7	2.9	2.6	2.4	2.5
Dayton-Springfield	464.2	474.4	462.5	476.4	17.8	17.0	15.2	16.6	3.8	3.6	3.3	3.5
Hamilton-Middletown	176.9	181.2	175.3	180.7	6.3	6.0	5.4	5.8	3.5	3.3	3.1	3.2
Lima	72.5	74.9	72.3	75.4	3.5	3.3	3.1	3.3	4.8	4.5	4.3	4.3
Mansfield	80.8	83.1	80.4	82.9	4.7	4.6	4.1	4.5	5.8	5.5	5.0	5.4
Steubenville-Weirton	56.4	57.1	57.1	58.0	3.9	4.4	3.5	4.4	7.0	7.7	6.2	7.6
Toledo	309.1	319.7	310.5	319.3	14.8	14.8	13.5	12.2	4.8	4.6	4.3	3.8
Youngstown-Warren	277.2	284.6	276.9	286.5	16.7	15.9	13.9	15.1	6.0	5.6	5.0	5.3

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999P	1998	1999	1998	1999P	1998	1999	1998	1999P
Oklahoma	1,611.1	1,644.4	1,616.8	1,640.6	71.9	70.1	70.5	64.1	4.5	4.3	4.4	3.9
Enid	27.6	27.3	28.0	27.8	1.1	1.0	1.0	0.9	3.9	3.7	3.6	3.3
Lawton	40.8	41.4	40.8	41.1	2.1	2.0	2.1	1.8	5.2	4.9	5.1	4.4
Oklahoma City	527.4	540.7	530.2	536.6	19.0	18.8	18.9	16.7	3.6	3.5	3.6	3.1
Tulsa	407.0	421.3	409.6	421.4	13.9	13.4	13.6	12.8	3.4	3.2	3.3	3.0
Oregon	1,740.4	1,774.1	1,742.0	1,756.6	110.0	113.4	98.8	95.9	6.3	6.4	5.7	5.5
Eugene-Springfield	161.4	164.9	161.6	163.2	10.0	9.8	9.0	8.2	6.2	5.9	5.6	5.1
Medford-Ashland	86.4	89.5	86.3	88.2	7.2	7.3	6.3	6.0	8.4	8.2	7.3	6.8
Portland-Vancouver	1,039.2	1,063.3	1,038.0	1,055.4	45.6	49.7	42.2	44.0	4.4	4.7	4.1	4.2
Salem	163.4	168.0	164.4	166.9	10.1	11.3	9.3	9.7	6.2	6.7	5.6	5.8
Pennsylvania	5,890.0	5,945.0	5,883.4	5,929.3	304.7	285.7	268.4	243.2	5.2	4.8	4.6	4.1
Allentown-Bethlehem-Easton	306.7	314.0	308.4	312.3	14.9	14.1	14.2	12.4	4.8	4.5	4.6	4.0
Altoona	61.6	62.9	62.1	62.4	3.5	3.3	3.3	2.6	5.7	5.2	5.3	4.2
Erie	138.0	139.6	137.3	138.7	8.1	7.7	7.4	6.4	5.9	5.5	5.4	4.6
Harrisburg-Lebanon-Carlisle	345.4	350.0	345.9	349.4	12.2	11.7	10.5	10.3	3.5	3.3	3.0	3.0
Johnstown	102.4	102.9	102.0	101.8	8.3	7.2	6.8	5.6	8.1	7.0	6.6	5.5
Lancaster	237.6	240.2	238.8	241.3	7.5	6.7	6.6	5.5	3.2	2.8	2.7	2.3
Philadelphia	2,474.8	2,495.4	2,472.9	2,498.3	110.2	102.6	104.2	93.5	4.5	4.1	4.2	3.7
Pittsburgh	1,142.9	1,156.6	1,139.7	1,151.7	61.1	56.8	51.4	47.0	5.3	4.9	4.5	4.1
Reading	181.4	182.9	182.1	183.2	8.3	8.4	7.6	7.8	4.6	4.6	4.2	4.2
Scranton-Wilkes-Barre-Hazleton	307.7	307.9	305.3	305.3	21.8	19.3	18.5	16.3	7.1	6.3	6.1	5.3
Sharon	56.2	56.5	56.6	56.7	2.8	2.8	2.5	2.4	4.9	4.9	4.4	4.2
State College	66.2	66.9	66.5	67.6	2.2	2.2	1.6	1.6	3.3	3.2	2.4	2.3
Williamsport	56.8	57.1	56.9	56.6	3.9	3.3	3.2	2.7	6.9	5.8	5.6	4.7
York	191.0	192.4	190.7	191.7	7.8	7.2	6.9	6.0	4.1	3.7	3.6	3.1
Rhode Island	492.6	496.8	487.4	495.1	29.1	17.8	24.0	14.0	5.9	3.6	4.9	2.8
Providence-Fall River-Warwick	570.5	572.9	562.0	569.1	34.7	22.9	27.2	17.4	6.1	4.0	4.8	3.1
South Carolina	1,937.0	1,958.8	1,948.8	1,981.3	57.3	64.0	59.7	71.0	3.0	3.3	3.1	3.6
Charleston-North Charleston	261.1	268.5	263.2	271.9	6.0	6.3	6.5	7.0	2.3	2.4	2.5	2.6
Columbia	277.4	282.9	279.6	285.8	4.5	5.2	4.7	5.3	1.6	1.8	1.7	1.9
Florence	63.4	63.4	63.5	63.7	2.3	2.3	2.3	2.7	3.7	3.7	3.6	4.2
Greenville-Spartanburg-Anderson	492.9	496.0	494.3	501.8	9.3	12.2	10.1	14.3	1.9	2.5	2.1	2.8
Myrtle Beach	99.4	102.3	102.2	105.4	3.3	3.2	2.7	2.7	3.4	3.1	2.7	2.5
Sumter	47.4	47.1	46.8	47.3	1.8	1.9	1.9	2.1	3.8	4.1	4.0	4.4
South Dakota	389.9	394.2	395.3	397.9	14.4	12.2	11.5	9.5	3.7	3.1	2.9	2.4
Rapid City	46.0	47.5	46.5	48.0	1.5	1.2	1.3	0.9	3.3	2.5	2.9	1.9
Sioux Falls	96.5	102.0	99.3	103.4	2.2	1.8	1.8	1.5	2.2	1.8	1.8	1.4
Tennessee	2,709.3	2,788.3	2,707.3	2,782.0	122.3	121.8	107.7	105.9	4.5	4.4	4.0	3.8
Chattanooga	219.2	217.1	219.2	217.9	9.7	8.0	8.9	7.1	4.4	3.7	4.1	3.2
Clarksville-Hopkinsville	80.0	82.6	80.0	82.6	3.1	2.8	2.8	2.4	3.8	3.4	3.5	2.9
Jackson	55.9	56.6	55.4	56.4	2.0	2.1	1.8	2.1	3.5	3.7	3.3	3.7
Johnson City-Kingsport-Bristol	221.8	225.8	220.4	224.6	9.8	10.9	8.8	10.0	4.4	4.8	4.0	4.4
Knoxville	337.1	343.2	338.1	342.7	13.9	14.6	10.7	10.8	4.1	4.2	3.2	3.2
Memphis	534.6	566.3	537.0	563.3	20.8	19.5	19.6	18.1	3.9	3.4	3.7	3.2
Nashville	628.9	648.9	626.8	650.0	17.5	17.7	16.2	16.7	2.8	2.7	2.6	2.6
Texas	9,948.5	10,219.8	9,981.2	10,243.0	459.5	448.6	434.9	436.2	4.6	4.4	4.4	4.3
Abilene	60.7	61.9	60.7	61.9	2.0	2.2	1.9	2.1	3.3	3.5	3.1	3.4
Amarillo	111.1	113.6	111.6	113.5	3.8	3.0	3.5	2.9	3.4	2.6	3.1	2.6
Austin-San Marcos	668.9	697.6	674.2	702.9	16.5	14.7	15.6	14.1	2.5	2.1	2.3	2.0
Beaumont-Port Arthur	181.6	188.1	180.7	187.8	12.3	14.5	11.9	15.1	6.7	7.7	6.6	8.0
Brazoria	106.3	106.8	104.6	106.0	6.0	6.2	5.7	6.2	5.6	5.8	5.4	5.9
Brownsville-Harlingen-San Benito	126.5	125.4	126.6	124.8	15.5	12.4	14.9	11.1	12.3	9.9	11.7	8.9
Bryan-College Station	73.7	77.0	74.8	77.4	1.1	1.1	1.0	1.2	1.5	1.5	1.4	1.5
Corpus Christi	173.6	177.1	175.1	178.3	10.5	10.2	10.4	10.4	6.1	5.8	6.0	5.8
Dallas	1,830.2	1,902.3	1,842.1	1,912.7	57.2	53.1	54.2	52.8	3.1	2.8	2.9	2.8
El Paso	285.7	286.0	285.0	287.5	27.3	25.7	26.2	25.7	9.6	9.0	9.2	8.9
Fort Worth-Arlington	860.0	892.5	867.4	899.4	27.0	25.8	25.6	25.1	3.1	2.9	3.0	2.8
Galveston-Texas City	122.8	123.3	122.5	123.1	7.8	7.1	7.3	7.3	6.3	5.7	6.0	6.0
Houston	2,090.0	2,148.5	2,096.7	2,150.5	81.8	85.2	78.2	88.8	3.9	4.0	3.7	4.1
Killeen-Temple	113.8	114.8	114.2	115.6	4.7	3.7	4.6	3.6	4.2	4.2	4.0	3.1
Laredo	71.7	74.7	72.5	74.9	6.6	6.6	6.5	6.2	9.3	8.8	9.0	8.2
Longview-Marshall	103.2	105.4	103.6	105.9	6.6	6.9	6.1	6.9	6.4	6.6	5.9	6.5
Lubbock	121.9	123.5	122.2	123.7	4.1	3.3	3.8	3.2	3.4	2.6	3.1	2.6
McAllen-Edinburg-Mission	195.5	196.2	194.7	192.8	34.7	30.2	31.4	25.1	17.8	15.4	16.1	13.0
Odessa-Midland	126.6	128.5	126.4	128.7	5.3	11.0	5.4	11.2	4.2	8.6	4.3	8.7
San Angelo	51.5	53.1	51.6	52.9	1.5	2.2	1.4	2.1	3.0	4.2	2.7	4.0
San Antonio	749.9	767.4	749.2	767.0	27.4	21.7	24.9	20.1	3.6	2.8	3.3	2.6
Sherman-Denison	49.9	51.1	49.8	51.1	2.0	2.3	1.9	2.1	4.0	4.5	3.9	4.1
Texarkana	55.6	56.3	55.7	56.6	4.3	3.0	4.0	2.8	7.7	5.3	7.2	5.0
Tyler	88.5	91.4	88.4	91.1	4.3	3.7	4.0	3.4	4.8	4.1	4.5	3.7

See footnotes at end of table.

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1998	1999	1998	1999 ^P	1998	1999	1998	1999 ^P	1998	1999	1998	1999 ^P
Texas—Continued												
Victoria	43.0	43.3	43.2	43.1	1.8	1.7	1.8	1.7	4.1	3.8	4.1	3.8
Waco	99.4	101.5	100.4	102.2	4.4	3.2	4.1	2.9	4.4	3.1	4.1	2.8
Wichita Falls	65.7	65.9	65.7	66.1	2.9	2.6	2.7	2.6	4.5	3.9	4.1	3.9
Utah												
Provo-Orem	1,031.0	1,085.7	1,037.4	1,089.2	40.8	37.1	40.7	32.4	4.0	3.4	3.9	3.0
Salt Lake City-Ogden	154.3	163.9	155.8	163.8	5.1	5.0	5.1	4.3	3.3	3.1	3.3	2.6
Utah	660.5	695.1	664.0	694.7	24.5	21.9	25.0	19.5	3.7	3.1	3.8	2.8
Vermont												
Burlington	327.3	338.8	324.7	335.2	13.0	11.7	11.4	9.4	4.0	3.5	3.5	2.8
Vermont	98.2	100.8	97.5	100.5	2.6	2.2	2.0	1.7	2.6	2.2	2.1	1.7
Virginia												
Charlottesville	3,412.9	3,560.8	3,432.6	3,570.6	95.0	92.9	84.1	83.5	2.8	2.6	2.4	2.3
Danville	72.9	76.9	74.6	78.1	0.9	0.8	0.8	0.7	1.3	1.1	1.0	0.9
Lynchburg	55.1	56.9	56.4	56.6	2.5	3.5	2.8	3.3	4.5	6.2	5.0	5.9
Norfolk-Virginia Beach-Newport News	100.9	104.3	100.9	103.7	2.4	2.3	2.1	1.9	2.3	2.2	2.1	1.8
Roanoke	718.2	743.8	719.7	747.2	22.7	21.5	20.5	20.8	3.2	2.9	2.8	2.8
Richmond-Petersburg	501.1	517.8	500.7	517.3	12.3	10.9	10.9	10.5	2.4	2.1	2.2	2.0
Virginia	126.7	132.4	128.2	132.4	3.0	2.1	2.6	2.1	2.4	1.6	2.1	1.6
Washington												
Bellingham	2,999.6	3,063.9	2,982.8	3,046.5	151.7	154.4	135.7	134.4	5.1	5.0	4.6	4.4
Bremerton	78.1	80.5	77.3	79.9	5.0	4.6	4.3	3.8	6.3	5.7	5.5	4.8
Olympia	90.9	93.5	90.0	92.7	4.8	4.8	4.5	4.3	5.3	5.2	5.0	4.6
Richland-Kennewick-Pasco	99.5	101.4	97.8	100.5	5.2	4.7	4.6	4.1	5.2	4.7	4.7	4.1
Seattle-Bellevue-Everett	91.4	92.5	92.5	93.3	7.2	6.6	6.6	5.5	7.9	7.1	7.1	5.9
Spokane	1,371.3	1,394.5	1,361.0	1,385.3	43.2	46.9	40.8	43.3	3.2	3.4	3.0	3.1
Tacoma	207.0	213.0	205.3	210.9	10.7	12.4	8.7	9.9	5.1	5.8	4.2	4.7
Yakima	329.4	339.9	327.3	336.9	15.6	15.5	14.4	13.5	4.7	4.5	4.4	4.0
Washington	108.9	109.9	109.6	111.0	13.7	13.1	11.7	11.5	12.6	11.9	10.7	10.4
West Virginia												
Charleston	791.2	804.0	791.7	807.7	62.6	59.5	55.2	55.3	7.9	7.4	7.0	6.9
Huntington-Ashland	128.5	131.1	128.6	132.0	7.0	6.6	6.3	6.5	5.5	5.0	4.9	4.9
Parkersburg-Marietta	136.2	139.4	136.6	139.8	9.8	9.5	8.9	8.9	7.2	6.8	6.5	6.3
Wheeling	74.8	77.6	75.0	78.5	5.3	5.0	4.5	4.5	7.0	6.4	6.1	5.7
West Virginia	72.3	74.0	71.4	74.3	5.0	4.5	3.9	4.2	6.9	6.0	5.4	5.6
Wisconsin												
Appleton-Oshkosh-Neenah	2,901.2	2,945.1	2,912.6	2,946.3	111.8	113.9	91.1	96.7	3.9	3.9	3.1	3.3
Eau Claire	218.5	223.5	219.9	223.1	6.9	6.7	6.2	5.6	3.2	3.0	2.8	2.5
Green Bay	81.7	83.9	82.4	85.0	3.5	3.3	2.5	3.4	4.3	3.9	3.1	4.0
Janesville-Beloit	130.2	131.8	130.7	131.6	4.1	3.6	3.4	3.2	3.1	2.8	2.6	2.4
Kenosha	79.3	79.3	79.3	78.9	2.9	3.1	2.5	2.8	3.6	4.0	3.2	3.5
La Crosse	79.7	81.4	79.9	80.2	2.5	2.9	2.3	2.5	3.1	3.6	2.8	3.2
Madison	71.2	72.4	71.7	72.4	2.4	2.3	1.7	1.9	3.4	3.2	2.4	2.6
Milwaukee-Waukesha	258.0	265.2	260.3	265.6	4.6	4.5	3.6	3.7	1.8	1.7	1.4	1.4
Racine	799.2	809.1	801.0	807.2	24.9	27.9	24.2	25.9	3.1	3.4	3.0	3.2
Sheboygan	92.5	93.8	92.6	93.5	3.9	4.4	3.6	4.1	4.2	4.7	3.8	4.4
Wausau	60.4	60.7	60.7	60.4	1.6	1.4	1.2	1.2	2.6	2.3	2.0	2.0
Wisconsin	72.2	74.6	72.4	74.0	3.3	3.2	2.4	2.3	4.6	4.3	3.3	3.2
Wyoming												
Casper	255.1	259.4	255.8	259.6	15.1	13.9	13.0	12.4	5.9	5.4	5.1	4.8
Cheyenne	33.4	34.1	33.3	34.1	2.0	1.9	1.8	1.8	6.0	5.5	5.3	5.3
Wyoming	39.8	40.0	39.6	39.9	1.7	1.4	1.4	1.2	4.3	3.4	3.5	3.0
Puerto Rico												
Aguadilla	1,326.4	1,322.1	1,307.7	1,302.8	177.6	167.6	174.4	141.7	13.4	12.7	13.3	10.9
Arecibo	53.1	51.2	52.6	49.9	9.9	8.6	9.4	7.2	18.6	16.8	17.9	14.3
Caguas	53.5	54.6	52.5	54.2	8.8	7.7	8.5	6.6	16.5	14.2	16.2	12.1
Mayaguez	119.7	120.2	117.6	118.5	14.6	14.3	13.7	11.9	12.2	11.9	11.7	10.1
Ponce	94.6	95.1	93.7	91.0	15.3	15.5	15.2	12.0	16.1	16.3	16.3	13.2
San Juan-Bayamon	111.4	110.2	109.4	107.4	19.7	18.3	19.5	14.8	17.7	16.6	17.8	13.8
Puerto Rico	717.8	718.2	709.1	712.5	76.6	72.3	75.4	62.9	10.7	10.1	10.6	8.8

^P = preliminary.

when new benchmark and population information becomes available.

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

Explanatory Notes and Estimates of Error

Introduction

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

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

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

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

Data from these two sources differ from each other because of variations in definitions and coverage, source of information, methods of collection, and estimating procedures. Sampling variability and response errors are additional reasons for discrepancies. The major factors which have a differential effect on the levels and trends of the two data series are as follows.

Employment

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

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

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

Hours of work

The household survey measures hours worked for all workers whereas the payroll survey measures hours for private production and nonsupervisory workers paid for by

employers. In the household survey, all persons with a job but not at work are excluded from the hours distributions and the computations of average hours at work. In the payroll survey, production or nonsupervisory employees on paid vacation, paid holiday, or paid sick leave are included and assigned the number of hours for which they were paid during the reporting period.

Earnings

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

COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

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

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

For an examination of the similarities and differences between State insured unemployment and total unemploy-

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

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

COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

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

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

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

Household Data

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

COLLECTION AND COVERAGE

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

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

CONCEPTS AND DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

HISTORICAL COMPARABILITY

Changes in concepts and methods

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

- In 1945, the questionnaire was radically changed with

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Noncomparability of labor force levels

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

- Beginning in 1953, as a result of introducing data from the 1950 census into the estimating procedures, population levels were raised by about 600,000; labor force, total employment, and agricultural employment were increased by about 350,000, primarily affecting the figures for totals and men; other categories were relatively unaffected.

- Beginning in 1960, the inclusion of Alaska and Hawaii resulted in an increase of about 500,000 in the population and about 300,000 in the labor force. Four-fifths of this increase was in nonagricultural employment; other labor force categories were not appreciably affected.

- Beginning in 1962, the introduction of data from the 1960 census reduced the population by about 50,000 and labor force and employment by about 200,000; unemployment totals were virtually unchanged.

- Beginning in 1972, information from the 1970 census was introduced into the estimation procedures, increasing the population by about 800,000; labor force and employment totals were raised by a little more than 300,000; unemployment levels and rates were essentially unchanged.

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

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

- Beginning in January 1974, the method used to prepare independent estimates of the civilian noninstitutional population was modified to an "inflation-deflation" approach. This change in the derivation of the estimates had its greatest impact on estimates of 20- to 24-year-old men—particularly those of the black-and-other population—but had little effect on estimates of the total population 16 years and over. Additional information on the adjustment procedure appears in "CPS Population Controls Derived from Inflation-Deflation Method of Estimation," in the February 1974 issue of this publication.

- Effective in July 1975, as a result of the large inflow of Vietnamese refugees into the United States, the total and black-and-other independent population controls for persons 16 years and over were adjusted upward by 76,000—(30,000 men and 46,000 women). The addition of the refugees increased the black-and-other population by less than 1 percent in any age-sex group, with all of the changes being confined to the "other" component of the population.

- Beginning in January 1978, the introduction of an expansion in the sample and revisions in the estimation procedures resulted in an increase of about 250,000 in the civilian labor force and employment totals; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978" in the February 1978 issue of this publication.

- Beginning in October 1978, the race of the individual was determined by the household respondent for the incoming rotation group households, rather than by the interviewer as before. The purpose of this change was to provide more accurate estimates of characteristics by race. Thus, in October 1978, one-eighth of the sample households had race determined by the household respondent and seven-eighths of the sample households had race determined by interviewer observation. It was not until January 1980 that the entire sample had race determined by the household respondent. The new procedure had no significant effect on the estimates.

- Beginning in January 1979, the first-stage ratio adjustment method was changed in the CPS estimation procedure. Differences between the old and new procedures existed only for metropolitan and nonmetropolitan area estimates, not for the total United States. The reasoning behind

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

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

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

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

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

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

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

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

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

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

- Beginning in January 1998, new composite estimation procedures and minor revisions in the population controls were introduced into the household survey. The new composite estimation procedures simplify processing of the

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

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

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

Changes in the occupational and industrial classification systems

Beginning in 1971, the comparability of occupational employment data was affected as a result of changes in the occupational classification system for the 1970 census that were introduced into the CPS. Comparability was further affected in December 1971, when a question relating to major activity or duties was added to the monthly CPS questionnaire in order to determine more precisely the occupational classification of individuals. As a result of these changes, meaningful comparisons of occupational employment levels could not be made between 1971-72 and prior years nor between those 2 years. Unemployment rates were

not significantly affected. For a further explanation of the changes in the occupational classification system, see "Revisions in Occupational Classifications for 1971" and "Revisions in the Current Population Survey" in the February 1971 and February 1972 issues, respectively, of this publication.

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

The industrial classification system used in the 1980 census was based on the 1972 Standard Industrial Classification (SIC) system, as modified in 1977. The adoption of the new system had much less of an adverse effect on historical comparability than did the new occupational system. The most notable changes from the 1970 system were the transfer of farm equipment stores from "retail" to "wholesale" trade, postal service from "public administration" to "transportation," and some interchange between "professional and related services" and "public administration." Additional information on the 1980 census occupational and industrial classification systems appears in "Revisions in the Current Population Survey Beginning in January 1983" in the February 1983 issue of this publication.

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

Sampling

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

Changes in this regard since 1960 are as follows: When

Alaska and Hawaii received statehood in 1959 and 1960, respectively, three sample areas were added to the existing sample to account for the population of these States. In January 1978, a supplemental sample of 9,000 housing units, selected in 24 States and the District of Columbia, was designed to provide more reliable annual average estimates for States. In October 1978, a coverage improvement sample of approximately 450 sample household units representing 237,000 occupied mobile homes and 600,000 new construction housing units was added. In January 1980, another supplemental sample of 9,000 households selected in 32 States and the District of Columbia was added. A sample reduction of about 6,000 units was implemented in May 1981. In January 1982, the sample was expanded by 100 households to provide additional coverage in counties added to the Standard Metropolitan Statistical Areas (SMSAs), which were redefined in 1973. In January 1985, a new State-based CPS sample was selected based on 1980 census information. A sample reduction of about 4,000 households was implemented in April 1988; they were reinstated during the 8-month period, April-November 1989. A redesigned CPS sample based on the 1990 decennial census was selected for use during the 1990s. Households from this new sample were phased into the CPS between April 1994 and July 1995. The July 1995 sample was the first monthly sample based entirely on the 1990 census. For further information on the 1990 sample redesign, see "Redesign of the Sample for the Current Population Survey" in the May 1994 issue of this publication.

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

The current sample design, introduced in January 1996, includes about 59,000 households from 754 sample areas and maintains a 1.9-percent CV on national monthly estimates of unemployment level. This translates into a change of 0.2 percentage point in the unemployment rate being significant at a 90-percent confidence level. For each of the 50 States and for the District of Columbia, the design maintains a CV of at most 8-percent on the annual average estimate of unemployment level, assuming a 6-percent unemployment rate. Due to the national reliability criterion, estimates for several large States are substantially more reliable than the State design criterion requires. Annual average unemploy-

ment estimates for California, Florida, New York, and Texas, for example, carry a CV of less than 4 percent.

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

Selection of sample areas. The entire area of the United States, consisting of 3,141 counties and independent cities, is divided into 2,007 sample units (PSUs). In most States, a PSU consists of a county or a number of contiguous counties. In New England and Hawaii, minor civil divisions are used instead of counties.

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

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

Selection of sample households. Because the sample design is State based, the sampling ratio differs by State and

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

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

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

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

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

Units in the three strata described above all existed at the time of the 1990 decennial census. Through a series of ad-

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

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

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

ESTIMATING METHODS

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

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

Time period	Number of sample areas	Households eligible		Households visited but not eligible
		Interviewed	Not interviewed	
Aug. 1947 to Jan. 1954	68	21,000	500-1,000	3,000-3,500
Feb. 1954 to Apr. 1956	230	21,000	500-1,000	3,000-3,500
May 1956 to Dec. 1959	1,330	33,500	1,500	6,000
Jan. 1960 to Feb. 1963	2,333	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.

data from previous months are incorporated into the estimates through the composite estimation procedure.

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

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

a. First-stage ratio estimation. The purpose of the first-stage ratio adjustment is to reduce the contribution to variance that results from selecting a sample of PSUs rather

than drawing sample households from every PSU in the Nation. This adjustment is made to the CPS weights in two race cells: Black and nonblack; it is applied only to PSUs that are not self-representing and for those States that have a substantial number of black households. The procedure corrects for differences that existed in each State cell at the time of the 1990 census between 1) the race distribution of the population in sample PSUs and 2) the race distribution of all PSUs (both 1 and 2 exclude self-representing PSUs).

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

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

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

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

The independent population controls are prepared by projecting forward the resident population as enumerated on April 1, 1990. The projections are derived by updating demographic census data with information from a variety of other data sources that account for births, deaths, and net migration. Estimated numbers of resident Armed Forces per-

sonnel and institutionalized persons reduce the resident population to the civilian noninstitutional population. Estimates of net census undercount, determined from the Post Enumeration Survey, are added to the population projections. Prior to January 1994, the projections were based on earlier censuses, and there was no correction for census undercount. A summary of the current procedures used to make population projections is given in "Revisions in the Current Population Survey Effective January 1994," appearing in the February 1994 issue of this publication.

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

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

Rounding of estimates

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

Reliability of the estimates

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

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

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

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

The effects of some components of nonsampling error in the CPS data can be examined as a result of the rotation plan used for the sample, since the level of the estimates varies by rotation group. A description of these effects appears in "The Effects of Rotation Group Bias on Estimates From Panel Surveys," by Barbara A. Bailar, *Journal of the American Statistical Association*, Volume 70, No. 349, March 1975.

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

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

sources of errors and describes attempts to measure them in the CPS.

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

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

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

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

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

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

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

Category	Monthly level	Consecutive-month change
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

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

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

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

Tables 1-D and 1-E show standard errors for monthly levels and consecutive monthly changes in levels for general employment status characteristics. The standard errors are

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

Characteristic	Monthly level	Consecutive-month change
Total, 16 years and over	0.11	0.13
Men, 16 years and over .....	.15	.18
Men, 20 years and over .....	.14	.17
Women, 16 years and over .....	.16	.19
Women, 20 years and over .....	.16	.19
Both sexes, 16 to 19 years .....	.74	.97
White workers .....	.11	.13
Black workers .....	.45	.53
Hispanic-origin workers .....	.50	.59
Married men, spouse present .....	.15	.18
Married women, spouse present .....	.18	.22
Women who maintain families .....	.54	.64
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

calculated using linear interpolation based on the size of the monthly estimates.

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

Table 1-H presents factors used to convert standard errors of monthly levels and rates determined from tables 1-B, 1-C, 1-D, and 1-F to standard errors pertaining to quar-

terly and yearly averages, consecutive year-to-year changes of monthly estimates, and changes in quarterly and yearly averages.

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

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

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

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

Illustration. Assume that between 2 consecutive months the estimated number of employed persons changed from 115,600,000 to 116,700,000, an apparent increase of 1,100,000. The approximate standard error on this month-to-month change estimate is based on the average level of the estimate for the 2 months, 116,150,000. Using the

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

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

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

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

table 1-E column titled "Labor force data other than agricultural employment and unemployment, Total," it is necessary to find the standard errors corresponding to the two monthly level entries between which the value 116,150,000 lies. The standard error corresponding to 100,000,000 is given as 274,000, and the standard error corresponding to 120,000,000 is given as 246,000. Use linear interpolation to find the approximate standard error on month-to-month change corresponding to the level 116,150,000; one method of calculation is given below.

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

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

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

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

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

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

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

Illustration. Assume that in a given month there are an estimated 6 million unemployed men in the civilian labor

force ($x = 6,000,000$). Obtain the appropriate a and b parameters from table 1-F ("Unemployment: Total or white"). Use the formula to compute an approximate standard error on the estimate of 6,000,000.

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total ¹	-0.00017682	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.

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

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

Use of table 1-H. Use this table with table 1-B, 1-C, 1-D, or 1-F to calculate approximate standard errors for quarterly or yearly averages, changes in consecutive quarterly or yearly averages, and consecutive year-to-year changes in monthly estimates. Table 1-H gives factors that can be used to convert standard errors for monthly levels into standard errors for other time periods and changes over time. Follow these three basic steps:

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

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

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

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

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

Step 2. Obtain the a and b parameters from table 1-F (“Labor force and not-in-labor-force data other than agricultural employment and unemployment: Black”). Use the

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total or white:		
Most characteristics	-0.000012482	2001.12
High correlation characteristics ¹	-0.00009288	1564.84
Low correlation characteristics ¹	-0.000016162	2550.56
Men:		
Most characteristics	-0.000022599	1921.13
High correlation characteristics	-0.000016814	1500.99
Low correlation characteristics	-0.000058387	2668.56
Women:		
Most characteristics	-0.000021229	1689.99
Low correlation characteristics	-0.000059785	2690.59
Both sexes, 16 to 19 years	-0.00186555	2616.54
Black:		
Most characteristics	-0.000098960	2147.36
Low correlation characteristics	-0.01928030	6513.82
Men:		
Most characteristics	-0.00234427	2280.03
Low correlation characteristics	-0.02881467	5829.60
Women:		
Most characteristics	-0.00156363	1860.78
Low correlation characteristics	-0.02311407	5420.13
Both sexes, 16 to 19 years	-0.01288452	3131.77
Hispanic origin:		
Total	-0.00157201	2774.53
Civilian labor force and not in labor force	-0.00102898	1930.51
Low correlation characteristics	-0.02624078	8620.43
Men, civilian labor force and not in labor force	-0.00248038	2347.42
Men, 16 years and over; 20 years and over; and both sexes, 16 to 19 years	-0.000398909	3615.62
Women, 16 years and over and 20 years and over	-0.000338741	2569.69
Agricultural employment:		
Total or white:		
Total	-0.000395757	3838.04
Men	-0.000672985	3959.25
Women or both sexes, 16 to 19 years .....	.000130289	2367.00
Black:		
Total or women	-0.00122355	2861.72
Men or both sexes, 16 to 19 years	-0.019110769	5876.77
Hispanic origin:		
Total or women .....	.002872129	4640.81
Men or both sexes, 16 to 19 years .....	.002884390	4028.10
Self-employed	-0.000245791	2091.57
Unemployment:²		
Total or white:		
Total, men, women	-0.000093662	4191.84
Both sexes, 16 to 19 years and low correlation characteristics	-0.000071624	5121.75
Black:		
Total, men, women, and both sexes, 16 to 19 years	-0.000414217	4361.16
High correlation characteristics .....	.000048170	3088.91
Hispanic origin:		
Total, men, women	-0.000252897	5054.25
Both sexes, 16 to 19 years and low correlation characteristics	-0.000996431	7037.75

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

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

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

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

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

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

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

Step 1. The average for the second quarter is 11,200,000. The average of the 2 quarters is 11,400,000.

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

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

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

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

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

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

Establishment Data ("B" tables)

COLLECTION

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

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

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

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

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

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

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

graphic stratification and differences in the timing of benchmark adjustments.

CONCEPTS

Industrial classification

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

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

Industry employment

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

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

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

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

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

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

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

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

Industry hours and earnings

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

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

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

by members of the construction trades.

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

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

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

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

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

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

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

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

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

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

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

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

For each sample establishment in SIC 3721 and SIC 3761

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

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

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

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

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

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

ESTIMATING METHODS

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

Benchmarks

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

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

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

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

sample versus the full universe counts derived from the UI.

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

Monthly estimation

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

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

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

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

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

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

Employment, hours, and earnings	Basic estimating cell (industry, region, size or region/size cell)	Aggregate industry level (division and, where stratified, industry)
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 1960s. Prior to the 1983 benchmark, bias adjustments were derived from a simple mean error model, which averaged undercount errors for the previous 3 years to arrive at bias projections for the coming year. The undercount errors were measured as the difference between sample-based estimate results and benchmark levels.

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

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

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

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

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

Table 2-B summarizes bias adjustments for the 1988-98 period. The table displays the average monthly "bias added" and the average monthly "bias required" with the benchmark revisions for each year. Bias added shows the average amount of bias which was added each month over the course of an interbenchmark period. For example, the bias added for 1998 is listed as 150,000; this represents the average of bias adjustments made each month over the period April 1997 through March 1998. Bias required is computed retrospectively, after the March benchmark for a given year is known. Bias required figures are calculated by taking the difference between a March estimate derived purely from the sample (i.e., a series calculated without bias adjustment) and the March benchmark. Dividing this figure by 12 gives the average monthly bias required figure. The bias required is thus defined as the amount of bias adjustment which would have achieved a zero benchmark error. The difference between the total bias required and the total bias added is then, by definition, approximately the benchmark revision amount, for any given year. Also provided in the table for illustration, are the March-to-March changes. As discussed above, the over-the-year changes indicate correlation with the bias added and bias required figures.

THE SAMPLE

Design

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

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

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

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

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

Coverage

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

Reliability

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

Benchmark revision as a measure of survey error.

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

Table 2-B. **March employment benchmarks and bias adjustments for total private industries, March 1988-98**
(In thousands)

Year	Benchmark		Average monthly bias		Over-the-year employment change ⁵
	Employment ¹	Revision ²	Added ³	Required ⁴	
1988	86,180	-310	114	88	3,007
1989	89,015	-93	131	123	2,835
1990	90,546	-261	85	63	1,531
1991	88,790	-583	61	12	-1,756
1992	88,347	-130	33	22	-443
1993	89,790	288	83	107	1,443
1994	92,730	688	115	171	2,940
1995	96,175	511	144	187	3,445
1996	98,158	72	129	135	1,983
1997	101,040	518	130	173	2,882
1998	103,965	85	150	157	2,925

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.

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

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

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

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

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

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

If $S_1 = S_2$, then:

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

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

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

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

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

Approximately one-third of all establishments in the universe are included in the universe program's annual Standard Industrial Classification (SIC) refiling survey. Corrections to individual establishments' SIC and ownership codes are made through this process. The volume of these corrections has often been quite large and had substantial effects on universe employment distributions at the industry levels, but effects on total nonfarm employment have been minimal. In 1999, BLS and its State partners completed a multi-year conversion to a new refiling schedule, which uses a random selection method to target one-third

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

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

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. Hours and earnings estimates are derived from a sample.

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 1998) and historical benchmark revisions

(Numbers in thousands)

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

See footnotes at end of table.

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

(Numbers in thousands)

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

¹ Less than 0.05 percent.² 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.

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

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

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

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

STATISTICS FOR STATES AND AREAS (Tables B-7, B-14, and B-18)

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

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

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

Table 2-G. Errors of preliminary employment estimates

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Total	57,900	0	1.0
Total private	47,800	0	0
Goods-producing	13,900	0	0
Mining	1,800	0	0.2
Metal mining	300	-0.1	.4
Coal mining	700	.2	.6
Oil and gas extraction	1,700	-.1	.4
Nonmetallic minerals, except fuels	300	.1	.2
Construction	8,100	.1	.1
General building contractors	4,100	.1	.3
Heavy construction, except building	3,300	.1	.3
Special trade contractors	5,000	0	.1
Manufacturing	9,500	0	0
Durable goods	6,400	0	0
Lumber and wood products	1,300	.1	.1
Furniture and fixtures	1,200	0	.2
Stone, clay, and glass products	1,200	0	.2
Primary metal industries	1,700	0	.2
Blast furnaces and basic steel products	1,300	0	.3
Fabricated metal products	2,200	0	.1
Industrial machinery and equipment	2,600	.1	.1
Computer and office equipment	1,800	.3	.4
Electronic and other electrical equipment	2,200	0	.1
Electronic components and accessories	1,400	0	.2
Transportation equipment	4,200	0	.2
Motor vehicles and equipment	3,600	.1	.3
Aircraft and parts	1,600	0	.2
Instruments and related products	1,600	0	.1
Miscellaneous manufacturing	900	.1	.2
Nondurable goods	4,800	0	.1
Food and kindred products	2,700	0	.1
Tobacco products	500	.6	1.0
Textile mill products	1,200	0	.2
Apparel and other textile products	2,700	.1	.2
Paper and allied products	1,100	0	.1
Printing and publishing	1,700	0	.1
Chemicals and allied products	1,700	-.1	.1
Petroleum and coal products	1,000	-.1	.4
Rubber and miscellaneous plastics products	1,400	0	.1
Leather and leather products	600	0	.4
Service-producing	54,500	0	0
Transportation and public utilities	9,800	-.1	.1
Transportation	9,400	-.1	.2
Railroad transportation	2,100	-.1	.7
Local and interurban passenger transit	3,700	-.2	.5
Trucking and warehousing	5,800	-.1	.2
Water transportation	1,400	-.3	.7
Transportation by air	6,400	-.1	.4
Pipelines, except natural gas	200	-.2	.7
Transportation services	1,100	-.1	.2
Communications and public utilities	4,100	.1	.1
Communications	3,800	.1	.2
Electric, gas, and sanitary services	1,600	0	.1
Wholesale trade	7,600	.1	.1
Durable goods	4,300	.1	.1
Nondurable goods	4,800	.1	.1

See footnotes at end of table.

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

Industry	Root-mean-square error of monthly level ¹	Mean percent revision	
		Actual	Absolute
Retail trade	31,100	0	0.1
Building materials and garden supplies	2,800	0	.2
General merchandise stores	19,400	.1	.5
Department stores	18,500	.1	.6
Food stores	5,800	0	.1
Automotive dealers and service stations	3,000	-.1	.1
New and used car dealers	1,200	-.1	.1
Apparel and accessory stores	5,700	.1	.4
Furniture and home furnishings stores	3,100	0	.2
Eating and drinking places	9,400	0	.1
Miscellaneous retail establishments	7,900	.1	.2
Finance, insurance, and real estate	6,200	0	.1
Finance	3,800	0	.1
Depository institutions	2,500	-.1	.1
Commercial banks	2,100	-.1	.1
Savings institutions	1,100	-.1	.3
Nondepository institutions	1,500	0	.2
Mortgage bankers and brokers	1,100	.1	.4
Security and commodity brokers	1,100	0	.2
Holding and other investment offices	1,700	0	.5
Insurance	2,700	0	.1
Insurance carriers	2,400	0	.1
Insurance agents, brokers, and service	1,200	.1	.1
Real estate	2,800	0	.2
Services ²	28,700	0	.1
Agricultural services	2,700	.1	.3
Hotels and other lodging places	6,000	.1	.2
Personal services	5,800	-.1	.3
Business services	12,300	.1	.1
Services to buildings	2,500	0	.2
Personnel supply services	10,500	.1	.3
Help supply services	10,300	.1	.3
Computer and data processing services	2,800	0	.2
Auto repair, services, and parking	2,000	0	.1
Miscellaneous repair services	1,000	0	.2
Motion pictures	6,200	.1	.8
Amusement and recreation services	9,400	.2	.5
Health services	5,500	0	0
Offices and clinics of medical doctors	2,500	0	.1
Nursing and personal care facilities	1,600	0	.1
Hospitals	3,300	0	.1
Home health care services	2,000	.1	.3
Legal services	1,400	0	.1
Educational services	12,600	.1	.5
Social services	9,700	0	.3
Child day care services	4,400	.1	.6
Residential care	1,400	-.1	.2
Museums and botanical and zoological gardens	600	0	.5
Membership organizations	3,200	0	.1
Engineering and management services	5,100	0	.1
Engineering and architectural services	2,300	-.1	.2
Management and public relations	3,400	.1	.3
Services, nec	500	.1	.8
Government	19,500	0	.1
Federal	8,300	.1	.2
Federal, except Postal Service	7,600	0	.3
State	11,800	0	.2
Education	9,900	0	.4
Other State government	4,800	0	.1
Local	16,800	0	.1
Education	14,200	0	.1
Other local government	11,300	0	.1

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 1994 through December 1998.

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

FEDERAL-STATE COOPERATIVE PROGRAM

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

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

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

ESTIMATING METHODS

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

Estimates for States

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

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

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

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

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

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

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

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

Estimates for sub-State areas

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

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

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

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

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

Seasonal Adjustment

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

Household data

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

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

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

revised only for that year because of the major redesign and 1990 census-based population controls, adjusted for the estimated undercount, introduced into the Current Population Survey. In 1996, 1990-93 data also were revised to incorporate these 1990 census-based population controls and seasonally adjusted series were revised back to 1990. Subsequent revisions are only carried back to 1994.

All labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, for each of the three major labor force components—agricultural employment, nonagricultural employment, and unemployment—data for four sex-age groups (men and women under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. The seasonally adjusted figure for the labor force is a sum of eight seasonally adjusted civilian employment components and four seasonally adjusted unemployment components. The total for unemployment is the sum of the four unemployment components, and the unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force. Because of the independent seasonal adjustment of various series, components will not necessarily add to totals.

In each January issue (March issue in 1996), *Employment and Earnings* publishes revised seasonally adjusted data for selected labor force series based on the experience through December, new seasonal adjustment factors to be used to calculate the civilian unemployment estimate for the first 6 months of the following year, and a description of the current seasonal adjustment procedure.

Establishment data

Effective in June 1996, with the release of the March 1995 benchmark revisions, BLS began using an updated version of the X-12 ARIMA software developed by the Bureau of the Census to seasonally adjust national establishment-based employment, hours, and earnings series.

The conversion to X-12 ARIMA allows BLS to refine its seasonal adjustment procedures to control for survey interval variations, sometime referred to as the 4- vs. 5-week effect. While the CES survey is referenced to a consistent concept, the pay period including the 12th day of the month, inconsistencies arise because there are variations of 4 or 5 weeks between the week of the 12th in any given pair of months. In highly seasonal months and industries, this variation can be an important determinant of the magnitude of seasonal hires or layoffs that have occurred at the time the survey is taken, thereby complicating seasonal adjustment.

The interval effect adjustment is accomplished through the REGARIMA (regression with auto-correlated errors) option in the X-12 software. This process combines standard regression analysis, which measures correlations between two or more variables, with ARIMA modeling, which describes and predicts the behavior of a data series based on its own past history. In this application, the correlations of interest are those between employment levels in individual calendar months and the length of the survey intervals for those months. The REGARIMA models estimate and remove the variation in employment levels attributable to 11 separate survey intervals, one specified for each month, except March. March is excluded because there are always 4 weeks between the February and March surveys.

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

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

Projected seasonal factors for the establishment-based series are calculated and published twice a year, paralleling the procedure used for the household series. Revisions to historical data (usually the most recent 5 years) are made once a year, coincident with benchmark revisions. All series are seasonally adjusted using multiplicative models in X-12; additive models are not considered. Seasonal adjustment factors are computed and applied at component levels. For employment series, these are generally the 2-digit SIC levels. Seasonally adjusted totals are arithmetic aggregations for employment series and weighted averages of the seasonally adjusted data for hours and earnings series.

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing the average weekly earnings series by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours by production or nonsupervisory workers and dividing by the 1982 annual average base. For total private, total goods-producing, total private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours for the appropriate component industries and dividing by the 1982 annual average base.

Seasonally adjusted data are not published for a number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These

series, however, are used in the aggregation to higher level seasonally adjusted series.

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

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

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

Revised seasonally adjusted national establishment-based series based on the experience through March 1999, new seasonal adjustment factors for March-October 1999, and a description of the current seasonal adjustment procedure appear in the June 1999 issue of *Employment and Earnings*. Revised factors for the September 1999-April 2000 period will appear in the December issue.

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

does not compile a “sum-of-States” employment series, and cautions users that such a series is subject to a relatively large and volatile error structure.

Region and State labor force data

Beginning in 1992, BLS introduced publication of seasonally adjusted labor force data for the census regions and divisions, the 50 States, and the District of Columbia (tables C-1 and C-2). Beginning in 1998, regional aggregations are derived by summing the State estimates. Using the X-11

ARIMA procedure, seasonal adjustment factors are computed and applied independently to the component employment and unemployment levels and then aggregated to regional or State totals. Current seasonal adjustment factors are produced for 6-month periods twice a year. Historical revisions usually are made at the beginning of each calendar year. Because of the separate processing procedures, totals for the Nation, as a whole, differ from the results obtained by aggregating regional or State data.

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.

Topic	Monthly		Quarterly averages		Annual averages
	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	
Absences from work					44-45
Aggregate weekly hours (index)	B-9				
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