

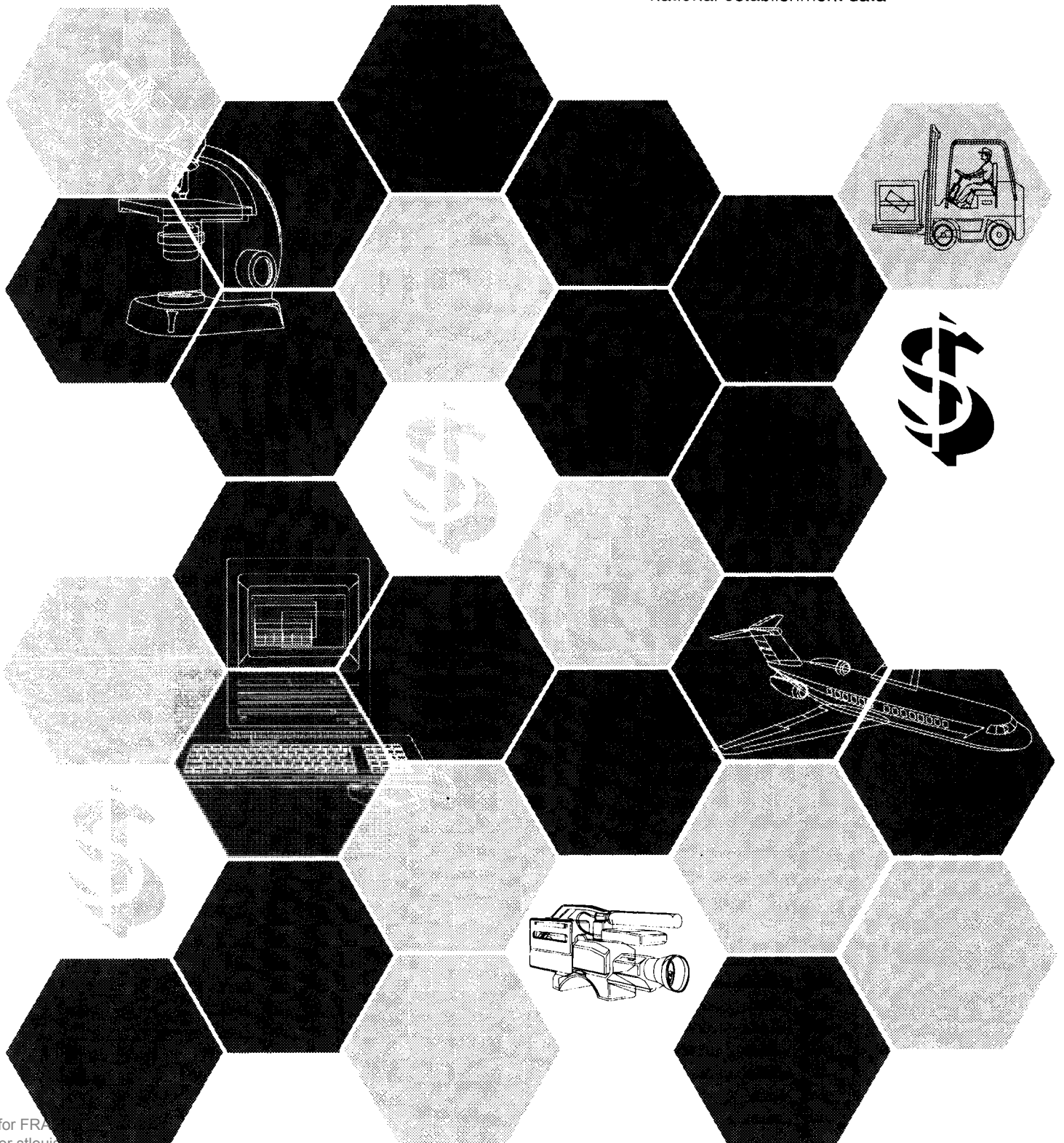


# EMPLOYMENT AND EARNINGS

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

In this issue: Establishment data adjustment to reflect new benchmarks

Revised 1997 annual averages for national establishment data





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

BUREAU OF LABOR STATISTICS  
Katharine G. Abraham, *Commissioner*

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**June 1998**  
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**Calendar of Features**

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

**Household data**

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

**Establishment data**

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

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

Annual revisions	March
Annual averages	May

# Employment and Earnings

Editors: Gloria Peterson Green, Eugene H. Becker

## 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 1997 benchmarks (comprehensive counts of employment) and recomputed seasonal adjustment factors. Unadjusted series have been revised back to April 1996. In addition, the seasonal adjustment process for the hours and earnings series has been refined to correct for distortions associated with the varying length of payroll periods across months.

All seasonally adjusted employment series for all employees and women have been revised back to January 1993. Seasonally adjusted series for employment, hours, indexes of aggregate hours, and earnings of production or nonsupervisory workers have been revised back to January 1989 to incorporate the new methodology.

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 1998. Revised current data appear in the "B" tables. Historical data for all national establishment data series are available on the Internet (<http://stats.bls.gov/ceshome.htm>).

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<sup>2</sup> Tables B-1, B-3 through B-6, B-8, B-9, and B-11.

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# Employment and Unemployment Developments, May 1998

Nonfarm payroll employment rose in May, and the unemployment rate remained at 4.3 percent. Nonfarm payroll employment increased by 296,000 with all the growth occurring in the service-producing sector. The number of manufacturing jobs fell, and construction employment edged down.

## Unemployment

The number of unemployed persons, 5.9 million in May, was little changed over the month, and the unemployment rate held at 4.3 percent. Both measures had fallen sharply in the previous month. Among the major demographic groups, the rates for adult men (3.5 percent), adult women (3.9 percent), teenagers (14.2 percent), whites (3.7 percent), blacks (9.0 percent), and Hispanics (6.8 percent) were essentially unchanged in May. (See tables A-3 and A-4.)

The unemployment rates for persons 25 years and older with less than a high school diploma (6.7 percent), high school graduates with no college experience (3.7 percent), and college graduates (1.6 percent) showed essentially no movement over the month. The jobless rate for persons with some college experience but no bachelor's degree rose by 0.4 percentage point to 3.1 percent in May. (See table A-5.)

## Total employment and the labor force

Total employment was essentially unchanged at 131.5 million. The employment-population ratio—the proportion of the population age 16 and older with jobs—was 64.2 percent. It has remained at or near this record level since January. (See table A-3.)

About 8.1 million persons (not seasonally adjusted) held more than one job in May. These multiple jobholders comprised 6.2 percent of the total employed. (See table A-37.)

The civilian labor force, 137.4 million, was about unchanged in May, after seasonal adjustment. The labor force participation rate held at 67.0 percent. (See table A-3.)

## Persons not in the labor force

About 1.2 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—totaled 268,000 in May, down from 338,000 a year earlier. (See table A-36.)

## Industry payroll employment

Nonfarm payroll employment rose by 296,000 in May, after seasonal adjustment, due to a large increase in the service-producing sector. Employment in the goods-producing sector declined, with widespread losses in manufacturing and a small decline in construction. (See table B-3.)

Manufacturing employment fell by 26,000 in May, after 3 months of little change. The largest decrease was in the apparel industry, which continued its long-term decline with a loss of 9,000 jobs. Most other industries experienced small employment losses over the month. Employment in both electronic components and industrial machinery declined for the second month in a row; these industries had added jobs steadily during 1997. In contrast, the furniture and fixtures industry continued its recent growth, adding 3,000 jobs in May, and employment in chemicals and allied products also rose by 3,000.

Construction employment edged down by 9,000 in May, after seasonal adjustment. This follows strong growth (204,000) from October to April.

Within the service-producing sector, the services industry added 151,000 jobs in May. This growth followed 3 months of gains that were well below the 1997 average of 142,000. Business services accounted for half of the May increase, with help supply services and computer services adding 26,000 and 17,000 jobs, respectively. This was the first gain for the help supply industry since February. Engineering and management services continued to grow, adding 25,000 jobs, with a sharp gain (16,000) in management and public relations. Employment in health services increased by 17,000 in May, after weak growth in the prior month.

Employment in retail trade grew by 89,000 in May, the second large increase in a row. Gains were widespread throughout the industry, with sizable growth occurring within eating and drinking places (33,000), department stores (28,000), and miscellaneous retail establishments (18,000). In contrast, wholesale trade gained 9,000 jobs, compared with the average increase of 15,000 in the prior 12 months.

The 3,000 employment gain in durable goods distribution was the smallest in nearly 5 years.

Transportation added 17,000 jobs in May, following a much smaller increase (3,000) in April. Employment in local and interurban passenger transit grew by 7,000, offsetting a decline of similar magnitude in the previous month. Communications added 6,000 jobs in May, reflecting continuing growth in the telephone industry.

Finance, insurance, and real estate added 20,000 jobs over the month, mostly in finance. Within finance, mortgage brokerages had the largest job gain (5,000) and has grown by 13 percent over the past 12 months. Security brokerages also continued steady growth, adding 3,000 jobs over the month. Insurance employment rose by 6,000 in May. Real estate employment edged down over the month, after adding 31,000 jobs from December through April.

Government payrolls rose by 41,000 in May, mainly due to an increase in local education (28,000) that was well above the industry's average for the past year. State government also had stronger-than-usual growth in May, spread about equally between the education and noneducation components. Declines continued in Federal Government employment.

### Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls increased by 0.2 hour in May to 34.7 hours, seasonally adjusted. The manufacturing workweek rose by 0.3 hour to 41.7 hours, but is a half hour below its peak level reached last December. Factory overtime edged up by 0.1 hour in May to 4.6 hours; however, overtime hours have trended down in recent months. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls increased by 0.7 percent to 144.9 (1982=100), seasonally adjusted. The manufacturing index rose by 0.5 percent to 109.1. (See table B-9.)

### Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls increased 4 cents in May to \$12.73, seasonally adjusted. Average weekly earnings increased by 0.9 percent to \$441.73. Over the year, average hourly and weekly earnings both rose by 4.3 percent. (See table B-11.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
June	July 2	September	October 2
July	August 7	October	November 6
August	September 4	November	December 5



# BLS Establishment Estimates Revised to Incorporate March 1997 Benchmarks

Sharon Strifas

With the release of data for May 1998, the Bureau of Labor Statistics 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 1997 benchmarks has revised all unadjusted data for the period subsequent to the March 1996 benchmark, that is, April 1996 forward. In accordance with usual practice, all seasonally adjusted all employee and women workers series have been revised from January 1993 forward. Seasonally adjusted series for employment, hours, indexes of aggregate hours, and earnings of production or nonsupervisory workers have been revised from January 1989 forward, in order to incorporate refinements in the seasonal adjustment process. As explained later, these refinements mitigate a calendar effect in the series related to the processing of sample reports for employers with semi-monthly and monthly payroll periods.

In addition, the procedure for seasonally adjusting the local government employment series has been modified to

produce seasonal factors that better reflect current industry seasonal patterns.

Moreover, all employee data are now published for several State and local government industry series. (See table B-12.) For State government, the series include construction; transportation and public utilities; services; social services; and services, except hospitals, education, and social services. For local government, the series include services; social services; and services, except hospitals, education, and social services. Historical data for all series begin in 1972.

## Summary of the benchmark revisions

The March 1997 benchmark level for total nonfarm employment is 120,903,000; this figure is 431,000 above the previously published sample-based estimate, constituting an adjustment of 0.4 percent. This year's overall revision was well within the range of the zero to  $\pm 0.7$  percent benchmark revisions experienced in recent years (table 1).

Table 2 summarizes the March 1997 revisions (not seasonally adjusted) by industry. This year's benchmark revision came from an upward revision in the goods-producing sector of 196,000, or 0.8 percent, coupled with an upward revision in the service-producing sector of 235,000, or 0.2 percent. The upward adjustment within the goods-producing sector came mostly from manufacturing which was adjusted by 122,000, or 0.7 percent. The service-producing sector revision was led for the most part by a large upward revision in the services industry, 338,000 (1.0 percent). This was offset by smaller downward revisions in transportation and public utilities, wholesale trade, retail trade, and government.

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Sharon Strifas is an economist in the Division of Monthly Industry Employment Statistics, Bureau of Labor Statistics.

**Table 1. Percent differences between nonfarm employment benchmarks and estimates by industry division, March 1990-97<sup>1</sup>**

Industry	1990	1991	1992	1993	1994	1995	1996	1997
Total .....	-0.2	-0.6	-0.1	0.2	0.7	0.5	( <sup>2</sup> )	0.4
Mining .....	-3.3	-6	-8	2.2	-7	.2	.5	3.1
Construction .....	-8	-2	-2.6	1.6	1.9	-1.6	.2	1.1
Manufacturing .....	.3	.1	-8	1.1	1.3	.3	1.0	.7
Transportation and public utilities .....	-3	-1.0	-6	1.0	2.2	-7	-1.2	-3
Wholesale trade .....	-2.6	-2	.7	-2.6	1.2	1.2	-1.7	-1
Retail trade .....	-3	-3	.9	-2	1.3	1.6	.5	-1
Finance, insurance, and real estate .....	-1.4	-4	-1.5	1.5	2.1	-1.8	-1.1	.5
Services .....	.3	-1.6	.2	.1	-8	.9	.1	1.0
Government .....	.2	-3	.4	-1	.4	.2	-1	-4

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

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

Within manufacturing, nearly all the component series contributed to the overall upward revision. Both durable and nondurable goods had moderate upward adjustments of 73,000 (0.7 percent) and 49,000 (0.6 percent), respectively. Within durable goods, the largest revisions were in electronic and other electrical equipment (30,000), transportation equipment (13,600), and stone, clay, and glass products (10,200). Among the nondurable goods industries, apparel and other textile products had an upward revision of 12,100 and printing and publishing, 8,600.

Within the service-producing sector, there were small downward revisions in the two trade divisions; retail trade was revised downward by 27,000 (-0.1 percent), and wholesale trade was adjusted downward by 4,000 (-0.1 percent). The services division had a large upward revision of 338,000 (1.0 percent), with business services accounting for most of this large upward adjustment (218,000). Other upward adjustments within services included membership organizations (52,300), amusement and recreation services (33,400), and educational services (31,400).

Among the other major divisions, transportation and public utilities, and government had downward revisions of 22,000 (-0.3 percent), and 87,000 (-0.4 percent), respectively. Finance, insurance, and real estate had an upward revision of 37,000 (0.5 percent).

### Revisions in the post-benchmark period

New estimates have been computed for each month since March 1997, based on the new benchmark levels. On a seasonally adjusted basis, the revision in total nonfarm employment stands at 308,000 in February 1998, reflecting the adjustment to new benchmark levels and the recomputation of bias and seasonal adjustment factors. Table 3 details the extent of the revisions in both level and change, through a comparison of seasonally adjusted monthly data as previously published and as revised.

While the total nonfarm (not seasonally adjusted) March 1997 benchmark adjustment was 431,000, by February 1998 the adjustment was 406,000. Average monthly bias adjustment levels for April 1997 to March 1998 were unchanged at an average of 150,000 per month.

*Special revisions in the help supply services industry.* The substantial upward revision in business services was due mostly to a large revision in the help supply services industry (130,800). Most of the adjustment is attributable to response error discovered in sample reports from the industry. To remove the incorrectly reported data and preserve the existing seasonal patterns, instead of the "wedge back" procedure (routinely used to adjust data for the months between the most recent March benchmark and the previous year's benchmark), the estimates for this industry were replaced with UI universe counts from April 1996-February 1997. The post-benchmark estimates for April 1997 through June 1997 also were replaced with UI universe counts. The combined effect on June 1997 of replacing the second quarter 1997 estimates with

UI universe counts, and the March benchmark adjustment is an increase of about 250,000 to the previously published level. The estimates for this industry were recalculated from June 1997 forward using standard methodology, that is, by applying the previously derived sample-based changes which were absent the incorrect reports.

### 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 generally 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 recordkeeping 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 fairly 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.

*Update on the CES sample redesign.* In June 1995, BLS announced plans for a comprehensive redesign of the sample of establishments for its monthly payroll survey. The Bureau's plans called for a 2-year research effort to develop the new sample design, followed by a 2-year production test of survey methods, procedures and systems, with a phased-in implementation of the new design following thereafter. As scheduled, the research phase for the CES sample redesign was completed in June 1997, and the Bureau launched a production test of the new sample design at that time. While the production test was originally scheduled to conclude in June 1999, it has been extended for 1 year. BLS is postponing the initial implementation of the redesign until June 2000 when it expects to introduce the first estimates from the new design

with the 1999 benchmark revisions, for the wholesale trade industry. The remaining industry divisions are scheduled to be phased in with subsequent years' benchmark releases over a 3- to 4-year period.

The 1-year postponement in the implementation of the redesign results from difficulties experienced during the first year of the production test, as well as issues that arose in the ongoing CES program. The goal of the first year of the production test was to evaluate the feasibility of the CES redesign methods, systems, and procedures in a live production environment. The new probability-based methodology is much more complex than the current methodology and requires more complex operating procedures and computer systems to support it, particularly in the areas of sample updating, new respondent enrollment, and monthly data collection. The live testing during the past year identified a number of areas where the research methodologies needed to be strengthened and the operating procedures and software systems needed to be expanded in their functionality. Initial complications were experienced in establishing the regular quarterly sample updates required by the new design and in achieving high response rates from the respondents targeted as new sample members for the redesign.

Progress on software development for the new computer systems for the redesign was slowed significantly due to a redirection of systems priorities towards ensuring that the existing CES processing system is Year 2000 compliant. In addition, there were some delays in methods and procedures development over this past year, due to the considerable time and effort needed to correct a calendar-related effect that was discovered to be significantly distorting month-to-month movements in current CES hours and earnings series.

*Background on the new CES sample design.* The new design is a State-based, stratified simple random sample, where the strata, or sub-populations, are specified by 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 in such a way as to minimize the overall variance, or sampling error, on the primary estimate of interest. For the CES redesign, the number of sample units is fixed to the approximate size of the existing CES survey; this is the sample size supportable by current program resources. 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, to minimizing the statistical error around the statewide total nonfarm employment estimates. The current sample size can support the publication of considerable industry and geographic detail within a State and provide 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 quarterly basis, as each new quarter of UI-based universe data becomes available. This quarterly frame maintenance will keep the sample up-to-date by adding new firm

births and deleting business deaths and will provide the basis for a regular program of sample rotation. The basic sampling unit is a UI account number. UI numbers are unique within a State and generally cover all the individual worksites within a firm. Defining the UI account as the basic sampling unit provides for the implicit capture of worksite births and deaths within multi-establishment firms. During monthly data collection, sample respondents can be queried about the opening and closing of worksites and this information incorporated into the estimation process.

In addition to the quarterly updates, which facilitate sampling for new business births, the new design also calls for an annual update process which 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 and size class designations and the merging of the quarterly supplemental birth samples into the overall frame. A high degree of overlap at each annual update is expected because all UI accounts on the sample frame are ordered through a technique known as permanent random numbers (PRN's). This technique assigns random numbers to all UI accounts on the universe frame at the time they first appear and then sequentially orders the frame by the PRN's. Working down the ordered PRN list then fulfills the allocation for each sampling cell 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, it is expected that between 90 to 95 percent of UI accounts drawn for the sample for any given year will be drawn again the following year. This then minimizes cancellation of existing sample units and the need to solicit replacement units. This basic schematic will be modified somewhat when BLS implements a sample rotation, after full implementation of the initial probability sample.

*Estimation formulas.* As an integral part of the new sample design, improved estimators also have been developed and tested for the CES survey. Estimates will be generated using a stratified expansion estimator that uses weights developed from the population sampling fractions to expand the sample employment to an estimate of universe employment. Benchmark factors, or post-stratification weights, that take advantage of information available from the most recent UI population count, will augment this basic technique. These benchmark factors rely on a strong correlation between current month and benchmark month employment across business establishments to provide for variance reduction.

*Business birth and death estimation.* Regular quarterly 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 deaths as indicated above. The most timely UI universe files available, however, will always be a minimum of 6 to 9 months out of date, with respect to the current reference month for estimation. The CES survey thus can not rely on quarterly 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.

Over the past year, BLS concluded research on a sample-based approach to measuring employment from new business births, but found it to be untenable in the actual CES production environment. This approach was based on the development of new business birth frames each month. BLS collected files of new UI account registrations from each of its State partners in the State employment security agencies (SESA's) to develop the frames, drew and screened a birth sample, and then began immediate monthly collection of data. The major drawback to this method was that the files of new UI accounts available from the SESA's each month were not current enough to form an accurate birth sampling frame. The research revealed that firms first registering for UI had often been in existence for several months prior to their registration; many new businesses do not register until after the end of the quarter in which they first have UI-covered employment. Additionally it was found to be very costly to create frames and select and enroll monthly birth samples, and results from birth estimate simulations indicated a high degree of variability associated with the estimates. All of these factors led BLS to abandon the approach of a monthly sample-based estimate for new business births.

*Model-based approach.* BLS now is concentrating on model-based approaches to measuring employment from business births and deaths each month. Early exploratory research indicated that while both the business birth and the business death components of employment change were relatively large, the net contribution of births and deaths was quite small and relatively stable. BLS is testing two model-based approaches to estimating the net birth/death component of total employment change each month.

The first modeling approach relies primarily on using death units to impute for the missing birth units. The primary feature of this approach is the imputation of an employment level for all sample units which do not report in a given month, including those found to be out of business. Research to date shows this approach works reasonably well in most industry divisions. In the retail trade and services divisions, however, where birth employment change has been consistently outpacing death employment change, a supplemental net birth/death model is required in addition to the imputation approach, to properly account for all of the birth employment. An operational advantage of this method is that it does not require distinction between sample nonresponse for business death versus other reasons; employment for all nonresponding sample members is imputed in the same manner.

The second modeling approach directly estimates a net birth/death employment component from historical observations, plus a separate variable for the observed movement in the sampled part of the population. This method assumes CES will capture and use information on business deaths, on a

1-month lagged basis, through the data collection process. It thus makes use of information on out-of-business units in monthly estimation.

Both of these techniques have the limitations common to all time series models, the inability to react quickly to sudden changes in trend and economic turning points. Both rely on historical patterns and relationships, and additionally incorporate information from the current movements observed in the reported sample to help estimate the birth and death employment contribution to total nonfarm employment.

*Current methodological research.* To date, the research work to develop new methodologies for sample design and estimation has been completed, as briefly described above. In addition, substantial research has been completed and further work is in progress in the areas of new respondent enrollment protocols and business birth/death estimation methods.

BLS is in the earlier stages of methods research for benchmarking and seasonal adjustment. The major issue affecting benchmarking is achieving consistency between national and State estimates. Currently, the national and State estimates utilize different methodologies to adjust data for the inter-benchmark periods between the March benchmark reference points, and utilize somewhat different procedures for establishing benchmark levels for the small portion of the population not covered by the UI universe-based benchmark. Developing a consistent methodology is critical to achieving the goal of consistent and approximately additive national and State series.

The major issue for seasonal adjustment centers around the potential emergence of new seasonal patterns that differ significantly from those evidenced by the current CES sample-based estimates. As the CES program transitions to a more representative sample of the UI universe, some of the differing seasonal patterns now evident between the sample-based estimates and the universe counts are expected to be reduced or eliminated. Because the seasonal adjustment process requires a consistent historical series to produce accurate seasonal adjustment factors, BLS is examining the use of universe counts or some hybrid of sample and universe based series for the seasonal adjustment process.

*Computer systems and operating procedures.* To date, prototype systems and procedures have been developed for sample frame construction and sample selection including quarterly and annual updating. For the new design and estimators to work effectively requires a continual, precise accounting of each UI account on the sample frame and each of its associated worksites. This accounting is updated each quarter with UI birth and death information, and annually when the survey sample is redrawn. This is a complex process because there are large numbers of administrative, as well as economic changes that occur in the UI-based sample frames. The new design also requires precise updating of the status of sampled UI accounts each month. Procedures also were developed to track and handle separately overlap UI accounts,

i.e., those included in both the existing CES and the new probability design.

Revised systems and operating procedures also have been developed for the solicitation of new sample respondents and their initial enrollment into the sample. The transition from a quota-based to a probability-based sample requires that high response rates be achieved for the exact sample as selected. Under the former quota sampling method, if solicitation response rates were low, solicitation of substitute units continued until the target sample size for a given sampling cell was achieved. Because of the very different nature of probability sampling, significantly improved solicitation protocols and procedures needed to be developed, including refusal conversion efforts targeted to reluctant respondents, and personal visit initiation for the largest firms selected for the sample.

Monthly data collection systems and procedures required significant enhancement to provide for the immediate capture of information on the openings and closings of worksites within multi-establishment UI accounts to fulfill the sample design specifications. All of the CES data collection modes—telephone, electronic filing, and mail—required reprogramming.

Additionally, an improved set of microdata screening procedures, as well as estimate review procedures are in the early test stages. The new procedures will provide for more consistency of approach across national, State, and area estimation, and rely less on individual analyst's decision-making processes than current procedures.

*Next stages in the production test.* Wholesale trade was selected as the first major industry division for probability design phase-in and the production test thus far has concentrated on collecting data for that industry. The enrollment of the entire wholesale trade sample is expected to be complete by the fall of 1998. The enrollment of wholesale nondurables, the first of two major industry groupings within the division, is nearing completion, and BLS expects to begin making a full set of parallel estimates for this component over the summer. Manufacturing will be the next major industry division targeted for probability design conversion; enrollment for that division is scheduled to begin by the end of this year.

*Sample redesign implementation plans.* The Bureau intends to proceed with a phased-in implementation of the new CES sample design beginning in June 2000, coincident with the publication of March 1999 national benchmark revisions. The wholesale trade industry series for 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 will be scheduled to coincide with the

publication of benchmark revisions, in order not to disrupt published over-the-month changes for current month estimates with a continually changing sample composition. BLS expects to complete conversion of all industries approximately 4 years from the start of implementation.

Much of the research work for the CES sample redesign completed to date by BLS and its expert consultants from Westat Inc., the National Opinion Research Center at the University of Chicago, and the University of Michigan Survey Research Center, is summarized in a set of eight technical papers presented at the 1997 Summer Joint Statistical Meetings sponsored by the American Statistical Association. The papers have been published in the meeting proceedings and also are available upon request from BLS.

### **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 employees 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 1997 benchmark. At the total private level, average hourly earnings were revised upward by 1 cent, and average weekly hours were revised upward by 0.01 hour.

### **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 linearly 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.<sup>1</sup> 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

<sup>1</sup> Employees of the Central Intelligence Agency, the National Security Agency, and those of the Department of Defense paid from nonappropriated funds are not included in the OPM summaries of these series and are therefore not counted.

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 3 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 employ-

**Text table A. March employment benchmarks and bias adjustments for total private industries, March 1987-97**  
(In thousands)

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

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

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

<sup>3</sup> The average amount of bias adjustment each month over the course of an inter-benchmark period, i.e., from April of the prior year through March of the given year.

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

<sup>5</sup> March-to-March changes in the benchmark employment level.

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

ment from 1987 through 1997. The table also shows the average monthly "bias added" and "bias required." Bias added is the average amount of bias which is added each month over the course of an inter-benchmark period. For example, the bias added for 1997 was 130,000; this represents the average bias adjustment made each month over the period April 1996 through March 1997. Bias required is computed retrospectively, after the March benchmark for a given year is determined. Total bias required is the difference between a March estimate derived purely from the CES sample (i.e., 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-

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 (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.

*Noneconomic code changes.* Historically, a major source of benchmark revision at the major industry division levels and below are noneconomic code changes. These are introduced into the universe data 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 nonfarm employment have been minimal. BLS and its State partners are near the end of 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 as a result of large benchmark revisions and corresponding distortions in over-the-year employment trend measurement for specific industries.

*Effects for the 1997 benchmark.* The services division was refiled over the past year for the States which have not yet converted to the random selection method described above. The results of this refiling affected the measurement of benchmark revisions for 1997 most significantly in manufacturing, and finance, insurance, and real estate; about half of the revision in each industry was due to refiling. The revision in construction was also exaggerated by the noneconomic code changes. Services, transportation and public utilities, wholesale trade, and retail trade had the opposite effect; that is, had it not been for the refiling, the upward revisions would have been larger. 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.

### Seasonal adjustment procedure

BLS uses X-12 ARIMA software developed by the Bureau of Census to seasonally adjust 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.



**Text table B. Effect of noneconomic code changes on benchmark employment levels by industry, March 1997**

(Numbers in thousands)

Industry	Overall benchmark revision	Net employment shift due to code changes <sup>1</sup>	Benchmark revision, less effect of code changes	Percent benchmark revision	
				Total	Less effect of code change
Total nonfarm .....	431	2	429	0.4	0.4
Mining .....	18	1	17	3.1	2.9
Construction .....	56	14	42	1.1	.8
Manufacturing .....	122	74	48	.7	.3
Transportation and public utilities .....	-22	22	-44	-.3	-.7
Wholesale trade .....	-4	-30	26	-.1	-.1
Retail trade .....	-27	3	-30	-.1	-.1
Finance, insurance, and real estate .....	37	19	18	.5	.3
Services .....	338	-96	434	1.0	1.2
Government .....	-87	-5	-82	-.4	-.4

<sup>1</sup> Shift is measured and based on December 1995 employment 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 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 1998, are published in tables 6 through 11. Additionally, these tables include revised seasonal factors for March and April 1998, 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 end 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, 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; data prior to 1988 are 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 has been improved with this benchmark update. The CES seasonal adjustment procedure uses forecasted seasonal factors for 6 months. In the past, these seasonal factors have been derived using the standard seasonal adjustment procedure of a logarithmic transformation of the data as input for the multiplicative de-



composition of the series. However, in recent years these forecasted seasonal factors have failed to adequately reflect the changing behavior of the industry in the summer months. In order to improve the factors, they 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.

*New refinements in hours and earnings seasonal adjustment.*

Over this past year, BLS has conducted research into potential distortions in published over-the-month changes in the average weekly hours and average hourly earnings series of the CES program. There was a significant correlation between over-the-month changes in both the hours and earnings series and the number of weekdays in a month, resulting in noneconomic fluctuations in these two series. Both series showed 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 was recognizable as attributable to this calendar effect. The calendar effect was evident from 1989 forward in most service-producing industries and at the total private level. The effect was much stronger for the hours than for the earnings series. Further detailed research traced the calendar effect 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 an artificial peak in the hours series in shorter months that are reversed in longer months. The processing error occurs when respondents with salaried workers do 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 only for both fields, resulting in peaks in the earnings series in short months and reversals in long months. Currently, the CES processing system can accommodate only one conversion factor per reporter.

Several research methods were pursued to confirm the scope and sources of the problem, and identify possible solutions. REGARIMA (regression with auto-correlated errors) modeling was used to identify, measure, and remove the length-of-pay period effect for the publication level seasonally adjusted hours and earnings series. REGARIMA modeling combines standard regression analysis, which measures correlations among two or more variables, with ARIMA modeling, which describes and predicts the behavior of a data series based on its own past history. The length-of-pay

period variable proved significant for explaining movements in hours in all the service-producing major industry divisions. For average hourly earnings, the length-of-pay period variable was significant for three major industry divisions: Wholesale trade, finance, insurance, and real estate, and services. Application of REGARIMA models yielded seasonally adjusted series that compare quite favorably in terms of smoothness with the currently published series.

Second, to confirm that semi-monthly and monthly reports are the source of calendar-related fluctuations, estimates were simulated excluding semi-monthly and monthly reports. The simulated hours and earnings series produced without any semi-monthly or monthly reports appeared to be free of the calendar-related spikes found in the published series.

In addition, a sample of 100 semi-monthly and monthly respondents were re-contacted to inquire about their hours and earnings reporting practices to confirm that the source of the problem stemmed from reporting practices for salaried workers. Respondents reported using actual hours figures over 90 percent of the time to compile data for their hourly paid workers. By contrast, actual hours were available only 12 percent of the time for salaried workers. When actual hours figures were not available, they were estimated. When asked if the number of hours they reported would vary with the number of weekdays in a month, about 80 percent of respondents said yes for the hourly paid workers; they answered yes only 20 percent of the time for the salaried workers. As for payroll data, about 50 percent of respondents have actual payroll data as compared with the 12 percent who have actual hours data. Nearly 90 percent of respondents had actual payroll data for hourly paid workers. In addition, most of those surveyed had both hourly paid and salaried workers combined in their report. Seventy-seven percent of the respondents with both types of payrolls said they could provide separate payroll figures for hourly and salaried workers.

To correct this calendar-related problem in the short run, a REGARIMA model-based adjustment to hours and earnings series was implemented with this benchmark release. All division level hours series in the service-producing sector have been adjusted from January 1989 forward. The division level earnings 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. BLS research will continue in these areas, as part of the comprehensive concepts review and sample redesign efforts now underway. Further research and review will include a reexamination of the viability of collecting hours figures for salaried workers when hard information may not be available from a large percentage of respondents. It will also include the feasibility of collecting payroll information separately for hourly paid and salaried workers in the CES

survey, and modifications to CES processing systems to apply appropriate length-of-pay conversion factors in all cases.

The series to which the 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 models show 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.

#### **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 from <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 1997 benchmark figures for these industries.

**Table 2. Differences between nonfarm employment benchmarks and estimates by industry, March 1997**

(Numbers in thousands)

Industry	Benchmark	Estimate	Difference	
			Amount	Percent
Total .....	120,903	120,472	431	0.4
Total private .....	101,040	100,522	518	.5
Goods-producing .....	24,359	24,163	196	.8
Mining .....	580	562	18	3.1
Metal mining .....	53	54	-1	-1.9
Coal mining .....	96	92	4	4.2
Oil and gas extraction .....	327	313	14	4.3
Nonmetallic minerals, except fuels .....	103	103	0	0
Construction .....	5,260	5,204	56	1.1
General building contractors .....	1,237	1,227	10	.8
Heavy construction, except building .....	709	685	24	3.4
Special trade contractors .....	3,314	3,292	22	.7
Manufacturing .....	18,519	18,397	122	.7
Durable goods .....	10,894	10,821	73	.7
Lumber and wood products .....	777	781	-4	-.5
Furniture and fixtures .....	509	507	2	.4
Stone, clay, and glass products .....	540	530	10	1.9
Primary metal industries .....	709	709	0	0
Blast furnaces and basic steel products .....	235	236	-1	-.4
Fabricated metal products .....	1,464	1,461	3	.2
Industrial machinery and equipment .....	2,151	2,142	9	.4
Computer and office equipment .....	368	372	-4	-1.1
Electronic and other electrical equipment .....	1,672	1,642	30	1.8
Electronic components and accessories .....	636	614	22	3.5
Transportation equipment .....	1,826	1,812	14	.8
Motor vehicles and equipment .....	983	969	14	1.4
Aircraft and parts .....	485	490	-5	-1.0
Instruments and related products .....	859	853	6	.7
Miscellaneous manufacturing .....	388	385	3	.8
Nondurable goods .....	7,625	7,576	49	.6
Food and kindred products .....	1,651	1,653	-2	-.1
Tobacco products .....	41	41	0	0
Textile mill products .....	619	611	8	1.3
Apparel and other textile products .....	835	823	12	1.4
Paper and allied products .....	682	673	9	1.3
Printing and publishing .....	1,543	1,534	9	.6
Chemicals and allied products .....	1,032	1,026	6	.6
Petroleum and coal products .....	137	137	0	0
Rubber and miscellaneous plastics products .....	992	986	6	.6
Leather and leather products .....	93	93	0	0
Service-producing .....	96,544	96,309	235	.2
Transportation and public utilities .....	6,331	6,353	-22	-.3
Transportation .....	4,062	4,123	-61	-1.5
Railroad transportation .....	223	224	-1	-.4
Local and interurban passenger transit .....	460	467	-7	-1.5
Trucking and warehousing .....	1,627	1,640	-13	-.8
Water transportation .....	173	170	3	1.7
Transportation by air .....	1,130	1,176	-46	-4.1
Pipelines, except natural gas .....	14	14	0	0
Transportation services .....	434	432	2	.5
Communications and public utilities .....	2,269	2,230	39	1.7
Communications .....	1,401	1,359	42	3.0
Electric, gas, and sanitary services .....	868	871	-3	-.3
Wholesale trade .....	6,567	6,571	-4	-.1
Durable goods .....	3,882	3,877	5	.1
Nondurable goods .....	2,685	2,694	-9	-.3

**Table 2. Differences between nonfarm employment benchmarks and estimates by industry, March 1997—Continued**  
(Numbers in thousands)

Industry	Benchmark	Estimate	Difference	
			Amount	Percent
Retail trade .....	21,467	21,494	-27	-.1
Building materials and garden supplies .....	894	888	6	.7
General merchandise stores .....	2,598	2,674	-76	-2.9
Department stores .....	2,287	2,352	-65	-2.8
Food stores .....	3,432	3,430	2	.1
Automotive dealers and service stations .....	2,284	2,293	-9	-.4
New and used car dealers .....	1,046	1,052	-6	-.6
Apparel and accessory stores .....	1,064	1,071	-7	-.7
Furniture and home furnishings stores .....	983	1,015	-32	-3.3
Eating and drinking places .....	7,504	7,386	118	1.6
Miscellaneous retail establishments .....	2,709	2,736	-27	-1.0
Finance, insurance, and real estate .....	6,988	6,951	37	.5
Finance .....	3,368	3,359	9	.3
Depository institutions .....	2,015	2,030	-15	-.7
Commercial banks .....	1,452	1,476	-24	-1.7
Savings institutions .....	262	254	8	3.1
Nondepository institutions .....	555	535	20	3.6
Mortgage bankers and brokers .....	247	241	6	2.4
Security and commodity brokers .....	581	577	4	.7
Holding and other investment offices .....	217	216	1	.5
Insurance .....	2,242	2,215	27	1.2
Insurance carriers .....	1,521	1,498	23	1.5
Insurance agents, brokers, and service .....	721	717	4	.6
Real estate .....	1,378	1,377	1	.1
Services <sup>1</sup> .....	35,328	34,990	338	1.0
Agricultural services .....	588	580	8	1.4
Hotels and other lodging places .....	1,673	1,677	-4	-.2
Personal services .....	1,244	1,257	-13	-1.0
Business services .....	7,677	7,459	218	2.8
Services to buildings .....	922	891	31	3.4
Personnel supply services .....	2,794	2,676	118	4.2
Help supply services .....	2,480	2,350	130	5.2
Computer and data processing services .....	1,362	1,298	64	4.7
Auto repair, services, and parking .....	1,113	1,125	-12	-1.1
Miscellaneous repair services .....	369	378	-9	-2.4
Motion pictures .....	540	533	7	1.3
Amusement and recreation services .....	1,406	1,373	33	2.3
Health services .....	9,633	9,604	29	.3
Offices and clinics of medical doctors .....	1,715	1,716	-1	-.1
Nursing and personal care facilities .....	1,744	1,749	-5	-.3
Hospitals .....	3,845	3,851	-6	-.2
Home health care services .....	706	677	29	4.1
Legal services .....	935	943	-8	-.9
Educational services .....	2,209	2,178	31	1.4
Social services .....	2,490	2,459	31	1.2
Child day care services .....	581	596	-15	-2.6
Residential care .....	704	688	16	2.3
Museums and botanical and zoological gardens .....	84	81	3	3.6
Membership organizations .....	2,231	2,178	53	2.4
Engineering and management services .....	2,943	2,950	-7	-.2
Engineering and architectural services .....	849	858	-9	-1.1
Management and public relations .....	910	922	-12	-1.3
Services, nec .....	48	48	0	0
Government .....	19,863	19,950	-87	-.4
Federal .....	2,700	2,700	0	0
Federal, except Postal Service .....	1,850	1,850	0	0
State .....	4,692	4,748	-56	-1.2
Education .....	2,028	2,069	-41	-2.0
Other State government .....	2,664	2,679	-15	-.6
Local .....	12,471	12,502	-31	-.2
Education .....	7,239	7,238	1	0
Other local government .....	5,231	5,264	-33	-.6

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

**Table 3. Differences in seasonally adjusted levels and over-the-month changes, total nonfarm employment, January 1997-February 1998**

(In thousands)

Year and date	Levels			Over-the-month changes		
	As previously published	As revised	Difference	As previously published	As revised	Difference
1997:						
January .....	120,909	121,146	237	250	245	-5
February .....	121,162	121,457	295	253	311	58
March .....	121,344	121,779	435	182	322	140
April .....	121,671	122,092	421	327	313	-14
May .....	121,834	122,325	491	163	233	70
June .....	122,056	122,534	478	222	209	-13
July .....	122,440	122,811	371	384	277	-104
August .....	122,492	122,894	402	52	83	31
September .....	122,792	123,280	488	300	386	86
October .....	123,083	123,568	485	291	288	-3
November .....	123,512	123,944	432	429	376	-53
December .....	123,866	124,289	423	354	345	-9
1998:						
January .....	124,265	124,640	375	399	351	-48
February .....	124,524	124,832	308	259	192	-67

**Table 4. Effect of March 1997 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 .....	34.6	34.6	.0	\$12.17	\$12.18	\$0.01
Goods-producing .....	41.2	41.2	0	13.72	13.73	.01
Mining .....	45.7	45.7	0	15.98	16.01	.03
Construction .....	38.4	38.4	0	15.67	15.71	.04
Manufacturing .....	42.0	42.0	0	13.08	13.07	-.01
Durable goods .....	42.9	42.9	0	13.64	13.63	-.01
Lumber and wood products .....	40.7	40.7	0	10.60	10.61	.01
Furniture and fixtures .....	39.9	39.9	0	10.43	10.43	0
Stone, clay, and glass products .....	42.5	42.5	0	13.03	13.02	-.01
Primary metal industries .....	44.8	44.8	0	15.16	15.16	0
Fabricated metal products .....	42.5	42.5	0	12.78	12.74	-.04
Industrial machinery and equipment .....	43.8	43.8	0	13.93	13.95	.02
Electronic and other electrical equipment .....	44.2	42.2	0	12.49	12.49	0
Transportation equipment .....	45.0	45.0	0	17.51	17.48	-.03
Instruments and related products .....	42.2	42.2	0	13.47	13.42	-.05
Miscellaneous manufacturing .....	40.3	40.3	0	10.56	10.55	-.01
Nondurable goods .....	40.7	40.7	0	12.25	12.25	0
Food and kindred products .....	40.7	40.7	0	11.40	11.40	0
Tobacco products .....	39.1	39.1	0	19.40	19.46	.06
Textile mill products .....	41.2	41.3	.1	9.92	9.93	.01
Apparel and other textile products .....	37.5	37.5	0	8.24	8.23	-.01
Paper and allied products .....	43.5	43.5	0	14.93	14.92	-.01
Printing and publishing .....	38.7	38.7	0	13.01	13.01	0
Chemicals and allied products .....	43.2	43.2	0	16.42	16.42	0
Petroleum and coal products .....	43.0	43.0	0	20.51	20.48	-.03
Rubber and miscellaneous plastics products .....	41.8	41.8	0	11.50	11.50	0
Leather and leather products .....	38.5	38.5	0	8.86	8.89	.03
Service-producing .....	32.9	32.9	0	11.66	11.67	.01
Transportation and public utilities .....	39.5	39.6	.1	14.70	14.74	.04
Wholesale trade .....	38.5	38.5	0	13.28	13.29	.01
Retail trade .....	28.7	28.7	0	8.27	8.26	-.01
Finance, insurance, and real estate .....	36.5	36.5	0	13.20	13.22	.02
Services .....	32.6	32.6	0	12.24	12.24	0

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b> .....		108,606	107,507	107,300	108,935	112,141	115,849	117,952	120,903
<b>Total Private</b> .....		90,038	88,790	88,347	89,790	92,730	96,175	98,158	101,040
<b>Goods-producing</b> .....		24,636	23,390	22,724	22,754	23,181	23,784	23,884	24,359
<b>Mining</b> .....		691	695	634	603	592	576	566	580
Lead and zinc ores .....	103	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.4
Gold and silver ores .....	104	21.0	19.7	19.6	18.7	17.1	17.7	19.0	19.1
Other metal ores and mining services .....	106,8,9	10.0	9.0	7.3	5.8	5.9	6.2	6.8	7.5
Bituminous coal and lignite-surface .....	1221	56.7	53.3	50.7	47.1	45.8	43.4	40.2	40.0
Bituminous coal-underground .....	1222	79.8	75.9	68.3	63.3	59.4	56.2	50.6	50.4
Anthracite mining and coal mining services .....	123,4	9.4	9.1	8.5	7.4	7.2	7.4	6.7	6.0
Natural gas liquids .....	132	4.5	4.7	6.0	5.0	5.0	5.2	5.0	4.9
Clay, ceramic, and refractory minerals .....	145	8.5	7.4	7.5	7.5	7.4	7.7	7.5	7.5
Dimension stone and other nonmetallic minerals .....	141,8,9	10.6	10.2	9.1	9.3	9.3	10.0	10.4	10.9
<b>Construction</b> .....		4,846	4,356	4,117	4,177	4,497	4,748	4,952	5,260
Bridge, tunnel, and elevated highway .....	1622	45.4	41.4	42.5	42.4	39.6	43.6	43.1	44.8
Water, sewer, and utility lines .....	1623	206.9	186.9	180.0	181.6	190.8	196.8	203.7	219.3
Heavy construction, nec .....	1629	249.8	248.1	243.4	228.3	239.0	246.8	253.9	255.4
Masonry and other stonework .....	1741	154.6	127.3	120.3	118.1	127.6	137.5	140.9	152.2
Plastering, drywall, and insulation .....	1742	261.7	218.9	194.1	194.4	210.9	222.1	230.0	248.9
Terrazzo, tile, marble, and mosaic work .....	1743	39.0	33.8	29.8	30.1	31.3	33.4	34.5	37.2
Carpentry work .....	1751	151.7	118.7	119.4	127.3	144.9	156.2	166.4	182.9
Floor laying and floor work, nec .....	1752	48.8	46.2	43.8	46.6	49.9	53.1	54.5	58.8
Concrete work .....	177	195.9	161.6	161.2	166.0	185.9	208.1	221.4	239.8
Water well drilling .....	178	19.0	18.8	18.8	18.5	19.6	20.6	21.4	21.6
Miscellaneous special trade contractors .....	179	500.0	469.6	436.9	442.3	482.2	511.9	531.7	568.1
Structural steel erection .....	1791	74.0	67.8	58.6	56.4	59.7	62.7	68.2	72.9
Glass and glazing work .....	1793	39.9	36.1	32.0	32.0	33.1	35.4	37.0	39.7
Excavation work .....	1794	108.4	94.1	90.2	93.0	101.5	111.0	116.4	126.0
Wrecking, demolition, and other special trade contractors .....	1795,6,9	277.7	271.6	256.1	260.9	287.9	302.8	310.1	329.5
<b>Manufacturing</b> .....		19,099	18,339	17,973	17,974	18,092	18,460	18,366	18,519
<b>Durable goods</b> .....		11,185	10,580	10,247	10,192	10,307	10,644	10,689	10,894
Lumber and wood products:									
Special product sawmills, nec .....	2429	3.1	2.7	2.1	2.1	1.9	1.6	1.8	1.9
Structural wood members, nec .....	2439	27.3	20.6	22.3	25.2	29.8	32.6	34.5	36.8
Nailed wood boxes and shook .....	2441	4.4	4.2	3.8	3.9	3.8	3.8	3.9	4.0
Wood pallets and skids .....	2448	32.3	32.0	31.7	33.6	37.3	40.2	40.6	41.8
Wood containers, nec .....	2449	8.2	7.8	7.4	7.2	7.4	7.1	7.6	7.3
Prefabricated wood buildings .....	2452	18.4	16.0	14.7	15.5	16.1	18.1	19.0	20.8
Wood preserving .....	2491	12.6	11.9	11.1	11.1	11.5	11.5	11.6	11.8
Reconstituted wood products .....	2493	18.0	16.5	17.4	17.6	18.9	19.9	20.6	20.8
Wood products, nec .....	2499	55.7	52.3	51.8	54.4	56.6	55.8	54.7	56.5
Furniture and fixtures:									
Wood television and radio cabinets, and household furniture, nec .....	2517,9	13.6	12.0	13.5	13.0	12.5	11.6	11.5	12.4
Wood office furniture .....	2521	34.8	30.3	27.2	26.5	28.0	28.3	29.0	28.9
Office furniture, except wood .....	2522	34.3	32.1	33.6	32.9	33.1	34.3	32.8	33.4
Wood partitions and fixtures .....	2541	42.4	40.3	39.7	39.7	42.3	47.8	47.5	49.8
Partitions and fixtures, except wood .....	2542	35.4	33.0	32.3	33.6	34.0	37.6	36.0	36.0
Drapery hardware and blinds and shades .....	2591	22.3	19.7	19.9	18.7	20.0	20.8	20.7	21.6
Furniture and fixtures, nec .....	2599	15.0	14.0	14.6	15.5	16.0	16.3	16.9	17.1
Stone, clay, and glass products:									
Brick and structural clay tile .....	3251	15.8	13.9	13.3	14.0	13.7	14.3	13.5	13.5
Clay refractories .....	3255	7.0	6.4	5.8	5.8	5.8	7.2	7.6	7.4
Ceramic tile and structural clay products, nec .....	3253,9	13.3	11.7	10.8	11.9	12.1	13.0	11.4	13.3
Vitreous plumbing fixtures .....	3261	9.1	8.6	8.9	9.4	10.0	10.6	9.9	10.1
Vitreous and semivitreous table and kitchenware .....	3262,3	5.5	4.9	5.4	5.0	5.1	5.4	5.6	5.9
Porcelain electrical supplies .....	3264	11.1	10.7	10.1	9.8	10.0	10.7	10.8	10.1
Pottery products, nec .....	3269	13.5	12.5	13.2	14.5	14.9	14.8	14.3	13.5
Lime .....	3274	5.3	5.0	5.0	4.9	4.8	5.1	5.1	5.0
Gypsum products .....	3275	13.5	12.0	11.6	11.8	11.9	12.2	12.6	12.7
Cut stone and stone products .....	328	15.0	14.0	13.6	13.1	13.6	13.1	13.8	14.7
Minerals, ground or treated .....	3295	13.0	13.4	12.7	12.2	12.3	12.3	12.8	12.5
Nonclay refractories .....	3297	8.1	8.1	8.9	8.7	8.6	8.3	8.4	9.0
Nonmetallic mineral products, nec .....	3299	8.9	8.6	7.4	8.3	9.3	9.9	9.6	10.3

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Durable goods—Continued</b>									
Primary metal industries:									
Electrometallurgical products .....	3313	6.1	6.0	6.3	6.0	5.7	5.2	6.1	5.7
Steel wire and related products .....	3315	18.4	16.9	16.4	17.1	18.2	19.3	20.8	21.0
Cold finishing of steel shapes .....	3316	17.6	16.9	15.6	15.7	16.1	17.0	17.2	16.9
Steel investment foundries .....	3324	15.8	16.2	15.6	14.4	14.3	15.7	16.2	17.3
Primary copper .....	3331	5.5	5.3	5.7	5.4	5.8	5.9	4.4	4.5
Primary nonferrous metals, nec .....	3339	14.5	14.5	12.9	12.4	11.9	11.8	12.1	12.3
Secondary nonferrous metals .....	334	18.8	18.5	15.5	14.5	15.4	15.8	16.0	16.0
Aluminum extruded products .....	3354	30.0	28.0	26.8	27.6	27.6	31.4	31.3	32.4
Aluminum and nonferrous rolling and drawing, nec .....	3355,6	18.2	18.1	19.0	18.5	18.1	18.4	19.2	19.2
Aluminum die-castings .....	3363	27.6	26.2	28.9	30.4	31.7	36.6	37.6	38.4
Nonferrous die-castings, except aluminum .....	3364	13.0	11.5	10.5	10.9	11.1	11.1	10.6	11.1
Copper foundries .....	3366	10.7	10.0	9.3	9.0	9.2	9.5	9.5	9.3
Nonferrous foundries, nec .....	3369	9.0	8.2	7.0	6.1	6.2	6.5	6.8	7.0
Miscellaneous primary metal products .....	339	27.2	26.2	25.9	26.5	27.5	28.5	29.2	30.1
Metal heat treating .....	3398	15.3	15.2	14.9	15.3	16.0	17.5	18.0	18.6
Primary metal products, nec .....	3399	11.9	11.0	11.0	11.2	11.5	11.0	11.2	11.5
Fabricated metal products:									
Metal barrels, drums, and pails .....	3412	9.5	9.4	8.8	8.2	7.9	7.7	7.7	7.4
Cutlery .....	3421	12.1	11.8	11.6	11.4	11.9	11.8	12.4	12.6
Metal sanitary ware .....	3431	13.5	12.6	13.0	13.2	13.9	14.6	13.5	14.0
Prefabricated metal buildings .....	3448	25.5	22.4	20.9	21.6	23.5	25.7	26.3	28.0
Miscellaneous metal work .....	3449	14.7	13.2	12.3	12.5	12.4	12.4	13.0	13.1
Nonferrous forgings, crowns, and closures .....	3463,6	12.1	11.1	11.9	11.2	11.1	11.6	12.0	12.9
Small arms, small arms ammunition, and other ordnance and accessories, nec .....	3482,4,9	30.3	26.6	25.0	24.1	23.2	25.0	23.5	21.0
Industrial valves .....	3491	27.8	26.8	26.6	25.2	25.2	26.9	26.4	26.9
Fluid power valves and hose fittings .....	3492	28.5	27.6	27.5	27.2	27.7	31.8	33.1	33.7
Steel springs, except wire .....	3493	6.0	5.6	4.8	4.8	5.1	5.6	5.5	5.6
Wire springs .....	3495	13.1	12.1	13.0	13.5	14.1	15.3	14.5	14.7
Fabricated pipe and fittings .....	3498	24.1	24.5	25.2	26.7	26.8	27.4	28.9	29.8
Metal foil and leaf, and fabricated metal products, nec .....	3497,9	55.5	54.5	50.2	55.5	58.0	62.6	65.1	67.0
Industrial machinery and equipment:									
Lawn and garden equipment .....	3524	30.6	26.7	27.1	27.2	28.4	30.4	29.7	30.5
Elevators and moving stairways .....	3534	11.5	10.3	9.3	9.6	9.6	9.8	9.8	9.7
Hoists, cranes, and monorails .....	3536	8.4	9.0	7.7	7.3	7.2	7.8	8.6	8.7
Industrial patterns .....	3543	9.0	8.7	8.2	8.1	8.4	8.8	8.3	8.0
Welding apparatus .....	3548	18.7	18.4	18.5	18.0	18.9	20.7	21.5	21.4
Rolling mill and metalworking machinery, nec .....	3547,9	12.7	12.4	12.7	13.1	13.3	15.2	16.3	17.1
Woodworking machinery .....	3553	9.8	8.4	8.0	8.7	9.9	11.3	11.1	10.6
Paper industries machinery .....	3554	19.7	18.9	19.6	19.3	19.5	21.2	22.4	22.3
Special industry machinery, nec .....	3559	62.3	60.8	60.0	60.4	62.4	71.8	82.1	82.0
Packaging machinery .....	3565	21.8	21.5	19.0	19.8	20.1	22.1	22.7	23.0
Industrial furnaces and ovens .....	3567	18.5	17.2	15.9	15.6	16.5	17.7	18.7	19.1
General industrial machinery, nec .....	3569	39.8	39.6	40.0	40.8	42.8	44.3	46.2	48.4
Computer storage devices .....	3572	35.0	38.2	35.6	38.0	37.6	40.3	43.2	43.1
Computer peripheral equipment, nec .....	3577	58.0	58.7	55.3	53.0	57.9	60.0	71.0	72.8
Automatic vending machines .....	3581	7.5	7.3	6.8	7.1	7.5	8.1	7.8	8.0
Commercial laundry equipment .....	3582	5.8	5.7	5.3	5.5	5.8	6.2	6.1	5.9
Measuring and dispensing pumps, and service industry machinery, nec .....	3586,9	43.2	41.6	41.9	42.9	45.8	48.6	47.9	47.5
Fluid power cylinders and actuators .....	3593	19.4	18.4	16.4	16.3	17.1	18.5	18.8	18.6
Fluid power pumps and motors .....	3594	29.3	28.7	27.4	26.3	25.4	26.2	26.8	27.0
Electronic and other electrical equipment:									
Carbon and graphite products .....	3624	10.9	10.2	9.4	9.3	9.5	10.0	10.2	10.1
Electrical industrial apparatus, nec .....	3629	9.1	9.3	9.6	9.5	9.2	9.7	10.1	10.0
Household cooking equipment .....	3631	20.6	18.0	17.6	21.1	21.8	23.3	22.6	23.1
Household vacuum cleaners and appliances, nec .....	3635,9	25.0	21.6	25.6	25.6	25.5	23.8	24.6	24.1
Commercial lighting fixtures .....	3646	22.9	22.2	22.0	22.8	23.6	25.8	24.7	25.0
Vehicular lighting equipment .....	3647	18.5	17.5	17.5	17.6	16.8	18.0	17.8	18.5
Lighting equipment, nec .....	3648	10.6	10.0	9.4	10.0	10.6	12.6	12.6	13.3
Prerecorded records and tapes .....	3652	21.0	23.2	21.6	23.4	25.1	26.9	28.2	26.9
Radio and television communications equipment .....	3663	112.9	111.0	106.0	102.9	107.8	122.2	126.5	125.7

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Durable goods—Continued</b>									
Electronic and other electrical equipment—Continued									
Communications equipment, nec .....	3669	24.1	24.4	23.2	24.8	25.0	28.0	29.2	29.3
Printed circuit boards .....	3672	101.7	99.2	92.2	99.8	100.6	114.8	126.7	132.5
Electronic capacitors .....	3675	22.0	20.2	18.4	19.6	19.4	20.9	21.3	20.1
Electronic resistors .....	3676	12.6	11.5	11.0	10.1	10.4	10.6	10.8	10.3
Electronic coils and transformers .....	3677	19.1	17.9	17.1	17.4	16.8	18.9	18.9	18.6
Electronic connectors .....	3678	15.5	15.9	16.2	15.6	15.9	16.9	18.4	19.7
Primary batteries, dry and wet .....	3692	10.7	10.8	12.1	11.3	11.5	11.9	12.0	12.0
Magnetic and optical recording media, and electrical equipment and supplies, nec .....	3695,9	56.3	55.9	49.7	49.2	49.9	47.0	45.9	45.5
Transportation equipment:									
Motor homes .....	3716	17.8	14.2	17.2	18.5	19.6	20.6	18.2	19.3
Motorcycles, bicycles, and parts .....	375	13.2	14.7	15.8	17.1	18.0	20.9	22.3	21.4
Space propulsion units and parts, and space vehicle equipment, nec .....	3764,9	54.0	49.5	42.4	36.4	32.5	29.7	28.0	28.0
Tanks and tank components .....	3795	15.1	14.3	12.8	11.1	9.7	8.7	7.3	6.5
Transportation equipment, nec .....	3799	14.0	12.6	14.9	16.3	19.3	22.2	23.9	25.3
Instruments and related products:									
Laboratory apparatus and furniture .....	3821	8.8	8.8	9.6	10.2	9.9	9.6	10.2	10.1
Fluid meters and counting devices .....	3824	12.1	12.0	12.4	12.4	12.5	11.9	11.9	11.6
Analytical instruments .....	3826	30.5	28.6	28.5	28.0	27.3	27.7	30.0	31.1
Optical instruments and lenses .....	3827	20.2	19.4	18.8	17.4	18.4	18.1	20.1	21.9
Measuring and controlling devices, nec .....	3829	45.3	45.7	42.6	40.4	38.3	40.6	41.2	41.4
Dental equipment and supplies .....	3843	13.0	13.0	12.8	13.8	14.2	13.8	14.5	14.2
X-ray apparatus and tubes .....	3844	10.4	11.4	10.7	10.8	10.8	12.7	12.7	12.9
Electromedical equipment .....	3845	28.4	31.8	37.6	38.4	41.7	41.9	42.7	44.3
Miscellaneous manufacturing industries:									
Silverware and plated ware .....	3914	6.7	6.5	6.3	6.2	6.1	6.5	6.1	6.0
Jewelers' materials and lapidary work .....	3915	7.1	6.6	6.8	7.0	7.0	6.3	6.2	6.3
Pens and mechanical pencils .....	3951	9.2	8.7	8.0	8.7	8.3	9.0	9.0	9.0
Lead pencils and art goods .....	3952	7.3	7.2	7.7	7.8	7.5	7.5	7.2	7.4
Marking devices, carbon paper, and inked ribbons .....	3953,5	17.7	17.3	17.2	16.8	17.1	15.0	15.0	14.8
Fasteners, buttons, needles, and pins .....	3965	12.1	11.8	11.9	11.4	11.3	11.0	10.4	10.1
Brooms and brushes .....	3991	13.5	13.2	13.3	14.1	14.1	14.6	14.2	14.2
Burial caskets .....	3995	9.0	9.0	8.9	8.9	9.2	9.1	8.8	8.7
Hard surface floor coverings and manufacturing industries, nec ..	3996,9	58.9	57.7	54.6	57.7	61.1	62.6	63.1	66.6
<b>Nondurable goods</b> .....		<b>7,914</b>	<b>7,759</b>	<b>7,726</b>	<b>7,782</b>	<b>7,785</b>	<b>7,816</b>	<b>7,677</b>	<b>7,625</b>
Food and kindred products:									
Creamery butter .....	2021	2.1	2.0	1.9	2.1	2.1	2.0	1.9	1.8
Dry, condensed, and evaporated products .....	2023	15.7	17.1	17.3	17.6	17.7	16.6	16.4	16.2
Ice cream and frozen desserts .....	2024	21.1	21.5	21.4	23.0	22.9	23.3	22.4	21.9
Dehydrated fruits, vegetables, and soups .....	2034	17.9	17.1	15.0	16.0	16.4	15.8	15.5	16.5
Pickles, sauces, and salad dressings .....	2035	19.3	20.1	21.1	20.9	21.3	21.4	22.4	20.8
Frozen specialties, nec .....	2038	42.5	44.5	48.8	49.7	50.0	52.6	51.4	51.3
Cereal breakfast foods .....	2043	19.9	18.9	18.4	19.8	19.8	19.5	19.7	18.3
Rice milling .....	2044	5.6	5.5	4.8	4.6	4.9	5.0	5.0	5.0
Prepared flour mixes and doughs .....	2045	9.4	11.0	11.5	13.0	13.9	13.3	13.2	13.5
Wet corn milling .....	2046	9.1	9.6	10.0	9.7	9.5	9.8	10.1	10.1
Dog and cat food .....	2047	16.0	16.3	16.9	18.0	18.3	18.1	19.1	19.4
Chocolate and cocoa products and chewing gum .....	2066,7	20.2	21.4	19.3	19.3	19.0	18.4	17.4	17.4
Salted and roasted nuts and seeds .....	2068	6.9	7.7	9.5	9.0	8.1	8.4	8.2	8.0
Cottonseed, soybean, and vegetable oil mills .....	2074,5,6	13.0	13.2	13.3	12.9	13.1	13.2	12.9	13.4
Animal and marine fats and oils .....	2077	8.2	7.6	7.5	7.6	7.7	7.7	8.0	8.3
Edible fats and oils, nec .....	2079	10.1	9.9	10.2	11.2	10.7	9.7	9.5	9.8
Wines, brandy, and brandy spirits .....	2084	15.1	16.0	16.1	17.0	16.8	17.4	18.8	20.8
Distilled and blended liquors .....	2085	8.5	9.2	8.5	8.7	8.3	8.2	7.8	7.7
Malt and flavoring extracts and syrups, nec .....	2083,7	18.0	17.5	17.5	17.9	19.0	20.2	21.3	21.7
Canned and cured fish and seafoods .....	2091	9.4	9.4	8.5	8.1	8.6	7.5	7.2	7.6
Fresh or frozen packaged fish .....	2092	42.2	43.3	45.4	47.3	45.0	43.9	45.9	45.9
Roasted coffee .....	2095	11.9	11.6	11.6	10.4	10.7	9.7	9.8	10.4
Potato chips and similar snacks .....	2096	34.5	35.3	35.5	35.2	35.0	35.0	33.2	32.5
Manufactured ice .....	2097	5.2	5.5	5.4	5.6	5.7	5.7	5.9	5.9
Macaroni and spaghetti .....	2098	8.6	8.5	8.2	8.9	8.8	8.5	8.5	8.1
Food preparations, nec .....	2099	61.6	62.7	62.1	65.7	68.7	66.1	72.1	71.2
Tobacco products:									
Cigars .....	212	2.8	2.7	2.4	2.4	2.2	2.2	2.7	3.1
Other tobacco products .....	213,4	10.1	9.7	10.5	10.1	9.6	9.2	9.9	9.7

See footnotes at end of table.



**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Nondurable goods—Continued</b>									
Textile mill products:									
Lace and warp knit fabric mills, and knitting mills, nec .....	2258,9	20.4	21.0	21.3	21.1	21.7	21.1	21.2	21.5
Finishing plants, nec .....	2269	13.0	12.4	13.8	14.1	14.6	14.1	14.0	15.0
Thread mills .....	2284	7.3	6.9	6.7	6.7	6.9	7.4	6.6	6.7
Coated fabrics, not rubberized .....	2295	9.7	8.8	8.9	8.9	9.0	9.0	9.3	9.7
Tire cord and fabrics .....	2296	6.3	6.0	6.4	6.7	6.5	6.5	6.5	6.3
Cordage and twine .....	2298	7.3	7.5	7.0	7.0	6.7	7.6	7.0	7.0
Nonwoven fabrics and other textile goods, nec .....	2297,9	28.4	28.1	28.6	28.0	29.7	30.1	28.8	30.7
Apparel and other textile products:									
Men's and boys' underwear and nightwear .....	2322	25.0	24.8	24.4	27.0	25.2	25.5	19.1	15.9
Men's and boys' neckwear .....	2323	6.9	6.3	7.3	6.9	6.9	6.6	5.7	5.4
Men's and boys' clothing, nec .....	2329	54.8	49.4	52.9	52.3	50.4	50.5	44.6	43.2
Hats, caps, and millinery .....	235	16.2	15.6	18.2	19.9	20.6	20.3	19.2	17.6
Girls and children's outerwear, nec .....	2369	34.0	29.1	29.4	28.9	25.2	25.8	22.4	18.0
Fur goods .....	237	1.7	1.2	.9	.9	.8	.8	.8	.8
Fabric dress and work gloves .....	2381	6.9	6.0	5.5	5.3	5.4	5.0	4.8	4.9
Robes and dressing gowns .....	2384	6.0	4.9	4.8	3.9	3.5	3.0	2.4	1.9
Waterproof outerwear .....	2385	5.7	6.6	6.2	6.3	5.1	4.1	4.3	4.5
Leather and sheep-lined clothing .....	2386	3.8	2.7	2.5	2.8	2.9	2.5	2.1	2.0
Apparel belts .....	2387	9.8	8.4	8.1	8.2	7.0	6.3	5.8	5.5
Apparel and accessories, nec .....	2389	12.1	14.3	14.4	16.7	17.1	16.2	16.0	15.6
Textile bags .....	2393	9.2	9.6	10.0	10.1	10.9	11.9	11.6	11.6
Canvas and related products .....	2394	17.7	16.5	16.7	17.6	19.4	19.9	19.0	19.1
Pleating and stitching .....	2395	14.5	14.9	15.8	16.4	16.1	16.8	18.4	17.9
Other fabricated textile products .....	2397,9	36.6	32.4	31.7	32.7	34.7	35.7	34.6	34.0
Paper and allied products:									
Pulp mills .....	261	13.8	14.3	13.9	13.5	12.6	12.5	12.6	12.4
Setup paperboard boxes .....	2652	8.2	8.1	7.3	7.2	7.4	7.5	7.4	7.0
Fiber cans, drums, and similar products .....	2655	16.6	15.9	15.0	15.1	15.4	15.0	14.8	14.8
Paper, coated and laminated, packaging .....	2671	21.4	21.2	21.4	21.4	21.3	22.7	21.6	22.0
Bags: uncoated paper and multiwall .....	2674	21.0	19.1	19.6	18.9	18.8	18.5	18.1	18.2
Die-cut paper and board .....	2675	17.6	16.8	18.0	18.8	19.4	20.1	19.8	20.0
Sanitary paper products .....	2676	31.9	30.8	32.4	33.0	32.9	30.0	29.6	30.6
Stationery and converted paper products, nec .....	2678,9	43.5	42.2	41.1	41.8	41.4	42.1	41.3	40.9
Printing and publishing:									
Commercial printing, gravure .....	2754	17.4	18.1	18.9	19.5	20.7	20.4	20.3	20.0
Greeting cards .....	277	24.0	27.0	26.0	26.0	27.2	26.4	26.4	27.3
Blankbooks and looseleaf binders .....	2782	44.4	43.0	41.3	41.3	40.3	39.3	38.1	37.8
Bookbinding and related work .....	2789	27.5	26.9	27.0	27.2	28.3	29.9	28.2	27.9
Typesetting .....	2791	32.6	29.8	25.2	23.7	23.3	21.2	19.8	18.4
Platemaking services .....	2796	31.2	32.0	33.4	33.2	33.1	34.0	32.5	31.9
Chemicals and allied products:									
Alkalies and chlorine .....	2812	12.3	12.6	12.9	12.8	12.6	10.0	10.5	10.5
Industrial gases .....	2813	23.7	23.6	24.6	24.2	23.4	23.0	23.5	23.9
Inorganic pigments .....	2816	10.4	10.1	10.6	10.9	11.2	11.8	11.7	11.6
Synthetic rubber .....	2822	15.4	15.3	16.0	16.5	16.1	16.0	16.5	17.0
Cellulosic synthetic fibers .....	2823	14.4	13.1	11.4	11.7	17.6	17.8	17.5	17.0
Medicinals and botanicals .....	2833	17.9	18.3	18.7	19.7	19.8	20.6	21.5	23.3
Diagnostic and other biological products .....	2835,6	21.1	22.3	26.5	28.4	29.5	28.8	30.4	32.1
Gum and wood chemicals .....	2861	4.3	4.8	3.5	2.9	2.8	2.7	2.8	2.5
Nitrogenous fertilizers .....	2873	10.1	10.6	10.6	9.2	8.9	8.7	8.7	8.9
Phosphatic fertilizers .....	2874	10.8	10.3	12.1	10.4	9.4	9.9	10.0	10.0
Fertilizers, mixing only .....	2875	10.3	10.4	9.9	9.8	9.9	10.1	10.0	10.0
Agricultural chemicals, nec .....	2879	25.4	25.3	27.0	27.4	26.8	25.6	24.2	24.1
Adhesives and sealants .....	2891	24.5	23.6	23.0	23.5	22.8	24.5	24.7	25.6
Explosives .....	2892	15.0	14.4	12.9	10.1	9.0	8.2	7.8	7.6
Printing ink .....	2893	15.2	16.2	15.7	16.3	16.3	15.9	16.3	16.4
Other chemical preparations .....	2895,9	44.2	44.5	41.9	42.5	44.8	43.5	44.3	43.7
Petroleum and coal products:									
Asphalt paving mixtures and blocks .....	2951	11.0	10.9	11.1	10.9	11.3	11.7	11.6	12.2
Asphalt felts and coatings .....	2952	13.4	12.7	12.6	13.0	13.1	12.9	13.0	13.8
Miscellaneous petroleum and coal products .....	299	12.5	12.3	12.3	12.5	12.6	14.0	14.3	14.1

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Nondurable goods—Continued</b>									
Rubber and miscellaneous plastics products:									
Gaskets, packing and sealing devices .....	3053	34.7	33.9	35.1	36.0	37.6	40.5	39.8	40.4
Mechanical rubber goods .....	3061	46.9	44.2	44.6	45.9	47.9	50.5	50.4	51.3
Fabricated rubber products, nec .....	3069	57.7	55.6	56.6	57.0	58.7	61.2	62.2	60.8
Unsupported plastics film and sheet .....	3081	54.4	55.2	55.9	56.3	57.5	61.6	62.3	62.8
Unsupported plastics profile shapes .....	3082	27.9	25.4	23.7	23.9	25.4	23.6	23.8	24.2
Laminated plastics plate and sheet .....	3083	20.0	20.2	20.2	21.6	21.9	22.6	23.4	24.1
Plastics pipe .....	3084	16.1	14.7	13.9	14.3	15.4	16.7	16.3	18.3
Plastics bottles .....	3085	30.4	29.7	30.2	31.1	31.6	33.1	32.2	32.4
Plastics foam products .....	3086	52.0	48.4	49.5	50.7	53.4	55.1	55.6	58.4
Custom compound purchased resins .....	3087	25.3	23.3	22.3	23.4	24.6	26.1	26.2	25.6
Plastics plumbing fixtures and plastic products, nec .....	3088,9	399.3	385.4	397.6	422.9	445.6	475.0	468.1	480.9
Leather and leather products:									
Footwear cut stock .....	313	6.3	5.4	4.8	4.2	3.4	2.9	2.0	2.1
House slippers .....	3142	4.2	3.7	3.2	2.8	3.1	3.4	2.6	2.3
Footwear, except rubber, nec .....	3149	10.1	9.6	8.1	7.6	7.2	6.8	5.7	5.6
Leather gloves and mittens .....	315	2.5	2.5	2.5	2.6	2.6	2.8	2.5	2.6
Women's handbags and purses .....	3171	6.0	4.9	4.7	5.1	5.1	4.7	4.3	3.5
Personal leather goods, nec .....	3172	9.1	8.4	7.4	7.2	7.0	6.9	6.7	6.4
Leather goods, nec .....	319	10.2	9.6	9.7	9.9	10.7	12.0	12.7	12.5
<b>Service-producing .....</b>		<b>83,970</b>	<b>84,117</b>	<b>84,576</b>	<b>86,181</b>	<b>88,960</b>	<b>92,065</b>	<b>94,068</b>	<b>96,544</b>
<b>Transportation and public utilities .....</b>		<b>5,713</b>	<b>5,707</b>	<b>5,655</b>	<b>5,720</b>	<b>5,890</b>	<b>6,066</b>	<b>6,159</b>	<b>6,331</b>
Transportation:									
Other railroads and switching and terminal services .....	4013	38.8	32.2	32.1	31.9	26.9	26.2	25.6	24.3
Bus charter service, and bus terminal and service facilities .....	414,7	27.2	27.4	27.7	28.6	29.3	30.1	31.9	33.0
Local trucking, without storage .....	4212	(1)	(1)	(1)	407.7	432.8	442.4	450.1	460.4
Trucking, except local .....	4213	(1)	(1)	(1)	731.3	764.8	804.7	819.4	829.4
Local trucking, with storage .....	4214	(1)	(1)	(1)	64.3	67.4	70.1	71.4	72.3
Courier services, except by air .....	4215	(1)	(1)	(1)	64.4	83.7	96.3	102.5	107.0
General warehousing and storage .....	4225	64.5	66.5	70.2	72.3	79.5	84.0	88.7	93.2
Warehousing and storage, nec .....	4221,2,6	49.3	49.5	49.2	50.9	53.2	55.5	57.4	59.3
Trucking terminal facilities .....	423	4.0	3.9	3.5	4.1	4.2	4.1	4.8	5.2
Deep sea and Great Lakes freight transportation .....	441,2,3	31.6	32.4	34.2	30.3	29.3	28.2	26.3	25.6
Water transportation of passengers .....	448	14.3	15.0	15.5	15.0	16.5	16.3	16.7	17.7
Marine cargo handling .....	4491	53.8	57.6	56.8	53.3	55.2	59.3	55.0	57.8
Marinas .....	4493	17.2	17.2	16.8	17.1	17.8	18.2	19.2	20.2
Towing, tugboat, and water transportation services, nec .....	4492,9	35.9	36.8	33.5	33.0	35.2	35.5	35.5	38.2
Air courier services .....	4513	308.8	315.3	324.6	341.7	361.4	411.0	446.8	460.5
Air transportation, nonscheduled .....	452	26.0	27.5	28.5	30.2	34.0	40.1	42.1	43.1
Tour operators .....	4725	22.8	21.6	23.6	24.9	27.4	29.5	31.5	33.4
Passenger transport arrangement, nec .....	4729	14.9	13.9	12.1	12.0	11.5	11.7	11.7	12.3
Rental of railroad cars .....	474	5.7	5.6	4.7	4.4	4.7	4.9	4.9	4.9
Miscellaneous transportation services .....	478	20.2	23.3	24.3	27.8	32.1	35.9	38.2	40.9
Communications and public utilities:									
Radiotelephone communications .....	4812	36.5	44.2	50.7	59.6	74.3	95.6	117.3	144.1
Telegraph and other communications .....	482	12.0	10.4	8.7	7.0	7.2	8.5	8.2	9.0
Communications services, nec .....	489	25.3	23.3	17.2	17.7	17.2	17.8	19.8	21.4
Water supply .....	494	25.1	25.8	25.7	26.3	26.6	27.6	28.3	28.2
Steam and air-conditioning supply, and irrigation systems .....	496,7	4.6	4.6	4.2	3.6	3.7	3.7	3.8	3.7
<b>Wholesale trade .....</b>		<b>6,126</b>	<b>6,050</b>	<b>5,993</b>	<b>5,903</b>	<b>6,047</b>	<b>6,316</b>	<b>6,396</b>	<b>6,567</b>
Tires and tubes .....	5014	30.3	28.4	28.4	28.6	29.0	29.7	30.0	30.5
Motor vehicle parts, used .....	5015	39.5	39.8	39.5	40.0	42.0	43.6	44.5	46.5
Brick, stone, and related materials .....	5032	38.9	37.0	37.4	37.6	39.7	44.8	46.5	49.6
Roofing, siding, and insulation .....	5033	27.0	25.8	25.9	27.0	28.2	31.1	32.2	34.4
Photographic equipment and supplies .....	5043	30.8	30.7	28.9	27.5	27.6	26.7	24.7	22.7
Commercial equipment, nec .....	5046	51.5	50.8	49.7	50.4	51.1	54.1	54.4	55.5
Ophthalmic goods .....	5048	20.3	20.1	20.7	19.9	20.3	21.2	21.7	21.8
Professional equipment, nec .....	5049	35.6	34.3	35.8	35.0	34.8	35.8	35.3	35.8
Warm air heating and air-conditioning .....	5075	52.5	51.7	51.6	52.0	54.5	57.2	59.0	60.7
Refrigeration equipment and supplies .....	5078	13.4	13.3	12.9	12.7	13.5	13.3	13.8	13.9
Service establishment equipment .....	5087	81.6	82.0	80.5	76.4	78.5	81.9	83.8	84.7
Transportation equipment and supplies .....	5088	38.6	39.2	38.9	35.3	34.6	36.1	37.4	38.5
Sporting and recreational goods .....	5091	42.5	41.7	43.1	40.7	43.6	46.4	46.7	47.8

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Wholesale trade—Continued</b>									
Toys and hobby goods and supplies .....	5092	23.9	23.1	24.1	25.0	26.2	27.8	27.5	28.2
Jewelry and precious stones .....	5094	48.3	47.9	48.0	48.5	49.1	48.0	47.9	48.3
Wholesale trade durable goods,nec .....	5099	67.7	69.2	69.4	64.2	69.1	76.7	77.3	82.5
Printing and writing paper .....	5111	25.6	25.0	23.9	23.1	22.4	23.2	23.5	23.6
Industry and personal service paper .....	5113	86.8	86.4	84.4	86.0	86.7	85.5	87.7	87.8
Piece goods and notions .....	5131	51.8	51.2	52.5	52.6	51.8	53.9	51.8	51.5
Men's and boys'clothing .....	5136	43.4	42.4	44.4	47.1	48.2	51.2	50.2	50.6
Women's and children's clothing .....	5137	84.9	80.9	85.8	81.8	84.2	90.1	86.8	89.7
Footwear .....	5139	21.2	21.5	22.0	22.7	23.8	25.9	25.0	26.6
Packaged frozen foods .....	5142	33.3	34.5	35.3	35.2	35.5	36.4	37.8	37.5
Dairy products, except dried or canned .....	5143	49.6	46.8	46.3	45.0	45.5	44.9	43.6	42.8
Poultry and poultry products .....	5144	20.4	19.8	18.7	17.5	17.4	17.4	16.4	16.1
Confectionery .....	5145	48.1	48.5	49.8	50.6	52.1	54.4	55.2	57.0
Fish and seafoods .....	5146	31.0	29.3	28.7	27.3	27.9	29.0	29.2	28.6
Groceries and related products, nec .....	5149	225.1	231.3	236.5	231.8	242.6	258.4	263.4	272.2
Grain and field beans .....	5153	65.4	63.2	63.3	59.9	59.8	60.0	58.8	58.1
Livestock .....	5154	35.3	35.4	35.1	34.7	34.8	33.6	31.4	30.9
Farm-product raw materials, nec .....	5159	17.3	16.7	16.2	15.6	15.6	15.5	14.2	14.8
Plastics materials and basic shapes .....	5162	24.9	24.5	25.6	26.5	27.2	29.2	30.0	31.3
Chemicals and allied products, nec .....	5169	110.8	113.0	113.2	114.9	113.9	117.6	117.7	119.7
Books, periodicals, and newspapers .....	5192	69.1	70.7	72.0	73.8	77.8	84.0	85.5	84.0
Flowers and florists'supplies .....	5193	49.4	50.2	51.1	49.7	51.6	56.1	56.3	59.0
Tobacco and tobacco products .....	5194	45.8	45.5	48.3	48.6	45.9	45.2	43.6	41.9
Paints, varnishes, and supplies .....	5198	29.8	29.2	28.0	28.2	28.5	30.0	30.4	29.9
Wholesale trade nondurable goods, nec .....	5199	125.5	127.3	136.6	125.3	134.6	147.9	146.8	159.5
<b>Retail trade</b> .....		19,216	18,934	18,855	19,133	19,857	20,627	21,023	21,467
Mobile home dealers .....	527	25.9	23.7	23.6	25.1	28.6	33.4	36.7	41.3
Fruit and vegetable markets .....	543	21.3	22.0	23.2	22.3	24.0	25.3	25.2	25.8
Candy, nut, and confectionery stores .....	544	30.1	30.9	28.2	29.2	29.0	28.5	29.8	30.8
Miscellaneous food stores .....	549	41.1	43.1	44.9	49.1	56.2	64.8	72.7	82.8
Used car dealers .....	552	61.2	61.3	62.2	63.1	70.4	77.1	83.0	89.8
Boat dealers .....	555	36.7	30.7	29.0	28.1	29.8	32.6	33.9	35.4
Recreational vehicle dealers .....	556	21.2	19.1	19.7	20.5	22.7	24.4	25.6	26.3
Motorcycle dealers .....	557	24.1	23.4	23.4	23.4	25.9	28.7	30.3	31.9
Women's accessory and specialty stores .....	563	50.5	49.8	50.0	51.5	53.6	53.6	50.7	50.5
Children's and infants'wear stores .....	564	33.3	32.9	32.5	33.0	34.6	38.2	39.3	39.5
Miscellaneous apparel and accessory stores .....	569	71.5	77.6	78.0	78.6	82.6	85.6	86.7	89.6
Floor covering stores .....	5713	78.8	75.0	74.5	76.3	78.8	83.1	82.1	84.5
Drapery, upholstery, and miscellaneous home furnishings .....	5714,9	98.9	95.0	95.1	96.7	101.3	110.7	114.8	124.0
Computer and software stores .....	5734	72.8	75.3	78.9	80.3	86.8	97.1	104.6	118.1
Musical instrument stores .....	5736	26.7	26.2	26.3	26.8	27.9	29.4	30.2	31.3
Hobby, toy, and game shops .....	5945	90.9	89.9	93.4	90.3	96.7	102.6	107.1	107.9
Camera, luggage, and leather goods stores .....	5946,8	40.5	38.9	37.8	36.7	36.1	36.7	37.3	37.9
Direct selling establishments .....	5963	53.2	55.2	52.4	51.7	51.7	54.2	53.3	53.8
<b>Finance, insurance, and real estate</b> .....		6,650	6,656	6,534	6,633	6,883	6,770	6,815	6,988
Central reserve depositories .....	601	26.7	27.3	27.0	26.0	26.3	25.8	25.6	25.2
Foreign banks and branches and agencies .....	608	28.0	29.3	34.2	34.4	32.9	32.8	32.3	30.5
Functions closely related to banking .....	609	57.4	60.3	60.4	62.5	66.6	68.4	71.6	77.4
Federal and federally sponsored credit agencies .....	611	11.1	12.1	16.2	17.8	19.9	21.5	20.8	21.3
Short-term business credit .....	6153	43.9	50.7	49.1	49.6	53.4	56.5	63.0	68.9
Miscellaneous business credit institutions .....	6159	35.0	35.0	32.4	31.5	33.6	34.0	38.5	42.7
Investment advice .....	6282	48.3	54.0	55.2	62.7	72.5	74.9	81.0	94.7
Security and commodity services, nec .....	6289	26.6	27.2	25.8	24.0	24.6	24.3	25.3	27.1
Bank holding companies .....	6712	28.0	28.6	25.2	27.8	27.7	28.8	29.1	27.1
Holding companies, nec .....	6719	82.2	82.0	74.9	75.8	76.1	73.4	75.0	78.0
Trusts .....	673	63.6	76.1	76.5	68.2	71.0	65.9	43.0	45.4
Investment offices and miscellaneous investing .....	672,9	41.1	42.1	42.1	48.1	54.6	56.2	60.9	66.0
Accident and health insurance .....	6321	54.9	55.9	61.5	61.0	61.7	61.1	61.2	62.4
Pension, health, and welfare funds .....	637	37.4	38.9	39.4	39.4	41.8	42.4	43.4	44.8
Surety insurance and insurance carriers, nec .....	635,9	15.4	16.7	17.8	18.8	19.9	20.5	21.3	22.5
Title abstract offices .....	654	30.4	28.3	30.4	32.1	37.5	29.7	31.5	32.1

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Services</b> .....		27,697	28,053	28,586	29,647	30,872	32,612	33,881	35,328
Agricultural services:									
Animal services, except veterinary .....	075	41.8	43.5	40.9	42.8	45.2	45.4	47.2	49.4
Hotels and other lodging places:									
Camps and recreational vehicle parks .....	703	23.3	22.0	22.8	23.4	23.7	25.3	26.4	25.8
Rooming and boarding houses, and membership-basis organization hotels .....	702.4	17.8	17.9	17.1	17.3	16.9	17.2	17.7	16.8
Personal services:									
Power laundries and garment pressing and cleaners agents .....	7211.2	(1)	(1)	(1)	58.4	52.9	53.2	51.1	49.0
Linen supply .....	7213	(1)	(1)	(1)	63.5	63.2	64.5	66.3	68.2
Drycleaning plants and carpet and upholstery cleaning, except rugs .....	7216.7	(1)	(1)	(1)	191.5	197.4	203.3	204.2	207.8
Industrial laundries .....	7218	(1)	(1)	(1)	43.8	48.4	52.4	53.2	54.6
Coin-operated laundries and laundry and garment services, nec Barber shops .....	7215.9	(1)	(1)	(1)	58.6	54.1	53.4	53.7	54.0
724	17.7	14.1	13.9	13.8	12.3	12.1	11.7	11.3	
Shoe repair shops and shoeshine parlors .....	725	6.9	6.6	6.7	6.4	5.7	5.5	5.1	4.9
Tax return preparation services .....	7291	89.9	105.7	114.4	118.1	122.9	127.8	124.5	116.7
Miscellaneous personal services, nec .....	7299	100.5	98.2	97.0	100.4	96.4	100.0	105.0	110.0
Business services:									
Outdoor, radio, television, and other advertising, nec .....	7312,3.9	67.9	68.7	69.6	72.1	70.6	74.7	80.4	84.9
Adjustment and collection services .....	7322	66.3	70.5	74.6	77.6	78.5	83.2	89.3	93.9
Credit reporting services .....	7323	39.4	35.8	37.9	37.7	38.0	34.0	36.5	37.0
Direct mail advertising services .....	7331	88.9	88.1	84.7	88.3	90.7	96.4	103.2	107.9
Commercial photography .....	7335	17.8	16.1	15.7	16.1	15.2	15.7	15.3	15.3
Commercial art and graphic design .....	7336	48.3	45.6	45.1	47.3	48.2	54.8	58.7	61.1
Secretarial and court reporting .....	7338	29.3	29.7	30.7	33.0	33.9	36.7	40.6	42.5
Computer facilities management .....	7376	25.6	24.2	25.2	25.8	23.9	25.0	27.6	27.7
Computer rental and leasing .....	7377	10.7	10.8	10.2	9.8	9.3	8.7	9.1	8.5
Computer related services, nec .....	7379	88.5	94.0	101.9	116.1	130.8	159.9	201.7	262.7
News syndicates .....	7383	10.3	10.0	10.2	9.9	10.0	11.0	12.3	11.8
Business services, nec .....	7389	661.7	635.5	647.7	702.3	713.2	816.6	902.0	980.7
Auto repair, services, and parking:									
Passenger car leasing .....	7515	11.3	10.0	9.5	9.3	8.7	8.7	9.2	8.8
Truck and utility trailer rental .....	7513.9	64.4	55.3	52.1	53.5	53.4	57.5	58.1	57.8
Auto exhaust system repair shops .....	7533	22.1	22.4	23.3	23.9	25.0	26.2	26.7	26.9
Automotive glass replacement shops .....	7536	19.7	20.5	20.0	20.6	22.3	25.7	26.9	29.7
Automotive transmission repair shops .....	7537	23.6	23.5	23.1	23.9	25.2	26.2	27.8	28.8
Automotive repair shops, nec .....	7539	54.5	50.8	50.0	50.2	50.2	52.1	53.9	54.1
Automotive services, nec .....	7549	58.2	62.9	66.1	71.0	79.7	88.7	97.6	105.6
Reupholstery and furniture repair .....	764	24.4	20.8	20.5	20.9	20.5	21.6	21.5	21.6
Watch and miscellaneous repair shops .....	763.9	247.3	208.0	212.6	224.7	204.0	225.0	235.7	234.7
Motion pictures:									
Motion picture distribution and services .....	782	13.7	14.7	14.9	15.0	18.8	20.8	24.3	20.5
Amusement and recreational services:									
Dance studios, schools, and halls .....	791	22.1	22.7	24.6	24.9	25.4	26.4	27.2	29.0
Producers, orchestras, and entertainers .....	792	134.8	137.0	135.9	138.5	138.6	144.3	149.5	161.9
Commercial sports .....	794	91.0	91.9	91.8	91.7	94.7	96.2	105.8	109.9
Public golf courses .....	7992	33.8	35.5	39.7	39.4	46.4	54.4	56.4	65.8
Coin-operated amusement devices .....	7993	27.0	25.7	28.7	35.8	41.1	70.3	69.9	80.6
Amusement parks .....	7996	80.2	87.7	89.3	91.2	93.4	94.9	98.7	104.0
Amusement and recreation, nec. ....	7999	183.0	186.3	208.4	255.4	306.3	320.5	326.2	338.0
Health services:									
Offices and clinics of osteopathic physicians .....	803	35.2	43.1	45.1	45.4	50.1	49.9	49.0	48.8
Offices and clinics of podiatrists .....	8043	22.4	24.3	25.2	25.8	26.7	27.7	27.9	28.2
Offices and clinics of health practitioners, nec. ....	8049	109.6	129.1	148.6	167.4	189.7	211.1	223.0	239.1
Health and allied services, nec .....	809	224.9	234.0	248.7	270.1	280.7	298.0	309.1	323.4

See footnotes at end of table.

**Table 5. Employment benchmarks for industries not published monthly, March 1990-97—Continued**

(In thousands)

Industry	1987 SIC Code	1990	1991	1992	1993	1994	1995	1996	1997
<b>Services—Continued</b>									
Specialty outpatient clinics, nec. ....	8093	154.3	159.6	167.1	179.5	184.3	194.4	198.3	202.5
Kidney dialysis centers and health and allied services, nec. ....	8092,9	70.6	74.4	81.6	90.6	96.4	103.6	110.8	120.9
Educational services:									
Libraries .....	823	14.2	18.4	19.9	14.3	16.2	21.9	21.9	22.3
Schools and educational services, nec. ....	829	97.6	104.6	108.2	113.8	120.1	130.1	139.1	150.9
Membership organizations:									
Religious organizations .....	866	1,118.6	1,211.6	1,149.9	1,195.3	1,238.7	1,296.5	1,321.6	1,380.2
Political and membership organizations, nec. ....	865,9	93.6	81.1	80.5	96.8	105.5	101.8	114.7	114.7
Engineering and management services:									
Testing laboratories .....	8734	72.2	74.5	79.6	80.5	82.8	88.7	88.9	91.2
Facilities support services .....	8744	56.6	58.8	66.3	66.3	71.7	73.1	77.3	82.4
Business consulting, nec. ....	8748	71.5	80.0	90.5	101.2	116.7	134.6	150.9	164.4
<b>Government</b> .....		18,568	18,717	18,953	19,145	19,411	19,674	19,794	19,863
Federal:									
Small arms ammunition and ordnance .....		19.4	18.1	18.8	16.9	14.1	12.9	11.9	14.9
Other manufacturing .....		29.4	27.1	25.6	22.3	21.1	20.3	20.0	15.2
Trade .....		79.7	79.5	75.3	70.1	66.1	58.7	53.3	64.4
Finance .....		26.6	31.2	33.6	32.8	33.6	27.9	19.7	16.4
Other services .....		164.5	155.7	158.9	152.8	149.1	144.1	136.1	135.1
All other Federal Government, except Postal Service .....		1,602.2	1,489.3	1,533.1	1,471.4	1,485.4	1,437.2	1,391.4	1,342.6
State:									
Construction .....		116.0	85.7	82.5	84.7	88.8	90.4	88.4	86.6
Transportation and public utilities .....		48.6	49.4	48.4	48.7	49.3	49.4	49.5	52.9
Services .....		2,595.7	2,662.4	2,680.0	2,717.6	2,764.9	2,830.1	2,799.0	2,741.8
Social services .....		203.4	212.2	203.7	212.0	217.2	218.5	213.0	208.7
Services, except hospitals, education, and social services .....		121.5	140.5	135.6	138.7	139.3	141.5	141.8	140.8
Local:									
Services .....		7,328.3	7,467.7	7,569.6	7,718.1	7,864.5	8,032.2	8,169.0	8,339.1
Social services .....		104.7	113.5	121.3	123.2	131.3	138.0	141.3	138.0
Services, except hospitals, education, and social services .....		223.3	230.6	239.5	244.5	261.8	278.7	306.2	330.0
<b>Nonclassifiable establishments</b> .....		162.8	127.3	142.5	133.9	130.6	147.1	167.6	143.6

<sup>1</sup> 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	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total<sup>1</sup></b>								
<b>Goods-producing<sup>1</sup></b>								
<b>Mining<sup>1</sup></b>								
Metal mining .....	0.9845	0.9887	0.9984	1.0212	1.0192	1.0266	1.0097	0.9981
Coal mining .....	.9949	1.0003	.9961	1.0078	1.0030	1.0061	1.0024	1.0011
Oil and gas extraction .....	.9856	.9857	.9944	1.0023	1.0162	1.0165	1.0030	1.0092
Nonmetallic minerals, except fuels .....	.9582	.9990	1.0253	1.0387	1.0404	1.0380	1.0359	1.0270
<b>Construction<sup>1</sup></b>								
General building contractors .....	.9473	.9726	.9977	1.0295	1.0462	1.0464	1.0296	1.0273
Heavy construction, except building .....	.8866	.9665	1.0378	1.0692	1.0810	1.0916	1.1016	1.1041
Special trade contractors .....	.9357	.9717	1.0073	1.0350	1.0541	1.0564	1.0443	1.0403
<b>Manufacturing<sup>1</sup></b>								
<b>Durable goods<sup>1</sup></b>								
Lumber and wood products .....	.9812	.9865	.9961	1.0131	1.0153	1.0188	1.0146	1.0117
Furniture and fixtures .....	1.0017	.9986	.9973	1.0051	.9843	.9963	.9995	1.0036
Stone, clay, and glass products .....	.9786	.9970	1.0099	1.0200	1.0147	1.0192	1.0177	1.0146
Primary metal industries .....	1.0004	.9992	.9992	1.0032	.9885	.9962	.9981	.9998
Blast furnaces and basic steel products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Fabricated metal products .....	.9986	.9972	.9995	1.0047	.9903	.9989	1.0011	1.0015
Industrial machinery and equipment .....	1.0029	1.0025	1.0024	1.0051	.9972	.9953	.9961	.9954
Computer and office equipment .....	.9958	.9988	1.0016	1.0055	1.0054	1.0029	.9977	1.0023
Electronic and other electrical equipment .....	.9977	.9968	.9967	1.0014	.9975	.9994	1.0005	1.0007
Electronic components and accessories .....	.9986	.9976	.9976	1.0032	1.0020	1.0021	.9982	.9995
Transportation equipment <sup>3</sup> .....	1.0007	1.0008	1.0036	1.0055	.9867	.9987	1.0018	.9984
Motor vehicles and equipment <sup>3</sup> .....	1.0010	1.0004	1.0069	1.0094	.9776	.9993	1.0044	.9987
Aircraft and parts .....	.9969	.9977	.9981	.9987	.9970	.9946	.9992	1.0007
Instruments and related products .....	.9990	.9988	.9987	1.0031	1.0002	1.0022	1.0000	1.0004
Miscellaneous manufacturing .....	.9965	1.0000	.9998	1.0043	.9921	1.0041	1.0066	1.0147
<b>Nondurable goods<sup>1</sup></b>								
Food and kindred products .....	.9766	.9736	.9803	.9986	1.0188	1.0436	1.0387	1.0200
Tobacco products .....	.9817	.9506	.9206	.9230	.9170	1.0116	1.0484	1.0635
Textile mill products .....	.9971	.9982	1.0009	1.0065	.9967	1.0027	1.0032	.9988
Apparel and other textile products .....	.9951	.9968	1.0036	1.0093	.9838	1.0077	1.0085	1.0100
Paper and allied products .....	.9952	.9943	.9963	1.0074	1.0033	1.0041	1.0032	.9991
Printing and publishing .....	.9980	.9991	.9994	1.0011	.9996	.9993	.9966	.9988
Chemicals and allied products .....	.9980	.9971	.9990	1.0062	1.0047	1.0058	.9998	1.0003
Petroleum and coal products .....	.9777	.9900	1.0072	1.0194	1.0257	1.0265	1.0170	1.0143
Rubber and misc. plastics products .....	.9991	.9985	.9997	1.0082	.9953	1.0012	1.0015	1.0034
Leather and leather products .....	.9990	1.0024	1.0031	1.0094	.9758	1.0065	1.0077	1.0114
<b>Service-producing<sup>1</sup></b>								
<b>Transportation and public utilities<sup>1</sup></b>								
<b>Transportation<sup>1</sup></b>								
Railroad transportation .....	.9882	.9997	1.0036	1.0031	1.0124	1.0096	1.0048	1.0073
Local and interurban passenger transit <sup>3</sup> .....	1.0275	1.0312	1.0408	1.0020	.8657	.8620	1.0265	1.0366
Trucking and warehousing .....	.9809	.9843	.9969	1.0083	1.0130	1.0151	1.0168	1.0148
Water transportation .....	.9672	.9940	1.0109	1.0381	1.0503	1.0365	1.0210	1.0134
Transportation by air .....	.9914	.9935	.9951	.9970	.9999	.9966	.9931	.9976
Pipelines, except natural gas .....	.9905	.9867	.9955	1.0154	1.0196	1.0166	1.0007	.9990
Transportation services .....	.9987	1.0021	1.0005	1.0038	1.0039	1.0044	1.0017	1.0046
<b>Communications and public utilities<sup>1</sup></b>								
Communications .....	.9960	.9955	.9991	1.0039	1.0048	1.0065	1.0033	1.0028
Electric, gas, and sanitary services .....	.9952	.9968	.9998	1.0082	1.0103	1.0081	1.0003	.9994
<b>Wholesale trade<sup>1</sup></b>								
Durable goods .....	.9971	.9993	1.0015	1.0064	1.0073	1.0034	.9984	1.0002
Nondurable goods .....	.9903	.9949	.9989	1.0062	1.0071	1.0065	1.0053	1.0088
<b>Retail trade<sup>1</sup></b>								
Building materials and garden supplies .....	.9634	1.0087	1.0426	1.0504	1.0382	1.0223	1.0042	1.0030
General merchandise stores .....	.9641	.9608	.9691	.9784	.9800	.9872	.9871	1.0164
Department stores .....	.9649	.9626	.9675	.9776	.9824	.9856	.9872	1.0181
Food stores .....	.9861	.9876	.9943	1.0056	1.0062	1.0044	.9990	1.0020
Automotive dealers and service stations .....	.9906	.9960	1.0021	1.0090	1.0128	1.0127	1.0068	1.0037
New and used car dealers .....	.9985	.9988	.9995	1.0014	1.0031	1.0040	1.0031	1.0027
Apparel and accessory stores .....	.9688	.9741	.9762	.9889	.9925	.9993	.9823	.9981
Furniture and home furnishings stores .....	.9897	.9905	.9877	.9896	.9917	.9894	.9906	1.0030
Eating and drinking places .....	.9836	.9995	1.0191	1.0306	1.0205	1.0237	1.0157	.9973
Miscellaneous retail establishments .....	.9790	.9813	.9866	.9833	.9793	.9827	.9909	1.0072

See footnotes at end of table.

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

Industry	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Finance, insurance, and real estate<sup>1</sup></b>								
Finance <sup>1</sup>								
Depository institutions .....	0.9969	0.9970	0.9975	1.0062	1.0081	1.0057	0.9987	0.9962
Commercial banks .....	.9959	.9964	.9971	1.0065	1.0085	1.0066	.9989	.9968
Savings institutions .....	.9997	1.0006	.9993	1.0069	1.0078	1.0046	.9958	.9921
Nondepository institutions .....	.9997	1.0008	1.0015	1.0048	1.0043	1.0035	.9999	.9953
Mortgage bankers and brokers .....	.9991	1.0039	1.0064	1.0118	1.0094	1.0063	.9998	.9924
Security and commodity brokers .....	.9967	.9978	.9984	1.0046	1.0081	1.0077	.9988	.9985
Holding and other investment offices .....	1.0019	1.0021	1.0016	1.0045	1.0042	1.0010	.9938	.9988
Insurance <sup>1</sup>								
Insurance carriers .....	.9978	.9987	.9996	1.0033	1.0047	1.0041	.9991	.9995
Insurance agents, brokers, and service .....	.9998	.9989	.9998	1.0035	1.0038	1.0025	.9972	.9982
Real estate .....	.9772	.9876	1.0038	1.0284	1.0349	1.0368	1.0104	1.0015
<b>Services<sup>1</sup></b>								
Agricultural services .....	.8888	1.0051	1.0828	1.1161	1.1110	1.0947	1.0571	1.0459
Hotels and other lodging places .....	.9621	.9737	1.0108	1.0572	1.0787	1.0726	1.0267	1.0001
Personal services .....	1.0527	1.0478	.9886	.9769	.9646	.9636	.9725	.9763
Business services .....	.9850	.9923	.9973	1.0043	1.0050	1.0102	1.0130	1.0200
Services to buildings .....	.9929	1.0019	1.0053	1.0116	1.0070	1.0112	1.0026	1.0018
Personnel supply services .....	.9657	.9810	.9933	1.0026	1.0053	1.0252	1.0356	1.0489
Help supply services .....	.9615	.9790	.9942	1.0013	1.0064	1.0237	1.0386	1.0561
Computer and data processing services .....	1.0040	.9996	.9982	.9987	.9995	.9995	.9977	.9988
Auto repair, services, and parking .....	.9989	.9981	1.0015	1.0063	1.0067	1.0059	1.0013	1.0021
Miscellaneous repair services .....	.9914	.9998	1.0003	1.0093	1.0145	1.0113	1.0052	1.0058
Motion pictures .....	1.0041	.9973	.9973	1.0076	1.0173	1.0190	.9859	.9826
Amusement and recreation services .....	.9122	.9861	1.0563	1.1593	1.1892	1.1617	1.0483	.9669
Health services .....	.9981	.9987	.9994	1.0022	1.0039	1.0018	.9989	1.0002
Offices and clinics of medical doctors .....	.9971	.9982	.9990	1.0031	1.0052	1.0034	.9989	.9997
Nursing and personal care facilities .....	.9976	.9978	.9973	1.0010	1.0040	1.0038	1.0000	1.0005
Hospitals .....	.9999	.9986	.9985	1.0016	1.0036	1.0014	.9982	.9992
Home health care services .....	.9960	1.0013	1.0034	1.0022	1.0000	.9965	1.0020	1.0079
Legal services .....	.9959	.9954	.9945	1.0150	1.0169	1.0077	.9927	.9945
Educational services <sup>3</sup> .....	1.0618	1.0629	1.0152	.9112	.8738	.8609	.9797	1.0661
Social services .....	1.0036	1.0069	1.0099	.9983	.9988	.9899	.9953	1.0033
Child day care services .....	1.0249	1.0298	1.0387	.9765	.9143	.9153	1.0070	1.0267
Residential care .....	.9970	.9986	.9996	1.0092	1.0111	1.0081	.9961	.9963
Museums and botanical and zoological gardens .....	.9359	.9829	1.0417	1.0816	1.0978	1.0751	1.0149	1.0157
Membership organizations <sup>3</sup> .....	.9937	.9944	.9997	1.0160	1.0308	1.0173	.9911	.9944
Engineering and management services .....	1.0036	1.0066	.9981	1.0061	1.0063	1.0035	.9964	.9985
Engineering and architectural services .....	.9905	.9906	.9981	1.0123	1.0136	1.0137	1.0045	1.0036
Management and public relations .....	.9960	1.0038	1.0025	1.0091	1.0085	1.0059	1.0010	1.0026
Services, nec .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Government<sup>1</sup></b>								
Federal <sup>1</sup>								
Postal Service .....	.9956	.9925	.9920	.9941	.9918	.9930	.9915	.9866
Federal, except Postal Service .....	.9969	1.0001	1.0065	1.0146	1.0132	1.0098	1.0018	.9939
State <sup>1</sup>								
Education .....	1.0710	1.0697	1.0319	.9102	.8550	.8520	.9727	1.0651
Other State government .....	.9944	.9974	.9995	1.0127	1.0219	1.0142	1.0023	.9952
Local <sup>1</sup>								
Education .....	1.0553	1.0487	1.0498	1.0048	.8388	.8331	.9789	1.0392
Other local government .....	.9811	.9823	.9938	1.0297	1.0589	1.0421	.9983	.9873

<sup>1</sup> Seasonally adjusted data are derived by aggregation of the component series.

<sup>2</sup> 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.

<sup>3</sup> 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 1997 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	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total<sup>1</sup></b>								
<b>Goods-producing<sup>1</sup></b>								
<b>Mining</b> .....	0.9879	0.9971	0.9965	1.0155	1.0219	1.0139	1.0021	1.0099
<b>Construction</b> .....	.9771	.9871	.9988	1.0140	1.0239	1.0229	1.0162	1.0132
<b>Manufacturing<sup>1</sup></b>								
<b>Durable goods<sup>1</sup></b>								
Lumber and wood products .....	.9821	.9914	1.0001	1.0112	1.0106	1.0149	1.0092	1.0104
Furniture and fixtures .....	1.0021	1.0008	1.0008	1.0067	.9816	.9925	.9987	1.0035
Stone, clay, and glass products .....	.9898	.9969	.9984	1.0107	.9939	1.0085	1.0078	1.0060
Primary metal industries .....	.9956	.9944	1.0048	1.0099	1.0008	1.0074	1.0026	.9950
Fabricated metal products .....	.9982	.9981	.9995	1.0055	.9876	.9989	.9999	1.0037
Industrial machinery and equipment .....	1.0037	1.0018	1.0047	1.0059	.9979	.9953	.9915	.9949
Electronic and other electrical equipment .....	.9973	.9969	.9975	1.0004	.9931	.9973	1.0004	1.0020
Transportation equipment <sup>2</sup> .....	.9984	.9981	.9986	1.0043	.9851	1.0041	1.0004	.9984
Instruments and related products .....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Miscellaneous manufacturing .....	.9934	.9978	1.0013	1.0046	.9946	1.0082	1.0116	1.0203
<b>Nondurable goods<sup>1</sup></b>								
Food and kindred products .....	.9619	.9577	.9667	.9895	1.0370	1.0651	1.0595	1.0350
Tobacco products .....	.9693	.9119	.8662	.8814	.8645	1.0349	1.0840	1.1001
Textile mill products .....	.9957	.9977	1.0005	1.0086	.9951	1.0034	1.0051	1.0003
Apparel and other textile products .....	.9968	.9988	1.0042	1.0088	.9755	1.0040	1.0089	1.0136
Paper and allied products .....	.9896	.9892	.9952	1.0112	1.0107	1.0121	1.0067	1.0031
Printing and publishing .....	.9978	1.0003	1.0002	1.0022	.9991	1.0005	.9953	.9979
Chemicals and allied products .....	.9961	.9960	.9985	1.0086	1.0068	1.0087	1.0003	1.0013
Petroleum and coal products .....	.9770	.9820	.9947	1.0164	1.0266	1.0327	1.0138	1.0125
Rubber and misc. plastics products .....	.9990	.9987	1.0004	1.0081	.9895	.9968	1.0012	1.0038
Leather and leather products .....	.9965	.9988	1.0031	1.0052	.9729	1.0104	1.0135	1.0161
<b>Service-producing<sup>1</sup></b>								
<b>Transportation and public utilities</b> .....	.9981	.9976	1.0020	1.0024	.9882	.9862	1.0051	1.0074
<b>Wholesale trade</b> .....	.9945	.9947	.9973	1.0023	1.0010	.9992	1.0028	1.0073
<b>Retail trade</b> .....	.9749	.9843	.9966	1.0060	1.0009	1.0050	1.0019	1.0057
<b>Finance, insurance, and real estate</b> .....	.9968	.9974	.9992	1.0073	1.0090	1.0075	.9990	.9987
<b>Services</b> .....	.9986	1.0026	1.0027	1.0048	1.0014	.9997	1.0010	1.0063
<b>Government<sup>1</sup></b>								
Federal .....	.9957	1.0001	1.0040	1.0079	1.0049	1.0029	1.0005	.9906
State .....	1.0281	1.0291	1.0147	.9678	.9476	.9412	.9881	1.0253
Local .....	1.0321	1.0301	1.0324	1.0104	.8969	.8861	.9838	1.0245

<sup>1</sup> Seasonally adjusted data are derived by aggregation of the component series.

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

<sup>3</sup> 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 1997 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 workers<sup>1</sup> on nonfarm payrolls by industry**

Industry	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total private<sup>2</sup></b>								
<b>Goods-producing<sup>2</sup></b>								
<b>Mining</b> .....	0.9816	0.9921	0.9989	1.0155	1.0240	1.0260	1.0141	1.0123
<b>Construction</b> .....	.9145	.9658	1.0128	1.0453	1.0671	1.0723	1.0613	1.0605
<b>Manufacturing<sup>2</sup></b>								
<b>Durable goods<sup>2</sup></b>								
Lumber and wood products .....	.9789	.9851	.9957	1.0142	1.0157	1.0207	1.0176	1.0135
Furniture and fixtures .....	1.0028	.9993	.9981	1.0052	.9825	.9958	.9997	1.0047
Stone, clay, and glass products .....	.9774	1.0014	1.0107	1.0238	1.0133	1.0233	1.0219	1.0190
Primary metal industries .....	1.0007	.9997	.9999	1.0043	.9869	.9954	.9978	.9999
Blast furnaces and basic steel products .....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Fabricated metal products .....	.9986	.9975	.9992	1.0056	.9862	.9995	1.0017	1.0025
Industrial machinery and equipment .....	1.0069	1.0058	1.0042	1.0053	.9915	.9897	.9940	.9935
Electronic and other electrical equipment .....	1.0000	.9971	.9969	1.0003	.9922	.9972	.9991	1.0009
Transportation equipment <sup>4</sup> .....	1.0023	1.0031	1.0078	1.0090	.9815	.9974	1.0019	.9968
Motor vehicles and equipment <sup>4</sup> .....	1.0028	1.0009	1.0093	1.0116	.9711	.9974	1.0008	.9959
Instruments and related products .....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Miscellaneous manufacturing .....	.9968	.9980	1.0009	1.0060	.9881	1.0018	1.0103	1.0180
<b>Nondurable goods<sup>2</sup></b>								
Food and kindred products .....	.9719	.9670	.9733	.9947	1.0204	1.0561	1.0495	1.0254
Tobacco products .....	.9744	.9288	.8900	.8919	.8859	1.0266	1.0711	1.0884
Textile mill products .....	.9981	.9996	1.0020	1.0065	.9936	1.0028	1.0037	.9988
Apparel and other textile products .....	.9963	.9988	1.0057	1.0092	.9772	1.0056	1.0099	1.0126
Paper and allied products .....	.9940	.9919	.9960	1.0074	1.0056	1.0057	1.0046	1.0003
Printing and publishing .....	1.0000	.9997	.9976	.9991	.9995	.9993	.9965	.9975
Chemicals and allied products .....	.9986	.9964	.9995	1.0049	.9997	1.0054	1.0014	1.0009
Petroleum and coal products .....	.9684	.9943	1.0145	1.0281	1.0337	1.0355	1.0246	1.0222
Rubber and misc. plastics products .....	.9994	.9978	.9992	1.0089	.9933	1.0013	1.0024	1.0051
Leather and leather products .....	1.0006	1.0018	1.0032	1.0121	.9644	1.0085	1.0067	1.0174
<b>Service-producing<sup>2</sup></b>								
<b>Transportation and public utilities</b> .....	.9915	.9948	1.0011	1.0069	.9991	.9966	1.0071	1.0090
<b>Wholesale trade</b> .....	.9927	.9961	1.0005	1.0075	1.0081	1.0064	1.0023	1.0050
<b>Retail trade</b> .....	.9779	.9886	1.0002	1.0098	1.0053	1.0074	1.0022	1.0026
<b>Finance, insurance, and real estate</b> .....	.9921	.9955	1.0006	1.0123	1.0165	1.0144	1.0009	.9978
<b>Services</b> .....	.9931	1.0018	1.0049	1.0106	1.0126	1.0095	1.0033	1.0065

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

<sup>2</sup> Seasonally adjusted data are derived by aggregation of the component series.

<sup>3</sup> 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.

<sup>4</sup> 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 1997 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 workers<sup>1</sup> on private nonfarm payrolls by industry**

Industry	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total private<sup>2</sup></b>								
<b>Goods-producing<sup>2</sup></b>								
<b>Mining</b> .....	0.9910	0.9846	0.9964	1.0047	0.9825	1.0052	1.0016	1.0018
<b>Construction</b> .....	.9840	.9815	1.0150	1.0178	1.0234	1.0249	.9849	1.0219
<b>Manufacturing<sup>2</sup></b>								
<b>Durable goods<sup>2</sup></b>								
Lumber and wood products .....	.9904	.9894	1.0040	1.0075	.9997	1.0089	.9938	1.0107
Furniture and fixtures .....	.9918	.9750	.9851	.9953	.9912	1.0068	.9952	1.0092
Stone, clay, and glass products .....	.9844	.9912	1.0099	1.0137	1.0051	1.0113	1.0199	1.0149
Primary metal industries .....	.9988	.9895	.9989	.9997	.9889	.9923	1.0005	.9989
Blast furnaces and basic steel products <sup>3</sup> .....	.9985	.9974	.9965	.9980	1.0022	.9943	1.0032	.9920
Fabricated metal products .....	.9942	.9778	.9979	1.0021	.9814	.9974	.9864	1.0055
Industrial machinery and equipment .....	1.0049	.9827	1.0025	.9992	.9834	.9882	.9815	.9949
Electronic and other electrical equipment .....	.9996	.9819	.9947	.9996	.9823	.9955	.9919	.9991
Transportation equipment .....	1.0059	.9833	1.0097	1.0045	.9625	1.0013	.9818	1.0063
Motor vehicles and equipment .....	1.0087	.9818	1.0175	1.0067	.9486	1.0041	.9779	1.0089
Instruments and related products .....	1.0048	.9820	.9960	1.0000	.9819	.9929	.9924	.9989
Miscellaneous manufacturing .....	1.0003	.9836	.9973	.9983	.9801	.9953	.9845	1.0108
<b>Nondurable goods<sup>2</sup></b>								
Food and kindred products .....	.9859	.9775	.9925	.9952	.9912	1.0085	1.0209	1.0118
Tobacco products .....	.9812	.9684	.9923	1.0224	.9672	.9930	1.0100	1.0135
Textile mill products .....	.9988	.9791	.9956	1.0092	.9850	1.0061	1.0120	.9977
Apparel and other textile products .....	.9997	.9674	.9988	1.0113	.9885	1.0036	.9885	1.0080
Paper and allied products <sup>3</sup> .....	.9928	.9892	.9955	.9987	.9884	.9943	1.0098	1.0007
Printing and publishing .....	1.0008	.9903	.9928	.9910	.9919	1.0013	1.0131	1.0063
Chemicals and allied products <sup>4</sup> .....	.9993	.9950	.9974	.9994	.9924	.9921	1.0033	.9975
Petroleum and coal products .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Rubber and misc. plastics products .....	.9988	.9840	.9961	1.0006	.9766	.9940	.9994	.9962
Leather and leather products .....	.9947	.9783	1.0020	1.0138	.9967	1.0062	.9985	1.0064
<b>Service-producing<sup>2</sup></b>								
<b>Transportation and public utilities<sup>6</sup></b> .....	.9895	.9880	.9925	1.0035	1.0037	1.0150	1.0039	.9994
<b>Wholesale trade<sup>6</sup></b> .....	1.0023	.9958	.9981	1.0022	.9997	1.0066	.9980	1.0005
<b>Retail trade<sup>4,6</sup></b> .....	.9919	.9899	.9974	1.0105	1.0229	1.0294	1.0037	.9939
<b>Finance, insurance, and real estate</b> .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<b>Services<sup>6</sup></b> .....	1.0023	.9947	.9939	1.0010	1.0066	1.0159	.9942	.9976

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

<sup>2</sup> Seasonally adjusted data are derived by aggregation of the component series.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> 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 1997 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	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Manufacturing<sup>1</sup></b>								
<b>Durable goods</b> .....	0.9735	0.8850	1.0033	0.9954	0.9104	1.0087	0.9867	1.0387
<b>Nondurable goods</b> .....	.9548	.9028	.9564	.9849	.9757	1.0473	1.0968	1.0512

<sup>1</sup> Seasonally adjusted data are derived by aggregation of the component series.

NOTE: March-April factors replace those published in the

December 1997 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 workers<sup>1</sup> on private nonfarm payrolls by industry**

Industry	1998							
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total private<sup>2</sup></b>								
<b>Goods-producing<sup>2</sup></b>								
<b>Mining</b> .....	1.0039	1.0074	0.9978	1.0002	0.9956	0.9909	1.0009	0.9912
<b>Construction</b> .....	.9930	.9934	.9973	.9958	.9993	1.0044	1.0122	1.0096
<b>Manufacturing</b> .....	1.0005	1.0017	.9999	.9980	.9966	.9943	1.0007	.9987
<b>Excluding overtime</b> .....	1.0024	1.0058	1.0000	.9984	.9989	.9936	1.0003	.9959
<b>Service-producing<sup>2</sup></b>								
<b>Transportation and public utilities</b> .....	.9981	.9970	.9933	.9955	.9985	.9989	1.0031	1.0023
<b>Wholesale trade<sup>3</sup></b> .....	1.0011	1.0017	.9969	.9933	.9945	.9982	.9992	.9950
<b>Retail trade</b> .....	1.0036	1.0002	.9987	.9964	.9918	.9893	1.0037	1.0021
<b>Finance, insurance, and real estate<sup>3</sup></b> .....	1.0085	.9986	.9970	.9899	.9886	.9965	.9959	.9971
<b>Services<sup>3</sup></b> .....	1.0092	1.0009	.9955	.9865	.9821	.9848	.9980	.9987

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

<sup>2</sup> Seasonally adjusted data are derived by aggregation of the component series.

<sup>3</sup> 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 1997 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	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Labor force status													
Civilian noninstitutional population .....	202,832	203,000	203,166	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899
Civilian labor force .....	136,060	136,206	136,294	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364
Percent of population .....	67.1	67.1	67.1	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0
Employed .....	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453
Percent of population .....	63.8	63.7	63.8	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2
Unemployed .....	6,566	6,814	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910
Not in labor force .....	66,772	66,794	66,872	66,960	67,131	67,361	67,077	66,929	66,745	66,844	67,024	67,489	67,535
Unemployment rates													
All workers .....	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3
Men, 20 years and over .....	3.9	4.2	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5
Women, 20 years and over .....	4.5	4.4	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9
Both sexes, 16 to 19 years .....	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2
White .....	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7
Black .....	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0
Hispanic origin .....	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8

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

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

(Numbers in thousands)

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
Employment													
Total .....	122,325	122,534	122,811	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,216	125,512
Total private .....	102,811	102,991	103,219	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,452	105,707
Goods-producing industries .....	24,883	24,903	24,923	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,334	25,298
Mining .....	593	593	593	592	594	592	591	592	592	590	587	582	581
Construction .....	5,670	5,668	5,682	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,925	5,917
Manufacturing .....	18,620	18,642	18,648	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,826	18,800
Service-producing industries .....	97,442	97,631	97,888	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,882	100,214
Transportation and public utilities .....	6,399	6,405	6,411	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,512	6,534
Wholesale trade .....	6,626	6,632	6,655	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,797	6,806
Retail trade .....	21,952	21,987	21,987	22,043	22,078	22,105	22,206	22,245	22,280	22,283	22,259	22,328	22,417
Finance, insurance, and real estate .....	7,064	7,072	7,095	7,110	7,125	7,151	7,172	7,194	7,213	7,232	7,258	7,286	7,306
Services .....	35,887	35,992	36,148	36,225	36,363	36,484	36,638	36,795	36,932	37,020	37,106	37,195	37,346
Government .....	19,514	19,543	19,592	19,609	19,607	19,646	19,662	19,680	19,686	19,720	19,728	19,764	19,805
Over-the-month change													
Total .....	233	209	277	83	386	288	376	345	351	192	82	302	296
Total private .....	223	180	228	66	388	249	360	327	345	158	74	266	255
Goods-producing industries .....	27	20	20	49	21	39	67	94	104	17	-38	58	-36
Mining .....	2	0	0	-1	2	-2	-1	1	0	-2	-3	-5	-1
Construction .....	18	-2	14	17	14	9	28	60	71	21	-42	66	-9
Manufacturing .....	7	22	6	33	5	32	40	33	33	-2	7	-3	-26
Service-producing industries .....	206	189	257	34	365	249	309	251	247	175	120	244	332
Transportation and public utilities .....	6	6	6	-147	171	18	3	-5	22	21	10	8	22
Wholesale trade .....	11	6	23	16	8	18	14	20	28	10	14	14	9
Retail trade .....	15	35	0	56	35	27	101	39	35	3	-24	69	89
Finance, insurance, and real estate .....	11	8	23	15	15	26	21	22	19	19	26	28	20
Services .....	153	105	156	77	138	121	154	157	137	88	86	89	151
Government .....	10	29	49	17	-2	39	16	18	6	34	8	36	41
Hours of work <sup>1</sup>													
Total private .....	34.7	34.5	34.5	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7
Manufacturing .....	42.0	41.9	41.9	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.7
Overtime .....	4.9	4.7	4.8	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6
Indexes of aggregate weekly hours (1982=100) <sup>1</sup>													
Total private .....	141.2	140.9	141.3	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	143.9	144.9
Manufacturing .....	109.1	108.8	108.9	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.6	109.1
Earnings <sup>1</sup>													
Average hourly earnings, total private:													
Current dollars .....	\$12.21	\$12.24	\$12.27	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.69	\$12.73
Constant (1982) dollars <sup>2</sup> .....	7.53	7.54	7.55	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.73	N.A.
Average weekly earnings, total private .....	423.69	422.28	423.32	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	437.81	441.73

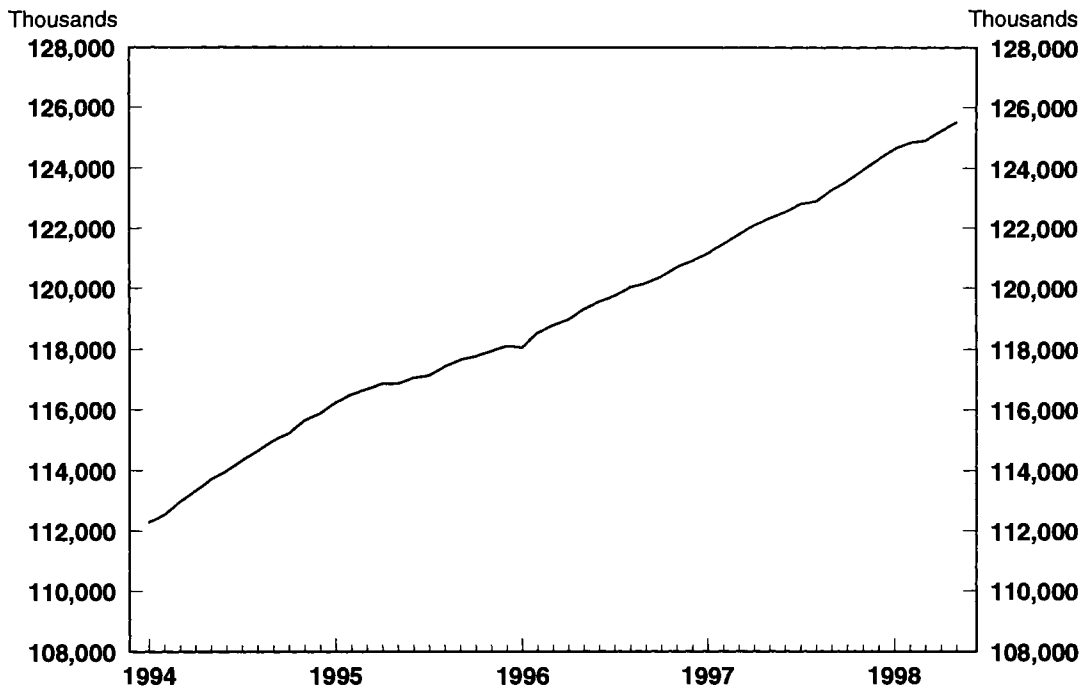
<sup>1</sup> Data relate to private production or nonsupervisory workers.

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

<sup>P</sup> = preliminary.

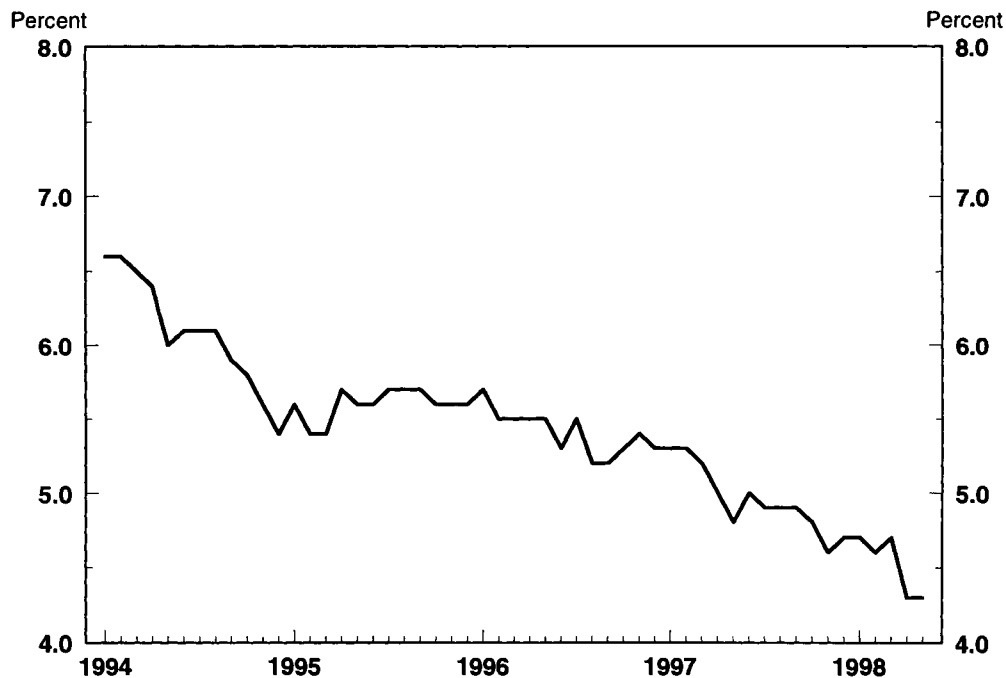
NOTE: Data have been revised to reflect March 1997 benchmarks, refinements to the seasonal adjustment process for the hours and earnings series, and recomputed seasonal adjustment factors.

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



NOTE: Data have been revised to reflect March 1997 benchmarks and recomputed seasonal adjustment factors.

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



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

**HOUSEHOLD DATA  
HISTORICAL**

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

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
1964 .....	124,485	73,091	58.7	69,305	55.7	4,523	64,782	3,786	5.2	51,394
1965 .....	126,513	74,455	58.9	71,088	56.2	4,361	66,726	3,366	4.5	52,058
1966 .....	128,058	75,770	59.2	72,895	56.9	3,979	68,915	2,875	3.8	52,288
1967 .....	129,874	77,347	59.6	74,372	57.3	3,844	70,527	2,975	3.8	52,527
1968 .....	132,028	78,737	59.6	75,920	57.5	3,817	72,103	2,817	3.6	53,291
1969 .....	134,335	80,734	60.1	77,902	58.0	3,606	74,296	2,832	3.5	53,602
1970 .....	137,085	82,771	60.4	78,678	57.4	3,463	75,215	4,093	4.9	54,315
1971 .....	140,216	84,382	60.2	79,367	56.6	3,394	75,972	5,016	5.9	55,834
1972 <sup>1</sup> .....	144,126	87,034	60.4	82,153	57.0	3,484	78,669	4,882	5.6	57,091
1973 <sup>1</sup> .....	147,096	89,429	60.8	85,064	57.8	3,470	81,594	4,365	4.9	57,667
1974 .....	150,120	91,949	61.3	86,794	57.8	3,515	83,279	5,156	5.6	58,171
1975 .....	153,153	93,775	61.2	85,846	56.1	3,408	82,438	7,929	8.5	59,377
1976 .....	156,150	96,158	61.6	88,752	56.8	3,331	85,421	7,406	7.7	59,991
1977 .....	159,033	99,009	62.3	92,017	57.9	3,283	88,734	6,991	7.1	60,025
1978 <sup>1</sup> .....	161,910	102,251	63.2	96,048	59.3	3,387	92,661	6,202	6.1	59,659
1979 .....	164,863	104,962	63.7	98,824	59.9	3,347	95,477	6,137	5.8	59,900
1980 .....	167,745	106,940	63.8	99,303	59.2	3,364	95,938	7,637	7.1	60,806
1981 .....	170,130	108,670	63.9	100,397	59.0	3,368	97,030	8,273	7.6	61,460
1982 .....	172,271	110,204	64.0	99,526	57.8	3,401	96,125	10,678	9.7	62,067
1983 .....	174,215	111,550	64.0	100,834	57.9	3,383	97,450	10,717	9.6	62,665
1984 .....	176,383	113,544	64.4	105,005	59.5	3,321	101,685	8,539	7.5	62,839
1985 .....	178,206	115,461	64.8	107,150	60.1	3,179	103,971	8,312	7.2	62,744
1986 <sup>1</sup> .....	180,587	117,834	65.3	109,597	60.7	3,163	106,434	8,237	7.0	62,752
1987 .....	182,753	119,865	65.6	112,440	61.5	3,208	109,232	7,425	6.2	62,888
1988 .....	184,613	121,669	65.9	114,968	62.3	3,169	111,800	6,701	5.5	62,944
1989 .....	186,393	123,869	66.5	117,342	63.0	3,199	114,142	6,528	5.3	62,523
1990 <sup>1</sup> .....	189,164	125,840	66.5	118,793	62.8	3,223	115,570	7,047	5.6	63,324
1991 .....	190,925	126,346	66.2	117,718	61.7	3,269	114,449	8,628	6.8	64,578
1992 .....	192,805	128,105	66.4	118,492	61.5	3,247	115,245	9,613	7.5	64,700
1993 .....	194,838	129,200	66.3	120,259	61.7	3,115	117,144	8,940	6.9	65,638
1994 <sup>1</sup> .....	196,814	131,056	66.6	123,060	62.5	3,409	119,651	7,996	6.1	65,758
1995 .....	198,584	132,304	66.6	124,900	62.9	3,440	121,460	7,404	5.6	66,280
1996 .....	200,591	133,943	66.8	126,708	63.2	3,443	123,264	7,236	5.4	66,647
1997 <sup>1</sup> .....	203,133	136,297	67.1	129,558	63.8	3,399	126,159	6,739	4.9	66,837
Monthly data, seasonally adjusted <sup>2</sup>										
<b>1997:</b>										
May .....	202,832	136,060	67.1	129,494	63.8	3,418	126,076	6,566	4.8	66,772
June .....	203,000	136,206	67.1	129,392	63.7	3,389	126,003	6,814	5.0	66,794
July .....	203,166	136,294	67.1	129,661	63.8	3,452	126,209	6,633	4.9	66,872
August .....	203,364	136,404	67.1	129,747	63.8	3,379	126,368	6,657	4.9	66,960
September .....	203,570	136,439	67.0	129,761	63.7	3,422	126,339	6,678	4.9	67,131
October .....	203,767	136,406	66.9	129,910	63.8	3,327	126,583	6,496	4.8	67,361
November .....	203,941	136,864	67.1	130,575	64.0	3,384	127,191	6,289	4.6	67,077
December .....	204,098	137,169	67.2	130,777	64.1	3,385	127,392	6,392	4.7	66,929
<b>1998:</b>										
January <sup>3</sup> .....	204,238	137,493	67.3	131,083	64.2	3,319	127,764	6,409	4.7	66,745
February .....	204,400	137,557	67.3	131,163	64.2	3,335	127,829	6,393	4.6	66,844
March .....	204,547	137,523	67.2	130,994	64.0	3,132	127,862	6,529	4.7	67,024
April .....	204,731	137,242	67.0	131,383	64.2	3,350	128,033	5,859	4.3	67,489
May .....	204,899	137,364	67.0	131,453	64.2	3,335	128,118	5,910	4.3	67,535

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

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

<sup>3</sup> Beginning in January 1998, data are not strictly comparable with data

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

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

(Numbers in thousands)

Sex, year, and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
<b>MEN</b>										
1986 <sup>1</sup> .....	85,798	65,422	76.3	60,892	71.0	2,511	58,381	4,530	6.9	20,376
1987 .....	86,899	66,207	76.2	62,107	71.5	2,543	59,564	4,101	6.2	20,692
1988 .....	87,857	66,927	76.2	63,273	72.0	2,493	60,780	3,655	5.5	20,930
1989 .....	88,762	67,840	76.4	64,315	72.5	2,513	61,802	3,525	5.2	20,923
1990 <sup>1</sup> .....	90,377	69,011	76.4	65,104	72.0	2,546	62,559	3,906	5.7	21,367
1991 .....	91,278	69,168	75.8	64,223	70.4	2,589	61,634	4,946	7.2	22,110
1992 .....	92,270	69,964	75.8	64,440	69.8	2,575	61,866	5,523	7.9	22,306
1993 .....	93,332	70,404	75.4	65,349	70.0	2,478	62,871	5,055	7.2	22,927
1994 <sup>1</sup> .....	94,355	70,817	75.1	66,450	70.4	2,554	63,896	4,367	6.2	23,538
1995 .....	95,178	71,360	75.0	67,377	70.8	2,559	64,818	3,983	5.6	23,818
1996 .....	96,206	72,087	74.9	68,207	70.9	2,573	65,634	3,880	5.4	24,119
1997 <sup>1</sup> .....	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
Monthly data, seasonally adjusted <sup>2</sup>										
<b>1997:</b>										
May .....	97,559	73,089	74.9	69,765	71.5	2,610	67,155	3,324	4.5	24,470
June .....	97,649	73,225	75.0	69,586	71.3	2,583	67,003	3,639	5.0	24,424
July .....	97,733	73,218	74.9	69,711	71.3	2,572	67,139	3,507	4.8	24,515
August .....	97,838	73,265	74.9	69,748	71.3	2,504	67,244	3,517	4.8	24,573
September .....	97,946	73,192	74.7	69,656	71.1	2,552	67,104	3,536	4.8	24,754
October .....	98,050	73,311	74.8	69,785	71.2	2,468	67,317	3,526	4.8	24,739
November .....	98,141	73,682	75.1	70,352	71.7	2,503	67,849	3,330	4.5	24,459
December .....	98,225	73,662	75.0	70,195	71.5	2,497	67,698	3,467	4.7	24,563
<b>1998:</b>										
January <sup>3</sup> .....	98,241	73,852	75.2	70,518	71.8	2,463	68,056	3,333	4.5	24,389
February .....	98,331	73,780	75.0	70,459	71.7	2,458	68,001	3,320	4.5	24,551
March .....	98,405	73,695	74.9	70,297	71.4	2,356	67,941	3,399	4.6	24,710
April .....	98,503	73,799	74.9	70,831	71.9	2,584	68,248	2,969	4.0	24,704
May .....	98,591	73,783	74.8	70,685	71.7	2,492	68,193	3,098	4.2	24,808
Annual averages										
<b>WOMEN</b>										
1986 <sup>1</sup> .....	94,789	52,413	55.3	48,706	51.4	652	48,054	3,707	7.1	42,376
1987 .....	95,853	53,658	56.0	50,334	52.5	666	49,668	3,324	6.2	42,195
1988 .....	96,756	54,742	56.6	51,696	53.4	676	51,020	3,046	5.6	42,014
1989 .....	97,630	56,030	57.4	53,027	54.3	687	52,341	3,003	5.4	41,601
1990 <sup>1</sup> .....	98,787	56,829	57.5	53,689	54.3	678	53,011	3,140	5.5	41,957
1991 .....	99,646	57,178	57.4	53,496	53.7	680	52,815	3,683	6.4	42,468
1992 .....	100,535	58,141	57.8	54,052	53.8	672	53,380	4,090	7.0	42,394
1993 .....	101,506	58,795	57.9	54,910	54.1	637	54,273	3,885	6.6	42,711
1994 <sup>1</sup> .....	102,460	60,239	58.8	56,610	55.3	855	55,755	3,629	6.0	42,221
1995 .....	103,406	60,944	58.9	57,523	55.6	881	56,642	3,421	5.6	42,462
1996 .....	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997 <sup>1</sup> .....	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
Monthly data, seasonally adjusted <sup>2</sup>										
<b>1997:</b>										
May .....	105,274	62,971	59.8	59,729	56.7	808	58,921	3,242	5.1	42,303
June .....	105,351	62,981	59.8	59,806	56.8	806	59,000	3,175	5.0	42,370
July .....	105,433	63,076	59.8	59,950	56.9	880	59,070	3,126	5.0	42,357
August .....	105,527	63,139	59.8	59,999	56.9	875	59,124	3,140	5.0	42,388
September .....	105,623	63,247	59.9	60,105	56.9	870	59,235	3,142	5.0	42,376
October .....	105,718	63,095	59.7	60,125	56.9	859	59,266	2,970	4.7	42,623
November .....	105,799	63,182	59.7	60,223	56.9	881	59,342	2,959	4.7	42,617
December .....	105,873	63,507	60.0	60,582	57.2	888	59,694	2,925	4.6	42,366
<b>1998:</b>										
January <sup>3</sup> .....	105,997	63,641	60.0	60,565	57.1	856	59,709	3,076	4.8	42,356
February .....	106,070	63,777	60.1	60,704	57.2	876	59,827	3,073	4.8	42,293
March .....	106,141	63,827	60.1	60,697	57.2	776	59,921	3,130	4.9	42,314
April .....	106,228	63,443	59.7	60,553	57.0	766	59,787	2,890	4.6	42,785
May .....	106,308	63,581	59.8	60,768	57.2	844	59,924	2,813	4.4	42,727

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

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

<sup>3</sup> Beginning in January 1998, data are not strictly comparable with data for 1997 and

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, sex, and age	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup> ..	202,832	203,000	203,166	203,364	203,570	203,767	203,941	204,098	204,238	204,400	204,547	204,731	204,899
Civilian labor force .....	136,060	136,206	136,294	136,404	136,439	136,406	136,864	137,169	137,493	137,557	137,523	137,242	137,364
Percent of population .....	67.1	67.1	67.1	67.1	67.0	66.9	67.1	67.2	67.3	67.3	67.2	67.0	67.0
Employed .....	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453
Employment-population ratio .....	63.8	63.7	63.8	63.8	63.7	63.8	64.0	64.1	64.2	64.2	64.0	64.2	64.2
Unemployed .....	6,566	6,814	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910
Unemployment rate .....	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3
<b>Men, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	97,559	97,649	97,733	97,838	97,946	98,050	98,141	98,225	98,241	98,331	98,405	98,503	98,591
Civilian labor force .....	73,089	73,225	73,218	73,265	73,192	73,311	73,682	73,662	73,852	73,780	73,695	73,799	73,783
Percent of population .....	74.9	75.0	74.9	74.9	74.7	74.8	75.1	75.0	75.2	75.0	74.9	74.9	74.8
Employed .....	69,765	69,586	69,711	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685
Employment-population ratio .....	71.5	71.3	71.3	71.3	71.1	71.2	71.7	71.5	71.8	71.7	71.4	71.9	71.7
Agriculture .....	2,610	2,583	2,572	2,504	2,552	2,468	2,503	2,497	2,463	2,458	2,356	2,584	2,492
Nonagricultural industries .....	67,155	67,003	67,139	67,244	67,104	67,317	67,849	67,698	68,056	68,001	67,941	68,246	68,193
Unemployed .....	3,324	3,639	3,507	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098
Unemployment rate .....	4.5	5.0	4.8	4.8	4.8	4.8	4.5	4.7	4.5	4.5	4.6	4.0	4.2
Not in labor force .....	24,470	24,424	24,515	24,573	24,754	24,739	24,459	24,563	24,389	24,551	24,710	24,704	24,808
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	89,766	89,829	89,888	89,982	90,068	90,140	90,251	90,339	90,391	90,476	90,502	90,580	90,622
Civilian labor force .....	68,990	69,157	69,171	69,198	69,136	69,193	69,500	69,561	69,652	69,601	69,451	69,697	69,624
Percent of population .....	76.9	77.0	77.0	76.9	76.8	76.8	77.0	77.0	77.1	76.9	76.7	76.9	76.8
Employed .....	66,309	66,258	66,361	66,386	66,298	66,337	66,824	66,676	67,008	66,990	66,753	67,301	67,190
Employment-population ratio .....	73.9	73.8	73.8	73.8	73.6	73.6	74.0	73.8	74.1	74.0	73.8	74.3	74.1
Agriculture .....	2,402	2,398	2,390	2,311	2,383	2,298	2,323	2,314	2,282	2,264	2,168	2,420	2,324
Nonagricultural industries .....	63,907	63,860	63,971	64,075	63,915	64,039	64,501	64,362	64,726	64,726	64,585	64,881	64,866
Unemployed .....	2,681	2,899	2,810	2,812	2,838	2,856	2,676	2,885	2,644	2,611	2,699	2,396	2,434
Unemployment rate .....	3.9	4.2	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5
Not in labor force .....	20,776	20,672	20,717	20,784	20,932	20,947	20,751	20,778	20,738	20,875	21,051	20,883	20,998
<b>Women, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	105,274	105,351	105,433	105,527	105,623	105,718	105,799	105,873	105,997	106,070	106,141	106,228	106,308
Civilian labor force .....	62,971	62,981	63,076	63,139	63,247	63,095	63,182	63,507	63,641	63,777	63,827	63,443	63,581
Percent of population .....	59.8	59.8	59.8	59.8	59.9	59.7	59.7	60.0	60.0	60.1	60.1	59.7	59.8
Employed .....	59,729	59,806	59,950	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768
Employment-population ratio .....	56.7	56.8	56.9	56.9	56.9	56.9	56.9	57.2	57.1	57.2	57.2	57.0	57.2
Agriculture .....	808	806	880	875	870	859	881	888	856	876	776	766	844
Nonagricultural industries .....	58,921	59,000	59,070	59,124	59,235	59,266	59,342	59,694	59,709	59,827	59,921	59,787	59,924
Unemployed .....	3,242	3,175	3,126	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813
Unemployment rate .....	5.1	5.0	5.0	5.0	5.0	4.7	4.7	4.6	4.8	4.8	4.9	4.6	4.4
Not in labor force .....	42,303	42,370	42,357	42,388	42,376	42,623	42,617	42,366	42,356	42,293	42,314	42,785	42,727
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> ..	97,767	97,834	97,919	98,000	98,082	98,144	98,212	98,300	98,420	98,471	98,534	98,583	98,668
Civilian labor force .....	59,129	59,195	59,232	59,362	59,432	59,338	59,348	59,624	59,652	59,721	59,771	59,486	59,573
Percent of population .....	60.5	60.5	60.5	60.6	60.6	60.5	60.4	60.6	60.6	60.6	60.7	60.3	60.4
Employed .....	56,488	56,575	56,693	56,789	56,883	56,919	56,953	57,255	57,040	57,146	57,186	57,075	57,253
Employment-population ratio .....	57.8	57.8	57.9	57.9	58.0	58.0	58.0	58.2	58.0	58.0	58.0	57.9	58.0
Agriculture .....	760	755	831	824	826	814	833	845	811	801	717	705	755
Nonagricultural industries .....	55,728	55,820	55,862	55,965	56,057	56,105	56,120	56,410	56,229	56,345	56,470	56,370	56,499
Unemployed .....	2,641	2,620	2,539	2,573	2,549	2,419	2,395	2,369	2,612	2,575	2,585	2,411	2,320
Unemployment rate .....	4.5	4.4	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9
Not in labor force .....	38,638	38,639	38,687	38,638	38,650	38,806	38,864	38,676	38,768	38,750	38,762	39,097	39,095
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup> ..	15,300	15,336	15,359	15,382	15,420	15,483	15,478	15,459	15,427	15,453	15,511	15,569	15,609
Civilian labor force .....	7,941	7,854	7,891	7,844	7,871	7,875	8,016	7,984	8,189	8,235	8,300	8,059	8,166
Percent of population .....	51.9	51.2	51.4	51.0	51.0	50.9	51.8	51.6	53.1	53.3	53.5	51.8	52.3
Employed .....	6,697	6,559	6,607	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010
Employment-population ratio .....	43.8	42.8	43.0	42.7	42.7	43.0	43.9	44.3	45.6	45.5	45.5	45.0	44.9
Agriculture .....	256	236	231	244	213	215	228	226	227	270	247	225	256
Nonagricultural industries .....	6,441	6,323	6,376	6,328	6,367	6,439	6,570	6,620	6,809	6,758	6,808	6,782	6,754
Unemployed .....	1,244	1,295	1,284	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156
Unemployment rate .....	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2
Not in labor force .....	7,359	7,482	7,468	7,538	7,549	7,608	7,462	7,475	7,238	7,218	7,210	7,510	7,442

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

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



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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> ..	169,782	169,897	170,010	170,148	170,290	170,427	170,545	170,649	170,810	170,917	171,016	171,141	171,257
Civilian labor force .....	114,562	114,659	114,622	114,669	114,758	114,784	115,073	115,263	115,253	115,392	115,297	115,057	115,309
Percent of population .....	67.5	67.5	67.4	67.4	67.4	67.4	67.5	67.5	67.5	67.5	67.4	67.2	67.3
Employed .....	109,906	109,779	109,851	109,832	109,904	110,063	110,604	110,729	110,698	110,842	110,605	110,859	111,025
Employment-population ratio .....	64.7	64.6	64.6	64.6	64.5	64.6	64.9	64.8	64.8	64.9	64.7	64.8	64.8
Unemployed .....	4,656	4,880	4,771	4,837	4,854	4,721	4,469	4,534	4,555	4,550	4,692	4,198	4,284
Unemployment rate .....	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7
<b>Men, 20 years and over</b>													
Civilian labor force .....	59,001	59,086	59,096	59,118	59,110	59,098	59,355	59,389	59,262	59,372	59,201	59,307	59,366
Percent of population .....	77.4	77.5	77.4	77.4	77.3	77.2	77.5	77.5	77.3	77.4	77.1	77.2	77.2
Employed .....	57,033	56,967	57,011	57,011	56,989	56,966	57,363	57,272	57,336	57,456	57,209	57,562	57,516
Employment-population ratio .....	74.8	74.7	74.7	74.6	74.5	74.4	74.9	74.7	74.8	74.9	74.5	74.9	74.8
Unemployed .....	1,968	2,119	2,085	2,107	2,121	2,132	1,992	2,117	1,926	1,916	1,992	1,745	1,850
Unemployment rate .....	3.3	3.6	3.5	3.6	3.6	3.6	3.4	3.6	3.3	3.2	3.4	2.9	3.1
<b>Women, 20 years and over</b>													
Civilian labor force .....	48,845	48,877	48,790	48,910	48,955	48,976	48,906	49,134	49,077	49,057	49,077	48,955	49,019
Percent of population .....	60.0	60.0	59.9	60.0	60.0	60.0	59.9	60.1	60.0	59.9	59.9	59.7	59.8
Employed .....	47,022	47,077	47,072	47,122	47,165	47,284	47,265	47,474	47,250	47,279	47,276	47,300	47,416
Employment-population ratio .....	57.8	57.8	57.8	57.8	57.8	57.9	57.8	58.1	57.7	57.7	57.7	57.7	57.8
Unemployed .....	1,823	1,800	1,718	1,788	1,790	1,692	1,641	1,660	1,827	1,778	1,801	1,654	1,603
Unemployment rate .....	3.7	3.7	3.5	3.7	3.7	3.5	3.4	3.4	3.7	3.6	3.7	3.4	3.3
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,716	6,696	6,736	6,641	6,693	6,710	6,812	6,740	6,914	6,963	7,019	6,795	6,924
Percent of population .....	55.3	55.0	55.3	54.4	54.8	54.9	55.6	55.0	56.3	56.6	56.9	54.9	55.8
Employed .....	5,851	5,735	5,768	5,699	5,750	5,813	5,976	5,983	6,113	6,107	6,120	5,996	6,093
Employment-population ratio .....	48.2	47.1	47.3	46.7	47.0	47.5	48.8	48.8	49.8	49.6	49.6	48.5	49.1
Unemployed .....	865	961	968	942	943	897	836	757	802	857	899	799	831
Unemployment rate .....	12.9	14.4	14.4	14.2	14.1	13.4	12.3	11.2	11.6	12.3	12.8	11.8	12.0
Men .....	13.0	15.8	15.0	15.1	14.4	14.3	12.8	11.3	14.2	14.7	14.9	12.7	14.0
Women .....	12.7	12.8	13.7	13.1	13.7	12.3	11.6	11.1	8.8	9.8	10.6	10.7	9.8
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> ..	23,950	23,978	24,006	24,043	24,081	24,117	24,149	24,180	24,196	24,229	24,257	24,289	24,317
Civilian labor force .....	15,424	15,426	15,524	15,728	15,691	15,555	15,638	15,709	15,788	15,885	15,971	15,907	15,756
Percent of population .....	64.4	64.3	64.7	65.4	65.2	64.5	64.8	65.0	65.3	65.6	65.8	65.5	64.8
Employed .....	13,837	13,836	14,040	14,237	14,180	14,067	14,128	14,149	14,316	14,349	14,498	14,499	14,344
Employment-population ratio .....	57.8	57.7	58.5	59.2	58.9	58.3	58.5	58.5	59.2	59.2	59.8	59.7	59.0
Unemployed .....	1,587	1,590	1,484	1,491	1,511	1,488	1,510	1,560	1,472	1,535	1,473	1,408	1,412
Unemployment rate .....	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,851	6,925	6,946	7,035	6,978	6,945	6,965	6,957	7,012	6,974	7,044	7,097	7,009
Percent of population .....	71.7	72.4	72.5	73.3	72.6	72.3	72.1	72.0	72.6	72.1	72.8	73.2	72.2
Employed .....	6,273	6,305	6,371	6,480	6,424	6,367	6,420	6,356	6,456	6,428	6,511	6,573	6,536
Employment-population ratio .....	65.7	65.9	66.5	67.5	66.8	66.3	66.5	65.8	66.9	66.5	67.3	67.8	67.4
Unemployed .....	578	620	575	555	554	578	545	601	556	546	533	524	473
Unemployment rate .....	8.4	9.0	8.3	7.9	7.9	8.3	7.8	8.6	7.9	7.8	7.6	7.4	6.7
<b>Women, 20 years and over</b>													
Civilian labor force .....	7,671	7,617	7,691	7,771	7,790	7,680	7,731	7,791	7,799	7,952	7,935	7,822	7,787
Percent of population .....	63.9	63.5	64.1	64.6	64.6	63.6	63.9	64.4	64.3	65.5	65.3	64.3	64.0
Employed .....	6,968	6,932	7,048	7,115	7,135	7,044	7,080	7,163	7,178	7,265	7,284	7,182	7,130
Employment-population ratio .....	58.1	57.8	58.7	59.1	59.2	58.3	58.6	59.2	59.2	59.8	60.0	59.0	58.6
Unemployed .....	703	685	643	656	655	636	651	628	621	687	651	640	657
Unemployment rate .....	9.2	9.0	8.4	8.4	8.4	8.3	8.4	8.1	8.0	8.6	8.2	8.2	8.4

See footnotes at end of table.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	902	884	887	922	923	930	942	961	977	959	992	988	960
Percent of population .....	37.5	36.5	36.7	38.3	38.3	38.2	39.2	39.8	40.5	39.6	40.9	40.6	39.4
Employed .....	596	599	621	642	621	656	628	630	683	656	703	744	678
Employment-population ratio .....	24.8	24.7	25.7	26.6	25.8	26.9	26.1	26.1	28.3	27.1	29.0	30.6	27.8
Unemployed .....	306	285	266	280	302	274	314	331	294	302	289	244	283
Unemployment rate .....	33.9	32.2	30.0	30.4	32.7	29.5	33.3	34.4	30.1	31.5	29.1	24.7	29.4
Men .....	34.5	39.1	34.6	33.9	37.6	30.1	35.0	36.2	31.8	34.7	27.8	23.9	30.2
Women .....	33.3	25.5	25.9	27.2	28.6	28.8	31.9	33.1	28.5	28.4	30.3	25.3	28.8
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> ..	20,236	20,293	20,351	20,407	20,464	20,519	20,575	20,629	20,741	20,798	20,851	20,915	20,975
Civilian labor force .....	13,760	13,814	13,861	13,886	13,861	13,896	13,880	13,973	13,954	14,149	14,298	14,369	14,458
Percent of population .....	68.0	68.1	68.1	68.0	67.7	67.7	67.5	67.7	67.3	68.0	68.6	68.7	68.9
Employed .....	12,713	12,751	12,772	12,867	12,807	12,806	12,921	12,921	12,988	13,181	13,305	13,434	13,480
Employment-population ratio .....	62.8	62.8	62.8	63.1	62.6	62.4	62.8	62.6	62.6	63.4	63.8	64.2	64.3
Unemployed .....	1,047	1,063	1,089	1,019	1,054	1,090	959	1,052	966	968	993	935	978
Unemployment rate .....	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8

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

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

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

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

(Numbers in thousands)

Educational attainment	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Less than a high school diploma</b>													
Civilian noninstitutional population <sup>1</sup> .....	30,198	29,924	29,288	29,314	29,350	29,046	29,505	29,566	29,981	29,228	29,251	29,638	29,931
Civilian labor force .....	12,590	12,608	12,554	12,534	12,555	12,468	12,511	12,555	12,682	12,555	12,392	12,664	12,690
Percent of population .....	41.7	42.1	42.9	42.8	42.8	42.9	42.4	42.5	42.3	43.0	42.4	42.7	42.4
Employed .....	11,556	11,575	11,579	11,573	11,548	11,502	11,575	11,606	11,771	11,676	11,500	11,773	11,839
Employment-population ratio .....	38.3	38.7	39.5	39.5	39.3	39.6	39.2	39.3	39.3	39.9	39.3	39.7	39.6
Unemployed .....	1,034	1,033	975	961	1,007	966	936	949	911	879	891	891	851
Unemployment rate .....	8.2	8.2	7.8	7.7	8.0	7.7	7.5	7.6	7.2	7.0	7.2	7.0	6.7
<b>High school graduates, no college<sup>2</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	57,392	57,643	57,581	57,607	57,483	57,459	57,310	57,631	57,606	57,418	57,885	57,484	57,706
Civilian labor force .....	37,669	37,826	37,987	37,842	37,585	37,759	37,641	37,827	37,787	37,807	37,931	37,340	37,496
Percent of population .....	65.6	65.6	66.0	65.7	65.4	65.7	65.7	65.6	65.6	65.8	65.5	65.0	65.0
Employed .....	36,097	36,174	36,382	36,225	36,003	36,179	36,193	36,287	36,303	36,302	36,331	35,885	36,114
Employment-population ratio .....	62.9	62.8	63.2	62.9	62.6	63.0	63.2	63.0	63.0	63.2	62.8	62.4	62.6
Unemployed .....	1,572	1,652	1,605	1,617	1,582	1,580	1,448	1,540	1,485	1,505	1,600	1,454	1,383
Unemployment rate .....	4.2	4.4	4.2	4.3	4.2	4.2	3.8	4.1	3.9	4.0	4.2	3.9	3.7
<b>Less than a bachelor's degree<sup>3</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	41,648	41,747	42,322	42,401	42,075	42,613	42,417	42,085	41,718	42,527	42,313	42,303	42,024
Civilian labor force .....	31,279	31,333	31,227	31,445	31,401	31,328	31,544	31,506	31,440	31,505	31,515	31,517	31,408
Percent of population .....	75.1	75.1	73.8	74.2	74.6	73.5	74.4	74.9	75.4	74.1	74.5	74.5	74.7
Employed .....	30,342	30,316	30,239	30,438	30,382	30,410	30,574	30,484	30,429	30,538	30,471	30,669	30,437
Employment-population ratio .....	72.9	72.6	71.4	71.8	72.2	71.4	72.1	72.4	72.9	71.8	72.0	72.5	72.4
Unemployed .....	937	1,017	988	1,007	1,019	918	970	1,022	1,011	967	1,043	848	971
Unemployment rate .....	3.0	3.2	3.2	3.2	3.2	2.9	3.1	3.2	3.2	3.1	3.3	2.7	3.1
<b>College graduates</b>													
Civilian noninstitutional population <sup>1</sup> .....	40,909	40,955	41,171	41,232	41,769	41,696	41,739	41,822	41,974	42,238	42,085	42,197	42,090
Civilian labor force .....	32,971	33,036	33,159	33,290	33,577	33,510	33,505	33,678	33,685	33,672	33,777	33,989	33,920
Percent of population .....	80.6	80.7	80.5	80.7	80.4	80.4	80.3	80.5	80.3	79.7	80.3	80.5	80.6
Employed .....	32,265	32,356	32,474	32,592	32,891	32,868	32,916	33,083	33,040	33,029	33,145	33,419	33,364
Employment-population ratio .....	78.9	79.0	78.9	79.0	78.7	78.8	78.9	79.1	78.7	78.2	78.8	79.2	79.3
Unemployed .....	706	680	685	698	686	642	589	595	645	643	632	571	556
Unemployment rate .....	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.8	1.9	1.9	1.9	1.7	1.6

<sup>1</sup> The population figures are not adjusted for seasonal variation.  
<sup>2</sup> Includes high school diploma or equivalent.  
<sup>3</sup> Includes the categories, some college, no degree; and associate degree.

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Full- and part-time status, sex, and age	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>EMPLOYED</b>													
Full-time workers .....	106,095	106,343	106,548	106,672	106,926	106,824	107,491	107,452	107,777	107,788	107,696	108,107	108,155
Men, 16 years and over .....	62,160	62,245	62,332	62,376	62,487	62,439	63,014	62,829	62,909	62,810	62,740	63,092	63,098
Men, 20 years and over .....	60,863	60,976	61,038	61,101	61,197	61,142	61,672	61,505	61,652	61,534	61,434	61,810	61,742
Women, 16 years and over .....	43,912	44,146	44,304	44,375	44,436	44,369	44,452	44,589	44,741	44,869	44,855	44,957	44,983
Women, 20 years and over .....	43,085	43,281	43,364	43,468	43,518	43,479	43,546	43,691	43,856	43,898	43,810	43,997	44,017
Both sexes, 16 to 19 years .....	2,147	2,086	2,146	2,103	2,211	2,203	2,273	2,256	2,268	2,356	2,452	2,300	2,396
Part-time workers .....	23,327	22,987	23,016	23,061	23,004	23,163	23,244	23,422	23,373	23,249	23,428	23,201	23,222
Men, 16 years and over .....	7,487	7,323	7,375	7,436	7,348	7,401	7,432	7,459	7,469	7,547	7,550	7,641	7,424
Men, 20 years and over .....	5,326	5,260	5,323	5,355	5,278	5,255	5,226	5,257	5,273	5,319	5,305	5,404	5,296
Women, 16 years and over .....	15,816	15,689	15,628	15,623	15,652	15,766	15,802	16,014	15,833	15,704	15,901	15,580	15,770
Women, 20 years and over .....	13,400	13,280	13,290	13,291	13,366	13,432	13,447	13,559	13,258	13,175	13,382	13,099	13,232
Both sexes, 16 to 19 years .....	4,601	4,447	4,403	4,415	4,360	4,476	4,571	4,606	4,842	4,755	4,742	4,698	4,694
<b>UNEMPLOYED</b>													
Looking for full-time work .....	5,300	5,480	5,329	5,305	5,309	5,215	4,987	5,203	5,075	5,070	5,126	4,690	4,784
Men, 16 years and over .....	2,855	3,164	2,961	2,958	2,984	2,991	2,834	2,994	2,645	2,610	2,725	2,461	2,662
Men, 20 years and over .....	2,487	2,669	2,585	2,568	2,571	2,600	2,466	2,689	2,438	2,386	2,462	2,167	2,250
Women, 16 years and over .....	2,472	2,395	2,344	2,369	2,361	2,254	2,205	2,220	2,296	2,369	2,322	2,252	2,160
Women, 20 years and over .....	2,162	2,125	2,102	2,116	2,069	1,979	1,905	1,914	2,102	2,137	2,050	1,993	1,916
Both sexes, 16 to 19 years .....	651	686	642	621	669	636	616	600	536	547	613	530	617
Looking for part-time work .....	1,303	1,296	1,305	1,346	1,328	1,288	1,329	1,238	1,339	1,279	1,409	1,170	1,157
Men, 16 years and over .....	519	542	558	577	561	570	551	502	549	583	582	504	494
Men, 20 years and over .....	193	227	219	233	245	263	226	220	206	220	234	228	180
Women, 16 years and over .....	788	772	766	752	751	705	779	753	760	708	806	686	679
Women, 20 years and over .....	496	474	445	459	458	440	499	462	505	443	536	426	415
Both sexes, 16 to 19 years .....	614	595	641	654	625	585	604	556	627	615	640	516	562
<b>UNEMPLOYMENT RATES<sup>1</sup></b>													
Full-time workers .....	4.8	4.9	4.8	4.7	4.7	4.7	4.4	4.6	4.5	4.5	4.5	4.2	4.2
Men, 16 years and over .....	4.4	4.8	4.5	4.5	4.6	4.6	4.3	4.5	4.0	4.0	4.2	3.8	4.0
Men, 20 years and over .....	3.9	4.2	4.1	4.0	4.0	4.1	3.8	4.2	3.8	3.7	3.9	3.4	3.5
Women, 16 years and over .....	5.3	5.1	5.0	5.1	5.0	4.8	4.7	4.7	4.9	5.0	4.9	4.8	4.6
Women, 20 years and over .....	4.8	4.7	4.6	4.6	4.5	4.4	4.2	4.2	4.6	4.6	4.5	4.3	4.2
Both sexes, 16 to 19 years .....	23.3	24.7	23.0	22.8	23.2	22.4	21.3	21.0	19.1	18.8	20.0	18.7	20.5
Part-time workers .....	5.3	5.3	5.4	5.5	5.5	5.3	5.4	5.0	5.4	5.2	5.7	4.8	4.7
Men, 16 years and over .....	6.5	6.9	7.0	7.2	7.1	7.2	6.9	6.3	6.8	7.2	7.2	6.2	6.2
Men, 20 years and over .....	3.5	4.1	4.0	4.2	4.4	4.8	4.1	4.0	3.8	4.0	4.2	4.0	3.3
Women, 16 years and over .....	4.7	4.7	4.7	4.6	4.6	4.3	4.7	4.5	4.6	4.3	4.8	4.2	4.1
Women, 20 years and over .....	3.6	3.4	3.2	3.3	3.3	3.2	3.6	3.3	3.7	3.3	3.8	3.2	3.0
Both sexes, 16 to 19 years .....	11.8	11.8	12.7	12.9	12.5	11.6	11.7	10.8	11.5	11.5	11.9	9.9	10.7

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

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

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

(In thousands)

Category	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>MARITAL STATUS</b>													
Total .....	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453
Married men, spouse present .....	42,375	42,476	42,582	42,680	42,648	42,771	42,967	42,952	42,977	42,915	42,779	42,865	42,471
Married women, spouse present .....	32,520	32,654	32,813	32,861	32,846	32,978	32,840	32,975	32,793	32,821	32,872	32,973	32,805
Women who maintain families .....	7,820	7,820	7,875	7,892	7,876	7,865	7,726	7,822	7,784	7,884	7,776	7,813	7,848
<b>OCCUPATION</b>													
Managerial and professional specialty .....	37,356	37,549	37,598	37,765	37,860	37,844	37,986	38,205	38,099	38,164	38,454	38,643	38,641
Technical, sales, and administrative support .....	38,304	38,188	38,240	38,334	38,535	38,537	38,540	38,562	38,382	38,491	38,693	38,585	38,401
Service occupations .....	17,418	17,450	17,550	17,713	17,746	17,723	17,827	17,890	18,162	17,950	17,752	17,478	17,749
Precision production, craft, and repair .....	14,279	14,282	14,234	14,038	13,859	14,051	14,191	14,299	14,285	14,456	14,656	14,673	14,853
Operators, fabricators, and laborers .....	18,593	18,540	18,476	18,452	18,302	18,385	18,467	18,394	18,622	18,632	18,179	18,447	18,322
Farming, forestry, and fishing .....	3,612	3,502	3,531	3,442	3,483	3,438	3,512	3,472	3,355	3,436	3,269	3,495	3,479
<b>CLASS OF WORKER</b>													
Agriculture:													
Wage and salary workers .....	1,917	1,912	1,897	1,853	1,889	1,815	1,855	1,844	1,949	1,928	1,866	1,987	1,871
Self-employed workers .....	1,442	1,429	1,478	1,477	1,495	1,475	1,493	1,496	1,348	1,324	1,242	1,324	1,395
Unpaid family workers .....	52	47	52	50	44	55	49	54	44	41	32	28	51
Nonagricultural industries:													
Wage and salary workers .....	116,874	116,642	117,146	117,372	117,303	117,635	118,083	118,403	118,529	118,961	119,131	118,774	119,013
Private industries .....	99,011	98,529	98,843	99,169	99,194	99,560	99,913	100,155	100,108	100,583	101,058	100,571	100,979
Private households .....	948	888	911	935	877	877	910	946	985	1,035	1,022	1,014	1,015
Other industries .....	98,063	97,641	97,932	98,234	98,317	98,683	99,003	99,209	99,123	99,547	100,037	99,557	99,964
Government .....	17,863	18,113	18,303	18,203	18,109	18,075	18,170	18,248	18,421	18,378	18,072	18,202	18,034
Self-employed workers .....	9,098	9,089	8,927	8,955	8,949	8,930	9,004	8,886	8,964	8,761	8,784	9,069	9,023
Unpaid family workers .....	142	128	129	126	83	92	97	99	131	117	102	124	97
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
All industries:													
Part time for economic reasons .....	4,060	4,049	4,019	3,988	3,928	3,913	3,890	3,855	4,082	3,882	3,902	3,735	3,772
Slack work or business conditions .....	2,295	2,347	2,236	2,164	2,187	2,211	2,221	2,230	2,282	2,123	2,188	2,074	2,104
Could only find part-time work .....	1,440	1,373	1,489	1,487	1,455	1,406	1,386	1,323	1,400	1,455	1,445	1,300	1,344
Part time for noneconomic reasons .....	18,218	18,205	18,055	18,096	17,901	18,113	18,083	18,386	18,515	18,407	18,448	18,084	18,662
Nonagricultural industries:													
Part time for economic reasons .....	3,853	3,819	3,858	3,832	3,739	3,732	3,689	3,654	3,865	3,743	3,726	3,608	3,630
Slack work or business conditions .....	2,166	2,202	2,121	2,066	2,067	2,103	2,100	2,113	2,162	2,025	2,057	1,998	2,024
Could only find part-time work .....	1,402	1,320	1,462	1,455	1,417	1,378	1,346	1,291	1,373	1,433	1,416	1,276	1,315
Part time for noneconomic reasons .....	17,654	17,577	17,452	17,521	17,381	17,537	17,486	17,791	17,898	17,786	17,929	17,470	18,067

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

holidays, illness, and bad weather.

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	129,494	129,392	129,661	129,747	129,761	129,910	130,575	130,777	131,083	131,163	130,994	131,383	131,453
16 to 24 years .....	19,191	18,919	19,017	18,855	19,013	19,002	19,257	19,304	19,574	19,587	19,563	19,691	19,597
16 to 19 years .....	6,697	6,559	6,607	6,572	6,580	6,654	6,798	6,846	7,035	7,028	7,055	7,007	7,010
16 to 17 years .....	2,615	2,628	2,622	2,567	2,640	2,680	2,680	2,676	2,843	2,803	2,840	2,823	2,741
18 to 19 years .....	4,105	3,943	3,982	3,976	3,936	3,976	4,118	4,176	4,193	4,224	4,215	4,173	4,287
20 to 24 years .....	12,494	12,360	12,410	12,283	12,433	12,348	12,459	12,458	12,539	12,560	12,508	12,684	12,587
25 years and over .....	110,337	110,487	110,610	110,858	110,831	110,964	111,251	111,445	111,463	111,505	111,398	111,755	111,855
25 to 54 years .....	94,225	94,540	94,717	94,910	94,772	94,707	94,859	94,941	95,125	95,099	95,055	95,148	95,217
55 years and over .....	16,031	15,892	15,934	16,063	16,104	16,220	16,417	16,523	16,367	16,401	16,388	16,475	16,562
Men, 16 years and over .....	69,765	69,586	69,711	69,748	69,656	69,785	70,352	70,195	70,518	70,459	70,297	70,831	70,685
16 to 24 years .....	10,134	9,904	9,929	9,895	9,880	9,889	10,070	10,010	10,178	10,132	10,167	10,263	10,126
16 to 19 years .....	3,456	3,328	3,350	3,362	3,358	3,448	3,528	3,519	3,510	3,470	3,544	3,529	3,495
16 to 17 years .....	1,338	1,338	1,331	1,339	1,360	1,398	1,401	1,377	1,472	1,397	1,452	1,444	1,375
18 to 19 years .....	2,126	2,001	2,007	1,996	1,980	2,075	2,128	2,151	2,041	2,080	2,093	2,088	2,121
20 to 24 years .....	6,678	6,576	6,579	6,533	6,522	6,441	6,542	6,491	6,668	6,662	6,622	6,733	6,631
25 years and over .....	59,639	59,671	59,781	59,850	59,877	59,952	60,234	60,168	60,288	60,315	60,117	60,520	60,543
25 to 54 years .....	50,680	50,772	50,858	50,906	50,871	50,867	51,125	51,034	51,235	51,201	51,144	51,357	51,315
55 years and over .....	8,958	8,858	8,932	9,007	9,009	9,060	9,152	9,151	9,048	9,087	8,991	9,114	9,226
Women, 16 years and over .....	59,729	59,806	59,950	59,999	60,105	60,125	60,223	60,582	60,565	60,704	60,697	60,553	60,768
16 to 24 years .....	9,057	9,015	9,088	8,960	9,133	9,113	9,187	9,294	9,396	9,455	9,397	9,429	9,471
16 to 19 years .....	3,241	3,231	3,257	3,210	3,222	3,206	3,270	3,327	3,525	3,558	3,511	3,478	3,515
16 to 17 years .....	1,277	1,290	1,291	1,228	1,280	1,282	1,279	1,299	1,371	1,406	1,388	1,380	1,366
18 to 19 years .....	1,979	1,942	1,975	1,980	1,956	1,901	1,990	2,025	2,152	2,144	2,122	2,086	2,166
20 to 24 years .....	5,816	5,784	5,831	5,750	5,911	5,907	5,917	5,967	5,871	5,898	5,886	5,951	5,956
25 years and over .....	50,698	50,816	50,829	51,008	50,954	51,012	51,017	51,277	51,175	51,190	51,281	51,235	51,311
25 to 54 years .....	43,545	43,768	43,859	44,004	43,901	43,840	43,734	43,907	43,890	43,898	43,910	43,791	43,902
55 years and over .....	7,073	7,034	7,002	7,056	7,095	7,160	7,265	7,372	7,319	7,314	7,397	7,361	7,336

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

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

(In thousands)

Age and sex	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	6,566	6,814	6,633	6,657	6,678	6,496	6,289	6,392	6,409	6,393	6,529	5,859	5,910
16 to 24 years .....	2,361	2,426	2,350	2,393	2,408	2,375	2,360	2,300	2,371	2,378	2,335	2,063	2,184
16 to 19 years .....	1,244	1,295	1,284	1,272	1,291	1,221	1,218	1,138	1,154	1,207	1,245	1,052	1,156
16 to 17 years .....	586	550	571	559	631	568	574	576	596	638	579	506	514
18 to 19 years .....	664	743	729	722	669	654	646	555	549	538	670	546	650
20 to 24 years .....	1,117	1,131	1,066	1,121	1,117	1,154	1,142	1,162	1,218	1,171	1,090	1,011	1,028
25 years and over .....	4,249	4,371	4,245	4,296	4,304	4,122	3,923	4,149	4,019	4,018	4,184	3,751	3,758
25 to 54 years .....	3,787	3,867	3,750	3,778	3,791	3,636	3,461	3,659	3,588	3,571	3,712	3,293	3,372
55 years and over .....	480	509	488	504	512	472	472	480	459	450	486	426	407
Men, 16 years and over .....	3,324	3,639	3,507	3,517	3,536	3,526	3,330	3,467	3,333	3,320	3,399	2,969	3,098
16 to 24 years .....	1,209	1,337	1,293	1,334	1,347	1,350	1,325	1,250	1,278	1,348	1,282	1,105	1,250
16 to 19 years .....	643	740	697	705	698	670	654	582	689	709	700	573	664
16 to 17 years .....	304	328	309	295	314	311	312	310	330	371	330	253	300
18 to 19 years .....	345	421	385	417	381	360	349	268	357	313	374	320	370
20 to 24 years .....	566	597	596	629	649	680	671	668	588	639	582	532	586
25 years and over .....	2,156	2,292	2,201	2,220	2,182	2,176	2,005	2,213	2,050	1,975	2,102	1,854	1,875
25 to 54 years .....	1,878	2,007	1,928	1,921	1,901	1,887	1,727	1,896	1,785	1,718	1,828	1,602	1,639
55 years and over .....	264	285	274	284	276	277	278	325	289	268	285	244	225
Women, 16 years and over .....	3,242	3,175	3,126	3,140	3,142	2,970	2,959	2,925	3,076	3,073	3,130	2,890	2,813
16 to 24 years .....	1,152	1,089	1,057	1,059	1,061	1,025	1,035	1,050	1,094	1,030	1,053	958	935
16 to 19 years .....	601	555	587	567	593	551	564	556	464	498	545	479	493
16 to 17 years .....	282	222	262	264	317	257	262	266	267	249	249	253	214
18 to 19 years .....	319	322	344	305	288	294	297	287	191	225	296	226	280
20 to 24 years .....	551	534	470	492	468	474	471	494	629	532	508	479	442
25 years and over .....	2,093	2,079	2,044	2,076	2,122	1,946	1,918	1,936	1,969	2,043	2,082	1,897	1,883
25 to 54 years .....	1,909	1,860	1,822	1,857	1,890	1,749	1,734	1,763	1,802	1,853	1,884	1,692	1,733
55 years and over .....	216	224	214	220	236	195	194	155	170	181	201	182	182

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Percent)

Age and sex	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3
16 to 24 years .....	11.0	11.4	11.0	11.3	11.2	11.1	10.9	10.6	10.8	10.8	10.7	9.5	10.0
16 to 19 years .....	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2
16 to 17 years .....	18.3	17.3	17.9	17.9	19.3	17.5	17.6	17.7	17.3	18.5	16.9	15.2	15.8
18 to 19 years .....	13.9	15.9	15.5	15.4	14.5	14.1	13.6	11.7	11.6	11.3	13.7	11.6	13.2
20 to 24 years .....	8.2	8.4	7.9	8.4	8.2	8.5	8.4	8.5	8.9	8.5	8.0	7.4	7.6
25 years and over .....	3.7	3.8	3.7	3.7	3.7	3.6	3.4	3.6	3.5	3.5	3.6	3.2	3.3
25 to 54 years .....	3.9	3.9	3.8	3.8	3.8	3.7	3.5	3.7	3.6	3.6	3.8	3.3	3.4
55 years and over .....	2.9	3.1	3.0	3.0	3.1	2.8	2.8	2.8	2.7	2.7	2.9	2.5	2.4
Men, 16 years and over .....	4.5	5.0	4.8	4.8	4.8	4.8	4.5	4.7	4.5	4.5	4.6	4.0	4.2
16 to 24 years .....	10.7	11.9	11.5	11.9	12.0	12.0	11.6	11.1	11.2	11.7	11.2	9.7	11.0
16 to 19 years .....	15.7	18.2	17.2	17.3	17.2	16.3	15.6	14.2	16.4	17.0	16.5	14.0	16.0
16 to 17 years .....	18.5	19.7	18.8	18.1	18.8	18.2	18.2	18.4	18.3	21.0	18.5	14.9	17.9
18 to 19 years .....	14.0	17.4	16.1	17.3	16.1	14.8	14.1	11.1	14.9	13.1	15.2	13.3	14.8
20 to 24 years .....	7.8	8.3	8.3	8.8	9.1	9.5	9.3	9.3	8.1	8.7	8.1	7.3	8.1
25 years and over .....	3.5	3.7	3.6	3.6	3.5	3.5	3.2	3.5	3.3	3.2	3.4	3.0	3.0
25 to 54 years .....	3.6	3.8	3.7	3.6	3.6	3.6	3.3	3.6	3.4	3.2	3.5	3.0	3.1
55 years and over .....	2.9	3.1	3.0	3.1	3.0	3.0	2.9	3.4	3.1	2.9	3.1	2.6	2.4
Women, 16 years and over .....	5.1	5.0	5.0	5.0	5.0	4.7	4.7	4.6	4.8	4.8	4.9	4.6	4.4
16 to 24 years .....	11.3	10.8	10.4	10.6	10.4	10.1	10.1	10.2	10.4	9.8	10.1	9.2	9.0
16 to 19 years .....	15.6	14.7	15.3	15.0	15.5	14.7	14.7	14.3	11.6	12.3	13.4	12.1	12.3
16 to 17 years .....	18.1	14.7	16.9	17.7	19.8	16.7	17.0	17.0	16.3	16.0	15.2	15.5	13.5
18 to 19 years .....	13.9	14.2	14.8	13.3	12.8	13.4	13.0	12.4	8.2	9.5	12.2	9.8	11.4
20 to 24 years .....	8.7	8.5	7.5	7.9	7.3	7.4	7.4	7.6	9.7	8.3	7.9	7.5	6.9
25 years and over .....	4.0	3.9	3.9	3.9	4.0	3.7	3.6	3.6	3.7	3.8	3.9	3.6	3.5
25 to 54 years .....	4.2	4.1	4.0	4.0	4.1	3.8	3.8	3.9	3.9	4.1	4.1	3.7	3.8
55 years and over .....	3.0	3.1	3.0	3.0	3.2	2.7	2.6	2.1	2.3	2.4	2.6	2.4	2.4

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



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

(Percent)

Category	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>CHARACTERISTIC</b>													
Total .....	4.8	5.0	4.9	4.9	4.9	4.8	4.6	4.7	4.7	4.6	4.7	4.3	4.3
Men, 20 years and over .....	3.9	4.2	4.1	4.1	4.1	4.1	3.9	4.1	3.8	3.8	3.9	3.4	3.5
Women, 20 years and over .....	4.5	4.4	4.3	4.3	4.3	4.1	4.0	4.0	4.4	4.3	4.3	4.1	3.9
Both sexes, 16 to 19 years .....	15.7	16.5	16.3	16.2	16.4	15.5	15.2	14.3	14.1	14.7	15.0	13.1	14.2
White .....	4.1	4.3	4.2	4.2	4.2	4.1	3.9	3.9	4.0	3.9	4.1	3.6	3.7
Black and other .....	9.2	8.9	8.4	8.4	8.4	8.2	8.4	8.6	8.3	8.3	8.2	7.5	7.6
Black .....	10.3	10.3	9.6	9.5	9.6	9.6	9.7	9.9	9.3	9.7	9.2	8.9	9.0
Hispanic origin .....	7.6	7.7	7.9	7.3	7.6	7.8	6.9	7.5	6.9	6.8	6.9	6.5	6.8
Married men, spouse present .....	2.7	2.7	2.6	2.6	2.6	2.6	2.4	2.6	2.6	2.5	2.5	2.2	2.4
Married women, spouse present .....	3.2	3.2	3.1	3.0	3.1	2.8	2.8	2.8	3.1	3.1	3.3	2.8	2.8
Women who maintain families .....	7.9	8.0	7.6	8.0	7.8	7.8	8.1	7.7	7.6	7.6	7.6	7.6	7.7
<b>OCCUPATION<sup>1</sup></b>													
Managerial and professional specialty .....	2.1	2.0	2.0	2.0	2.0	1.8	1.7	1.9	2.0	2.0	1.8	1.9	1.7
Technical, sales, and administrative support .....	3.9	4.2	4.1	4.1	4.0	3.9	3.9	4.0	4.2	4.0	4.1	3.7	3.9
Precision production, craft, and repair .....	4.7	4.8	4.9	4.7	4.8	5.3	4.5	4.7	4.6	4.1	4.5	3.7	4.4
Operators, fabricators, and laborers .....	7.2	7.4	7.4	7.6	7.8	7.1	7.1	7.0	5.9	6.5	6.9	6.1	6.5
Farming, forestry, and fishing .....	6.6	7.9	6.5	7.2	6.7	7.3	6.6	7.2	6.8	6.3	7.1	5.8	6.4
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers ...	5.0	5.0	4.9	5.0	5.0	4.8	4.7	4.8	4.7	4.7	4.7	4.3	4.5
Goods-producing industries .....	5.3	5.2	5.3	5.3	5.2	5.0	4.6	5.0	4.8	4.7	5.0	4.4	4.6
Mining .....	3.3	2.8	4.1	4.9	3.4	4.5	3.3	3.3	4.0	2.6	3.7	2.3	1.3
Construction .....	8.6	8.8	8.7	9.0	8.7	8.7	7.9	8.9	7.9	7.8	8.6	6.3	8.0
Manufacturing .....	4.3	4.2	4.3	4.1	4.1	3.8	3.6	3.8	3.9	3.7	3.8	3.9	3.6
Durable goods .....	3.6	3.6	3.5	3.5	3.3	3.1	3.1	3.1	3.4	2.9	3.6	3.5	3.0
Nondurable goods .....	5.3	5.0	5.4	5.0	5.3	4.8	4.4	4.9	4.5	5.0	4.2	4.4	4.6
Service-producing industries .....	4.9	4.9	4.8	4.9	4.9	4.7	4.7	4.7	4.7	4.7	4.6	4.3	4.5
Transportation and public utilities .....	3.6	3.0	3.4	3.7	3.8	3.3	3.1	3.3	3.8	3.2	3.3	3.1	3.0
Wholesale and retail trade .....	6.1	6.4	6.1	6.2	6.2	6.1	6.2	5.8	5.9	5.8	5.4	5.2	5.1
Finance, insurance, and real estate .....	3.1	2.5	3.1	3.0	3.0	2.9	2.4	2.8	2.6	2.6	2.6	2.2	2.0
Services .....	4.7	4.7	4.4	4.5	4.6	4.3	4.4	4.5	4.3	4.7	4.7	4.3	4.8
Government workers .....	2.5	2.8	2.7	2.6	2.6	2.4	2.3	2.1	2.4	2.3	2.9	2.0	2.4
Agricultural wage and salary workers .....	7.6	10.4	8.4	8.9	9.0	9.6	8.6	9.7	10.6	8.6	9.7	8.0	7.9

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

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Reason	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>NUMBER OF UNEMPLOYED</b>													
Job losers and persons who completed temporary jobs .....	2,961	3,094	2,954	3,010	3,007	2,934	2,886	2,991	2,807	2,795	2,980	2,631	2,772
On temporary layoff .....	909	928	894	891	893	963	815	961	860	821	980	696	786
Not on temporary layoff .....	2,052	2,166	2,060	2,119	2,114	1,971	2,071	2,030	1,947	1,975	2,000	1,935	1,986
Job leavers .....	808	827	812	894	853	732	655	692	808	786	744	625	748
Reentrants .....	2,338	2,333	2,263	2,173	2,263	2,247	2,229	2,170	2,229	2,266	2,215	2,096	2,033
New entrants .....	573	510	564	554	560	555	560	552	518	543	549	511	493
<b>PERCENT DISTRIBUTION</b>													
Job losers and persons who completed temporary jobs .....	44.3	45.7	44.8	45.4	45.0	45.4	45.6	46.7	44.1	43.7	45.9	44.9	45.8
On temporary layoff .....	13.6	13.7	13.6	13.4	13.4	14.9	12.9	15.0	13.5	12.8	15.1	11.9	13.0
Not on temporary layoff .....	30.7	32.0	31.2	32.0	31.6	30.5	32.7	31.7	30.6	30.9	30.8	33.0	32.8
Job leavers .....	12.1	12.2	12.3	13.5	12.8	11.3	10.3	10.8	12.7	12.3	11.5	10.7	12.4
Reentrants .....	35.0	34.5	34.3	32.8	33.9	34.7	35.2	33.9	35.0	35.5	34.1	35.7	33.6
New entrants .....	8.6	7.5	8.6	8.4	8.4	8.6	8.8	8.6	8.1	8.5	8.5	8.7	8.2
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers and persons who completed temporary jobs .....	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.0	2.0	2.2	1.9	2.0
Job leavers .....	.6	.6	.6	.7	.6	.5	.5	.5	.6	.6	.5	.5	.5
Reentrants .....	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5
New entrants .....	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4

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

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

(Numbers in thousands)

Duration	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>NUMBER OF UNEMPLOYED</b>													
Less than 5 weeks .....	2,542	2,541	2,446	2,564	2,484	2,558	2,423	2,531	2,488	2,622	2,858	2,632	2,634
5 to 14 weeks .....	2,067	2,188	2,097	2,121	2,115	1,912	2,048	1,922	1,971	1,909	1,979	1,901	1,954
15 weeks and over .....	2,076	2,069	2,128	2,027	2,109	1,990	1,865	1,964	1,811	1,830	1,731	1,417	1,462
15 to 26 weeks .....	1,054	1,031	1,061	950	1,031	919	899	936	773	855	841	584	656
27 weeks and over .....	1,022	1,038	1,067	1,077	1,078	1,071	966	1,028	1,038	974	891	833	806
Average (mean) duration, in weeks .....	15.3	15.3	16.5	15.8	15.9	16.3	15.6	16.3	15.6	15.6	14.3	14.3	14.6
Median duration, in weeks .....	7.8	7.9	8.2	7.9	8.1	7.7	7.8	7.7	7.4	7.2	6.8	6.4	5.9
<b>PERCENT DISTRIBUTION</b>													
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	38.0	37.4	36.7	38.2	37.0	39.6	38.2	39.4	39.7	41.2	43.5	44.2	43.5
5 to 14 weeks .....	30.9	32.2	31.4	31.6	31.5	29.6	32.3	30.0	31.4	30.0	30.1	31.9	32.3
15 weeks and over .....	31.1	30.4	31.9	30.2	31.4	30.8	29.4	30.6	28.9	28.8	26.4	23.8	24.2
15 to 26 weeks .....	15.8	15.2	15.9	14.2	15.4	14.2	14.2	14.6	12.3	13.4	12.8	9.8	10.8
27 weeks and over .....	15.3	15.3	16.0	16.0	16.1	16.6	15.2	16.0	16.6	15.3	13.6	14.0	13.3

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

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

(Numbers in thousands)

Age, sex, and race	May 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force	
<b>TOTAL</b>										
16 years and over .....	204,899	137,240	67.0	131,476	64.2	3,552	127,924	5,764	4.2	67,659
16 to 19 years .....	15,609	8,054	51.6	6,847	43.9	296	6,552	1,207	15.0	7,554
16 to 17 years .....	7,893	3,147	39.9	2,606	33.0	143	2,463	542	17.2	4,745
18 to 19 years .....	7,716	4,907	63.6	4,242	55.0	153	4,089	666	13.6	2,809
20 to 24 years .....	17,540	13,572	77.4	12,525	71.4	344	12,181	1,047	7.7	3,968
25 to 54 years .....	117,483	98,570	83.9	95,463	81.3	2,124	93,339	3,108	3.2	18,913
25 to 34 years .....	38,850	32,819	84.5	31,532	81.2	768	30,764	1,287	3.9	6,032
25 to 29 years .....	18,614	15,710	84.4	15,064	80.9	382	14,682	646	4.1	2,904
30 to 34 years .....	20,237	17,109	84.5	16,468	81.4	386	16,082	641	3.7	3,128
35 to 44 years .....	44,298	37,503	84.7	36,333	82.0	756	35,577	1,170	3.1	6,796
35 to 39 years .....	22,431	18,892	84.2	18,267	81.4	413	17,855	625	3.3	3,539
40 to 44 years .....	21,867	18,611	85.1	18,065	82.6	344	17,722	545	2.9	3,256
45 to 54 years .....	34,335	28,249	82.3	27,598	80.4	600	26,998	651	2.3	6,086
45 to 49 years .....	18,717	15,825	84.5	15,475	82.7	339	15,135	350	2.2	2,893
50 to 54 years .....	15,618	12,424	79.6	12,123	77.6	260	11,862	302	2.4	3,193
55 to 64 years .....	22,117	13,143	59.4	12,848	58.1	442	12,406	295	2.2	8,974
55 to 59 years .....	12,078	8,420	69.7	8,254	68.3	228	8,026	166	2.0	3,658
60 to 64 years .....	10,039	4,723	47.0	4,594	45.8	214	4,380	129	2.7	5,317
65 years and over .....	32,149	3,900	12.1	3,793	11.8	346	3,447	108	2.8	28,249
65 to 69 years .....	9,350	2,137	22.9	2,081	22.3	137	1,944	56	2.6	7,213
70 to 74 years .....	8,591	1,081	12.6	1,046	12.2	109	937	35	3.3	7,510
75 years and over .....	14,209	682	4.8	665	4.7	100	565	17	2.5	13,526
<b>Men</b>										
16 years and over .....	98,591	73,853	74.9	70,856	71.9	2,691	68,165	2,997	4.1	24,738
16 to 19 years .....	7,969	4,101	51.5	3,443	43.2	209	3,235	658	16.0	3,868
16 to 17 years .....	4,072	1,631	40.0	1,333	32.7	112	1,221	298	18.3	2,441
18 to 19 years .....	3,897	2,470	63.4	2,111	54.2	97	2,014	360	14.6	1,427
20 to 24 years .....	8,743	7,210	82.5	6,626	75.8	275	6,351	584	8.1	1,533
25 to 54 years .....	57,775	53,012	91.8	51,480	89.1	1,605	49,875	1,532	2.9	4,763
25 to 34 years .....	19,127	17,818	93.2	17,232	90.1	594	16,639	586	3.3	1,309
25 to 29 years .....	9,141	8,464	92.6	8,160	89.3	308	7,853	304	3.6	676
30 to 34 years .....	9,986	9,354	93.7	9,072	90.8	286	8,786	282	3.0	632
35 to 44 years .....	21,872	20,234	92.5	19,675	90.0	569	19,106	559	2.8	1,638
35 to 39 years .....	11,080	10,291	92.9	10,021	90.4	318	9,703	269	2.6	789
40 to 44 years .....	10,793	9,943	92.1	9,654	89.4	251	9,403	290	2.9	849
45 to 54 years .....	16,775	14,960	89.2	14,573	86.9	442	14,131	387	2.6	1,815
45 to 49 years .....	9,192	8,330	90.6	8,127	88.4	251	7,876	203	2.4	862
50 to 54 years .....	7,583	6,630	87.4	6,446	85.0	191	6,255	184	2.8	954
55 to 64 years .....	10,564	7,269	68.8	7,105	67.3	311	6,794	164	2.3	3,295
55 to 59 years .....	5,806	4,618	79.5	4,531	78.0	154	4,376	87	1.9	1,188
60 to 64 years .....	4,758	2,651	55.7	2,574	54.1	157	2,418	77	2.9	2,107
65 years and over .....	13,540	2,261	16.7	2,202	16.3	291	1,910	59	2.6	11,279
65 to 69 years .....	4,264	1,200	28.2	1,172	27.5	121	1,051	28	2.3	3,063
70 to 74 years .....	3,776	622	16.5	604	16.0	87	518	18	2.9	3,153
75 years and over .....	5,501	438	8.0	425	7.7	84	341	13	3.0	5,063
<b>Women</b>										
16 years and over .....	106,308	63,387	59.6	60,619	57.0	861	59,759	2,767	4.4	42,921
16 to 19 years .....	7,639	3,953	51.8	3,404	44.6	87	3,317	550	13.9	3,686
16 to 17 years .....	3,821	1,517	39.7	1,273	33.3	31	1,242	244	16.1	2,304
18 to 19 years .....	3,819	2,437	63.8	2,131	55.8	56	2,075	306	12.6	1,382
20 to 24 years .....	8,798	6,362	72.3	5,899	67.1	69	5,830	463	7.3	2,436
25 to 54 years .....	59,709	45,558	76.3	43,982	73.7	519	43,464	1,576	3.5	14,150
25 to 34 years .....	19,723	15,000	76.1	14,300	72.5	174	14,126	701	4.7	4,723
25 to 29 years .....	9,473	7,245	76.5	6,904	72.9	74	6,830	341	4.7	2,228
30 to 34 years .....	10,251	7,755	75.7	7,396	72.2	100	7,296	359	4.6	2,495
35 to 44 years .....	22,426	17,269	77.0	16,658	74.3	187	16,471	611	3.5	5,157
35 to 39 years .....	11,352	8,601	75.8	8,246	72.6	95	8,151	355	4.1	2,750
40 to 44 years .....	11,074	8,667	78.3	8,412	76.0	93	8,319	256	2.9	2,407
45 to 54 years .....	17,559	13,289	75.7	13,025	74.2	158	12,867	264	2.0	4,270
45 to 49 years .....	9,525	7,494	78.7	7,348	77.1	88	7,259	147	2.0	2,031
50 to 54 years .....	8,034	5,795	72.1	5,677	70.7	69	5,608	118	2.0	2,240
55 to 64 years .....	11,553	5,874	50.8	5,743	49.7	131	5,612	131	2.2	5,679
55 to 59 years .....	6,272	3,802	60.6	3,723	59.4	74	3,650	79	2.1	2,469
60 to 64 years .....	5,281	2,071	39.2	2,020	38.2	57	1,962	52	2.5	3,210
65 years and over .....	18,609	1,639	8.8	1,591	8.6	55	1,536	48	2.9	16,970
65 to 69 years .....	5,086	936	18.4	909	17.9	16	893	27	2.9	4,149
70 to 74 years .....	4,815	459	9.5	442	9.2	22	420	17	3.7	4,357
75 years and over .....	8,708	244	2.8	240	2.8	16	224	4	1.5	8,464

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 1998									
	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agri-culture	Nonagri-cultural industries	Number	Percent of labor force	
<b>WHITE</b>										
16 years and over .....	171,257	115,261	67.3	111,127	64.9	3,346	107,781	4,134	3.6	55,996
16 to 19 years .....	12,406	6,853	55.2	5,965	48.1	280	5,685	888	13.0	5,553
16 to 17 years .....	6,266	2,746	43.8	2,330	37.2	136	2,194	416	15.1	3,519
18 to 19 years .....	6,140	4,107	66.9	3,635	59.2	144	3,491	472	11.5	2,034
20 to 24 years .....	14,108	11,269	79.9	10,555	74.8	326	10,228	715	6.3	2,838
25 to 54 years .....	97,074	82,194	84.7	79,946	82.4	1,997	77,949	2,248	2.7	14,880
25 to 34 years .....	31,391	26,813	85.4	25,915	82.6	736	25,179	898	3.3	4,578
25 to 29 years .....	15,040	12,904	85.8	12,447	82.8	366	12,081	456	3.5	2,137
30 to 34 years .....	16,350	13,909	85.1	13,467	82.4	369	13,098	442	3.2	2,441
35 to 44 years .....	36,589	31,211	85.3	30,354	83.0	705	29,649	858	2.7	5,377
35 to 39 years .....	18,527	15,728	84.9	15,273	82.4	382	14,891	456	2.9	2,798
40 to 44 years .....	18,062	15,483	85.7	15,081	83.5	324	14,757	402	2.6	2,579
45 to 54 years .....	29,095	24,170	83.1	23,678	81.4	556	23,121	493	2.0	4,925
45 to 49 years .....	15,723	13,407	85.3	13,151	83.6	312	12,840	256	1.9	2,315
50 to 54 years .....	13,372	10,763	80.5	10,526	78.7	245	10,282	237	2.2	2,609
55 to 64 years .....	19,046	11,435	60.0	11,222	58.9	402	10,821	213	1.9	7,610
55 to 59 years .....	10,379	7,321	70.5	7,199	69.4	203	6,995	123	1.7	3,058
60 to 64 years .....	8,667	4,114	47.5	4,024	46.4	198	3,826	90	2.2	4,553
65 years and over .....	28,623	3,509	12.3	3,439	12.0	341	3,098	70	2.0	25,114
65 to 69 years .....	8,166	1,931	23.6	1,886	23.1	134	1,752	45	2.3	6,235
70 to 74 years .....	7,619	977	12.8	961	12.6	108	853	16	1.7	6,642
75 years and over .....	12,838	601	4.7	592	4.6	99	493	9	1.5	12,237
<b>Men</b>										
16 years and over .....	83,232	63,021	75.7	60,773	73.0	2,531	58,243	2,248	3.6	20,211
16 to 19 years .....	6,371	3,533	55.5	3,028	47.5	200	2,828	505	14.3	2,838
16 to 17 years .....	3,235	1,435	44.4	1,187	36.7	112	1,076	248	17.3	1,799
18 to 19 years .....	3,136	2,098	66.9	1,840	58.7	88	1,752	258	12.3	1,039
20 to 24 years .....	7,153	6,114	85.5	5,697	79.6	257	5,440	417	6.8	1,039
25 to 54 years .....	48,372	44,949	92.9	43,774	90.5	1,506	42,268	1,175	2.6	3,423
25 to 34 years .....	15,695	14,819	94.4	14,377	91.6	567	13,810	442	3.0	875
25 to 29 years .....	7,515	7,093	94.4	6,859	91.3	295	6,564	234	3.3	422
30 to 34 years .....	8,180	7,726	94.5	7,518	91.9	272	7,246	208	2.7	454
35 to 44 years .....	18,297	17,166	93.8	16,745	91.5	532	16,213	421	2.5	1,131
35 to 39 years .....	9,273	8,736	94.2	8,522	91.9	298	8,224	215	2.5	537
40 to 44 years .....	9,024	8,430	93.4	8,224	91.1	235	7,989	206	2.4	594
45 to 54 years .....	14,380	12,964	90.1	12,651	88.0	407	12,244	313	2.4	1,416
45 to 49 years .....	7,804	7,145	91.6	6,982	89.5	231	6,751	163	2.3	659
50 to 54 years .....	6,577	5,819	88.5	5,669	86.2	176	5,493	150	2.6	758
55 to 64 years .....	9,197	6,377	69.3	6,259	68.1	280	5,978	118	1.9	2,820
55 to 59 years .....	5,045	4,049	80.3	3,983	79.0	133	3,850	65	1.6	996
60 to 64 years .....	4,152	2,328	56.1	2,275	54.8	147	2,128	53	2.3	1,823
65 years and over .....	12,140	2,048	16.9	2,016	16.6	287	1,729	32	1.6	10,091
65 to 69 years .....	3,783	1,084	28.6	1,062	28.1	119	944	22	2.0	2,699
70 to 74 years .....	3,372	575	17.0	569	16.9	87	483	6	1.0	2,797
75 years and over .....	4,985	390	7.8	385	7.7	83	302	5	1.3	4,596
<b>Women</b>										
16 years and over .....	88,025	52,240	59.3	50,354	57.2	815	49,538	1,886	3.6	35,785
16 to 19 years .....	6,035	3,320	55.0	2,938	48.7	80	2,857	382	11.5	2,715
16 to 17 years .....	3,031	1,311	43.3	1,143	37.7	24	1,118	168	12.8	1,720
18 to 19 years .....	3,004	2,009	66.9	1,795	59.7	56	1,739	214	10.7	995
20 to 24 years .....	6,954	5,155	74.1	4,857	69.8	69	4,788	298	5.8	1,799
25 to 54 years .....	48,703	37,245	76.5	36,172	74.3	491	35,681	1,073	2.9	11,457
25 to 34 years .....	15,696	11,993	76.4	11,537	73.5	169	11,369	456	3.8	3,703
25 to 29 years .....	7,526	5,811	77.2	5,588	74.3	71	5,517	222	3.8	1,715
30 to 34 years .....	8,170	6,183	75.7	5,949	72.8	98	5,852	234	3.8	1,988
35 to 44 years .....	18,292	14,046	76.8	13,609	74.4	173	13,436	437	3.1	4,246
35 to 39 years .....	9,254	6,992	75.6	6,751	73.0	84	6,667	241	3.4	2,262
40 to 44 years .....	9,038	7,053	78.0	6,858	75.9	89	6,768	196	2.8	1,985
45 to 54 years .....	14,714	11,206	76.2	11,026	74.9	149	10,877	180	1.6	3,508
45 to 49 years .....	7,919	6,262	79.1	6,169	77.9	81	6,088	93	1.5	1,657
50 to 54 years .....	6,795	4,944	72.8	4,857	71.5	68	4,788	87	1.8	1,852
55 to 64 years .....	9,849	5,058	51.4	4,964	50.4	121	4,843	95	1.9	4,791
55 to 59 years .....	5,334	3,273	61.4	3,215	60.3	70	3,145	57	1.8	2,062
60 to 64 years .....	4,515	1,786	39.6	1,749	38.7	51	1,697	37	2.1	2,729
65 years and over .....	16,483	1,461	8.9	1,423	8.6	54	1,369	38	2.6	15,023
65 to 69 years .....	4,383	848	19.3	824	18.8	16	808	23	2.8	3,535
70 to 74 years .....	4,248	402	9.5	392	9.2	21	370	11	2.7	3,845
75 years and over .....	7,853	211	2.7	207	2.6	16	191	4	1.8	7,642

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 1998									
	Civilian noninstitutional population	Civilian labor force							Not in labor force	
		Total	Percent of population	Employed				Unemployed		
				Total	Percent of population	Agriculture	Nonagricultural industries	Number		Percent of labor force
<b>BLACK</b>										
16 years and over .....	24,317	15,709	64.6	14,336	59.0	138	14,198	1,373	8.7	8,608
16 to 19 years .....	2,440	938	38.5	657	26.9	14	643	282	30.0	1,502
16 to 17 years .....	1,242	298	24.0	190	15.3	5	185	109	36.4	944
18 to 19 years .....	1,198	640	53.4	467	39.0	9	458	173	27.0	558
20 to 24 years .....	2,536	1,726	68.1	1,433	56.5	17	1,416	293	17.0	810
25 to 54 years .....	14,454	11,583	80.1	10,878	75.3	86	10,792	705	6.1	2,870
25 to 34 years .....	5,229	4,272	81.7	3,946	75.5	23	3,923	326	7.6	957
25 to 29 years .....	2,549	2,022	79.3	1,863	73.1	7	1,856	159	7.9	527
30 to 34 years .....	2,680	2,250	84.0	2,083	77.7	17	2,067	167	7.4	430
35 to 44 years .....	5,500	4,475	81.4	4,229	76.9	31	4,198	246	5.5	1,025
35 to 39 years .....	2,837	2,305	81.2	2,166	76.3	21	2,145	139	6.0	532
40 to 44 years .....	2,663	2,170	81.5	2,063	77.5	10	2,053	107	5.0	493
45 to 54 years .....	3,725	2,837	76.2	2,703	72.6	32	2,671	133	4.7	888
45 to 49 years .....	2,162	1,715	79.3	1,633	75.5	21	1,613	82	4.8	447
50 to 54 years .....	1,562	1,121	71.8	1,070	68.5	11	1,059	51	4.6	441
55 to 64 years .....	2,206	1,175	53.3	1,111	50.4	18	1,093	64	5.4	1,031
55 to 59 years .....	1,208	738	61.1	707	58.5	13	694	31	4.2	470
60 to 64 years .....	998	437	43.8	404	40.5	5	400	33	7.5	560
65 years and over .....	2,682	286	10.7	257	9.6	4	253	29	10.3	2,396
65 to 69 years .....	854	141	16.5	134	15.6	3	131	7	4.9	713
70 to 74 years .....	745	76	10.2	62	8.3	-	62	15	19.1	669
75 years and over .....	1,084	70	6.4	62	5.7	1	60	8	( <sup>1</sup> )	1,014
<b>Men</b>										
16 years and over .....	10,900	7,432	68.2	6,842	62.8	120	6,722	590	7.9	3,469
16 to 19 years .....	1,199	423	35.3	293	24.4	9	284	130	30.7	776
16 to 17 years .....	623	125	20.1	85	13.7	-	85	40	31.8	498
18 to 19 years .....	576	298	51.7	208	36.0	9	199	90	30.3	278
20 to 24 years .....	1,161	803	69.1	654	56.3	17	637	149	18.5	359
25 to 54 years .....	6,533	5,465	83.7	5,211	79.8	75	5,136	254	4.7	1,068
25 to 34 years .....	2,338	2,023	86.5	1,911	81.8	21	1,890	111	5.5	315
25 to 29 years .....	1,126	935	83.0	884	78.5	7	877	51	5.5	191
30 to 34 years .....	1,212	1,088	89.8	1,028	84.8	14	1,013	60	5.5	124
35 to 44 years .....	2,514	2,101	83.6	2,013	80.1	26	1,987	88	4.2	413
35 to 39 years .....	1,291	1,076	83.3	1,042	80.7	17	1,026	33	3.1	216
40 to 44 years .....	1,223	1,025	83.8	971	79.4	10	961	55	5.3	198
45 to 54 years .....	1,681	1,342	79.8	1,287	76.5	28	1,259	55	4.1	339
45 to 49 years .....	981	811	82.7	781	79.6	16	765	30	3.7	169
50 to 54 years .....	701	530	75.7	506	72.2	26	494	25	4.7	170
55 to 64 years .....	935	588	62.9	554	59.2	15	539	34	5.8	347
55 to 59 years .....	518	366	70.7	351	67.8	13	338	15	4.0	152
60 to 64 years .....	417	222	53.2	202	48.5	2	200	20	8.8	195
65 years and over .....	1,072	153	14.3	130	12.2	4	126	23	14.9	919
65 to 69 years .....	337	74	21.8	71	21.0	3	68	3	( <sup>1</sup> )	263
70 to 74 years .....	330	34	10.2	22	6.6	-	22	12	( <sup>1</sup> )	296
75 years and over .....	406	46	11.3	38	9.3	1	36	8	( <sup>1</sup> )	360
<b>Women</b>										
16 years and over .....	13,417	8,277	61.7	7,494	55.9	18	7,476	783	9.5	5,140
16 to 19 years .....	1,241	515	41.5	364	29.3	5	359	152	29.4	726
16 to 17 years .....	619	173	28.0	104	16.8	5	100	69	39.8	446
18 to 19 years .....	622	342	55.0	260	41.7	-	260	83	24.2	280
20 to 24 years .....	1,374	923	67.2	779	56.7	-	779	144	15.6	451
25 to 54 years .....	7,920	6,118	77.2	5,667	71.6	11	5,656	451	7.4	1,802
25 to 34 years .....	2,891	2,249	77.8	2,035	70.4	2	2,032	214	9.5	642
25 to 29 years .....	1,422	1,086	76.4	979	68.8	-	979	108	9.9	336
30 to 34 years .....	1,469	1,162	79.1	1,056	71.9	2	1,053	107	9.2	306
35 to 44 years .....	2,986	2,374	79.5	2,216	74.2	4	2,211	158	6.7	611
35 to 39 years .....	1,546	1,229	79.5	1,124	72.7	4	1,119	106	8.6	317
40 to 44 years .....	1,439	1,145	79.5	1,092	75.9	-	1,092	53	4.6	295
45 to 54 years .....	2,044	1,495	73.2	1,417	69.3	4	1,412	78	5.2	549
45 to 49 years .....	1,182	904	76.5	852	72.1	4	848	52	5.7	278
50 to 54 years .....	862	591	68.6	564	65.5	-	564	27	4.5	271
55 to 64 years .....	1,271	587	46.2	558	43.9	3	555	30	5.0	684
55 to 59 years .....	690	372	53.9	356	51.5	-	356	16	4.4	318
60 to 64 years .....	581	215	37.1	202	34.8	3	199	13	6.2	365
65 years and over .....	1,610	133	8.3	127	7.9	-	127	7	5.0	1,477
65 to 69 years .....	517	67	13.0	63	12.2	-	63	4	( <sup>1</sup> )	450
70 to 74 years .....	415	43	10.2	40	9.6	-	40	3	( <sup>1</sup> )	373
75 years and over .....	678	24	3.5	24	3.5	-	24	-	-	654

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

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

and revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	202,832	204,899	89,766	90,622	97,767	98,668	15,300	15,609
Civilian labor force .....	135,963	137,240	69,146	69,752	58,984	59,434	7,832	8,054
Percent of population .....	67.0	67.0	77.0	77.0	60.3	60.2	51.2	51.6
Employed .....	129,565	131,476	66,564	67,413	56,464	57,216	6,537	6,847
Agriculture .....	3,652	3,552	2,566	2,482	782	774	304	296
Nonagricultural industries .....	125,912	127,924	63,997	64,930	55,682	56,442	6,233	6,552
Unemployed .....	6,398	5,764	2,582	2,339	2,520	2,218	1,296	1,207
Unemployment rate .....	4.7	4.2	3.7	3.4	4.3	3.7	16.5	15.0
Not in labor force .....	66,870	67,659	20,620	20,870	38,782	39,235	7,468	7,554
<b>White</b>								
Civilian noninstitutional population .....	169,782	171,257	76,220	76,861	81,412	81,990	12,150	12,406
Civilian labor force .....	114,486	115,261	59,137	59,488	48,705	48,920	6,644	6,853
Percent of population .....	67.4	67.3	77.6	77.4	59.8	59.7	54.7	55.2
Employed .....	110,004	111,127	57,284	57,746	47,000	47,416	5,721	5,965
Agriculture .....	3,451	3,346	2,399	2,331	759	735	293	280
Nonagricultural industries .....	106,553	107,781	54,885	55,415	46,240	46,681	5,428	5,685
Unemployed .....	4,481	4,134	1,853	1,743	1,705	1,504	923	888
Unemployment rate .....	3.9	3.6	3.1	2.9	3.5	3.1	13.9	13.0
Not in labor force .....	55,296	55,996	17,083	17,373	32,707	33,070	5,506	5,553
<b>Black</b>								
Civilian noninstitutional population .....	23,950	24,317	9,551	9,701	11,996	12,176	2,403	2,440
Civilian labor force .....	15,370	15,709	6,849	7,009	7,641	7,762	879	938
Percent of population .....	64.2	64.6	71.7	72.2	63.7	63.7	36.6	38.5
Employed .....	13,825	14,336	6,287	6,549	6,967	7,130	572	657
Agriculture .....	127	138	116	111	9	14	2	14
Nonagricultural industries .....	13,698	14,198	6,170	6,438	6,958	7,116	570	643
Unemployed .....	1,545	1,373	563	460	675	631	307	282
Unemployment rate .....	10.0	8.7	8.2	6.6	8.8	8.1	34.9	30.0
Not in labor force .....	8,580	8,608	2,702	2,692	4,355	4,414	1,524	1,502

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	May 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
Total	Full time			Part time	Total	Looking for full-time work	Looking for part-time work			
<b>TOTAL ENROLLED</b>										
Total, 16 to 24 years .....	17,336	8,449	48.7	7,536	1,539	5,997	912	385	527	10.8
16 to 19 years .....	12,132	5,363	44.2	4,630	469	4,161	733	268	465	13.7
20 to 24 years .....	5,204	3,086	59.3	2,907	1,070	1,837	179	117	63	5.8
High school .....	10,258	4,335	42.3	3,707	259	3,448	629	208	420	14.5
College .....	7,078	4,113	58.1	3,829	1,280	2,549	284	177	107	6.9
Full-time students .....	5,967	3,154	52.9	2,908	707	2,201	246	156	89	7.8
Part-time students .....	1,111	959	86.4	921	573	348	38	20	18	4.0
Men, 16 to 24 years .....	8,629	4,067	47.1	3,616	765	2,851	451	194	257	11.1
16 to 19 years .....	6,181	2,658	43.0	2,285	270	2,014	373	143	230	14.0
20 to 24 years .....	2,448	1,410	57.6	1,332	495	837	78	51	27	5.5
High school .....	5,423	2,292	42.3	1,951	165	1,786	341	121	220	14.9
College .....	3,206	1,775	55.4	1,665	600	1,065	110	73	38	6.2
Full-time students .....	2,720	1,349	49.6	1,249	328	921	101	68	33	7.5
Part-time students .....	486	426	87.6	417	272	145	9	5	5	2.2
Women, 16 to 24 years .....	8,707	4,381	50.3	3,920	773	3,146	461	191	270	10.5
16 to 19 years .....	5,950	2,705	45.5	2,345	199	2,146	360	125	234	13.3
20 to 24 years .....	2,756	1,676	60.8	1,575	575	1,000	101	66	36	6.1
High school .....	4,835	2,044	42.3	1,756	93	1,663	288	87	201	14.1
College .....	3,871	2,338	60.4	2,164	680	1,484	174	104	69	7.4
Full-time students .....	3,247	1,805	55.6	1,659	379	1,280	145	89	57	8.0
Part-time students .....	624	533	85.4	504	301	204	28	16	13	5.3
<b>White</b>										
Total, 16 to 24 years .....	13,685	7,205	52.6	6,509	1,295	5,214	696	294	402	9.7
16 to 19 years .....	9,626	4,637	48.2	4,083	408	3,674	555	202	353	12.0
20 to 24 years .....	4,059	2,568	63.3	2,426	887	1,539	141	92	49	5.5
Men .....	6,884	3,525	51.2	3,169	687	2,481	357	141	216	10.1
Women .....	6,801	3,679	54.1	3,340	608	2,732	339	154	186	9.2
High school .....	8,135	3,774	46.4	3,311	236	3,074	463	145	318	12.3
College .....	5,550	3,431	61.8	3,198	1,059	2,140	233	149	84	6.8
Full-time students .....	4,678	2,643	56.5	2,437	588	1,849	206	134	72	7.8
Part-time students .....	872	788	90.3	761	470	290	27	15	12	3.4
<b>Black</b>										
Total, 16 to 24 years .....	2,552	841	33.0	660	152	509	181	72	109	21.5
16 to 19 years .....	1,853	545	29.4	389	35	354	156	56	99	28.6
20 to 24 years .....	699	296	42.4	271	116	155	25	16	9	8.5
Men .....	1,195	339	28.4	266	46	220	74	41	32	21.7
Women .....	1,357	502	37.0	395	106	288	107	31	76	21.4
High school .....	1,612	436	27.1	289	16	273	148	56	92	33.8
College .....	939	405	43.1	372	136	236	33	17	17	8.2
Full-time students .....	791	290	36.6	266	70	195	24	11	13	8.4
Part-time students .....	149	115	77.5	106	66	41	9	5	4	7.8
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,123	904	42.6	772	197	575	132	51	81	14.6
16 to 19 years .....	1,582	570	36.1	462	69	393	109	37	71	19.0
20 to 24 years .....	541	334	61.7	310	128	182	24	14	10	7.2
Men .....	1,075	470	43.7	404	119	285	66	29	37	14.1
Women .....	1,047	434	41.4	368	78	290	66	22	44	15.3
High school .....	1,426	470	33.0	370	50	320	101	36	64	21.4
College .....	697	434	62.3	402	147	256	32	15	17	7.3
Full-time students .....	511	269	52.7	242	55	187	27	10	17	10.0
Part-time students .....	185	165	88.8	160	92	68	5	5	-	3.0

See footnotes at end of table.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Enrollment status, educational attainment, race, and Hispanic origin	May 1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
Total	Full time			Part time	Total	Looking for full-time work	Looking for part-time work			
<b>TOTAL NOT ENROLLED</b>										
Total, 16 to 24 years .....	15,813	13,178	83.3	11,836	9,669	2,167	1,342	1,197	145	10.2
16 to 19 years .....	3,477	2,692	77.4	2,217	1,543	674	474	410	65	17.6
20 to 24 years .....	12,336	10,486	85.0	9,619	8,126	1,493	867	787	80	8.3
Less than a high school diploma .....	3,752	2,557	68.2	2,138	1,655	483	419	378	41	16.4
High school graduates, no college .....	6,691	5,686	85.0	5,089	4,174	915	597	531	66	10.5
Less than a bachelor's degree .....	4,042	3,708	91.7	3,429	2,767	663	279	242	37	7.5
College graduates .....	1,328	1,227	92.4	1,179	1,073	106	47	46	2	3.9
<b>Men, 16 to 24 years .....</b>	<b>8,082</b>	<b>7,244</b>	<b>89.6</b>	<b>6,453</b>	<b>5,645</b>	<b>808</b>	<b>791</b>	<b>734</b>	<b>57</b>	<b>10.9</b>
16 to 19 years .....	1,788	1,443	80.7	1,159	896	262	285	249	36	19.7
20 to 24 years .....	6,294	5,800	92.1	5,294	4,749	546	506	485	22	8.7
Less than a high school diploma .....	2,105	1,672	79.4	1,413	1,195	218	258	243	15	15.5
High school graduates, no college .....	3,450	3,186	92.3	2,828	2,495	332	358	328	30	11.2
Less than a bachelor's degree .....	1,970	1,856	94.2	1,713	1,500	213	143	132	11	7.7
College graduates .....	558	530	95.0	499	455	44	31	30	2	5.9
<b>Women, 16 to 24 years .....</b>	<b>7,730</b>	<b>5,934</b>	<b>76.8</b>	<b>5,383</b>	<b>4,024</b>	<b>1,359</b>	<b>551</b>	<b>463</b>	<b>88</b>	<b>9.3</b>
16 to 19 years .....	1,689	1,249	73.9	1,059	647	412	190	161	29	15.2
20 to 24 years .....	6,041	4,686	77.6	4,324	3,377	947	361	303	59	7.7
Less than a high school diploma .....	1,647	885	53.7	725	460	265	160	134	26	18.1
High school graduates, no college .....	3,241	2,500	77.1	2,261	1,678	583	239	203	36	9.6
Less than a bachelor's degree .....	2,072	1,852	89.4	1,716	1,267	449	136	110	26	7.3
College graduates .....	770	697	90.5	681	619	62	16	16	-	2.3
<b>White</b>										
Total, 16 to 24 years .....	12,829	10,917	85.1	10,011	8,258	1,753	906	802	104	8.3
16 to 19 years .....	2,780	2,216	79.7	1,883	1,328	555	333	284	49	15.0
20 to 24 years .....	10,048	8,702	86.6	8,128	6,930	1,198	573	518	56	6.6
<b>Men .....</b>	<b>6,640</b>	<b>6,121</b>	<b>92.2</b>	<b>5,556</b>	<b>4,930</b>	<b>626</b>	<b>565</b>	<b>527</b>	<b>38</b>	<b>9.2</b>
<b>Women .....</b>	<b>6,188</b>	<b>4,796</b>	<b>77.5</b>	<b>4,455</b>	<b>3,327</b>	<b>1,127</b>	<b>341</b>	<b>275</b>	<b>67</b>	<b>7.1</b>
Less than a high school diploma .....	2,906	2,065	71.1	1,795	1,408	387	270	236	34	13.1
High school graduates, no college .....	5,383	4,641	86.2	4,251	3,531	720	390	346	44	8.4
Less than a bachelor's degree .....	3,352	3,096	92.4	2,891	2,345	546	204	178	27	6.6
College graduates .....	1,187	1,116	94.0	1,074	974	100	42	42	-	3.8
<b>Black</b>										
Total, 16 to 24 years .....	2,424	1,823	75.2	1,429	1,107	322	394	358	36	21.6
16 to 19 years .....	587	393	67.0	267	171	97	126	111	15	32.0
20 to 24 years .....	1,837	1,429	77.8	1,162	936	225	268	246	21	18.7
<b>Men .....</b>	<b>1,165</b>	<b>886</b>	<b>76.1</b>	<b>681</b>	<b>540</b>	<b>142</b>	<b>205</b>	<b>186</b>	<b>19</b>	<b>23.1</b>
<b>Women .....</b>	<b>1,259</b>	<b>936</b>	<b>74.4</b>	<b>748</b>	<b>568</b>	<b>180</b>	<b>189</b>	<b>172</b>	<b>17</b>	<b>20.1</b>
Less than a high school diploma .....	714	407	57.0	271	192	79	136	130	6	33.5
High school graduates, no college .....	1,096	867	79.1	678	523	155	189	167	22	21.8
Less than a bachelor's degree .....	547	497	90.8	430	347	83	67	60	7	13.4
College graduates .....	68	52	( <sup>1</sup> )	51	45	6	2	-	2	( <sup>1</sup> )
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,763	2,183	79.0	1,950	1,646	304	233	208	25	10.7
16 to 19 years .....	613	472	77.0	369	255	114	103	87	16	21.8
20 to 24 years .....	2,150	1,711	79.6	1,581	1,391	190	130	121	9	7.6
<b>Men .....</b>	<b>1,529</b>	<b>1,396</b>	<b>91.3</b>	<b>1,247</b>	<b>1,134</b>	<b>113</b>	<b>149</b>	<b>136</b>	<b>13</b>	<b>10.7</b>
<b>Women .....</b>	<b>1,234</b>	<b>787</b>	<b>63.8</b>	<b>703</b>	<b>512</b>	<b>191</b>	<b>84</b>	<b>72</b>	<b>12</b>	<b>10.7</b>
Less than a high school diploma .....	1,234	870	70.5	760	624	137	109	97	12	12.6
High school graduates, no college .....	947	797	84.1	698	602	96	99	87	12	12.4
Less than a bachelor's degree .....	515	449	87.2	432	370	61	18	17	-	3.9
College graduates .....	67	67	( <sup>1</sup> )	60	50	10	7	7	-	( <sup>1</sup> )

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

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

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



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

(Numbers in thousands)

Educational attainment	Total		Men		Women		White		Black		Hispanic origin	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
<b>TOTAL</b>												
Civilian noninstitutional population ...	170,147	171,750	81,093	81,879	89,054	89,871	143,676	144,743	19,036	19,341	15,511	16,089
Civilian labor force .....	114,566	115,614	61,912	62,542	52,653	53,072	96,714	97,139	12,665	13,045	10,762	11,241
Percent of population .....	67.3	67.3	76.3	76.4	59.1	59.1	67.3	67.1	66.5	67.4	69.4	69.9
Employed .....	110,603	112,103	59,895	60,787	50,708	51,316	93,857	94,607	11,795	12,246	10,142	10,705
Employment-population ratio .....	65.0	65.3	73.9	74.2	56.9	57.1	65.3	65.4	62.0	63.3	65.4	66.5
Unemployed .....	3,963	3,510	2,018	1,755	1,946	1,755	2,857	2,531	870	799	619	536
Unemployment rate .....	3.5	3.0	3.3	2.8	3.7	3.3	3.0	2.6	6.9	6.1	5.8	4.8
<b>Less than a high school diploma</b>												
Civilian noninstitutional population ...	30,198	29,931	14,323	14,261	15,875	15,670	24,250	24,080	4,607	4,549	7,027	7,055
Civilian labor force .....	12,828	12,942	7,944	7,997	4,883	4,945	10,416	10,460	1,813	1,851	4,107	4,132
Percent of population .....	42.5	43.2	55.5	56.1	30.8	31.6	43.0	43.4	39.3	40.7	58.5	58.6
Employed .....	11,864	12,147	7,438	7,595	4,426	4,552	9,714	9,885	1,589	1,667	3,797	3,884
Employment-population ratio .....	39.3	40.6	51.9	53.3	27.9	29.0	40.1	41.1	34.5	36.6	54.0	55.1
Unemployed .....	964	796	507	402	457	394	702	575	223	184	310	248
Unemployment rate .....	7.5	6.1	6.4	5.0	9.4	8.0	6.7	5.5	12.3	10.0	7.5	6.0
<b>High school graduates, no college</b>												
Civilian noninstitutional population ...	57,392	57,706	26,158	26,091	31,234	31,615	48,673	49,068	6,871	6,711	4,060	4,253
Civilian labor force .....	37,791	37,627	20,004	19,927	17,787	17,701	31,684	31,587	4,842	4,728	3,042	3,138
Percent of population .....	65.8	65.2	76.5	76.4	56.9	56.0	65.1	64.4	70.5	70.5	74.9	73.8
Employed .....	36,354	36,366	19,293	19,270	17,061	17,097	30,675	30,704	4,478	4,404	2,859	2,999
Employment-population ratio .....	63.3	63.0	73.8	73.9	54.6	54.1	63.0	62.6	65.2	65.6	70.4	70.5
Unemployed .....	1,436	1,261	710	657	726	604	1,010	883	364	324	183	139
Unemployment rate .....	3.8	3.4	3.6	3.3	4.1	3.4	3.2	2.8	7.5	6.9	6.0	4.4
<b>Less than a bachelor's degree<sup>1</sup></b>												
Civilian noninstitutional population ...	41,648	42,024	19,139	19,606	22,508	22,417	35,209	35,282	4,889	5,111	2,800	2,972
Civilian labor force .....	30,975	31,114	15,704	15,929	15,270	15,185	25,995	25,914	3,815	3,980	2,259	2,451
Percent of population .....	74.4	74.0	82.1	81.2	67.8	67.7	73.8	73.4	78.0	77.9	80.7	82.5
Employed .....	30,083	30,193	15,271	15,495	14,812	14,698	25,368	25,248	3,616	3,766	2,178	2,342
Employment-population ratio .....	72.2	71.8	79.8	79.0	65.8	65.6	72.0	71.6	74.0	73.7	77.8	78.8
Unemployed .....	891	921	433	434	458	487	627	666	199	214	81	110
Unemployment rate .....	2.9	3.0	2.8	2.7	3.0	3.2	2.4	2.6	5.2	5.4	3.6	4.5
<b>Some college, no degree</b>												
Civilian noninstitutional population ...	29,191	29,774	13,854	14,177	15,336	15,597	24,486	24,829	3,676	3,844	2,045	2,191
Civilian labor force .....	21,132	21,440	11,152	11,210	9,980	10,230	17,539	17,698	2,844	2,939	1,635	1,776
Percent of population .....	72.4	72.0	80.5	79.1	65.1	65.6	71.6	71.3	77.4	76.5	79.9	81.1
Employed .....	20,456	20,755	10,807	10,873	9,649	9,881	17,087	17,204	2,667	2,772	1,579	1,695
Employment-population ratio .....	70.1	69.7	78.0	76.7	62.9	63.4	69.8	69.3	72.5	72.1	77.3	77.4
Unemployed .....	676	686	345	337	331	349	451	494	177	167	55	81
Unemployment rate .....	3.2	3.2	3.1	3.0	3.3	3.4	2.6	2.8	6.2	5.7	3.4	4.6
<b>Associate degree</b>												
Civilian noninstitutional population ...	12,457	12,250	5,285	5,429	7,172	6,821	10,723	10,453	1,213	1,267	756	781
Civilian labor force .....	9,843	9,673	4,552	4,719	5,291	4,954	8,456	8,216	971	1,041	624	675
Percent of population .....	79.0	79.0	86.1	86.9	73.8	72.6	78.9	78.6	80.0	82.2	82.6	86.5
Employed .....	9,627	9,438	4,464	4,622	5,163	4,817	8,281	8,044	949	995	598	647
Employment-population ratio .....	77.3	77.0	84.5	85.1	72.0	70.6	77.2	76.9	78.2	78.5	79.2	82.8
Unemployed .....	215	235	88	97	127	138	175	173	21	47	26	29
Unemployment rate .....	2.2	2.4	1.9	2.1	2.4	2.8	2.1	2.1	2.2	4.5	4.1	4.2
<b>College graduates</b>												
Civilian noninstitutional population ...	40,909	42,090	21,472	21,921	19,436	20,168	35,543	36,314	2,670	2,971	1,624	1,809
Civilian labor force .....	32,973	33,930	18,260	18,690	14,713	15,241	28,619	29,178	2,195	2,485	1,354	1,519
Percent of population .....	80.6	80.6	85.0	85.3	75.7	75.6	80.5	80.3	82.2	83.6	83.4	84.0
Employed .....	32,301	33,397	17,892	18,428	14,409	14,970	28,100	28,771	2,111	2,409	1,308	1,480
Employment-population ratio .....	79.0	79.3	83.3	84.1	74.1	74.2	79.1	79.2	79.1	81.1	80.5	81.8
Unemployed .....	672	533	368	262	304	271	519	407	84	76	46	39
Unemployment rate .....	2.0	1.6	2.0	1.4	2.1	1.8	1.8	1.4	3.8	3.0	3.4	2.6

<sup>1</sup> Includes the categories, some college, no degree; and associate degree.

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

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age, sex, and race	May 1998									
	Employed <sup>1</sup>								Unemployed	
	Full-time workers				Part-time workers				Looking for full-time work	Looking for part-time work
	Total	At work		Not at work	Total	At work <sup>2</sup>		Not at work		
35 hours or more		1 to 34 hours for economic or noneconomic reasons	Part time for economic reasons			Part time for noneconomic reasons				
<b>TOTAL</b>										
Total, 16 years and over .....	108,116	96,150	8,911	3,054	23,360	2,391	19,775	1,194	4,715	1,050
16 to 19 years .....	2,012	1,668	307	38	4,835	265	4,402	168	678	529
16 to 17 years .....	224	161	53	9	2,382	17	2,286	78	188	354
18 to 19 years .....	1,789	1,507	253	29	2,453	248	2,116	89	490	175
20 years and over .....	106,104	94,482	8,605	3,017	18,525	2,125	15,373	1,026	4,036	521
20 to 24 years .....	9,196	8,119	876	200	3,330	498	2,651	181	904	143
25 years and over .....	96,908	86,363	7,728	2,817	15,195	1,628	12,723	845	3,132	378
25 to 54 years .....	84,608	75,665	6,604	2,339	10,855	1,402	8,889	563	2,856	252
55 years and over .....	12,300	10,698	1,124	478	4,341	225	3,833	282	276	126
<b>Men, 16 years and over .....</b>	<b>63,341</b>	<b>57,260</b>	<b>4,445</b>	<b>1,637</b>	<b>7,515</b>	<b>1,007</b>	<b>6,127</b>	<b>380</b>	<b>2,579</b>	<b>418</b>
16 to 19 years .....	1,167	989	151	27	2,277	108	2,084	84	392	266
20 years and over .....	62,175	56,271	4,293	1,610	5,238	899	4,043	296	2,187	152
20 to 24 years .....	5,244	4,703	463	77	1,382	247	1,070	65	535	49
25 years and over .....	56,931	51,568	3,830	1,533	3,856	652	2,974	231	1,652	103
25 to 54 years .....	49,470	44,997	3,234	1,239	2,010	545	1,355	110	1,492	39
55 years and over .....	7,461	6,571	596	294	1,846	106	1,618	121	160	64
<b>Women, 16 years and over .....</b>	<b>44,775</b>	<b>38,891</b>	<b>4,466</b>	<b>1,418</b>	<b>15,845</b>	<b>1,384</b>	<b>13,647</b>	<b>814</b>	<b>2,135</b>	<b>632</b>
16 to 19 years .....	846	679	155	11	2,558	157	2,318	83	286	263
20 years and over .....	43,929	38,211	4,311	1,406	13,287	1,226	11,330	731	1,849	369
20 to 24 years .....	3,952	3,416	413	123	1,947	250	1,581	116	368	94
25 years and over .....	39,977	34,795	3,898	1,284	11,339	976	9,749	614	1,481	275
25 to 54 years .....	35,138	30,668	3,370	1,099	8,844	857	7,534	454	1,364	213
55 years and over .....	4,839	4,127	528	184	2,495	119	2,215	161	117	62
<b>White</b>										
<b>Men, 16 years and over .....</b>	<b>54,366</b>	<b>49,111</b>	<b>3,846</b>	<b>1,409</b>	<b>6,408</b>	<b>761</b>	<b>5,299</b>	<b>348</b>	<b>1,928</b>	<b>320</b>
16 to 19 years .....	1,048	894	128	27	1,979	74	1,838	67	289	217
20 years and over .....	53,318	48,217	3,718	1,382	4,428	687	3,460	281	1,639	103
20 to 24 years .....	4,569	4,091	414	65	1,128	183	881	65	379	38
25 years and over .....	48,748	44,127	3,304	1,317	3,300	504	2,580	217	1,260	66
25 to 54 years .....	42,141	38,323	2,776	1,042	1,633	409	1,119	105	1,149	26
55 years and over .....	6,607	5,804	528	275	1,667	95	1,461	112	111	40
<b>Women, 16 years and over .....</b>	<b>36,488</b>	<b>31,664</b>	<b>3,697</b>	<b>1,127</b>	<b>13,866</b>	<b>1,087</b>	<b>12,050</b>	<b>730</b>	<b>1,403</b>	<b>483</b>
16 to 19 years .....	687	571	112	5	2,250	155	2,026	70	197	185
20 years and over .....	35,800	31,093	3,585	1,122	11,616	932	10,024	660	1,206	298
20 to 24 years .....	3,248	2,815	340	93	1,609	187	1,320	103	231	67
25 years and over .....	32,552	28,278	3,245	1,029	10,007	745	8,704	557	975	231
25 to 54 years .....	28,391	24,737	2,793	861	7,781	653	6,726	403	896	177
55 years and over .....	4,161	3,541	453	167	2,225	93	1,979	154	79	54
<b>Black</b>										
<b>Men, 16 years and over .....</b>	<b>6,157</b>	<b>5,557</b>	<b>455</b>	<b>145</b>	<b>685</b>	<b>176</b>	<b>493</b>	<b>16</b>	<b>510</b>	<b>80</b>
16 to 19 years .....	81	64	17	-	212	32	168	13	88	42
20 years and over .....	6,076	5,493	438	145	473	144	326	4	422	38
20 to 24 years .....	504	460	41	3	150	50	99	1	139	10
25 years and over .....	5,572	5,032	397	142	323	94	227	3	283	28
25 to 54 years .....	5,002	4,520	350	133	209	90	119	-	247	8
55 years and over .....	569	513	48	9	114	4	108	3	36	21
<b>Women, 16 years and over .....</b>	<b>6,092</b>	<b>5,312</b>	<b>586</b>	<b>195</b>	<b>1,401</b>	<b>232</b>	<b>1,129</b>	<b>40</b>	<b>662</b>	<b>122</b>
16 to 19 years .....	125	84	35	6	239	3	224	12	79	72
20 years and over .....	5,967	5,228	551	188	1,163	230	905	28	582	49
20 to 24 years .....	549	463	65	21	230	42	185	4	123	21
25 years and over .....	5,419	4,765	486	168	933	188	720	24	459	28
25 to 54 years .....	4,940	4,344	438	158	727	165	541	21	427	25
55 years and over .....	479	421	48	10	205	23	179	3	32	4

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

<sup>2</sup> Includes some persons at work 35 hours or more classified by their reason for working part time.  
NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
Total .....	129,565	131,476	69,968	70,856	66,564	67,413	59,597	60,619	56,464	57,216
Managerial and professional specialty .....	37,391	38,672	18,907	19,584	18,806	19,468	18,484	19,088	18,382	18,946
Executive, administrative, and managerial .....	18,263	18,708	10,146	10,375	10,101	10,320	8,117	8,333	8,093	8,257
Officials and administrators, public administration .....	628	657	327	360	327	360	301	296	301	294
Other executive, administrative, and managerial .....	13,152	13,460	7,998	8,024	7,956	7,974	5,154	5,437	5,134	5,390
Management-related occupations .....	4,483	4,591	1,821	1,991	1,818	1,985	2,662	2,600	2,658	2,573
Professional specialty .....	19,128	19,964	8,761	9,208	8,706	9,148	10,367	10,755	10,290	10,689
Engineers .....	2,037	2,021	1,834	1,784	1,829	1,784	203	236	202	236
Mathematical and computer scientists .....	1,504	1,593	1,025	1,140	1,018	1,138	479	453	479	450
Natural scientists .....	543	452	374	295	374	295	169	157	169	157
Health diagnosing occupations .....	1,006	1,054	749	758	749	758	256	296	255	296
Health assessment and treating occupations .....	2,911	2,960	364	466	363	466	2,548	2,493	2,544	2,491
Teachers, college and university .....	791	853	466	526	460	519	326	327	320	324
Teachers, except college and university .....	4,860	5,239	1,145	1,238	1,138	1,225	3,715	4,001	3,679	3,959
Lawyers and judges .....	894	1,011	640	725	638	725	254	286	254	286
Other professional specialty occupations .....	4,582	4,782	2,165	2,276	2,136	2,238	2,417	2,506	2,388	2,489
Technical, sales, and administrative support .....	38,132	38,247	13,773	13,678	13,028	12,948	24,359	24,569	22,707	22,740
Technicians and related support .....	4,126	4,272	1,973	1,975	1,942	1,941	2,153	2,297	2,113	2,273
Health technologists and technicians .....	1,740	1,719	368	323	368	317	1,372	1,396	1,351	1,392
Engineering and science technicians .....	1,182	1,304	901	939	884	923	281	365	268	349
Technicians, except health, engineering, and science .....	1,205	1,250	705	712	691	701	500	537	493	532
Sales occupations .....	15,766	15,905	7,926	7,927	7,404	7,449	7,840	7,978	6,743	6,755
Supervisors and proprietors .....	4,707	4,850	2,899	2,948	2,880	2,928	1,807	1,901	1,786	1,866
Sales representatives, finance and business services .....	2,621	2,638	1,537	1,474	1,515	1,442	1,084	1,163	1,056	1,100
Sales representatives, commodities, except retail .....	1,398	1,495	1,074	1,094	1,066	1,094	324	400	319	394
Sales workers, retail and personal services .....	6,948	6,805	2,392	2,381	1,920	1,957	4,556	4,424	3,513	3,310
Sales-related occupations .....	92	118	23	29	23	27	70	89	70	86
Administrative support, including clerical .....	18,240	18,070	3,874	3,777	3,683	3,558	14,366	14,293	13,851	13,712
Supervisors .....	653	708	272	267	273	264	381	441	381	436
Computer equipment operators .....	409	366	180	158	175	155	229	208	227	208
Secretaries, stenographers, and typists .....	3,720	3,716	51	100	50	97	3,669	3,617	3,581	3,506
Financial records processing .....	2,212	2,038	185	137	177	124	2,027	1,900	2,000	1,875
Mail and message distributing .....	1,003	963	612	565	598	546	391	398	380	390
Other administrative support, including clerical .....	10,241	10,279	2,574	2,549	2,410	2,373	7,667	7,730	7,282	7,298
Service occupations .....	17,407	17,749	7,097	7,153	6,097	6,152	10,310	10,597	9,215	9,477
Private household .....	746	848	41	56	29	50	705	792	608	716
Protective service .....	2,247	2,346	1,849	1,928	1,819	1,907	397	419	367	373
Service, except private household and protective .....	14,415	14,555	5,207	5,169	4,249	4,195	9,208	9,386	8,239	8,389
Food service .....	5,958	6,137	2,627	2,561	1,881	1,820	3,331	3,576	2,630	2,854
Health service .....	2,408	2,456	281	324	270	299	2,126	2,132	2,067	2,048
Cleaning and building service .....	3,112	3,109	1,749	1,738	1,629	1,606	1,362	1,371	1,305	1,314
Personal service .....	2,937	2,853	548	546	470	470	2,389	2,307	2,236	2,173
Precision production, craft, and repair .....	14,265	14,839	13,011	13,617	12,737	13,286	1,254	1,221	1,223	1,204
Mechanics and repairers .....	4,532	4,955	4,331	4,729	4,244	4,611	201	226	195	225
Construction trades .....	5,624	5,706	5,483	5,610	5,348	5,444	141	95	137	87
Other precision production, craft, and repair .....	4,109	4,178	3,197	3,278	3,146	3,231	912	900	891	892
Operators, fabricators, and laborers .....	18,514	18,250	14,009	13,832	13,029	12,839	4,504	4,417	4,300	4,192
Machine operators, assemblers, and inspectors .....	7,891	7,653	4,943	4,692	4,811	4,513	2,948	2,961	2,891	2,870
Transportation and material moving occupations .....	5,499	5,487	4,982	4,951	4,893	4,844	516	536	499	519
Motor vehicle operators .....	4,126	4,055	3,676	3,586	3,610	3,511	449	468	433	451
Other transportation and material moving occupations .....	1,373	1,433	1,306	1,365	1,283	1,334	67	68	67	68
Handlers, equipment cleaners, helpers, and laborers .....	5,124	5,109	4,084	4,189	3,326	3,482	1,040	920	909	803
Construction laborers .....	802	829	753	794	692	761	49	35	50	35
Other handlers, equipment cleaners, helpers, and laborers .....	4,322	4,281	3,331	3,395	2,634	2,721	991	885	860	769
Farming, forestry, and fishing .....	3,856	3,719	3,170	2,992	2,865	2,720	686	727	638	656
Farm operators and managers .....	1,361	1,323	1,065	1,013	1,047	1,006	296	309	294	306
Other farming, forestry, and fishing occupations .....	2,495	2,396	2,105	1,979	1,819	1,714	390	418	344	350

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	129,565	131,476	69,968	70,856	59,597	60,619
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	28.9	29.4	27.0	27.6	31.0	31.5
Executive, administrative, and managerial .....	14.1	14.2	14.5	14.6	13.6	13.7
Professional specialty .....	14.8	15.2	12.5	13.0	17.4	17.7
Technical, sales, and administrative support .....	29.4	29.1	19.7	19.3	40.9	40.5
Technicians and related support .....	3.2	3.2	2.8	2.8	3.6	3.8
Sales occupations .....	12.2	12.1	11.3	11.2	13.2	13.2
Administrative support, including clerical .....	14.1	13.7	5.5	5.3	24.1	23.6
Service occupations .....	13.4	13.5	10.1	10.1	17.3	17.5
Private household .....	.6	.6	( <sup>1</sup> )	.1	1.2	1.3
Protective service .....	1.7	1.8	2.6	2.7	.7	.7
Service, except private household and protective .....	11.1	11.1	7.4	7.3	15.5	15.5
Precision production, craft, and repair .....	11.0	11.3	18.6	19.2	2.1	2.0
Operators, fabricators, and laborers .....	14.3	13.9	20.0	19.5	7.6	7.3
Machine operators, assemblers, and inspectors .....	6.1	5.8	7.1	6.6	4.9	4.9
Transportation and material moving occupations .....	4.2	4.2	7.1	7.0	.9	.9
Handlers, equipment cleaners, helpers, and laborers .....	4.0	3.9	5.8	5.9	1.7	1.5
Farming, forestry, and fishing .....	3.0	2.8	4.5	4.2	1.2	1.2
<b>White</b>						
Total, 16 years and over (thousands) .....	110,004	111,127	60,300	60,773	49,705	50,354
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	30.0	30.4	28.0	28.6	32.4	32.6
Executive, administrative, and managerial .....	14.8	14.9	15.3	15.4	14.3	14.3
Professional specialty .....	15.2	15.5	12.8	13.2	18.1	18.3
Technical, sales, and administrative support .....	29.4	29.1	19.6	19.3	41.2	41.0
Technicians and related support .....	3.1	3.2	2.8	2.7	3.6	3.8
Sales occupations .....	12.5	12.4	11.7	11.6	13.3	13.3
Administrative support, including clerical .....	13.8	13.6	5.2	5.1	24.3	23.9
Service occupations .....	12.4	12.5	9.2	9.3	16.2	16.3
Private household .....	.5	.6	( <sup>1</sup> )	.1	1.1	1.3
Protective service .....	1.6	1.7	2.5	2.6	.5	.5
Service, except private household and protective .....	10.2	10.2	6.6	6.6	14.5	14.5
Precision production, craft, and repair .....	11.5	11.7	19.3	19.8	2.0	2.0
Operators, fabricators, and laborers .....	13.5	13.1	19.0	18.3	6.8	6.7
Machine operators, assemblers, and inspectors .....	5.6	5.4	6.7	6.2	4.3	4.4
Transportation and material moving occupations .....	4.1	4.0	6.8	6.6	.9	.9
Handlers, equipment cleaners, helpers, and laborers .....	3.7	3.7	5.4	5.5	1.7	1.4
Farming, forestry, and fishing .....	3.3	3.1	4.9	4.6	1.3	1.4
<b>Black</b>						
Total, 16 years and over (thousands) .....	13,825	14,336	6,562	6,842	7,263	7,494
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	19.3	20.8	15.9	16.7	22.3	24.6
Executive, administrative, and managerial .....	8.8	9.3	8.2	8.1	9.3	10.4
Professional specialty .....	10.5	11.5	7.7	8.5	13.0	14.2
Technical, sales, and administrative support .....	29.3	28.0	18.2	16.5	39.3	38.6
Technicians and related support .....	3.1	3.1	2.7	2.5	3.5	3.6
Sales occupations .....	9.3	9.3	6.8	7.2	11.5	11.3
Administrative support, including clerical .....	17.0	15.6	8.7	6.8	24.4	23.7
Service occupations .....	21.4	20.7	17.7	15.7	24.8	25.2
Private household .....	.9	.8	-	.1	1.7	1.4
Protective service .....	3.0	3.1	4.6	4.3	1.5	1.9
Service, except private household and protective .....	17.5	16.8	13.1	11.4	21.6	21.8
Precision production, craft, and repair .....	8.4	8.8	14.8	16.4	2.5	1.7
Operators, fabricators, and laborers .....	20.4	20.5	30.9	32.4	10.9	9.7
Machine operators, assemblers, and inspectors .....	8.8	8.4	9.9	9.9	7.7	7.1
Transportation and material moving occupations .....	6.0	6.4	11.4	12.4	1.2	.9
Handlers, equipment cleaners, helpers, and laborers .....	5.6	5.7	9.6	10.0	2.0	1.7
Farming, forestry, and fishing .....	1.2	1.2	2.4	2.3	.2	.2

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

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

procedures and revised population controls used in the household survey.

A-21. Employed persons by industry and occupation

(In thousands)

Industry	May 1998												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service <sup>1</sup>		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture .....	3,552	70	124	70	30	121	-	19	38	26	37	19	2,997
Mining .....	646	107	56	26	12	51	-	5	197	43	135	13	2
Construction .....	8,670	1,322	138	47	56	433	-	30	4,997	81	602	929	35
Manufacturing .....	20,621	3,054	1,898	619	711	2,008	-	270	4,131	6,115	749	1,019	47
Durable goods .....	12,473	1,791	1,281	455	264	1,136	-	156	2,970	3,431	424	523	42
Nondurable goods .....	8,149	1,263	617	164	447	872	-	114	1,161	2,684	326	497	5
Transportation and public utilities .....	9,317	1,302	592	335	270	2,265	-	323	1,229	166	2,268	561	6
Wholesale and retail trade .....	27,348	2,605	559	251	11,478	2,073	-	5,218	1,599	339	1,089	2,025	113
Wholesale trade .....	4,901	606	135	45	1,953	672	-	75	358	135	472	376	75
Retail trade .....	22,447	1,998	424	206	9,525	1,401	-	5,143	1,241	204	617	1,649	38
Finance, insurance, and real estate .....	8,413	2,343	338	154	2,083	2,879	-	336	197	10	15	10	47
Services .....	47,272	6,635	15,281	2,524	1,244	7,013	848	9,118	2,270	863	543	489	444
Private households .....	977	5	3	-	-	10	848	51	7	2	2	4	46
Other service industries .....	46,295	6,631	15,278	2,524	1,244	7,003	-	9,067	2,264	861	541	485	398
Professional services .....	31,527	4,015	13,300	2,132	218	5,081	-	5,565	514	201	300	126	74
Public administration .....	5,637	1,270	978	247	21	1,227	-	1,583	181	11	49	43	28

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

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	May 1998									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Wage and salary workers					Self-employed workers	Unpaid family workers
				Total	Private industries			Government		
Total					Private household workers	Other private industries				
Total, 16 years and over .....	2,070	1,430	52	118,753	100,467	975	99,491	18,287	9,068	103
16 to 19 years .....	253	28	14	6,496	6,248	101	6,147	247	46	10
16 to 17 years .....	111	23	9	2,430	2,364	54	2,310	66	28	5
18 to 19 years .....	143	5	5	4,066	3,885	47	3,837	181	19	5
20 to 24 years .....	305	34	5	11,900	10,906	114	10,792	994	267	14
25 to 34 years .....	559	192	16	29,232	25,604	190	25,415	3,628	1,515	18
35 to 44 years .....	446	306	5	32,832	27,468	203	27,265	5,364	2,719	26
45 to 54 years .....	262	335	2	24,565	19,158	189	18,969	5,407	2,420	13
55 to 64 years .....	165	273	4	10,940	8,745	80	8,665	2,195	1,449	17
65 years and over .....	79	262	5	2,789	2,337	98	2,238	452	653	5
Men, 16 years and over .....	1,578	1,083	30	62,534	54,528	114	54,414	8,006	5,602	29
16 to 19 years .....	172	24	12	3,204	3,126	25	3,101	78	25	6
16 to 17 years .....	83	21	7	1,203	1,179	10	1,168	24	17	1
18 to 19 years .....	89	3	5	2,001	1,947	15	1,932	54	8	5
20 to 24 years .....	250	24	1	6,204	5,753	21	5,731	451	138	9
25 to 34 years .....	436	149	9	15,778	14,137	21	14,116	1,642	859	1
35 to 44 years .....	337	232	-	17,454	15,177	5	15,172	2,277	1,650	3
45 to 54 years .....	188	254	-	12,603	10,284	12	10,272	2,319	1,526	2
55 to 64 years .....	122	185	4	5,848	4,818	15	4,804	1,030	941	5
65 years and over .....	73	216	3	1,444	1,235	15	1,219	209	463	3
Women, 16 years and over .....	491	347	22	56,219	45,938	861	45,077	10,280	3,466	75
16 to 19 years .....	81	4	2	3,292	3,123	76	3,047	169	21	4
16 to 17 years .....	27	2	2	1,227	1,185	43	1,141	42	11	4
18 to 19 years .....	54	2	-	2,064	1,938	33	1,905	127	10	-
20 to 24 years .....	55	10	4	5,696	5,153	93	5,061	542	129	6
25 to 34 years .....	124	44	7	13,454	11,468	169	11,299	1,986	656	16
35 to 44 years .....	108	74	5	15,378	12,291	198	12,093	3,087	1,069	24
45 to 54 years .....	74	81	2	11,962	8,875	177	8,697	3,088	894	11
55 to 64 years .....	43	88	-	5,092	3,927	66	3,861	1,166	507	12
65 years and over .....	6	46	2	1,345	1,102	83	1,019	243	189	2

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

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

Hours of work	May 1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	127,227	3,423	123,804	100.0	100.0	100.0
1 to 34 hours .....	30,199	987	29,212	23.7	28.8	23.6
1 to 4 hours .....	1,225	71	1,153	1.0	2.1	.9
5 to 14 hours .....	4,952	214	4,737	3.9	6.3	3.8
15 to 29 hours .....	15,432	480	14,952	12.1	14.0	12.1
30 to 34 hours .....	8,591	221	8,370	6.8	6.5	6.8
35 hours and over .....	97,028	2,436	94,592	76.3	71.2	76.4
35 to 39 hours .....	8,586	130	8,456	6.7	3.8	6.8
40 hours .....	46,996	763	46,233	36.9	22.3	37.3
41 hours and over .....	41,447	1,543	39,903	32.6	45.1	32.2
41 to 48 hours .....	14,831	225	14,606	11.7	6.6	11.8
49 to 59 hours .....	14,828	422	14,406	11.7	12.3	11.6
60 hours and over .....	11,788	897	10,891	9.3	26.2	8.8
Average hours, total at work .....	39.8	44.3	39.7	-	-	-
Average hours, persons who usually work full time .....	43.9	51.1	43.7	-	-	-

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

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

(Numbers in thousands)

Reason for working less than 35 hours	May 1998					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over .....	30,199	8,911	21,287	29,212	8,624	20,588
Economic reasons .....	3,602	1,350	2,252	3,478	1,300	2,177
Stack work or business conditions .....	2,005	1,085	920	1,937	1,054	883
Could only find part-time work .....	1,299	-	1,299	1,265	-	1,265
Seasonal work .....	101	68	34	87	57	29
Job started or ended during week .....	197	197	-	189	189	-
Noneconomic reasons .....	26,596	7,561	19,035	25,734	7,324	18,411
Child-care problems .....	815	101	714	809	101	708
Other family or personal obligations .....	5,766	640	5,125	5,596	625	4,970
Health or medical limitations .....	773	-	773	735	-	735
In school or training .....	6,610	143	6,467	6,414	136	6,279
Retired or Social Security limit on earnings .....	2,028	-	2,028	1,880	-	1,880
Vacation or personal day .....	3,602	3,602	-	3,517	3,517	-
Holiday, legal or religious .....	90	90	-	88	88	-
Weather-related curtailment .....	290	290	-	225	225	-
All other reasons .....	6,621	2,693	3,928	6,471	2,632	3,840
Average hours:						
Economic reasons .....	23.0	24.1	22.3	23.0	24.2	22.2
Other reasons .....	21.2	25.2	19.5	21.2	25.3	19.6

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Industry and class of worker	May 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over .....	123,804	29,212	3,478	7,324	18,411	94,592	39.7	43.7
Wage and salary workers .....	115,147	26,431	3,080	6,808	16,543	88,716	39.6	43.4
Mining .....	610	35	3	19	13	575	48.2	48.8
Construction .....	6,933	1,031	254	482	295	5,902	41.9	43.3
Manufacturing .....	19,576	2,274	318	1,237	720	17,301	42.6	43.6
Durable goods .....	11,898	1,232	135	773	324	10,665	43.1	43.8
Nondurable goods .....	7,678	1,042	183	463	396	6,636	41.8	43.3
Transportation and public utilities .....	8,537	1,248	183	493	572	7,288	42.9	44.8
Wholesale and retail trade .....	24,807	8,406	1,025	1,084	6,297	16,401	37.1	44.0
Finance, insurance, and real estate .....	7,609	1,258	80	453	725	6,351	40.5	42.7
Service industries .....	41,610	11,378	1,190	2,527	7,661	30,232	38.2	43.0
Private households .....	959	530	68	33	429	429	29.3	42.9
All other industries .....	40,651	10,848	1,122	2,494	7,232	29,803	38.5	43.0
Public administration .....	5,465	801	28	512	261	4,664	41.0	42.2
Self-employed workers .....	8,554	2,735	388	515	1,832	5,819	40.3	47.3
Unpaid family workers .....	103	46	9	1	36	58	39.5	( <sup>1</sup> )

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

procedures and revised population controls used in the household survey.

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



**A-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 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
<b>TOTAL</b>								
Total, 16 years and over .....	123,804	29,212	3,478	7,324	18,411	94,592	39.7	43.7
16 to 19 years .....	6,363	4,690	319	211	4,160	1,674	24.2	38.9
16 to 17 years .....	2,380	2,209	17	44	2,149	171	17.4	36.4
18 to 19 years .....	3,983	2,481	302	167	2,011	1,503	28.2	39.2
20 years and over .....	117,440	24,522	3,159	7,112	14,251	92,918	40.5	43.7
20 to 24 years .....	11,817	3,841	643	685	2,513	7,976	36.3	41.6
25 years and over .....	105,623	20,681	2,516	6,428	11,738	84,942	41.0	43.9
25 to 54 years .....	90,489	15,969	2,179	5,496	8,293	74,520	41.6	44.1
55 years and over .....	15,135	4,713	337	931	3,444	10,422	37.3	43.1
<b>Men, 16 years and over</b> .....	66,211	10,665	1,659	3,450	5,556	55,546	42.7	45.2
16 to 19 years .....	3,132	2,152	128	97	1,927	980	25.5	40.0
16 to 17 years .....	1,179	1,062	10	15	1,037	116	18.5	39.2
18 to 19 years .....	1,954	1,090	118	82	890	864	29.8	40.1
20 years and over .....	63,079	8,513	1,531	3,353	3,629	54,566	43.6	45.3
20 to 24 years .....	6,217	1,669	342	331	996	4,547	38.4	42.7
25 years and over .....	56,862	6,844	1,189	3,022	2,633	50,018	44.2	45.6
25 to 54 years .....	48,548	4,808	1,013	2,550	1,246	43,740	44.9	45.7
55 years and over .....	8,315	2,036	176	472	1,388	6,279	39.9	44.5
<b>Women, 16 years and over</b> .....	57,592	18,547	1,818	3,874	12,854	39,046	36.2	41.5
16 to 19 years .....	3,231	2,538	191	114	2,233	693	22.9	37.5
16 to 17 years .....	1,202	1,147	6	28	1,112	55	16.4	32.0
18 to 19 years .....	2,029	1,391	184	86	1,121	638	26.7	38.1
20 years and over .....	54,361	16,009	1,628	3,760	10,621	38,353	37.0	41.6
20 to 24 years .....	5,600	2,171	301	354	1,517	3,429	33.9	40.2
25 years and over .....	48,761	13,837	1,327	3,406	9,104	34,924	37.3	41.7
25 to 54 years .....	41,941	11,161	1,167	2,946	7,048	30,780	37.9	41.8
55 years and over .....	6,820	2,676	160	460	2,057	4,144	34.0	41.1
<b>Race</b>								
<b>White, 16 years and over</b> .....	104,294	25,034	2,699	6,242	16,092	79,260	39.8	43.9
Men .....	56,549	9,057	1,283	3,013	4,761	47,492	43.0	45.5
Women .....	47,745	15,977	1,416	3,229	11,332	31,768	36.0	41.6
<b>Black, 16 years and over</b> .....	13,801	2,953	599	808	1,545	10,848	39.0	42.0
Men .....	6,560	1,074	289	316	469	5,486	41.2	43.3
Women .....	7,241	1,879	310	492	1,077	5,362	37.0	40.6
<b>Marital status</b>								
<b>Men, 16 years and over:</b>								
Married, spouse present .....	39,786	4,392	640	2,099	1,653	35,394	44.7	46.0
Widowed, divorced, or separated .....	8,448	1,241	242	488	510	7,207	43.3	45.1
Single (never married) .....	17,978	5,032	778	862	3,393	12,945	38.0	43.2
<b>Women, 16 years and over:</b>								
Married, spouse present .....	30,995	9,901	684	2,083	7,133	21,095	36.3	41.4
Widowed, divorced, or separated .....	11,611	2,923	457	877	1,589	8,687	38.4	41.9
Single (never married) .....	14,986	5,723	677	914	4,132	9,264	34.3	41.2

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Occupation and sex	May 1998							
	Total at work	Worked 1 to 34 hours				Worked 35 hours or more	Average hours	
		Total	For economic reasons	For noneconomic reasons			Total at work	Persons who usually work full time
				Usually work full time	Usually work part time			
Total, 16 years and over <sup>1</sup> .....	123,627	29,151	3,442	7,317	18,392	94,476	39.7	43.7
Managerial and professional specialty .....	37,457	6,598	480	2,302	3,816	30,858	42.5	45.3
Executive, administrative, and managerial .....	18,136	2,458	154	1,084	1,220	15,678	44.3	46.2
Professional specialty .....	19,321	4,140	326	1,218	2,596	15,181	40.8	44.4
Technical, sales, and administrative support .....	37,053	10,184	884	2,234	7,067	26,869	37.9	42.6
Technicians and related support .....	4,122	837	63	285	489	3,285	39.4	41.9
Sales occupations .....	15,352	4,539	469	662	3,407	10,813	39.0	45.3
Administrative support, including clerical .....	17,579	4,809	352	1,286	3,170	12,771	36.6	40.6
Service occupations .....	17,103	7,025	989	892	5,144	10,078	34.2	42.0
Private household .....	831	461	59	23	378	370	29.4	43.4
Protective service .....	2,253	376	43	132	202	1,876	41.5	44.0
Service, except private household and protective .....	14,020	6,188	887	737	4,564	7,832	33.3	41.5
Precision production, craft, and repair .....	14,385	1,857	404	884	568	12,528	42.5	43.6
Operators, fabricators, and laborers .....	17,629	3,486	684	1,005	1,797	14,143	40.6	43.5
Machine operators, assemblers, and inspectors .....	7,400	1,141	253	496	393	6,259	40.6	42.0
Transportation and material moving occupations .....	5,297	832	144	236	452	4,465	44.8	47.3
Handlers, equipment cleaners, helpers, and laborers .....	4,932	1,513	287	274	952	3,418	36.2	41.3
Men, 16 years and over <sup>1</sup> .....	65,915	10,548	1,637	3,431	5,480	55,367	42.8	45.3
Managerial and professional specialty .....	19,067	2,231	199	985	1,047	16,836	45.6	47.4
Executive, administrative, and managerial .....	10,116	961	75	492	394	9,155	47.0	48.3
Professional specialty .....	8,951	1,270	125	492	653	7,682	44.0	46.3
Technical, sales, and administrative support .....	13,310	2,254	257	609	1,388	11,056	42.5	45.5
Technicians and related support .....	1,913	264	30	116	118	1,650	41.7	43.3
Sales occupations .....	7,715	1,308	135	265	907	6,407	44.0	47.6
Administrative support, including clerical .....	3,682	683	92	227	363	2,999	39.8	42.5
Service occupations .....	6,913	2,075	328	313	1,433	4,838	37.6	43.5
Private household .....	52	27	6	-	21	24	( <sup>2</sup> )	( <sup>2</sup> )
Protective service .....	1,854	250	32	108	110	1,604	42.8	44.4
Service, except private household and protective .....	5,007	1,798	290	206	1,302	3,209	35.8	43.0
Precision production, craft, and repair .....	13,216	1,634	385	805	444	11,582	42.7	43.7
Operators, fabricators, and laborers .....	13,409	2,354	468	718	1,168	11,055	41.7	44.3
Machine operators, assemblers, and inspectors .....	4,558	593	141	290	162	3,965	41.7	42.7
Transportation and material moving occupations .....	4,780	617	118	210	289	4,163	45.7	47.6
Handlers, equipment cleaners, helpers, and laborers .....	4,071	1,143	208	219	716	2,928	37.1	41.8
Women, 16 years and over <sup>1</sup> .....	57,711	18,603	1,805	3,886	12,912	39,108	36.2	41.5
Managerial and professional specialty .....	18,389	4,368	281	1,317	2,769	14,022	39.2	42.8
Executive, administrative, and managerial .....	8,020	1,497	80	592	826	6,523	40.9	43.3
Professional specialty .....	10,369	2,870	201	726	1,943	7,499	37.9	42.4
Technical, sales, and administrative support .....	23,743	7,930	627	1,625	5,678	15,813	35.3	40.7
Technicians and related support .....	2,209	573	33	169	371	1,635	37.4	40.5
Sales occupations .....	7,637	3,231	334	397	2,500	4,406	33.9	42.1
Administrative support, including clerical .....	13,897	4,126	260	1,059	2,807	9,771	35.8	40.1
Service occupations .....	10,191	4,950	661	578	3,710	5,240	31.9	40.8
Private household .....	779	434	54	23	357	346	29.3	43.2
Protective service .....	398	126	10	24	91	272	35.4	41.3
Service, except private household and protective .....	9,013	4,390	597	531	3,262	4,623	32.0	40.6
Precision production, craft, and repair .....	1,169	223	19	79	124	946	39.4	41.9
Operators, fabricators, and laborers .....	4,220	1,132	216	287	629	3,087	37.1	40.8
Machine operators, assemblers, and inspectors .....	2,842	548	112	206	231	2,294	38.8	40.8
Transportation and material moving occupations .....	518	215	26	26	163	303	36.1	43.5
Handlers, equipment cleaners, helpers, and laborers .....	861	370	79	55	236	491	32.2	39.1

<sup>1</sup> Excludes farming, forestry, and fishing occupations.

<sup>2</sup> Data not shown where base is less than 75,000

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

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

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
Total, 16 years and over .....	3,223	2,997	4.4	4.1	3,175	2,767	5.1	4.4
Married, spouse present .....	1,074	946	2.5	2.2	959	835	2.9	2.5
Widowed, divorced, or separated .....	448	404	4.9	4.3	626	546	4.9	4.3
Single (never married) .....	1,701	1,647	8.3	7.9	1,590	1,386	9.6	8.1
White, 16 years and over .....	2,318	2,248	3.7	3.6	2,163	1,886	4.2	3.6
Married, spouse present .....	872	729	2.3	1.9	766	702	2.6	2.4
Widowed, divorced, or separated .....	327	319	4.4	4.1	432	363	4.3	3.6
Single (never married) .....	1,119	1,200	6.7	7.0	966	821	7.8	6.4
Black, 16 years and over .....	717	590	9.9	7.9	827	783	10.2	9.5
Married, spouse present .....	137	131	4.2	3.9	132	95	5.3	3.7
Widowed, divorced, or separated .....	94	79	7.4	6.2	174	172	7.7	7.8
Single (never married) .....	486	380	17.4	13.5	522	516	15.5	14.7
Total, 25 years and over .....	2,018	1,755	3.3	2.8	1,946	1,755	3.7	3.3
Married, spouse present .....	1,001	889	2.4	2.1	869	756	2.7	2.3
Widowed, divorced, or separated .....	418	387	4.8	4.2	574	514	4.7	4.2
Single (never married) .....	599	479	5.5	4.3	502	485	6.1	5.7
White, 25 years and over .....	1,498	1,326	2.8	2.5	1,358	1,206	3.1	2.8
Married, spouse present .....	823	677	2.2	1.8	697	628	2.5	2.2
Widowed, divorced, or separated .....	298	302	4.2	4.0	401	336	4.1	3.5
Single (never married) .....	378	346	4.4	4.0	260	241	4.5	4.1
Black, 25 years and over .....	383	311	6.4	5.0	486	487	7.3	7.1
Married, spouse present .....	114	125	3.6	3.9	112	92	4.7	3.7
Widowed, divorced, or separated .....	93	79	7.4	6.2	157	168	7.2	7.7
Single (never married) .....	177	107	10.8	6.3	218	227	10.3	10.3

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-29. Unemployed persons by occupation and sex**

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
Total, 16 years and over <sup>1</sup> .....	6,398	5,764	4.7	4.2	4.4	4.1	5.1	4.4
Managerial and professional specialty .....	765	622	2.0	1.6	2.1	1.5	1.9	1.7
Executive, administrative, and managerial .....	359	286	1.9	1.5	1.9	1.4	2.0	1.6
Professional specialty .....	406	337	2.1	1.7	2.4	1.6	1.8	1.7
Technical, sales, and administrative support .....	1,565	1,566	3.9	3.9	3.0	3.3	4.4	4.3
Technicians and related support .....	89	132	2.1	3.0	2.2	2.8	2.0	3.2
Sales occupations .....	776	695	4.7	4.2	3.2	3.0	6.1	5.4
Administrative support, including clerical .....	700	738	3.7	3.9	3.1	4.2	3.9	3.9
Service occupations .....	1,293	1,082	6.9	5.7	6.9	5.4	6.9	6.0
Private household .....	50	86	6.3	9.2	( <sup>2</sup> )	( <sup>2</sup> )	6.1	8.9
Protective service .....	104	62	4.4	2.6	3.8	2.1	7.5	4.8
Service, except private household and protective .....	1,138	933	7.3	6.0	8.0	6.4	6.9	5.8
Precision production, craft, and repair .....	643	615	4.3	4.0	4.2	4.0	5.0	4.1
Mechanics and repairers .....	124	149	2.7	2.9	2.7	3.1	1.6	-
Construction trades .....	375	334	6.3	5.5	6.1	5.4	13.3	13.3
Other precision production, craft, and repair .....	144	132	3.4	3.1	3.1	2.8	4.3	4.1
Operators, fabricators, and laborers .....	1,337	1,170	6.7	6.0	6.2	5.8	8.5	6.8
Machine operators, assemblers, and inspectors .....	509	440	6.1	5.4	4.7	5.0	8.3	6.2
Transportation and material moving occupations .....	277	239	4.8	4.2	4.9	4.1	4.1	4.6
Handlers, equipment cleaners, helpers, and laborers .....	551	490	9.7	8.8	9.4	8.5	11.0	9.7
Construction laborers .....	144	116	15.2	12.3	15.4	12.3	( <sup>2</sup> )	( <sup>2</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	407	374	8.6	8.0	7.9	7.6	11.0	9.6
Farming, forestry, and fishing .....	205	190	5.0	4.9	4.1	4.8	9.3	5.1
No previous work experience .....	569	486	-	-	-	-	-	-
16 to 19 years .....	385	364	-	-	-	-	-	-
20 to 24 years .....	85	63	-	-	-	-	-	-
25 years and over .....	98	60	-	-	-	-	-	-

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

<sup>2</sup> Data not shown where base is less than 75,000

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

A-30. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
Total, 16 years and over .....	6,398	5,764	4.7	4.2	4.4	4.1	5.1	4.4
Nonagricultural private wage and salary workers .....	5,074	4,605	4.9	4.4	4.7	4.2	5.2	4.6
Mining .....	22	9	3.5	1.4	3.7	1.6	2.2	-
Construction .....	548	515	7.7	7.2	8.0	7.3	5.4	5.9
Manufacturing .....	905	756	4.3	3.6	3.6	3.0	5.6	4.9
Durable goods .....	446	371	3.6	3.0	3.3	2.5	4.3	4.1
Lumber and wood products .....	47	42	5.7	5.2	5.7	5.8	5.4	2.8
Furniture and fixtures .....	21	23	3.0	3.5	2.2	3.9	5.0	2.5
Stone, clay, and glass products .....	16	10	2.6	1.7	3.0	1.7	1.4	1.9
Primary metal industries .....	42	27	5.6	3.3	5.1	3.3	8.2	3.0
Fabricated metal products .....	37	51	2.8	3.8	2.8	3.8	2.7	3.7
Machinery and computing equipment .....	91	62	3.6	2.5	3.5	1.9	3.7	4.0
Electrical machinery, equipment, and supplies .....	45	54	2.4	2.8	2.0	1.8	3.0	4.4
Transportation equipment .....	70	54	2.9	2.2	2.7	1.8	3.6	3.5
Automobiles .....	39	26	2.8	1.9	2.9	1.7	2.6	2.8
Other transportation equipment .....	32	28	3.0	2.6	2.4	2.0	5.1	4.3
Professional and photographic equipment .....	20	13	2.7	1.7	3.1	1.3	2.1	2.2
Other durable goods industries .....	57	35	8.2	5.4	4.8	1.2	12.8	11.3
Nondurable goods .....	459	385	5.3	4.6	4.3	3.8	6.9	5.8
Food and kindred products .....	139	107	8.1	6.2	6.3	5.7	11.4	7.1
Textile mill products .....	27	17	4.2	3.1	3.6	3.0	4.9	3.3
Apparel and other textile products .....	83	69	8.1	8.3	2.8	7.4	10.3	8.7
Paper and allied products .....	36	29	5.0	3.9	5.5	3.9	3.2	3.9
Printing and publishing .....	59	73	3.2	4.0	2.9	3.5	3.7	4.5
Chemicals and allied products .....	62	41	4.4	3.1	4.0	2.0	5.2	5.5
Rubber and miscellaneous plastics products .....	35	22	3.8	2.3	3.2	1.3	5.2	4.4
Other nondurable goods industries .....	18	26	4.6	7.6	4.6	6.8	4.6	9.4
Transportation and public utilities .....	239	199	3.2	2.7	3.0	2.7	3.6	2.6
Transportation .....	180	155	3.9	3.4	3.7	3.6	4.2	2.7
Communications and other public utilities .....	59	44	2.1	1.5	1.7	1.0	2.8	2.5
Wholesale and retail trade .....	1,620	1,372	6.1	5.1	5.0	4.3	7.2	6.0
Wholesale trade .....	152	183	3.2	3.9	2.3	3.1	5.0	5.7
Retail trade .....	1,468	1,189	6.7	5.4	5.8	4.7	7.5	6.0
Finance, insurance, and real estate .....	245	164	3.2	2.1	3.4	2.1	3.1	2.1
Service industries .....	1,496	1,589	4.5	4.6	4.9	5.0	4.3	4.4
Professional services .....	581	560	3.0	2.7	2.9	2.3	3.0	2.9
Other service industries .....	915	1,029	6.9	7.4	6.5	7.3	7.3	7.6
Agricultural wage and salary workers .....	118	120	5.3	5.5	4.2	5.3	9.0	6.0
Government, self-employed, and unpaid family workers .....	637	553	2.2	1.9	2.0	1.9	2.3	1.9
No previous work experience .....	569	486	-	-	-	-	-	-

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	6,398	5,764	2,582	2,339	2,520	2,218	1,296	1,207	4,481	4,134	1,545	1,373
Job losers and persons who completed temporary jobs .....	2,696	2,517	1,523	1,382	1,024	985	148	149	1,953	1,853	603	569
On temporary layoff .....	704	608	448	340	211	217	45	51	574	507	107	81
Not on temporary layoff .....	1,992	1,908	1,076	1,042	813	769	104	98	1,379	1,346	497	488
Permanent job losers .....	1,391	1,357	755	738	582	553	54	66	964	953	329	351
Persons who completed temporary jobs .....	602	551	321	304	231	215	50	32	416	393	168	137
Job leavers .....	721	664	332	358	312	234	77	72	574	517	122	115
Reentrants .....	2,412	2,098	670	550	1,057	925	685	623	1,589	1,430	663	570
New entrants .....	569	486	57	49	127	74	385	364	365	333	157	119
<b>PERCENT DISTRIBUTION</b>												
Job losers and persons who completed temporary jobs .....	42.1	43.7	59.0	59.1	40.7	44.4	11.4	12.3	43.6	44.8	39.0	41.5
On temporary layoff .....	11.0	10.5	17.3	14.6	8.4	9.8	3.5	4.2	12.8	12.3	6.9	5.9
Not on temporary layoff .....	31.1	33.1	41.7	44.5	32.3	34.7	8.0	8.1	30.8	32.6	32.1	35.5
Job leavers .....	11.3	11.5	12.9	15.3	12.4	10.6	6.0	6.0	12.8	12.5	7.9	8.3
Reentrants .....	37.7	36.4	25.9	23.5	42.0	41.7	52.9	51.6	35.5	34.6	42.9	41.5
New entrants .....	8.9	8.4	2.2	2.1	5.0	3.3	29.7	30.1	8.2	8.1	10.1	8.7
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers and persons who completed temporary jobs .....	2.0	1.8	2.2	2.0	1.7	1.7	1.9	1.9	1.7	1.6	3.9	3.6
Job leavers .....	.5	.5	.5	.5	.5	.4	1.0	.9	.5	.4	.8	.7
Reentrants .....	1.8	1.5	1.0	.8	1.8	1.6	8.7	7.7	1.4	1.2	4.3	3.6
New entrants .....	.4	.4	.1	.1	.2	.1	4.9	4.5	.3	.3	1.0	.8

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

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

(Percent distribution)

Reason, sex, and age	May 1998						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over .....	5,764	100.0	45.7	27.7	26.6	12.6	14.0
Job losers and persons who completed temporary jobs .....	2,517	100.0	41.8	30.0	28.2	15.5	12.8
On temporary layoff .....	608	100.0	61.9	24.7	13.4	7.6	5.7
Not on temporary layoff .....	1,908	100.0	35.4	31.6	33.0	18.0	15.0
Permanent job losers .....	1,357	100.0	32.4	32.8	34.7	18.5	16.2
Persons who completed temporary jobs .....	551	100.0	42.7	28.7	28.6	16.6	12.0
Job leavers .....	664	100.0	53.7	27.6	18.7	9.1	9.6
Reentrants .....	2,098	100.0	47.2	24.7	28.1	11.5	16.6
New entrants .....	486	100.0	48.7	28.9	22.4	6.9	15.5
Men, 20 years and over .....	2,339	100.0	40.8	26.8	32.4	14.9	17.5
Job losers and persons who completed temporary jobs .....	1,382	100.0	38.9	29.7	31.4	16.9	14.5
On temporary layoff .....	340	100.0	55.7	29.8	14.5	6.2	8.3
Not on temporary layoff .....	1,042	100.0	33.4	29.6	37.0	20.4	16.6
Permanent job losers .....	738	100.0	30.5	30.9	38.5	20.5	18.0
Persons who completed temporary jobs .....	304	100.0	40.5	26.4	33.1	20.2	12.9
Job leavers .....	358	100.0	49.8	25.8	24.4	10.8	13.6
Reentrants .....	550	100.0	41.1	21.0	37.8	13.5	24.4
New entrants .....	49	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 20 years and over .....	2,218	100.0	42.9	29.8	27.3	13.6	13.7
Job losers and persons who completed temporary jobs .....	985	100.0	42.5	30.9	26.7	15.1	11.6
On temporary layoff .....	217	100.0	64.4	20.8	14.8	11.7	3.1
Not on temporary layoff .....	769	100.0	36.3	33.7	30.0	16.1	13.9
Permanent job losers .....	553	100.0	32.4	34.5	33.1	18.0	15.1
Persons who completed temporary jobs .....	215	100.0	46.2	31.7	22.1	11.2	10.9
Job leavers .....	234	100.0	53.4	32.4	14.2	9.2	5.0
Reentrants .....	925	100.0	40.4	27.8	31.8	14.0	17.8
New entrants .....	74	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Both sexes, 16 to 19 years .....	1,207	100.0	60.3	25.6	14.1	6.1	7.9
Job losers and persons who completed temporary jobs .....	149	100.0	64.1	26.7	9.1	4.9	4.3
On temporary layoff .....	51	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Not on temporary layoff .....	98	100.0	49.1	37.0	13.9	7.4	6.5
Permanent job losers .....	66	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Persons who completed temporary jobs .....	32	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Job leavers .....	72	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Reentrants .....	623	100.0	62.5	23.4	14.1	6.1	8.0
New entrants .....	364	100.0	52.4	29.7	17.9	8.0	9.9

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

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

procedures and revised population controls used in the household survey.

**A-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 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
Total, 16 years and over .....	6,398	5,764	100.0	100.0	5,213	4,715	100.0	100.0
Less than 5 weeks .....	2,535	2,634	39.6	45.7	1,985	2,042	38.1	43.3
5 to 14 weeks .....	1,691	1,597	26.4	27.7	1,319	1,297	25.3	27.5
5 to 10 weeks .....	1,236	1,122	19.3	19.5	927	905	17.8	19.2
11 to 14 weeks .....	455	475	7.1	8.2	392	392	7.5	8.3
15 weeks and over .....	2,172	1,534	33.9	26.6	1,909	1,376	36.6	29.2
15 to 26 weeks .....	1,144	724	17.9	12.6	992	657	19.0	13.9
27 weeks and over .....	1,028	809	16.1	14.0	917	719	17.6	15.3
27 to 51 weeks .....	466	286	7.3	5.0	407	250	7.8	5.3
52 weeks and over .....	562	523	8.8	9.1	511	469	9.8	9.9
Average (mean) duration, in weeks .....	15.7	15.0	-	-	16.7	15.9	-	-
Median duration, in weeks .....	7.8	5.9	-	-	8.7	6.6	-	-

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Sex, age, race, and marital status	May 1998							Average (mean) duration	Median duration
	Thousands of persons								
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
<b>TOTAL</b>									
Total, 16 years and over .....	5,764	2,634	1,597	1,534	724	809	15.0	5.9	
16 to 19 years .....	1,207	729	309	170	74	96	9.3	3.6	
20 to 24 years .....	1,047	553	298	195	101	94	11.9	4.2	
25 to 34 years .....	1,287	569	369	350	187	162	13.8	7.1	
35 to 44 years .....	1,170	453	344	373	179	194	16.6	7.8	
45 to 54 years .....	651	194	178	279	125	155	23.3	10.4	
55 to 64 years .....	295	86	78	131	51	79	26.5	11.0	
65 years and over .....	108	50	21	36	7	29	22.4	6.0	
<b>Men, 16 years and over .....</b>	<b>2,997</b>	<b>1,340</b>	<b>816</b>	<b>841</b>	<b>382</b>	<b>460</b>	<b>15.7</b>	<b>6.3</b>	
16 to 19 years .....	658	386	188	84	34	50	8.7	3.8	
20 to 24 years .....	584	296	165	123	58	66	14.2	4.4	
25 to 34 years .....	586	270	144	172	88	83	14.2	6.9	
35 to 44 years .....	559	215	163	181	76	104	18.3	8.0	
45 to 54 years .....	387	102	92	193	94	99	24.0	14.4	
55 to 64 years .....	164	49	47	68	30	38	22.8	10.7	
65 years and over .....	59	23	16	21	3	18	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Women, 16 years and over .....</b>	<b>2,767</b>	<b>1,294</b>	<b>781</b>	<b>692</b>	<b>343</b>	<b>349</b>	<b>14.2</b>	<b>5.4</b>	
16 to 19 years .....	550	343	121	86	41	45	10.0	3.2	
20 to 24 years .....	463	257	133	72	44	28	9.1	3.9	
25 to 34 years .....	701	298	224	178	99	79	13.5	7.2	
35 to 44 years .....	611	238	181	192	103	90	15.1	7.7	
45 to 54 years .....	264	92	86	86	31	56	22.4	8.3	
55 to 64 years .....	131	38	31	62	21	41	31.1	12.1	
65 years and over .....	48	27	6	15	4	11	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Race</b>									
White, 16 years and over .....	4,134	2,082	1,074	977	482	495	13.1	4.5	
Men .....	2,248	1,093	566	589	265	324	14.2	4.9	
Women .....	1,886	990	508	388	217	171	11.8	4.3	
Black, 16 years and over .....	1,373	457	445	471	212	259	19.8	9.2	
Men .....	590	197	202	191	100	91	18.9	9.0	
Women .....	783	260	243	280	112	168	20.5	9.4	
<b>Marital status</b>									
<b>Men, 16 years and over:</b>									
Married, spouse present .....	946	333	282	331	141	190	20.0	8.9	
Widowed, divorced, or separated .....	404	165	85	155	65	90	20.1	7.7	
Single (never married) .....	1,647	842	448	356	176	180	12.1	4.4	
<b>Women, 16 years and over:</b>									
Married, spouse present .....	835	384	238	213	114	99	14.3	5.6	
Widowed, divorced, or separated .....	546	206	178	163	72	90	18.2	8.0	
Single (never married) .....	1,386	705	365	316	156	160	12.6	4.4	

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

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

procedures and revised population controls used in the household survey.



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

Occupation and industry	May 1998							
	Thousands of persons						Weeks	
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over			Average (mean) duration	Median duration
				Total	15 to 26 weeks	27 weeks and over		
<b>OCCUPATION</b>								
Managerial and professional specialty .....	622	293	123	206	97	108	17.1	5.8
Technical, sales, and administrative support .....	1,566	733	439	394	191	203	14.2	5.4
Service occupations .....	1,082	474	339	269	124	145	14.6	6.0
Precision production, craft, and repair .....	615	292	155	168	90	78	14.4	5.6
Operators, fabricators, and laborers .....	1,170	494	349	327	156	172	15.4	7.1
Farming, forestry, and fishing .....	190	101	43	47	28	19	12.3	4.1
<b>INDUSTRY<sup>1</sup></b>								
Agriculture .....	120	56	34	30	22	8	10.9	5.8
Construction .....	524	235	128	161	79	82	16.0	6.1
Manufacturing .....	756	281	250	225	99	126	15.5	8.1
Durable goods .....	371	127	130	114	51	64	16.9	8.6
Nondurable goods .....	385	154	120	111	49	62	14.1	7.6
Transportation and public utilities .....	692	102	69	68	26	42	17.1	6.2
Wholesale and retail trade .....	4,174	632	421	329	166	163	13.3	5.6
Finance, insurance, and real estate .....	522	69	50	54	23	30	17.4	8.0
Services .....	3,371	892	449	442	227	215	14.4	4.5
Public administration .....	261	30	11	45	11	34	28.2	15.8
No previous work experience .....	486	237	140	109	34	75	15.8	4.8

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

procedures and revised population controls used in the household survey.

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

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

(In thousands)

Category	Total		Age						Sex			
	May 1997	May 1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
	Total not in the labor force .....	66,870	67,659	11,289	11,522	18,900	18,913	36,682	37,223	24,368	24,738	42,502
Do not want a job now <sup>1</sup> .....	60,969	62,346	8,513	8,974	16,559	16,819	35,897	36,553	21,880	22,501	39,089	39,845
Want a job <sup>1</sup> .....	5,901	5,313	2,775	2,548	2,340	2,095	785	671	2,488	2,237	3,412	3,076
Did not search for work in previous year .....	3,384	3,080	1,526	1,365	1,249	1,232	610	482	1,403	1,241	1,981	1,839
Searched for work in previous year <sup>2</sup> .....	2,516	2,234	1,249	1,183	1,092	863	175	189	1,085	997	1,431	1,237
Not available to work now .....	1,085	1,021	742	699	307	290	36	31	446	427	639	593
Available to work now .....	1,431	1,213	507	483	785	572	139	157	639	570	792	644
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	338	268	104	88	194	129	39	50	198	161	140	106
Reasons other than discouragement .....	1,093	946	403	395	591	443	100	108	441	408	652	537
Family responsibilities .....	140	166	18	58	117	99	5	9	19	24	121	141
In school or training .....	280	234	225	201	55	29	-	-	125	129	155	105
Ill health or disability .....	94	111	10	19	75	70	8	22	47	55	47	56
Other <sup>4</sup> .....	579	435	149	117	344	244	86	74	249	200	330	235

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

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

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

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

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Characteristic	Both sexes				Men				Women			
	Number		Rate <sup>1</sup>		Number		Rate <sup>1</sup>		Number		Rate <sup>1</sup>	
	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998	May 1997	May 1998
<b>AGE</b>												
Total, 16 years and over <sup>2</sup> .....	8,197	8,126	6.3	6.2	4,398	4,438	6.3	6.3	3,800	3,688	6.4	6.1
16 to 19 years .....	311	317	4.8	4.6	137	137	4.0	4.0	174	181	5.6	5.3
20 years and over .....	7,887	7,809	6.4	6.3	4,261	4,302	6.4	6.4	3,626	3,507	6.4	6.1
20 to 24 years .....	890	799	7.2	6.4	475	390	7.1	5.9	414	409	7.2	6.9
25 years and over .....	6,997	7,009	6.3	6.3	3,786	3,911	6.3	6.4	3,211	3,098	6.3	6.0
25 to 54 years .....	6,213	6,229	6.6	6.5	3,338	3,460	6.6	6.7	2,875	2,770	6.6	6.3
55 years and over .....	784	780	4.9	4.7	447	452	4.9	4.9	336	328	4.8	4.5
55 to 64 years .....	653	660	5.3	5.1	354	379	5.2	5.3	299	281	5.4	4.9
65 years and over .....	131	119	3.4	3.1	94	72	4.1	3.3	37	47	2.3	3.0
<b>RACE AND HISPANIC ORIGIN</b>												
White .....	7,139	7,019	6.5	6.3	3,841	3,853	6.4	6.3	3,298	3,166	6.6	6.3
Black .....	789	792	5.7	5.5	411	436	6.3	6.4	378	356	5.2	4.7
Hispanic origin .....	518	596	4.1	4.4	300	357	3.9	4.4	218	239	4.4	4.5
<b>MARITAL STATUS</b>												
Married, spouse present .....	4,498	4,649	6.0	6.2	2,694	2,885	6.3	6.8	1,804	1,765	5.5	5.4
Widowed, divorced, or separated .....	1,438	1,412	6.9	6.7	524	528	6.1	5.8	914	885	7.6	7.3
Single (never married) .....	2,262	2,064	6.7	5.9	1,179	1,026	6.3	5.3	1,082	1,038	7.2	6.6
<b>FULL- OR PART-TIME STATUS</b>												
Primary job full time, secondary job part time .....	4,594	4,660	-	-	2,773	2,811	-	-	1,820	1,849	-	-
Primary and secondary jobs both part time .....	1,713	1,571	-	-	546	496	-	-	1,167	1,075	-	-
Primary and secondary jobs both full time .....	262	265	-	-	190	206	-	-	73	59	-	-
Hours vary on primary or secondary job .....	1,608	1,606	-	-	875	912	-	-	733	694	-	-

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

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

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

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

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	May 1997	May 1998	Total		Employed		Unemployed			
			May 1997	May 1998	May 1997	May 1998	Number		Percent of labor force	
							May 1997	May 1998	May 1997	May 1998
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,803	7,812	6,688	6,571	6,472	6,391	215	180	3.2	2.7
40 to 54 years .....	6,336	6,002	5,731	5,365	5,547	5,211	184	154	3.2	2.9
40 to 44 years .....	1,059	788	930	713	902	670	28	42	3.1	5.9
45 to 49 years .....	2,751	2,292	2,513	2,051	2,442	2,016	71	35	2.8	1.7
50 to 54 years .....	2,526	2,922	2,288	2,602	2,204	2,525	84	77	3.7	3.0
55 years and over .....	1,467	1,810	957	1,206	925	1,180	32	26	3.3	2.1
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	19,340	20,299	17,516	18,379	17,006	17,900	510	480	2.9	2.6
40 to 44 years .....	8,903	9,208	8,202	8,488	7,952	8,274	251	214	3.1	2.5
45 to 49 years .....	6,118	6,721	5,564	6,115	5,405	5,950	159	166	2.9	2.7
50 to 54 years .....	4,320	4,370	3,750	3,776	3,649	3,676	101	100	2.7	2.7

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

used in the household survey. Population and labor force levels for nonveterans from August 1995 to February 1998 are slightly overstated because they incorporate incorrect weighting procedures. Corrections will be made as soon as the necessary microdata files become available.



**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private <sup>1</sup>			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
<b>Annual averages</b>									
1964 .....	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965 .....	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966 .....	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967 .....	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968 .....	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969 .....	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970 .....	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971 .....	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972 .....	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973 .....	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974 .....	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975 .....	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976 .....	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977 .....	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978 .....	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979 .....	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980 .....	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981 .....	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982 .....	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983 .....	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984 .....	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985 .....	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986 .....	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987 .....	34.8	8.98	312.50	42.4	12.54	531.70	37.8	12.71	480.44
1988 .....	34.7	9.28	322.02	42.3	12.80	541.44	37.9	13.08	495.73
1989 .....	34.6	9.66	334.24	43.0	13.26	570.18	37.9	13.54	513.17
1990 .....	34.5	10.01	345.35	44.1	13.68	603.29	38.2	13.77	526.01
1991 .....	34.3	10.32	353.98	44.4	14.19	630.04	38.1	14.00	533.40
1992 .....	34.4	10.57	363.61	43.9	14.54	638.31	38.0	14.15	537.70
1993 .....	34.5	10.83	373.64	44.3	14.60	646.78	38.5	14.38	553.63
1994 .....	34.7	11.12	385.86	44.8	14.88	666.62	38.9	14.73	573.00
1995 .....	34.5	11.43	394.34	44.7	15.30	683.91	38.9	15.09	587.00
1996 .....	34.4	11.82	406.61	45.3	15.62	707.59	39.0	15.47	603.33
1997 .....	34.6	12.28	424.89	45.4	16.17	734.12	38.9	16.03	623.57
<b>Monthly data, not seasonally adjusted</b>									
<b>1997:</b>									
May .....	34.5	\$12.18	\$420.21	45.8	\$16.01	\$733.26	39.7	\$15.86	\$629.64
June .....	34.9	12.18	425.08	45.8	16.14	739.21	39.6	15.91	630.04
July .....	34.8	12.17	423.52	45.1	16.07	724.76	40.1	16.03	642.80
August .....	35.0	12.22	427.70	45.6	15.98	728.69	39.7	16.12	639.96
September .....	34.8	12.40	431.52	45.5	16.26	739.83	40.1	16.30	653.63
October .....	34.7	12.45	432.02	45.3	16.23	735.22	39.8	16.33	649.93
November .....	34.8	12.53	436.04	45.6	16.41	748.30	37.8	16.28	615.38
December .....	34.8	12.53	436.04	45.2	16.52	746.70	38.5	16.37	630.25
<b>1998:</b>									
January .....	34.2	12.60	430.92	45.0	16.65	749.25	37.4	16.25	607.75
February .....	34.6	12.65	437.69	44.0	16.89	743.16	37.9	16.21	614.36
March .....	34.5	12.68	437.46	43.4	16.89	733.03	37.9	16.29	617.39
April .....	34.2	12.69	434.00	43.5	16.82	731.67	38.0	16.35	621.30
May .....	34.5	12.70	438.15	44.4	16.76	744.14	39.3	16.45	646.49

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Manufacturing				Transportation and public utilities			Wholesale trade		
	Weekly hours	Hourly earnings	Hourly earnings, excluding overtime	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages										
1964 .....	40.7	\$2.53	\$2.43	\$102.97	41.1	\$2.89	\$118.78	40.7	\$2.52	\$102.56
1965 .....	41.2	2.61	2.50	107.53	41.3	3.03	125.14	40.8	2.60	106.08
1966 .....	41.4	2.71	2.59	112.19	41.2	3.11	128.13	40.7	2.73	111.11
1967 .....	40.6	2.82	2.71	114.49	40.5	3.23	130.82	40.3	2.87	115.66
1968 .....	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.04	121.90
1969 .....	40.6	3.19	3.05	129.51	40.7	3.63	147.74	40.2	3.23	129.85
1970 .....	39.8	3.35	3.23	133.33	40.5	3.85	155.93	39.9	3.43	136.86
1971 .....	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.4	3.64	143.42
1972 .....	40.5	3.82	3.66	154.71	40.4	4.65	187.86	39.4	3.85	151.69
1973 .....	40.7	4.09	3.91	166.46	40.5	5.02	203.31	39.2	4.07	159.54
1974 .....	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.38	169.94
1975 .....	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.6	4.72	182.19
1976 .....	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.02	194.27
1977 .....	40.3	5.68	5.44	228.90	39.9	6.99	278.90	38.8	5.39	209.13
1978 .....	40.4	6.17	5.91	249.27	40.0	7.57	302.80	38.8	5.88	228.14
1979 .....	40.2	6.70	6.43	269.34	39.9	8.16	325.58	38.8	6.39	247.93
1980 .....	39.7	7.27	7.02	288.62	39.6	8.87	351.25	38.4	6.95	266.88
1981 .....	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.55	290.68
1982 .....	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.08	309.46
1983 .....	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.54	328.79
1984 .....	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.88	341.88
1985 .....	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.15	351.36
1986 .....	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.34	357.72
1987 .....	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
1988 .....	41.1	10.19	9.73	418.81	38.2	12.24	467.57	38.1	9.98	380.24
1989 .....	41.0	10.48	10.02	429.68	38.3	12.57	481.43	38.0	10.39	394.82
1990 .....	40.8	10.83	10.37	441.86	38.4	12.92	496.13	38.1	10.79	411.10
1991 .....	40.7	11.18	10.71	455.03	38.1	13.20	502.92	38.1	11.15	424.82
1992 .....	41.0	11.46	10.95	469.86	38.3	13.43	514.37	38.2	11.39	435.10
1993 .....	41.4	11.74	11.18	486.04	39.3	13.55	532.52	38.2	11.74	448.47
1994 .....	42.0	12.07	11.43	506.94	39.7	13.78	547.07	38.4	12.06	463.10
1995 .....	41.6	12.37	11.74	514.59	39.4	14.13	556.72	38.3	12.43	476.07
1996 .....	41.6	12.77	12.12	531.23	39.6	14.45	572.22	38.3	12.87	492.92
1997 .....	42.0	13.17	12.45	553.14	39.7	14.93	592.72	38.4	13.44	516.10
Monthly data, not seasonally adjusted										
<b>1997:</b>										
May .....	41.9	\$13.08	\$12.39	\$548.05	39.3	\$14.76	\$580.07	38.5	\$13.33	\$513.21
June .....	42.0	13.09	12.40	549.78	39.9	14.82	591.32	38.7	13.37	517.42
July .....	41.2	13.10	12.42	539.72	39.5	14.99	592.11	38.3	13.38	512.45
August .....	42.0	13.14	12.41	551.88	40.5	15.04	609.12	38.5	13.48	518.98
September .....	42.4	13.23	12.46	560.95	40.3	15.06	606.92	38.4	13.53	519.55
October .....	42.2	13.28	12.53	560.42	39.8	15.09	600.58	38.4	13.57	521.09
November .....	42.6	13.36	12.60	569.14	40.4	15.19	613.68	38.7	13.76	532.51
December .....	43.0	13.47	12.68	579.21	39.8	15.17	603.77	38.4	13.72	526.85
<b>1998:</b>										
January .....	41.9	13.40	12.70	561.46	39.3	15.27	600.11	38.1	13.77	524.64
February .....	41.7	13.41	12.72	559.20	39.9	15.29	610.07	38.5	13.85	533.23
March .....	41.7	13.47	12.76	561.70	39.4	15.24	600.46	38.4	13.86	532.22
April <sup>P</sup> .....	40.7	13.46	12.83	547.82	39.1	15.26	596.67	38.1	13.92	530.35
May <sup>P</sup> .....	41.6	13.47	12.77	560.35	39.7	15.20	603.44	38.4	13.97	536.45

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
<b>Annual averages</b>									
1964 .....	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965 .....	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966 .....	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967 .....	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968 .....	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969 .....	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970 .....	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971 .....	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972 .....	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973 .....	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974 .....	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975 .....	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976 .....	32.1	3.57	114.60	36.4	4.27	155.43	33.3	4.31	143.52
1977 .....	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978 .....	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979 .....	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980 .....	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981 .....	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982 .....	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983 .....	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984 .....	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985 .....	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986 .....	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987 .....	29.2	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988 .....	29.1	6.31	183.62	35.9	9.06	325.25	32.6	8.88	289.49
1989 .....	28.9	6.53	188.72	35.8	9.53	341.17	32.6	9.38	305.79
1990 .....	28.8	6.75	194.40	35.8	9.97	356.93	32.5	9.83	319.48
1991 .....	28.6	6.94	198.48	35.7	10.39	370.92	32.4	10.23	331.45
1992 .....	28.8	7.12	205.06	35.8	10.82	387.36	32.5	10.54	342.55
1993 .....	28.8	7.29	209.95	35.8	11.35	406.33	32.5	10.78	350.35
1994 .....	28.9	7.49	216.46	35.8	11.83	423.51	32.5	11.04	358.80
1995 .....	28.8	7.69	221.47	35.9	12.32	442.29	32.4	11.39	369.04
1996 .....	28.8	7.99	230.11	35.9	12.80	459.52	32.4	11.79	382.00
1997 .....	28.9	8.34	241.03	36.1	13.33	481.21	32.6	12.28	400.33
<b>Monthly data, not seasonally adjusted</b>									
<b>1997:</b>									
May .....	28.8	\$8.27	\$238.18	35.9	\$13.21	\$474.24	32.4	\$12.16	\$393.98
June .....	29.4	8.27	243.14	36.7	13.26	486.64	32.8	12.14	398.19
July .....	29.6	8.27	244.79	35.9	13.21	474.24	32.8	12.06	395.57
August .....	29.7	8.30	246.51	36.1	13.38	483.02	32.9	12.12	398.75
September .....	29.0	8.45	245.05	35.8	13.48	482.58	32.5	12.36	401.70
October .....	28.8	8.47	243.94	35.9	13.56	486.80	32.6	12.41	404.57
November .....	28.8	8.51	245.09	36.7	13.72	503.52	32.8	12.57	412.30
December .....	29.2	8.51	248.49	35.9	13.64	489.68	32.6	12.61	411.09
<b>1998:</b>									
January .....	28.1	8.63	242.50	36.1	13.70	494.57	32.4	12.66	410.18
February .....	28.7	8.62	247.39	37.1	13.95	517.55	32.8	12.75	418.20
March .....	28.7	8.67	248.83	36.8	13.97	514.10	32.7	12.77	417.58
April <sup>p</sup> .....	28.7	8.71	249.98	36.1	13.98	504.68	32.4	12.75	413.10
May <sup>p</sup> .....	29.0	8.73	253.17	36.1	13.97	504.32	32.5	12.73	413.73

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

p = preliminary.  
NOTE: Data have been revised to reflect March 1997 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	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
<b>Total</b> .....	122,325	122,534	122,811	122,894	123,280	123,568	123,944	124,289	124,640	124,832	124,914	125,216	125,512
<b>Total private</b> .....	102,811	102,991	103,219	103,285	103,673	103,922	104,282	104,609	104,954	105,112	105,186	105,452	105,707
<b>Goods-producing</b> .....	24,883	24,903	24,923	24,972	24,993	25,032	25,099	25,193	25,297	25,314	25,276	25,334	25,298
<b>Mining</b> .....	593	593	593	592	594	592	591	592	592	590	587	582	581
Metal mining .....	54	54	54	54	53	53	53	52	52	52	51	51	51
Coal mining .....	97	96	95	95	95	95	94	94	94	93	93	92	92
Oil and gas extraction .....	334	335	336	336	338	337	337	338	338	338	336	332	331
Nonmetallic minerals, except fuels .....	108	108	108	107	108	107	107	108	108	107	107	107	107
<b>Construction</b> .....	5,670	5,668	5,682	5,699	5,713	5,722	5,750	5,810	5,881	5,902	5,860	5,926	5,917
General building contractors .....	1,310	1,312	1,316	1,318	1,320	1,326	1,335	1,351	1,365	1,371	1,373	1,384	1,382
Heavy construction, except building .....	797	791	789	791	792	789	788	805	817	813	805	818	816
Special trade contractors .....	3,563	3,565	3,577	3,590	3,601	3,607	3,627	3,654	3,699	3,718	3,682	3,724	3,719
<b>Manufacturing</b> .....	18,620	18,642	18,648	18,681	18,686	18,718	18,758	18,791	18,824	18,822	18,829	18,826	18,800
<b>Durable goods</b> .....	10,941	10,966	10,988	11,028	11,030	11,060	11,094	11,118	11,154	11,159	11,166	11,169	11,158
Lumber and wood products .....	794	793	793	794	794	794	795	798	800	800	801	801	802
Furniture and fixtures .....	509	509	510	509	510	511	513	515	517	519	520	524	527
Stone, clay, and glass products .....	551	550	553	552	553	554	554	555	562	561	558	561	559
Primary metal industries .....	708	708	708	712	714	714	715	716	719	718	719	717	716
Fabricated metal products .....	1,473	1,474	1,472	1,478	1,480	1,485	1,488	1,491	1,496	1,497	1,497	1,498	1,496
Industrial machinery and equipment .....	2,154	2,160	2,165	2,172	2,175	2,185	2,191	2,196	2,200	2,202	2,205	2,202	2,200
Computer and office equipment .....	374	375	377	379	379	380	379	381	381	381	381	378	375
Electronic and other electrical equipment .....	1,676	1,684	1,690	1,694	1,698	1,702	1,707	1,712	1,719	1,720	1,722	1,720	1,716
Electronic components and accessories .....	646	651	655	660	664	669	672	676	680	680	681	678	675
Transportation equipment .....	1,824	1,835	1,840	1,862	1,852	1,861	1,878	1,878	1,882	1,886	1,887	1,889	1,887
Motor vehicles and equipment .....	973	979	980	998	986	990	1,005	1,001	1,002	1,004	1,002	1,004	1,000
Aircraft and parts .....	495	500	504	508	510	513	516	519	521	523	525	525	524
Instruments and related products .....	861	863	865	865	865	866	867	869	870	866	868	868	867
Miscellaneous manufacturing .....	391	390	392	390	389	388	386	388	389	390	389	389	388
<b>Nondurable goods</b> .....	7,679	7,676	7,660	7,653	7,656	7,658	7,664	7,673	7,670	7,663	7,663	7,657	7,642
Food and kindred products .....	1,690	1,690	1,687	1,682	1,688	1,689	1,696	1,702	1,702	1,703	1,704	1,707	1,706
Tobacco products .....	41	41	42	41	40	41	42	41	40	41	41	42	41
Textile mill products .....	617	616	616	613	613	612	611	611	608	606	604	605	604
Apparel and other textile products .....	831	829	824	822	817	814	810	808	805	796	796	787	778
Paper and allied products .....	685	684	684	684	685	685	686	686	688	688	688	686	684
Printing and publishing .....	1,553	1,557	1,556	1,556	1,556	1,558	1,560	1,561	1,564	1,564	1,564	1,566	1,566
Chemicals and allied products .....	1,036	1,034	1,031	1,032	1,033	1,034	1,035	1,036	1,035	1,036	1,036	1,035	1,038
Petroleum and coal products .....	141	140	139	139	139	139	138	139	136	136	136	137	136
Rubber and misc. plastics products .....	993	994	991	995	997	998	999	1,002	1,006	1,007	1,009	1,008	1,005
Leather and leather products .....	92	91	90	89	88	88	87	87	86	86	85	84	84
<b>Service-producing</b> .....	97,442	97,631	97,888	97,922	98,287	98,536	98,845	99,096	99,343	99,518	99,638	99,882	100,214
<b>Transportation and public utilities</b> .....	6,399	6,405	6,411	6,264	6,435	6,453	6,456	6,451	6,473	6,494	6,504	6,512	6,534
Transportation .....	4,112	4,118	4,120	3,973	4,141	4,149	4,147	4,135	4,148	4,164	4,170	4,173	4,190
Railroad transportation .....	226	229	228	225	227	227	228	230	231	231	231	230	230
Local and interurban passenger transit .....	450	450	451	455	451	452	453	455	456	459	460	454	461
Trucking and warehousing .....	1,666	1,666	1,670	1,675	1,680	1,680	1,678	1,676	1,684	1,688	1,690	1,702	1,703
Water transportation .....	179	181	180	181	180	180	180	179	177	181	183	182	185
Transportation by air .....	1,139	1,139	1,137	981	1,147	1,154	1,151	1,138	1,142	1,145	1,146	1,146	1,149
Pipelines, except natural gas .....	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services .....	438	439	440	442	442	442	443	443	444	446	446	445	448
Communications and public utilities .....	2,287	2,287	2,291	2,291	2,294	2,304	2,309	2,316	2,325	2,330	2,334	2,339	2,344
Communications .....	1,419	1,421	1,425	1,430	1,432	1,443	1,449	1,457	1,466	1,471	1,475	1,484	1,490
Electric, gas, and sanitary services .....	868	866	866	861	862	861	860	859	859	859	859	855	854
<b>Wholesale trade</b> .....	6,626	6,632	6,655	6,671	6,679	6,697	6,711	6,731	6,759	6,769	6,783	6,797	6,806
Durable goods .....	3,916	3,923	3,942	3,959	3,964	3,977	3,989	4,002	4,017	4,030	4,039	4,050	4,053
Nondurable goods .....	2,710	2,709	2,713	2,712	2,715	2,720	2,722	2,729	2,742	2,739	2,744	2,747	2,753

See footnotes at end of table.



**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
<b>Retail trade</b> .....	21,952	21,987	21,987	22,043	22,078	22,105	22,206	22,245	22,280	22,283	22,259	22,328	22,417
Building materials and garden supplies	941	938	940	940	939	938	944	946	954	959	966	967	966
General merchandise stores	2,702	2,709	2,713	2,723	2,726	2,738	2,761	2,771	2,771	2,756	2,759	2,784	2,801
Department stores	2,376	2,379	2,385	2,393	2,397	2,409	2,433	2,434	2,439	2,427	2,428	2,448	2,476
Food stores	3,486	3,490	3,500	3,503	3,506	3,512	3,516	3,517	3,528	3,533	3,536	3,533	3,539
Automotive dealers and service stations	2,309	2,309	2,311	2,317	2,321	2,325	2,328	2,329	2,331	2,331	2,333	2,337	2,345
New and used car dealers	1,049	1,052	1,051	1,052	1,053	1,055	1,056	1,056	1,056	1,056	1,056	1,058	1,062
Apparel and accessory stores	1,095	1,095	1,093	1,098	1,100	1,103	1,105	1,103	1,108	1,100	1,098	1,104	1,105
Furniture and home furnishings stores	1,000	1,003	1,010	1,013	1,019	1,023	1,029	1,035	1,039	1,043	1,048	1,045	1,052
Eating and drinking places	7,637	7,646	7,616	7,633	7,641	7,630	7,666	7,682	7,685	7,694	7,645	7,680	7,713
Miscellaneous retail establishments	2,782	2,797	2,804	2,816	2,826	2,836	2,857	2,862	2,864	2,867	2,874	2,878	2,896
<b>Finance, insurance, and real estate</b> .....	7,064	7,072	7,095	7,110	7,125	7,151	7,172	7,194	7,213	7,232	7,258	7,286	7,306
Finance	3,397	3,402	3,413	3,423	3,434	3,451	3,463	3,478	3,485	3,496	3,512	3,519	3,535
Depository institutions	2,024	2,025	2,027	2,028	2,027	2,032	2,035	2,040	2,037	2,039	2,041	2,040	2,044
Commercial banks	1,459	1,458	1,459	1,460	1,459	1,462	1,464	1,466	1,463	1,464	1,465	1,461	1,463
Savings institutions	262	262	262	261	261	261	261	263	262	262	262	262	264
Nondepository institutions	563	565	567	571	576	581	582	586	589	593	602	605	612
Mortgage bankers and brokers	250	250	251	253	256	260	261	262	264	270	276	278	283
Security and commodity brokers	591	592	598	602	606	611	616	620	625	629	633	636	639
Holding and other investment offices	219	220	221	222	225	227	230	232	234	235	236	238	240
Insurance	2,249	2,255	2,259	2,265	2,267	2,275	2,281	2,291	2,293	2,297	2,302	2,311	2,317
Insurance carriers	1,527	1,531	1,534	1,538	1,540	1,546	1,550	1,558	1,558	1,560	1,566	1,574	1,579
Insurance agents, brokers, and service	722	724	725	727	727	729	731	733	735	737	736	737	738
Real estate	1,418	1,415	1,423	1,422	1,424	1,425	1,428	1,425	1,435	1,439	1,444	1,456	1,454
<b>Services</b> <sup>1</sup>	35,887	35,992	36,148	36,225	36,363	36,484	36,638	36,795	36,932	37,020	37,106	37,195	37,346
Agricultural services	677	678	682	685	690	692	694	694	696	696	695	708	700
Hotels and other lodging places	1,741	1,738	1,738	1,740	1,745	1,754	1,754	1,754	1,762	1,756	1,755	1,768	1,768
Personal services	1,184	1,180	1,179	1,180	1,180	1,181	1,185	1,178	1,176	1,177	1,178	1,182	1,190
Business services	7,931	7,987	8,035	8,055	8,112	8,147	8,226	8,294	8,351	8,384	8,412	8,417	8,491
Services to buildings	936	938	940	937	947	948	947	955	960	961	966	963	972
Personnel supply services	2,951	2,975	3,004	2,991	3,013	3,030	3,074	3,111	3,139	3,152	3,149	3,138	3,165
Help supply services	2,631	2,652	2,673	2,657	2,686	2,694	2,741	2,783	2,804	2,820	2,819	2,802	2,828
Computer and data processing services	1,391	1,409	1,420	1,433	1,448	1,462	1,475	1,493	1,507	1,522	1,538	1,560	1,577
Auto repair, services, and parking	1,123	1,120	1,125	1,127	1,131	1,134	1,138	1,143	1,147	1,144	1,145	1,148	1,152
Miscellaneous repair services	375	376	377	378	378	378	379	380	381	382	382	383	384
Motion pictures	541	546	548	554	556	556	557	564	563	569	565	563	559
Amusement and recreation services	1,564	1,571	1,582	1,580	1,593	1,597	1,610	1,625	1,633	1,641	1,647	1,658	1,665
Health services	9,701	9,707	9,731	9,749	9,766	9,789	9,807	9,827	9,837	9,852	9,867	9,872	9,889
Offices and clinics of medical doctors	1,738	1,739	1,745	1,747	1,754	1,764	1,772	1,779	1,784	1,788	1,796	1,802	1,809
Nursing and personal care facilities	1,757	1,755	1,756	1,757	1,757	1,759	1,760	1,761	1,759	1,761	1,761	1,760	1,760
Hospitals	3,857	3,863	3,871	3,878	3,885	3,894	3,901	3,908	3,916	3,920	3,925	3,938	3,946
Home health care services	713	714	716	716	716	715	714	713	706	702	698	686	683
Legal services	944	945	948	949	953	956	959	963	964	967	970	972	975
Educational services	2,097	2,108	2,122	2,128	2,136	2,146	2,155	2,160	2,169	2,179	2,189	2,196	2,212
Social services	2,501	2,510	2,531	2,532	2,541	2,546	2,552	2,561	2,570	2,577	2,587	2,595	2,606
Child day care services	569	570	572	578	572	572	571	572	575	574	575	576	574
Residential care	712	716	719	720	726	728	730	736	736	741	744	746	748
Museums and botanical and zoological gardens	90	90	90	90	90	91	91	91	91	92	92	92	91
Membership organizations	2,250	2,250	2,253	2,252	2,250	2,252	2,247	2,255	2,260	2,261	2,263	2,266	2,265
Engineering and management services	2,974	2,993	3,013	3,032	3,048	3,070	3,089	3,111	3,137	3,148	3,164	3,179	3,204
Engineering and architectural services	862	866	870	873	876	881	885	892	897	899	904	911	915
Management and public relations	931	940	949	959	962	970	975	988	1,004	1,007	1,012	1,012	1,028
<b>Government</b> .....	19,514	19,543	19,592	19,609	19,607	19,646	19,662	19,680	19,686	19,720	19,728	19,764	19,805
Federal	2,704	2,697	2,691	2,691	2,684	2,690	2,689	2,688	2,670	2,676	2,671	2,675	2,672
Federal, except Postal Service	1,850	1,843	1,839	1,833	1,827	1,829	1,826	1,819	1,822	1,819	1,815	1,815	1,811
State	4,583	4,586	4,617	4,602	4,604	4,609	4,613	4,611	4,613	4,613	4,619	4,620	4,632
Education	1,904	1,910	1,933	1,917	1,921	1,922	1,923	1,924	1,924	1,924	1,928	1,926	1,931
Other State government	2,679	2,676	2,684	2,685	2,683	2,687	2,690	2,687	2,689	2,689	2,691	2,694	2,701
Local	12,227	12,260	12,284	12,316	12,319	12,347	12,360	12,381	12,403	12,431	12,438	12,469	12,501
Education	6,874	6,894	6,913	6,933	6,941	6,947	6,959	6,965	6,980	6,999	7,003	7,023	7,051
Other local government	5,353	5,366	5,371	5,383	5,378	5,400	5,401	5,416	5,423	5,432	5,435	5,446	5,450

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

P = preliminary.

NOTE: Data have been revised to reflect March 1997 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	1997										1998		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total</b> .....	58,939	59,083	59,228	59,335	59,506	59,564	59,663	59,810	59,974	60,114	60,220	60,308	60,380
<b>Total private</b> .....	48,153	48,285	48,398	48,485	48,621	48,614	48,763	48,884	49,026	49,142	49,239	49,306	49,369
<b>Goods-producing</b> .....	6,680	6,688	6,694	6,703	6,705	6,711	6,717	6,732	6,741	6,759	6,766	6,767	6,770
<b>Mining</b> .....	81	81	82	82	82	83	82	82	82	83	83	83	83
<b>Construction</b> .....	624	627	630	632	634	636	639	643	645	648	650	654	655
<b>Manufacturing</b> .....	5,975	5,980	5,982	5,989	5,989	5,992	5,996	6,007	6,014	6,028	6,033	6,030	6,032
<b>Durable goods</b> .....	2,888	2,894	2,900	2,909	2,915	2,926	2,932	2,945	2,952	2,962	2,973	2,979	2,982
Lumber and wood products .....	137	137	138	137	138	138	138	138	139	139	140	141	141
Furniture and fixtures .....	160	160	160	160	160	160	160	160	161	162	163	164	165
Stone, clay, and glass products .....	104	104	104	104	104	105	105	105	106	105	107	107	107
Primary metal industries .....	102	102	102	103	103	103	103	103	104	104	104	104	104
Fabricated metal products .....	324	325	326	327	326	328	329	330	330	331	333	334	334
Industrial machinery and equipment .....	468	469	472	473	475	477	478	481	482	484	485	486	485
Electronic and other electrical equipment .....	691	692	692	695	697	698	702	706	708	712	714	716	716
Transportation equipment .....	380	382	383	387	387	393	394	397	399	401	400	401	402
Instruments and related products .....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing .....	172	172	172	172	173	172	171	171	169	170	171	171	171
<b>Nondurable goods</b> .....	3,087	3,086	3,082	3,080	3,074	3,066	3,064	3,062	3,062	3,066	3,060	3,051	3,050
Food and kindred products .....	557	557	556	557	555	554	554	555	557	558	559	559	559
Tobacco products .....	13	13	13	13	13	12	13	13	13	13	13	13	13
Textile mill products .....	289	288	287	287	288	284	285	284	283	283	281	280	278
Apparel and other textile products .....	623	620	615	612	609	608	602	598	594	594	589	582	583
Paper and allied products .....	166	166	167	166	166	166	167	167	168	168	168	168	168
Printing and publishing .....	696	699	701	703	704	703	703	704	705	705	706	705	706
Chemicals and allied products .....	330	330	330	330	329	329	330	330	330	331	330	331	330
Petroleum and coal products .....	25	25	25	25	25	24	24	24	24	25	24	24	24
Rubber and misc. plastics products .....	338	338	339	339	337	339	340	341	342	343	345	344	344
Leather and leather products .....	50	50	49	48	48	47	46	46	46	46	45	45	45
<b>Service-producing</b> .....	52,259	52,395	52,534	52,632	52,801	52,853	52,946	53,078	53,233	53,355	53,454	53,541	53,610
<b>Transportation and public utilities</b> .....	1,938	1,941	1,945	1,945	1,943	1,900	1,943	1,944	1,944	1,939	1,946	1,948	1,949
<b>Wholesale trade</b> .....	2,047	2,050	2,055	2,054	2,059	2,060	2,058	2,066	2,066	2,067	2,078	2,077	2,078
<b>Retail trade</b> .....	11,539	11,549	11,560	11,576	11,580	11,602	11,614	11,632	11,677	11,700	11,713	11,712	11,707
<b>Finance, insurance, and real estate</b> .....	4,430	4,441	4,450	4,459	4,469	4,478	4,486	4,498	4,511	4,526	4,539	4,546	4,563
<b>Services</b> .....	21,519	21,616	21,694	21,748	21,865	21,863	21,945	22,012	22,087	22,151	22,197	22,256	22,302
<b>Government</b> .....	10,786	10,798	10,830	10,850	10,885	10,950	10,900	10,926	10,948	10,972	10,981	11,002	11,011
Federal .....	1,149	1,147	1,146	1,145	1,143	1,143	1,135	1,142	1,144	1,154	1,141	1,140	1,137
State .....	2,323	2,327	2,335	2,339	2,357	2,354	2,351	2,360	2,365	2,363	2,365	2,367	2,371
Local .....	7,314	7,324	7,349	7,366	7,385	7,453	7,414	7,424	7,439	7,455	7,475	7,495	7,503

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

NOTE: Data have been revised to reflect March 1997 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 workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
<b>Total private</b> .....	84,312	84,455	84,670	84,567	84,966	85,176	85,441	85,705	85,947	86,073	86,113	86,255	86,503
<b>Goods-producing</b> .....	17,723	17,729	17,744	17,773	17,787	17,818	17,870	17,947	18,039	18,037	17,996	18,032	17,996
<b>Mining</b> .....	449	446	447	447	448	448	449	449	450	450	445	440	441
<b>Construction</b> .....	4,400	4,395	4,408	4,418	4,424	4,425	4,451	4,497	4,566	4,563	4,538	4,591	4,573
<b>Manufacturing</b> .....	12,874	12,888	12,889	12,908	12,915	12,945	12,970	13,001	13,023	13,024	13,013	13,001	12,982
<b>Durable goods</b> .....	7,504	7,524	7,536	7,573	7,573	7,598	7,621	7,644	7,669	7,676	7,669	7,664	7,648
Lumber and wood products .....	654	653	653	653	653	654	655	658	660	660	659	659	659
Furniture and fixtures .....	404	405	407	405	405	406	408	410	412	413	415	418	419
Stone, clay, and glass products .....	429	428	431	431	431	433	434	436	441	441	436	436	437
Primary metal industries .....	553	553	554	558	559	559	560	562	564	564	565	563	562
Fabricated metal products .....	1,109	1,111	1,110	1,116	1,117	1,120	1,122	1,125	1,130	1,132	1,131	1,132	1,128
Industrial machinery and equipment .....	1,355	1,361	1,362	1,369	1,370	1,379	1,382	1,386	1,389	1,391	1,391	1,389	1,388
Electronic and other electrical equipment .....	1,060	1,064	1,068	1,072	1,075	1,078	1,080	1,086	1,089	1,087	1,085	1,083	1,081
Transportation equipment .....	1,240	1,248	1,251	1,270	1,264	1,270	1,283	1,280	1,279	1,283	1,281	1,277	1,269
Motor vehicles and equipment .....	769	776	777	792	784	786	791	790	787	788	784	783	776
Instruments and related products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing .....	275	274	274	274	272	272	270	272	273	273	273	274	271
<b>Nondurable goods</b> .....	5,370	5,364	5,353	5,335	5,342	5,347	5,349	5,357	5,354	5,348	5,344	5,337	5,334
Food and kindred products .....	1,255	1,255	1,252	1,248	1,254	1,255	1,260	1,263	1,265	1,267	1,267	1,271	1,274
Tobacco products .....	32	32	32	30	31	32	33	32	32	32	32	33	32
Textile mill products .....	523	522	523	518	519	520	518	519	516	514	513	513	512
Apparel and other textile products .....	680	678	674	670	665	663	659	656	652	645	643	632	625
Paper and allied products .....	523	522	522	520	521	522	523	524	525	525	525	523	521
Printing and publishing .....	852	853	851	849	847	849	849	850	850	848	845	846	845
Chemicals and allied products .....	570	570	570	570	573	575	576	578	580	582	583	584	594
Petroleum and coal products .....	93	92	92	92	92	91	91	92	89	89	89	89	88
Rubber and misc. plastics products .....	771	771	769	771	773	773	774	777	780	781	783	783	781
Leather and leather products .....	71	69	68	67	67	67	66	66	65	65	64	63	62
<b>Service-producing</b> .....	66,589	66,726	66,926	66,794	67,179	67,358	67,571	67,758	67,908	68,036	68,117	68,223	68,507
<b>Transportation and public utilities</b> .....	5,379	5,380	5,378	5,199	5,373	5,375	5,370	5,367	5,374	5,372	5,375	5,375	5,406
<b>Wholesale trade</b> .....	5,342	5,344	5,361	5,369	5,371	5,382	5,392	5,407	5,426	5,431	5,436	5,446	5,448
<b>Retail trade</b> .....	19,332	19,356	19,359	19,398	19,422	19,463	19,539	19,570	19,585	19,605	19,582	19,587	19,693
<b>Finance, insurance, and real estate</b> .....	5,160	5,166	5,182	5,191	5,202	5,223	5,245	5,264	5,287	5,307	5,329	5,350	5,361
<b>Services</b> .....	31,376	31,480	31,646	31,637	31,811	31,915	32,025	32,150	32,236	32,321	32,395	32,465	32,599

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

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

cannot be separated with sufficient precision.

P = preliminary.

NOTE: Data have been revised to reflect March 1997 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 industries <sup>1</sup>												
Over 1-month span:												
1994 .....	59.3	60.5	67.0	64.5	58.6	63.3	63.8	61.7	61.5	60.4	64.0	61.7
1995 .....	62.5	60.0	54.9	55.6	47.8	55.6	54.8	59.0	58.0	55.8	54.5	58.8
1996 .....	50.8	64.6	59.6	56.6	62.8	61.0	57.3	61.5	56.0	62.5	62.2	60.7
1997 .....	58.0	61.4	59.8	63.6	60.1	54.6	61.1	59.1	60.0	64.3	62.4	64.9
1998 .....	63.8	58.7	59.6	P 56.3	P 54.5							
Over 3-month span:												
1994 .....	64.5	69.2	69.9	68.4	66.6	67.1	69.0	69.5	66.2	65.6	66.6	66.3
1995 .....	63.6	61.4	59.4	53.1	55.2	53.2	59.7	60.1	59.1	58.0	56.6	54.6
1996 .....	61.9	62.8	64.0	63.8	63.5	64.9	64.2	61.5	63.9	64.2	67.0	66.6
1997 .....	64.9	63.3	65.6	66.2	63.9	61.2	60.1	65.9	67.4	68.1	70.8	71.9
1998 .....	68.4	67.3	P 64.3	P 60.1								
Over 6-month span:												
1994 .....	70.9	69.9	69.7	71.2	70.2	69.8	69.8	70.2	68.7	67.4	66.7	65.4
1995 .....	66.4	60.1	59.1	57.3	59.0	60.1	57.6	60.4	59.7	59.3	61.1	63.2
1996 .....	62.8	65.4	64.7	65.7	66.2	65.0	66.4	66.0	66.2	67.6	66.9	66.3
1997 .....	67.6	67.0	65.3	64.9	65.6	67.3	68.0	67.3	70.6	72.3	73.3	72.6
1998 .....	P 72.2	P 69.5										
Over 12-month span:												
1994 .....	70.2	71.6	71.8	71.8	72.1	71.8	71.5	72.1	70.1	69.5	66.6	65.0
1995 .....	63.6	62.4	62.6	63.3	61.7	61.9	58.7	62.2	62.2	61.5	63.5	65.4
1996 .....	64.5	66.7	64.5	65.6	68.5	67.3	67.7	66.4	68.0	69.9	69.1	68.3
1997 .....	69.8	67.6	69.2	70.1	69.8	69.8	71.2	71.2	71.1	P 72.3	P 71.6	
1998 .....												
Manufacturing payrolls, 139 industries <sup>1</sup>												
Over 1-month span:												
1994 .....	56.8	56.5	60.1	59.0	53.6	58.3	59.0	55.8	53.6	56.5	58.3	56.8
1995 .....	54.7	54.3	46.4	53.2	42.4	44.2	46.4	49.6	48.6	52.2	45.3	48.2
1996 .....	42.8	54.7	48.2	42.1	55.4	50.7	47.1	55.4	47.8	52.9	54.3	55.4
1997 .....	49.3	54.3	50.0	56.8	51.4	52.2	50.4	48.9	56.5	57.2	56.1	60.8
1998 .....	55.8	51.8	52.5	P 47.8	P 43.5							
Over 3-month span:												
1994 .....	60.4	63.7	63.7	60.4	57.6	59.7	61.9	56.8	54.3	55.4	60.8	59.0
1995 .....	56.8	50.0	47.8	42.1	43.2	38.8	40.6	43.5	48.2	47.1	45.3	39.9
1996 .....	43.9	46.8	46.0	47.5	46.4	49.3	51.4	50.0	53.6	51.1	57.6	54.7
1997 .....	54.3	49.3	54.3	54.0	55.4	50.4	47.5	52.2	57.9	62.6	64.7	65.5
1998 .....	60.1	59.0	P 51.1	P 45.3								
Over 6-month span:												
1994 .....	60.4	62.9	61.2	62.6	59.4	57.2	57.6	58.6	58.6	54.7	57.2	55.0
1995 .....	55.4	46.4	42.8	40.3	41.4	42.4	41.0	41.0	43.9	43.2	43.2	45.3
1996 .....	42.1	45.3	46.4	47.1	48.2	48.6	51.1	50.4	52.9	52.9	53.2	52.2
1997 .....	54.3	54.3	51.4	52.9	51.4	55.0	56.8	57.6	60.4	64.4	67.6	65.8
1998 .....	P 62.2	P 55.8										
Over 12-month span:												
1994 .....	57.9	58.6	60.8	60.8	60.8	63.3	59.4	60.1	57.2	56.5	50.4	49.6
1995 .....	46.0	44.2	46.0	47.8	41.0	41.7	38.5	38.8	36.3	38.5	39.9	44.6
1996 .....	43.5	47.5	45.3	45.3	50.4	49.6	50.4	48.6	51.1	55.0	54.0	51.8
1997 .....	57.2	52.5	54.7	56.5	57.9	57.6	58.6	58.6	60.4	P 59.7	P 57.6	
1998 .....												

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

P = preliminary.

NOTE: Figures are the percent of industries with employment

increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Data have been revised to reflect March 1997 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	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	
	Total <sup>1</sup>													
Alabama	1,859.6	1,864.2	1,864.9	1,869.9	1,869.5	1,869.5	1,870.7	1,871.0	1,871.9	1,876.0	1,877.2	1,879.4	1,877.8	
Alaska	267.7	269.2	268.9	270.2	269.5	269.0	268.1	268.8	268.3	270.2	273.1	273.7	274.2	
Arizona	1,961.2	1,968.7	1,975.3	1,972.4	1,983.3	1,994.0	2,000.5	2,011.8	2,021.9	2,031.5	2,037.9	2,045.6	2,048.0	
Arkansas	1,100.4	1,101.6	1,100.3	1,103.4	1,106.8	1,106.1	1,107.2	1,110.6	1,111.6	1,110.5	1,113.1	1,118.9	1,123.5	
California	13,089.3	13,118.1	13,150.0	13,203.2	13,224.5	13,277.7	13,318.5	13,367.0	13,398.3	13,401.2	13,439.9	13,485.6	13,517.6	
Colorado	1,962.7	1,971.9	1,977.8	1,989.2	1,985.8	1,996.8	2,001.8	2,003.3	2,009.5	2,017.8	2,019.9	2,023.9	2,021.0	
Connecticut	1,608.8	1,609.3	1,611.1	1,611.9	1,616.1	1,621.7	1,627.2	1,634.6	1,642.6	1,639.6	1,641.2	1,639.6	1,642.2	
Delaware	384.8	385.1	386.2	388.1	390.1	391.4	392.5	393.6	395.5	394.6	396.6	398.0	398.2	
District of Columbia	615.9	613.0	612.9	619.1	614.7	614.8	612.9	610.8	610.4	613.1	609.4	619.9	609.9	
Florida	6,371.6	6,393.5	6,410.8	6,439.7	6,458.7	6,487.4	6,508.8	6,534.1	6,551.6	6,566.0	6,577.9	6,604.1	6,622.5	
Georgia	3,585.0	3,593.2	3,593.8	3,613.6	3,626.1	3,649.9	3,664.2	3,674.8	3,690.0	3,690.7	3,707.4	3,714.9	3,722.2	
Hawaii	531.5	531.2	531.6	531.3	533.0	534.6	533.4	532.8	530.5	528.6	528.4	529.0	528.2	
Idaho	506.2	508.2	508.8	512.6	511.5	510.2	512.9	513.5	514.0	515.1	516.1	516.7	516.2	
Illinois	5,743.2	5,762.1	5,759.6	5,784.6	5,783.4	5,795.4	5,816.0	5,823.5	5,833.8	5,837.8	5,833.2	5,834.5	5,849.3	
Indiana	2,857.1	2,859.1	2,857.9	2,861.8	2,862.4	2,866.2	2,868.9	2,873.9	2,884.0	2,874.6	2,878.8	2,880.0	2,890.2	
Iowa	1,396.6	1,404.9	1,406.5	1,407.8	1,404.7	1,406.4	1,419.1	1,416.9	1,419.2	1,423.0	1,426.1	1,429.2	1,435.4	
Kansas	1,259.0	1,266.1	1,268.4	1,270.8	1,274.3	1,275.6	1,281.9	1,282.8	1,287.4	1,291.5	1,294.4	1,294.4	1,298.0	
Kentucky	1,707.7	1,706.6	1,711.1	1,717.1	1,718.6	1,722.5	1,720.3	1,726.2	1,732.0	1,738.5	1,735.4	1,738.0	1,744.2	
Louisiana	1,840.2	1,841.6	1,843.1	1,854.0	1,855.1	1,858.5	1,863.9	1,867.7	1,869.8	1,870.5	1,875.8	1,879.5	1,878.4	
Maine	548.6	550.0	552.6	554.6	555.2	557.1	558.5	560.8	561.4	558.1	560.8	561.0	561.1	
Maryland	2,253.9	2,258.0	2,259.1	2,258.9	2,255.5	2,258.2	2,263.3	2,272.1	2,273.8	2,282.0	2,282.4	2,277.2	2,273.2	
Massachusetts	3,099.0	3,106.7	3,110.8	3,121.3	3,125.8	3,134.4	3,144.8	3,157.6	3,168.4	3,173.0	3,185.5	3,190.6	3,197.6	
Michigan	4,439.2	4,452.6	4,442.4	4,447.0	4,451.3	4,462.8	4,473.4	4,471.1	4,489.6	4,495.7	4,506.7	4,503.3	4,518.2	
Minnesota	2,468.4	2,476.9	2,482.6	2,491.9	2,496.0	2,498.1	2,504.5	2,512.6	2,518.5	2,514.1	2,522.3	2,530.1	2,528.1	
Mississippi	1,101.5	1,104.4	1,100.7	1,109.4	1,111.0	1,110.5	1,112.7	1,113.1	1,112.6	1,117.6	1,120.9	1,117.2	1,121.6	
Missouri	2,626.3	2,634.2	2,640.3	2,637.9	2,643.2	2,645.0	2,649.5	2,652.0	2,658.9	2,664.4	2,662.9	2,651.6	2,663.4	
Montana	362.9	365.2	363.0	367.5	367.9	368.2	368.6	369.0	370.3	368.7	370.6	370.2	369.8	
Nebraska	848.7	850.8	853.3	861.0	859.3	861.8	864.0	866.4	868.6	874.0	878.5	873.0	877.2	
Nevada	880.4	885.4	890.2	891.9	893.8	898.7	901.9	904.2	907.2	907.0	912.8	916.0	919.7	
New Hampshire	565.9	569.1	568.7	573.8	572.4	570.5	573.4	572.5	570.0	572.7	572.6	570.5	573.8	
New Jersey	3,709.2	3,712.7	3,719.9	3,728.0	3,724.1	3,746.9	3,748.4	3,758.2	3,766.5	3,771.3	3,784.2	3,788.0	3,784.1	
New Mexico	703.9	707.0	708.5	709.1	709.5	709.1	712.2	713.3	713.9	712.7	713.1	714.4	713.2	
New York	8,007.6	8,013.8	8,014.4	8,030.1	8,032.9	8,057.7	8,075.7	8,083.4	8,095.6	8,082.4	8,098.6	8,117.5	8,123.0	
North Carolina	3,642.6	3,652.1	3,656.1	3,681.5	3,694.9	3,697.4	3,704.2	3,716.8	3,715.4	3,719.6	3,734.1	3,735.5	3,738.6	
North Dakota	312.1	312.1	311.3	313.6	313.6	314.1	314.4	315.1	316.2	317.4	319.0	318.1	317.9	
Ohio	5,373.6	5,386.4	5,388.5	5,384.3	5,394.1	5,405.7	5,409.0	5,417.1	5,421.7	5,439.2	5,436.3	5,445.3	5,446.1	
Oklahoma	1,379.2	1,383.8	1,381.6	1,384.9	1,388.7	1,397.7	1,397.3	1,403.4	1,405.1	1,405.7	1,410.7	1,415.9	1,417.9	
Oregon	1,519.6	1,525.8	1,525.7	1,528.6	1,527.0	1,532.2	1,537.8	1,536.9	1,551.0	1,551.8	1,557.3	1,561.9	1,562.0	
Pennsylvania	5,383.4	5,393.3	5,385.0	5,396.8	5,396.4	5,421.7	5,425.9	5,434.4	5,446.5	5,453.9	5,448.0	5,447.2	5,452.4	
Rhode Island	448.5	449.0	448.1	449.8	449.7	452.3	451.9	451.1	453.4	452.7	454.1	453.7	454.9	
South Carolina	1,710.8	1,713.6	1,715.5	1,724.1	1,725.9	1,727.8	1,730.6	1,735.0	1,749.1	1,763.5	1,767.8	1,775.6	1,784.8	
South Dakota	352.0	355.4	352.4	356.5	356.6	355.8	356.3	355.7	356.1	354.9	357.0	357.3	357.7	
Tennessee	2,578.6	2,579.5	2,588.7	2,589.3	2,587.3	2,590.4	2,595.9	2,603.0	2,605.3	2,618.6	2,620.7	2,623.6	2,623.4	
Texas	8,533.3	8,568.7	8,592.0	8,626.0	8,655.9	8,682.6	8,703.4	8,732.1	8,760.7	8,755.4	8,801.2	8,824.5	8,858.1	
Utah	987.1	991.8	992.7	997.1	997.4	1,002.1	1,003.7	1,010.6	1,014.3	1,015.6	1,018.2	1,024.3	1,025.5	
Vermont	277.7	278.4	278.4	279.7	279.2	279.4	279.5	279.7	281.4	279.3	280.0	280.1	281.2	
Virginia	3,212.1	3,218.1	3,226.3	3,225.6	3,232.5	3,240.2	3,259.8	3,267.2	3,278.7	3,280.0	3,291.1	3,303.6	3,309.7	
Washington	2,496.6	2,507.0	2,513.9	2,526.0	2,522.8	2,525.5	2,529.9	2,534.5	2,543.6	2,546.0	2,558.5	2,566.4	2,577.8	
West Virginia	706.0	705.6	706.7	706.1	706.9	708.7	716.9	717.7	717.1	715.3	715.6	715.2	713.0	
Wisconsin	2,636.8	2,647.0	2,650.1	2,657.7	2,662.5	2,668.0	2,674.5	2,679.4	2,684.9	2,691.4	2,694.1	2,696.5	2,702.0	
Wyoming	222.8	224.1	223.1	226.5	226.7	223.2	223.4	223.2	223.0	222.8	222.4	223.9	224.6	

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	
	Construction													
Alabama .....	97.0	97.6	97.6	97.3	96.9	97.0	96.6	96.5	96.2	97.1	97.9	97.0	98.6	
Alaska .....	12.8	13.0	12.9	12.9	12.8	12.5	12.4	12.7	12.8	12.8	12.8	12.8	13.0	
Arizona .....	129.7	130.3	130.0	131.9	131.2	131.4	131.8	131.4	131.6	134.5	133.5	134.5	133.5	
Arkansas .....	47.5	48.2	47.7	48.0	47.9	47.4	48.0	48.0	48.1	47.5	47.5	47.7	48.7	
California .....	543.7	548.2	548.2	557.2	562.1	566.1	570.2	573.1	577.9	583.4	582.3	591.9	591.9	
Colorado .....	117.4	118.9	119.3	119.6	120.0	121.2	121.6	118.0	122.1	127.3	128.0	127.9	128.0	
Connecticut .....	56.3	56.3	56.3	56.3	56.3	57.2	57.7	58.1	58.9	60.1	60.1	59.8	59.5	
Delaware .....	21.5	21.2	21.6	21.1	21.3	21.6	21.9	22.2	22.5	23.1	22.8	22.2	22.1	
District of Columbia .....	9.1	8.9	8.9	9.0	8.9	8.8	8.8	8.4	8.8	8.7	8.8	8.9	8.7	
Florida .....	329.0	329.6	330.3	335.4	335.7	335.4	337.6	339.3	339.9	340.5	340.6	342.6	344.3	
Georgia .....	165.9	166.4	165.9	169.0	170.9	171.9	172.2	173.3	175.2	177.2	177.2	178.2	178.8	
Hawaii <sup>2</sup> .....	22.5	22.3	22.1	22.2	22.0	22.0	22.0	21.9	21.8	21.9	21.9	22.1	21.9	
Idaho .....	31.9	32.2	32.2	32.2	32.4	32.7	32.6	32.5	32.3	32.7	33.2	32.6	32.5	
Illinois .....	234.3	234.7	233.0	234.8	237.2	238.2	238.2	239.3	239.1	239.8	240.8	235.9	241.1	
Indiana .....	141.2	141.2	140.8	139.8	139.7	139.8	140.6	142.3	142.9	143.3	143.8	140.6	144.8	
Iowa .....	58.0	60.1	60.5	61.0	60.6	60.3	60.2	60.5	61.0	60.1	60.3	60.6	62.0	
Kansas .....	57.8	59.7	59.5	58.9	59.2	59.1	59.3	59.4	59.3	60.7	60.8	58.5	59.5	
Kentucky .....	81.5	81.1	80.2	81.6	83.3	82.1	82.1	81.6	82.3	85.2	83.3	85.4	86.5	
Louisiana .....	116.7	116.4	117.5	118.0	118.7	117.8	117.8	117.4	117.1	117.9	118.0	118.4	117.9	
Maine .....	23.5	23.5	23.5	23.9	24.0	24.0	24.2	24.4	24.4	24.4	24.4	24.2	24.0	
Maryland .....	138.3	138.3	138.1	137.6	137.6	137.2	138.5	139.7	140.3	140.6	140.1	137.4	136.9	
Massachusetts .....	98.9	98.4	98.3	100.2	100.7	99.0	99.7	102.5	104.4	107.9	108.8	108.3	108.3	
Michigan .....	180.3	180.8	181.0	181.2	182.7	182.5	183.7	184.1	186.1	184.8	187.3	184.6	189.6	
Minnesota .....	92.4	93.6	93.3	93.4	93.9	94.2	94.5	95.7	96.3	97.6	99.4	99.2	99.8	
Mississippi .....	49.3	50.1	50.0	51.5	51.6	51.7	52.4	51.6	51.5	52.7	52.6	51.9	52.3	
Missouri .....	120.3	121.3	120.6	121.6	123.5	124.6	124.6	125.2	124.9	123.1	124.8	118.5	123.3	
Montana .....	16.8	17.8	17.4	18.4	19.0	18.5	18.5	18.6	18.9	18.9	18.7	18.2	17.8	
Nebraska .....	37.7	37.8	38.3	38.9	38.8	38.9	39.2	39.2	40.9	42.8	42.4	40.8	41.5	
Nevada .....	80.9	81.8	81.8	82.0	82.5	82.8	83.4	83.7	84.0	85.1	85.2	86.1	87.0	
New Hampshire .....	20.9	21.2	20.9	21.1	21.3	21.5	21.2	21.0	21.4	21.8	22.0	22.2	22.4	
New Jersey .....	130.8	130.2	130.4	131.3	131.5	131.5	131.2	131.8	131.9	135.6	137.1	136.4	135.8	
New Mexico .....	42.5	42.8	42.8	42.5	42.8	42.6	42.3	42.2	42.2	42.1	42.1	42.2	42.6	
New York .....	263.1	262.8	262.3	262.1	264.1	265.3	267.9	267.8	268.1	265.6	268.5	270.6	271.4	
North Carolina .....	202.1	202.0	201.7	204.4	205.5	206.7	207.2	207.9	208.7	211.7	208.7	209.5	210.7	
North Dakota .....	14.4	14.9	15.0	15.5	14.9	14.7	14.7	14.8	14.9	15.1	15.2	15.1	15.3	
Ohio .....	223.6	224.1	222.9	222.6	224.6	224.9	225.0	225.4	225.3	226.7	228.4	228.1	232.5	
Oklahoma .....	50.1	50.2	49.9	50.5	50.5	50.8	50.6	50.9	50.8	51.8	52.1	52.3	52.3	
Oregon .....	81.3	82.2	82.5	81.9	82.5	83.0	82.7	83.1	84.6	82.3	84.3	84.9	85.6	
Pennsylvania .....	214.0	213.0	212.2	212.3	213.0	213.9	214.7	216.4	217.1	218.4	219.4	220.6	222.3	
Rhode Island .....	14.4	14.4	14.3	14.4	14.6	14.9	14.9	14.9	15.1	15.4	15.5	16.1	16.9	
South Carolina .....	99.4	98.8	98.6	99.7	100.4	100.7	101.1	101.6	103.3	104.9	106.0	106.7	107.9	
South Dakota .....	14.2	15.0	15.2	15.5	15.6	15.5	15.6	15.7	15.9	15.9	16.0	15.6	15.8	
Tennessee .....	117.0	116.2	115.1	116.0	116.6	116.9	117.4	117.8	118.1	117.0	117.7	119.2	120.3	
Texas .....	453.1	456.4	457.9	459.6	462.5	463.2	462.4	464.5	467.0	468.1	476.7	477.8	479.7	
Utah .....	64.0	65.2	65.3	65.5	65.4	65.1	64.7	65.8	66.5	65.7	66.5	67.3	68.2	
Vermont .....	12.9	12.9	13.0	13.2	13.3	13.1	12.9	12.8	13.3	12.7	12.6	12.5	12.9	
Virginia .....	183.9	185.2	184.7	185.1	185.7	185.1	187.3	188.3	189.0	190.2	191.5	192.9	193.9	
Washington .....	135.4	136.0	136.4	136.9	137.0	136.3	136.1	136.8	136.6	137.7	138.2	138.9	140.3	
West Virginia .....	35.3	34.6	34.6	34.3	34.5	34.6	35.4	35.6	35.5	36.2	35.4	34.3	34.7	
Wisconsin .....	107.7	108.9	109.0	109.5	109.3	108.8	108.9	109.4	110.0	110.2	111.6	110.9	111.9	
Wyoming .....	14.5	15.2	15.3	15.5	15.6	15.4	14.9	15.2	14.9	14.9	15.0	15.1	15.3	

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	
	Manufacturing													
Alabama .....	380.8	380.9	379.8	381.2	382.2	380.0	378.7	378.7	378.6	380.2	379.2	378.0	377.0	
Alaska .....	16.0	15.5	15.5	15.4	14.8	14.7	15.0	15.5	13.9	15.5	16.4	16.3	15.7	
Arizona .....	203.8	204.7	205.2	206.9	208.1	209.3	210.1	211.6	212.9	214.7	215.0	215.1	215.6	
Arkansas .....	253.4	253.8	253.7	253.0	253.4	252.9	253.5	253.3	254.0	255.5	255.3	255.1	255.6	
California .....	1,901.0	1,907.8	1,913.9	1,925.8	1,925.8	1,927.4	1,935.0	1,936.5	1,941.6	1,943.2	1,945.2	1,947.1	1,947.1	
Colorado .....	202.3	202.7	202.8	204.0	204.6	205.1	205.8	206.6	207.7	206.9	208.4	208.8	208.7	
Connecticut .....	276.2	275.9	276.2	278.2	277.2	276.6	276.5	276.0	276.3	277.1	276.9	277.0	277.4	
Delaware .....	57.4	57.5	56.6	56.6	57.5	57.9	58.3	58.4	58.7	56.7	57.3	58.8	58.8	
District of Columbia .....	12.6	12.7	12.5	12.5	12.6	12.5	12.6	12.6	12.6	12.8	12.8	12.8	12.8	
Florida .....	491.2	491.0	490.2	492.3	492.3	491.9	491.7	491.5	491.9	491.8	491.7	491.3	492.6	
Georgia .....	589.0	589.4	588.5	588.9	587.8	587.5	588.1	589.3	590.0	589.1	587.1	589.9	590.8	
Hawaii .....	16.7	16.7	16.7	16.8	16.7	16.4	16.4	16.5	16.5	16.5	16.4	16.4	16.3	
Idaho .....	74.4	74.2	74.4	74.1	74.5	74.8	75.2	75.5	75.8	76.4	76.7	76.3	76.6	
Illinois .....	969.8	970.6	968.2	975.9	977.7	978.8	983.3	979.5	980.9	981.3	980.2	980.5	982.1	
Indiana .....	678.2	677.4	675.9	676.8	677.5	675.2	678.0	678.4	679.6	678.6	680.1	682.9	680.8	
Iowa .....	251.5	253.0	253.6	253.9	255.2	254.4	256.3	256.1	256.3	256.5	257.0	258.4	258.1	
Kansas .....	204.3	204.5	205.9	206.3	206.9	207.3	207.1	208.4	208.9	209.7	210.2	210.4	211.0	
Kentucky .....	316.1	314.6	317.4	318.6	319.5	320.2	315.6	315.9	316.7	318.6	317.9	314.9	315.3	
Louisiana .....	190.2	191.6	190.8	191.3	191.0	190.7	190.0	190.7	190.8	190.8	190.8	190.5	190.1	
Maine .....	87.2	87.6	87.7	87.3	87.9	87.6	87.5	87.8	88.1	88.1	88.2	87.4	87.3	
Maryland .....	176.8	176.7	176.1	175.3	176.0	173.5	173.6	176.6	176.7	176.6	177.1	176.8	175.7	
Massachusetts .....	446.5	447.0	447.7	448.9	448.7	448.2	450.2	451.6	452.9	455.8	456.9	456.3	454.8	
Michigan .....	967.3	967.4	963.3	964.1	967.8	963.3	969.8	970.7	969.3	970.9	973.2	973.8	979.7	
Minnesota .....	431.4	432.4	433.0	434.5	435.1	434.9	437.5	439.3	440.4	440.7	438.7	442.4	441.7	
Mississippi .....	241.6	242.4	241.3	242.5	240.4	239.3	240.3	241.2	241.1	241.8	242.6	241.5	241.7	
Missouri .....	417.5	417.9	418.9	416.4	422.1	418.6	420.8	419.8	420.2	426.7	420.0	421.6	421.2	
Montana .....	24.1	24.2	24.0	24.1	24.3	24.3	24.4	24.5	24.3	24.4	24.6	24.5	24.9	
Nebraska .....	115.7	114.7	115.9	118.0	116.0	116.2	116.5	116.8	117.0	117.7	118.7	118.2	118.9	
Nevada .....	40.1	40.3	40.4	40.4	40.7	40.9	40.9	41.2	41.4	41.7	41.9	42.4	42.3	
New Hampshire .....	106.2	106.6	106.8	107.4	107.3	107.7	107.7	107.7	108.1	108.8	108.5	108.5	108.2	
New Jersey .....	482.4	481.1	480.8	481.9	482.4	482.0	481.6	483.5	484.4	486.0	485.5	485.2	482.4	
New Mexico .....	45.8	46.1	45.9	46.4	46.9	46.9	47.1	47.3	47.3	46.9	46.3	45.6	45.4	
New York .....	921.4	920.4	917.7	921.3	921.7	921.6	922.3	923.3	925.1	923.0	920.3	920.4	918.0	
North Carolina .....	834.4	834.9	834.2	835.6	831.4	834.0	834.2	834.7	833.5	833.1	833.7	833.1	831.3	
North Dakota .....	23.0	23.0	23.2	23.5	23.8	23.4	23.6	23.7	23.6	24.0	23.9	23.9	23.9	
Ohio .....	1,090.8	1,092.1	1,090.5	1,082.2	1,090.0	1,090.1	1,090.5	1,090.8	1,093.8	1,095.3	1,096.9	1,097.8	1,094.7	
Oklahoma .....	176.5	177.5	181.2	181.2	181.1	181.6	182.2	183.2	183.7	184.2	184.4	184.4	183.9	
Oregon .....	242.8	245.3	244.1	244.3	242.1	243.7	245.6	246.2	246.7	247.0	247.5	247.7	246.9	
Pennsylvania .....	935.4	937.3	936.5	936.4	935.4	938.7	939.3	938.6	938.6	943.0	941.6	939.7	938.7	
Rhode Island .....	79.8	79.9	79.6	79.8	79.3	79.7	79.3	78.8	80.1	79.4	79.4	79.3	78.6	
South Carolina .....	362.3	363.3	362.8	362.3	362.2	361.5	361.8	362.1	362.2	362.2	361.4	362.5	363.9	
South Dakota .....	49.4	49.7	49.9	50.2	49.3	49.3	49.7	49.7	49.9	49.0	49.6	49.6	49.1	
Tennessee .....	518.4	516.6	517.1	517.3	517.1	515.3	516.0	517.5	517.7	517.8	518.2	518.5	516.9	
Texas .....	1,075.9	1,079.1	1,081.9	1,085.2	1,086.3	1,087.8	1,089.0	1,091.8	1,093.9	1,093.3	1,093.4	1,095.9	1,097.5	
Utah .....	132.5	132.8	132.6	133.3	133.4	133.7	133.6	134.0	134.0	135.1	135.3	135.4	135.6	
Vermont .....	46.0	46.3	46.2	46.5	46.5	46.7	46.9	46.9	47.2	47.3	47.4	47.3	47.8	
Virginia .....	403.8	403.8	403.0	403.8	404.1	403.9	405.3	405.3	405.8	406.4	406.6	407.6	407.4	
Washington .....	364.8	367.1	369.6	372.0	373.2	374.2	373.8	375.1	376.0	376.5	377.4	377.8	376.8	
West Virginia .....	81.6	81.5	81.4	80.8	81.6	81.1	82.2	82.4	82.7	83.0	83.1	82.9	83.1	
Wisconsin .....	605.6	608.8	609.3	610.3	612.3	612.6	614.4	615.8	617.4	620.8	619.4	620.0	620.5	
Wyoming .....	10.7	10.8	10.8	10.8	10.8	11.0	10.9	10.9	10.9	10.9	10.8	11.0	11.0	

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
Transportation and public utilities														
Alabama .....	91.4	91.3	91.3	91.3	89.6	91.5	91.4	90.7	91.0	91.6	91.7	91.8	91.4	
Alaska .....	23.7	24.1	24.0	24.0	24.2	24.3	24.3	24.0	24.4	24.4	24.7	24.6	25.0	
Arizona .....	96.0	96.5	96.8	95.4	92.5	96.4	96.0	97.0	97.8	98.2	97.0	97.5	97.5	
Arkansas .....	65.2	65.4	65.3	65.9	64.7	66.1	66.6	66.9	67.2	67.1	67.5	67.7	67.7	
California .....	659.7	662.5	664.4	665.5	642.8	669.1	672.7	675.4	675.1	675.6	678.5	679.0	680.4	
Colorado .....	122.1	122.1	122.2	121.8	118.7	121.7	122.0	121.8	121.2	122.5	122.5	122.0	122.9	
Connecticut .....	75.1	74.6	74.7	74.2	71.9	74.8	75.0	75.3	75.7	75.3	75.8	76.1	76.1	
Delaware .....	15.5	15.6	15.7	16.0	15.9	15.7	15.8	15.7	15.8	15.5	15.6	15.6	15.6	
District of Columbia .....	17.8	17.8	17.8	17.7	17.7	17.5	17.5	17.5	17.5	17.7	17.3	17.2	17.2	
Florida .....	326.3	326.5	327.1	328.8	321.8	330.3	330.3	330.9	332.2	335.6	336.2	338.1	336.7	
Georgia .....	229.0	229.6	229.9	231.3	226.5	233.6	234.8	235.7	236.4	236.3	237.5	238.4	238.9	
Hawaii .....	41.5	41.4	41.2	41.7	41.5	41.4	41.4	41.5	41.0	41.1	41.2	40.9	40.2	
Idaho .....	24.1	24.1	24.3	24.0	23.9	24.0	23.9	24.1	24.2	24.7	24.4	25.8	25.9	
Illinois .....	336.6	337.8	338.8	336.1	323.3	338.9	340.3	340.8	342.0	342.0	341.3	342.1	342.8	
Indiana .....	141.2	141.0	140.3	138.8	136.1	140.2	140.4	140.7	141.5	142.3	142.6	142.8	142.5	
Iowa .....	65.9	66.0	65.8	65.3	62.9	65.4	66.2	66.5	66.7	66.9	67.0	67.2	67.8	
Kansas .....	72.0	72.2	71.9	71.9	72.5	72.8	73.0	73.0	72.9	72.9	73.0	73.3	73.5	
Kentucky .....	97.5	97.3	97.3	97.1	90.9	97.7	98.5	98.6	99.4	99.5	99.7	100.0	101.8	
Louisiana .....	110.0	110.0	110.2	111.2	109.7	111.5	111.8	111.8	112.1	111.7	112.5	112.8	113.3	
Maine .....	23.1	23.1	23.4	23.5	22.5	23.5	23.4	23.4	23.5	23.5	23.9	23.8	23.8	
Maryland .....	107.2	107.3	107.2	106.7	102.5	106.6	105.7	105.9	106.3	105.3	106.2	105.5	105.6	
Massachusetts .....	133.2	133.5	133.3	134.9	131.3	135.7	137.0	136.0	135.3	136.8	137.5	137.6	138.8	
Michigan .....	173.2	173.3	173.5	173.8	169.6	174.4	174.7	175.1	175.3	175.4	175.0	174.0	173.7	
Minnesota .....	123.3	123.8	123.8	123.8	120.8	124.8	125.2	125.3	126.0	125.9	125.4	125.6	125.6	
Mississippi .....	52.8	52.9	52.9	52.9	51.5	53.0	53.4	53.6	53.5	54.1	53.9	53.7	53.7	
Missouri .....	164.9	165.4	165.8	165.3	162.0	164.6	164.0	163.6	164.3	165.9	165.4	165.6	166.6	
Montana .....	21.0	21.1	21.1	20.9	20.4	21.1	21.2	21.4	21.3	21.5	21.6	21.5	21.4	
Nebraska .....	53.1	53.7	53.8	53.7	53.8	54.8	54.2	54.4	54.6	54.9	55.0	54.8	55.0	
Nevada .....	45.0	45.5	45.8	46.0	44.9	46.4	46.6	46.7	46.7	46.7	46.9	46.9	47.0	
New Hampshire .....	19.4	19.5	19.5	19.8	19.7	19.4	19.3	19.4	19.4	19.7	19.4	19.3	19.8	
New Jersey .....	257.3	257.1	257.5	258.3	248.1	258.5	259.9	259.4	260.4	260.4	261.9	261.9	262.4	
New Mexico .....	31.9	32.1	32.1	32.0	31.8	32.1	32.7	32.6	32.5	32.5	32.5	32.7	32.9	
New York .....	408.9	409.0	409.0	408.2	395.2	410.5	411.3	410.6	410.7	411.7	410.6	411.1	409.9	
North Carolina .....	171.0	171.0	170.9	170.3	164.1	169.8	170.8	171.0	170.9	171.0	171.3	170.7	170.1	
North Dakota .....	18.3	18.3	18.2	18.1	18.1	18.0	18.0	18.0	18.0	18.3	18.2	18.3	18.4	
Ohio .....	234.6	234.8	234.6	233.8	226.0	234.5	234.6	233.8	233.3	235.4	235.4	235.2	235.2	
Oklahoma .....	78.5	78.7	79.0	79.5	78.6	79.9	80.3	80.7	80.9	80.7	81.1	81.6	81.7	
Oregon .....	74.9	74.6	74.8	74.1	71.2	74.6	74.5	74.6	74.4	74.5	74.6	74.7	74.8	
Pennsylvania .....	278.4	278.6	279.1	278.3	267.1	279.9	279.3	278.4	278.2	281.0	280.8	280.4	280.8	
Rhode Island .....	15.4	15.5	15.5	15.6	14.8	15.5	15.5	15.7	15.9	15.4	15.9	16.0	15.8	
South Carolina .....	75.4	75.2	74.8	75.9	73.8	76.0	76.2	76.5	76.9	75.8	76.3	77.2	77.8	
South Dakota .....	16.2	16.4	16.4	16.4	15.7	16.2	16.1	15.9	15.8	16.1	16.0	15.9	16.1	
Tennessee .....	150.5	150.7	150.7	150.7	146.4	150.6	150.6	150.4	150.1	153.1	153.0	152.4	153.4	
Texas .....	509.3	512.0	514.6	517.2	510.0	519.9	522.4	524.7	526.0	527.8	531.2	532.4	537.3	
Utah .....	56.0	56.0	55.7	56.5	54.4	56.8	56.9	57.3	57.7	57.4	57.5	57.8	58.3	
Vermont .....	12.2	12.1	12.2	12.3	11.9	12.2	12.3	12.3	12.3	12.4	12.5	12.5	12.6	
Virginia .....	166.6	167.2	167.7	168.2	164.8	168.8	170.4	170.7	171.3	170.9	171.6	172.0	173.0	
Washington .....	133.6	134.2	134.2	133.9	131.0	133.6	133.7	133.9	133.9	135.6	136.3	136.7	137.2	
West Virginia .....	38.9	38.9	38.8	38.8	38.1	39.0	39.0	39.2	38.8	39.2	38.7	38.5	38.6	
Wisconsin .....	124.3	124.4	124.2	123.4	119.1	123.1	123.1	123.0	122.5	124.0	124.4	123.8	123.9	
Wyoming .....	13.9	13.9	13.9	13.9	13.8	13.9	13.9	14.0	13.9	13.7	13.8	13.9	13.9	

See footnotes at end of table.



**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
	Trade													
Alabama .....	425.7	427.2	427.5	428.0	428.1	428.0	428.8	429.2	429.4	430.3	431.4	432.9	432.2	
Alaska .....	55.4	55.7	56.1	56.5	56.4	55.7	55.0	54.9	55.4	55.9	56.4	56.9	56.7	
Arizona .....	477.5	478.3	479.8	478.4	480.8	480.9	483.3	487.8	491.3	496.7	497.6	499.0	499.1	
Arkansas .....	251.5	251.6	250.9	251.5	251.9	252.4	252.2	253.7	252.7	251.6	251.2	254.4	254.8	
California .....	3,044.6	3,050.9	3,058.5	3,066.6	3,070.3	3,073.8	3,081.6	3,100.1	3,106.6	3,091.3	3,107.1	3,114.7	3,117.7	
Colorado .....	479.1	480.5	481.4	483.8	484.4	483.0	484.3	486.6	486.5	489.5	490.7	491.9	490.1	
Connecticut .....	351.2	352.2	352.7	352.7	353.9	355.0	356.6	359.6	362.3	360.2	359.9	359.0	358.1	
Delaware .....	85.3	85.2	85.0	85.1	85.3	85.4	85.7	85.9	86.1	86.7	87.7	87.7	86.9	
District of Columbia .....	48.0	47.6	47.5	48.5	48.4	48.4	48.6	48.6	48.8	48.6	48.2	48.7	48.2	
Florida .....	1,637.9	1,642.7	1,645.1	1,648.4	1,656.8	1,663.4	1,670.0	1,675.7	1,680.9	1,678.4	1,681.8	1,687.8	1,688.9	
Georgia .....	904.6	907.0	906.4	912.0	919.2	923.2	926.0	929.1	932.4	931.9	936.9	936.5	937.1	
Hawaii .....	135.2	135.2	134.8	134.2	134.3	134.7	134.9	134.7	134.4	133.8	133.7	133.3	132.6	
Idaho .....	128.6	129.0	128.8	128.9	128.1	128.4	128.7	129.4	129.7	129.6	130.1	129.2	129.2	
Illinois .....	1,320.7	1,323.6	1,322.4	1,323.8	1,323.8	1,323.4	1,330.1	1,331.7	1,336.8	1,339.7	1,335.1	1,337.3	1,337.5	
Indiana .....	681.5	681.5	681.4	683.7	684.7	682.7	682.7	682.9	681.9	676.9	682.5	683.8	683.1	
Iowa .....	342.6	345.6	344.9	345.3	344.4	344.5	348.7	348.5	347.7	347.8	348.0	348.5	349.4	
Kansas .....	306.9	308.5	309.2	310.8	311.8	311.3	313.3	313.6	314.4	314.7	316.1	316.4	317.3	
Kentucky .....	408.4	408.7	409.7	409.0	411.8	409.7	410.2	414.4	416.1	416.2	416.4	415.6	417.3	
Louisiana .....	428.3	427.5	426.2	430.1	430.6	429.6	433.1	434.7	436.2	434.7	436.8	436.7	435.9	
Maine .....	138.3	138.7	139.6	140.2	140.6	141.2	141.7	142.8	142.4	140.4	139.9	140.8	141.0	
Maryland .....	534.7	534.9	534.4	533.4	534.1	533.6	536.2	539.1	539.1	543.2	541.0	541.6	539.3	
Massachusetts .....	705.0	705.5	705.6	709.9	713.4	715.6	717.4	722.0	723.6	727.4	729.4	729.4	728.9	
Michigan .....	1,040.0	1,044.1	1,044.0	1,049.1	1,047.2	1,048.6	1,049.7	1,047.9	1,050.9	1,050.2	1,056.0	1,055.3	1,053.1	
Minnesota .....	595.8	597.5	599.3	602.6	603.6	603.6	605.0	607.0	608.6	605.1	605.5	606.2	603.4	
Mississippi .....	236.6	236.5	236.3	237.7	238.5	238.6	238.2	238.0	237.8	238.7	238.6	238.1	240.0	
Missouri .....	622.0	622.3	623.4	623.4	623.3	624.2	625.0	625.4	626.4	625.4	626.5	628.4	631.8	
Montana .....	98.2	98.7	99.0	100.0	99.9	99.7	99.2	99.3	99.4	98.8	99.4	99.4	98.9	
Nebraska .....	208.6	210.0	209.7	210.9	210.8	211.4	211.5	212.0	211.7	214.5	214.2	213.2	214.2	
Nevada .....	177.1	177.9	178.2	179.8	180.4	181.1	181.6	182.4	183.1	183.1	184.3	185.9	185.9	
New Hampshire .....	146.6	147.7	148.2	149.5	149.1	149.3	150.9	150.1	150.2	149.8	149.3	148.8	148.7	
New Jersey .....	870.3	870.3	871.6	871.5	873.5	875.6	876.1	877.8	880.1	879.5	885.9	886.6	884.3	
New Mexico .....	167.2	167.4	168.0	167.4	167.3	166.9	168.1	168.8	169.1	168.7	169.2	169.9	169.5	
New York .....	1,636.6	1,636.4	1,638.7	1,642.5	1,645.8	1,646.6	1,646.6	1,651.6	1,655.5	1,654.3	1,650.1	1,654.3	1,657.4	
North Carolina .....	836.5	839.0	840.1	842.5	840.6	841.2	839.8	845.1	840.5	841.8	846.6	847.2	845.9	
North Dakota .....	80.3	79.5	80.5	80.5	80.9	80.7	81.4	81.5	82.0	81.3	81.9	81.5	80.9	
Ohio .....	1,306.6	1,308.5	1,310.3	1,308.0	1,311.2	1,313.3	1,314.6	1,318.5	1,321.3	1,317.1	1,317.6	1,318.1	1,315.0	
Oklahoma .....	323.7	323.9	323.8	323.4	324.2	323.6	324.4	326.6	327.3	326.4	327.0	327.9	328.1	
Oregon .....	375.1	376.8	377.4	378.7	378.8	378.0	380.9	381.9	384.8	383.0	384.5	387.0	386.0	
Pennsylvania .....	1,212.0	1,214.2	1,213.5	1,214.4	1,216.2	1,220.6	1,222.6	1,223.9	1,228.0	1,216.7	1,221.3	1,224.1	1,225.0	
Rhode Island .....	98.1	98.0	97.8	98.4	98.4	98.7	98.8	98.7	98.6	98.5	99.2	99.0	98.7	
South Carolina .....	408.5	409.5	411.3	413.2	413.3	414.2	415.8	426.5	427.6	430.0	431.0	433.2	436.4	
South Dakota .....	87.7	89.0	88.5	88.5	88.9	88.0	86.2	88.3	88.1	87.2	87.5	87.3	87.6	
Tennessee .....	609.7	607.4	607.1	607.0	607.8	608.5	610.7	614.8	618.4	618.1	619.5	620.1	624.4	
Texas .....	2,032.4	2,038.9	2,043.7	2,053.3	2,057.8	2,058.9	2,063.2	2,071.0	2,081.5	2,084.5	2,086.0	2,091.1	2,093.5	
Utah .....	236.9	238.0	238.2	238.7	239.3	239.8	240.2	241.2	242.7	242.7	243.9	245.0	244.2	
Vermont .....	65.1	65.2	65.1	65.4	65.0	65.0	65.0	65.1	65.3	64.8	65.0	65.4	65.2	
Virginia .....	721.1	721.5	721.7	721.3	723.3	724.3	730.0	732.3	734.4	730.9	735.3	737.5	736.9	
Washington .....	603.9	607.1	608.1	611.0	609.0	608.2	610.1	611.9	612.8	615.4	618.1	621.3	621.7	
West Virginia .....	161.2	161.4	161.6	161.2	160.9	161.0	164.1	164.3	164.5	163.4	163.6	164.7	162.8	
Wisconsin .....	601.8	602.8	602.7	605.2	608.9	607.4	607.8	608.5	609.5	608.6	611.7	613.4	612.4	
Wyoming .....	52.7	52.6	52.5	52.3	52.1	51.9	52.5	52.3	52.3	52.5	51.9	52.3	52.4	

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	
	Finance, insurance, and real estate													
Alabama .....	83.9	84.2	84.2	84.7	84.7	84.7	84.9	84.9	85.1	85.1	85.3	85.6	85.9	
Alaska .....	12.1	12.2	12.3	12.3	12.4	12.3	12.2	12.2	12.2	12.1	12.1	12.2	12.3	
Arizona .....	125.1	125.9	126.5	127.3	127.6	128.0	129.2	130.0	130.3	130.5	131.4	132.4	132.5	
Arkansas .....	44.1	44.1	43.9	44.1	44.2	44.2	44.3	44.4	44.5	44.3	44.4	44.8	44.8	
California .....	750.7	754.5	756.7	759.3	760.0	761.2	763.5	764.7	765.1	765.8	769.9	772.7	776.9	
Colorado .....	125.6	126.4	127.1	128.3	128.7	128.7	129.0	129.5	130.0	130.0	130.9	131.2	130.3	
Connecticut .....	130.9	131.5	130.4	130.9	131.1	131.4	131.8	132.8	133.6	133.7	133.8	134.7	134.5	
Delaware .....	46.3	46.5	47.0	47.3	47.6	48.3	48.5	48.2	48.6	48.4	48.6	48.9	49.6	
District of Columbia .....	28.5	28.5	28.4	28.5	28.5	28.5	28.4	28.3	28.4	28.9	28.4	28.5	28.5	
Florida .....	406.8	408.0	408.3	410.1	411.4	413.1	416.8	419.3	419.2	418.8	419.9	422.8	424.5	
Georgia .....	185.4	186.0	186.1	187.0	188.5	189.2	190.6	190.8	191.7	191.8	192.8	193.8	194.5	
Hawaii .....	36.3	36.3	36.2	36.1	36.1	36.0	35.9	35.8	35.7	35.6	35.3	35.3	35.3	
Idaho .....	25.1	25.1	25.1	25.7	25.7	25.8	25.7	25.6	25.6	25.7	26.0	26.2	26.4	
Illinois .....	395.1	396.5	397.2	399.1	400.9	401.0	402.9	404.3	405.2	406.3	406.5	406.8	407.9	
Indiana .....	137.9	137.8	137.7	139.0	139.3	139.6	139.9	140.1	140.4	140.2	140.0	140.2	140.9	
Iowa .....	78.7	79.0	79.2	79.5	79.6	79.8	80.5	80.7	80.9	81.3	81.0	81.1	81.2	
Kansas .....	61.1	61.1	61.1	60.5	60.7	60.7	60.7	60.8	60.9	60.8	61.1	61.0	61.5	
Kentucky .....	68.8	68.8	68.5	69.9	70.2	70.1	70.2	70.4	70.6	70.5	70.7	70.8	71.1	
Louisiana .....	85.3	85.4	85.5	85.9	86.0	86.0	86.1	86.5	86.8	86.5	86.6	86.8	86.5	
Maine .....	28.0	28.1	28.3	28.7	28.7	28.6	28.8	29.0	29.2	29.4	29.7	30.2	30.2	
Maryland .....	130.4	130.4	130.7	130.4	130.7	130.8	130.7	130.9	131.3	131.5	131.8	131.1	131.5	
Massachusetts .....	211.7	212.3	212.5	212.3	213.2	213.9	214.6	215.2	215.7	215.9	216.1	216.5	216.3	
Michigan .....	206.7	206.2	206.2	205.5	204.9	205.7	206.2	206.6	207.1	207.9	208.9	209.4	210.0	
Minnesota .....	145.9	145.5	145.7	146.2	146.4	146.7	147.9	148.5	149.1	149.2	149.8	149.9	150.8	
Mississippi .....	41.6	41.7	41.7	41.4	40.6	40.8	41.1	41.1	41.1	41.2	41.5	41.3	41.5	
Missouri .....	153.9	153.8	154.0	154.4	153.7	154.1	154.7	154.8	155.5	155.8	156.0	156.7	157.1	
Montana .....	16.3	16.3	16.4	16.4	16.5	16.6	16.6	16.6	16.6	16.7	16.8	16.7	16.9	
Nebraska .....	53.9	54.1	54.2	54.7	54.8	55.0	55.3	55.4	55.9	55.8	56.4	56.5	56.8	
Nevada .....	39.4	39.9	40.1	40.4	40.4	40.5	40.9	41.1	41.2	41.4	41.5	41.7	41.9	
New Hampshire .....	29.2	29.3	29.4	29.6	29.6	29.4	29.5	29.4	29.2	29.3	29.3	29.4	29.8	
New Jersey .....	237.4	238.3	238.6	237.9	238.2	238.8	239.9	240.9	242.2	243.3	244.1	244.0	244.6	
New Mexico .....	31.3	31.3	31.4	31.4	31.4	31.2	31.2	31.3	31.4	31.5	31.5	31.6	31.5	
New York .....	719.7	719.8	721.1	720.3	720.7	721.3	721.3	721.5	722.1	721.3	724.1	725.8	725.9	
North Carolina .....	165.2	166.1	166.4	167.6	168.0	168.3	168.5	168.9	169.3	170.6	172.5	173.4	173.2	
North Dakota .....	14.6	14.6	14.7	14.9	14.9	14.9	15.0	15.0	15.2	15.3	15.4	15.3	15.4	
Ohio .....	286.5	287.0	286.6	286.7	287.5	287.9	288.4	288.7	288.9	290.0	289.8	290.5	291.8	
Oklahoma .....	69.0	69.1	69.2	69.3	69.3	69.5	69.9	70.2	70.2	70.3	70.5	70.7	70.9	
Oregon .....	94.8	94.9	94.9	95.4	95.5	95.2	95.7	96.1	96.0	96.4	96.0	96.7	96.5	
Pennsylvania .....	312.1	312.4	312.8	312.4	312.5	313.3	314.4	315.3	317.6	317.5	318.5	318.5	319.2	
Rhode Island .....	26.4	26.5	26.5	26.7	26.6	26.6	26.6	26.7	26.6	26.9	27.0	26.8	27.0	
South Carolina .....	74.5	74.6	74.6	75.1	75.2	75.2	75.3	75.3	75.8	76.0	76.6	76.9	77.5	
South Dakota .....	20.7	20.8	20.9	21.1	21.1	21.2	21.4	21.6	21.7	21.7	21.6	21.6	21.6	
Tennessee .....	119.5	120.2	120.7	120.7	120.8	121.6	122.0	121.7	121.7	123.4	123.5	123.2	122.7	
Texas .....	460.1	462.3	463.4	465.2	466.7	467.9	469.0	469.7	471.2	473.5	475.6	477.4	478.5	
Utah .....	52.4	52.5	52.6	52.8	52.9	53.2	53.6	54.0	53.9	53.7	53.8	53.7	53.9	
Vermont .....	12.2	12.2	12.3	12.4	12.4	12.4	12.3	12.3	12.2	12.2	12.1	12.1	12.1	
Virginia .....	167.3	167.6	168.0	168.1	168.1	167.6	168.6	169.1	169.5	170.6	170.7	170.7	170.6	
Washington .....	127.4	127.6	127.0	129.2	129.6	129.8	130.3	130.4	131.0	131.5	132.0	132.5	133.7	
West Virginia .....	28.2	28.2	28.1	28.3	28.3	28.3	28.5	28.5	28.6	28.4	28.3	28.4	28.3	
Wisconsin .....	139.7	139.8	140.3	140.5	140.4	140.5	141.1	141.8	141.9	141.8	142.2	142.3	142.5	
Wyoming .....	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	
<b>Services</b>														
Alabama .....	424.9	426.7	429.1	432.0	432.0	432.0	433.2	433.9	434.3	435.1	435.6	438.0	437.6	
Alaska .....	64.7	65.5	65.3	65.6	65.8	66.0	66.1	66.1	66.0	66.5	67.0	67.1	67.5	
Arizona .....	590.6	592.8	595.7	600.1	603.3	607.2	608.8	612.5	616.3	617.3	619.9	621.1	624.4	
Arkansas .....	252.0	252.1	252.4	253.4	255.6	255.8	256.3	257.3	257.7	257.2	259.6	260.9	262.9	
California .....	4,020.3	4,022.8	4,036.7	4,072.4	4,089.0	4,098.9	4,110.9	4,124.2	4,142.0	4,154.9	4,168.6	4,180.9	4,200.7	
Colorado .....	589.4	593.7	596.5	602.2	600.3	606.7	608.7	610.4	610.8	609.5	607.4	609.8	610.9	
Connecticut .....	493.6	493.6	495.7	495.4	500.8	500.7	503.5	506.4	508.7	506.6	506.9	505.4	509.4	
Delaware .....	105.8	105.9	107.0	108.5	108.7	108.5	108.8	109.5	109.9	110.2	110.7	111.0	111.0	
District of Columbia .....	265.7	263.7	265.0	267.7	265.6	267.6	267.0	266.0	265.6	266.3	266.0	267.5	265.3	
Florida .....	2,234.7	2,247.4	2,260.5	2,279.2	2,291.8	2,302.2	2,311.0	2,321.5	2,330.5	2,337.5	2,347.9	2,363.5	2,379.5	
Georgia .....	928.3	930.9	932.8	938.8	945.1	955.2	963.1	967.4	973.2	972.3	981.5	982.8	985.3	
Hawaii .....	169.0	168.6	169.2	169.7	169.7	169.7	170.1	170.3	169.5	168.4	169.1	169.7	170.4	
Idaho .....	120.2	121.4	121.9	124.9	123.7	121.7	124.0	123.9	123.9	121.8	121.4	121.5	120.5	
Illinois .....	1,674.2	1,680.9	1,684.0	1,695.2	1,699.9	1,695.1	1,701.8	1,709.9	1,714.0	1,713.4	1,716.7	1,717.1	1,722.5	
Indiana .....	678.9	680.0	680.1	683.5	686.3	689.0	691.2	696.7	700.7	691.3	692.1	693.1	700.0	
Iowa .....	363.9	365.0	366.1	366.3	365.4	364.9	368.3	369.1	369.9	371.6	373.0	373.9	376.5	
Kansas .....	312.6	315.2	316.8	318.4	319.8	321.4	323.2	324.1	325.0	324.9	325.8	326.9	329.8	
Kentucky .....	421.0	422.2	423.7	426.2	429.0	429.7	430.7	431.7	433.3	432.0	432.3	434.5	436.7	
Louisiana .....	494.8	494.7	495.5	501.3	500.2	502.5	503.8	504.6	506.0	507.4	507.7	511.0	511.3	
Maine .....	155.3	156.3	157.1	158.0	158.5	159.2	159.7	160.5	160.7	160.6	161.6	162.0	162.5	
Maryland .....	748.4	752.1	753.2	754.1	755.6	756.8	760.4	762.7	764.0	763.1	764.5	763.7	761.8	
Massachusetts .....	1,099.1	1,104.4	1,107.2	1,106.6	1,109.6	1,113.4	1,117.6	1,121.6	1,126.1	1,119.3	1,126.2	1,133.6	1,140.4	
Michigan .....	1,213.3	1,215.7	1,216.7	1,220.1	1,226.9	1,228.2	1,234.5	1,235.2	1,243.2	1,244.1	1,243.7	1,246.3	1,249.3	
Minnesota .....	693.9	698.3	700.4	703.2	705.4	706.1	706.8	708.9	710.5	708.1	714.6	716.3	718.7	
Mississippi .....	255.8	256.9	255.3	258.7	259.9	261.0	261.1	261.5	261.3	262.7	263.7	264.3	264.3	
Missouri .....	731.2	734.4	736.9	737.5	738.2	738.6	740.3	744.3	746.5	746.2	747.0	740.7	740.5	
Montana .....	104.2	104.8	105.3	105.5	105.6	105.5	105.9	106.0	106.6	106.1	107.1	107.0	107.3	
Nebraska .....	226.7	227.7	228.2	230.0	230.6	232.0	232.8	233.4	233.3	234.3	236.8	235.6	236.0	
Nevada .....	377.8	379.6	380.1	381.8	383.2	385.1	386.1	386.7	387.2	386.5	389.6	390.0	391.1	
New Hampshire .....	164.3	165.4	164.9	166.4	166.1	164.9	166.1	166.0	165.7	165.2	165.3	164.0	165.3	
New Jersey .....	1,160.3	1,164.7	1,169.7	1,176.4	1,180.2	1,182.7	1,187.1	1,192.9	1,195.1	1,194.6	1,198.2	1,203.7	1,206.0	
New Mexico .....	193.1	194.3	194.6	194.9	195.2	196.0	197.2	197.4	197.2	196.8	197.7	197.7	197.4	
New York .....	2,679.7	2,685.5	2,689.7	2,698.1	2,705.8	2,713.2	2,722.0	2,729.4	2,736.5	2,734.3	2,750.1	2,759.4	2,768.6	
North Carolina .....	855.5	861.3	864.5	878.2	882.1	886.5	891.3	896.2	899.5	899.8	904.2	905.4	909.1	
North Dakota .....	86.6	86.5	87.0	87.5	87.1	87.1	87.2	87.5	87.8	88.4	89.1	89.0	89.0	
Ohio .....	1,461.6	1,468.3	1,469.6	1,473.2	1,477.1	1,478.5	1,481.9	1,485.0	1,484.7	1,497.6	1,494.3	1,500.5	1,501.6	
Oklahoma .....	375.3	377.5	377.4	378.7	380.7	382.0	381.7	382.6	383.0	382.9	385.2	386.2	389.7	
Oregon .....	398.8	401.0	399.7	403.7	403.8	404.2	404.5	404.2	408.7	412.0	412.9	412.7	414.4	
Pennsylvania .....	1,695.7	1,700.7	1,706.6	1,710.8	1,717.2	1,719.8	1,721.6	1,728.8	1,732.9	1,739.0	1,733.9	1,732.6	1,733.7	
Rhode Island .....	150.8	151.2	150.4	151.2	151.7	152.3	152.5	152.3	152.1	151.9	151.7	151.6	152.3	
South Carolina .....	390.0	391.3	392.3	396.3	399.1	398.5	398.6	400.2	401.4	409.3	410.9	413.0	415.4	
South Dakota .....	91.6	92.3	92.1	92.7	92.7	92.8	92.7	92.2	92.5	92.9	94.4	94.5	95.2	
Tennessee .....	679.3	683.3	685.5	687.7	689.3	688.2	690.6	692.6	691.1	699.0	698.7	700.4	696.1	
Texas .....	2,361.2	2,375.9	2,390.1	2,401.8	2,419.1	2,425.1	2,436.5	2,447.2	2,457.1	2,448.9	2,473.4	2,479.6	2,494.5	
Utah .....	266.1	267.4	268.3	270.0	271.7	272.5	273.6	275.6	276.4	277.7	277.1	279.1	278.7	
Vermont .....	83.1	83.5	83.5	83.8	84.1	84.0	84.0	84.3	84.7	83.9	84.2	84.4	84.8	
Virginia .....	961.6	965.9	973.8	976.8	981.3	984.9	989.3	991.9	999.2	1,004.5	1,007.8	1,014.7	1,018.6	
Washington .....	671.5	675.6	675.9	677.5	680.2	680.8	683.3	686.6	689.4	689.5	695.6	698.8	704.6	
West Virginia .....	197.0	197.3	198.4	199.3	199.8	200.6	202.8	202.9	202.5	202.5	203.4	203.7	202.0	
Wisconsin .....	670.7	673.0	675.6	683.0	684.8	687.5	688.8	690.7	692.3	693.5	691.0	693.6	695.9	
Wyoming .....	48.8	49.1	48.5	49.0	48.8	48.6	48.9	48.9	49.0	48.8	48.5	48.8	48.8	

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	1997										1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	
<b>Government</b>														
Alabama .....	345.5	345.8	345.3	345.3	346.0	346.2	347.0	347.1	347.3	346.7	346.2	346.3	345.2	
Alaska .....	73.3	73.1	72.9	73.5	73.0	72.8	72.9	73.3	73.5	73.1	73.3	73.2	73.6	
Arizona .....	325.1	326.8	327.3	318.2	325.7	326.6	327.0	327.3	327.5	325.4	329.5	332.6	331.8	
Arkansas .....	183.1	182.8	182.9	184.0	185.6	183.7	182.8	183.5	183.9	183.7	184.0	184.7	185.3	
California .....	2,139.9	2,142.1	2,142.4	2,127.0	2,145.2	2,151.8	2,155.2	2,163.6	2,160.5	2,157.5	2,161.0	2,170.2	2,174.3	
Colorado .....	313.0	313.8	314.5	315.6	315.3	316.4	316.2	316.2	317.0	318.2	317.8	318.0	317.9	
Connecticut .....	224.8	224.5	224.4	223.5	224.2	225.2	225.3	225.6	226.3	225.8	227.0	226.8	226.4	
Delaware .....	52.9	53.1	53.2	53.4	53.7	53.9	53.4	53.6	53.8	53.9	53.8	53.7	54.1	
District of Columbia .....	234.1	233.7	232.7	235.1	232.9	231.4	229.9	229.3	228.6	230.0	227.9	227.2	229.1	
Florida .....	939.2	941.7	942.8	938.8	942.2	944.4	944.8	949.3	950.5	956.9	953.2	951.3	949.2	
Georgia .....	574.7	575.9	576.2	578.4	580.0	581.1	581.3	581.1	582.9	584.0	586.2	587.1	588.6	
Hawaii .....	110.3	110.7	111.4	110.6	112.7	114.4	112.7	112.1	111.6	111.3	110.8	111.3	111.5	
Idaho .....	98.7	99.0	98.9	99.7	100.1	99.7	99.7	99.6	99.4	101.1	101.4	102.1	102.0	
Illinois .....	800.5	806.5	804.6	808.1	808.8	808.3	807.5	806.2	804.1	803.8	801.2	803.4	804.0	
Indiana .....	391.5	393.4	395.0	393.4	392.1	393.0	389.4	386.1	390.4	395.2	391.0	389.9	391.1	
Iowa .....	233.9	234.1	234.3	234.5	234.5	235.0	236.8	233.4	234.6	236.8	237.8	237.5	238.4	
Kansas .....	236.0	236.7	235.7	235.8	235.2	234.7	237.0	235.2	237.8	239.4	239.0	239.7	237.2	
Kentucky .....	291.3	290.8	291.3	291.5	291.1	290.3	290.2	291.0	291.1	294.1	292.5	294.3	292.9	
Louisiana .....	362.1	362.7	364.1	361.9	364.5	365.3	365.9	366.5	365.2	365.4	367.7	367.0	367.5	
Maine .....	93.1	92.6	92.9	92.9	92.9	92.9	93.1	92.8	93.0	91.6	93.0	92.5	92.2	
Maryland .....	416.8	417.0	418.1	420.1	417.7	418.4	416.9	416.0	414.8	420.4	420.4	419.8	421.1	
Massachusetts .....	403.3	404.4	404.9	407.2	407.5	407.3	406.9	407.3	409.0	408.5	409.3	407.7	408.7	
Michigan .....	650.6	657.3	649.9	646.1	644.6	652.6	647.3	643.9	650.0	654.7	655.1	652.3	655.4	
Minnesota .....	377.7	377.8	379.1	380.3	382.9	379.9	379.8	380.1	379.9	379.7	381.1	382.6	380.1	
Mississippi .....	218.0	217.7	217.1	218.8	222.3	220.3	220.3	220.3	220.3	220.2	221.7	220.7	222.0	
Missouri .....	411.7	414.3	415.9	414.6	415.7	415.6	415.4	414.1	416.4	416.4	418.3	415.3	417.8	
Montana .....	76.9	76.7	74.4	76.5	76.7	77.0	77.3	77.3	77.9	77.0	77.0	77.6	77.3	
Nebraska .....	151.8	151.6	152.0	153.6	153.3	152.3	153.3	153.9	154.0	152.8	153.6	152.7	153.5	
Nevada .....	105.3	105.8	109.2	106.9	107.2	107.4	108.0	108.0	109.2	108.4	109.5	109.3	110.6	
New Hampshire .....	78.9	78.9	78.5	79.5	78.8	77.8	78.2	78.4	75.6	77.8	78.4	77.9	79.2	
New Jersey .....	568.8	569.1	569.4	568.8	568.3	575.9	570.7	570.0	570.5	570.0	569.6	568.4	566.8	
New Mexico .....	176.4	177.3	178.1	178.8	178.4	177.8	178.0	178.2	178.6	178.3	178.3	179.1	178.1	
New York .....	1,373.7	1,375.5	1,371.5	1,373.2	1,375.1	1,374.7	1,379.8	1,374.7	1,373.3	1,368.3	1,370.6	1,371.4	1,367.3	
North Carolina .....	573.9	573.8	574.4	578.9	599.2	586.9	588.4	589.0	589.0	587.5	593.0	592.3	594.4	
North Dakota .....	70.8	71.1	68.5	69.4	69.7	71.1	70.3	70.4	70.5	70.9	71.1	70.9	70.9	
Ohio .....	756.6	758.1	760.5	764.3	764.2	763.0	760.5	761.4	760.9	763.4	760.6	761.7	762.2	
Oklahoma .....	274.4	275.1	269.3	270.7	272.6	278.7	276.8	277.6	277.3	277.6	278.7	280.4	279.8	
Oregon .....	250.1	249.2	250.5	248.7	251.2	251.7	252.1	248.9	253.9	254.7	255.6	256.3	255.9	
Pennsylvania .....	715.6	716.9	704.1	711.6	713.5	715.2	713.7	712.7	713.8	717.8	712.2	711.2	712.3	
Rhode Island .....	63.4	63.3	63.8	63.5	64.1	64.4	64.1	63.8	64.8	65.1	65.3	64.7	65.4	
South Carolina .....	298.8	299.0	299.2	299.7	300.0	299.8	299.9	290.9	300.0	303.4	303.7	304.2	304.0	
South Dakota .....	70.0	70.0	67.2	69.9	70.1	70.5	70.4	70.1	70.1	69.9	69.8	70.7	70.6	
Tennessee .....	379.7	380.5	388.0	385.4	384.8	384.7	384.0	383.9	383.6	385.6	385.6	385.4	385.1	
Texas .....	1,477.8	1,479.6	1,475.4	1,477.0	1,486.5	1,492.6	1,493.9	1,495.8	1,496.7	1,490.8	1,495.1	1,502.0	1,508.3	
Utah .....	170.8	171.4	171.7	171.8	172.0	172.7	172.7	174.3	174.8	175.0	175.7	177.5	178.2	
Vermont .....	45.6	45.6	45.5	45.6	45.4	45.4	45.5	45.4	45.7	45.4	45.6	45.4	45.4	
Virginia .....	596.7	595.6	596.0	591.0	594.0	594.4	597.8	598.6	598.5	595.7	596.7	597.2	598.3	
Washington .....	456.5	455.9	459.2	462.0	459.3	459.1	459.0	456.3	460.3	456.3	457.5	457.0	460.1	
West Virginia .....	139.1	139.0	138.9	138.9	139.2	139.6	140.5	140.9	140.8	139.3	140.2	139.9	140.4	
Wisconsin .....	384.5	386.7	386.5	383.2	385.2	385.6	387.9	387.7	388.7	390.0	391.3	390.0	392.5	
Wyoming .....	57.4	57.7	57.2	59.9	60.3	57.3	57.0	56.9	57.1	56.9	57.0	57.3	57.6	

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

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

**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**B-8. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
<b>Total private</b> .....	34.7	34.5	34.5	34.7	34.6	34.6	34.7	34.7	34.8	34.7	34.6	34.5	34.7
<b>Goods-producing</b> .....	41.4	41.2	41.3	41.3	41.3	41.3	41.2	41.4	41.6	41.4	41.0	40.8	41.0
<b>Mining</b> .....	45.8	45.6	45.3	45.6	45.1	45.2	45.2	44.9	45.4	44.4	43.8	44.2	44.6
<b>Construction</b> .....	39.2	38.9	39.0	38.8	39.1	38.9	38.2	39.0	39.8	39.2	38.5	38.7	38.7
<b>Manufacturing</b> .....	42.0	41.9	41.9	41.9	41.9	42.0	42.1	42.2	42.1	42.0	41.8	41.4	41.7
<i>Overtime hours</i> .....	4.9	4.7	4.8	4.8	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.5	4.6
<b>Durable goods</b> .....	42.9	42.7	42.7	42.8	42.7	42.8	42.9	43.0	42.8	42.8	42.5	41.9	42.2
<i>Overtime hours</i> .....	5.2	5.0	5.1	5.1	5.0	5.1	5.2	5.2	5.2	5.1	5.0	4.6	4.8
Lumber and wood products .....	41.1	41.3	41.2	41.0	40.9	41.0	41.1	41.0	41.2	41.1	41.2	41.2	41.1
Furniture and fixtures .....	40.3	40.0	40.0	40.2	40.4	40.4	40.6	40.7	41.0	41.0	40.7	40.7	40.9
Stone, clay, and glass products .....	43.3	43.0	43.2	43.1	43.2	43.2	42.9	43.6	43.7	43.6	43.2	43.3	43.7
Primary metal industries .....	44.9	44.8	44.6	45.0	45.0	45.2	45.2	45.2	45.2	44.8	44.6	43.9	44.2
Blast furnaces and basic steel products .....	44.9	44.7	44.3	45.1	45.0	45.4	45.3	45.4	46.0	45.4	45.3	44.8	45.5
Fabricated metal products .....	42.6	42.5	42.5	42.5	42.5	42.6	42.7	42.9	42.7	42.7	42.4	41.8	41.2
Industrial machinery and equipment .....	43.6	43.4	43.5	43.5	43.5	43.6	43.7	43.7	43.6	43.4	43.3	42.6	43.1
Electronic and other electrical equipment .....	42.1	42.0	42.1	41.9	41.8	41.9	42.0	42.0	41.8	41.9	41.4	41.0	41.4
Transportation equipment .....	44.5	44.3	44.1	44.4	44.0	44.3	44.1	44.5	43.9	43.8	43.4	42.1	43.4
Motor vehicles and equipment .....	45.1	44.9	44.4	44.9	44.3	44.6	44.5	44.9	43.9	43.8	43.5	42.0	43.3
Instruments and related products .....	42.0	41.9	41.8	42.2	42.0	42.0	42.2	41.9	41.9	42.0	41.5	41.3	41.4
Miscellaneous manufacturing .....	40.2	40.2	40.4	40.2	40.3	40.4	40.5	40.6	40.4	40.4	40.5	40.1	39.9
<b>Nondurable goods</b> .....	40.8	40.7	40.7	40.7	40.8	40.9	41.0	41.0	41.1	40.9	40.8	40.7	40.8
<i>Overtime hours</i> .....	4.4	4.2	4.3	4.3	4.3	4.4	4.5	4.4	4.4	4.4	4.4	4.2	4.4
Food and kindred products .....	41.4	41.0	41.2	41.2	41.2	41.3	41.5	41.6	41.8	41.5	41.5	41.2	41.6
Tobacco products .....	38.8	38.3	36.6	38.0	38.2	39.1	39.0	38.8	38.3	38.5	37.7	38.1	39.0
Textile mill products .....	41.4	41.3	41.4	41.3	41.5	41.5	41.5	41.7	41.8	41.5	41.2	41.0	41.3
Apparel and other textile products .....	37.2	37.3	37.1	37.1	37.3	37.3	37.2	37.5	37.4	37.4	37.2	37.7	37.5
Paper and allied products .....	43.8	43.5	43.5	43.5	43.6	43.7	44.0	43.7	43.6	43.4	43.4	43.0	43.6
Printing and publishing .....	38.4	38.3	38.4	38.3	38.6	38.6	38.8	38.6	38.5	38.5	38.4	38.2	38.3
Chemicals and allied products .....	43.3	43.1	43.1	43.3	43.3	43.4	43.4	43.2	43.5	43.4	43.4	43.0	42.1
Petroleum and coal products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products .....	41.7	41.6	41.7	41.8	41.7	42.1	42.0	42.1	42.0	41.8	41.5	41.6	42.0
Leather and leather products .....	38.3	38.3	38.3	38.1	38.4	38.3	38.2	38.4	38.3	38.8	37.9	37.5	37.8
<b>Service-producing</b> .....	32.9	32.7	32.7	32.9	32.8	32.9	32.9	32.9	33.0	33.0	32.8	32.9	33.0
<b>Transportation and public utilities</b> .....	39.6	39.5	39.3	40.1	39.9	39.8	39.9	39.9	40.0	39.9	39.8	39.6	40.0
<b>Wholesale trade</b> .....	38.6	38.4	38.3	38.4	38.4	38.4	38.5	38.3	38.5	38.5	38.3	38.3	38.5
<b>Retail trade</b> .....	28.9	28.8	28.9	29.0	28.9	29.0	29.0	28.9	29.0	29.0	28.9	29.0	29.1
<b>Finance, insurance, and real estate</b> .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Services</b> .....	32.6	32.5	32.5	32.7	32.6	32.6	32.7	32.7	32.8	32.7	32.6	32.6	32.7

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

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

components, cannot be separated with sufficient precision.

<sup>P</sup> = preliminary.

NOTE: Data have been revised to reflect March 1997 benchmarks, refinements to the seasonal adjustment process for the hours series, 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 workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(1982=100)

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P	MayP
<b>Total private</b> .....	141.2	140.9	141.3	141.7	142.1	142.6	143.2	143.6	144.6	144.4	143.8	143.9	144.9
<b>Goods-producing</b> .....	114.5	114.0	114.2	114.4	114.6	114.9	114.9	116.0	117.1	116.4	115.1	114.7	115.1
<b>Mining</b> .....	58.7	58.0	57.8	58.1	57.6	57.8	57.9	57.5	58.3	57.0	55.6	55.5	56.1
<b>Construction</b> .....	156.6	155.3	156.1	155.7	157.1	156.3	154.4	159.3	165.0	162.4	158.7	161.4	160.7
<b>Manufacturing</b> .....	109.1	108.8	108.9	109.2	109.2	109.8	110.1	110.6	110.6	110.3	109.7	108.6	109.1
<b>Durable goods</b> .....	112.2	112.2	112.3	113.0	112.8	113.5	113.9	114.6	114.6	114.5	113.7	112.1	112.7
Lumber and wood products .....	142.1	142.6	142.3	141.6	141.2	141.8	142.3	142.6	143.8	143.4	143.6	143.6	143.2
Furniture and fixtures .....	128.0	127.3	127.9	128.0	128.6	128.9	130.2	131.1	132.8	133.1	132.7	133.7	134.7
Stone, clay, and glass products .....	112.3	111.3	112.6	112.3	112.6	113.1	112.6	114.9	116.5	116.2	113.9	114.1	115.4
Primary metal industries .....	94.1	93.9	93.7	95.2	95.4	95.8	95.9	96.3	96.6	95.8	95.5	93.7	94.2
Blast furnaces and basic steel products .....	72.5	72.6	72.0	73.3	73.5	73.8	74.0	73.8	75.6	74.6	74.4	73.2	74.3
Fabricated metal products .....	117.3	117.3	117.2	117.8	117.9	118.5	119.0	119.9	119.8	120.1	119.1	117.5	115.4
Industrial machinery and equipment .....	108.9	108.9	109.3	109.8	109.9	110.9	111.4	111.7	111.7	111.3	111.1	109.1	110.3
Electronic and other electrical equipment .....	110.6	110.7	111.4	111.3	111.3	111.9	112.4	113.0	112.8	112.8	111.3	110.0	110.9
Transportation equipment .....	127.7	128.0	127.7	130.5	128.7	130.2	131.0	131.8	130.0	130.1	128.7	124.4	127.5
Motor vehicles and equipment .....	167.4	168.2	166.5	171.6	167.6	169.2	169.9	171.2	166.8	166.6	164.6	158.7	162.2
Instruments and related products .....	76.3	76.5	76.1	76.7	76.7	76.7	77.0	76.9	77.4	77.6	76.8	76.5	76.8
Miscellaneous manufacturing .....	104.0	103.7	104.2	103.7	103.2	103.4	102.9	103.9	103.8	103.8	104.1	103.4	101.8
<b>Nondurable goods</b> .....	104.8	104.2	104.1	103.9	104.3	104.6	104.9	105.1	105.2	104.6	104.3	103.8	104.1
Food and kindred products .....	117.1	116.0	116.2	115.9	116.4	116.8	117.8	118.4	119.2	118.5	118.5	118.0	119.4
Tobacco products .....	61.5	60.7	58.0	56.5	58.6	62.0	63.7	61.5	60.7	61.0	59.7	62.3	61.8
Textile mill products .....	90.0	89.6	90.0	88.9	89.5	89.7	89.3	89.9	89.6	88.6	87.8	87.4	87.9
Apparel and other textile products .....	74.2	74.2	73.4	73.0	72.8	72.6	72.0	72.2	71.6	70.8	70.2	69.9	68.8
Paper and allied products .....	111.7	110.7	110.7	110.3	110.8	111.2	112.2	111.6	111.6	111.1	111.1	109.6	110.8
Printing and publishing .....	126.3	126.1	126.1	125.5	126.2	126.5	127.2	126.7	126.3	126.0	125.3	124.7	124.9
Chemicals and allied products .....	100.8	100.4	100.4	100.8	101.4	102.0	102.1	102.0	103.1	103.2	103.4	102.6	102.2
Petroleum and coal products .....	76.2	75.0	74.5	75.6	75.0	74.0	74.4	74.2	75.0	71.9	73.6	72.4	72.3
Rubber and misc. plastics products .....	145.6	145.3	145.2	146.0	146.0	147.4	147.2	148.2	148.4	147.9	147.2	147.5	148.6
Leather and leather products .....	41.8	40.6	40.0	39.2	39.5	39.4	38.7	38.9	38.3	38.7	37.3	36.3	36.0
<b>Service-producing</b> .....	153.2	153.0	153.5	154.0	154.5	155.0	155.9	156.0	156.9	157.0	156.7	157.0	158.3
<b>Transportation and public utilities</b> .....	130.3	130.0	129.3	127.5	131.2	130.9	131.1	131.0	131.5	131.1	130.9	130.2	132.3
<b>Wholesale trade</b> .....	126.4	125.8	125.8	126.4	126.4	126.7	127.2	126.9	128.0	128.2	127.6	127.8	128.6
<b>Retail trade</b> .....	137.5	137.2	137.7	138.4	138.1	138.9	139.4	139.2	139.8	139.9	139.3	139.8	141.0
<b>Finance, insurance, and real estate</b> .....	129.0	128.8	129.2	129.8	129.3	130.2	131.5	130.9	132.5	133.4	133.6	134.1	134.8
<b>Services</b> .....	185.8	185.9	186.8	187.9	188.4	189.0	190.3	191.0	192.1	192.0	191.9	192.3	193.7

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

P = preliminary.

NOTE: Data have been revised to reflect March 1997 benchmarks, refinements to the seasonal adjustment process for the hours series, 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) <sup>1</sup>			Percent change		
	March 1998 <sup>r</sup>	April 1998 <sup>r</sup>	May 1998 <sup>p</sup>	May 1997 to May 1998 <sup>p</sup>	March 1998 to April 1998 <sup>r</sup>	April 1998 To May 1998 <sup>p</sup>
Total .....	228,873	229,269	230,694	2.9	0.2	0.6
Private sector .....	191,790	192,250	193,388	2.9	.2	.6
Mining .....	1,333	1,337	1,350	-4.2	.3	.9
Construction .....	11,732	11,925	11,907	3.0	1.7	-2
Manufacturing .....	40,911	40,642	40,758	.4	-.7	.3
Durable goods .....	24,593	24,376	24,479	1.0	-.9	.4
Nondurable goods .....	16,318	16,267	16,278	-.5	-.3	.1
Transportation and public utilities .....	13,440	13,433	13,620	3.1	.0	1.4
Wholesale trade .....	13,509	13,537	13,626	2.5	.2	.7
Retail trade .....	33,451	33,671	33,921	2.6	.7	.7
Finance, insurance, and real estate .....	13,734	13,776	13,834	3.9	.3	.4
Services .....	63,681	63,928	64,372	4.5	.4	.7
Government .....	37,083	37,019	37,306	3.1	-.2	.8

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

<sup>p</sup> = preliminary.

<sup>r</sup> = revised.

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

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

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

**ESTABLISHMENT DATA  
EARNINGS  
SEASONALLY ADJUSTED**

**B-11. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry, seasonally adjusted**

Industry	1997								1998				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
<b>Average hourly earnings</b>													
<b>Total private</b> (in current dollars) .....	\$12.21	\$12.24	\$12.27	\$12.34	\$12.37	\$12.43	\$12.47	\$12.50	\$12.54	\$12.59	\$12.63	\$12.69	\$12.73
<b>Goods-producing</b> .....	13.85	13.86	13.89	13.95	13.98	14.05	14.10	14.15	14.16	14.21	14.25	14.26	14.28
<b>Mining</b> .....	16.09	16.14	16.15	16.16	16.24	16.37	16.48	16.46	16.47	16.76	16.82	16.70	16.80
<b>Construction</b> .....	15.93	15.97	15.99	16.06	16.10	16.17	16.24	16.34	16.27	16.34	16.40	16.46	16.49
<b>Manufacturing</b> .....	13.10	13.11	13.13	13.20	13.22	13.30	13.34	13.37	13.38	13.42	13.46	13.44	13.47
<b>Excluding overtime<sup>2</sup></b> .....	12.38	12.42	12.42	12.49	12.50	12.58	12.61	12.63	12.66	12.69	12.73	12.76	12.77
<b>Service-producing</b> .....	11.66	11.70	11.73	11.80	11.83	11.88	11.93	11.95	12.00	12.06	12.10	12.18	12.22
<b>Transportation and public utilities</b> .....	14.83	14.89	14.99	15.02	15.01	15.05	15.10	15.16	15.21	15.25	15.27	15.31	15.30
<b>Wholesale trade</b> .....	13.37	13.37	13.45	13.56	13.54	13.63	13.72	13.71	13.75	13.81	13.84	13.90	14.01
<b>Retail trade</b> .....	8.28	8.30	8.33	8.37	8.42	8.46	8.49	8.51	8.56	8.59	8.64	8.71	8.74
<b>Finance, insurance, and real estate</b> .....	13.25	13.31	13.36	13.51	13.53	13.60	13.65	13.66	13.72	13.83	13.85	14.00	14.01
<b>Services</b> .....	12.22	12.26	12.28	12.35	12.38	12.43	12.48	12.50	12.54	12.60	12.65	12.74	12.79
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	7.53	7.54	7.55	7.58	7.58	7.60	7.62	7.63	7.66	7.69	7.72	7.73	(4)
<b>Goods-producing</b> .....	8.54	8.54	8.55	8.56	8.56	8.59	8.61	8.64	8.64	8.68	8.70	8.69	(4)
<b>Service-producing</b> .....	7.19	7.21	7.22	7.24	7.24	7.26	7.29	7.30	7.33	7.36	7.39	7.42	(4)
<b>Average weekly earnings</b>													
<b>Total private</b> (in current dollars) .....	423.69	422.28	423.32	428.20	428.00	430.08	432.71	433.75	436.39	436.87	437.00	437.81	441.73
<b>Goods-producing</b> .....	573.39	571.03	573.66	576.14	577.37	580.27	580.92	585.81	589.06	588.29	584.25	581.81	585.48
<b>Mining</b> .....	736.92	735.98	731.60	736.90	732.42	739.92	744.90	739.05	747.74	744.14	736.72	738.14	749.28
<b>Construction</b> .....	624.46	621.23	623.61	623.13	629.51	629.01	620.37	637.26	647.55	640.53	631.40	637.00	638.16
<b>Manufacturing</b> .....	550.20	549.31	550.15	553.08	553.92	558.60	561.61	564.21	563.30	563.64	562.63	556.42	561.70
<b>Service-producing</b> .....	383.61	382.59	383.57	388.22	388.02	390.85	392.50	393.16	396.00	397.98	396.88	400.72	403.26
<b>Transportation and public utilities</b> .....	587.27	588.16	589.11	602.30	598.90	598.99	602.49	604.88	608.40	608.48	607.75	606.28	612.00
<b>Wholesale trade</b> .....	516.08	513.41	515.14	520.70	519.94	523.39	528.22	525.09	529.38	531.69	530.07	532.37	539.39
<b>Retail trade</b> .....	239.29	239.04	240.74	242.73	243.34	245.34	246.21	245.94	248.24	249.11	249.70	252.59	254.33
<b>Finance, insurance, and real estate</b> .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
<b>Services</b> .....	398.37	398.45	399.10	403.85	403.59	405.22	408.10	408.75	411.31	412.02	412.39	415.32	418.23
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	261.38	260.18	260.50	262.86	262.09	262.89	264.33	264.80	266.42	266.71	266.95	266.79	(4)
<b>Goods-producing</b> .....	353.73	351.84	353.02	353.68	353.56	354.69	354.87	357.64	359.62	359.15	356.90	354.55	(4)
<b>Service-producing</b> .....	236.65	235.73	236.04	238.32	237.61	238.91	239.77	240.02	241.76	242.97	242.44	244.19	(4)

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

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

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

<sup>4</sup> Not available.

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

<sup>P</sup> = preliminary.

NOTE: Data have been revised to reflect March 1997 benchmarks, refinements to the seasonal adjustment process for the hours and earnings series, 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 <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Total</b> .....		122,690	121,882	124,006	125,068	126,114	-	-	-	-	-
<b>Total private</b> .....		103,120	102,017	103,880	104,938	105,926	84,529	83,574	84,873	85,798	86,714
<b>Mining</b> .....		592	585	577	577	581	446	440	437	437	441
Metal mining .....	10	53.7	53.4	50.4	50.3	50.8	41.3	41.2	38.4	38.3	-
Iron ores .....	101	8.6	8.5	8.3	8.3	-	7.1	7.0	6.9	6.9	-
Copper ores .....	102	15.9	15.8	15.4	15.3	-	12.0	12.0	11.6	11.5	-
Coal mining .....	12	95.8	96.7	93.0	92.1	91.6	78.6	79.5	76.1	75.4	-
Bituminous coal and lignite mining .....	122	90.0	90.7	87.5	86.6	-	73.7	74.4	71.4	70.7	-
Oil and gas extraction .....	13	334.6	328.3	330.8	327.6	329.0	244.9	238.6	244.4	241.9	-
Crude petroleum and natural gas .....	131	142.6	142.2	136.3	135.5	-	81.8	80.9	79.2	78.9	-
Oil and gas field services .....	138	187.0	181.2	189.5	187.2	-	159.1	153.8	161.0	158.8	-
Nonmetallic minerals, except fuels .....	14	107.5	106.8	102.8	107.0	109.5	81.4	80.9	77.6	81.5	-
Crushed and broken stone .....	142	41.3	41.4	39.4	41.1	-	32.3	32.4	30.5	32.2	-
Sand and gravel .....	144	35.8	34.8	33.3	35.6	-	-	-	-	-	-
Chemical and fertilizer minerals .....	147	11.8	11.9	11.8	11.7	-	-	-	-	-	-
<b>Construction</b> .....		5,686	5,493	5,459	5,755	5,971	4,409	4,231	4,150	4,434	4,632
General building contractors .....	15	1,316.3	1,270.9	1,300.6	1,345.7	1,378.7	928.2	888.5	897.3	936.4	-
Residential building construction .....	152	681.7	658.1	681.6	706.1	-	462.9	442.3	454.7	475.3	-
Operative builders .....	153	27.0	26.8	27.3	27.8	-	11.0	10.8	10.7	11.1	-
Nonresidential building construction .....	154	607.6	586.0	591.7	611.8	-	454.3	435.4	431.9	450.0	-
Heavy construction, except building .....	16	795.2	771.6	713.6	790.6	846.8	663.5	641.4	584.1	658.7	-
Highway and street construction .....	161	241.8	225.0	185.4	232.7	-	197.3	181.3	141.1	187.5	-
Heavy construction, except highway .....	162	553.3	546.6	528.2	557.9	-	466.2	460.1	443.0	471.2	-
Special trade contractors .....	17	3,574.7	3,450.6	3,445.1	3,618.6	3,745.7	2,817.0	2,700.6	2,668.9	2,839.2	-
Plumbing, heating, and air conditioning .....	171	792.3	772.1	783.8	793.2	-	585.7	567.5	572.5	581.6	-
Painting and paper hanging .....	172	199.0	188.2	181.5	196.5	-	164.8	154.3	146.4	162.1	-
Electrical work .....	173	681.4	654.6	694.0	696.9	-	539.2	513.7	546.7	548.2	-
Masonry, stonework, and plastering .....	174	468.4	454.1	461.9	485.3	-	402.8	388.4	394.7	417.6	-
Carpentry and floor work .....	175	253.9	246.4	253.3	257.7	-	194.8	187.6	190.5	195.0	-
Roofing, siding, and sheet metal work .....	176	241.0	234.2	214.6	239.5	-	192.1	186.4	164.0	188.3	-
<b>Manufacturing</b> .....		18,657	18,531	18,744	18,746	18,766	12,896	12,800	12,954	12,942	12,958
<b>Durable goods</b> .....		10,987	10,911	11,140	11,153	11,162	7,539	7,486	7,657	7,660	7,660
Lumber and wood products .....	24	793.1	782.6	785.7	790.2	798.7	652.8	643.3	645.4	649.2	656.2
Logging .....	241	81.9	76.6	74.2	72.7	-	65.5	60.6	58.2	56.6	-
Sawmills and planing mills .....	242	182.0	180.9	180.4	181.2	-	158.6	157.6	157.3	158.1	-
Sawmills and planing mills, general .....	2421	144.1	143.5	141.8	142.7	-	125.1	124.6	123.1	124.0	-
Hardwood dimension and flooring mills .....	2426	36.0	35.5	36.7	36.5	-	31.9	31.4	32.6	32.4	-
Millwork, plywood, and structural members .....	243	293.6	290.1	296.5	298.9	-	235.7	232.8	237.8	240.2	-
Millwork .....	2431	116.8	115.5	117.1	118.3	-	89.8	88.8	90.6	91.8	-
Wood kitchen cabinets .....	2434	81.0	79.8	82.9	83.4	-	65.5	64.3	66.7	67.4	-
Hardwood veneer and plywood .....	2435	28.4	28.4	29.3	28.8	-	24.1	24.2	25.0	24.6	-
Softwood veneer and plywood .....	2436	29.2	28.9	28.5	28.9	-	27.0	26.9	25.9	26.1	-
Wood containers .....	244	53.7	53.7	53.5	53.7	-	45.9	45.8	45.7	45.8	-
Wood buildings and mobile homes .....	245	92.5	91.6	92.7	94.6	-	74.2	73.4	74.2	75.9	-
Mobile homes .....	2451	70.2	69.9	70.8	72.0	-	58.9	58.4	59.2	60.5	-
Miscellaneous wood products .....	249	89.4	89.7	88.4	89.1	-	72.9	73.1	72.2	72.6	-
Furniture and fixtures .....	25	510.1	508.3	521.1	523.7	525.1	405.1	403.1	415.8	418.1	418.6
Household furniture .....	251	276.8	278.6	283.6	284.4	-	233.6	235.2	240.6	241.1	-
Wood household furniture .....	2511	125.2	126.8	125.5	126.1	-	108.5	109.9	108.8	109.5	-
Upholstered household furniture .....	2512	86.7	86.6	89.0	89.6	-	73.1	73.2	75.5	75.8	-
Metal household furniture .....	2514	19.7	20.7	22.3	21.9	-	16.3	17.2	19.0	18.6	-
Mattresses and bedsprings .....	2515	33.4	32.6	35.1	35.1	-	25.8	25.0	27.4	27.4	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Furniture and fixtures—Continued											
Office furniture .....	252	63.4	62.3	65.0	65.1	—	46.8	45.9	48.2	48.2	—
Public building and related furniture .....	253	43.3	43.1	44.4	45.1	—	34.1	34.0	34.7	35.3	—
Partitions and fixtures .....	254	87.1	85.1	88.0	88.5	—	64.5	62.3	65.8	66.3	—
Miscellaneous furniture and fixtures .....	259	39.5	39.2	40.1	40.6	—	26.0	25.7	26.5	27.2	—
Stone, clay, and glass products .....	32	552.3	549.7	546.4	559.4	564.3	430.9	427.3	426.0	437.0	441.2
Flat glass .....	321	16.8	16.8	16.6	16.5	—	13.5	13.5	13.3	13.2	—
Glass and glassware, pressed or blown .....	322	72.0	71.8	72.4	71.6	—	59.8	59.6	59.9	59.0	—
Glass containers .....	3221	26.3	26.6	25.5	25.4	—	23.6	23.8	22.8	22.7	—
Pressed and blown glass, nec .....	3229	45.7	45.2	46.9	46.2	—	36.3	35.8	37.1	36.3	—
Products of purchased glass .....	323	62.7	61.7	63.0	62.8	—	49.0	47.9	49.1	48.8	—
Cement, hydraulic .....	324	17.3	17.1	17.3	17.4	—	13.2	13.0	13.1	13.1	—
Structural clay products .....	325	34.1	34.5	32.6	33.2	—	26.6	27.1	25.2	25.8	—
Pottery and related products .....	326	39.2	39.7	38.3	38.6	—	31.0	31.4	30.1	30.3	—
Concrete, gypsum, and plaster products .....	327	216.8	214.9	208.4	220.9	—	166.4	164.2	159.1	170.3	—
Concrete block and brick .....	3271	18.2	18.1	17.6	18.2	—	11.7	11.6	11.2	11.5	—
Concrete products, nec .....	3272	73.0	72.6	73.0	74.5	—	55.5	54.8	55.9	57.1	—
Ready-mixed concrete .....	3273	107.7	106.5	99.9	110.3	—	85.2	83.9	77.8	87.6	—
Misc. nonmetallic mineral products .....	329	78.6	78.4	78.9	79.3	—	60.4	59.9	61.1	61.4	—
Abrasive products .....	3291	20.0	19.9	20.2	20.5	—	15.9	15.7	16.2	16.4	—
Asbestos products .....	3292	2.5	2.6	2.5	2.5	—	2.1	2.1	2.1	2.1	—
Mineral wool .....	3296	24.1	23.9	24.1	24.1	—	—	—	—	—	—
Primary metal industries .....	33	710.7	708.1	719.3	716.7	715.9	555.5	552.8	565.0	563.2	561.5
Blast furnaces and basic steel products .....	331	235.4	234.2	235.2	234.2	234.7	181.3	180.3	182.2	181.6	181.5
Blast furnaces and steel mills .....	3312	163.4	163.1	162.3	161.5	—	126.9	126.7	126.9	126.2	—
Steel pipe and tubes .....	3317	28.0	27.7	28.8	28.7	—	21.1	20.9	21.7	21.6	—
Iron and steel foundries .....	332	130.0	129.1	134.2	134.0	—	106.7	106.0	110.2	110.0	—
Gray and ductile iron foundries .....	3321	80.5	80.5	81.6	81.7	—	66.8	66.7	67.5	67.5	—
Malleable iron foundries .....	3322	4.6	4.6	4.7	4.8	—	3.6	3.6	3.6	3.7	—
Steel foundries, nec .....	3325	27.0	26.5	28.7	28.5	—	22.1	21.9	23.6	23.5	—
Primary nonferrous metals .....	333	39.3	39.1	39.3	39.2	—	30.3	30.2	30.5	30.5	—
Primary aluminum .....	3334	22.3	22.2	22.3	22.3	—	18.0	18.0	18.2	18.2	—
Nonferrous rolling and drawing .....	335	168.4	168.6	168.9	168.4	—	128.9	128.6	130.0	129.6	—
Copper rolling and drawing .....	3351	22.4	22.4	22.2	22.3	—	17.6	17.6	17.9	18.0	—
Aluminum sheet, plate, and foil .....	3353	21.4	21.8	21.4	21.0	—	15.9	16.1	16.1	15.7	—
Nonferrous wire drawing and insulating .....	3357	72.3	72.4	72.7	72.6	—	55.0	54.7	55.4	55.3	—
Nonferrous foundries (castings) .....	336	91.3	91.0	93.6	92.9	—	74.2	74.0	75.9	75.4	—
Aluminum foundries .....	3365	25.3	25.2	25.9	25.9	—	20.7	20.6	21.2	21.2	—
Fabricated metal products .....	34	1,474.9	1,466.6	1,494.6	1,494.2	1,495.0	1,111.8	1,105.8	1,129.7	1,129.0	1,127.5
Metal cans and shipping containers .....	341	37.7	37.7	37.0	36.9	—	32.2	32.2	31.4	31.3	—
Metal cans .....	3411	30.2	30.2	29.7	29.6	—	26.1	26.2	25.6	25.6	—
Cutlery, handtools, and hardware .....	342	125.4	125.2	126.6	126.4	—	95.5	95.3	97.7	97.5	—
Hand and edge tools, and blades and handsaws ...	3423,5	43.2	43.3	43.1	43.4	—	33.4	33.6	33.4	33.6	—
Hardware, nec .....	3429	69.4	69.1	70.5	70.0	—	52.8	52.5	54.4	54.0	—
Plumbing and heating, except electric .....	343	58.6	58.1	59.0	58.7	—	41.8	41.5	41.5	41.2	—
Plumbing fixture fittings and trim .....	3432	23.7	23.9	24.5	24.5	—	17.2	17.3	17.7	17.7	—
Heating equipment, except electric .....	3433	20.8	20.2	20.3	20.0	—	14.0	13.5	13.1	12.8	—
Fabricated structural metal products .....	344	450.9	447.5	452.4	452.6	—	330.9	328.6	331.2	331.1	—
Fabricated structural metal .....	3441	78.1	77.4	78.0	78.3	—	57.5	57.0	57.3	57.4	—
Metal doors, sash, and trim .....	3442	78.5	77.5	77.3	77.4	—	58.2	57.3	56.6	56.7	—
Fabricated plate work (boiler shops) .....	3443	101.1	101.4	102.2	101.4	—	73.0	73.2	73.9	73.4	—
Sheet metal work .....	3444	120.4	119.1	121.6	121.6	—	92.6	91.9	93.2	93.1	—
Architectural metal work .....	3446	30.6	30.7	31.2	31.2	—	21.9	21.9	22.8	22.7	—
Screw machine products, bolts, etc .....	345	104.4	103.9	108.4	108.5	—	82.0	81.6	85.5	85.4	—
Screw machine products .....	3451	54.3	54.1	56.9	56.9	—	44.2	44.0	46.5	46.4	—
Bolts, nuts, rivets, and washers .....	3452	50.1	49.8	51.5	51.6	—	37.8	37.6	39.0	39.0	—
Metal forgings and stampings .....	346	254.8	254.1	260.0	260.0	—	202.9	203.1	206.4	206.2	—
Iron and steel forgings .....	3462	32.0	31.6	33.5	33.6	—	24.5	24.2	25.7	25.7	—
Automotive stampings .....	3465	114.3	114.9	115.8	116.3	—	94.3	95.1	95.1	95.5	—
Metal stampings, nec .....	3469	95.6	94.7	97.3	96.7	—	74.4	74.0	75.4	74.7	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Metal services, nec .....	347	138.2	136.5	141.9	142.3	-	111.0	109.2	114.9	115.3	-
Plating and polishing .....	3471	84.3	83.1	86.5	86.5	-	68.3	66.9	70.9	70.8	-
Metal coating and allied services .....	3479	53.9	53.4	55.4	55.8	-	42.6	42.3	44.0	44.5	-
Ordnance and accessories, nec .....	348	43.1	43.5	41.2	41.0	-	23.3	23.2	23.2	23.3	-
Ammunition, except for small arms, nec .....	3483	22.8	22.8	22.0	21.8	-	9.8	9.5	10.0	10.0	-
Miscellaneous fabricated metal products .....	349	262.0	260.1	268.1	267.8	-	192.4	191.1	197.9	197.7	-
Valves and pipe fittings, nec .....	3494	25.8	25.6	26.1	25.9	-	19.1	19.0	19.2	19.1	-
Misc. fabricated wire products .....	3496	56.8	57.0	57.0	56.8	-	42.8	43.1	42.9	42.9	-
Industrial machinery and equipment .....	35	2,163.4	2,154.2	2,211.0	2,207.9	2,205.2	1,361.7	1,359.9	1,400.5	1,397.1	1,393.7
Engines and turbines .....	351	83.1	84.0	83.5	83.5	-	53.1	54.4	52.5	52.5	-
Turbines and turbine generator sets .....	3511	24.3	24.2	24.1	24.2	-	13.7	13.7	13.6	13.6	-
Internal combustion engines, nec .....	3519	58.8	59.8	59.4	59.3	-	39.5	40.7	38.9	38.9	-
Farm and garden machinery .....	352	104.1	107.2	107.2	106.8	-	75.9	79.2	78.6	78.0	-
Farm machinery and equipment .....	3523	77.3	76.3	80.1	79.8	-	55.8	55.2	58.4	58.0	-
Construction and related machinery .....	353	243.3	239.4	253.4	254.4	-	158.5	155.5	166.0	166.1	-
Construction machinery .....	3531	89.3	88.8	92.8	92.9	-	61.0	60.8	64.1	63.9	-
Mining machinery .....	3532	17.1	17.1	16.8	16.9	-	10.2	10.3	10.0	10.0	-
Oil and gas field machinery .....	3533	46.8	44.7	51.4	51.5	-	31.7	30.2	34.8	35.0	-
Conveyors and conveying equipment .....	3535	40.3	39.8	41.1	41.7	-	22.6	22.2	22.2	22.4	-
Industrial trucks and tractors .....	3537	31.0	30.5	32.0	32.1	-	21.3	20.8	22.5	22.3	-
Metalworking machinery .....	354	348.9	348.0	352.8	352.1	-	248.6	248.0	253.3	252.3	-
Machine tools, metal cutting types .....	3541	42.3	42.4	42.6	42.8	-	26.5	26.4	27.1	27.0	-
Machine tools, metal forming types .....	3542	17.9	17.9	18.2	18.1	-	11.4	11.5	11.4	11.4	-
Special dies, tools, jigs, and fixtures .....	3544	167.1	166.7	170.5	169.3	-	127.8	127.6	130.8	129.9	-
Machine tool accessories .....	3545	53.2	53.1	54.1	54.3	-	37.4	37.2	38.7	38.8	-
Power driven handtools .....	3546	21.4	21.3	20.4	20.6	-	14.9	14.9	14.5	14.6	-
Special industry machinery .....	355	180.0	177.3	185.6	185.3	-	99.7	99.3	101.0	100.2	-
Textile machinery .....	3552	14.9	14.8	15.3	15.2	-	9.9	9.9	10.0	9.9	-
Printing trades machinery .....	3555	22.7	22.6	23.3	23.6	-	12.9	12.8	13.2	13.3	-
Food products machinery .....	3556	25.3	25.3	25.2	24.8	-	15.0	15.1	15.1	14.8	-
General industrial machinery .....	356	262.5	261.1	267.4	266.3	-	167.7	167.0	171.5	170.6	-
Pumps and pumping equipment .....	3561	30.6	30.8	30.4	30.5	-	17.5	17.6	17.8	17.8	-
Ball and roller bearings .....	3562	40.0	39.9	41.0	41.0	-	31.3	31.4	31.9	31.8	-
Air and gas compressors .....	3563	26.3	26.1	26.8	26.7	-	15.3	15.2	15.5	15.5	-
Blowers and fans .....	3564	35.1	34.9	35.6	35.3	-	23.7	23.6	24.2	24.1	-
Speed changers, drives, and gears .....	3566	17.8	17.5	18.4	18.4	-	12.7	12.4	13.4	13.3	-
Power transmission equipment, nec .....	3568	21.8	21.6	22.3	22.3	-	15.2	15.1	15.6	15.6	-
Computer and office equipment .....	357	374.6	369.7	379.0	377.7	375.8	139.2	136.6	145.4	145.4	-
Electronic computers .....	3571	195.8	193.3	198.3	197.5	-	63.8	62.1	70.2	70.2	-
Computer terminals, calculators, and office machines, nec .....	3575,8,9	60.3	59.3	61.3	61.3	-	24.3	23.7	24.0	24.1	-
Refrigeration and service machinery .....	358	202.4	206.3	204.6	204.3	-	145.5	149.7	147.9	147.8	-
Refrigeration and heating equipment .....	3585	140.6	144.8	141.6	141.2	-	106.9	111.2	108.1	108.0	-
Misc. industrial and commercial machinery .....	359	364.6	361.2	377.5	377.5	-	273.5	270.2	284.3	284.2	-
Carburetors, pistons, rings, valves .....	3592	22.9	22.9	23.2	23.2	-	18.1	17.9	18.6	18.7	-
Scales, balances, and industrial machinery, nec .....	3596,9	295.1	292.4	306.0	305.7	-	226.4	223.7	235.4	235.0	-
Electronic and other electrical equipment .....	36	1,687.7	1,669.5	1,718.4	1,714.2	1,710.0	1,067.9	1,056.7	1,084.5	1,079.5	1,077.8
Electric distribution equipment .....	361	82.3	82.2	82.9	82.9	-	56.0	55.9	56.1	55.7	-
Transformers, except electronic .....	3612	39.4	39.5	39.2	38.9	-	27.5	27.7	26.7	26.2	-
Switchgear and switchboard apparatus .....	3613	42.9	42.7	43.7	44.0	-	28.4	28.2	29.4	29.5	-
Electrical industrial apparatus .....	362	154.1	154.6	154.1	153.9	-	107.5	108.0	107.8	107.5	-
Motors and generators .....	3621	76.1	76.0	76.5	76.4	-	59.2	59.2	59.6	59.4	-
Relays and industrial controls .....	3625	57.7	58.4	56.8	56.7	-	33.6	34.1	33.1	33.0	-
Household appliances .....	363	114.6	111.9	115.7	115.6	-	90.0	87.7	91.7	91.5	-
Household refrigerators and freezers .....	3632	23.8	22.9	23.9	24.3	-	18.5	17.7	18.9	19.3	-
Household laundry equipment .....	3633	16.9	16.3	17.7	17.6	-	13.3	12.9	14.0	13.9	-
Electric housewares and fans .....	3634	26.3	25.7	25.6	25.6	-	20.1	19.7	19.2	18.9	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Electronic and other electrical equipment—Continued											
Electric lighting and wiring equipment .....	364	180.5	179.6	183.0	182.8	—	129.3	128.4	130.2	130.2	—
Electric lamps .....	3641	22.0	22.1	21.9	21.9	—	17.0	17.2	16.9	17.0	—
Current-carrying wiring devices .....	3643	62.3	62.0	63.8	63.8	—	40.9	40.3	41.9	41.9	—
Noncurrent-carrying wiring devices .....	3644	17.9	18.0	18.0	18.0	—	13.6	13.7	13.4	13.4	—
Residential lighting fixtures .....	3645	21.1	20.8	21.2	20.9	—	15.8	15.6	15.9	15.8	—
Household audio and video equipment .....	365	79.1	79.4	77.1	77.1	—	51.3	51.4	49.5	49.5	—
Household audio and video equipment .....	3651	53.0	53.1	52.2	52.1	—	31.3	31.3	30.8	30.7	—
Communications equipment .....	366	275.8	274.0	278.4	279.4	—	131.3	130.4	128.8	129.4	—
Telephone and telegraph apparatus .....	3661	119.9	119.2	124.4	125.6	—	59.5	59.8	58.3	58.7	—
Electronic components and accessories .....	367	652.3	638.9	679.7	676.4	673.6	395.1	387.5	414.3	411.3	—
Electron tubes .....	3671	22.5	22.2	22.9	22.8	—	16.3	16.0	17.0	16.6	—
Semiconductors and related devices .....	3674	278.1	269.6	292.4	291.6	—	127.0	123.6	134.5	133.9	—
Electronic components, nec .....	3679	145.9	144.6	149.9	148.6	—	99.2	97.7	103.4	102.2	—
Misc. electrical equipment and supplies .....	369	149.0	148.9	147.5	146.1	—	107.5	107.4	106.1	104.4	—
Storage batteries .....	3691	26.7	26.8	25.7	25.5	—	20.7	20.7	19.9	19.7	—
Engine electrical equipment .....	3694	65.2	65.2	66.2	65.4	—	51.7	51.9	51.1	50.0	—
Transportation equipment .....	37	1,841.8	1,822.9	1,888.6	1,891.0	1,894.1	1,254.0	1,239.3	1,283.8	1,280.6	1,279.3
Motor vehicles and equipment .....	371	985.1	974.1	1,003.5	1,004.7	1,006.5	778.8	767.5	785.7	784.0	782.9
Motor vehicles and car bodies .....	3711	350.3	344.0	356.8	358.0	—	270.1	262.8	268.1	267.3	—
Truck and bus bodies .....	3713	40.7	40.6	42.3	42.5	—	32.5	32.4	33.5	33.7	—
Motor vehicle parts and accessories .....	3714	541.2	537.9	545.6	545.2	—	433.1	430.2	435.7	434.8	—
Truck trailers .....	3715	33.3	32.3	37.6	38.0	—	26.9	25.9	30.7	30.7	—
Aircraft and parts .....	372	500.3	490.7	522.9	523.6	522.7	251.0	243.9	268.7	267.5	—
Aircraft .....	3721	263.4	258.2	273.8	273.3	—	110.6	107.1	116.6	116.0	—
Aircraft engines and engine parts .....	3724	99.8	99.8	102.3	103.5	—	53.6	53.4	56.9	56.7	—
Aircraft parts and equipment, nec .....	3728	137.1	132.7	146.8	146.8	—	86.8	83.4	95.2	94.8	—
Ship and boat building and repairing .....	373	157.0	159.8	161.1	160.9	—	119.4	123.2	123.0	122.0	—
Ship building and repairing .....	3731	99.8	101.8	100.5	99.6	—	71.7	74.7	72.1	70.7	—
Boat building and repairing .....	3732	57.1	58.0	60.6	61.3	—	47.7	48.5	50.9	51.3	—
Railroad equipment .....	374	33.3	33.2	33.6	33.9	—	25.1	25.2	25.9	26.1	—
Guided missiles, space vehicles, and parts .....	376	90.6	89.9	90.4	90.3	—	24.3	24.1	24.3	24.2	—
Guided missiles and space vehicles .....	3761	62.6	62.1	62.7	62.7	—	15.3	15.2	15.3	15.3	—
Miscellaneous transportation equipment .....	379	53.1	53.6	54.3	54.9	—	38.8	39.4	39.9	40.6	—
Travel trailers and campers .....	3792	21.9	21.8	23.0	23.4	—	18.4	18.4	19.4	19.8	—
Instruments and related products .....	38	863.3	859.9	867.3	866.5	865.7	426.3	425.0	433.8	432.9	432.9
Search and navigation equipment .....	381	160.5	159.6	160.5	160.7	—	43.6	44.0	43.2	43.5	—
Measuring and controlling devices .....	382	299.4	298.7	303.0	302.6	—	153.3	153.3	156.1	155.3	—
Environmental controls .....	3822	41.3	41.3	40.8	40.6	—	27.7	27.6	27.8	27.5	—
Process control instruments .....	3823	66.1	66.4	66.4	66.1	—	33.7	33.9	34.1	33.7	—
Instruments to measure electricity .....	3825	75.4	74.6	77.4	77.5	—	32.3	32.4	33.0	32.8	—
Medical instruments and supplies .....	384	275.9	274.2	279.8	279.7	—	161.1	160.6	165.4	165.4	—
Surgical and medical instruments .....	3841	108.2	107.7	109.2	109.8	—	68.9	69.4	70.2	70.4	—
Surgical appliances and supplies .....	3842	94.9	94.6	97.2	97.0	—	58.5	58.1	60.5	60.2	—
Ophthalmic goods .....	385	35.3	34.8	36.5	36.8	—	22.2	21.2	24.3	24.6	—
Photographic equipment and supplies .....	386	84.4	84.9	79.7	79.1	—	39.7	39.6	38.3	37.9	—
Watches, clocks, watchcases, and parts .....	387	7.8	7.7	7.8	7.6	—	6.4	6.3	6.5	6.2	—
Miscellaneous manufacturing industries .....	39	389.3	389.1	388.0	389.0	387.5	273.1	272.9	272.0	273.6	271.3
Jewelry, silverware, and plated ware .....	391	48.9	49.1	48.3	48.6	—	33.7	33.6	33.4	33.8	—
Jewelry, precious metal .....	3911	36.6	36.7	36.3	36.6	—	24.8	24.7	24.7	25.0	—
Musical instruments .....	393	15.9	15.7	16.7	16.6	—	12.6	12.4	13.2	13.1	—
Toys and sporting goods .....	394	109.8	112.4	106.2	106.5	—	75.7	78.2	72.6	73.1	—
Dolls, games, toys, and children's vehicles .....	3942,4	37.3	37.4	34.8	34.1	—	24.6	24.6	22.2	21.8	—
Sporting and athletic goods, nec .....	3949	72.4	75.0	71.4	72.4	—	51.2	53.6	50.4	51.3	—
Pens, pencils, office, and art supplies .....	395	30.9	30.8	30.7	30.6	—	20.9	20.6	21.4	21.4	—
Costume jewelry and notions .....	396	23.6	23.4	23.1	23.1	—	16.5	16.1	16.5	16.6	—
Costume jewelry .....	3961	13.5	13.3	12.9	12.8	—	9.4	9.0	9.4	9.4	—
Miscellaneous manufactures .....	399	160.2	157.7	163.0	163.6	—	113.7	112.0	114.9	115.6	—
Signs and advertising specialties .....	3993	68.9	67.6	71.0	71.5	—	45.3	44.5	46.1	46.9	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods</b> .....		7,670	7,620	7,604	7,593	7,604	5,357	5,314	5,297	5,282	5,298
Food and kindred products .....	20	1,691.0	1,646.3	1,663.8	1,662.4	1,672.6	1,255.8	1,214.9	1,231.4	1,228.9	1,239.7
Meat products .....	201	489.2	485.4	494.8	495.5	-	415.4	411.0	419.5	421.0	-
Meat packing plants .....	2011	149.9	148.2	153.9	153.2	-	125.0	122.5	128.6	128.2	-
Sausages and other prepared meats .....	2013	96.1	94.9	96.2	96.6	-	74.4	73.1	74.7	75.3	-
Poultry slaughtering and processing .....	2015	243.2	242.3	244.7	245.7	-	215.9	215.4	216.2	217.5	-
Dairy products .....	202	141.9	141.7	141.7	141.8	-	94.0	93.8	95.9	96.1	-
Cheese, natural and processed .....	2022	40.0	39.5	39.6	39.7	-	32.7	32.3	32.1	32.2	-
Fluid milk .....	2026	61.8	61.7	61.9	61.6	-	35.1	35.0	36.2	35.9	-
Preserved fruits and vegetables .....	203	232.1	211.1	206.6	209.1	-	195.1	173.9	170.1	172.5	-
Canned specialties .....	2032	18.9	18.4	18.3	18.4	-	15.0	14.5	14.3	14.5	-
Canned fruits and vegetables .....	2033	73.3	61.0	56.5	58.5	-	61.2	48.6	45.2	47.3	-
Frozen fruits and vegetables .....	2037	48.3	43.5	44.3	44.0	-	42.1	37.3	38.2	37.6	-
Grain mill products .....	204	125.3	124.5	124.2	123.6	-	89.6	88.7	89.0	88.1	-
Flour and other grain mill products .....	2041	18.9	18.3	18.7	18.8	-	11.7	11.4	11.5	11.5	-
Prepared feeds, nec .....	2048	39.8	40.0	39.9	39.7	-	25.7	25.5	26.2	26.0	-
Bakery products .....	205	207.4	203.8	206.2	205.9	-	139.4	137.3	138.4	137.4	-
Bread, cake, and related products .....	2051	148.1	146.5	149.0	150.1	-	89.9	89.0	90.3	90.8	-
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	59.3	57.3	57.2	55.8	-	49.5	48.3	48.1	46.6	-
Sugar and confectionery products .....	206	98.0	89.6	96.5	92.7	-	77.5	69.7	75.1	71.1	-
Raw cane sugar .....	2061	5.1	4.1	6.3	4.9	-	3.8	3.1	5.1	3.6	-
Cane sugar refining .....	2062	4.3	4.2	4.2	4.1	-	3.2	3.2	3.1	3.1	-
Beet sugar .....	2063	8.4	7.1	7.2	7.5	-	7.4	6.1	6.3	6.5	-
Candy and other confectionery products .....	2064	54.2	49.4	53.4	51.1	-	43.7	39.2	41.7	39.2	-
Fats and oils .....	207	32.9	31.7	32.6	32.8	-	23.1	22.8	23.0	23.0	-
Beverages .....	208	180.8	177.9	180.2	181.0	-	87.5	85.4	88.1	88.7	-
Malt beverages .....	2082	33.9	33.8	33.1	33.5	-	21.6	21.7	20.9	21.2	-
Bottled and canned soft drinks .....	2086	94.4	93.6	94.3	95.1	-	38.9	38.5	39.1	39.5	-
Misc. food and kindred products .....	209	183.4	180.6	181.0	180.0	-	134.3	132.3	132.3	131.0	-
Tobacco products .....	21	41.2	38.8	40.5	39.5	37.4	31.8	29.1	31.5	30.5	28.6
Cigarettes .....	211	28.0	28.4	27.4	27.2	-	20.8	21.2	20.5	20.4	-
Textile mill products .....	22	615.5	616.8	602.5	603.6	604.2	521.7	523.4	511.6	512.3	513.2
Broadwoven fabric mills, cotton .....	221	72.3	72.6	70.1	70.6	-	64.5	64.6	62.6	63.1	-
Broadwoven fabric mills, synthetics .....	222	64.3	63.8	64.8	64.9	-	54.0	53.6	54.8	55.1	-
Broadwoven fabric mills, wool .....	223	14.3	14.5	13.7	13.7	-	12.1	12.5	11.6	11.5	-
Narrow fabric mills .....	224	21.4	21.5	21.1	21.0	-	17.7	17.9	17.4	17.2	-
Knitting mills .....	225	172.9	174.6	163.4	163.6	-	148.1	150.3	139.7	139.6	-
Women's hosiery, except socks .....	2251	19.7	19.8	18.2	17.5	-	17.3	17.4	16.0	15.2	-
Hosiery, nec .....	2252	38.3	38.4	36.5	36.1	-	33.4	33.8	31.9	31.5	-
Knit outerwear mills .....	2253	52.0	53.0	49.0	49.5	-	44.4	45.2	42.1	42.5	-
Knit underwear mills .....	2254	16.3	17.2	12.3	13.1	-	14.4	15.3	10.9	11.7	-
Weft knit fabric mills .....	2257	24.9	24.8	25.3	25.3	-	20.7	20.8	21.3	21.3	-
Textile finishing, except wool .....	226	67.0	67.9	65.7	65.0	-	54.7	55.5	53.9	53.4	-
Finishing plants, cotton .....	2261	31.2	31.6	30.6	30.1	-	25.5	25.8	25.1	24.6	-
Finishing plants, synthetics .....	2262	21.1	21.4	20.5	20.3	-	16.9	17.1	16.5	16.4	-
Carpets and rugs .....	227	63.5	62.3	65.0	65.8	-	52.3	51.0	54.5	55.1	-
Yarn and thread mills .....	228	86.0	86.2	84.4	84.9	-	76.2	76.6	75.1	75.4	-
Yarn spinning mills .....	2281	62.7	63.0	61.4	61.9	-	55.9	56.3	55.2	55.5	-
Throwing and winding mills .....	2282	16.4	16.4	16.1	16.2	-	14.1	14.2	13.8	13.8	-
Miscellaneous textile goods .....	229	54.0	53.4	54.3	54.1	-	42.0	41.4	42.0	41.9	-
Apparel and other textile products .....	23	825.6	833.0	792.0	784.0	780.8	674.1	680.9	640.4	631.6	628.2
Men's and boys' suits and coats .....	231	29.4	29.4	28.6	28.4	-	23.8	24.0	23.2	23.1	-
Men's and boys' furnishings .....	232	207.1	211.1	192.3	191.1	-	175.3	178.6	162.5	160.8	-
Men's and boys' shirts .....	2321	42.9	43.9	39.8	39.4	-	36.8	37.6	34.5	34.2	-
Men's and boys' trousers and slacks .....	2325	69.7	70.3	64.9	65.2	-	60.1	60.7	56.4	56.1	-
Men's and boys' work clothing .....	2326	30.8	32.0	29.1	28.7	-	26.4	27.3	24.8	24.3	-
Women's and misses' outerwear .....	233	252.2	255.2	242.4	237.6	-	204.6	206.9	193.4	188.2	-
Women's and misses' blouses and shirts .....	2331	22.9	23.6	20.7	20.8	-	17.8	18.5	15.9	15.8	-
Women's, juniors', and misses' dresses .....	2335	40.1	40.6	39.4	38.4	-	31.5	31.9	30.4	29.7	-
Women's and misses' suits and coats .....	2337	24.8	23.9	23.9	23.6	-	19.4	18.6	18.4	18.2	-
Women's and misses' outerwear, nec .....	2339	164.5	167.1	158.4	154.8	-	136.0	137.9	128.7	124.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods—Continued</b>											
Apparel and other textile products—Continued											
Women's and children's undergarments .....	234	35.2	35.6	32.6	32.4	—	27.8	28.4	25.7	25.3	—
Women's and children's underwear .....	2341	25.5	25.6	24.0	23.9	—	20.8	21.1	19.4	19.1	—
Brassieres, girdles, and allied garments .....	2342	9.7	10.0	8.6	8.5	—	7.0	7.3	6.3	6.2	—
Girls' and children's outerwear .....	236	30.6	30.5	26.9	25.4	—	25.2	25.2	22.1	20.8	—
Girls' and children's dresses and blouses .....	2361	12.4	12.3	10.8	10.2	—	10.6	10.6	9.4	8.8	—
Misc. apparel and accessories .....	238	34.0	34.7	33.2	33.3	—	27.3	28.1	26.6	26.8	—
Misc. fabricated textile products .....	239	219.4	218.3	218.8	219.0	—	176.0	175.3	173.4	173.2	—
Curtains and draperies .....	2391	19.8	20.6	18.9	19.4	—	15.5	16.3	14.7	14.7	—
House furnishings, nec .....	2392	55.6	55.3	57.3	56.7	—	47.1	46.7	48.3	47.7	—
Automotive and apparel trimmings .....	2396	61.0	60.1	60.5	60.7	—	48.4	47.9	46.8	47.2	—
Paper and allied products .....	26	685.1	681.4	684.6	681.6	681.4	522.3	519.0	521.6	518.7	519.2
Paper mills .....	262	158.7	158.2	155.3	154.9	—	123.5	123.0	121.5	121.1	—
Paperboard mills .....	263	50.0	49.6	50.1	50.0	—	38.5	37.8	38.8	38.6	—
Paperboard containers and boxes .....	265	220.0	219.2	218.8	218.3	—	170.5	169.7	169.4	168.8	—
Corrugated and solid fiber boxes .....	2653	132.9	132.3	133.2	132.7	—	99.6	98.9	99.4	98.9	—
Sanitary food containers .....	2656	17.4	17.7	16.9	16.7	—	15.5	15.8	15.2	15.0	—
Folding paperboard boxes .....	2657	47.4	47.3	46.9	47.0	—	38.3	38.3	38.0	38.2	—
Misc. converted paper products .....	267	244.4	242.3	248.6	246.6	—	180.2	178.8	182.5	180.8	—
Paper, coated and laminated, nec .....	2672	46.9	46.1	48.1	48.2	—	24.3	23.7	25.0	24.8	—
Bags: plastics, laminated, and coated .....	2673	40.2	40.0	40.7	40.1	—	31.4	31.3	32.0	31.5	—
Envelopes .....	2677	25.2	24.9	25.7	25.5	—	19.7	19.4	20.0	19.9	—
Printing and publishing .....	27	1,552.6	1,547.3	1,560.6	1,564.6	1,565.0	847.0	845.1	845.1	845.4	843.0
Newspapers .....	271	441.1	437.8	442.4	442.8	—	147.7	146.4	146.8	147.2	—
Periodicals .....	272	135.8	134.9	138.4	138.8	—	46.3	46.1	46.5	46.2	—
Books .....	273	128.0	129.3	128.8	129.1	—	67.0	68.2	65.9	66.0	—
Book publishing .....	2731	89.3	89.8	89.9	90.0	—	36.3	36.9	35.1	34.9	—
Book printing .....	2732	38.8	39.5	38.9	39.1	—	30.7	31.3	30.8	31.1	—
Miscellaneous publishing .....	274	87.8	87.0	90.2	91.0	—	40.9	40.1	42.5	42.3	—
Commercial printing .....	275	572.3	572.1	575.5	577.1	—	409.2	409.1	410.1	409.9	—
Commercial printing, lithographic .....	2752	371.3	370.3	374.2	375.4	—	264.7	263.7	266.3	266.1	—
Commercial printing, nec .....	2759	181.0	181.4	181.8	181.9	—	128.7	129.1	128.4	128.5	—
Manifold business forms .....	276	43.0	43.1	42.7	42.9	—	30.2	30.2	30.5	30.3	—
Blankbooks and bookbinding .....	278	66.3	65.4	65.7	65.5	—	50.8	50.5	49.8	49.8	—
Printing trade services .....	279	50.0	50.2	49.0	49.0	—	34.0	34.4	33.0	32.9	—
Chemicals and allied products .....	28	1,033.8	1,032.0	1,034.1	1,031.6	1,036.7	571.6	568.2	581.8	581.4	593.4
Industrial inorganic chemicals .....	281	117.2	117.3	115.8	115.6	—	56.7	54.8	60.9	60.9	—
Industrial inorganic chemicals, nec .....	2819	71.1	71.5	69.8	69.6	—	35.6	35.7	35.5	35.3	—
Plastics materials and synthetics .....	282	158.3	158.8	154.9	154.2	—	105.4	105.8	103.4	103.7	—
Plastics materials and resins .....	2821	79.7	79.1	80.4	80.4	—	49.6	49.4	49.6	49.5	—
Organic fibers, noncellulosic .....	2824	45.5	45.8	44.6	44.6	—	35.5	35.6	35.3	35.4	—
Drugs .....	283	267.2	266.5	270.6	270.9	—	120.4	120.3	124.5	124.5	—
Pharmaceutical preparations .....	2834	211.1	210.8	214.5	215.2	—	97.3	97.7	100.7	100.6	—
Soap, cleaners, and toilet goods .....	284	156.0	153.4	156.8	155.6	—	95.5	93.6	97.6	96.5	—
Soap and other detergents .....	2841	42.0	41.5	41.5	41.4	—	22.5	22.5	22.7	22.6	—
Polishing, sanitation, and finishing preparations .....	2842.3	39.6	39.2	40.5	40.5	—	22.0	21.7	23.0	23.0	—
Toilet preparations .....	2844	74.4	72.7	74.8	73.7	—	51.0	49.4	51.9	50.9	—
Paints and allied products .....	285	51.6	51.3	51.8	51.7	—	27.5	27.4	27.4	27.4	—
Industrial organic chemicals .....	286	138.3	138.4	138.1	137.4	—	78.5	78.3	79.7	79.8	—
Cyclic crudes and intermediates .....	2865	23.3	23.3	23.4	23.3	—	14.1	14.2	14.1	14.0	—
Industrial organic chemicals, nec .....	2869	112.5	112.6	112.2	111.6	—	62.5	62.2	63.8	64.0	—
Agricultural chemicals .....	287	51.6	53.1	51.6	51.8	—	31.0	32.0	31.5	31.7	—
Miscellaneous chemical products .....	289	93.7	93.2	94.5	94.4	—	56.5	56.0	56.8	56.9	—
Petroleum and coal products .....	29	139.7	139.1	133.2	135.5	137.3	92.1	92.4	86.6	88.8	89.7
Petroleum refining .....	291	97.0	97.3	93.1	93.3	—	63.3	64.0	60.3	60.5	—
Asphalt paving and roofing materials .....	295	28.5	27.8	25.5	27.7	—	21.1	20.8	18.4	20.5	—
Rubber and misc. plastics products .....	30	995.1	993.1	1,007.8	1,006.0	1,004.5	771.6	770.3	782.3	781.5	780.5
Tires and inner tubes .....	301	77.6	77.9	79.4	79.9	—	57.1	57.5	58.2	58.5	—
Rubber and plastics footwear .....	302	6.9	6.8	6.9	6.7	—	5.5	5.4	5.3	5.2	—
Hose, belting, gaskets, and packing .....	305	69.2	68.6	72.1	72.4	—	53.1	52.5	55.8	55.8	—
Rubber and plastics hose and belting .....	3052	28.1	28.0	29.2	29.3	—	21.9	21.7	23.0	23.0	—
Fabricated rubber products, nec .....	306	111.7	112.0	112.4	112.1	—	85.6	86.1	86.3	86.1	—
Miscellaneous plastics products, nec .....	308	729.7	727.8	737.0	734.9	—	570.3	568.8	576.7	575.9	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods—Continued</b>											
Leather and leather products .....	31	90.2	92.3	85.1	84.4	83.9	68.6	70.3	64.3	63.2	62.6
Leather tanning and finishing .....	311	12.9	13.4	13.2	13.2	—	10.6	10.9	10.9	10.9	—
Footwear, except rubber .....	314	40.5	41.8	36.8	36.3	—	32.5	33.7	29.3	28.8	—
Men's footwear, except athletic .....	3143	21.6	21.9	20.3	19.7	—	16.9	17.1	15.8	15.2	—
Women's footwear, except athletic .....	3144	11.3	12.0	9.6	9.6	—	8.9	9.7	7.4	7.4	—
Luggage .....	316	10.3	10.4	10.6	10.2	—	7.6	7.8	7.2	6.5	—
Handbags and personal leather goods .....	317	9.6	9.6	9.0	9.1	—	5.7	5.6	5.1	5.2	—
<b>Transportation and public utilities .....</b>		<b>6,395</b>	<b>6,361</b>	<b>6,456</b>	<b>6,483</b>	<b>6,544</b>	<b>5,355</b>	<b>5,345</b>	<b>5,329</b>	<b>5,347</b>	<b>5,412</b>
Transportation .....		4,106	4,086	4,132	4,153	4,201	—	—	—	—	—
Railroad transportation .....	40	226.9	224.4	228.0	229.6	230.8	—	—	—	—	—
Class I railroads plus Amtrak <sup>2</sup> .....	4011	201.8	199.9	201.4	203.0	—	—	—	—	—	—
Local and interurban passenger transit .....	41	450.6	463.8	472.8	468.3	479.3	412.0	425.8	434.1	429.4	—
Local and suburban transportation .....	411	229.8	228.3	234.8	236.0	—	208.8	207.7	213.7	214.4	—
Taxicabs .....	412	30.6	30.9	31.7	31.1	—	—	—	—	—	—
Intercity and rural bus transportation .....	413	21.2	21.1	21.2	21.4	—	19.2	18.8	19.1	19.2	—
School buses .....	415	135.7	149.7	151.4	145.0	—	—	—	—	—	—
Trucking and warehousing .....	42	1,667.2	1,636.7	1,658.1	1,675.6	1,697.4	1,458.6	1,425.8	1,449.3	1,466.0	—
Trucking and courier services, except air .....	421	1,506.9	1,479.3	1,496.1	1,515.6	—	1,324.8	1,294.7	1,314.0	1,332.7	—
Public warehousing and storage .....	422	155.0	152.1	156.8	155.1	—	129.0	126.3	130.6	129.0	—
Water transportation .....	44	180.4	179.1	176.9	180.5	186.7	—	—	—	—	—
Water transportation of freight, nec .....	444	14.2	14.2	14.4	14.2	—	—	—	—	—	—
Water transportation services .....	449	121.2	120.6	120.5	123.2	—	107.3	106.7	105.8	108.2	—
Transportation by air .....	45	1,127.9	1,130.2	1,136.6	1,139.0	1,143.7	—	—	—	—	—
Air transportation, scheduled .....	451	964.8	968.5	966.1	966.4	—	—	—	—	—	—
Air transportation, scheduled .....	4512	512.2	509.2	518.6	522.1	—	—	—	—	—	—
Airports, flying fields, and services .....	458	120	118	126	127	—	—	—	—	—	—
Pipelines, except natural gas .....	46	14.3	14.2	14.1	14.1	14.3	11.6	11.5	11.4	11.4	—
Transportation services .....	47	438.6	437.2	445.9	446.2	448.4	357.3	355.7	364.9	365.0	—
Passenger transportation arrangement .....	472	216.3	218.7	217.1	217.6	—	180.7	182.7	182.9	183.5	—
Travel agencies .....	4724	171.1	172.6	173.8	173.6	—	143.3	144.3	146.4	146.3	—
Freight transportation arrangement .....	473	174.8	171.9	181.4	180.2	—	136.9	134.3	142.5	140.8	—
Communications and public utilities .....		2,290	2,275	2,324	2,330	2,343	—	—	—	—	—
Communications .....	48	1,423.5	1,408.2	1,469.2	1,477.4	1,488.7	1,093.3	1,096.1	1,061.6	1,059.8	—
Telephone communications .....	481	975.1	960.0	1,011.8	1,017.8	—	730.4	731.5	697.0	694.3	—
Telephone communications, except radio .....	4813	823.5	813.1	846.7	854.4	—	609.2	613.3	575.6	576.9	—
Radio and television broadcasting .....	483	242.6	241.9	244.1	245.0	—	201.9	201.5	201.7	202.2	—
Radio broadcasting stations .....	4832	114.5	113.6	115.6	117.1	—	—	—	—	—	—
Television broadcasting stations .....	4833	128.1	128.3	128.5	127.9	—	—	—	—	—	—
Cable and other pay television services .....	484	175.2	176.2	182.2	183.3	—	146.5	148.5	149.4	149.6	—
Electric, gas, and sanitary services .....	49	865.9	866.5	855.2	852.4	854.3	688.6	688.3	680.7	679.8	—
Electric services .....	491	368.3	368.0	363.1	361.4	—	294.2	293.7	291.8	290.8	—
Gas production and distribution .....	492	142.5	143.3	140.5	139.7	—	110.3	110.8	109.0	108.4	—
Combination utility services .....	493	160.4	161.4	157.5	157.2	—	124.4	125.3	122.0	122.0	—
Sanitary services .....	495	162.2	161.6	161.7	161.6	—	134.1	133.4	132.2	133.1	—
<b>Wholesale trade .....</b>		<b>6,648</b>	<b>6,595</b>	<b>6,744</b>	<b>6,780</b>	<b>6,809</b>	<b>5,355</b>	<b>5,313</b>	<b>5,396</b>	<b>5,425</b>	<b>5,451</b>
Durable goods .....	50	3,935	3,899	4,027	4,047	4,059	3,128	3,102	3,170	3,185	—
Motor vehicles, parts, and supplies .....	501	513.6	511.2	516.2	516.9	—	418.2	417.3	413.2	413.0	—
Automobiles and other motor vehicles .....	5012	144.0	142.3	147.9	148.1	—	—	—	—	—	—
Motor vehicle supplies and new parts .....	5013	291.6	291.2	289.8	289.8	—	—	—	—	—	—
Furniture and home furnishings .....	502	156.9	155.4	162.5	162.1	—	125.0	123.8	129.0	128.3	—
Furniture .....	5021	74.9	74.0	78.4	77.9	—	—	—	—	—	—
Home furnishings .....	5023	82.0	81.4	84.1	84.2	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Wholesale trade—Continued</b>											
Durable goods—Continued											
Lumber and other construction materials .....	503	256.2	253.7	259.1	264.3	—	211.4	209.1	214.4	219.2	—
Lumber, plywood, and millwork .....	5031	131.0	130.0	134.1	135.1	—	—	—	—	—	—
Construction materials, nec .....	5039	38.1	37.7	37.6	38.7	—	—	—	—	—	—
Professional and commercial equipment .....	504	862.7	852.2	895.2	898.3	—	676.9	669.8	690.9	692.3	—
Office equipment .....	5044	198.7	195.7	208.8	210.1	—	—	—	—	—	—
Computers, peripherals and software .....	5045	345.4	341.4	359.2	358.7	—	—	—	—	—	—
Medical and hospital equipment .....	5047	180.5	178.6	186.5	186.4	—	146.2	144.9	150.3	150.0	—
Metals and minerals, except petroleum .....	505	147.0	146.6	150.4	151.4	—	118.9	118.4	121.5	122.1	—
Electrical goods .....	506	538.0	532.0	552.3	552.9	—	401.2	397.6	402.1	401.1	—
Electrical apparatus and equipment .....	5063	224.3	221.4	231.2	231.6	—	—	—	—	—	—
Electrical appliances, television and radio sets .....	5064	49.6	49.7	49.4	49.5	—	—	—	—	—	—
Electronic parts and equipment .....	5065	264.1	260.9	271.7	271.8	—	—	—	—	—	—
Hardware, plumbing, and heating equipment .....	507	300.6	299.3	301.5	302.0	—	244.7	244.1	245.2	246.3	—
Hardware .....	5072	106.7	106.1	108.4	108.9	—	—	—	—	—	—
Plumbing and hydronic heating supplies .....	5074	118.9	118.7	118.3	118.4	—	—	—	—	—	—
Machinery, equipment, and supplies .....	508	816.7	810.5	835.2	841.5	—	653.2	648.1	666.8	672.6	—
Construction and mining machinery .....	5082	88.0	86.8	91.0	91.7	—	—	—	—	—	—
Farm and garden machinery .....	5083	121.3	121.5	122.6	124.8	—	—	—	—	—	—
Industrial machinery and equipment .....	5084	329.9	326.3	338.1	339.7	—	—	—	—	—	—
Industrial supplies .....	5085	153.1	151.9	156.9	158.7	—	—	—	—	—	—
Misc. wholesale trade durable goods .....	509	343.4	338.3	354.3	357.7	—	278.4	273.9	286.7	290.1	—
Scrap and waste materials .....	5093	130.3	128.1	133.8	134.4	—	—	—	—	—	—
Nondurable goods											
Paper and paper products .....	51	2,713	2,696	2,717	2,733	2,750	2,228	2,211	2,226	2,240	—
Paper and office supplies .....	511	264.7	263.7	266.0	266.5	—	222.6	222.2	222.3	222.7	—
Stationery and office supplies .....	5112	153.3	152.0	155.4	155.6	—	—	—	—	—	—
Drugs, proprietaries, and sundries .....	512	212.7	211.4	214.0	213.7	—	177.1	175.6	177.7	177.2	—
Apparel, piece goods, and notions .....	513	221.6	219.8	222.5	222.6	—	178.7	176.4	179.8	180.3	—
Groceries and related products .....	514	903.5	891.7	897.2	896.6	—	759.7	748.3	753.8	751.8	—
Groceries, general line .....	5141	286.8	284.1	288.1	288.6	—	—	—	—	—	—
Meats and meat products .....	5147	55.6	56.0	55.3	54.6	—	—	—	—	—	—
Fresh fruits and vegetables .....	5148	102.3	98.2	92.7	93.3	—	—	—	—	—	—
Farm-product raw materials .....	515	106.6	104.2	103.7	104.9	—	85.8	83.7	83.3	84.7	—
Chemicals and allied products .....	516	151.0	151.7	150.1	149.9	—	110.5	111.3	109.6	109.6	—
Petroleum and petroleum products .....	517	156.0	154.6	156.9	157.7	—	129.2	127.9	129.6	130.2	—
Petroleum bulk stations and terminals .....	5171	63.9	63.4	65.4	65.4	—	—	—	—	—	—
Petroleum products, nec .....	5172	92.2	91.2	91.5	92.3	—	—	—	—	—	—
Beer, wine, and distilled beverages .....	518	153.6	151.9	152.0	152.9	—	124.2	122.8	122.4	123.1	—
Beer and ale .....	5181	98.4	97.0	97.1	97.9	—	—	—	—	—	—
Wine and distilled beverages .....	5182	55.2	54.9	54.9	55.0	—	—	—	—	—	—
Misc. wholesale trade nondurable goods .....	519	543.2	546.7	554.4	568.4	—	439.6	443.2	447.4	460.1	—
Farm supplies .....	5191	165.0	169.6	167.9	176.5	—	—	—	—	—	—
<b>Retail trade</b> .....		<b>22,011</b>	<b>21,665</b>	<b>21,823</b>	<b>22,078</b>	<b>22,425</b>	<b>19,375</b>	<b>19,048</b>	<b>19,149</b>	<b>19,364</b>	<b>19,697</b>
Building materials and garden supplies											
Lumber and other building materials .....	52	936.7	946.2	930.5	975.8	1,006.8	779.8	789.8	768.3	812.1	—
Paint, glass, and wallpaper stores .....	521	567.6	567.4	568.0	585.1	—	480.3	480.5	477.2	492.9	—
Hardware stores .....	523	67.8	66.5	68.6	68.8	—	52.5	51.2	52.7	52.9	—
Hardware stores .....	525	163.2	162.7	161.5	163.9	—	134.4	134.1	132.1	134.6	—
Retail nurseries and garden stores .....	526	94.8	107.3	86.3	110.3	—	78.5	90.6	70.2	93.7	—
General merchandise stores											
Department stores .....	53	2,717.9	2,602.0	2,660.0	2,674.4	2,714.4	2,527.5	2,416.2	2,454.9	2,470.1	—
Department stores .....	531	2,388.7	2,287.8	2,343.2	2,356.0	2,395.9	2,244.6	2,147.0	2,185.0	2,198.9	—
Variety stores .....	533	139.4	133.9	133.6	136.2	—	118.7	114.0	112.8	115.2	—
Miscellaneous general merchandise stores .....	539	189.7	180.3	183.2	182.2	—	164.3	155.2	157.1	156.0	—
Food stores											
Grocery stores .....	54	3,495.7	3,440.2	3,486.8	3,489.6	3,518.4	3,172.7	3,117.1	3,160.9	3,161.1	—
Grocery stores .....	541	3,073.3	3,035.8	3,060.2	3,051.3	—	2,810.9	2,772.2	2,796.6	2,786.0	—
Meat and fish markets .....	542	48.3	47.1	47.1	50.5	—	—	—	—	—	—
Dairy products stores .....	545	14.3	13.2	12.3	13.1	—	—	—	—	—	—
Retail bakeries .....	546	209.5	204.6	221.1	222.7	—	183.2	179.2	192.9	193.6	—
Automotive dealers and service stations											
New and used car dealers .....	55	2,313.9	2,300.1	2,311.2	2,327.2	2,350.0	1,935.6	1,926.8	1,920.8	1,929.5	—
New and used car dealers .....	551	1,050.8	1,047.6	1,054.7	1,056.7	1,061.0	882.0	879.0	883.8	884.3	—

See footnotes at end of table.



**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Retail trade—Continued</b>											
<b>Automotive dealers and service stations—Continued</b>											
Auto and home supply stores .....	553	395.2	389.2	397.3	400.4	—	314.7	315.0	305.4	307.1	—
Gasoline service stations .....	554	671.1	665.1	658.3	663.7	—	581.9	574.8	571.1	573.3	—
Automotive dealers, nec .....	559	9.5	9.4	9.8	9.7	—	8.0	7.8	8.0	7.8	—
<b>Apparel and accessory stores .....</b>	<b>56</b>	<b>1,097.7</b>	<b>1,068.2</b>	<b>1,064.0</b>	<b>1,075.0</b>	<b>1,078.9</b>	<b>913.0</b>	<b>882.9</b>	<b>887.2</b>	<b>895.7</b>	<b>—</b>
Men's and boys' clothing stores .....	561	81.0	80.9	79.2	80.3	—	64.7	64.7	64.4	65.1	—
Women's clothing stores .....	562	281.8	280.0	267.4	268.0	—	234.0	231.9	222.2	222.6	—
Family clothing stores .....	565	347.3	327.2	337.8	340.1	—	306.1	284.7	299.7	301.4	—
Shoe stores .....	566	200.7	198.2	194.5	200.2	—	158.5	156.6	154.3	159.3	—
<b>Furniture and home furnishings stores .....</b>	<b>57</b>	<b>1,009.0</b>	<b>983.4</b>	<b>1,037.2</b>	<b>1,035.3</b>	<b>1,038.8</b>	<b>828.3</b>	<b>804.8</b>	<b>851.7</b>	<b>849.9</b>	<b>—</b>
Furniture and home furnishings stores .....	571	517.5	507.5	529.4	530.4	—	421.3	412.0	430.0	430.7	—
Furniture stores .....	5712	302.3	297.4	314.3	315.4	—	—	—	—	—	—
Household appliance stores .....	572	71.5	71.1	69.6	69.3	—	57.8	57.1	56.3	56.1	—
Radio, television, and computer stores .....	573	419.9	404.8	438.2	435.6	—	349.2	335.7	365.4	363.1	—
Radio, television, and electronic stores .....	5731	185.1	176.7	191.9	191.1	—	154.4	147.2	159.8	159.4	—
Record and prerecorded tape stores .....	5735	79.3	77.6	81.1	80.2	—	65.3	63.3	68.3	67.0	—
<b>Eating and drinking places .....</b>	<b>58</b>	<b>7,635.8</b>	<b>7,610.3</b>	<b>7,519.8</b>	<b>7,676.1</b>	<b>7,860.3</b>	<b>6,875.9</b>	<b>6,850.3</b>	<b>6,762.4</b>	<b>6,895.3</b>	<b>—</b>
<b>Miscellaneous retail establishments .....</b>	<b>59</b>	<b>2,804.1</b>	<b>2,714.6</b>	<b>2,813.7</b>	<b>2,824.1</b>	<b>2,856.9</b>	<b>2,342.3</b>	<b>2,259.9</b>	<b>2,342.6</b>	<b>2,349.8</b>	<b>—</b>
Drug stores and proprietary stores .....	591	627.5	621.0	642.5	640.6	—	521.7	514.2	539.6	537.2	—
Liquor stores .....	592	111.4	109.3	110.5	111.5	—	—	—	—	—	—
Used merchandise stores .....	593	114.5	111.5	119.0	120.1	—	95.3	92.6	99.2	99.9	—
Miscellaneous shopping goods stores .....	594	991.8	938.8	972.2	971.5	—	833.6	784.8	808.0	806.9	—
Sporting goods and bicycle shops .....	5941	190.6	181.3	191.3	192.8	—	—	—	—	—	—
Book stores .....	5942	129.0	124.8	127.4	124.1	—	—	—	—	—	—
Stationery stores .....	5943	88.6	87.9	91.9	91.9	—	—	—	—	—	—
Jewelry stores .....	5944	144.6	138.6	142.8	141.1	—	—	—	—	—	—
Gift, novelty, and souvenir shops .....	5947	226.1	212.9	217.6	221.2	—	—	—	—	—	—
Sewing, needlework, and piece goods .....	5949	50.7	50.0	50.0	50.0	—	—	—	—	—	—
<b>Nonstore retailers .....</b>	<b>596</b>	<b>344.5</b>	<b>329.3</b>	<b>348.8</b>	<b>346.5</b>	<b>—</b>	<b>292.0</b>	<b>278.7</b>	<b>295.1</b>	<b>293.3</b>	<b>—</b>
Catalog and mail-order houses .....	5961	221.3	206.6	223.6	220.8	—	—	—	—	—	—
Merchandising machine operators .....	5962	68.3	68.5	68.7	69.3	—	—	—	—	—	—
Fuel dealers .....	598	98.1	97.3	99.7	96.9	—	81.1	80.2	82.9	80.0	—
Retail stores, nec .....	599	516.3	507.4	521.0	537.0	—	427.6	420.4	428.4	442.2	—
Florists, tobacco stores, and newsstands .....	5992,3,4	152.5	151.4	153.4	161.7	—	—	—	—	—	—
Optical goods stores .....	5995	67.6	66.2	73.3	73.9	—	56.3	55.4	59.1	59.0	—
Miscellaneous retail stores, nec .....	5999	296.3	289.8	294.3	301.4	—	240.9	235.2	239.8	245.9	—
<b>Finance, insurance, and real estate<sup>3</sup> .....</b>	<b>—</b>	<b>7,091</b>	<b>7,023</b>	<b>7,213</b>	<b>7,258</b>	<b>7,305</b>	<b>5,180</b>	<b>5,123</b>	<b>5,287</b>	<b>5,326</b>	<b>5,364</b>
<b>Finance .....</b>	<b>—</b>	<b>3,413</b>	<b>3,379</b>	<b>3,504</b>	<b>3,512</b>	<b>3,529</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Depository institutions .....</b>	<b>60</b>	<b>2,027.0</b>	<b>2,015.4</b>	<b>2,034.8</b>	<b>2,033.4</b>	<b>2,038.9</b>	<b>1,457.3</b>	<b>1,448.8</b>	<b>1,462.8</b>	<b>1,460.7</b>	<b>—</b>
Commercial banks .....	602	1,460.1	1,451.6	1,459.0	1,455.9	1,459.2	1,034.8	1,028.4	1,034.7	1,030.9	—
State commercial banks .....	6022	588.4	582.1	595.5	596.7	—	420.7	416.2	426.2	426.4	—
National and commercial banks, nec .....	6021,9	871.6	869.5	863.5	859.2	—	614.2	612.2	608.5	604.5	—
Savings institutions .....	603	261.5	261.4	261.8	262.6	263.3	—	—	—	—	—
Federal savings institutions .....	6035	145.1	144.5	145.4	145.7	—	—	—	—	—	—
Savings institutions, except federal .....	6036	116.4	116.9	116.4	116.9	—	—	—	—	—	—
Credit unions .....	606	171.7	169.6	176.8	177.2	—	136.3	134.5	140.4	141.0	—
<b>Nondepository institutions .....</b>	<b>61</b>	<b>567.2</b>	<b>559.3</b>	<b>602.3</b>	<b>605.7</b>	<b>612.7</b>	<b>401.6</b>	<b>398.1</b>	<b>416.5</b>	<b>418.5</b>	<b>—</b>
Personal credit institutions .....	614	179.6	176.6	185.5	184.8	—	123.0	124.1	112.8	110.8	—
Business credit institutions .....	615	114.2	112.4	119.5	119.7	—	—	—	—	—	—
Mortgage bankers and brokers .....	616	252.5	249.3	275.6	279.1	284.3	—	—	—	—	—
<b>Security and commodity brokers .....</b>	<b>62</b>	<b>596.8</b>	<b>585.2</b>	<b>630.5</b>	<b>634.2</b>	<b>637.6</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Security brokers and dealers .....	621	444.8	437.2	464.1	466.3	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges .....	622,3	25.1	24.8	25.4	25.3	—	—	—	—	—	—
Security and commodity services .....	628	126.9	123.2	141.0	142.6	—	84.2	81.6	94.6	95.4	—
<b>Holding and other investment offices .....</b>	<b>67</b>	<b>221.8</b>	<b>218.9</b>	<b>236.3</b>	<b>239.0</b>	<b>239.9</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Holding offices .....	671	106.1	105.2	109.7	109.8	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Finance, insurance, and real estate—Continued</b>											
Insurance .....	63,64	2,260	2,245	2,298	2,308	2,317	-	-	-	-	-
Insurance carriers .....	63	1,535.4	1,523.4	1,562.7	1,571.6	1,578.2	1,117.1	1,099.4	1,173.4	1,184.9	-
Life insurance .....	631	517.7	513.3	523.3	526.1	-	338.9	336.3	345.5	350.4	-
Medical service and health insurance .....	632	339.4	336.0	348.4	351.1	-	277.1	274.9	282.7	284.6	-
Hospital and medical service plans .....	6324	277.3	274.6	285.8	288.3	-	229.6	227.7	235.5	237.7	-
Fire, marine, and casualty insurance .....	633	537.8	536.3	541.5	542.4	-	388.4	377.7	424.9	427.0	-
Title insurance .....	636	71.6	70.0	77.2	79.1	-	-	-	-	-	-
Insurance agents, brokers, and service .....	64	724.4	721.5	735.7	736.2	738.3	-	-	-	-	-
Real estate .....	65	1,419	1,399	1,411	1,438	1,459	-	-	-	-	-
Real estate operators and lessors .....	651	580.8	578.4	572.3	576.8	-	-	-	-	-	-
Real estate agents and managers .....	653	688.7	674.1	692.3	705.4	-	-	-	-	-	-
Subdividers and developers .....	655	115.9	114.2	109.6	118.8	-	-	-	-	-	-
<b>Services .....</b>		<b>36,040</b>	<b>35,764</b>	<b>36,864</b>	<b>37,261</b>	<b>37,525</b>	<b>31,513</b>	<b>31,274</b>	<b>32,171</b>	<b>32,523</b>	<b>32,759</b>
Agricultural services .....	07	679.1	677.3	617.3	711.8	757.6	573.3	571.9	512.5	599.9	-
Veterinary services .....	074	181.6	179.0	184.7	187.1	-	152.7	150.5	155.2	157.3	-
Landscape and horticultural services .....	078	447.1	448.8	384.1	475.1	-	378.9	380.7	316.8	401.5	-
Hotels and other lodging places .....	70	1,744.2	1,702.2	1,688.8	1,721.6	1,787.2	-	-	-	-	-
Hotels and motels .....	701	1,692.6	1,656.6	1,647.9	1,678.1	-	1,489.8	1,453.4	1,444.0	1,469.5	-
Personal services .....	72	1,181.9	1,241.1	1,239.8	1,238.7	1,176.3	-	-	-	-	-
Laundry, cleaning, and garment services .....	721	438.8	435.2	438.9	440.5	-	385.9	382.4	386.0	387.8	-
Photographic studios, portrait .....	722	70.8	68.3	56.9	57.4	-	-	-	-	-	-
Beauty shops .....	723	397.0	397.1	400.7	399.6	-	353.3	352.7	353.8	353.2	-
Funeral service and crematories .....	726	97.5	98.2	99.4	99.8	-	-	-	-	-	-
Miscellaneous personal services .....	729	162.0	226.5	228.6	226.2	-	137.5	198.8	202.2	200.1	-
Business services .....	73	7,982.7	7,778.7	8,285.6	8,352.3	8,468.1	7,091.2	6,901.8	7,341.2	7,397.8	-
Advertising .....	731	254.7	251.4	264.1	264.0	-	184.9	182.9	190.1	190.1	-
Advertising agencies .....	7311	167.7	165.2	172.8	172.7	-	-	-	-	-	-
Credit reporting and collection .....	732	134.0	132.4	137.4	138.9	-	-	-	-	-	-
Mailing, reproduction, and stenographic services .....	733	305.9	303.4	314.1	314.3	-	-	-	-	-	-
Photocopying and duplicating services .....	7334	76.4	76.1	78.8	79.8	-	64.6	64.5	66.9	67.9	-
Services to buildings .....	734	937.4	932.8	959.5	965.1	976.8	837.5	833.3	856.9	862.7	-
Disinfecting and pest control services .....	7342	88.7	88.9	93.0	95.4	-	71.1	71.2	75.1	76.9	-
Building maintenance services, nec .....	7349	848.8	843.9	866.5	869.7	-	766.4	762.1	781.8	785.8	-
Miscellaneous equipment rental and leasing .....	735	250.7	247.5	254.5	257.3	-	201.2	198.1	200.9	202.6	-
Medical equipment rental .....	7352	40.5	40.2	41.5	40.6	-	31.0	31.1	30.5	29.6	-
Heavy construction equipment rental .....	7353	44.7	44.9	45.4	45.9	-	37.8	37.8	38.5	38.9	-
Equipment rental and leasing, nec .....	7359	165.5	162.4	167.6	170.8	-	132.4	129.2	131.9	134.1	-
Personnel supply services .....	736	2,968.4	2,851.7	3,041.2	3,078.0	3,143.5	-	-	-	-	-
Employment agencies .....	7361	322.7	319.1	330.4	334.5	-	-	-	-	-	-
Help supply services .....	7363	2,645.7	2,532.6	2,710.8	2,743.5	2,811.6	2,573.4	2,460.4	2,633.3	2,663.7	-
Computer and data processing services .....	737	1,410.6	1,375.2	1,544.5	1,559.0	1,574.1	1,125.4	1,096.8	1,233.4	1,243.6	-
Computer programming services .....	7371	321.7	311.7	356.5	359.5	-	273.3	263.3	304.4	306.1	-
Prepackaged software .....	7372	229.6	222.5	257.8	260.9	-	-	-	-	-	-
Computer integrated systems design .....	7373	162.9	160.1	177.9	178.2	-	114.5	112.3	124.1	124.0	-
Data processing and preparation .....	7374	248.6	245.6	264.8	266.9	-	-	-	-	-	-
Information retrieval services .....	7375	81.3	80.1	87.6	89.2	-	58.9	58.5	61.4	63.4	-
Computer maintenance and repair .....	7378	57.2	56.2	57.3	57.5	-	40.2	39.8	39.1	39.6	-
Miscellaneous business services .....	738	1,720.9	1,684.3	1,770.3	1,775.7	-	1,498.5	1,466.7	1,541.3	1,544.1	-
Detective and armored car services .....	7381	572.3	560.6	589.4	596.1	-	528.5	516.6	542.8	549.3	-
Security systems services .....	7382	57.9	56.2	58.4	58.3	-	49.5	48.0	49.3	48.0	-
Photofinishing laboratories .....	7384	75.6	71.7	76.7	77.2	-	-	-	-	-	-
Auto repair, services, and parking .....	75	1,124.3	1,120.2	1,144.2	1,145.5	1,153.5	924.8	923.9	932.1	931.0	-
Automotive rentals, without drivers .....	751	197.5	193.8	201.5	202.4	-	162.3	159.0	164.3	164.7	-
Passenger car rental .....	7514	130.1	126.7	134.8	135.4	-	108.5	106.0	111.6	111.6	-
Automobile parking .....	752	72.3	72.1	74.2	75.1	-	63.6	63.9	64.6	65.5	-
Automotive repair shops .....	753	621.5	620.4	624.5	625.3	-	499.5	500.3	495.5	493.8	-
Automotive and tire repair shops .....	7532,4	216.4	215.8	219.4	218.3	-	177.5	177.5	179.3	178.3	-
General automotive repair shops .....	7538	264.5	264.1	264.6	265.8	-	212.2	213.5	206.4	204.9	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Services—Continued</b>											
Auto repair, services, and parking—Continued											
Automotive services, except repair .....	754	232.9	233.9	244.0	242.7	—	199.5	200.7	207.7	207.0	—
Carwashes .....	7542	123.9	127.5	130.4	129.0	—	109.6	113.0	115.3	114.5	—
Miscellaneous repair services .....	76	375.9	371.6	378.8	382.9	384.2	307.5	303.6	309.5	312.9	—
Electrical repair shops .....	762	115.1	114.1	115.3	116.6	—	—	—	—	—	—
Motion pictures .....	78	548.1	536.6	567.2	561.5	557.8	459.5	448.5	474.6	467.9	—
Motion picture production and services .....	781	233.4	227.8	243.4	238.5	—	195.3	189.4	203.9	198.5	—
Motion picture theaters .....	783	131.8	127.3	131.3	131.5	—	—	—	—	—	—
Video tape rental .....	784	162.9	161.1	172.4	171.9	—	131.5	129.8	139.0	138.2	—
Amusement and recreation services .....	79	1,572.9	1,522.0	1,502.7	1,634.8	1,758.4	1,378.8	1,329.0	1,297.8	1,423.3	—
Bowling centers .....	793	81.4	87.3	85.4	83.9	—	72.6	78.4	76.6	75.0	—
Misc. amusement and recreation services .....	799	1,152.0	1,100.3	1,082.1	1,188.7	—	1,011.5	961.1	935.4	1,037.6	—
Physical fitness facilities .....	7991	165.4	163.6	177.5	179.2	—	147.1	145.8	158.4	159.7	—
Membership sports and recreation clubs .....	7997	328.2	299.3	282.8	332.7	—	288.6	260.3	243.1	290.7	—
Health services .....	80	9,719.5	9,657.7	9,848.3	9,859.2	9,882.7	8,613.5	8,559.2	8,729.6	8,733.7	—
Offices and clinics of medical doctors .....	801	1,742.9	1,722.6	1,790.3	1,798.6	1,807.2	1,430.8	1,414.4	1,477.0	1,481.2	—
Offices and clinics of dentists .....	802	628.2	626.3	636.1	638.1	—	549.4	548.4	555.1	556.3	—
Offices and clinics of other health practitioners .....	804	439.3	432.5	460.8	462.9	—	365.5	360.2	380.4	382.8	—
Offices and clinics of chiropractors and optometrists .....	8041,2	165.2	162.7	169.0	169.2	—	—	—	—	—	—
Nursing and personal care facilities .....	805	1,754.5	1,748.1	1,756.8	1,755.8	1,755.5	1,577.7	1,571.7	1,580.0	1,579.2	—
Skilled nursing care facilities .....	8051	1,330.3	1,326.0	1,331.8	1,331.0	—	—	—	—	—	—
Intermediate care facilities .....	8052	207.9	207.6	207.4	208.1	—	186.9	187.1	186.5	187.3	—
Nursing and personal care, nec .....	8059	216.3	214.5	217.6	216.7	—	—	—	—	—	—
Hospitals .....	806	3,868.7	3,846.0	3,924.9	3,932.5	3,939.9	3,545.0	3,522.0	3,598.0	3,603.5	—
General medical and surgical hospitals .....	8062	3,567.0	3,545.8	3,618.2	3,624.6	—	—	—	—	—	—
Psychiatric hospitals .....	8063	84.1	84.2	84.2	84.5	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric .....	8069	217.6	216.0	222.5	223.4	—	—	—	—	—	—
Medical and dental laboratories .....	807	198.5	197.6	200.9	201.0	—	—	—	—	—	—
Home health care services .....	808	712.5	711.8	694.8	686.6	685.5	656.7	656.5	640.5	632.2	—
Legal services .....	81	947.3	937.6	966.2	967.7	969.9	756.1	748.5	769.6	770.6	—
Educational services .....	82	2,114.2	2,223.9	2,324.2	2,333.7	2,245.6	—	—	—	—	—
Elementary and secondary schools .....	821	627.8	635.4	663.6	660.7	—	—	—	—	—	—
Colleges and universities .....	822	1,225.6	1,329.0	1,382.2	1,393.4	—	—	—	—	—	—
Vocational schools .....	824	82.1	82.3	87.8	88.3	—	—	—	—	—	—
Social services .....	83	2,513.8	2,504.7	2,595.9	2,612.7	2,631.5	2,182.6	2,176.2	2,245.9	2,260.5	—
Individual and family services .....	832	675.3	671.5	694.4	698.8	—	585.9	583.3	601.1	605.2	—
Job training and related services .....	833	351.7	342.2	364.3	368.7	—	302.8	293.8	311.8	316.0	—
Child day care services .....	835	569.5	581.9	589.3	593.6	596.5	504.3	517.1	521.9	526.2	—
Residential care .....	836	716.8	707.6	742.0	745.0	747.8	622.0	613.9	643.3	645.2	—
Social services, nec .....	839	200.5	201.5	205.9	206.6	—	167.5	168.1	167.8	167.9	—
Museums and botanical and zoological gardens .....	84	89.9	87.6	86.2	90.5	94.6	—	—	—	—	—
Membership organizations .....	86	2,248.2	2,236.9	2,248.6	2,253.0	2,264.8	—	—	—	—	—
Business associations .....	861	107.8	105.8	108.5	108.2	—	—	—	—	—	—
Professional organizations .....	862	59.1	59.0	60.7	61.1	—	42.6	42.6	44.0	44.1	—
Labor organizations .....	863	142.3	145.8	143.1	142.4	—	—	—	—	—	—
Civic and social associations .....	864	443.2	429.4	439.2	443.3	—	—	—	—	—	—
Engineering and management services .....	87	3,004.8	2,973.7	3,175.7	3,200.4	3,197.7	2,295.2	2,272.8	2,428.1	2,450.2	—
Engineering and architectural services .....	871	869.1	853.7	895.1	902.1	913.1	714.0	699.7	733.9	740.2	—
Engineering services .....	8711	667.0	655.0	686.1	691.5	—	553.8	542.4	568.9	574.0	—
Architectural services .....	8712	146.1	143.8	152.5	153.0	—	114.3	112.3	119.0	119.2	—
Surveying services .....	8713	56.1	54.9	56.5	57.6	—	45.9	45.0	46.0	47.0	—
Accounting, auditing, and bookkeeping .....	872	599.5	612.5	657.7	661.2	—	421.5	435.5	472.0	475.2	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Services—Continued</b>											
Engineering and management services—Continued											
Research and testing services .....	873	592.4	583.5	615.4	621.3	—	452.2	444.9	471.7	478.5	—
Commercial physical research .....	8731	225.3	222.4	231.9	232.4	—	156.2	154.0	160.9	161.2	—
Commercial nonphysical research .....	8732	134.1	132.5	142.1	146.0	—	110.9	109.7	118.6	123.0	—
Noncommercial research organizations .....	8733	140.2	137.3	146.9	147.7	—	109.5	107.1	115.4	116.2	—
Management and public relations .....	874	943.7	924.0	1,007.5	1,015.8	1,031.0	707.4	692.7	750.5	756.3	—
Management services .....	8741	314.6	308.6	333.3	338.0	—	232.5	229.3	246.5	251.4	—
Management consulting services .....	8742	333.7	323.6	365.5	366.9	—	251.1	241.9	271.4	270.7	—
Public relations services .....	8743	38.7	38.1	41.9	42.6	—	25.5	24.8	28.2	28.6	—
Services, nec .....	89	49.6	48.7	50.8	51.2	51.4	39.4	38.6	39.9	40.5	—
<b>Government</b> .....		19,570	19,865	20,126	20,130	20,188	—	—	—	—	—
Federal Government <sup>4</sup> .....		2,699	2,700	2,662	2,668	2,677	—	—	—	—	—
Executive, by agency <sup>4</sup> .....		2,638.3	2,640.4	2,600.8	—	—	—	—	—	—	—
Department of Defense .....		698.2	703.3	669.0	—	—	—	—	—	—	—
Postal Service <sup>5</sup> .....		857.9	847.9	852.7	—	—	—	—	—	—	—
Other executive agencies .....		1,082.2	1,089.2	1,079.1	—	—	—	—	—	—	—
Legislative .....		31.4	30.6	30.4	—	—	—	—	—	—	—
Judicial .....		29.7	29.4	30.4	—	—	—	—	—	—	—
Federal Government, except Postal Service .....		1,841.5	1,852.5	1,808.9	1,815.2	1,823.1	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities .....		50.3	51.7	47.4	47.4	—	—	—	—	—	—
Ship building and repairing .....	3731	22.1	22.3	21.9	21.9	—	—	—	—	—	—
Transportation and public utilities, except Postal Service .....		13.9	14.1	12.4	12.3	—	—	—	—	—	—
Services .....		362.1	360.2	355.5	357.0	—	—	—	—	—	—
Hospitals .....	806	223.5	223.8	220.7	220.6	—	—	—	—	—	—
State government .....		4,594	4,702	4,741	4,747	4,692	—	—	—	—	—
Construction .....		87.9	86.4	86.6	86.4	—	—	—	—	—	—
Transportation and public utilities .....		52.7	53.1	51.3	51.5	—	—	—	—	—	—
Services .....		2,629.7	2,746.8	2,780.6	2,776.8	—	—	—	—	—	—
Hospitals .....	806	365.3	364.7	365.8	364.7	—	—	—	—	—	—
Education .....	82	1,911.7	2,031.9	2,064.8	2,060.4	1,992.6	—	—	—	—	—
Social services .....		208.4	209.0	206.0	206.8	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		144.2	141.2	144.0	144.9	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		1,823.6	1,815.9	1,822.4	1,832.5	—	—	—	—	—	—
State government, except education .....		2,682.2	2,670.3	2,676.1	2,686.8	2,699.7	—	—	—	—	—
Local government .....		12,276	12,463	12,723	12,715	12,819	—	—	—	—	—
Transportation and public utilities .....		454.1	451.1	454.0	454.4	—	—	—	—	—	—
Services .....		8,047.8	8,315.7	8,533.0	8,513.7	—	—	—	—	—	—
Hospitals .....	806	637.4	632.0	648.0	647.4	—	—	—	—	—	—
Education .....	82	6,913.0	7,208.4	7,390.7	7,365.4	7,402.2	—	—	—	—	—
Social services .....		140.5	138.0	140.0	140.4	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		356.9	337.3	354.3	360.5	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		3,774.1	3,695.7	3,735.5	3,746.7	—	—	—	—	—	—
Local government, except education .....		5,363.0	5,254.1	5,331.8	5,349.4	5,416.3	—	—	—	—	—

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

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

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

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

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

<sup>5</sup> Includes rural mail carriers.

— Data not available.

P = preliminary.

NOTE: Data have been revised to reflect March 1997 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. 1997	Mar. 1997	Jan. 1998	Feb. 1998	Mar. 1998
<b>Total</b> .....	59,380	58,837	59,629	60,005	60,275
<b>Total private</b> .....	48,521	47,752	48,616	48,753	48,961
<b>Goods-producing</b> .....	6,704	6,627	6,706	6,707	6,717
<b>Mining</b> .....	82	80	82	82	82
<b>Construction</b> .....	633	610	633	634	640
<b>Manufacturing</b> .....	5,989	5,937	5,991	5,991	5,995
<b>Durable goods</b> .....	2,914	2,881	2,967	2,972	2,975
Lumber and wood products .....	138	134	138	138	138
Furniture and fixtures .....	160	160	163	164	165
Stone, clay, and glass products .....	105	103	106	106	106
Primary metal industries .....	103	102	104	104	104
Fabricated metal products .....	327	323	332	333	333
Industrial machinery and equipment .....	474	469	486	488	487
Electronic and other electrical equipment .....	698	689	715	715	714
Transportation equipment .....	388	379	400	402	401
Instruments and related products .....	352	350	355	354	356
Miscellaneous manufacturing .....	171	171	167	169	170
<b>Nondurable goods</b> .....	3,075	3,056	3,024	3,019	3,020
Food and kindred products .....	556	535	541	538	538
Tobacco products .....	13	13	14	13	13
Textile mill products .....	286	287	279	278	277
Apparel and other textile products .....	610	621	582	580	581
Paper and allied products .....	167	165	166	166	167
Printing and publishing .....	701	695	704	703	704
Chemicals and allied products .....	330	329	327	329	329
Petroleum and coal products .....	25	24	24	24	24
Rubber and misc. plastics products .....	339	338	343	344	344
Leather and leather products .....	48	50	45	45	45
<b>Service-producing</b> .....	52,676	52,210	52,923	53,298	53,558
<b>Transportation and public utilities</b> .....	1,938	1,934	1,938	1,940	1,945
<b>Wholesale trade</b> .....	2,055	2,036	2,067	2,064	2,067
<b>Retail trade</b> .....	11,584	11,250	11,526	11,402	11,413
<b>Finance, insurance, and real estate</b> .....	4,466	4,416	4,512	4,521	4,548
<b>Services</b> .....	21,775	21,489	21,867	22,119	22,271
<b>Government</b> .....	10,859	11,085	11,013	11,252	11,314
Federal .....	1,146	1,144	1,129	1,132	1,132
State .....	2,342	2,389	2,337	2,421	2,438
Local .....	7,371	7,552	7,547	7,699	7,744

NOTE: Data have been revised to reflect March 1997 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 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Alabama</b>	1,862.1	1,877.7	1,881.6	10.4	9.8	9.9	97.1	96.0	98.8
Birmingham	461.5	468.4	470.3	3.2	3.0	3.0	26.9	28.1	28.7
Huntsville	171.3	175.3	175.5	(1)	(1)	(1)	6.1	5.6	6.3
Mobile	219.7	223.3	223.7	(1)	(1)	(1)	16.6	16.9	16.9
Montgomery	156.4	156.4	157.5	(1)	(1)	(1)	8.4	7.7	8.2
Tuscaloosa	78.4	81.3	81.6	2.7	2.7	2.7	5.7	5.7	5.9
<b>Alaska</b>	261.5	263.0	266.8	9.5	10.3	10.2	10.7	9.7	10.8
Anchorage	121.1	123.1	124.6	2.4	2.7	2.7	5.5	5.2	5.6
<b>Arizona</b>	1,971.7	2,063.2	2,062.9	13.3	13.4	13.5	127.9	132.2	132.6
Phoenix-Mesa	1,374.5	1,453.4	1,456.8	5.8	6.0	6.0	92.1	95.8	96.4
Tucson	315.7	324.1	321.9	2.3	2.3	2.3	18.7	20.5	20.5
<b>Arkansas</b>	1,101.5	1,115.2	1,123.3	3.5	3.5	3.6	46.9	46.1	48.2
Fayetteville-Springdale-Rogers	137.8	138.7	139.5	(1)	(1)	(1)	5.7	5.3	5.4
Fort Smith	95.2	95.6	95.5	.9	.9	.9	3.9	4.1	4.1
Little Rock-North Little Rock	301.2	306.6	307.7	(1)	(1)	(1)	14.1	14.0	14.6
Pine Bluff	35.6	35.7	35.7	(1)	(1)	(1)	.9	1.0	1.0
<b>California</b>	13,056.1	13,454.6	13,492.1	29.2	28.8	28.5	531.2	574.0	579.8
Bakersfield	179.0	181.4	182.0	10.6	10.8	10.8	8.3	7.9	7.8
Fresno	273.0	275.2	276.3	.6	.5	.5	13.1	13.9	13.9
Los Angeles-Long Beach	3,854.2	3,954.7	3,960.4	5.7	5.6	5.6	107.9	111.6	111.8
Modesto	129.9	133.4	133.9	(2)	(2)	(2)	6.5	6.9	7.2
Oakland	944.8	966.8	968.7	2.2	2.3	2.3	48.5	51.2	51.8
Orange County	1,219.2	1,266.0	1,269.9	.9	.9	.9	55.8	61.4	61.9
Riverside-San Bernardino	840.8	875.4	877.6	1.2	1.1	1.1	49.7	54.9	55.8
Sacramento	619.7	634.6	634.4	.2	.2	.2	31.4	33.0	33.5
Salinas	116.2	118.1	118.0	.1	.1	.1	4.2	4.7	4.7
San Diego	1,042.4	1,071.6	1,074.5	.4	.4	.4	50.7	53.7	53.5
San Francisco	980.4	994.4	994.8	.6	.5	.5	34.1	36.2	36.7
San Jose	916.7	952.9	955.4	.1	.1	.1	35.6	40.2	40.8
Santa Barbara-Santa Maria-Lompoc	150.8	151.6	152.7	1.1	1.0	1.0	6.4	6.2	6.4
Santa Rosa	163.9	169.0	169.7	.5	.4	.4	8.9	8.7	9.1
Stockton-Lodi	164.0	166.9	167.1	.1	.1	.1	7.2	7.3	7.4
Vallejo-Fairfield-Napa	147.4	154.2	154.9	.5	.5	.5	9.6	10.6	10.6
Ventura	243.8	248.5	248.5	1.7	1.5	1.5	10.9	10.6	10.9
<b>Colorado</b>	1,956.7	2,021.2	2,022.3	13.5	14.0	13.9	113.7	121.9	123.7
Boulder-Longmont	155.6	161.9	161.5	(1)	(1)	(1)	6.2	6.5	6.5
Colorado Springs	214.1	215.7	217.6	(1)	(1)	(1)	12.3	12.5	12.8
Denver	1,042.0	1,071.9	1,076.0	6.8	6.6	6.6	59.6	63.9	64.7
<b>Connecticut</b>	1,603.7	1,624.1	1,636.6	.7	.7	.8	54.4	53.6	56.9
Bridgeport	182.4	182.8	184.0	(2)	(2)	(2)	5.9	5.8	6.4
Danbury	84.6	86.2	86.8	(1)	(1)	(1)	3.4	3.5	3.8
Hartford	596.9	598.1	601.0	(1)	(1)	(1)	19.1	18.1	19.6
New Haven-Meriden	250.7	247.3	250.3	(1)	(1)	(1)	8.7	8.6	8.8
New London-Norwich	134.2	136.3	137.4	(1)	(1)	(1)	4.4	4.4	4.5
Stamford-Norwalk	200.4	204.3	206.4	(1)	(1)	(1)	5.6	5.3	5.5
Waterbury	84.7	87.1	87.1	(2)	(2)	(2)	3.1	3.1	3.5
<b>Delaware</b>	382.8	392.8	396.7	.1	.1	.1	21.0	20.9	21.7
Dover	51.1	53.2	53.9	.1	.1	.1	2.2	2.2	2.4
Wilmington-Newark	298.3	308.8	311.1	.2	.2	.2	15.9	16.0	16.5
<b>District of Columbia</b>	613.7	608.6	609.0	.1	.1	.1	8.9	8.8	8.6
Washington PMSA	2,459.8	2,502.2	2,513.9	1.0	1.1	1.0	123.1	125.2	128.6
<b>Florida</b>	6,407.0	6,667.1	6,672.5	6.5	6.7	6.8	326.9	341.6	342.1
Daytona Beach	150.1	155.8	155.0	(2)	(2)	(2)	7.6	7.8	7.8
Fort Lauderdale	623.4	648.1	645.7	.1	.1	.1	33.1	34.0	34.1
Fort Myers-Cape Coral	151.6	156.2	155.0	(2)	(2)	(2)	12.4	12.8	12.6
Gainesville	111.6	115.0	115.2	(2)	(2)	(2)	4.3	4.4	4.5
Jacksonville	513.9	535.5	538.7	(2)	(2)	(2)	27.4	28.5	28.4
Lakeland-Winter Haven	168.5	174.6	174.4	3.1	3.1	3.1	8.6	8.6	8.6
Melbourne-Titusville-Palm Bay	176.5	181.0	180.9	(2)	(2)	(2)	9.4	9.5	9.5
Miami	958.0	982.1	979.0	.3	.3	.3	33.2	33.8	33.7
Orlando	787.7	827.2	829.4	(2)	(2)	(2)	41.9	45.3	45.4
Pensacola	149.3	153.8	154.1	(2)	(2)	(2)	10.5	11.0	10.9
Sarasota-Bradenton	247.0	267.0	266.4	(2)	(2)	(2)	12.2	12.7	12.7
Tallahassee	147.8	149.9	150.3	(2)	(2)	(2)	6.1	5.7	6.0
Tampa-St. Petersburg-Clearwater	1,059.3	1,109.7	1,110.8	.4	.4	.4	50.0	53.7	54.3
West Palm Beach-Boca Raton	436.4	459.5	457.3	(2)	(2)	(2)	24.0	25.4	25.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Alabama</b> .....	380.1	377.3	376.3	91.0	91.3	91.2	423.4	428.7	430.4
Birmingham .....	51.8	50.7	50.7	30.1	30.3	30.3	110.6	113.3	114.0
Huntsville .....	38.6	40.0	39.9	3.7	3.6	3.4	34.4	35.0	35.4
Mobile .....	27.6	27.9	27.7	13.2	13.5	13.5	57.4	58.3	58.5
Montgomery .....	17.6	17.4	17.5	6.4	6.4	6.6	36.9	36.5	36.6
Tuscaloosa .....	11.1	12.3	12.3	2.4	2.4	2.6	18.2	18.2	18.3
<b>Alaska</b> .....	15.6	16.2	15.4	22.9	23.2	24.0	53.0	53.0	54.1
Anchorage .....	2.0	1.9	2.0	11.8	12.1	12.4	29.7	30.0	30.4
<b>Arizona</b> .....	202.9	214.5	214.5	95.5	97.3	97.4	480.0	500.7	500.6
Phoenix-Mesa .....	157.5	167.7	187.8	69.6	72.6	72.7	337.0	355.9	357.2
Tucson .....	28.1	28.9	28.9	13.3	13.2	13.3	68.5	70.4	70.0
<b>Arkansas</b> .....	252.4	254.6	254.8	64.7	67.0	67.2	251.1	251.5	253.9
Fayetteville-Springdale-Rogers .....	33.8	33.6	33.7	9.2	9.3	9.3	38.2	38.6	38.9
Fort Smith .....	27.4	26.5	27.0	6.5	8.6	6.6	20.2	19.9	19.9
Little Rock-North Little Rock .....	32.8	33.6	33.4	20.8	21.4	21.3	69.6	70.3	70.6
Pine Bluff .....	8.1	8.3	8.3	1.7	1.8	1.8	7.5	7.2	7.2
<b>California</b> .....	1,890.1	1,938.3	1,937.0	653.7	671.5	673.6	3,011.6	3,080.5	3,085.3
Bakersfield .....	9.9	10.1	10.3	9.6	10.4	10.5	42.3	42.6	42.5
Fresno .....	29.3	28.5	28.7	14.1	14.1	14.1	66.4	66.6	66.8
Los Angeles-Long Beach .....	659.3	680.7	680.7	209.1	215.6	216.0	849.3	867.0	867.9
Modesto .....	24.8	25.3	25.2	5.2	5.5	5.5	33.1	34.0	34.1
Oakland .....	118.7	120.5	120.5	60.1	60.3	60.3	211.5	214.5	214.8
Orange County .....	219.8	230.5	231.2	44.6	46.9	46.9	304.5	315.9	316.2
Riverside-San Bernardino .....	103.9	110.3	110.1	42.1	44.7	44.9	216.5	223.7	224.2
Sacramento .....	43.6	47.0	47.1	24.5	25.4	25.5	135.1	136.5	137.8
Salinas .....	9.1	8.8	8.9	5.3	5.6	5.6	30.3	31.0	30.7
San Diego .....	120.8	124.3	124.3	40.9	41.5	41.6	238.2	241.1	242.0
San Francisco .....	76.0	76.6	76.0	78.5	79.7	79.5	206.3	204.9	203.7
San Jose .....	252.5	259.7	260.1	26.9	28.4	28.7	180.7	187.5	187.6
Santa Barbara-Santa Maria-Lompoc .....	16.9	16.8	17.0	5.3	5.7	5.9	35.7	35.1	35.3
Santa Rosa .....	24.8	26.1	25.9	6.0	6.6	6.6	40.8	42.1	42.3
Stockton-Lodi .....	22.4	22.0	21.9	10.2	10.5	10.8	38.9	39.7	39.4
Vallejo-Fairfield-Napa .....	17.2	18.2	18.3	5.7	6.2	6.2	38.4	39.2	39.3
Ventura .....	32.3	34.1	34.0	9.4	10.0	10.0	59.9	59.9	59.7
<b>Colorado</b> .....	200.3	207.2	207.4	122.5	121.8	122.8	473.8	488.7	486.7
Boulder-Longmont .....	30.9	33.1	32.9	3.6	3.9	3.9	33.9	34.1	34.1
Colorado Springs .....	25.3	27.3	27.5	11.7	11.4	11.5	47.2	48.5	48.4
Denver .....	92.0	93.6	93.7	85.5	85.4	85.8	252.3	260.7	260.8
<b>Connecticut</b> .....	275.6	276.6	276.6	74.8	75.6	75.9	345.6	351.9	352.9
Bridgeport .....	39.8	39.8	39.9	7.2	7.0	7.1	40.8	40.9	41.1
Danbury .....	18.6	18.8	18.8	2.6	2.5	2.4	21.3	21.5	21.5
Hartford .....	92.1	94.0	94.1	27.3	27.1	27.2	122.9	122.4	122.4
New Haven-Meriden .....	39.6	39.1	39.3	15.9	16.0	16.1	51.6	52.1	52.0
New London-Norwich .....	24.7	24.6	24.4	6.4	6.4	6.6	26.7	26.7	27.0
Stamford-Norwalk .....	28.5	27.1	27.3	10.0	9.9	10.0	44.6	45.3	45.5
Waterbury .....	18.7	19.2	19.1	3.5	3.6	3.6	16.9	18.7	18.3
<b>Delaware</b> .....	57.1	58.6	58.8	15.6	15.6	15.7	83.4	84.0	84.8
Dover .....	5.8	6.1	6.1	1.7	1.9	1.9	12.8	12.7	12.7
Wilmington-Newark .....	42.7	44.8	44.8	13.4	13.8	13.9	60.6	61.3	61.7
<b>District of Columbia</b> .....	12.5	12.7	12.7	17.6	17.1	17.1	47.6	48.0	48.2
Washington PMSA .....	98.4	100.4	101.1	111.5	110.7	111.6	462.5	468.4	467.6
<b>Florida</b> .....	490.5	492.3	491.0	326.2	338.4	338.0	1,644.3	1,704.9	1,697.3
Daytona Beach .....	14.1	14.6	14.6	4.3	4.4	4.4	43.1	44.1	44.1
Fort Lauderdale .....	40.3	40.5	40.3	30.9	31.9	31.6	177.5	183.2	182.4
Fort Myers-Cape Coral .....	6.6	6.7	6.7	6.9	7.1	7.0	43.2	45.2	44.4
Gainesville .....	5.5	5.5	5.4	2.3	2.6	2.7	23.3	24.3	24.2
Jacksonville .....	36.9	38.2	38.4	35.7	37.2	37.4	126.2	131.2	131.9
Lakeland-Winter Haven .....	21.0	20.7	20.9	8.8	9.2	9.0	47.8	50.4	50.5
Melbourne-Titusville-Palm Bay .....	27.0	28.2	28.2	5.2	5.6	5.6	41.1	42.4	42.2
Miami .....	76.0	73.1	73.0	82.7	85.1	84.7	251.3	260.3	259.4
Orlando .....	52.1	53.4	53.5	40.9	42.0	42.4	195.7	204.6	204.3
Pensacola .....	11.0	10.8	10.7	7.1	7.6	7.6	38.8	39.4	40.0
Sarasota-Bradenton .....	20.5	21.4	21.4	5.4	5.4	5.4	59.5	62.4	61.3
Tallahassee .....	5.2	5.1	5.1	4.0	4.2	4.3	29.4	30.0	29.8
Tampa-St. Petersburg-Clearwater .....	87.7	87.2	86.7	48.0	49.4	49.5	258.1	265.3	263.6
West Palm Beach-Boca Raton .....	30.3	31.1	30.7	16.1	16.6	16.6	112.8	119.6	117.6

See footnotes at end of table.

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

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

(in thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Alabama</b> .....	83.6	85.3	85.6	426.2	438.0	438.9	350.3	351.3	350.5
Birmingham .....	33.9	34.8	35.0	135.6	139.7	140.4	69.4	68.5	68.2
Huntsville .....	4.7	4.7	4.7	45.0	47.7	47.4	38.8	38.7	38.4
Mobile .....	9.9	10.0	10.0	60.1	61.3	61.8	34.9	35.4	35.3
Montgomery .....	9.2	9.3	9.3	40.7	41.8	41.8	37.2	37.3	37.5
Tuscaloosa .....	2.5	2.6	2.6	13.7	14.0	14.1	22.1	23.4	23.1
<b>Alaska</b> .....	11.8	11.9	12.0	63.1	64.4	65.3	74.9	74.3	75.0
Anchorage .....	7.1	7.1	7.1	34.3	35.4	35.6	28.3	28.7	28.8
<b>Arizona</b> .....	125.3	132.4	132.9	592.2	627.3	628.8	334.6	345.4	342.6
Phoenix-Mesa .....	105.6	113.1	114.0	430.0	458.1	459.8	176.9	184.2	182.9
Tucson .....	11.7	12.5	12.4	98.6	101.3	100.1	74.5	75.0	74.4
<b>Arkansas</b> .....	43.9	44.5	44.6	252.4	259.3	261.8	186.6	188.7	189.2
Fayetteville-Springdale-Rogers .....	4.8	4.9	5.0	26.7	27.1	27.2	19.4	19.9	20.0
Fort Smith .....	3.1	3.0	3.1	23.3	24.8	25.1	9.9	9.8	9.8
Little Rock-North Little Rock .....	17.4	17.4	17.5	86.9	89.9	90.3	59.6	60.0	60.0
Pine Bluff .....	1.3	1.3	1.3	8.3	8.4	8.4	7.8	7.7	7.7
<b>California</b> .....	749.4	773.0	776.1	4,018.2	4,185.1	4,204.9	2,172.7	2,203.4	2,206.9
Bakersfield .....	6.6	7.1	7.1	42.7	42.8	43.2	49.0	49.7	49.8
Fresno .....	13.6	13.6	13.5	69.6	70.9	71.3	66.3	67.1	67.5
Los Angeles-Long Beach .....	217.9	223.7	223.8	1,261.6	1,301.6	1,304.7	543.4	548.9	549.9
Modesto .....	4.4	4.4	4.4	31.9	32.3	32.4	24.0	25.0	25.1
Oakland .....	54.4	55.6	55.5	277.8	288.9	289.6	171.6	173.5	173.9
Orange County .....	90.8	93.9	94.3	367.6	377.4	379.5	135.2	139.1	139.0
Riverside-San Bernardino .....	30.0	31.3	31.5	222.9	233.3	233.4	174.5	176.1	176.6
Sacramento .....	40.6	43.1	43.0	173.3	177.1	177.5	171.0	172.3	171.8
Salinas .....	5.9	5.7	5.8	33.0	33.1	33.2	28.3	29.1	29.0
San Diego .....	60.2	62.5	62.3	335.9	349.7	351.9	195.3	198.4	198.5
San Francisco .....	101.3	104.3	104.3	357.6	369.4	371.2	126.0	122.8	122.9
San Jose .....	30.6	31.1	31.2	300.4	315.3	316.1	89.9	90.6	90.8
Santa Barbara-Santa Maria-Lompoc .....	7.3	7.5	7.5	46.9	47.4	47.5	31.2	31.9	32.1
Santa Rosa .....	9.3	9.6	9.6	47.8	48.9	49.2	25.8	26.6	26.6
Stockton-Lodi .....	8.7	8.8	8.8	41.2	42.7	42.9	35.3	35.8	36.0
Vallejo-Fairfield-Napa .....	6.0	6.3	6.3	38.9	41.5	41.8	31.1	31.7	31.9
Ventura .....	12.6	14.0	13.9	72.5	74.8	75.1	44.5	43.6	43.4
<b>Colorado</b> .....	125.4	131.4	130.8	588.8	612.2	613.3	318.7	324.0	323.9
Boulder-Longmont .....	5.4	5.6	5.5	48.9	51.3	51.4	26.7	27.4	27.2
Colorado Springs .....	11.7	11.8	12.0	70.9	69.0	70.1	35.0	35.2	35.3
Denver .....	82.6	86.3	86.4	318.2	327.2	329.7	145.0	148.2	148.3
<b>Connecticut</b> .....	130.4	133.8	134.2	492.3	500.3	508.4	229.9	231.6	230.9
Bridgeport .....	10.2	10.2	10.2	57.7	58.1	58.2	20.8	21.2	21.1
Danbury .....	4.3	4.8	4.7	24.2	24.5	25.2	10.2	10.6	10.4
Hartford .....	69.0	68.2	68.4	170.7	171.3	172.8	95.8	97.0	96.5
New Haven-Meriden .....	13.0	12.9	12.8	90.4	87.3	90.0	31.5	31.3	31.3
New London-Norwich .....	3.7	3.7	3.8	34.0	34.2	34.8	34.3	36.3	36.3
Stamford-Norwalk .....	23.0	26.0	26.1	70.8	72.5	73.9	17.9	18.2	18.1
Waterbury .....	4.3	4.2	4.2	25.7	26.1	26.2	12.5	12.2	12.2
<b>Delaware</b> .....	46.1	48.9	49.5	105.5	110.0	110.9	54.0	54.7	55.2
Dover .....	2.1	2.5	2.5	11.5	12.3	12.4	15.0	15.5	15.9
Wilmington-Newark .....	40.3	42.7	43.2	86.6	90.5	91.2	38.6	39.7	39.6
<b>District of Columbia</b> .....	28.3	28.5	28.4	265.1	268.0	266.9	233.6	225.4	227.0
Washington PMSA .....	132.9	133.7	133.4	939.6	972.6	977.4	590.8	590.1	593.2
<b>Florida</b> .....	406.7	423.1	424.5	2,248.8	2,387.1	2,400.9	957.1	973.0	971.6
Daytona Beach .....	6.4	6.6	6.6	51.4	54.2	53.5	23.2	24.1	24.0
Fort Lauderdale .....	44.0	45.6	45.5	213.1	227.2	225.9	84.4	85.6	85.8
Fort Myers-Cape Coral .....	9.0	9.3	9.3	48.3	49.2	49.2	25.1	25.8	25.7
Gainesville .....	5.0	5.2	5.3	32.2	33.7	33.9	39.0	39.3	39.2
Jacksonville .....	52.7	53.3	53.2	167.1	178.1	180.5	67.5	68.6	68.5
Lakeland-Winter Haven .....	7.6	8.1	8.1	46.3	48.4	48.5	25.3	26.1	25.7
Melbourne-Titusville-Palm Bay .....	5.8	6.0	6.1	63.1	63.9	64.0	24.9	25.4	25.3
Miami .....	67.8	68.3	68.3	310.6	322.9	322.0	136.1	138.3	137.6
Orlando .....	45.5	47.8	47.8	326.8	346.3	348.3	84.4	87.4	87.3
Pensacola .....	5.9	6.3	6.2	46.9	49.5	49.9	28.8	29.0	28.5
Sarasota-Bradenton .....	11.4	11.7	11.7	114.2	129.7	130.2	23.7	23.6	23.6
Tallahassee .....	5.6	5.8	5.8	38.4	39.3	39.6	58.9	59.6	59.5
Tampa-St. Petersburg-Clearwater .....	74.7	78.7	79.2	407.6	439.2	442.4	132.8	135.8	134.7
West Palm Beach-Boca Raton .....	30.3	31.4	31.3	168.0	180.0	180.3	54.9	55.4	55.5

See footnotes at end of table.



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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Georgia</b> .....	3,578.1	3,697.4	3,712.0	8.1	8.2	8.2	166.3	175.6	177.2
Albany .....	59.1	59.2	59.6	(2)	(2)	(2)	3.4	3.5	3.7
Athens .....	72.1	74.4	74.3	(1)	(1)	(1)	2.6	2.4	2.5
Atlanta .....	1,937.8	2,008.1	2,015.6	1.6	1.7	1.7	92.0	99.3	100.7
Augusta-Aiken .....	192.8	194.6	195.8	.4	.4	.4	11.2	10.9	10.9
Columbus .....	114.8	116.9	117.1	(1)	(1)	(1)	5.2	5.4	5.5
Macon .....	147.4	151.2	151.5	1.2	1.3	1.3	6.2	6.6	6.7
Savannah .....	131.6	133.8	133.9	(1)	(1)	(1)	7.9	7.4	7.4
<b>Hawaii</b> .....	532.0	532.4	530.3	(1)	(1)	(1)	21.9	21.6	21.5
Honolulu .....	403.7	403.0	401.2	(1)	(1)	(1)	17.1	16.7	16.7
<b>Idaho</b> .....	501.8	509.0	511.9	3.1	2.9	3.0	30.3	29.9	31.1
Boise City .....	191.0	194.5	195.1	(1)	(1)	(1)	13.3	12.0	12.2
<b>Illinois</b> .....	5,723.4	5,786.2	5,833.6	11.9	11.1	11.4	226.4	211.0	231.5
Bloomington-Normal .....	78.8	81.2	81.8	(1)	(1)	(1)	2.5	2.5	2.7
Champaign-Urbana .....	98.0	98.7	98.4	(1)	(1)	(1)	3.0	2.9	3.1
Chicago .....	3,991.3	4,033.0	4,064.3	1.6	1.5	1.7	154.4	143.2	156.8
Davenport-Moline-Rock Island .....	176.9	179.1	181.1	(1)	(1)	(1)	8.8	8.7	9.3
Decatur .....	56.7	56.4	57.1	(1)	(1)	(1)	3.6	3.5	3.8
Kankakee .....	42.8	42.9	43.6	(1)	(1)	(1)	1.9	1.7	1.8
Peoria-Pekin .....	169.3	171.3	172.6	(1)	(1)	(1)	7.7	6.9	7.2
Rockford .....	176.0	177.7	178.4	(1)	(1)	(1)	6.4	5.9	6.4
Springfield .....	111.7	112.5	113.5	(1)	(1)	(1)	4.7	4.4	4.8
<b>Indiana</b> .....	2,857.7	2,862.3	2,887.2	6.8	6.5	6.9	138.3	129.2	139.7
Bloomington .....	65.6	65.3	65.7	(1)	(1)	(1)	3.0	3.2	3.2
Elkhart-Goshen .....	116.9	115.5	115.9	(1)	(1)	(1)	4.4	4.5	4.8
Evansville-Henderson .....	152.0	152.2	152.7	1.3	1.3	1.3	9.2	8.9	9.3
Fort Wayne .....	267.2	269.1	271.2	(1)	(1)	(1)	12.3	12.3	13.1
Gary .....	264.4	261.6	267.1	(1)	(1)	(1)	17.6	14.8	17.7
Indianapolis .....	824.5	841.5	847.1	.8	.8	.9	44.5	46.6	49.0
Kokomo .....	51.7	52.4	53.3	(1)	(1)	(1)	2.1	2.2	2.5
Lafayette .....	92.9	93.9	94.6	(1)	(1)	(1)	3.7	3.4	3.7
Muncie .....	60.9	59.7	60.0	(1)	(1)	(1)	2.4	2.2	2.3
South Bend .....	133.3	133.8	134.6	(1)	(1)	(1)	7.5	6.8	7.4
Terre Haute .....	68.5	67.3	67.6	.2	.3	.2	3.0	2.6	3.1
<b>Iowa</b> .....	1,400.9	1,417.2	1,437.1	2.1	1.9	2.1	56.9	52.6	59.5
Cedar Rapids .....	111.2	114.5	115.1	(1)	(1)	(1)	5.1	5.6	6.0
Des Moines .....	268.2	268.5	271.5	(1)	(1)	(1)	11.8	9.6	11.7
Dubuque .....	50.5	51.7	52.3	(1)	(1)	(1)	1.7	1.6	1.9
Iowa City .....	66.3	67.2	68.0	(1)	(1)	(1)	2.1	2.1	2.3
Sioux City .....	64.5	64.9	65.5	(1)	(1)	(1)	3.2	3.2	3.6
Waterloo-Cedar Falls .....	71.1	72.5	73.0	(1)	(1)	(1)	2.6	2.4	2.7
<b>Kansas</b> .....	1,266.0	1,293.0	1,306.3	8.3	8.1	8.2	57.4	55.6	58.8
Lawrence .....	47.7	48.5	48.6	(1)	(1)	(1)	2.1	1.9	2.1
Topeka .....	99.2	98.7	99.6	(1)	(1)	(1)	4.4	3.9	4.5
Wichita .....	273.6	281.5	283.8	1.4	1.4	1.4	14.0	13.6	14.3
<b>Kentucky</b> .....	1,708.3	1,724.9	1,742.9	23.0	22.4	22.4	80.0	80.0	84.3
Lexington .....	268.8	273.9	277.9	.2	.2	.2	12.8	13.2	13.6
Louisville .....	547.4	560.0	566.4	.6	.5	.5	28.2	28.9	29.8
Owensboro .....	43.0	44.0	44.1	.3	.3	.3	3.2	3.4	3.5
<b>Louisiana</b> .....	1,839.2	1,878.1	1,880.2	52.1	55.8	55.5	114.3	118.6	117.2
Alexandria .....	53.3	54.4	54.7	.1	.1	.1	3.2	3.2	3.4
Baton Rouge .....	280.2	289.2	289.4	.8	1.0	1.0	30.4	34.2	33.8
Houma .....	72.9	76.7	77.4	6.9	7.6	7.6	3.3	3.8	3.8
Lafayette .....	159.7	163.7	164.3	14.5	15.7	15.7	8.5	9.9	10.1
Lake Charles .....	85.8	85.8	87.0	1.2	1.4	1.4	10.5	10.4	10.5
Monroe .....	68.2	68.8	68.9	.2	.2	.2	3.5	3.5	3.6
New Orleans .....	612.4	616.9	618.0	15.1	15.1	15.0	30.3	30.8	30.9
Shreveport-Bossier City .....	168.8	173.9	174.1	2.5	2.6	2.5	9.2	9.9	10.0
<b>Maine</b> .....	537.3	544.0	549.6	.1	.1	.1	20.9	20.2	21.4
Lewiston-Auburn .....	40.5	40.8	41.0	(2)	(2)	(2)	1.5	1.5	1.5
Portland .....	138.1	138.9	139.7	(2)	(2)	(2)	6.1	6.3	6.8

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 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Georgia</b> .....	587.3	589.6	589.8	227.4	237.0	238.2	899.0	925.1	928.3
Albany .....	9.0	8.6	8.7	2.9	3.2	3.2	13.7	14.2	14.1
Athens .....	11.6	11.6	11.7	1.8	1.8	1.9	18.2	18.2	18.3
Atlanta .....	217.3	220.8	220.4	161.8	169.1	169.6	512.5	526.1	527.7
Augusta-Aiken .....	41.3	41.8	41.8	6.5	6.7	6.7	42.4	42.3	43.0
Columbus .....	21.6	21.7	21.3	4.0	4.2	4.2	26.0	26.7	26.9
Macon .....	20.2	20.3	20.3	5.3	5.3	5.3	34.0	34.1	34.0
Savannah .....	17.4	18.3	18.3	9.7	9.6	9.6	32.7	34.0	34.0
<b>Hawaii</b> .....	16.6	16.4	16.2	41.3	40.9	40.4	133.7	133.0	131.9
Honolulu .....	12.7	12.6	12.4	33.4	32.9	32.5	99.1	98.2	97.4
<b>Idaho</b> .....	72.7	74.8	74.9	23.5	25.4	25.6	126.9	126.7	127.6
Boise City .....	34.3	36.4	36.3	9.3	9.8	9.7	45.8	45.4	46.0
<b>Illinois</b> .....	968.9	979.1	981.1	335.4	340.7	341.7	1,303.5	1,317.7	1,321.1
Bloomington-Normal .....	8.6	8.8	8.7	3.0	2.8	2.9	17.2	17.0	17.3
Champaign-Urbana .....	11.9	11.4	11.6	2.7	2.7	2.7	21.1	21.5	21.1
Chicago .....	654.5	660.3	660.6	245.2	250.8	252.4	900.5	912.6	914.1
Davenport-Moline-Rock Island .....	30.3	31.3	31.7	9.4	9.7	9.9	46.7	46.2	46.6
Decatur .....	13.4	13.4	13.4	5.1	4.9	4.9	12.3	12.2	12.3
Kankakee .....	8.2	8.3	8.3	2.0	2.0	2.0	10.8	10.8	10.9
Peoria-Pekin .....	32.0	32.4	32.6	9.4	9.6	9.7	40.9	41.8	42.1
Rockford .....	53.1	53.5	53.5	9.1	9.3	9.3	36.6	37.3	37.4
Springfield .....	4.4	4.6	4.7	4.9	4.9	5.1	23.8	24.0	24.3
<b>Indiana</b> .....	675.5	680.1	679.1	140.5	140.9	141.5	674.8	671.4	676.3
Bloomington .....	9.8	10.3	10.2	1.9	1.8	1.8	14.6	15.2	15.2
Elkhart-Goshen .....	58.3	58.7	58.8	3.0	2.7	2.7	22.0	21.6	21.7
Evansville-Henderson .....	32.3	31.2	31.4	7.1	7.0	7.0	38.0	37.8	37.9
Fort Wayne .....	74.7	75.6	75.7	12.9	12.8	13.1	63.4	63.7	64.3
Gary .....	50.2	49.3	49.7	16.0	15.5	15.6	62.6	62.5	63.1
Indianapolis .....	127.2	128.9	128.7	50.2	51.6	51.9	212.1	215.9	215.9
Kokomo .....	21.2	21.1	21.5	1.2	1.2	1.2	10.9	11.0	11.0
Lafayette .....	21.9	22.1	21.9	2.3	2.2	2.2	19.0	18.9	19.0
Muncie .....	11.0	9.8	9.6	3.3	3.6	3.6	13.6	13.4	13.6
South Bend .....	22.2	22.5	22.8	5.5	5.6	5.5	34.0	33.5	33.7
Terre Haute .....	11.8	12.0	11.9	2.9	2.7	2.6	19.2	19.0	18.9
<b>Iowa</b> .....	251.0	256.7	257.4	65.6	66.8	67.5	340.9	341.4	346.9
Cedar Rapids .....	21.2	22.2	22.3	8.0	7.7	7.6	24.8	25.8	25.9
Des Moines .....	24.8	25.3	25.3	13.5	13.5	13.5	69.9	69.5	70.1
Dubuque .....	11.8	11.7	11.7	2.1	2.0	2.1	12.0	12.3	12.4
Iowa City .....	4.8	4.8	4.8	2.4	2.2	2.2	12.7	12.9	13.0
Sioux City .....	12.8	13.2	13.3	3.9	3.7	3.8	15.9	15.4	15.4
Waterloo-Cedar Falls .....	14.6	15.1	15.0	2.4	2.3	2.4	16.4	16.4	16.5
<b>Kansas</b> .....	204.5	210.4	211.4	72.0	73.1	73.8	304.6	313.3	316.3
Lawrence .....	5.3	5.3	5.3	1.2	1.3	1.3	11.9	11.7	11.8
Topeka .....	10.1	9.9	10.1	6.3	6.2	6.1	21.2	21.0	21.1
Wichita .....	67.8	73.0	73.2	10.9	10.9	11.1	61.0	62.3	62.6
<b>Kentucky</b> .....	314.5	314.4	314.0	97.0	98.9	101.1	405.2	408.9	413.8
Lexington .....	45.8	47.1	47.8	10.6	10.8	10.9	59.7	61.5	62.3
Louisville .....	88.1	89.4	89.2	40.8	42.2	43.8	133.5	136.9	138.2
Owensboro .....	7.1	7.1	7.1	2.2	2.3	2.3	10.7	11.0	11.0
<b>Louisiana</b> .....	188.4	188.5	189.5	109.3	112.4	112.6	426.4	434.2	434.4
Alexandria .....	3.4	3.6	3.5	2.6	2.7	2.7	12.1	12.5	12.5
Baton Rouge .....	24.2	24.6	24.8	12.4	12.6	12.6	65.2	67.6	67.8
Houma .....	6.8	7.6	7.5	7.9	8.3	8.5	17.1	17.4	17.8
Lafayette .....	16.7	14.5	14.6	9.5	10.1	10.2	41.0	42.2	42.2
Lake Charles .....	11.7	12.1	12.3	4.4	4.5	4.3	18.1	18.3	18.5
Monroe .....	8.0	8.0	8.0	3.8	3.6	3.6	16.8	17.1	17.1
New Orleans .....	48.1	49.3	49.2	41.7	42.4	42.4	150.2	149.2	149.3
Shreveport-Bossier City .....	19.2	19.3	19.3	8.2	8.5	8.6	38.4	40.1	40.0
<b>Maine</b> .....	85.8	86.4	85.9	22.5	23.3	23.2	131.7	130.8	134.3
Lewiston-Auburn .....	7.8	7.8	7.8	1.7	1.6	1.7	9.8	10.1	10.1
Portland .....	14.8	14.7	14.8	6.4	6.3	6.5	38.6	39.7	39.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Georgia</b> .....	184.3	193.0	193.7	926.1	975.9	983.3	579.6	593.0	593.3
Albany .....	2.1	2.1	2.1	15.1	14.9	15.1	12.9	12.7	12.7
Athens .....	2.2	2.2	2.2	15.3	15.2	15.1	20.4	23.0	22.6
Atlanta .....	125.6	131.6	132.0	570.0	599.9	603.6	257.0	259.6	259.9
Augusta-Aiken .....	5.9	6.0	5.9	45.9	46.6	47.3	39.2	39.9	39.8
Columbus .....	8.1	8.2	8.3	29.5	30.3	30.5	20.4	20.4	20.4
Macon .....	8.3	9.0	9.1	39.1	41.2	41.3	33.1	33.4	33.5
Savannah .....	4.3	4.3	4.3	38.6	39.2	39.3	21.0	21.0	21.0
<b>Hawaii</b> .....	36.0	35.3	35.2	168.5	170.1	170.2	114.0	115.1	114.9
Honolulu .....	28.9	28.2	28.2	120.6	121.6	121.6	91.9	92.8	92.4
<b>Idaho</b> .....	25.0	26.0	26.1	119.8	120.0	120.3	100.5	103.3	103.3
Boise City .....	10.7	11.5	11.6	47.8	48.2	48.0	29.8	31.2	31.3
<b>Illinois</b> .....	393.4	405.6	406.8	1,667.8	1,699.9	1,719.1	816.1	821.1	820.9
Bloomington-Normal .....	13.6	14.8	14.9	19.8	20.3	20.7	14.1	15.0	14.6
Champaign-Urbana .....	3.6	3.7	3.7	21.0	21.4	21.6	34.7	35.1	34.6
Chicago .....	307.6	315.6	316.3	1,236.2	1,259.9	1,273.6	491.3	489.1	488.8
Davenport-Moline-Rock Island .....	8.1	8.2	8.3	46.2	47.6	47.7	27.4	27.4	27.6
Decatur .....	2.0	2.0	2.0	13.6	13.6	13.7	6.7	6.8	7.0
Kankakee .....	1.6	1.6	1.7	11.5	11.4	11.7	6.8	7.1	7.2
Peoria-Pekin .....	7.8	7.9	8.0	52.0	53.1	53.5	19.5	19.6	19.5
Rockford .....	7.4	7.6	7.7	45.5	46.2	46.0	17.9	17.9	18.1
Springfield .....	7.9	7.9	7.8	32.2	32.8	33.0	33.8	33.9	33.8
<b>Indiana</b> .....	137.5	139.2	140.3	681.7	693.8	702.1	402.6	401.2	401.3
Bloomington .....	2.5	2.1	2.2	12.8	12.6	12.8	21.0	20.1	20.3
Elkhart-Goshen .....	2.9	3.2	3.2	18.9	17.9	17.9	7.4	6.9	6.8
Evansville-Henderson .....	7.2	7.4	7.5	42.0	43.8	43.9	14.9	14.8	14.4
Fort Wayne .....	14.7	14.6	14.7	61.9	62.0	62.3	27.3	28.1	28.0
Gary .....	9.2	9.5	9.4	72.0	72.7	74.4	36.8	37.3	37.2
Indianapolis .....	61.3	65.2	65.7	223.2	228.3	230.8	105.2	104.2	104.2
Kokomo .....	1.5	1.5	1.5	7.9	8.6	8.7	6.9	6.8	6.9
Lafayette .....	3.8	4.1	4.2	17.2	19.2	19.2	25.0	24.0	24.4
Muncie .....	1.8	1.8	1.9	15.9	16.7	16.9	12.9	12.2	12.1
South Bend .....	6.6	6.3	6.4	43.9	45.0	44.8	13.6	14.1	14.0
Terre Haute .....	2.3	2.2	2.2	16.9	16.3	16.6	12.2	12.2	12.1
<b>Iowa</b> .....	78.3	80.7	81.0	366.7	374.4	379.3	239.4	242.7	243.4
Cedar Rapids .....	5.7	6.3	6.3	34.9	35.4	35.6	11.5	11.5	11.4
Des Moines .....	36.7	38.1	38.1	76.2	78.3	79.0	35.3	34.2	33.8
Dubuque .....	1.7	1.8	1.8	17.4	18.4	18.6	3.8	3.9	3.8
Iowa City .....	1.8	2.0	2.0	14.1	14.6	14.7	28.4	28.6	29.0
Sioux City .....	2.5	2.6	2.6	18.7	19.1	19.1	7.5	7.7	7.7
Waterloo-Cedar Falls .....	3.3	3.3	3.3	18.8	19.9	20.0	13.0	13.1	13.1
<b>Kansas</b> .....	61.1	60.7	61.2	314.8	325.4	330.4	243.3	246.4	246.2
Lawrence .....	2.0	2.1	2.1	11.1	11.7	11.7	14.1	14.5	14.3
Topeka .....	6.7	6.8	6.9	28.1	28.5	28.8	22.4	22.4	22.1
Wichita .....	11.0	11.1	11.1	73.6	74.7	75.7	33.9	34.5	34.4
<b>Kentucky</b> .....	68.6	70.4	70.8	421.1	431.5	437.6	298.9	298.4	298.9
Lexington .....	9.9	10.2	10.3	72.1	73.5	75.2	57.7	57.4	57.6
Louisville .....	29.0	29.0	29.3	158.1	162.5	165.1	69.1	70.6	70.5
Owensboro .....	1.7	1.8	1.8	10.6	10.7	10.8	7.2	7.4	7.3
<b>Louisiana</b> .....	85.2	86.7	86.6	495.7	511.5	511.8	367.8	370.4	372.6
Alexandria .....	2.3	2.2	2.3	16.4	16.7	16.8	13.2	13.4	13.4
Baton Rouge .....	17.3	17.8	17.8	72.0	74.0	74.0	57.9	57.4	57.8
Houma .....	2.3	2.3	2.3	15.6	16.1	16.2	13.0	13.6	13.7
Lafayette .....	8.0	8.3	8.2	40.1	41.0	41.3	23.4	24.0	24.0
Lake Charles .....	2.7	2.7	2.7	24.0	24.4	24.2	13.2	13.0	13.1
Monroe .....	4.8	4.9	4.9	18.0	18.5	18.4	13.1	13.0	13.1
New Orleans .....	31.6	31.4	31.3	189.9	190.8	191.9	105.5	107.9	108.0
Shreveport-Bossier City .....	6.6	6.6	6.6	51.9	53.8	54.1	32.8	33.1	33.0
<b>Maine</b> .....	27.8	30.0	30.0	152.1	157.2	159.2	96.4	96.0	95.5
Lewiston-Auburn .....	2.1	2.2	2.2	12.6	12.7	12.7	5.0	4.9	5.0
Portland .....	12.4	12.7	12.8	41.6	40.6	40.8	18.2	18.6	18.4

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Maryland</b> .....	2,248.9	2,257.0	2,271.1	1.3	1.2	1.3	136.6	130.9	135.5
Baltimore PMSA .....	1,156.7	1,171.8	1,181.2	.2	.2	.2	63.4	62.1	64.5
Baltimore City .....	402.0	405.2	407.8	(1)	(1)	(1)	12.2	12.2	12.8
Suburban Maryland-D.C. ....	825.0	837.4	839.9	(1)	(1)	(1)	58.9	58.0	59.6
<b>Massachusetts</b> .....	3,085.1	3,154.4	3,185.7	1.3	1.3	1.4	93.8	95.7	103.1
Barnstable-Yarmouth .....	53.3	52.9	55.6	(1)	(1)	(1)	2.6	2.6	2.7
Boston .....	1,892.1	1,932.4	1,946.6	.4	.4	.5	53.2	54.8	58.0
Brockton .....	94.4	96.1	97.1	(2)	(2)	(2)	3.0	3.1	3.2
Fitchburg-Leominster .....	52.3	53.2	54.0	(2)	(2)	(2)	1.5	1.5	1.6
Lawrence .....	148.6	150.4	151.6	(2)	(2)	(2)	5.4	5.1	5.7
Lowell .....	114.0	119.4	120.1	(1)	(1)	(1)	4.6	4.6	4.8
New Bedford .....	62.9	64.2	64.8	(2)	(2)	(2)	2.0	2.0	2.0
Pittsfield .....	40.6	41.6	41.9	.1	.1	.1	1.4	1.3	1.6
Springfield .....	250.9	255.1	258.4	.1	.1	.1	7.2	6.7	7.5
Worcester .....	221.1	224.3	226.2	.2	.2	.2	6.6	6.2	6.9
<b>Michigan</b> .....	4,416.9	4,469.0	4,502.3	7.6	7.1	7.4	169.5	164.3	178.3
Ann Arbor .....	264.9	271.3	272.3	(1)	(1)	(1)	9.1	9.1	9.8
Benton Harbor .....	70.9	70.8	71.5	(1)	(1)	(1)	2.3	2.2	2.4
Detroit .....	2,065.0	2,110.8	2,119.1	.8	.9	.8	73.6	75.0	78.4
Flint .....	178.7	181.6	181.5	(1)	(1)	(1)	6.3	6.9	7.0
Grand Rapids-Muskegon-Holland ..	545.8	559.2	563.6	(1)	(1)	(1)	24.5	22.6	25.3
Jackson .....	60.4	60.8	61.4	(1)	(1)	(1)	2.3	2.1	2.3
Kalamazoo-Battle Creek .....	209.0	210.2	211.2	(1)	(1)	(1)	7.8	7.6	8.2
Lansing-East Lansing .....	233.0	232.9	235.9	(1)	(1)	(1)	8.1	8.1	8.6
Saginaw-Bay City-Midland .....	177.4	178.1	180.0	(1)	(1)	(1)	8.7	8.0	8.3
<b>Minnesota</b> .....	2,451.6	2,497.1	2,518.6	7.7	7.3	7.6	82.8	82.0	89.5
Duluth-Superior .....	107.7	109.5	110.7	5.0	4.8	4.9	3.1	3.3	3.5
Minneapolis-St. Paul .....	1,593.5	1,625.0	1,634.9	(2)	(2)	(2)	53.8	53.6	57.9
Rochester .....	72.0	74.0	74.3	(1)	(1)	(1)	2.6	2.6	2.8
St. Cloud .....	84.7	85.4	86.5	(1)	(1)	(1)	3.4	3.4	3.7
<b>Mississippi</b> .....	1,103.0	1,113.8	1,122.4	5.7	6.2	6.0	49.5	50.4	51.8
Jackson .....	219.8	224.7	226.3	(2)	(2)	(2)	11.2	11.5	11.7
<b>Missouri</b> .....	2,637.3	2,641.2	2,676.8	4.8	4.7	4.9	118.9	113.6	121.5
Kansas City .....	909.2	938.4	945.4	(1)	(1)	(1)	44.9	45.7	48.0
St. Louis .....	1,294.0	1,295.1	1,307.1	(1)	(1)	(1)	64.7	62.6	65.7
Springfield .....	159.5	161.6	163.5	(1)	(1)	(1)	6.6	6.6	6.5
<b>Montana</b> .....	359.2	362.6	365.8	5.2	5.0	5.1	15.7	15.2	16.5
<b>Nebraska</b> .....	847.5	868.0	874.9	1.2	1.2	1.3	36.6	37.1	40.4
Lincoln .....	145.3	145.2	145.2	(1)	(1)	(1)	6.4	5.9	6.6
Omaha .....	393.1	405.6	411.9	(1)	(1)	(1)	17.3	18.1	19.5
<b>Nevada</b> .....	878.2	913.2	917.7	14.6	13.5	13.6	79.4	84.6	86.0
Las Vegas .....	623.1	652.8	654.5	2.2	2.2	2.1	62.7	67.4	68.0
Reno .....	175.6	179.2	180.7	.7	.6	.6	11.6	12.0	12.7
<b>New Hampshire</b> .....	559.2	563.3	568.6	.4	.4	.4	19.7	19.9	21.4
Manchester .....	95.4	96.1	96.5	(1)	(1)	(1)	4.1	4.2	4.6
Nashua .....	90.0	92.3	94.0	(1)	(1)	(1)	2.7	2.9	3.1
Portsmouth-Rochester .....	112.4	112.1	114.9	(1)	(1)	(1)	3.1	2.9	3.0
<b>New Jersey</b> .....	3,686.5	3,742.9	3,764.6	1.9	1.7	1.8	127.8	125.4	132.9
Atlantic-Cape May .....	173.7	172.5	177.1	(1)	(1)	(1)	7.5	6.7	7.0
Bergen-Passaic .....	633.5	641.6	646.6	(1)	(1)	(1)	21.4	20.8	21.6
Camden .....	465.7	474.4	477.5	(1)	(1)	(1)	20.7	21.0	21.3
Jersey City .....	238.7	239.6	240.4	(1)	(1)	(1)	4.2	4.4	4.6
Middlesex-Somerset-Hunterdon ..	602.2	621.6	622.4	.5	.5	.5	18.7	18.4	18.9
Monmouth-Ocean .....	356.4	356.8	360.6	(1)	(1)	(1)	17.4	16.9	18.3
Newark .....	939.5	956.8	958.5	.7	.7	.9	30.6	30.6	32.0
Trenton .....	197.8	198.5	199.0	(1)	(1)	(1)	4.4	4.6	4.7
Vineland-Millville-Bridgeton .....	57.4	58.3	59.4	.3	.3	.3	2.0	1.7	1.9
<b>New Mexico</b> .....	702.6	711.2	714.1	15.6	15.3	15.5	41.9	41.0	42.3
Albuquerque .....	331.5	334.3	337.0	(1)	(1)	(1)	22.1	21.1	21.4
Las Cruces .....	50.9	52.1	52.8	(1)	(1)	(1)	3.1	3.1	3.2
Santa Fe .....	70.1	71.2	72.3	(1)	(1)	(1)	3.5	3.6	3.8

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 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Maryland</b> .....	175.8	175.9	175.6	106.9	105.3	105.0	527.1	529.2	531.7
Baltimore PMSA .....	100.4	100.4	99.9	58.3	59.0	59.4	265.2	268.5	270.3
Baltimore City .....	32.0	31.3	31.1	20.0	20.5	20.7	64.0	63.1	63.4
Suburban Maryland-D.C. ....	38.0	39.1	38.9	33.8	33.4	33.6	195.0	194.4	193.9
<b>Massachusetts</b> .....	444.8	454.5	454.2	132.6	136.8	137.9	690.2	710.8	715.8
Barnstable-Yarmouth .....	1.9	2.1	2.1	2.9	2.8	2.8	17.2	17.0	18.3
Boston .....	220.7	225.7	225.3	81.9	84.3	84.5	404.6	415.0	417.0
Brockton .....	10.7	10.5	10.6	5.0	4.8	4.9	30.7	31.1	31.0
Fitchburg-Leominster .....	13.8	13.8	13.9	2.0	2.1	2.1	12.1	12.2	12.3
Lawrence .....	38.0	39.1	38.8	4.9	5.0	4.9	33.4	33.8	33.8
Lowell .....	28.5	29.9	29.9	6.7	6.7	6.9	23.9	25.2	25.3
New Bedford .....	13.3	13.7	13.8	3.4	3.7	3.7	15.9	15.7	15.9
Pittsfield .....	7.6	7.5	7.5	1.2	1.2	1.2	9.9	10.2	10.1
Springfield .....	38.8	39.2	39.3	9.7	10.2	10.3	57.3	58.0	58.2
Worcester .....	41.1	42.4	42.4	9.5	9.3	9.3	48.4	49.6	50.1
<b>Michigan</b> .....	963.3	973.8	977.0	171.1	172.2	172.8	1,021.3	1,032.7	1,037.2
Ann Arbor .....	51.8	53.4	53.5	6.3	6.4	6.5	52.4	53.7	53.6
Benton Harbor .....	20.0	20.0	20.1	2.9	2.9	2.9	15.5	15.5	15.8
Detroit .....	443.2	446.2	445.7	93.9	95.1	95.3	476.1	491.9	491.2
Flint .....	41.6	40.4	40.4	5.4	5.4	5.4	44.2	45.2	45.1
Grand Rapids-Muskegon-Holland .....	153.1	156.8	157.3	18.5	18.8	18.7	134.3	137.9	139.2
Jackson .....	12.9	13.0	13.0	3.4	3.4	3.4	15.3	15.4	15.7
Kalamazoo-Battle Creek .....	49.1	49.4	49.5	6.9	7.1	7.1	45.6	45.6	46.1
Lansing-East Lansing .....	29.9	29.3	29.8	6.1	6.0	6.2	50.3	51.5	51.9
Saginaw-Bay City-Midland .....	39.5	39.7	39.9	7.2	7.2	7.3	44.2	44.9	45.3
<b>Minnesota</b> .....	427.5	437.6	438.2	122.7	125.0	125.5	588.2	595.1	599.8
Duluth-Superior .....	8.2	8.6	8.5	6.8	6.8	7.2	26.5	27.2	27.6
Minneapolis-St. Paul .....	272.1	274.4	274.3	87.6	89.1	89.5	377.9	385.3	385.9
Rochester .....	11.1	12.7	12.6	2.1	2.1	2.1	14.5	14.5	14.6
St. Cloud .....	15.6	15.8	15.9	3.0	3.0	3.0	25.3	25.3	25.7
<b>Mississippi</b> .....	241.3	240.6	241.4	52.4	53.1	53.1	235.5	236.0	239.2
Jackson .....	20.4	20.6	20.8	15.4	15.8	15.9	53.0	54.8	54.8
<b>Missouri</b> .....	417.6	421.4	421.0	164.6	165.3	166.6	617.8	618.5	627.8
Kansas City .....	104.9	108.0	108.6	74.0	78.4	78.6	221.2	229.0	229.5
St. Louis .....	195.9	197.0	197.1	82.7	82.1	82.6	302.3	304.4	306.8
Springfield .....	23.9	23.6	23.6	10.4	10.5	10.4	44.6	44.8	45.2
<b>Montana</b> .....	23.2	23.8	24.0	20.8	21.1	21.1	96.0	96.2	96.9
<b>Nebraska</b> .....	115.0	118.1	117.9	53.1	55.0	55.1	206.4	210.8	212.6
Lincoln .....	16.8	17.7	17.6	9.1	9.6	9.7	30.6	29.8	29.9
Omaha .....	39.5	40.1	40.7	27.8	28.8	28.8	93.1	95.4	96.6
<b>Nevada</b> .....	40.0	42.2	42.3	44.7	46.7	46.8	175.5	184.1	184.4
Las Vegas .....	21.8	22.6	22.6	32.0	33.5	33.6	126.5	133.0	133.2
Reno .....	13.3	14.0	14.2	11.2	11.4	11.3	39.3	40.8	40.6
<b>New Hampshire</b> .....	106.3	108.5	108.5	19.2	19.2	19.4	142.2	144.0	145.4
Manchester .....	14.0	13.8	13.8	5.6	5.9	5.8	23.1	23.4	23.4
Nashua .....	27.4	28.0	27.9	2.2	2.3	2.4	21.7	22.7	23.3
Portsmouth-Rochester .....	19.4	20.1	20.0	3.9	4.0	3.9	28.9	29.0	29.4
<b>New Jersey</b> .....	479.9	481.8	480.1	256.8	261.7	261.8	852.7	864.7	867.7
Atlantic-Cape May .....	6.4	6.5	6.5	6.9	7.1	7.0	33.5	33.2	35.5
Bergen-Passaic .....	106.2	106.0	105.3	34.7	36.2	36.6	172.8	175.6	176.3
Camden .....	54.9	55.3	55.3	22.7	22.1	22.0	122.5	124.2	125.3
Jersey City .....	28.2	27.8	27.1	28.3	28.4	28.5	54.8	54.8	55.2
Middlesex-Somerset-Hunterdon .....	92.0	93.4	93.5	50.6	51.9	51.9	140.1	144.7	143.1
Monmouth-Ocean .....	21.0	20.5	19.8	20.6	20.7	21.1	95.6	95.9	96.8
Newark .....	134.4	136.3	135.8	79.8	81.2	81.5	186.5	189.2	189.1
Trenton .....	19.9	19.3	19.3	7.1	7.3	7.3	32.1	32.6	32.6
Vineland-Millville-Bridgeton .....	12.8	12.3	12.8	2.9	3.0	2.9	11.1	11.4	11.6
<b>New Mexico</b> .....	45.0	44.9	44.9	31.9	32.9	32.9	165.3	167.1	168.4
Albuquerque .....	28.7	29.2	29.3	15.4	16.1	16.2	79.6	80.8	82.0
Las Cruces .....	2.7	2.6	2.7	1.8	1.8	1.8	10.5	11.0	11.1
Santa Fe .....	2.0	2.0	2.1	1.2	1.1	1.2	14.8	14.8	14.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Maryland</b> .....	129.7	130.6	131.1	748.4	756.8	763.3	423.1	427.1	427.6
Baltimore PMSA .....	72.0	72.6	73.1	385.8	393.9	398.3	211.4	215.1	215.5
Baltimore City .....	33.5	33.7	33.7	152.7	154.9	156.0	87.6	89.5	90.1
Suburban Maryland-D.C. ....	49.2	49.2	49.2	282.9	290.2	291.6	167.2	173.1	173.1
<b>Massachusetts</b> .....	210.2	215.2	215.0	1,102.2	1,126.0	1,142.5	410.0	414.1	415.8
Barnstable-Yarmouth .....	3.2	3.1	3.2	18.1	17.9	19.0	7.4	7.4	7.5
Boston .....	156.3	160.4	160.2	745.7	761.9	770.7	229.3	229.9	230.4
Brockton .....	3.2	3.3	3.4	25.5	26.7	27.3	16.3	16.6	16.7
Fitchburg-Leominster .....	1.5	1.7	1.7	13.4	13.5	13.8	8.0	8.4	8.6
Lawrence .....	4.3	4.2	4.2	43.3	44.0	44.8	19.3	19.2	19.4
Lowell .....	3.7	3.8	3.8	31.1	33.2	33.3	15.5	16.0	16.1
New Bedford .....	1.8	1.8	1.8	16.5	17.4	17.5	10.0	9.9	10.1
Pittsfield .....	1.8	1.9	1.9	13.6	13.9	14.0	5.0	5.5	5.5
Springfield .....	12.6	13.0	12.9	79.1	80.7	82.6	46.1	47.2	47.5
Worcester .....	15.1	15.0	14.9	66.2	66.2	66.8	34.0	35.4	35.6
<b>Michigan</b> .....	205.6	207.6	208.4	1,209.0	1,235.1	1,249.3	669.5	676.4	671.8
Ann Arbor .....	9.8	10.0	10.1	63.8	65.3	66.0	71.6	73.3	72.7
Benton Harbor .....	2.6	2.4	2.3	19.0	18.9	19.3	8.7	8.8	8.7
Detroit .....	112.0	112.8	113.1	632.9	653.0	659.9	232.6	235.8	234.7
Flint .....	6.4	6.5	6.5	49.9	51.9	52.1	25.0	25.3	25.0
Grand Rapids-Muskegon-Holland .....	21.9	22.6	22.8	139.1	143.6	144.5	54.4	56.8	55.9
Jackson .....	1.9	1.9	1.9	14.4	14.4	14.8	10.1	10.6	10.4
Kalamazoo-Battle Creek .....	10.9	10.9	11.0	53.2	53.6	53.9	35.5	36.0	35.4
Lansing-East Lansing .....	13.6	13.9	14.0	56.9	56.9	57.9	68.2	67.2	67.5
Saginaw-Bay City-Midland .....	6.9	6.8	6.9	48.3	48.6	49.6	22.8	22.8	22.6
<b>Minnesota</b> .....	145.3	149.0	150.2	690.3	710.8	717.4	387.1	390.3	390.4
Duluth-Superior .....	3.3	3.4	3.4	30.6	31.9	31.9	24.2	23.5	23.7
Minneapolis-St. Paul .....	113.9	116.0	116.6	464.6	477.1	480.7	223.1	229.1	229.5
Rochester .....	2.3	2.3	2.3	32.2	32.6	32.8	7.2	7.2	7.1
St. Cloud .....	3.0	3.1	3.1	21.1	21.8	22.0	13.3	13.0	13.1
<b>Mississippi</b> .....	41.5	41.1	41.4	256.2	262.9	265.3	220.9	223.5	224.2
Jackson .....	15.5	16.2	16.3	58.2	59.3	60.2	45.4	45.5	45.6
<b>Missouri</b> .....	153.9	155.6	156.6	735.2	734.8	746.4	424.5	427.3	432.0
Kansas City .....	64.0	66.5	67.2	266.9	273.3	275.3	133.3	137.5	138.2
St. Louis .....	79.7	80.8	81.5	406.7	409.1	415.1	162.0	159.1	158.3
Springfield .....	6.8	7.0	7.0	47.1	50.1	50.2	20.1	19.0	20.6
<b>Montana</b> .....	16.2	16.6	16.7	103.0	105.0	105.9	79.1	79.7	79.6
<b>Nebraska</b> .....	53.7	56.2	56.7	227.4	234.9	236.9	154.1	154.7	154.0
Lincoln .....	9.1	9.6	9.8	37.3	37.2	37.0	36.0	35.4	34.6
Omaha .....	33.7	36.3	36.7	130.6	134.7	137.6	51.1	52.2	52.0
<b>Nevada</b> .....	39.3	41.7	41.9	377.4	388.2	390.1	107.3	112.2	112.6
Las Vegas .....	29.7	31.4	31.6	281.8	292.1	292.5	66.4	70.6	70.9
Reno .....	7.9	8.3	8.3	68.2	68.0	69.0	23.4	24.1	24.0
<b>New Hampshire</b> .....	29.0	29.3	29.6	160.8	161.5	162.5	81.6	80.5	81.4
Manchester .....	7.4	7.1	7.0	30.6	30.5	30.5	10.6	11.2	11.4
Nashua .....	4.4	4.2	4.4	23.0	23.5	24.2	8.6	8.7	8.7
Portsmouth-Rochester .....	6.1	6.3	6.3	28.6	28.5	29.3	22.4	21.3	23.0
<b>New Jersey</b> .....	235.6	241.0	241.7	1,156.0	1,190.2	1,202.7	575.8	576.4	575.9
Atlantic-Cape May .....	6.2	6.1	6.2	84.8	84.1	86.0	28.4	28.8	28.9
Bergen-Passaic .....	33.9	34.6	34.4	191.9	195.3	201.3	72.6	73.1	71.1
Camden .....	21.9	23.3	23.5	143.2	147.9	149.6	79.8	80.6	80.5
Jersey City .....	25.6	26.2	26.4	58.7	59.6	60.0	38.9	38.4	38.6
Middlesex-Somerset-Hunterdon .....	44.5	45.1	45.1	177.4	189.0	190.8	78.4	78.6	78.6
Monmouth-Ocean .....	17.8	17.5	17.4	120.3	121.6	123.1	63.7	63.7	64.1
Newark .....	70.9	72.4	72.1	292.8	302.9	303.4	143.8	143.5	143.7
Trenton .....	11.4	11.5	11.5	69.9	71.5	72.2	53.0	51.7	51.4
Vineland-Millville-Bridgeton .....	3.0	2.9	2.9	12.2	12.5	12.8	13.1	14.2	14.2
<b>New Mexico</b> .....	31.3	31.3	31.4	192.7	197.3	197.2	178.9	181.4	181.5
Albuquerque .....	16.9	16.6	16.8	104.0	105.0	105.7	64.8	65.5	65.6
Las Cruces .....	1.9	2.0	2.0	10.8	11.3	11.5	20.1	20.3	20.5
Santa Fe .....	3.2	3.2	3.3	20.6	21.1	21.4	24.8	25.4	25.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>New York</b> .....	7,973.4	8,048.5	8,096.2	4.4	4.0	4.4	250.3	242.4	259.3
Albany-Schenectady-Troy .....	430.2	429.4	433.8	.5	.4	.4	13.7	12.3	13.6
Binghamton .....	111.8	113.7	114.1	(1)	(1)	(1)	3.5	3.1	3.5
Buffalo-Niagara Falls .....	540.0	537.8	539.8	(1)	(1)	(1)	18.7	17.0	18.8
Dutchess County .....	106.8	107.3	108.2	(1)	(1)	(1)	4.1	3.8	4.0
Elmira .....	42.5	42.4	42.4	(1)	(1)	(1)	1.5	1.3	1.4
Glens Falls .....	47.4	47.5	48.4	(1)	(1)	(1)	1.7	1.6	1.9
Nassau-Suffolk .....	1,112.2	1,122.1	1,131.2	(1)	(1)	(1)	47.6	47.6	50.6
New York PMSA .....	3,897.3	3,962.1	3,983.8	(1)	(1)	(1)	114.6	115.6	120.2
New York City .....	3,395.0	3,454.6	3,472.1	.3	.3	.3	91.7	93.9	96.8
Newburgh .....	117.9	118.5	118.6	(1)	(1)	(1)	4.0	3.9	3.9
Rochester .....	526.1	521.6	524.6	.5	.4	.4	15.7	13.9	15.0
Rockland County .....	99.4	101.9	102.9	(1)	(1)	(1)	3.5	3.4	3.6
Syracuse .....	336.2	332.3	334.8	(1)	(1)	(1)	11.6	10.6	11.4
Utica-Rome .....	125.2	126.1	126.8	(1)	(1)	(1)	2.8	2.6	3.1
Westchester County .....	383.0	385.4	388.2	(1)	(1)	(1)	17.6	16.5	17.8
<b>North Carolina</b> .....	3,639.2	3,725.5	3,737.8	4.0	3.9	3.9	201.8	205.5	208.6
Asheville .....	107.6	108.6	109.7	(1)	(1)	(1)	5.9	5.6	5.8
Charlotte-Gastonia-Rock Hill .....	751.3	767.9	768.3	(1)	(1)	(1)	45.9	47.1	47.4
Greensboro-Winston-Salem-High Point .....	630.5	637.8	637.4	(1)	(1)	(1)	30.9	31.5	31.6
Raleigh-Durham-Chapel Hill .....	612.8	634.4	636.1	(1)	(1)	(1)	33.6	35.3	35.4
<b>North Dakota</b> .....	310.3	314.4	316.6	3.9	3.9	3.9	12.6	12.3	13.8
Bismarck .....	47.9	48.6	49.1	(1)	(1)	(1)	2.3	2.2	2.4
Fargo-Moorhead .....	95.1	97.8	98.2	(1)	(1)	(1)	4.6	4.5	4.8
Grand Forks .....	47.4	48.2	48.6	(1)	(1)	(1)	2.0	2.3	2.5
<b>Ohio</b> .....	5,355.1	5,390.5	5,432.5	13.1	13.2	13.2	216.0	206.1	224.1
Akron .....	320.7	323.1	325.7	.4	.4	.5	12.2	11.8	12.8
Canton-Massillon .....	179.2	182.5	184.3	.5	.5	.5	8.1	7.9	8.5
Cincinnati .....	838.4	853.8	862.8	.7	.7	.7	38.5	38.8	40.8
Cleveland-Lorain-Elyria .....	1,129.3	1,144.3	1,154.7	.8	.9	.8	42.2	40.3	44.0
Columbus .....	807.3	822.7	829.5	.6	.7	.7	33.9	34.7	36.2
Dayton-Springfield .....	473.3	476.7	477.1	.4	.4	.4	16.7	16.8	17.4
Hamilton-Middletown .....	118.0	117.9	119.2	(1)	(1)	(1)	6.8	6.7	7.2
Lima .....	76.9	77.9	78.6	(1)	(1)	(1)	3.6	3.6	3.8
Mansfield .....	79.0	78.9	79.0	(1)	(1)	(1)	2.4	2.2	2.4
Steubenville-Weirton .....	48.3	50.1	51.0	.4	.4	.4	1.5	1.4	1.6
Toledo .....	315.5	316.0	317.3	.2	.1	.1	14.5	13.5	14.6
Youngstown-Warren .....	245.0	247.5	249.6	.6	.5	.6	9.4	9.1	9.8
<b>Oklahoma</b> .....	1,379.7	1,413.1	1,418.8	31.4	32.2	31.5	49.4	51.2	51.7
Enid .....	24.6	25.3	25.4	1.1	1.3	1.2	.9	1.1	1.1
Lawton .....	37.4	37.0	37.2	.1	.1	.1	1.1	1.0	1.0
Oklahoma City .....	496.0	505.9	509.0	7.2	7.4	7.5	18.2	18.4	18.5
Tulsa .....	368.5	381.7	383.6	7.7	7.6	7.6	14.2	15.8	16.3
<b>Oregon</b> .....	1,508.8	1,545.9	1,553.3	1.8	1.8	1.8	77.9	79.2	80.7
Eugene-Springfield .....	136.1	138.7	139.4	.2	.2	.2	6.8	7.0	7.1
Medford-Ashland .....	66.5	68.3	68.9	.1	.1	.1	3.2	3.1	3.3
Portland-Vancouver .....	908.5	937.0	940.1	1.0	1.1	1.1	51.7	51.0	51.4
Salem .....	129.4	131.0	132.1	.2	.3	.3	7.1	7.6	7.7
<b>Pennsylvania</b> .....	5,383.4	5,402.4	5,454.8	20.1	19.6	20.2	207.6	200.9	214.4
Allentown Bethlehem-Easton .....	264.0	265.2	266.0	(1)	(1)	(1)	10.2	9.5	10.0
Altoona .....	57.8	58.1	58.6	(1)	(1)	(1)	2.5	2.1	2.3
Erie .....	127.7	128.7	129.3	(1)	(1)	(1)	4.1	3.8	4.1
Harrisburg-Lebanon-Carlisle .....	349.6	351.4	355.5	(1)	(1)	(1)	12.4	11.9	12.9
Johnstown .....	86.5	87.5	88.9	(1)	(1)	(1)	4.4	4.0	4.2
Lancaster .....	212.8	215.4	217.9	.4	.3	.4	12.0	12.1	12.5
Philadelphia PMSA .....	2,253.1	2,254.4	2,275.7	(1)	(1)	(1)	85.5	84.8	87.5
Philadelphia City .....	673.3	668.1	678.6	(1)	(1)	(1)	11.2	10.1	10.6
Pittsburgh .....	1,068.5	1,064.6	1,071.6	4.3	4.6	4.7	48.8	45.2	48.2
Reading .....	164.4	165.4	166.8	(1)	(1)	(1)	6.8	6.9	7.0
Scranton-Wilkes-Barre-Hazleton .....	273.9	274.1	276.4	.5	.3	.3	10.0	9.7	10.8
Sharon .....	47.0	47.7	48.2	(1)	(1)	(1)	1.4	1.3	1.5
State College .....	68.1	68.9	70.5	(1)	(1)	(1)	2.2	2.1	2.2
Williamsport .....	52.9	53.3	54.3	(1)	(1)	(1)	2.1	2.1	2.3
York .....	162.7	164.2	165.6	.4	.4	.4	8.0	7.9	8.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>New York</b> .....	915.2	915.7	915.4	406.7	408.0	408.8	1,604.5	1,620.2	1,629.7
Albany-Schenectady-Troy .....	38.5	38.8	38.8	17.1	17.0	17.0	90.0	90.4	91.2
Binghamton .....	24.5	25.0	25.2	4.9	4.7	4.8	23.3	23.9	23.8
Buffalo-Niagara Falls .....	89.0	89.5	89.6	25.4	24.8	25.1	128.7	127.2	127.8
Dutchess County .....	17.5	18.2	18.3	3.6	3.5	3.5	19.8	19.9	20.2
Elmira .....	9.6	9.7	9.7	1.5	1.5	1.5	10.3	10.2	10.2
Glens Falls .....	8.3	8.5	8.5	1.3	1.5	1.5	10.5	10.6	10.8
Nassau-Suffolk .....	111.8	112.9	112.2	52.1	52.6	52.3	280.4	284.6	285.2
New York PMSA .....	316.0	314.4	315.7	231.8	234.5	234.8	677.2	693.7	698.1
New York City .....	264.0	262.0	263.6	205.5	207.7	208.2	588.7	582.5	586.0
Newburgh .....	11.8	11.6	11.7	6.6	6.9	6.8	31.6	32.1	32.2
Rochester .....	126.7	123.8	123.5	16.6	16.7	16.3	109.3	109.7	109.7
Rockland County .....	12.0	12.4	12.3	6.2	6.4	6.4	21.8	23.3	24.2
Syracuse .....	49.0	49.3	49.4	19.4	19.8	19.8	76.8	77.1	77.7
Utica-Rome .....	19.3	19.6	19.3	3.9	3.6	3.5	26.0	25.4	25.6
Westchester County .....	38.1	38.1	37.9	19.4	19.7	19.5	82.5	83.7	83.8
<b>North Carolina</b> .....	829.4	829.8	827.2	169.9	169.6	169.7	828.7	837.1	839.2
Asheville .....	19.9	19.7	19.5	4.5	4.6	4.6	26.3	26.9	27.1
Charlotte-Gastonia-Rock Hill .....	144.3	143.8	143.5	53.9	53.0	53.0	181.2	186.6	186.2
Greensboro-Winston-Salem-High Point .....	164.1	164.6	164.1	33.6	31.9	31.9	141.4	142.1	142.1
Raleigh-Durham-Chapel Hill .....	82.4	85.5	85.2	26.4	27.6	27.5	128.6	132.3	132.5
<b>North Dakota</b> .....	22.8	23.6	23.8	18.1	18.3	18.3	79.9	80.1	80.3
Bismarck .....	2.6	2.6	2.7	3.1	3.1	3.2	11.9	11.9	12.1
Fargo-Moorhead .....	7.8	8.2	8.1	5.3	5.3	5.3	26.9	27.5	27.5
Grand Forks .....	3.6	3.6	3.6	2.3	2.4	2.4	12.9	12.9	12.8
<b>Ohio</b> .....	1,087.2	1,093.0	1,093.3	232.8	232.2	233.8	1,292.2	1,295.2	1,302.7
Akron .....	64.5	64.4	64.1	14.5	14.6	14.8	79.3	80.1	80.7
Canton-Massillon .....	45.8	46.9	47.2	5.0	5.1	5.1	44.6	45.8	46.1
Cincinnati .....	139.5	141.2	141.6	44.1	44.1	44.4	214.1	215.5	215.8
Cleveland-Lorain-Elyria .....	222.9	224.2	223.9	45.0	44.8	45.5	264.9	270.5	271.6
Columbus .....	92.5	93.8	94.1	36.2	35.9	35.7	209.8	213.3	214.4
Dayton-Springfield .....	99.6	100.2	100.0	20.6	20.8	21.0	108.5	110.3	110.2
Hamilton-Middletown .....	21.1	20.5	20.8	4.8	4.8	4.9	32.1	31.0	31.6
Lima .....	19.6	19.5	19.5	3.0	3.1	3.1	17.9	18.4	18.6
Mansfield .....	22.9	22.8	22.8	3.6	3.3	3.3	18.0	18.5	18.7
Steubenville-Weirton .....	11.4	13.9	13.9	2.8	2.6	2.6	10.7	10.2	10.3
Toledo .....	60.7	61.2	61.5	14.1	14.6	14.7	77.9	77.3	77.5
Youngstown-Warren .....	59.2	59.2	59.2	10.4	10.5	10.6	61.4	62.1	62.5
<b>Oklahoma</b> .....	176.0	184.1	184.5	78.1	80.9	81.3	321.3	324.1	325.7
Enid .....	2.1	2.4	2.4	2.0	2.0	2.1	6.1	6.1	6.2
Lawton .....	3.7	3.6	3.6	1.7	1.7	1.7	9.1	8.8	8.9
Oklahoma City .....	50.2	55.2	55.7	24.2	25.1	25.3	118.3	119.1	119.8
Tulsa .....	56.1	57.3	57.3	28.8	30.4	30.4	86.7	87.4	87.7
<b>Oregon</b> .....	237.7	242.4	242.9	74.4	74.3	74.7	368.7	378.8	380.9
Eugene-Springfield .....	20.8	21.3	21.5	4.5	4.6	4.6	33.7	34.6	35.0
Medford-Ashland .....	8.9	8.8	8.8	3.2	3.3	3.3	18.9	19.5	19.8
Portland-Vancouver .....	145.3	150.7	151.0	52.3	54.1	54.1	223.3	232.1	233.0
Salem .....	16.4	16.9	16.9	3.4	3.4	3.5	27.2	27.7	28.0
<b>Pennsylvania</b> .....	930.1	934.4	934.8	277.8	280.1	280.2	1,199.0	1,201.8	1,214.5
Allentown Bethlehem-Easton .....	56.5	56.3	55.9	15.2	15.5	15.4	55.7	55.7	55.7
Altoona .....	10.0	10.0	9.9	4.3	4.2	4.2	15.3	15.8	16.0
Erie .....	33.7	34.0	33.9	4.9	4.7	4.7	28.5	28.8	28.8
Harrisburg-Lebanon-Carlisle .....	45.2	45.1	45.6	23.1	23.2	23.5	77.0	78.3	79.4
Johnstown .....	12.7	12.7	13.0	5.2	5.1	5.2	20.0	20.0	20.4
Lancaster .....	57.3	56.4	56.6	8.4	8.6	8.6	52.1	53.1	54.3
Philadelphia PMSA .....	304.2	303.2	302.8	106.9	109.8	109.2	491.6	490.4	493.5
Philadelphia City .....	58.7	57.7	57.6	33.9	34.6	34.5	108.5	107.7	109.5
Pittsburgh .....	135.3	137.7	137.6	65.9	65.1	65.0	252.2	253.7	253.8
Reading .....	44.3	43.1	43.2	7.9	8.1	8.0	38.5	38.8	38.8
Scranton-Wilkes-Barre-Hazleton .....	54.1	54.2	53.8	15.3	15.6	15.6	65.6	64.2	64.7
Sharon .....	10.5	11.0	11.1	2.0	1.9	2.0	12.1	12.4	12.4
State College .....	8.6	8.8	8.9	2.1	2.1	2.1	12.9	13.1	13.5
Williamsport .....	13.3	13.2	13.3	1.9	1.9	1.9	12.8	12.9	13.2
York .....	47.5	47.7	47.9	7.5	7.7	7.6	38.8	39.8	40.3

See footnotes at end of table.



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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>New York</b> .....	714.2	720.7	722.1	2,685.0	2,748.4	2,768.6	1,393.2	1,389.2	1,387.8
Albany-Schenectady-Troy .....	25.3	25.3	25.3	134.8	135.5	137.2	110.4	109.7	110.2
Binghamton .....	3.7	3.7	3.7	29.8	30.5	30.6	22.2	22.7	22.6
Buffalo-Niagara Falls .....	28.8	29.2	29.6	162.2	162.0	162.6	87.0	88.1	86.4
Dutchess County .....	4.5	4.5	4.7	34.3	34.4	34.5	22.9	23.1	23.1
Elmira .....	1.3	1.2	1.3	10.9	10.9	10.8	7.4	7.6	7.6
Glens Falls .....	2.0	2.1	2.1	13.4	13.3	13.6	10.1	10.0	10.2
Nassau-Suffolk .....	78.9	79.1	79.6	358.5	364.3	368.8	183.1	180.9	182.4
New York PMSA .....	499.4	506.6	507.5	1,447.9	1,490.3	1,502.9	610.2	607.0	604.6
New York City .....	467.3	473.8	474.6	1,270.0	1,310.3	1,320.5	527.5	524.1	522.2
Newburgh .....	5.4	5.4	5.5	30.9	31.0	31.2	27.7	27.6	27.5
Rochester .....	21.3	20.9	21.0	155.3	156.2	158.2	80.7	80.0	80.5
Rockland County .....	4.9	4.9	4.9	31.2	31.8	32.0	19.6	19.6	19.4
Syracuse .....	17.8	17.7	17.7	100.0	96.8	97.5	61.6	61.1	61.4
Utica-Rome .....	7.7	7.5	7.5	37.6	39.4	39.7	27.8	28.0	28.0
Westchester County .....	26.0	26.3	26.5	140.5	142.0	144.0	58.8	58.9	58.7
<b>North Carolina</b> .....	164.6	172.2	172.9	853.7	899.1	906.4	587.1	608.3	609.9
Asheville .....	3.2	3.1	3.1	32.0	32.6	33.5	15.8	16.1	16.1
Charlotte-Gastonia-Rock Hill .....	53.6	54.5	54.8	183.4	189.4	189.1	89.0	93.5	94.3
Greensboro-Winston-Salem-High Point .....	32.7	33.0	33.0	159.0	165.8	165.7	68.8	68.9	69.0
Raleigh-Durham-Chapel Hill .....	28.8	30.3	30.5	189.6	197.4	197.5	123.4	126.0	127.5
<b>North Dakota</b> .....	14.5	15.3	15.4	86.4	88.6	88.9	72.1	72.3	72.2
Bismarck .....	2.3	2.3	2.3	15.6	15.7	15.6	10.1	10.8	10.8
Fargo-Moorhead .....	5.8	6.4	6.4	29.3	30.3	30.5	15.4	15.6	15.6
Grand Forks .....	1.6	1.5	1.5	12.4	12.2	12.2	12.6	13.3	13.6
<b>Ohio</b> .....	285.3	288.8	290.7	1,460.0	1,482.0	1,500.3	768.5	780.0	774.4
Akron .....	12.8	13.0	13.1	88.0	89.0	90.0	49.0	49.8	49.7
Canton-Massillon .....	5.9	6.1	6.0	49.5	50.3	51.1	19.8	19.9	19.8
Cincinnati .....	52.0	54.5	54.6	247.2	254.1	259.3	102.3	104.9	105.6
Cleveland-Lorain-Elyria .....	74.0	74.5	75.1	334.9	342.3	347.9	144.6	146.8	145.9
Columbus .....	71.3	72.4	72.8	226.5	233.0	237.3	136.5	138.9	138.3
Dayton-Springfield .....	17.8	18.1	18.2	137.8	138.5	139.2	71.9	71.8	70.7
Hamilton-Middletown .....	6.2	6.4	6.4	26.0	26.9	26.9	21.0	21.6	21.4
Lima .....	2.0	2.1	2.1	20.4	20.6	20.9	10.4	10.6	10.6
Mansfield .....	2.8	2.5	2.5	18.9	19.0	18.9	10.4	10.6	10.4
Steubenville-Weirton .....	1.4	1.4	1.4	13.7	13.7	14.1	6.4	6.5	6.7
Toledo .....	10.8	11.0	11.2	89.1	89.3	89.5	48.2	49.0	48.2
Youngstown-Warren .....	9.4	9.4	9.5	63.1	63.5	64.8	31.5	33.2	32.6
<b>Oklahoma</b> .....	68.9	70.3	70.8	375.6	385.1	389.5	279.0	285.2	283.8
Enid .....	1.0	1.0	1.0	7.2	7.2	7.2	4.2	4.2	4.2
Lawton .....	1.7	1.7	1.7	8.2	8.3	8.3	11.8	11.8	11.9
Oklahoma City .....	28.9	29.4	29.9	145.3	147.1	148.1	103.7	104.2	104.2
Tulsa .....	19.8	20.6	20.8	112.8	119.7	120.5	42.4	42.9	43.0
<b>Oregon</b> .....	94.5	96.0	96.2	397.9	411.5	414.8	255.9	261.9	261.3
Eugene-Springfield .....	7.2	7.4	7.4	36.8	37.5	37.6	26.1	26.1	26.0
Medford-Ashland .....	3.1	3.1	3.1	18.5	19.4	19.6	10.6	11.0	10.9
Portland-Vancouver .....	66.6	66.8	67.0	250.3	260.1	261.6	118.0	121.1	120.9
Salem .....	6.7	6.5	6.5	31.0	31.3	31.8	37.4	37.3	37.4
<b>Pennsylvania</b> .....	310.3	316.3	317.6	1,705.2	1,723.9	1,745.8	733.3	725.4	727.3
Allentown Bethlehem-Easton .....	13.1	13.1	13.2	82.2	83.3	84.0	31.1	31.8	31.8
Altoona .....	1.9	1.9	1.9	15.5	15.8	16.1	8.3	8.3	8.2
Erie .....	5.4	5.4	5.5	35.5	35.8	36.0	15.6	16.2	16.3
Harrisburg-Lebanon-Carlisle .....	25.9	25.7	25.8	93.0	99.1	100.0	73.0	68.1	68.3
Johnstown .....	4.2	4.1	4.1	26.0	27.5	27.7	14.0	14.1	14.3
Lancaster .....	9.2	9.7	9.7	54.4	55.7	56.3	19.0	19.5	19.5
Philadelphia PMSA .....	155.6	157.9	159.1	807.5	808.5	823.4	301.8	299.8	300.2
Philadelphia City .....	53.0	53.9	53.6	285.7	283.6	291.0	122.3	120.5	121.8
Pittsburgh .....	61.3	61.8	61.9	371.9	368.6	372.7	128.8	127.9	127.7
Reading .....	8.6	8.5	8.8	39.2	40.1	40.9	19.1	19.9	20.1
Scranton-Wilkes-Barre-Hazleton .....	13.8	14.1	14.2	79.3	80.6	81.7	35.3	35.4	35.3
Sharon .....	1.5	1.6	1.6	13.8	13.9	14.0	5.7	5.6	5.6
State College .....	2.0	2.0	2.0	13.9	13.9	14.2	26.4	26.9	27.6
Williamsport .....	2.1	2.1	2.2	14.4	14.9	15.2	6.3	6.2	6.2
York .....	5.0	5.1	5.2	38.8	39.1	39.3	16.7	16.5	16.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Rhode Island</b> .....	446.1	447.8	451.5	.2	.2	.2	13.7	14.3	16.1
Providence-Fall River-Warwick .....	501.7	504.0	507.8	.2	.2	.2	15.2	16.1	18.2
<b>South Carolina</b> .....	1,715.2	1,768.1	1,786.5	1.9	1.9	1.9	98.9	106.0	107.6
Charleston-North Charleston .....	219.3	229.2	231.0	(1)	(1)	(1)	15.6	17.2	17.5
Columbia .....	280.9	288.7	290.2	(1)	(1)	(1)	15.4	15.8	16.0
Greenville-Spartanburg-Anderson .....	457.6	468.2	472.0	(1)	(1)	(1)	29.7	30.8	30.9
<b>South Dakota</b> .....	349.6	351.5	355.0	2.1	2.0	1.7	13.4	13.4	15.0
Rapid City .....	44.7	44.8	45.7	(1)	(1)	(1)	2.7	2.7	3.0
Sioux Falls .....	100.8	104.1	105.7	(1)	(1)	(1)	4.3	4.1	4.6
<b>Tennessee</b> .....	2,577.0	2,611.3	2,623.4	4.5	4.4	4.5	116.5	114.8	119.0
Chattanooga .....	222.9	222.7	223.3	(1)	(1)	(1)	10.5	10.2	10.4
Johnson City-Kingsport-Bristol .....	201.8	201.8	202.0	(1)	(1)	(1)	11.1	11.3	11.5
Knoxville .....	318.6	315.2	318.8	.5	.6	.6	15.8	14.9	15.2
Memphis .....	557.3	558.9	560.6	(1)	(1)	(1)	23.8	24.2	24.3
Nashville .....	625.4	636.3	639.4	(1)	(1)	(1)	30.7	31.8	33.1
<b>Texas</b> .....	8,528.2	8,796.1	8,843.4	162.6	167.5	167.6	448.7	473.7	475.1
Abilene .....	55.0	56.3	56.3	1.7	1.6	1.6	2.3	2.3	2.3
Amarillo .....	92.8	95.1	95.2	.7	.6	.6	5.0	4.9	5.0
Austin-San Marcos .....	561.9	585.5	588.0	1.2	1.2	1.2	28.6	32.2	32.5
Beaumont-Port Arthur .....	155.1	159.8	160.1	.7	.8	.8	13.8	15.7	15.8
Brazoria .....	72.9	74.9	74.6	1.3	1.3	1.3	8.9	8.8	8.6
Brownsville-Harlingen-San Benito .....	97.1	100.4	100.2	(1)	(1)	(1)	3.4	3.5	3.4
Bryan-College Station .....	69.0	70.2	70.8	.8	.9	.9	2.9	3.1	3.2
Corpus Christi .....	154.3	156.7	157.1	2.3	2.5	2.5	12.9	11.2	11.2
Dallas .....	1,735.3	1,815.2	1,819.9	11.7	11.5	11.5	80.7	84.7	84.8
El Paso .....	241.4	246.7	248.7	(1)	(1)	(1)	11.7	12.2	12.5
Ft. Worth-Arlington .....	699.7	721.0	726.2	4.2	4.2	4.2	34.1	35.3	35.6
Galveston-Texas City .....	86.9	89.1	89.5	.7	.7	.7	4.5	4.2	4.1
Houston .....	1,866.3	1,950.7	1,957.1	66.2	69.5	69.4	122.9	131.9	132.1
Killeen-Temple .....	97.1	99.1	99.8	(1)	(1)	(1)	4.0	4.0	4.1
Laredo .....	59.6	61.4	61.7	3.3	2.5	2.3	2.0	2.2	2.3
Longview-Marshall .....	87.9	89.1	89.4	3.3	3.3	3.3	4.4	4.4	4.4
Lubbock .....	112.7	116.1	116.4	.1	.1	.1	4.2	4.5	4.6
McAllen-Edinburg-Mission .....	134.6	143.0	143.4	1.1	1.2	1.3	6.9	7.3	7.3
Odessa Midland .....	102.3	106.0	106.3	12.8	13.5	13.3	5.3	6.1	6.1
San Angelo .....	43.5	43.6	43.3	.6	.7	.7	1.9	1.8	1.8
San Antonio .....	659.3	679.4	684.2	1.9	1.9	2.0	33.4	35.8	35.8
Sherman-Denison .....	43.5	44.1	44.2	(1)	(1)	(1)	2.1	2.1	2.2
Texarkana .....	50.7	51.5	51.5	(1)	(1)	(1)	2.1	2.1	2.0
Tyler .....	76.4	78.6	78.8	1.5	1.6	1.6	2.8	2.9	3.0
Victoria .....	34.9	36.1	36.3	1.6	1.7	1.8	2.4	2.5	2.5
Waco .....	95.0	96.9	97.5	(1)	(1)	(1)	4.4	4.7	4.7
Wichita Falls .....	59.8	60.1	60.7	1.2	1.1	1.1	2.4	2.2	2.3
<b>Utah</b> .....	985.3	1,016.6	1,021.6	8.2	8.3	8.3	61.8	63.7	66.0
Provo-Orem .....	135.2	138.6	139.1	(1)	(1)	(1)	8.8	8.3	8.6
Salt Lake City-Ogden .....	661.5	684.4	686.6	3.0	2.9	2.9	41.5	43.2	44.5
<b>Vermont</b> .....	275.0	280.9	278.9	.6	.5	.5	11.2	10.4	11.1
Barre-Montpelier .....	29.9	31.3	30.6	(1)	(1)	(1)	1.2	1.2	1.2
Burlington .....	97.3	98.9	99.9	(1)	(1)	(1)	4.3	4.0	4.4
<b>Virginia</b> .....	3,204.8	3,283.7	3,308.2	11.2	11.0	11.0	181.9	186.4	191.4
Bristol .....	37.3	36.9	36.5	(1)	(1)	(1)	1.5	1.3	1.4
Charlottesville .....	81.2	81.6	82.2	(1)	(1)	(1)	4.4	4.2	4.3
Danville .....	45.2	45.7	46.1	(1)	(1)	(1)	2.3	2.2	2.3
Lynchburg .....	96.6	97.4	97.5	(1)	(1)	(1)	5.8	5.7	5.8
Norfolk-Virginia Beach-Newport News .....	659.2	665.8	670.7	(1)	(1)	(1)	39.7	39.0	39.5
Northern Virginia .....	987.0	1,019.6	1,026.7	.7	.7	.7	54.3	55.7	57.2
Richmond-Petersburg .....	521.9	536.4	540.6	.7	.7	.7	32.6	33.8	34.5
Roanoke .....	140.1	140.7	140.6	(1)	(1)	(1)	8.2	8.6	8.7
<b>Washington</b> .....	2,486.1	2,541.2	2,567.2	3.4	3.3	3.4	131.3	131.3	136.3
Seattle-Bellevue-Everett .....	1,274.9	1,328.7	1,342.2	.6	.7	.7	63.6	63.9	66.2
Spokane .....	184.0	187.7	189.4	(1)	(1)	(1)	10.2	9.9	10.6
Tacoma .....	228.9	232.6	234.3	.2	.2	.2	12.1	13.0	13.2

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 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Rhode Island</b> .....	79.9	78.9	78.5	15.2	15.8	15.7	95.9	95.6	96.3
Providence-Fall River-Warwick .....	102.2	101.8	101.4	17.5	17.9	17.8	113.2	112.0	112.5
<b>South Carolina</b> .....	361.9	362.3	362.9	75.0	76.6	77.1	407.5	426.6	435.0
Charleston-North Charleston .....	21.3	21.7	21.7	12.0	12.9	12.9	54.3	55.4	56.0
Columbia .....	25.4	26.2	26.2	13.0	12.7	12.8	64.4	66.9	67.3
Greenville-Spartanburg-Anderson .....	122.9	123.1	123.7	20.3	20.8	21.0	114.9	118.4	119.9
<b>South Dakota</b> .....	49.0	49.0	48.7	16.2	15.9	16.0	86.5	85.3	86.5
Rapid City .....	4.3	4.5	4.5	1.9	1.8	1.9	13.2	13.2	13.4
Sioux Falls .....	13.8	14.5	14.4	6.5	6.3	6.4	25.5	25.9	26.3
<b>Tennessee</b> .....	517.8	518.8	518.1	148.6	151.8	152.3	604.3	611.5	617.1
Chattanooga .....	43.2	42.8	42.6	11.8	12.0	12.0	52.6	52.5	52.9
Johnson City-Kingsport-Bristol .....	52.9	51.2	50.8	8.0	7.7	7.7	45.3	45.4	45.5
Knoxville .....	48.6	49.6	49.7	14.6	14.3	14.4	83.7	82.6	83.8
Memphis .....	63.5	63.1	63.2	60.7	62.4	62.8	139.9	140.5	140.7
Nashville .....	96.3	98.2	97.6	30.7	31.4	31.5	150.0	153.3	154.2
<b>Texas</b> .....	1,072.1	1,092.2	1,093.6	506.8	530.8	534.1	2,018.7	2,069.1	2,081.1
Abilene .....	3.2	3.2	3.2	2.4	2.4	2.4	14.3	14.7	14.6
Amarillo .....	9.3	9.3	9.4	5.5	5.6	5.6	25.7	26.3	26.4
Austin-San Marcos .....	74.3	78.4	78.3	18.7	19.2	19.6	119.4	124.5	124.7
Beaumont-Port Arthur .....	24.4	24.8	24.8	8.1	7.9	7.9	35.7	36.1	36.3
Brazoria .....	16.4	16.8	16.7	2.7	2.9	2.7	14.3	14.8	14.9
Brownsville-Harlingen-San Benito .....	12.2	12.1	12.0	4.4	4.5	4.5	23.6	24.5	24.4
Bryan-College Station .....	3.8	4.3	4.3	1.4	1.5	1.5	14.6	14.8	14.9
Corpus Christi .....	13.1	13.4	13.3	6.3	6.4	6.4	35.4	36.2	36.2
Dallas .....	242.7	248.5	248.3	117.6	125.9	126.6	422.4	434.8	437.2
El Paso .....	43.2	40.8	40.7	13.0	13.9	14.0	57.1	57.8	58.5
Ft. Worth-Arlington .....	108.5	109.8	110.3	63.5	67.6	67.8	175.9	183.0	184.6
Galveston-Texas City .....	8.0	8.0	8.0	4.2	4.3	4.3	19.2	19.5	19.9
Houston .....	206.2	215.6	215.4	130.9	137.1	138.2	426.4	444.7	445.9
Killeen-Temple .....	9.3	9.2	9.3	3.5	3.5	3.6	22.4	23.1	23.2
Laredo .....	1.4	1.5	1.5	9.8	10.8	10.9	15.9	16.6	16.6
Longview-Marshall .....	18.7	19.1	19.1	4.0	4.0	4.0	21.9	22.4	22.7
Lubbock .....	7.6	7.8	7.9	5.6	5.6	5.5	31.6	32.4	32.3
McAllen-Edinburg-Mission .....	13.1	13.2	13.1	4.7	4.9	4.9	37.3	40.6	40.3
Odessa Midland .....	7.4	7.5	7.5	4.2	4.2	4.2	27.2	27.2	27.5
San Angelo .....	5.3	4.7	4.7	2.3	2.3	2.3	10.3	10.2	10.1
San Antonio .....	50.0	49.6	50.1	30.2	30.9	31.0	158.7	162.8	163.5
Sherman-Denison .....	10.5	10.6	10.5	1.6	1.6	1.6	9.6	9.6	9.7
Texarkana .....	5.8	5.9	5.9	2.2	2.3	2.3	13.1	13.4	13.4
Tyler .....	11.3	10.8	10.9	3.6	3.9	4.0	19.3	20.0	19.9
Victoria .....	3.2	3.3	3.3	1.5	1.5	1.5	9.1	9.4	9.5
Waco .....	16.6	16.3	16.4	3.7	3.9	4.0	21.7	22.2	22.2
Wichita Falls .....	8.4	8.5	8.5	3.0	2.9	2.9	13.7	13.5	13.6
<b>Utah</b> .....	131.7	134.6	134.8	55.9	57.6	57.8	233.9	239.7	240.7
Provo-Orem .....	19.3	20.4	20.5	2.3	2.3	2.3	30.1	30.4	30.5
Salt Lake City-Ogden .....	81.3	83.2	83.0	43.9	45.9	46.2	159.5	163.5	163.9
<b>Vermont</b> .....	45.8	46.9	47.3	12.1	12.4	12.4	63.4	64.2	64.0
Barre-Montpelier .....	3.4	3.4	3.4	1.1	1.1	1.1	6.6	7.0	6.9
Burlington .....	17.6	18.5	18.6	4.6	4.5	4.5	21.9	21.8	21.7
<b>Virginia</b> .....	402.4	405.6	405.6	165.1	171.1	171.4	711.4	723.9	729.5
Bristol .....	9.9	9.4	8.8	1.3	1.3	1.3	10.0	10.1	10.2
Charlottesville .....	8.0	8.2	8.2	2.4	2.2	2.3	16.4	16.5	16.6
Danville .....	15.3	15.1	15.2	1.0	1.0	1.0	9.8	9.9	9.9
Lynchburg .....	25.2	25.2	25.1	3.5	3.6	3.5	20.4	20.3	20.3
Norfolk-Virginia Beach-Newport News .....	68.3	69.3	69.1	31.7	32.2	32.3	152.9	153.1	154.9
Northern Virginia .....	42.4	44.8	44.7	59.3	60.3	60.7	210.9	213.0	214.3
Richmond-Petersburg .....	60.9	61.8	61.5	26.8	27.9	28.0	122.4	126.4	127.1
Roanoke .....	19.4	18.9	18.9	8.6	8.6	8.4	35.9	36.0	35.8
<b>Washington</b> .....	362.4	373.0	374.7	132.5	134.9	136.1	593.8	606.2	612.5
Seattle-Bellevue-Everett .....	214.1	225.5	226.7	77.2	79.1	79.4	297.7	306.1	308.3
Spokane .....	22.4	22.8	22.8	7.8	7.9	7.9	45.9	47.3	47.6
Tacoma .....	25.2	25.1	25.3	9.7	9.8	10.0	56.4	59.0	59.5

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Rhode Island</b> .....	26.4	26.8	27.0	150.4	150.1	151.7	64.4	66.1	66.0
Providence-Fall River-Warwick .....	28.3	28.9	28.6	159.5	160.5	162.6	65.6	66.6	66.5
<b>South Carolina</b> .....	74.1	76.5	77.4	392.6	409.3	416.2	303.3	308.9	308.4
Charleston-North Charleston .....	8.3	8.4	8.5	59.0	63.1	64.2	48.8	50.5	50.2
Columbia .....	19.9	20.5	20.6	69.2	70.8	71.0	73.6	75.8	76.3
Greenville-Spartanburg-Anderson .....	15.4	15.7	15.7	97.3	100.1	101.2	57.1	59.3	59.6
<b>South Dakota</b> .....	20.6	21.6	21.7	90.2	92.7	93.7	71.6	71.6	71.7
Rapid City .....	1.7	1.7	1.7	13.6	13.4	13.6	7.3	7.5	7.6
Sioux Falls .....	11.3	12.2	12.2	29.6	31.0	31.6	9.8	10.1	10.2
<b>Tennessee</b> .....	119.2	122.7	122.7	678.8	694.3	696.0	387.3	393.0	393.7
Chattanooga .....	15.4	15.4	15.4	55.2	55.5	55.7	34.2	34.3	34.3
Johnson City-Kingsport-Bristol .....	6.0	6.2	6.2	49.4	50.6	50.9	29.1	29.4	29.4
Knoxville .....	13.7	14.0	14.0	86.6	84.7	86.6	55.1	54.5	54.5
Memphis .....	27.9	27.7	27.8	160.3	160.0	160.0	81.2	81.0	81.8
Nashville .....	38.5	39.5	39.3	197.5	197.2	198.9	81.7	84.9	84.8
<b>Texas</b> .....	458.5	474.7	476.8	2,361.0	2,467.5	2,489.0	1,499.8	1,520.6	1,526.1
Abilene .....	2.2	2.4	2.5	19.1	19.5	19.6	9.8	10.2	10.1
Amarillo .....	4.6	5.0	5.0	25.2	26.2	26.1	16.8	17.2	17.1
Austin-San Marcos .....	29.5	30.4	30.4	159.3	168.2	170.0	130.9	131.4	131.3
Beaumont-Port Arthur .....	5.0	5.3	5.3	40.9	42.3	42.3	26.5	26.9	26.9
Brazoria .....	1.8	1.8	1.8	13.7	13.8	13.9	13.8	14.7	14.7
Brownsville-Harlingen-San Benito .....	3.6	3.7	3.7	27.1	28.7	28.7	23.8	23.4	23.5
Bryan-College Station .....	2.4	2.3	2.3	15.1	15.2	15.4	28.0	28.1	28.3
Corpus Christi .....	6.5	6.5	6.6	46.4	49.1	49.5	31.4	31.4	31.4
Dallas .....	136.5	143.9	143.9	525.9	562.0	563.5	197.8	203.9	204.1
El Paso .....	9.4	10.0	10.1	53.9	57.0	57.6	53.1	55.0	55.3
Ft. Worth-Arlington .....	31.3	32.5	32.7	190.4	196.1	198.2	91.8	92.5	92.8
Galveston-Texas City .....	5.4	5.5	5.5	18.4	19.1	19.3	26.5	27.8	27.7
Houston .....	98.7	102.6	103.1	560.0	593.6	596.8	255.0	255.7	256.2
Killeen-Temple .....	4.0	4.1	4.1	26.6	27.5	27.8	27.3	27.7	27.7
Laredo .....	2.3	2.3	2.4	10.6	11.1	11.1	14.3	14.4	14.6
Longview-Marshall .....	3.1	3.2	3.2	20.7	21.0	21.1	11.8	11.7	11.6
Lubbock .....	5.4	5.6	5.6	33.0	34.8	35.1	25.2	25.3	25.3
McAllen-Edinburg-Mission .....	4.8	5.0	5.0	30.4	32.4	32.4	36.3	38.4	39.1
Odessa Midland .....	3.6	3.5	3.6	24.0	25.3	25.3	17.8	18.7	18.8
San Angelo .....	1.6	1.6	1.6	12.8	13.2	13.1	8.7	9.1	9.0
San Antonio .....	43.4	44.6	44.8	206.5	217.6	221.0	135.2	136.2	136.0
Sherman-Denison .....	2.1	2.1	2.1	11.9	12.4	12.4	5.7	5.7	5.7
Texarkana .....	1.7	1.7	1.7	13.9	14.5	14.6	11.9	11.6	11.6
Tyler .....	4.0	4.1	4.1	22.8	24.0	24.1	11.1	11.3	11.2
Victoria .....	1.6	1.4	1.4	9.3	9.8	9.8	6.2	6.5	6.5
Waco .....	5.7	5.7	5.7	27.9	29.1	29.2	15.0	15.0	15.3
Wichita Falls .....	2.1	2.2	2.3	16.2	16.6	16.9	12.8	13.1	13.1
<b>Utah</b> .....	52.3	53.5	53.8	265.6	278.0	278.1	175.9	181.2	182.1
Provo-Orem .....	3.9	4.2	4.2	51.7	53.3	53.1	19.1	19.7	19.9
Salt Lake City-Ogden .....	43.2	43.9	43.9	175.7	185.9	186.0	113.4	115.9	116.2
<b>Vermont</b> .....	12.1	12.0	12.0	81.9	87.0	83.9	47.9	47.5	47.7
Barre-Montpelier .....	2.6	2.4	2.4	7.9	8.9	8.4	7.1	7.3	7.2
Burlington .....	4.8	5.0	5.1	27.9	29.2	29.4	16.2	15.9	16.2
<b>Virginia</b> .....	166.1	169.8	169.8	959.5	1,007.9	1,019.8	607.2	608.0	609.7
Bristol .....	1.2	1.3	1.3	7.8	7.9	8.0	5.6	5.6	5.5
Charlottesville .....	4.0	4.1	4.0	19.8	19.9	20.2	26.2	26.5	26.6
Danville .....	1.4	1.4	1.4	9.3	10.1	10.2	6.1	6.0	6.1
Lynchburg .....	4.1	4.4	4.2	24.8	25.6	26.0	12.8	12.6	12.6
Norfolk-Virginia Beach-Newport News .....	30.3	31.5	31.7	193.4	194.8	197.4	142.9	145.9	145.8
Northern Virginia .....	54.4	55.8	55.7	383.4	408.4	412.6	181.6	180.9	180.8
Richmond-Petersburg .....	44.1	44.5	44.5	134.0	143.8	146.1	100.4	97.5	98.2
Roanoke .....	9.2	9.3	9.2	40.8	41.6	41.7	18.0	17.7	17.9
<b>Washington</b> .....	126.8	132.0	133.3	672.1	695.3	703.9	463.8	465.2	467.0
Seattle-Bellevue-Everett .....	76.2	81.0	81.5	366.8	389.5	395.0	178.7	182.9	184.4
Spokane .....	10.8	11.1	11.0	55.6	57.0	57.6	31.3	31.7	31.9
Tacoma .....	12.0	12.2	12.2	65.8	65.0	65.3	47.5	48.3	48.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>West Virginia</b> .....	702.9	705.4	711.7	24.7	22.8	23.1	34.1	29.8	33.6
Charleston .....	129.4	130.5	131.0	1.8	1.8	1.8	6.8	5.8	6.4
Huntington-Ashland .....	120.6	121.9	122.2	1.6	1.2	1.2	5.8	5.6	5.9
Parkersburg-Marietta .....	68.8	69.5	69.8	.3	.3	.3	4.3	3.7	3.8
Wheeling .....	64.5	65.3	66.1	1.6	1.5	1.5	2.2	1.9	2.3
<b>Wisconsin</b> .....	2,616.3	2,656.0	2,687.3	2.4	2.0	2.3	101.2	95.8	105.0
Appleton-Oshkosh-Neenah .....	190.3	194.9	197.1	(1)	(1)	(1)	10.1	10.1	10.7
Eau Claire .....	72.0	72.7	73.9	(1)	(1)	(1)	2.5	2.3	2.7
Green Bay .....	133.0	133.1	134.3	(1)	(1)	(1)	6.0	5.6	5.9
Janesville-Beloit .....	68.2	69.3	69.4	(1)	(1)	(1)	2.6	2.5	2.6
Kenosha .....	50.1	51.0	51.5	(1)	(1)	(1)	2.1	1.8	2.1
La Crosse .....	68.3	68.4	69.7	(1)	(1)	(1)	2.4	2.2	2.5
Madison .....	265.9	269.4	272.2	(1)	(1)	(1)	11.7	11.5	12.2
Milwaukee-Waukesha .....	816.8	834.8	840.1	(1)	(1)	(1)	28.3	28.2	29.3
Racine .....	79.2	81.7	82.6	(1)	(1)	(1)	3.0	2.9	3.2
Sheboygan .....	57.1	57.9	58.1	(1)	(1)	(1)	2.3	2.2	2.3
Wausau .....	63.2	64.5	65.1	(1)	(1)	(1)	2.5	2.7	2.7
<b>Wyoming</b> .....	217.2	215.8	217.9	16.0	16.5	16.6	13.5	12.7	13.8
Casper .....	29.6	29.9	29.9	1.9	2.0	2.0	1.5	1.5	1.6
<b>Puerto Rico</b> .....	978.9	959.3	955.0	1.2	1.1	1.1	56.0	55.0	53.6
Caguas .....	66.3	65.4	64.7	(1)	(1)	(1)	3.2	3.1	3.1
Mayaguez .....	69.5	67.5	67.2	(1)	(1)	(1)	3.7	4.3	4.3
Ponce .....	75.9	76.2	75.2	(1)	(1)	(1)	4.8	5.1	4.5
San Juan-Bayamon .....	614.0	602.1	600.3	.6	.6	.6	38.7	38.0	37.3
<b>Virgin Islands</b> .....	41.5	41.9	41.7	(1)	(1)	(1)	1.9	1.8	1.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>West Virginia</b> .....	81.4	82.4	82.8	38.7	38.2	38.5	159.4	160.6	161.5
Charleston .....	9.9	10.3	10.3	9.3	9.2	9.1	31.0	31.0	31.2
Huntington-Ashland .....	17.1	16.8	16.6	6.7	6.6	6.7	31.1	30.8	30.7
Parkersburg-Marietta .....	13.1	13.2	13.3	2.6	2.6	2.6	17.0	17.0	17.1
Wheeling .....	5.8	6.2	6.2	2.8	2.8	2.9	16.6	16.6	16.8
<b>Wisconsin</b> .....	599.0	613.5	615.6	123.8	123.0	123.8	590.0	596.7	603.2
Appleton-Oshkosh-Neenah .....	58.2	58.8	58.9	7.4	7.5	7.6	39.7	41.5	41.7
Eau Claire .....	12.0	12.7	12.9	3.5	3.5	3.4	19.7	19.6	20.0
Green Bay .....	28.0	28.3	28.3	9.7	9.9	10.0	30.9	31.0	31.1
Janesville-Beloit .....	20.6	21.6	21.6	2.6	2.6	2.6	15.5	15.7	15.7
Kenosha .....	11.2	11.6	11.6	1.9	2.1	2.2	12.3	11.9	11.9
La Crosse .....	11.4	11.9	12.0	2.9	2.8	2.8	18.5	17.9	18.3
Madison .....	29.1	29.8	30.0	9.2	9.6	9.7	56.2	55.4	56.0
Milwaukee-Waukesha .....	174.4	178.2	178.5	39.5	40.0	40.0	176.3	179.5	178.9
Racine .....	25.0	26.1	26.0	2.5	2.2	2.3	16.1	16.0	16.1
Sheboygan .....	23.5	23.8	23.9	1.7	1.8	1.8	10.5	10.5	10.7
Wausau .....	17.9	18.2	18.4	3.4	3.5	3.5	15.4	15.9	16.1
<b>Wyoming</b> .....	10.3	10.6	10.7	13.7	13.6	13.7	50.7	49.8	50.2
Casper .....	1.5	1.5	1.5	1.6	1.7	1.7	8.3	8.3	8.3
<b>Puerto Rico</b> .....	153.1	144.3	143.1	27.6	26.5	25.6	195.0	193.9	193.6
Caguas .....	16.1	15.2	14.9	.7	.7	.7	14.4	14.9	14.8
Mayaguez .....	19.1	17.5	17.5	.7	.6	.6	11.8	11.5	11.4
Ponce .....	11.0	9.8	9.6	2.4	2.5	2.2	12.9	13.1	13.1
San Juan-Bayamon .....	69.9	65.4	65.0	22.2	21.0	20.3	129.5	128.0	127.9
<b>Virgin Islands</b> .....	2.2	2.4	2.4	2.4	2.4	2.4	9.5	9.2	9.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>West Virginia</b> .....	28.1	28.2	28.3	196.5	201.7	202.8	140.0	141.7	141.1
Charleston .....	7.5	7.7	7.7	39.5	40.7	40.7	23.6	24.0	23.8
Huntington-Ashland .....	3.8	3.9	3.9	32.7	35.2	35.4	21.8	21.8	21.8
Parkersburg-Marietta .....	2.8	2.6	2.6	18.2	19.4	19.4	10.7	10.7	10.7
Wheeling .....	2.8	2.9	3.0	22.6	23.2	23.2	10.1	10.2	10.2
<b>Wisconsin</b> .....	139.3	141.3	142.3	664.9	685.3	691.7	395.7	398.2	403.5
Appleton-Oshkosh-Neenah .....	9.4	9.8	9.9	43.0	44.4	45.3	22.6	22.9	23.0
Eau Claire .....	2.4	2.5	2.5	19.5	19.8	20.0	12.3	12.3	12.5
Green Bay .....	9.4	9.4	9.4	32.8	32.9	33.2	16.2	16.1	16.3
Janesville-Beloit .....	1.8	1.9	1.9	16.4	16.1	16.2	8.6	8.9	8.8
Kenosha .....	1.6	1.8	1.8	12.9	13.6	13.6	8.1	8.2	8.3
La Crosse .....	2.4	2.6	2.6	20.3	20.6	20.9	10.4	10.4	10.6
Madison .....	21.0	21.8	21.9	66.8	69.0	69.4	71.9	72.4	72.9
Milwaukee-Waukesha .....	57.4	58.2	58.6	251.7	259.8	262.9	89.1	90.9	92.0
Racine .....	2.2	2.3	2.3	21.1	22.8	23.1	9.4	9.4	9.7
Sheboygan .....	2.1	2.2	2.2	10.7	10.9	10.8	6.2	6.4	6.4
Wausau .....	4.7	4.8	4.8	11.9	12.0	12.0	7.4	7.4	7.6
<b>Wyoming</b> .....	8.0	8.2	8.2	45.8	45.6	45.8	59.2	58.8	58.9
Casper .....	1.2	1.2	1.2	8.3	8.1	8.1	5.3	5.6	5.5
<b>Puerto Rico</b> .....	46.3	45.7	46.0	195.2	192.1	192.2	304.5	300.7	299.8
Caguas .....	1.6	1.7	1.8	12.3	12.3	12.3	18.0	17.5	17.1
Mayaguez .....	2.0	2.0	2.0	11.1	10.9	10.8	21.1	20.7	20.6
Ponce .....	2.3	2.3	2.4	16.6	17.0	17.2	25.9	26.4	26.2
San Juan-Bayamon .....	36.4	35.7	35.9	132.2	130.4	130.6	184.5	183.0	182.7
<b>Virgin Islands</b> .....	1.9	1.8	1.8	10.1	10.7	10.6	13.5	13.6	13.5

<sup>1</sup> Combined with construction.  
<sup>2</sup> Not available.  
P = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1997 benchmarks.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Total private</b> .....		34.6	34.4	34.5	34.2	34.5	-	-	-	-	-
<b>Goods-producing</b> .....		41.3	41.2	40.9	40.1	41.1	-	-	-	-	-
<b>Mining</b> .....		45.4	45.1	43.4	43.5	44.4	-	-	-	-	-
Metal mining .....	10	44.4	44.1	44.9	45.8	-	-	-	-	-	-
Iron ores .....	101	45.8	45.6	46.2	44.2	-	-	-	-	-	-
Copper ores .....	102	45.9	46.2	45.7	49.6	-	-	-	-	-	-
Coal mining .....	12	45.4	45.0	45.0	44.3	-	-	-	-	-	-
Bituminous coal and lignite mining .....	122	45.5	45.1	44.9	44.1	-	-	-	-	-	-
Oil and gas extraction .....	13	44.9	44.6	42.2	41.8	-	-	-	-	-	-
Crude petroleum and natural gas .....	131	42.2	41.9	40.9	40.6	-	-	-	-	-	-
Oil and gas field services .....	138	46.4	46.0	42.8	42.3	-	-	-	-	-	-
Nonmetallic minerals, except fuels .....	14	47.3	47.1	44.8	46.8	-	-	-	-	-	-
Crushed and broken stone .....	142	48.8	48.9	45.7	48.9	-	-	-	-	-	-
<b>Construction</b> .....		38.9	38.8	37.9	38.0	39.3	-	-	-	-	-
General building contractors .....	15	38.2	38.4	37.4	37.5	-	-	-	-	-	-
Residential building construction .....	152	36.9	37.1	36.2	36.4	-	-	-	-	-	-
Operative builders .....	153	38.4	40.4	39.1	39.5	-	-	-	-	-	-
Nonresidential building construction .....	154	39.5	39.7	38.7	38.7	-	-	-	-	-	-
Heavy construction, except building .....	16	42.4	42.2	41.3	41.2	-	-	-	-	-	-
Highway and street construction .....	161	43.2	42.4	39.7	41.3	-	-	-	-	-	-
Heavy construction, except highway .....	162	42.1	42.1	41.8	41.2	-	-	-	-	-	-
Special trade contractors .....	17	38.3	38.1	37.4	37.5	-	-	-	-	-	-
Plumbing, heating, and air conditioning .....	171	39.5	39.2	39.0	38.6	-	-	-	-	-	-
Painting and paper hanging .....	172	37.1	36.5	36.6	36.0	-	-	-	-	-	-
Electrical work .....	173	40.0	39.9	39.5	39.2	-	-	-	-	-	-
Masonry, stonework, and plastering .....	174	35.8	35.7	34.4	35.6	-	-	-	-	-	-
Carpentry and floor work .....	175	35.7	35.7	35.2	35.4	-	-	-	-	-	-
Roofing, siding, and sheet metal work .....	176	34.5	34.1	32.5	33.0	-	-	-	-	-	-
<b>Manufacturing</b> .....		42.0	41.8	41.7	40.7	41.6	4.8	4.6	4.6	4.0	4.5
<b>Durable goods</b> .....		42.8	42.7	42.4	41.3	42.3	5.1	5.0	4.9	4.1	4.8
Lumber and wood products .....	24	41.0	41.2	40.8	40.8	41.3	4.3	4.4	4.2	4.1	-
Logging .....	241	40.8	41.1	40.4	40.7	-	5.7	5.7	5.6	5.1	-
Sawmills and planing mills .....	242	42.4	42.4	41.9	41.9	-	5.2	5.2	4.9	4.7	-
Sawmills and planing mills, general .....	2421	42.8	42.8	42.3	42.3	-	5.7	5.8	5.3	5.1	-
Hardwood dimension and flooring mills .....	2426	40.9	41.2	40.6	40.5	-	3.4	3.3	3.6	3.1	-
Millwork, plywood, and structural members .....	243	41.4	41.7	41.3	41.4	-	4.3	4.5	4.4	4.3	-
Millwork .....	2431	40.8	40.8	39.8	40.5	-	3.5	3.5	3.1	3.2	-
Wood kitchen cabinets .....	2434	40.5	41.6	42.0	41.7	-	4.4	5.2	5.4	5.1	-
Hardwood veneer and plywood .....	2435	42.3	42.9	42.4	41.5	-	4.9	5.2	5.3	4.7	-
Softwood veneer and plywood .....	2436	44.8	45.4	43.9	43.1	-	5.9	5.7	5.9	5.9	-
Wood containers .....	244	39.1	39.0	38.1	37.6	-	3.5	3.4	3.2	2.9	-
Wood buildings and mobile homes .....	245	38.6	38.4	38.6	39.9	-	2.6	2.2	2.3	2.8	-
Mobile homes .....	2451	38.7	38.7	38.5	40.1	-	2.5	2.0	2.4	2.9	-
Miscellaneous wood products .....	249	40.7	41.3	40.7	39.7	-	3.6	3.8	3.5	3.1	-
Furniture and fixtures .....	25	40.2	39.5	40.4	39.7	40.3	3.5	3.0	3.5	3.3	-
Household furniture .....	251	39.1	38.5	40.3	39.4	-	2.9	2.5	3.2	2.9	-
Wood household furniture .....	2511	39.3	39.0	40.4	40.0	-	2.8	2.6	3.1	2.9	-
Upholstered household furniture .....	2512	38.4	37.2	39.9	38.6	-	2.3	1.6	2.7	2.4	-
Metal household furniture .....	2514	40.5	41.2	41.5	39.0	-	4.3	4.8	4.5	4.3	-
Mattresses and bedsprings .....	2515	39.2	38.0	39.9	39.9	-	3.7	2.7	4.0	3.6	-
Office furniture .....	252	42.0	40.2	40.2	39.4	-	4.3	3.3	3.9	3.6	-
Public building and related furniture .....	253	40.6	40.1	40.4	40.0	-	4.2	3.6	3.8	4.0	-
Partitions and fixtures .....	254	42.8	42.5	41.6	41.4	-	4.6	4.2	3.7	3.6	-
Miscellaneous furniture and fixtures .....	259	40.4	39.6	39.4	38.7	-	3.6	3.2	3.6	3.5	-

See footnotes at end of table.



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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Total private</b> .....		\$12.28	\$12.18	\$12.68	\$12.69	\$12.70	\$424.89	\$418.99	\$437.46	\$434.00	\$438.15
<b>Goods-producing</b> .....		13.92	13.78	14.18	14.23	14.29	574.90	567.74	579.96	570.62	587.32
<b>Mining</b> .....		16.17	16.08	16.89	16.82	16.76	734.12	725.21	733.03	731.67	744.14
Metal mining .....	10	17.82	17.87	18.16	18.21	—	791.21	788.07	815.38	834.02	—
Iron ores .....	101	18.85	18.48	18.96	19.97	—	863.33	842.69	875.95	882.67	—
Copper ores .....	102	16.32	16.55	16.29	16.32	—	749.09	764.61	744.45	809.47	—
Coal mining .....	12	19.01	18.82	19.11	19.12	—	863.05	846.90	859.95	847.02	—
Bituminous coal and lignite mining .....	122	19.30	19.12	19.37	19.41	—	878.15	862.31	869.71	855.98	—
Oil and gas extraction .....	13	15.66	15.59	16.74	16.68	—	703.13	695.31	706.43	697.22	—
Crude petroleum and natural gas .....	131	21.09	20.89	22.07	22.25	—	890.00	875.29	902.66	903.35	—
Oil and gas field services .....	138	13.06	12.99	14.19	13.95	—	605.98	597.54	607.33	590.09	—
Nonmetallic minerals, except fuels .....	14	14.19	14.00	14.51	14.53	—	671.19	659.40	650.05	680.00	—
Crushed and broken stone .....	142	13.56	13.45	13.87	13.93	—	661.73	657.71	633.86	681.18	—
<b>Construction</b> .....		16.03	15.78	16.29	16.35	16.45	623.57	612.26	617.39	621.30	646.49
General building contractors .....	15	15.21	15.05	15.73	15.80	—	581.02	577.92	588.30	592.50	—
Residential building construction .....	152	14.15	14.00	14.82	14.94	—	522.14	519.40	536.48	543.82	—
Operative builders .....	153	15.05	14.95	15.31	14.80	—	577.92	603.98	598.62	584.60	—
Nonresidential building construction .....	154	16.24	16.04	16.64	16.68	—	641.48	636.79	643.97	645.52	—
Heavy construction, except building .....	16	15.60	15.24	15.47	15.68	—	661.44	643.13	638.91	646.02	—
Highway and street construction .....	161	15.75	15.10	15.05	15.34	—	680.40	640.24	597.49	633.54	—
Heavy construction, except highway .....	162	15.53	15.30	15.59	15.81	—	653.81	644.13	651.66	651.37	—
Special trade contractors .....	17	16.41	16.17	16.67	16.71	—	628.50	616.08	623.46	626.63	—
Plumbing, heating, and air conditioning .....	171	16.73	16.58	16.97	17.01	—	660.84	649.94	661.83	656.59	—
Painting and paper hanging .....	172	14.67	14.44	15.06	15.04	—	544.26	527.06	551.20	541.44	—
Electrical work .....	173	17.82	17.67	18.09	18.08	—	712.80	705.03	714.56	708.74	—
Masonry, stonework, and plastering .....	174	16.22	15.97	16.42	16.61	—	580.68	570.13	564.85	591.32	—
Carpentry and floor work .....	175	16.03	15.71	16.13	16.62	—	572.27	560.85	567.78	588.35	—
Roofing, siding, and sheet metal work .....	176	14.20	13.87	14.35	14.39	—	489.90	472.97	466.38	474.87	—
<b>Manufacturing</b> .....		13.17	13.08	13.47	13.46	13.47	553.14	546.74	561.70	547.82	560.35
<b>Durable goods</b> .....		13.73	13.63	14.02	13.96	13.98	587.64	582.00	594.45	576.55	591.35
Lumber and wood products .....	24	10.77	10.65	10.95	10.99	11.06	441.57	438.78	446.76	448.39	456.78
Logging .....	241	12.18	11.92	12.29	12.21	—	496.94	489.91	496.52	496.95	—
Sawmills and planing mills .....	242	10.86	10.80	11.10	11.04	—	460.46	457.92	465.09	462.58	—
Sawmills and planing mills, general .....	2421	11.29	11.23	11.54	11.48	—	483.21	480.64	488.14	485.60	—
Hardwood dimension and flooring mills .....	2426	9.18	9.11	9.41	9.37	—	375.46	375.33	382.05	379.49	—
Millwork, plywood, and structural members .....	243	10.88	10.80	11.06	11.17	—	450.43	450.36	456.78	462.44	—
Millwork .....	2431	10.95	10.91	11.01	11.22	—	446.76	445.13	438.20	454.41	—
Wood kitchen cabinets .....	2434	10.82	10.54	11.09	11.14	—	430.11	438.46	465.78	464.54	—
Hardwood veneer and plywood .....	2435	9.52	9.46	9.81	9.97	—	402.70	405.83	415.94	413.76	—
Softwood veneer and plywood .....	2436	13.07	12.87	13.26	13.35	—	585.54	584.30	582.11	575.39	—
Wood containers .....	244	8.37	8.24	8.67	8.69	—	327.27	321.36	330.33	326.74	—
Wood buildings and mobile homes .....	245	10.86	10.68	11.15	11.25	—	419.20	410.11	430.39	448.88	—
Mobile homes .....	2451	11.05	10.83	11.30	11.40	—	427.64	419.12	435.05	457.14	—
Miscellaneous wood products .....	249	10.25	10.16	10.36	10.37	—	417.18	419.61	421.65	411.69	—
Furniture and fixtures .....	25	10.55	10.42	10.80	10.86	10.78	424.11	411.59	436.32	431.14	434.43
Household furniture .....	251	9.96	9.84	10.17	10.23	—	389.44	378.84	409.85	403.06	—
Wood household furniture .....	2511	9.52	9.45	9.79	9.72	—	374.14	368.55	395.52	388.80	—
Upholstered household furniture .....	2512	10.62	10.49	10.87	11.04	—	407.81	390.23	433.71	426.14	—
Metal household furniture .....	2514	9.55	9.58	9.40	9.78	—	386.78	394.70	390.10	381.42	—
Mattresses and bedsprings .....	2515	10.64	10.45	10.74	10.78	—	417.09	397.10	428.53	430.12	—
Office furniture .....	252	11.63	11.44	12.00	11.92	—	488.46	459.89	482.40	469.65	—
Public building and related furniture .....	253	11.41	11.34	11.80	12.02	—	463.25	454.73	476.72	480.80	—
Partitions and fixtures .....	254	11.30	11.21	11.61	11.64	—	483.64	476.43	482.98	481.90	—
Miscellaneous furniture and fixtures .....	259	10.49	10.38	10.97	10.98	—	423.80	411.05	432.22	424.93	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	43.2	42.9	42.5	42.9	44.1	5.9	5.7	5.6	5.8	—
Flat glass .....	321	45.6	45.7	45.6	44.1	—	7.5	8.4	8.1	8.7	—
Glass and glassware, pressed or blown .....	322	42.4	42.3	41.8	41.7	—	4.8	4.7	4.5	5.3	—
Glass containers .....	3221	44.4	43.8	44.3	45.4	—	6.4	6.2	6.3	7.4	—
Pressed and blown glass, nec .....	3229	41.1	41.3	40.2	39.3	—	3.7	3.7	3.4	4.0	—
Products of purchased glass .....	323	41.8	41.3	41.9	40.9	—	4.5	4.1	4.7	4.0	—
Cement, hydraulic .....	324	45.2	45.1	46.5	46.2	—	5.8	5.8	7.3	6.8	—
Structural clay products .....	325	42.3	42.6	41.7	41.8	—	4.9	4.9	4.5	4.7	—
Pottery and related products .....	326	40.9	40.5	41.1	40.7	—	4.6	4.1	4.5	4.7	—
Concrete, gypsum, and plaster products .....	327	44.3	44.1	43.0	44.6	—	7.3	7.0	6.7	7.3	—
Concrete block and brick .....	3271	46.2	46.1	45.3	46.7	—	8.4	8.4	7.9	8.3	—
Concrete products, nec .....	3272	43.5	42.9	42.7	43.2	—	6.2	5.5	5.8	5.9	—
Ready-mixed concrete .....	3273	43.9	43.7	41.7	44.4	—	7.5	7.3	6.6	7.8	—
Misc. nonmetallic mineral products .....	329	42.7	42.3	42.6	42.4	—	5.3	5.2	5.2	4.4	—
Abrasive products .....	3291	42.9	43.0	41.2	40.9	—	3.9	3.9	3.1	3.0	—
Asbestos products .....	3292	46.8	47.0	48.1	43.4	—	7.5	7.9	7.7	4.8	—
Primary metal industries .....	33	44.9	44.7	44.5	43.4	44.2	6.7	6.5	6.5	5.7	—
Blast furnaces and basic steel products .....	331	44.9	44.9	45.2	44.7	45.3	6.5	6.3	6.6	6.2	—
Blast furnaces and steel mills .....	3312	45.4	45.2	45.8	45.6	—	6.8	6.5	7.0	6.6	—
Steel pipe and tubes .....	3317	44.4	44.7	43.5	41.7	—	6.5	6.4	6.1	4.8	—
Iron and steel foundries .....	332	46.1	46.0	45.1	43.8	—	7.1	6.9	6.6	5.7	—
Gray and ductile iron foundries .....	3321	46.7	46.7	45.9	44.3	—	8.0	7.8	7.3	6.4	—
Malleable iron foundries .....	3322	51.1	49.0	51.8	51.2	—	9.2	9.5	8.3	8.1	—
Steel foundries, nec .....	3325	44.2	43.5	43.2	42.0	—	5.3	4.7	5.4	4.7	—
Primary nonferrous metals .....	333	44.1	44.0	44.0	44.3	—	6.1	6.0	6.0	6.4	—
Primary aluminum .....	3334	43.9	43.8	44.4	45.3	—	6.0	5.7	6.2	7.1	—
Nonferrous rolling and drawing .....	335	45.1	44.4	44.4	42.7	—	7.7	7.3	7.3	6.3	—
Copper rolling and drawing .....	3351	43.9	43.8	42.8	41.4	—	7.6	7.5	7.2	6.0	—
Aluminum sheet, plate, and foil .....	3353	46.8	47.1	45.6	43.6	—	8.9	8.1	9.8	10.3	—
Nonferrous wire drawing and insulating .....	3357	45.2	43.9	44.0	42.3	—	7.5	6.9	6.9	5.6	—
Nonferrous foundries (castings) .....	336	43.6	43.7	42.8	40.9	—	5.4	5.4	4.9	3.6	—
Aluminum foundries .....	3365	43.4	43.2	43.0	40.4	—	5.3	5.1	5.0	3.8	—
Fabricated metal products .....	34	42.6	42.4	42.2	40.9	41.1	5.1	4.9	4.8	3.8	—
Metal cans and shipping containers .....	341	43.2	42.6	42.5	42.3	—	6.3	6.2	5.7	5.8	—
Metal cans .....	3411	43.5	42.6	42.5	42.5	—	6.3	6.1	5.5	5.7	—
Cutlery, handtools, and hardware .....	342	42.7	42.3	41.8	40.6	—	4.6	4.3	4.1	3.1	—
Hand and edge tools, and blades and handsaws .....	3423,5	42.5	41.9	42.9	41.7	—	4.4	4.0	4.7	3.4	—
Hardware, nec .....	3429	42.8	42.7	41.5	40.4	—	4.7	4.5	4.1	3.2	—
Plumbing and heating, except electric .....	343	41.7	42.1	40.9	39.7	—	4.3	4.2	3.4	3.1	—
Plumbing fixture fittings and trim .....	3432	41.9	42.2	40.9	38.8	—	4.0	3.8	4.1	3.5	—
Heating equipment, except electric .....	3433	41.1	39.8	39.0	39.4	—	3.8	2.7	2.0	2.3	—
Fabricated structural metal products .....	344	42.1	41.6	41.6	41.1	—	4.7	4.5	4.4	3.6	—
Fabricated structural metal .....	3441	42.8	42.7	42.3	41.7	—	5.8	5.8	5.4	4.7	—
Metal doors, sash, and trim .....	3442	40.8	40.5	40.1	40.3	—	3.6	3.3	2.7	2.7	—
Fabricated plate work (boiler shops) .....	3443	43.3	42.5	43.6	42.1	—	5.5	5.2	5.6	4.1	—
Sheet metal work .....	3444	41.4	41.2	40.8	40.5	—	4.1	4.0	3.9	3.4	—
Architectural metal work .....	3446	41.6	40.8	40.9	41.0	—	4.1	3.7	3.8	3.8	—
Screw machine products, bolts, etc .....	345	44.1	43.8	44.4	42.4	—	6.0	5.9	6.3	5.0	—
Screw machine products .....	3451	42.8	42.9	42.7	41.8	—	5.2	5.2	5.5	4.7	—
Bolts, nuts, rivets, and washers .....	3452	45.5	44.9	46.5	43.2	—	6.9	6.7	7.3	5.4	—
Metal forgings and stampings .....	346	43.8	44.0	43.1	40.6	—	6.0	6.1	5.7	3.9	—
Iron and steel forgings .....	3462	45.2	45.4	44.9	42.1	—	6.9	7.0	6.5	5.2	—
Automotive stampings .....	3465	44.6	45.1	43.4	40.2	—	6.4	6.6	5.9	3.5	—
Metal stampings, nec .....	3469	42.0	42.0	41.6	40.3	—	4.7	4.7	4.6	3.5	—
Metal services, nec .....	347	41.7	41.7	41.5	40.3	—	4.9	4.8	4.9	4.0	—
Plating and polishing .....	3471	41.1	41.0	41.2	39.8	—	4.6	4.5	4.6	3.9	—
Metal coating and allied services .....	3479	42.7	42.7	41.9	41.1	—	5.4	5.2	5.4	4.2	—
Ordnance and accessories, nec .....	348	40.1	39.4	40.4	39.9	—	3.2	2.5	3.5	3.0	—
Ammunition, except for small arms, nec .....	3483	40.9	40.7	40.7	41.5	—	3.1	2.6	3.4	3.3	—
Misc. fabricated metal products .....	349	42.6	42.3	42.3	41.0	—	4.7	4.5	4.4	3.4	—
Valves and pipe fittings, nec .....	3494	42.4	41.9	41.8	40.8	—	4.6	4.1	4.1	3.3	—
Misc. fabricated wire products .....	3496	40.8	40.4	40.4	40.0	—	3.7	3.5	3.3	3.0	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	\$13.18	\$13.06	\$13.46	\$13.63	\$13.55	\$569.38	\$560.27	\$572.05	\$584.73	\$597.56
Flat glass .....	321	18.65	18.39	19.56	19.99	—	850.44	840.42	891.94	881.56	—
Glass and glassware, pressed or blown .....	322	14.98	14.95	15.18	15.64	—	635.15	632.39	634.52	652.19	—
Glass containers .....	3221	15.69	15.91	15.82	16.50	—	696.64	696.86	700.83	749.10	—
Pressed and blown glass, nec .....	3229	14.49	14.27	14.74	15.02	—	595.54	589.35	592.55	590.29	—
Products of purchased glass .....	323	11.92	11.90	12.09	12.14	—	498.26	491.47	506.57	496.53	—
Cement, hydraulic .....	324	17.48	17.33	18.30	18.84	—	790.10	781.58	850.95	870.41	—
Structural clay products .....	325	11.49	11.51	11.61	11.75	—	486.03	490.33	484.14	491.15	—
Pottery and related products .....	326	11.47	11.37	11.82	11.98	—	469.12	460.49	485.80	487.59	—
Concrete, gypsum, and plaster products .....	327	12.60	12.39	12.79	12.97	—	558.18	546.40	549.97	578.46	—
Concrete block and brick .....	3271	12.24	12.02	12.31	12.41	—	565.49	554.12	557.64	579.55	—
Concrete products, nec .....	3272	11.21	10.98	11.45	11.55	—	487.64	471.04	488.92	498.96	—
Ready-mixed concrete .....	3273	13.39	13.17	13.64	13.81	—	587.82	575.53	568.79	613.16	—
Misc. nonmetallic mineral products .....	329	13.58	13.48	13.83	13.94	—	579.87	570.20	589.16	591.06	—
Abrasive products .....	3291	11.87	11.59	12.41	12.37	—	509.22	498.37	511.29	505.93	—
Asbestos products .....	3292	15.74	15.59	15.34	15.00	—	736.63	732.73	737.85	651.00	—
Primary metal industries .....	33	15.22	15.15	15.52	15.65	15.60	683.38	677.21	690.64	679.21	689.52
Blast furnaces and basic steel products .....	331	18.03	17.92	18.32	18.66	18.55	809.55	804.61	828.06	834.10	840.32
Blast furnaces and steel mills .....	3312	19.61	19.45	19.94	20.33	—	890.29	879.14	913.25	927.05	—
Steel pipe and tubes .....	3317	14.17	14.15	14.21	14.26	—	629.15	632.51	618.14	594.64	—
Iron and steel foundries .....	332	13.81	13.72	14.16	14.10	—	636.64	631.12	638.62	617.58	—
Gray and ductile iron foundries .....	3321	14.68	14.51	15.04	14.97	—	685.56	677.62	690.34	663.17	—
Malleable iron foundries .....	3322	16.10	17.38	16.46	15.94	—	822.71	851.62	852.63	816.13	—
Steel foundries, nec .....	3325	12.59	12.37	12.98	12.94	—	556.48	538.10	560.74	543.48	—
Primary nonferrous metals .....	333	16.66	16.55	16.82	17.30	—	734.71	728.20	740.08	766.39	—
Primary aluminum .....	3334	16.70	16.59	16.65	17.24	—	733.13	726.64	739.26	780.97	—
Nonferrous rolling and drawing .....	335	14.48	14.41	14.81	14.76	—	653.05	639.80	657.56	630.25	—
Copper rolling and drawing .....	3351	14.57	14.39	15.08	15.08	—	639.62	630.28	645.42	624.31	—
Aluminum sheet, plate, and foil .....	3353	16.66	16.46	16.34	17.04	—	779.69	775.27	745.10	742.94	—
Nonferrous wire drawing and insulating .....	3357	14.51	14.42	15.32	14.96	—	655.85	633.04	674.08	632.81	—
Nonferrous foundries (castings) .....	336	12.05	12.14	12.36	12.26	—	525.38	530.52	529.01	501.43	—
Aluminum foundries .....	3365	11.56	11.43	11.70	11.69	—	501.70	493.78	503.10	472.28	—
Fabricated metal products .....	34	12.79	12.75	13.01	12.90	12.68	544.85	540.60	549.02	527.61	521.15
Metal cans and shipping containers .....	341	16.29	16.29	16.73	16.70	—	703.73	693.95	711.03	706.41	—
Metal cans .....	3411	17.34	17.39	17.84	17.73	—	754.29	740.81	758.20	753.53	—
Cutlery, handtools, and hardware .....	342	12.46	12.46	12.34	12.25	—	532.04	527.06	515.81	497.35	—
Hand and edge tools, and blades and handsaws .....	3423,5	12.00	11.87	12.15	12.12	—	510.00	497.35	521.24	505.40	—
Hardware, nec .....	3429	12.58	12.55	12.60	12.51	—	538.42	535.89	522.90	505.40	—
Plumbing and heating, except electric .....	343	11.71	11.60	11.88	11.88	—	488.31	488.36	485.89	471.64	—
Plumbing fixture fittings and trim .....	3432	11.39	11.25	11.60	11.52	—	477.24	474.75	474.44	446.98	—
Heating equipment, except electric .....	3433	11.74	11.56	11.68	11.91	—	482.51	460.09	455.52	469.25	—
Fabricated structural metal products .....	344	12.11	12.04	12.38	12.32	—	509.83	500.86	515.01	506.35	—
Fabricated structural metal .....	3441	12.18	12.06	12.61	12.69	—	521.30	514.96	533.40	529.17	—
Metal doors, sash, and trim .....	3442	10.35	10.28	10.48	10.50	—	422.28	416.34	420.25	423.15	—
Fabricated plate work (boiler shops) .....	3443	13.44	13.45	13.69	13.42	—	581.95	571.63	596.88	564.98	—
Sheet metal work .....	3444	12.36	12.27	12.65	12.65	—	511.70	505.52	516.12	512.33	—
Architectural metal work .....	3446	11.52	11.44	11.69	11.84	—	479.23	466.75	478.12	485.44	—
Screw machine products, bolts, etc .....	345	12.89	12.86	13.23	13.19	—	568.45	563.27	587.41	559.26	—
Screw machine products .....	3451	12.22	12.11	12.49	12.50	—	523.02	519.52	533.32	522.50	—
Bolts, nuts, rivets, and washers .....	3452	13.63	13.69	14.04	13.98	—	620.17	614.68	652.86	603.94	—
Metal forgings and stampings .....	346	14.95	14.98	15.28	14.91	—	654.81	659.12	658.57	605.35	—
Iron and steel forgings .....	3462	14.32	14.31	14.50	14.48	—	647.26	649.67	651.05	609.61	—
Automotive stampings .....	3465	17.13	17.19	17.57	16.88	—	764.00	775.27	762.54	678.58	—
Metal stampings, nec .....	3469	12.24	12.18	12.57	12.53	—	514.08	511.56	522.91	504.96	—
Metal services, nec .....	347	10.81	10.78	11.02	11.04	—	450.78	449.53	457.33	444.91	—
Plating and polishing .....	3471	10.65	10.61	10.92	10.91	—	437.72	435.01	449.90	434.22	—
Metal coating and allied services .....	3479	11.05	11.05	11.17	11.24	—	471.84	471.84	468.02	461.96	—
Ordnance and accessories, nec .....	348	15.10	14.79	15.43	15.56	—	605.51	582.73	623.37	620.84	—
Ammunition, except for small arms, nec .....	3483	15.93	15.64	16.32	16.53	—	651.54	636.55	664.22	686.00	—
Misc. fabricated metal products .....	349	12.21	12.13	12.36	12.31	—	520.15	513.10	522.83	504.71	—
Valves and pipe fittings, nec .....	3494	12.43	12.32	12.50	12.59	—	527.03	516.21	522.50	513.67	—
Misc. fabricated wire products .....	3496	10.85	10.77	10.96	10.92	—	442.68	435.11	442.78	436.80	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	43.6	43.6	43.5	41.9	43.2	5.5	5.5	5.6	4.3	—
Engines and turbines .....	351	44.3	42.6	45.6	43.4	—	5.9	5.0	6.5	5.0	—
Turbines and turbine generator sets .....	3511	42.7	42.0	43.0	40.7	—	4.7	4.3	4.6	3.2	—
Internal combustion engines, nec .....	3519	44.8	42.8	46.5	44.4	—	6.3	5.2	7.2	5.6	—
Farm and garden machinery .....	352	43.0	44.2	42.5	41.0	—	5.2	6.1	4.5	3.4	—
Farm machinery and equipment .....	3523	43.4	44.1	42.9	41.4	—	5.7	6.2	5.0	3.8	—
Construction and related machinery .....	353	44.8	44.7	44.5	42.8	—	6.1	6.0	6.3	4.8	—
Construction machinery .....	3531	44.1	44.4	44.3	42.9	—	5.4	5.4	6.0	4.6	—
Mining machinery .....	3532	42.9	43.3	41.6	40.9	—	4.9	5.1	4.4	3.7	—
Oil and gas field machinery .....	3533	49.5	49.3	49.1	45.1	—	9.8	9.7	10.1	7.2	—
Conveyors and conveying equipment .....	3535	43.0	42.9	42.9	41.3	—	5.4	5.7	5.0	3.5	—
Industrial trucks and tractors .....	3537	41.7	41.5	40.7	40.4	—	4.2	3.8	3.6	3.4	—
Metalworking machinery .....	354	44.2	44.3	43.9	42.1	—	6.4	6.4	6.3	4.9	—
Machine tools, metal cutting types .....	3541	44.5	44.5	44.5	42.2	—	6.3	6.2	6.4	4.6	—
Machine tools, metal forming types .....	3542	45.4	45.2	46.1	42.1	—	6.5	6.0	7.7	4.4	—
Special dies, tools, jigs, and fixtures .....	3544	44.4	44.4	43.9	42.3	—	7.0	7.0	6.7	5.4	—
Machine tool accessories .....	3545	43.5	43.6	43.4	41.7	—	5.1	5.1	5.0	4.0	—
Power driven handtools .....	3546	42.2	42.2	40.9	40.3	—	4.3	4.1	3.2	2.6	—
Special industry machinery .....	355	43.3	43.3	42.9	41.6	—	5.3	5.0	5.0	4.0	—
Textile machinery .....	3552	41.6	40.8	40.9	39.5	—	3.8	3.1	3.8	2.3	—
Printing trades machinery .....	3555	41.7	41.7	42.5	40.9	—	4.6	4.0	5.1	4.1	—
Food products machinery .....	3556	42.4	42.1	42.8	42.0	—	4.7	4.7	4.7	4.1	—
General industrial machinery .....	356	43.3	43.4	43.2	41.4	—	5.3	5.3	5.1	3.8	—
Pumps and pumping equipment .....	3561	42.5	42.7	41.5	40.3	—	4.9	5.2	4.6	3.7	—
Ball and roller bearings .....	3562	44.3	44.6	43.9	41.6	—	6.6	6.7	6.4	5.3	—
Air and gas compressors .....	3563	43.3	44.1	43.4	41.5	—	5.2	5.8	5.7	3.7	—
Blowers and fans .....	3564	43.6	43.0	42.5	41.2	—	4.3	3.9	3.7	2.2	—
Speed changers, drives, and gears .....	3566	44.3	44.9	44.7	41.5	—	6.2	6.6	6.7	4.3	—
Power transmission equipment, nec .....	3568	42.5	42.6	43.5	41.2	—	5.2	5.2	5.0	3.5	—
Computer and office equipment .....	357	42.2	42.4	42.5	41.4	—	3.8	3.4	4.5	3.3	—
Electronic computers .....	3571	41.9	41.4	43.3	42.0	—	3.2	2.3	5.5	3.9	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	42.4	43.0	42.1	40.6	—	4.8	4.6	4.2	2.9	—
Refrigeration and service machinery .....	358	43.7	43.2	43.9	42.1	—	5.0	5.0	4.6	3.6	—
Refrigeration and heating equipment .....	3585	44.1	43.7	44.7	42.5	—	5.3	5.3	4.9	3.8	—
Misc. industrial and commercial machinery .....	359	43.3	43.4	43.3	41.9	—	5.9	5.8	6.1	4.8	—
Carburetors, pistons, rings, valves .....	3592	41.4	42.4	41.8	40.3	—	4.9	5.1	5.5	4.5	—
Scales, balances, and industrial machinery, nec ..	3596,9	43.2	43.3	43.3	42.0	—	5.9	5.8	6.2	4.9	—
Electronic and other electrical equipment .....	36	42.0	41.9	41.4	40.3	41.2	4.2	4.0	3.8	3.2	—
Electric distribution equipment .....	361	41.7	41.3	40.4	39.2	—	4.2	3.8	3.9	3.0	—
Transformers, except electronic .....	3612	42.3	41.6	41.5	40.3	—	3.8	3.2	3.6	2.9	—
Switchgear and switchboard apparatus .....	3613	41.1	41.0	39.5	38.2	—	4.6	4.3	4.1	3.1	—
Electrical industrial apparatus .....	362	41.8	41.7	41.2	39.9	—	3.8	3.8	3.6	2.8	—
Motors and generators .....	3621	41.9	41.8	41.0	39.6	—	3.7	3.8	3.5	2.5	—
Relays and industrial controls .....	3625	40.9	40.8	40.6	38.9	—	3.6	3.7	3.5	2.7	—
Household appliances .....	363	40.3	40.1	40.3	38.2	—	3.0	2.7	2.4	1.6	—
Household refrigerators and freezers .....	3632	39.4	38.4	41.2	37.3	—	2.5	2.3	2.9	1.7	—
Household laundry equipment .....	3633	40.0	40.8	40.1	40.5	—	2.1	1.7	2.9	2.7	—
Electric housewares and fans .....	3634	41.1	40.8	39.8	38.3	—	2.9	2.5	1.7	1.2	—
Electric lighting and wiring equipment .....	364	42.0	42.0	41.2	39.7	—	4.5	4.3	3.9	2.9	—
Electric lamps .....	3641	43.1	43.7	40.7	41.0	—	5.2	5.6	3.7	2.8	—
Current-carrying wiring devices .....	3643	41.6	42.0	41.3	39.6	—	4.5	4.6	4.1	3.1	—
Noncurrent-carrying wiring devices .....	3644	42.1	42.0	42.8	40.6	—	3.4	3.4	3.2	2.2	—
Residential lighting fixtures .....	3645	39.4	39.2	39.1	38.1	—	2.9	2.7	3.2	2.7	—
Household audio and video equipment .....	365	41.8	41.4	41.0	40.0	—	4.6	3.6	4.3	3.9	—
Household audio and video equipment .....	3651	41.2	40.7	39.5	38.5	—	3.3	2.6	3.0	2.7	—
Communications equipment .....	366	42.5	42.4	42.1	41.7	—	3.9	3.6	3.3	2.6	—
Telephone and telegraph apparatus .....	3661	44.3	44.5	43.6	43.7	—	4.4	4.5	3.9	3.3	—
Electronic components and accessories .....	367	42.2	42.2	41.5	40.5	—	4.5	4.4	4.1	3.6	—
Electron tubes .....	3671	40.3	39.8	42.6	41.4	—	4.4	4.1	3.8	3.4	—
Semiconductors and related devices .....	3674	42.9	42.8	42.6	42.2	—	4.8	4.5	5.0	5.0	—
Electronic components, nec .....	3679	41.8	42.2	40.8	40.2	—	3.9	3.9	3.7	3.0	—
Misc. electrical equipment and supplies .....	369	42.3	42.1	41.9	41.6	—	4.6	4.1	4.3	4.0	—
Storage batteries .....	3691	42.3	41.4	41.3	38.6	—	4.6	3.5	3.8	2.9	—
Engine electrical equipment .....	3694	42.7	42.8	41.9	43.2	—	5.1	4.7	5.1	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 workers<sup>1</sup> on private nonfarm payrolls by detailed industry—Continued**

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	\$14.07	\$13.96	\$14.36	\$14.32	\$14.35	\$613.45	\$608.66	\$624.66	\$600.01	\$619.92
Engines and turbines .....	351	16.83	16.85	16.74	16.76	—	745.57	717.81	763.34	727.38	—
Turbines and turbine generator sets .....	3511	19.33	19.38	19.82	19.64	—	825.39	813.96	852.26	799.35	—
Internal combustion engines, nec .....	3519	16.01	16.02	15.74	15.84	—	717.25	685.66	731.91	703.30	—
Farm and garden machinery .....	352	13.78	13.61	13.98	14.19	—	592.54	601.56	594.15	581.79	—
Farm machinery and equipment .....	3523	14.77	15.04	14.88	15.06	—	641.02	663.26	638.35	623.48	—
Construction and related machinery .....	353	13.53	13.50	13.59	13.57	—	606.14	603.45	604.76	580.80	—
Construction machinery .....	3531	13.89	13.83	13.89	13.93	—	612.55	614.05	615.33	597.60	—
Mining machinery .....	3532	14.51	14.40	14.47	14.44	—	622.48	623.52	601.95	590.60	—
Oil and gas field machinery .....	3533	13.30	13.32	13.44	13.34	—	658.35	656.68	659.90	601.63	—
Conveyors and conveying equipment .....	3535	13.59	13.57	13.74	13.69	—	584.37	582.15	589.45	565.40	—
Industrial trucks and tractors .....	3537	12.43	12.33	12.72	12.50	—	518.33	511.70	517.70	505.00	—
Metalworking machinery .....	354	14.90	14.80	15.26	15.16	—	658.58	655.64	669.91	638.24	—
Machine tools, metal cutting types .....	3541	14.61	14.51	14.97	14.80	—	650.15	645.70	666.17	624.56	—
Machine tools, metal forming types .....	3542	15.26	15.15	15.61	15.43	—	692.80	684.78	719.62	649.60	—
Special dies, tools, jigs, and fixtures .....	3544	15.64	15.52	15.98	15.85	—	694.42	689.09	701.52	670.46	—
Machine tool accessories .....	3545	13.12	13.10	13.34	13.34	—	570.72	571.16	578.96	556.28	—
Power driven handtools .....	3546	12.26	12.24	12.50	12.52	—	517.37	516.53	511.25	504.56	—
Special industry machinery .....	355	14.68	14.52	15.10	14.96	—	635.64	628.72	647.79	622.34	—
Textile machinery .....	3552	12.75	12.60	13.18	13.03	—	530.40	514.08	539.06	514.69	—
Printing trades machinery .....	3555	15.64	15.53	15.97	16.12	—	652.19	647.60	678.73	659.31	—
Food products machinery .....	3556	14.37	14.15	14.64	14.60	—	609.29	595.72	626.59	613.20	—
General industrial machinery .....	356	13.78	13.72	14.06	13.96	—	596.67	595.45	607.39	577.94	—
Pumps and pumping equipment .....	3561	14.55	14.53	14.77	14.74	—	618.38	620.43	612.96	594.02	—
Ball and roller bearings .....	3562	14.99	15.03	15.24	15.26	—	664.06	670.34	669.04	634.82	—
Air and gas compressors .....	3563	14.46	14.06	14.92	14.71	—	626.12	620.05	647.53	610.47	—
Blowers and fans .....	3564	11.49	11.41	11.65	11.50	—	500.96	490.63	495.13	473.80	—
Speed changers, drives, and gears .....	3566	14.64	14.57	14.99	14.83	—	648.55	654.19	670.05	615.45	—
Power transmission equipment, nec .....	3568	13.25	13.26	13.46	13.35	—	563.13	564.88	585.51	550.02	—
Computer and office equipment .....	357	14.31	14.13	14.87	15.08	—	603.88	599.11	631.98	624.31	—
Electronic computers .....	3571	15.66	15.51	15.98	16.52	—	656.15	642.11	691.93	693.84	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	13.43	13.45	13.53	13.61	—	569.43	578.35	569.61	552.57	—
Refrigeration and service machinery .....	358	12.81	12.62	12.97	13.01	—	559.80	545.18	569.38	547.72	—
Refrigeration and heating equipment .....	3585	13.16	12.93	13.34	13.40	—	580.36	565.04	596.30	569.50	—
Misc. industrial and commercial machinery .....	359	13.66	13.55	14.05	13.88	—	591.48	588.07	608.37	581.57	—
Carburetors, pistons, rings, valves .....	3592	14.30	14.22	14.60	14.50	—	592.02	602.93	610.28	584.35	—
Scales, balances, and industrial machinery, nec .....	3596,9	13.47	13.35	13.91	13.73	—	581.90	578.06	602.30	576.66	—
Electronic and other electrical equipment .....	36	12.70	12.55	13.06	13.09	13.11	533.40	525.85	540.68	527.53	540.13
Electric distribution equipment .....	361	12.66	12.52	12.98	13.13	—	527.92	517.08	524.39	514.70	—
Transformers, except electronic .....	3612	11.72	11.56	11.91	12.21	—	495.76	480.90	494.27	492.06	—
Switchgear and switchboard apparatus .....	3613	13.59	13.49	13.99	14.00	—	558.55	553.09	552.61	534.80	—
Electrical industrial apparatus .....	362	12.16	12.11	12.45	12.37	—	508.29	504.99	512.94	493.56	—
Motors and generators .....	3621	11.34	11.29	11.55	11.42	—	475.15	471.92	473.55	452.23	—
Relays and industrial controls .....	3625	13.74	13.70	14.18	14.13	—	561.97	558.96	575.71	549.66	—
Household appliances .....	363	12.19	12.10	12.35	12.34	—	491.26	485.21	497.71	471.39	—
Household refrigerators and freezers .....	3632	13.38	13.26	13.45	13.26	—	527.17	509.18	554.14	494.60	—
Household laundry equipment .....	3633	14.26	14.21	14.23	14.00	—	570.40	579.77	570.62	567.00	—
Electric housewares and fans .....	3634	10.28	10.04	10.68	10.63	—	422.51	409.63	425.06	407.13	—
Electric lighting and wiring equipment .....	364	12.70	12.65	12.74	12.72	—	533.40	531.30	524.89	504.98	—
Electric lamps .....	3641	15.68	15.51	16.09	16.33	—	675.81	677.79	654.86	669.53	—
Current-carrying wiring devices .....	3643	12.91	12.79	12.88	12.91	—	537.06	537.18	531.94	511.24	—
Noncurrent-carrying wiring devices .....	3644	11.38	11.28	11.48	11.44	—	479.10	473.76	491.34	464.46	—
Residential lighting fixtures .....	3645	9.06	9.18	9.19	9.17	—	356.96	359.86	359.33	349.38	—
Household audio and video equipment .....	365	11.11	10.83	11.63	11.80	—	464.40	448.36	476.83	472.00	—
Household audio and video equipment .....	3651	10.72	10.58	11.19	11.35	—	441.66	430.61	442.01	436.98	—
Communications equipment .....	366	13.88	13.81	13.93	13.81	—	589.90	585.54	586.45	575.88	—
Telephone and telegraph apparatus .....	3661	15.05	15.10	14.84	14.75	—	666.72	671.95	647.02	644.58	—
Electronic components and accessories .....	367	12.53	12.29	13.12	13.21	—	528.77	518.64	544.48	535.01	—
Electron tubes .....	3671	14.58	14.09	15.23	15.15	—	587.57	560.78	648.80	627.21	—
Semiconductors and related devices .....	3674	16.20	15.71	17.38	17.48	—	694.98	672.39	740.39	737.66	—
Electronic components, nec .....	3679	10.44	10.36	10.70	10.69	—	436.39	437.19	436.56	429.74	—
Misc. electrical equipment and supplies .....	369	13.61	13.41	14.05	14.02	—	575.70	564.56	588.70	583.23	—
Storage batteries .....	3691	14.86	14.53	14.93	15.20	—	628.58	601.54	616.61	586.72	—
Engine electrical equipment .....	3694	13.78	13.70	14.80	14.68	—	588.41	586.36	620.12	634.18	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	44.5	44.7	43.7	41.4	43.8	6.4	6.5	6.0	4.9	—
Motor vehicles and equipment .....	371	45.0	45.4	43.9	41.2	44.1	6.8	7.0	6.4	5.3	—
Motor vehicles and car bodies .....	3711	45.5	45.3	43.1	39.6	—	6.9	7.0	6.2	4.5	—
Truck and bus bodies .....	3713	44.0	45.3	44.5	44.0	—	5.9	6.2	6.8	6.4	—
Motor vehicle parts and accessories .....	3714	45.2	45.8	44.7	42.0	—	7.1	7.3	6.7	5.9	—
Truck trailers .....	3715	41.9	41.8	41.4	41.1	—	3.9	4.1	4.5	4.2	—
Aircraft and parts .....	372	44.7	44.4	44.4	42.7	—	7.2	7.1	6.4	5.2	—
Aircraft .....	3721	44.2	43.8	44.1	42.6	—	7.2	7.2	6.1	5.0	—
Aircraft engines and engine parts .....	3724	45.1	44.9	44.4	42.8	—	6.8	6.5	6.1	4.8	—
Aircraft parts and equipment, nec .....	3728	45.1	44.9	44.7	42.9	—	7.3	7.5	7.0	5.5	—
Ship and boat building and repairing .....	373	42.2	42.4	42.3	40.4	—	4.3	4.4	4.6	3.4	—
Ship building and repairing .....	3731	43.9	43.8	43.9	40.8	—	5.3	5.3	5.5	3.6	—
Boat building and repairing .....	3732	39.7	40.3	40.0	39.9	—	2.9	3.1	3.4	3.0	—
Railroad equipment .....	374	44.3	43.4	43.8	42.5	—	4.6	4.2	4.6	3.0	—
Guided missiles, space vehicles, and parts .....	376	43.1	42.8	42.6	40.6	—	4.3	3.8	4.5	3.1	—
Guided missiles and space vehicles .....	3761	43.2	43.1	42.8	41.0	—	4.3	3.8	4.4	3.1	—
Misc. transportation equipment .....	379	40.2	40.7	40.9	39.8	—	3.6	4.0	3.8	3.3	—
Travel trailers and campers .....	3792	38.3	38.8	38.4	37.7	—	2.2	2.5	2.2	2.1	—
Instruments and related products .....	38	42.0	41.7	41.7	40.6	41.2	3.9	3.8	3.8	2.9	—
Search and navigation equipment .....	381	43.5	43.7	43.1	42.3	—	4.0	3.8	3.8	3.3	—
Measuring and controlling devices .....	382	41.9	41.6	41.7	40.5	—	3.6	3.3	3.7	2.5	—
Environmental controls .....	3822	41.0	40.0	41.0	37.3	—	3.4	3.0	4.3	2.3	—
Process control instruments .....	3823	42.1	41.5	42.0	40.9	—	3.6	3.5	4.1	2.7	—
Instruments to measure electricity .....	3825	41.6	41.5	41.9	41.3	—	3.2	3.0	2.6	1.9	—
Medical instruments and supplies .....	384	41.7	41.1	41.2	39.9	—	3.6	3.3	3.6	2.9	—
Surgical and medical instrument .....	3841	41.9	41.0	41.4	39.8	—	3.8	3.6	3.6	2.6	—
Surgical appliances and supplies .....	3842	41.0	40.8	40.2	39.4	—	3.5	3.0	3.7	3.3	—
Ophthalmic goods .....	385	40.3	39.2	42.1	41.3	—	2.5	1.8	3.0	3.0	—
Photographic equipment and supplies .....	386	43.3	43.7	42.5	42.7	—	7.7	9.0	6.0	4.2	—
Watches, clocks, watchcases, and parts .....	387	39.7	40.2	39.8	36.9	—	2.4	2.5	2.6	1.6	—
Miscellaneous manufacturing industries .....	39	40.4	40.2	40.5	39.4	39.8	3.3	3.1	3.3	2.6	—
Jewelry, silverware, and plated ware .....	391	39.9	39.4	39.9	39.1	—	2.6	2.3	2.7	2.0	—
Jewelry, precious metal .....	3911	39.4	38.7	39.1	38.2	—	2.5	2.3	2.8	2.0	—
Musical instruments .....	393	41.1	41.2	40.3	39.5	—	2.8	2.7	2.4	2.1	—
Toys and sporting goods .....	394	40.0	40.0	41.2	39.8	—	2.8	3.0	3.2	2.4	—
Dolls, games, toys, and children's vehicles .....	3942,4	39.1	38.8	39.4	37.8	—	2.3	2.0	2.0	1.5	—
Sporting and athletic goods, nec .....	3949	40.4	40.5	42.0	40.6	—	3.0	3.5	3.8	2.8	—
Pens, pencils, office, and art supplies .....	395	40.4	40.6	38.8	38.2	—	3.3	3.3	3.2	2.7	—
Costume jewelry and notions .....	396	39.7	40.3	39.3	38.0	—	3.0	3.1	2.5	1.7	—
Costume jewelry .....	3961	39.6	39.9	38.6	37.5	—	2.8	2.4	1.7	1.0	—
Miscellaneous manufactures .....	399	40.8	40.5	40.7	39.6	—	3.8	3.5	3.7	2.9	—
Signs and advertising specialties .....	3993	41.5	41.1	42.0	41.1	—	4.3	3.9	4.4	3.8	—
<b>Nondurable goods .....</b>		<b>40.9</b>	<b>40.5</b>	<b>40.7</b>	<b>40.0</b>	<b>40.6</b>	<b>4.4</b>	<b>4.1</b>	<b>4.2</b>	<b>3.8</b>	<b>4.2</b>
Food and kindred products .....	20	41.3	40.4	40.9	40.3	41.3	5.0	4.3	4.6	4.2	—
Meat products .....	201	40.5	39.6	40.0	39.6	—	4.4	3.6	4.2	3.8	—
Meat packing plants .....	2011	42.1	40.7	41.5	41.3	—	5.1	3.9	4.7	3.9	—
Sausages and other prepared meats .....	2013	41.9	40.9	41.6	40.8	—	5.6	4.4	5.9	5.5	—
Poultry slaughtering and processing .....	2015	39.1	38.6	38.5	38.3	—	3.6	3.1	3.4	3.2	—
Dairy products .....	202	42.2	42.1	41.5	41.4	—	5.1	5.0	4.8	4.7	—
Cheese, natural and processed .....	2022	41.7	41.2	40.9	40.7	—	4.5	4.1	4.3	4.1	—
Fluid milk .....	2026	42.5	42.2	41.0	40.8	—	5.0	4.9	4.5	4.4	—
Preserved fruits and vegetables .....	203	41.4	39.6	40.7	39.5	—	5.5	4.0	4.3	3.7	—
Canned specialties .....	2032	42.8	40.7	42.3	40.7	—	6.9	5.4	6.0	4.2	—
Canned fruits and vegetables .....	2033	41.7	39.0	39.9	38.8	—	6.1	3.3	3.7	4.0	—
Frozen fruits and vegetables .....	2037	40.3	39.6	41.3	40.2	—	4.7	4.1	4.5	3.7	—
Grain mill products .....	204	45.6	44.8	45.2	44.6	—	7.2	6.6	6.5	5.9	—
Flour and other grain mill products .....	2041	45.7	44.0	45.2	44.4	—	7.2	6.4	6.3	4.8	—
Prepared feeds, nec .....	2048	44.1	44.7	43.6	43.5	—	6.4	6.3	5.6	5.6	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	\$17.56	\$17.44	\$17.92	\$17.72	\$17.81	\$781.42	\$779.57	\$783.10	\$733.61	\$780.08
Motor vehicles and equipment .....	371	18.06	17.98	18.52	18.38	18.39	812.70	816.29	813.03	757.26	811.00
Motor vehicles and car bodies .....	3711	21.63	21.58	22.59	22.24	—	984.17	977.57	973.63	880.70	—
Truck and bus bodies .....	3713	15.31	15.04	16.32	15.96	—	673.64	681.31	726.24	702.24	—
Motor vehicle parts and accessories .....	3714	16.63	16.60	16.97	17.07	—	751.68	760.28	758.56	716.94	—
Truck trailers .....	3715	11.20	11.14	11.46	11.22	—	469.28	465.65	474.44	461.14	—
Aircraft and parts .....	372	18.86	18.71	19.04	18.77	—	843.04	830.72	845.38	801.48	—
Aircraft .....	3721	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Aircraft engines and engine parts .....	3724	18.58	18.26	18.79	18.62	—	837.96	819.87	834.28	796.94	—
Aircraft parts and equipment, nec .....	3728	16.67	16.56	16.80	16.59	—	751.82	743.54	750.96	711.71	—
Ship and boat building and repairing .....	373	13.20	13.31	13.22	13.12	—	557.04	564.34	559.21	530.05	—
Ship building and repairing .....	3731	14.58	14.81	14.54	14.50	—	640.06	648.68	638.31	591.60	—
Boat building and repairing .....	3732	10.91	10.79	11.15	11.16	—	433.13	434.84	446.00	445.28	—
Railroad equipment .....	374	16.81	16.65	17.43	16.91	—	744.68	722.61	763.43	718.68	—
Guided missiles, space vehicles, and parts .....	376	19.54	19.40	19.97	19.43	—	842.17	830.32	850.72	788.86	—
Guided missiles and space vehicles .....	3761	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Misc. transportation equipment .....	379	11.51	11.50	12.01	11.89	—	462.70	468.05	491.21	473.22	—
Travel trailers and campers .....	3792	11.39	11.23	12.13	12.05	—	436.24	435.72	465.79	454.29	—
Instruments and related products .....	38	13.51	13.43	13.73	13.76	13.79	567.42	560.03	572.54	558.66	568.15
Search and navigation equipment .....	381	16.82	16.58	17.22	17.23	—	731.67	724.55	742.18	728.83	—
Measuring and controlling devices .....	382	13.53	13.43	13.74	13.77	—	566.91	558.69	572.96	557.69	—
Environmental controls .....	3822	11.67	11.68	11.96	11.92	—	478.47	467.20	490.36	444.62	—
Process control instruments .....	3823	13.27	13.16	13.74	13.70	—	558.67	546.14	577.08	560.33	—
Instruments to measure electricity .....	3825	15.49	15.24	15.72	15.76	—	644.38	632.46	658.67	650.89	—
Medical instruments and supplies .....	384	12.51	12.37	12.86	12.84	—	521.67	508.41	529.83	512.32	—
Surgical and medical instrument .....	3841	11.85	11.66	12.10	12.05	—	496.52	478.06	500.94	479.59	—
Surgical appliances and supplies .....	3842	11.58	11.49	11.99	11.95	—	474.78	468.79	482.00	470.83	—
Ophthalmic goods .....	385	10.16	10.22	10.24	10.35	—	409.45	400.62	431.10	427.46	—
Photographic equipment and supplies .....	386	15.93	16.00	16.00	16.08	—	689.77	699.20	680.00	686.62	—
Watches, clocks, watchcases, and parts .....	387	9.90	9.90	10.42	10.47	—	393.03	397.98	414.72	386.34	—
Miscellaneous manufacturing industries .....	39	10.59	10.52	10.79	10.76	10.79	427.84	422.90	437.00	423.94	429.44
Jewelry, silverware, and plated ware .....	391	10.98	10.85	11.16	11.28	—	438.10	427.49	445.28	441.05	—
Jewelry, precious metal .....	3911	11.09	10.98	11.26	11.40	—	436.95	424.93	440.27	435.48	—
Musical instruments .....	393	10.71	10.65	10.78	11.06	—	440.18	438.78	434.43	436.87	—
Toys and sporting goods .....	394	10.02	9.98	10.26	10.33	—	400.80	399.20	422.71	411.13	—
Dolls, games, toys, and children's vehicles .....	3942,4	9.53	9.57	9.81	9.93	—	372.62	371.32	386.51	375.35	—
Sporting and athletic goods, nec .....	3949	10.24	10.16	10.44	10.48	—	413.70	411.48	438.48	425.49	—
Pens, pencils, office, and art supplies .....	395	11.09	11.08	11.27	11.18	—	448.04	449.85	437.28	427.08	—
Costume jewelry and notions .....	396	9.38	9.37	9.90	9.72	—	372.39	377.61	389.07	369.36	—
Costume jewelry .....	3961	8.32	8.24	8.99	8.85	—	329.47	328.78	347.01	331.88	—
Miscellaneous manufactures .....	399	10.92	10.84	11.06	10.91	—	445.54	439.02	450.14	432.04	—
Signs and advertising specialties .....	3993	11.43	11.24	11.75	11.53	—	474.35	461.96	493.50	473.88	—
<b>Nondurable goods .....</b>		<b>12.33</b>	<b>12.26</b>	<b>12.63</b>	<b>12.71</b>	<b>12.70</b>	<b>504.30</b>	<b>496.53</b>	<b>514.04</b>	<b>508.40</b>	<b>515.62</b>
Food and kindred products .....	20	11.49	11.45	11.70	11.75	11.81	474.54	462.58	478.53	473.53	487.75
Meat products .....	201	9.35	9.28	9.52	9.52	—	378.68	367.49	380.80	376.99	—
Meat packing plants .....	2011	10.03	10.00	10.13	10.08	—	422.26	407.00	420.40	416.30	—
Sausages and other prepared meats .....	2013	10.74	10.66	11.00	11.16	—	450.01	435.99	457.60	455.33	—
Poultry slaughtering and processing .....	2015	8.42	8.34	8.56	8.56	—	329.22	321.92	329.56	327.85	—
Dairy products .....	202	13.21	13.12	13.34	13.40	—	557.46	552.35	553.61	554.76	—
Cheese, natural and processed .....	2022	12.05	12.04	12.14	12.31	—	502.49	496.05	496.53	501.02	—
Fluid milk .....	2026	13.91	13.78	13.95	13.98	—	591.18	581.52	571.95	570.38	—
Preserved fruits and vegetables .....	203	11.02	11.05	11.34	11.32	—	456.23	437.58	461.54	447.14	—
Canned specialties .....	2032	14.37	14.35	14.44	14.29	—	615.04	584.05	610.81	581.60	—
Canned fruits and vegetables .....	2033	11.81	12.14	12.49	12.41	—	492.48	473.46	498.35	481.51	—
Frozen fruits and vegetables .....	2037	10.27	10.27	10.57	10.56	—	413.88	406.69	436.54	424.51	—
Grain mill products .....	204	14.38	14.18	14.75	14.79	—	655.73	635.26	666.70	659.63	—
Flour and other grain mill products .....	2041	12.63	12.16	12.70	12.76	—	577.19	535.04	574.04	566.54	—
Prepared feeds, nec .....	2048	11.32	11.25	11.59	11.65	—	499.21	502.88	505.32	506.78	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	40.3	39.4	40.6	40.3	—	4.7	4.4	4.6	4.6	—
Bread, cake, and related products .....	2051	40.1	39.6	40.5	40.4	—	4.7	4.6	4.5	5.0	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	40.8	39.1	41.0	40.1	—	4.6	4.1	4.8	3.9	—
Sugar and confectionery products .....	206	40.7	39.5	40.9	39.2	—	4.2	3.3	3.8	2.7	—
Raw cane sugar .....	2061	50.0	41.5	54.8	51.0	—	10.7	4.8	12.6	7.3	—
Cane sugar refining .....	2062	47.5	46.8	45.3	46.5	—	10.4	9.1	8.9	7.2	—
Beet sugar .....	2063	41.7	42.7	42.0	40.5	—	4.0	4.4	3.5	4.2	—
Candy and other confectionery products .....	2064	39.2	38.0	39.6	38.7	—	3.4	2.4	3.0	2.2	—
Fats and oils .....	207	42.8	41.4	42.9	42.5	—	6.4	5.5	6.0	6.3	—
Beverages .....	208	43.4	43.1	42.8	42.9	—	5.4	5.5	5.2	5.4	—
Malt beverages .....	2082	46.8	45.4	46.2	48.7	—	7.8	7.6	7.4	9.0	—
Bottled and canned soft drinks .....	2086	42.8	43.5	42.5	42.5	—	5.2	5.8	5.1	5.3	—
Misc. food and kindred products .....	209	40.2	39.4	39.7	38.7	—	5.2	4.8	4.5	3.5	—
Tobacco products .....	21	38.9	38.4	37.0	36.9	38.7	3.1	2.5	2.4	1.8	—
Cigarettes .....	211	38.6	38.3	35.3	35.8	—	3.3	2.7	1.9	1.4	—
Textile mill products .....	22	41.4	41.4	41.2	40.1	41.1	4.6	4.5	4.4	4.0	—
Broadwoven fabric mills, cotton .....	221	41.8	42.2	42.5	41.1	—	5.5	5.6	5.5	4.7	—
Broadwoven fabric mills, synthetics .....	222	41.6	41.2	40.8	39.7	—	5.2	4.8	4.6	4.1	—
Broadwoven fabric mills, wool .....	223	41.5	41.4	40.0	38.5	—	5.4	5.3	4.5	3.3	—
Narrow fabric mills .....	224	40.3	40.6	40.6	39.9	—	3.1	3.3	3.2	2.6	—
Knitting mills .....	225	40.1	40.2	39.8	38.4	—	3.6	3.5	3.4	3.0	—
Women's hosiery, except socks .....	2251	38.5	37.8	37.5	37.1	—	2.7	2.6	1.5	1.4	—
Hosiery, nec .....	2252	38.1	37.9	38.0	36.3	—	3.1	3.1	2.9	2.7	—
Knit outerwear mills .....	2253	40.5	41.0	40.4	39.3	—	3.3	2.9	3.2	3.2	—
Knit underwear mills .....	2254	39.0	38.9	38.2	34.6	—	2.6	2.5	1.7	0.5	—
Weft knit fabric mills .....	2257	41.6	43.4	41.0	40.0	—	5.4	5.9	5.0	4.8	—
Textile finishing, except wool .....	226	42.7	43.2	41.9	40.6	—	5.5	5.9	5.1	4.4	—
Finishing plants, cotton .....	2261	43.2	43.3	41.9	39.9	—	5.9	6.0	5.0	4.2	—
Finishing plants, synthetics .....	2262	42.2	42.7	41.8	41.2	—	5.1	5.6	4.6	4.0	—
Carpets and rugs .....	227	41.8	40.5	42.8	41.8	—	5.1	4.3	5.4	5.2	—
Yarn and thread mills .....	228	41.7	41.6	41.3	41.1	—	4.7	4.5	4.3	4.1	—
Yarn spinning mills .....	2281	42.4	42.4	42.4	42.4	—	5.0	4.8	4.7	4.7	—
Throwing and winding mills .....	2282	38.3	37.8	36.6	36.6	—	3.2	3.2	2.8	2.2	—
Miscellaneous textile goods .....	229	42.6	42.8	42.3	41.3	—	4.9	4.8	4.6	4.2	—
Apparel and other textile products .....	23	37.3	37.1	37.2	36.5	37.5	2.2	2.0	2.1	1.7	—
Men's and boys' suits and coats .....	231	37.4	36.6	37.3	36.8	—	1.4	1.1	0.8	0.6	—
Men's and boys' furnishings .....	232	36.7	36.6	36.3	35.8	—	1.5	1.4	1.4	1.4	—
Men's and boys' shirts .....	2321	35.9	35.6	36.3	35.3	—	1.5	1.3	1.5	1.1	—
Men's and boys' trousers and slacks .....	2325	36.2	35.8	34.9	34.2	—	1.3	1.2	1.1	1.1	—
Men's and boys' work clothing .....	2326	37.2	37.0	37.4	36.6	—	1.6	1.7	1.3	1.5	—
Women's and misses' outerwear .....	233	35.9	35.8	36.5	35.5	—	1.7	1.5	1.8	1.2	—
Women's and misses' blouses and shirts .....	2331	35.7	35.5	34.8	34.6	—	1.6	1.4	1.6	1.4	—
Women's, juniors', and misses' dresses .....	2335	37.2	37.1	38.3	37.3	—	2.2	2.4	2.4	2.0	—
Women's and misses' suits and coats .....	2337	36.4	34.3	36.3	36.2	—	1.8	1.3	1.4	0.9	—
Women's and misses' outerwear, nec .....	2339	35.6	35.7	36.3	35.1	—	1.6	1.3	1.7	1.1	—
Women's and children's undergarments .....	234	37.4	36.7	36.5	34.9	—	2.2	2.2	1.2	1.1	—
Women's and children's underwear .....	2341	37.1	35.5	36.5	34.5	—	1.8	1.6	1.1	1.0	—
Brassieres, girdles, and allied garments .....	2342	38.3	40.0	36.5	36.3	—	3.1	3.8	1.7	1.4	—
Girls' and children's outerwear .....	236	37.3	37.0	33.8	35.3	—	2.8	2.6	2.6	2.5	—
Girls' and children's dresses and blouses .....	2361	37.3	37.3	33.5	34.2	—	3.1	3.2	3.4	3.1	—
Misc. apparel and accessories .....	238	37.8	37.8	37.0	36.3	—	1.8	1.8	1.8	1.5	—
Misc. fabricated textile products .....	239	39.4	39.3	39.2	38.4	—	3.6	3.3	3.4	2.8	—
Curtains and draperies .....	2391	37.0	37.8	35.6	36.2	—	1.4	1.5	1.1	1.1	—
House furnishings, nec .....	2392	39.5	38.2	40.0	39.1	—	3.8	3.1	3.9	2.3	—
Automotive and apparel trimmings .....	2396	40.3	40.2	39.6	38.5	—	4.1	3.9	3.7	3.1	—
Paper and allied products .....	26	43.7	43.4	43.1	42.5	43.4	5.7	5.5	5.2	5.0	—
Paper mills .....	262	45.2	45.3	45.5	45.7	—	6.6	6.7	6.7	7.0	—
Paperboard mills .....	263	44.5	43.7	45.5	44.6	—	7.2	7.0	7.1	7.6	—

See footnotes at end of table.



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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	\$12.46	\$12.60	\$12.60	\$12.77	—	\$502.14	\$496.44	\$511.56	\$514.63	—
Bread, cake, and related products .....	2051	12.58	12.59	12.72	12.81	—	504.46	498.56	515.16	517.52	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	12.26	12.62	12.39	12.69	—	500.21	493.44	507.99	508.87	—
Sugar and confectionery products .....	206	12.73	12.85	12.99	13.09	—	518.11	507.58	531.29	513.13	—
Raw cane sugar .....	2061	11.88	12.11	12.14	12.08	—	594.00	502.57	665.27	616.08	—
Cane sugar refining .....	2062	17.83	17.56	18.29	17.77	—	846.93	821.81	828.54	826.31	—
Beet sugar .....	2063	13.45	14.12	14.13	14.60	—	560.87	602.92	593.46	591.30	—
Candy and other confectionery products .....	2064	11.79	11.83	12.07	12.16	—	462.17	449.54	477.97	470.59	—
Fats and oils .....	207	12.65	12.58	12.66	12.86	—	541.42	520.81	543.11	546.55	—
Beverages .....	208	16.00	15.91	16.05	16.31	—	694.40	685.72	686.94	699.70	—
Malt beverages .....	2082	22.07	21.88	22.20	22.80	—	1,032.88	993.35	1,025.64	1,110.36	—
Bottled and canned soft drinks .....	2086	13.38	13.41	13.42	13.48	—	572.66	583.34	570.35	572.90	—
Misc. food and kindred products .....	209	10.25	10.11	10.51	10.53	—	412.05	398.33	417.25	407.51	—
Tobacco products .....	21	19.27	20.34	18.54	18.79	\$20.01	749.60	781.06	685.98	693.35	\$774.39
Cigarettes .....	211	24.76	24.36	24.24	23.93	—	955.74	932.99	855.67	856.69	—
Textile mill products .....	22	10.03	9.95	10.29	10.39	10.36	415.24	411.93	423.95	416.64	425.80
Broadwoven fabric mills, cotton .....	221	10.44	10.35	10.80	10.82	—	436.39	436.77	459.00	444.70	—
Broadwoven fabric mills, synthetics .....	222	10.98	10.92	11.24	11.16	—	456.77	449.90	458.59	443.05	—
Broadwoven fabric mills, wool .....	223	10.50	10.41	10.78	10.73	—	435.75	430.97	431.20	413.11	—
Narrow fabric mills .....	224	9.19	9.16	9.47	9.50	—	370.36	371.90	384.48	379.05	—
Knitting mills .....	225	9.14	9.12	9.38	9.52	—	366.51	366.62	373.32	365.57	—
Women's hosiery, except socks .....	2251	8.52	8.44	8.61	8.67	—	328.02	319.03	322.88	321.66	—
Hosiery, nec .....	2252	9.09	9.06	9.41	9.42	—	346.33	343.37	357.58	341.95	—
Knit outerwear mills .....	2253	8.53	8.40	8.74	9.03	—	345.47	344.40	353.10	354.88	—
Knit underwear mills .....	2254	9.25	9.10	9.59	9.95	—	360.75	353.99	366.34	344.27	—
Weft knit fabric mills .....	2257	9.97	10.07	10.25	10.24	—	414.75	437.04	420.25	409.60	—
Textile finishing, except wool .....	226	10.27	10.20	10.55	10.62	—	438.53	440.64	442.05	431.17	—
Finishing plants, cotton .....	2261	10.19	10.10	10.39	10.52	—	440.21	437.33	435.34	419.75	—
Finishing plants, synthetics .....	2262	10.75	10.63	11.05	11.03	—	453.65	453.90	461.89	454.44	—
Carpets and rugs .....	227	10.02	9.85	10.25	10.65	—	418.84	398.93	438.70	445.17	—
Yarn and thread mills .....	228	9.73	9.63	9.92	9.94	—	405.74	400.61	409.70	408.53	—
Yarn spinning mills .....	2281	9.74	9.62	9.96	9.91	—	412.98	407.89	422.30	420.18	—
Throwing and winding mills .....	2282	9.86	9.82	9.94	10.08	—	377.64	371.20	363.80	368.93	—
Miscellaneous textile goods .....	229	11.57	11.53	11.78	11.94	—	492.88	493.48	498.29	493.12	—
Apparel and other textile products .....	23	8.25	8.20	8.43	8.48	8.49	307.73	304.22	313.60	309.52	318.38
Men's and boys' suits and coats .....	231	8.40	8.38	8.59	8.64	—	314.16	306.71	320.41	317.95	—
Men's and boys' furnishings .....	232	7.73	7.68	7.93	8.05	—	283.69	281.09	287.86	288.19	—
Men's and boys' shirts .....	2321	7.59	7.54	7.79	7.91	—	272.48	268.42	282.78	279.22	—
Men's and boys' trousers and slacks .....	2325	7.85	7.79	8.12	8.30	—	284.17	278.88	283.39	283.86	—
Men's and boys' work clothing .....	2326	7.64	7.58	7.76	7.79	—	284.21	280.46	290.22	285.11	—
Women's and misses' outerwear .....	233	7.85	7.72	8.06	8.11	—	281.82	276.38	294.19	287.91	—
Women's and misses' blouses and shirts .....	2331	7.01	6.82	7.26	7.23	—	250.26	242.11	252.65	250.16	—
Women's, juniors', and misses' dresses .....	2335	8.87	8.73	9.19	9.29	—	329.96	323.88	351.98	346.52	—
Women's and misses' suits and coats .....	2337	7.97	7.93	8.03	7.92	—	290.11	272.00	291.49	286.70	—
Women's and misses' outerwear, nec .....	2339	7.69	7.58	7.88	7.95	—	273.76	270.61	286.04	279.05	—
Women's and children's undergarments .....	234	7.84	7.72	8.09	8.09	—	293.22	283.32	295.29	282.34	—
Women's and children's underwear .....	2341	7.69	7.58	7.87	7.90	—	285.30	269.09	287.26	272.55	—
Brassieres, girdles, and allied garments .....	2342	8.27	8.09	8.75	8.66	—	316.74	323.60	319.38	314.36	—
Girls' and children's outerwear .....	236	7.54	7.50	7.88	7.95	—	281.24	277.50	266.34	280.64	—
Girls' and children's dresses and blouses .....	2361	7.32	7.31	7.49	7.65	—	273.04	272.66	250.92	261.63	—
Misc. apparel and accessories .....	238	7.82	7.78	8.14	8.21	—	295.60	294.08	301.18	298.02	—
Misc. fabricated textile products .....	239	9.32	9.39	9.30	9.28	—	367.21	369.03	364.56	356.35	—
Curtains and draperies .....	2391	8.07	8.04	8.21	8.19	—	298.59	303.91	292.28	296.48	—
House furnishings, nec .....	2392	8.73	8.58	8.96	8.85	—	344.84	327.76	358.40	346.04	—
Automotive and apparel trimmings .....	2396	11.27	11.53	11.01	10.78	—	454.18	463.51	436.00	415.03	—
Paper and allied products .....	26	15.04	14.98	15.27	15.47	15.51	657.25	650.13	658.14	657.48	673.13
Paper mills .....	262	19.08	18.92	19.45	19.64	—	862.42	857.08	884.98	897.55	—
Paperboard mills .....	263	18.79	18.94	19.18	19.58	—	836.16	827.68	872.69	873.27	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods—Continued</b>											
Paper and allied products—Continued											
Paperboard containers and boxes .....	265	43.5	43.1	42.0	40.9	—	5.7	5.4	4.6	4.1	—
Corrugated and solid fiber boxes .....	2653	43.9	43.4	42.4	41.1	—	6.0	5.6	4.8	4.3	—
Sanitary food containers .....	2656	42.5	42.3	41.9	41.8	—	4.9	5.1	4.3	4.4	—
Folding paperboard boxes .....	2657	43.6	43.0	41.7	39.7	—	5.9	5.6	5.0	3.7	—
Misc. converted paper products .....	267	42.5	42.2	42.0	41.3	—	4.8	4.4	4.3	3.9	—
Paper, coated and laminated, nec .....	2672	43.7	43.6	43.1	42.3	—	4.4	4.3	4.3	4.0	—
Bags: plastics, laminated, and coated .....	2673	42.4	41.9	41.7	41.5	—	5.0	4.6	4.4	4.3	—
Envelopes .....	2677	41.9	42.0	40.8	40.8	—	4.2	4.1	3.7	3.1	—
Printing and publishing .....	27	38.5	38.3	38.4	37.8	38.0	3.4	3.3	3.3	2.9	—
Newspapers .....	271	33.2	33.0	33.0	32.9	—	1.4	1.3	1.2	1.3	—
Periodicals .....	272	37.0	37.0	36.2	35.7	—	2.8	2.9	1.8	1.8	—
Books .....	273	39.4	39.6	39.2	39.1	—	3.9	4.2	3.6	3.3	—
Book publishing .....	2731	37.3	36.8	36.7	37.5	—	2.8	3.3	2.8	2.9	—
Book printing .....	2732	41.9	42.9	41.9	40.8	—	5.2	5.3	4.6	3.7	—
Miscellaneous publishing .....	274	36.4	36.4	36.1	36.4	—	2.4	2.3	2.4	2.6	—
Commercial printing .....	275	40.1	39.7	40.4	39.5	—	4.1	4.0	4.2	3.6	—
Commercial printing, lithographic .....	2752	40.0	39.7	40.4	39.5	—	4.0	4.0	4.3	3.6	—
Commercial printing, nec .....	2759	40.1	39.5	40.3	39.3	—	4.0	3.7	4.0	3.5	—
Manifold business forms .....	276	41.9	40.7	41.7	40.2	—	4.0	3.2	3.7	2.3	—
Blankbooks and bookbinding .....	278	39.7	39.7	38.9	38.5	—	2.9	2.8	2.8	2.2	—
Printing trade services .....	279	39.6	39.5	40.5	39.7	—	4.3	4.1	4.7	4.2	—
Chemicals and allied products .....	28	43.2	43.0	43.4	42.8	42.0	5.2	4.9	5.3	4.8	—
Industrial inorganic chemicals .....	281	46.6	46.8	46.1	46.0	—	6.1	5.9	5.9	6.7	—
Industrial inorganic chemicals, nec .....	2819	46.3	47.3	46.2	45.4	—	5.9	5.7	6.0	6.7	—
Plastics materials and synthetics .....	282	43.5	43.3	44.0	44.2	—	5.5	5.4	5.5	5.7	—
Plastics materials and resins .....	2821	44.9	44.7	44.7	44.3	—	5.6	5.5	5.5	5.5	—
Organic fibers, noncellulosic .....	2824	42.2	42.2	43.9	45.5	—	5.1	5.1	5.1	5.9	—
Drugs .....	283	41.6	41.5	42.0	40.8	—	4.9	4.5	5.2	3.8	—
Pharmaceutical preparations .....	2834	41.8	41.6	42.3	40.7	—	4.7	4.3	5.2	3.4	—
Soap, cleaners, and toilet goods .....	284	41.2	40.5	42.0	40.5	—	3.5	2.9	3.8	2.9	—
Soap and other detergents .....	2841	42.7	41.7	43.7	42.0	—	4.3	3.2	4.9	4.2	—
Polishing, sanitation, and finishing preparations .....	2842,3	41.3	40.8	41.0	40.3	—	3.5	3.3	3.7	3.2	—
Toilet preparations .....	2844	40.5	39.9	41.7	40.0	—	3.2	2.5	3.3	2.2	—
Paints and allied products .....	285	43.0	42.7	43.5	41.8	—	4.8	5.2	4.9	4.0	—
Industrial organic chemicals .....	286	44.6	44.5	44.1	44.3	—	6.2	5.9	6.2	6.1	—
Cyclic crudes and intermediates .....	2865	44.9	44.9	43.2	41.6	—	6.2	6.3	5.1	4.1	—
Industrial organic chemicals, nec .....	2869	44.6	44.4	44.3	44.8	—	6.2	5.7	6.4	6.6	—
Agricultural chemicals .....	287	45.0	45.2	45.9	45.6	—	6.3	6.4	7.5	7.1	—
Miscellaneous chemical products .....	289	43.5	43.0	43.0	42.2	—	5.2	5.0	4.7	4.1	—
Petroleum and coal products .....	29	43.1	42.4	43.2	42.9	42.4	6.2	5.9	6.4	6.2	—
Petroleum refining .....	291	43.0	42.2	43.3	42.6	—	5.5	5.3	6.3	5.8	—
Asphalt paving and roofing materials .....	295	43.7	43.2	43.0	44.2	—	8.4	7.8	7.1	7.5	—
Rubber and misc. plastics products .....	30	41.8	41.7	41.5	40.9	41.8	4.6	4.4	4.4	4.0	—
Tires and inner tubes .....	301	43.9	43.5	43.0	43.1	—	6.3	6.2	6.0	6.2	—
Rubber and plastics footwear .....	302	41.5	41.9	41.9	38.7	—	3.1	2.8	3.4	4.2	—
Hose, belting, gaskets, and packing .....	305	42.8	42.7	41.6	40.7	—	5.0	5.0	4.5	3.8	—
Rubber and plastics hose and belting .....	3052	43.8	44.2	43.5	41.9	—	5.7	6.1	5.4	4.6	—
Fabricated rubber products, nec .....	306	42.5	42.2	42.5	40.8	—	4.7	4.4	4.6	3.4	—
Miscellaneous plastics products, nec .....	308	41.4	41.4	41.2	40.8	—	4.3	4.2	4.2	3.9	—
Leather and leather products .....	31	38.4	38.1	37.7	36.7	37.9	2.2	2.0	2.3	1.7	—
Leather tanning and finishing .....	311	42.2	42.2	42.3	40.5	—	5.2	5.2	5.1	3.8	—
Footwear, except rubber .....	314	37.2	36.9	36.1	35.2	—	1.6	1.3	1.8	1.3	—
Men's footwear, except athletic .....	3143	37.4	36.9	35.7	35.0	—	1.8	1.2	1.8	1.1	—
Women's footwear, except athletic .....	3144	37.1	37.1	37.1	35.9	—	1.0	1.3	2.1	1.7	—
Luggage .....	316	38.9	38.1	36.9	37.1	—	2.3	2.7	1.4	0.9	—
Handbags and personal leather goods .....	317	38.5	38.0	37.6	37.3	—	1.7	1.8	1.8	1.0	—
<b>Service-producing .....</b>		<b>32.9</b>	<b>32.6</b>	<b>32.9</b>	<b>32.6</b>	<b>32.8</b>	—	—	—	—	—
<b>Transportation and public utilities .....</b>		<b>39.7</b>	<b>39.3</b>	<b>39.4</b>	<b>39.1</b>	<b>39.7</b>	—	—	—	—	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Nondurable goods—Continued</b>											
Paper and allied products—Continued											
Paperboard containers and boxes .....	265	\$12.80	\$12.70	\$12.97	\$13.05	—	\$556.80	\$547.37	\$544.74	\$533.75	—
Corrugated and solid fiber boxes .....	2653	12.79	12.66	12.92	13.02	—	561.48	549.44	547.81	535.12	—
Sanitary food containers .....	2656	12.84	12.80	13.18	13.38	—	545.70	541.44	552.24	559.28	—
Folding paperboard boxes .....	2657	13.56	13.52	13.69	13.69	—	591.22	581.36	570.87	543.49	—
Misc. converted paper products .....	267	13.14	13.08	13.21	13.34	—	558.45	551.98	554.82	550.94	—
Paper, coated and laminated, nec .....	2672	15.02	15.01	15.26	15.39	—	656.37	654.44	657.71	651.00	—
Bags: plastics, laminated, and coated .....	2673	11.86	11.91	12.03	12.28	—	502.86	499.03	501.65	509.62	—
Envelopes .....	2677	11.92	11.84	12.20	12.14	—	499.45	497.28	497.76	495.31	—
Printing and publishing .....	27	13.05	12.98	13.36	13.32	\$13.36	502.43	497.13	513.02	503.50	\$507.68
Newspapers .....	271	12.90	12.83	13.05	13.14	—	428.28	423.39	430.65	432.31	—
Periodicals .....	272	14.40	14.25	14.59	14.56	—	532.80	527.25	528.16	519.79	—
Books .....	273	12.31	12.32	12.47	12.35	—	485.01	487.87	488.82	482.89	—
Book publishing .....	2731	11.79	11.98	11.88	11.80	—	439.77	440.86	436.00	442.50	—
Book printing .....	2732	12.87	12.66	13.06	12.93	—	539.25	543.11	547.21	527.54	—
Miscellaneous publishing .....	274	12.77	12.63	12.88	13.05	—	464.83	459.73	464.97	475.02	—
Commercial printing .....	275	13.28	13.22	13.63	13.58	—	532.53	524.83	550.65	536.41	—
Commercial printing, lithographic .....	2752	13.53	13.54	13.90	13.79	—	541.20	537.54	561.56	544.71	—
Commercial printing, nec .....	2759	12.59	12.44	12.87	12.91	—	504.86	491.38	518.66	507.36	—
Manifold business forms .....	276	13.81	13.55	14.02	13.93	—	578.64	551.49	584.63	559.99	—
Blankbooks and bookbinding .....	278	10.19	10.18	10.53	10.37	—	404.54	404.15	409.62	399.25	—
Printing trade services .....	279	16.19	16.00	16.93	16.86	—	641.12	632.00	685.67	669.34	—
Chemicals and allied products .....	28	16.58	16.42	16.97	17.13	17.03	716.26	706.06	736.50	733.16	715.26
Industrial inorganic chemicals .....	281	18.56	18.51	19.37	19.77	—	864.90	866.27	892.96	909.42	—
Industrial inorganic chemicals, nec .....	2819	18.82	18.79	19.82	20.32	—	871.37	888.77	915.68	922.53	—
Plastics materials and synthetics .....	282	17.42	17.17	17.69	17.87	—	757.77	743.46	778.36	789.85	—
Plastics materials and resins .....	2821	19.39	19.24	19.73	20.04	—	870.61	860.03	881.93	887.77	—
Organic fibers, noncellulosic .....	2824	14.86	14.68	15.04	15.22	—	627.09	619.50	660.26	692.51	—
Drugs .....	283	16.39	16.21	16.82	16.89	—	681.82	672.72	706.44	689.11	—
Pharmaceutical preparations .....	2834	16.22	16.06	16.75	16.80	—	678.00	668.10	708.53	683.76	—
Soap, cleaners, and toilet goods .....	284	13.28	13.15	13.71	13.74	—	547.14	532.58	575.82	556.47	—
Soap and other detergents .....	2841	16.78	16.28	17.77	17.45	—	716.51	678.88	776.55	732.90	—
Polishing, sanitation, and finishing preparations .....	2842,3	12.75	12.64	13.23	13.41	—	526.58	515.71	542.43	540.42	—
Toilet preparations .....	2844	11.89	11.89	12.07	12.16	—	481.55	474.41	503.32	486.40	—
Paints and allied products .....	285	14.06	14.05	14.48	14.19	—	604.58	599.94	629.88	593.14	—
Industrial organic chemicals .....	286	19.86	19.72	20.31	20.49	—	885.76	877.54	895.67	907.71	—
Cyclic crudes and intermediates .....	2865	19.95	19.69	20.15	20.10	—	895.76	884.08	870.48	836.16	—
Industrial organic chemicals, nec .....	2869	19.97	19.85	20.47	20.71	—	890.66	881.34	906.82	927.81	—
Agricultural chemicals .....	287	16.60	16.04	16.64	16.77	—	747.00	725.01	763.78	764.71	—
Miscellaneous chemical products .....	289	15.05	14.96	15.25	15.30	—	654.68	643.28	655.75	645.66	—
Petroleum and coal products .....	29	20.18	19.93	21.16	20.99	20.52	869.76	845.03	914.11	900.47	870.05
Petroleum refining .....	291	22.52	22.27	23.76	23.77	—	968.36	939.79	1,028.81	1,012.60	—
Asphalt paving and roofing materials .....	295	15.02	14.55	15.00	14.95	—	656.37	628.56	645.00	660.79	—
Rubber and misc. plastics products .....	30	11.57	11.53	11.78	11.84	11.85	483.63	480.80	488.87	484.26	495.33
Tires and inner tubes .....	301	18.59	18.70	18.86	19.11	—	816.10	813.45	810.98	823.64	—
Rubber and plastics footwear .....	302	9.71	9.69	9.95	10.00	—	402.97	406.01	416.91	387.00	—
Hose, belting, gaskets, and packing .....	305	11.69	11.80	11.74	11.80	—	500.33	503.86	488.38	480.26	—
Rubber and plastics hose and belting .....	3052	11.85	11.99	11.89	11.88	—	519.03	529.96	517.22	497.77	—
Fabricated rubber products, nec .....	306	11.23	11.18	11.46	11.43	—	477.28	471.80	487.05	466.34	—
Miscellaneous plastics products, nec .....	308	10.88	10.81	11.11	11.14	—	450.43	447.53	457.73	454.51	—
Leather and leather products .....	31	8.98	8.90	9.32	9.32	9.42	344.83	339.09	351.36	342.04	357.02
Leather tanning and finishing .....	311	11.88	11.88	11.85	11.99	—	501.34	501.34	501.26	485.60	—
Footwear, except rubber .....	314	8.49	8.34	8.89	8.81	—	315.83	307.75	320.93	310.11	—
Men's footwear, except athletic .....	3143	9.20	9.06	9.60	9.47	—	344.08	334.31	342.72	331.45	—
Women's footwear, except athletic .....	3144	7.43	7.36	7.71	7.68	—	275.65	273.06	286.04	275.71	—
Luggage .....	316	8.82	8.92	9.22	9.21	—	343.10	339.85	340.22	341.69	—
Handbags and personal leather goods .....	317	7.92	7.69	8.19	8.27	—	304.92	292.22	307.94	308.47	—
<b>Service-producing .....</b>		<b>11.73</b>	<b>11.64</b>	<b>12.19</b>	<b>12.19</b>	<b>12.18</b>	<b>385.92</b>	<b>379.46</b>	<b>401.05</b>	<b>397.39</b>	<b>399.50</b>
<b>Transportation and public utilities .....</b>		<b>14.93</b>	<b>14.81</b>	<b>15.24</b>	<b>15.26</b>	<b>15.20</b>	<b>592.72</b>	<b>582.03</b>	<b>600.46</b>	<b>596.67</b>	<b>603.44</b>

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class 1 railroads plus Amtrak <sup>3</sup> .....	4011	49.3	49.0	49.2	48.5	-	-	-	-	-	-
Local and interurban passenger transit .....	41	34.3	34.0	34.6	33.5	-	-	-	-	-	-
Local and suburban transportation .....	411	38.3	38.1	38.4	38.6	-	-	-	-	-	-
Intercity and rural bus transportation .....	413	38.1	37.9	37.9	38.1	-	-	-	-	-	-
Trucking and warehousing .....	42	40.2	39.9	39.3	39.3	-	-	-	-	-	-
Trucking and courier services, except air .....	421	40.2	40.0	39.3	39.3	-	-	-	-	-	-
Public warehousing and storage .....	422	40.2	39.0	39.6	39.3	-	-	-	-	-	-
Water transportation:											
Water transportation services .....	449	38.3	37.9	38.0	38.2	-	-	-	-	-	-
Pipelines, except natural gas .....	46	43.9	43.3	43.6	44.1	-	-	-	-	-	-
Transportation services .....	47	37.9	38.0	38.0	37.5	-	-	-	-	-	-
Passenger transportation arrangement .....	472	37.6	37.7	38.1	37.6	-	-	-	-	-	-
Travel agencies .....	4724	37.5	37.3	38.3	37.8	-	-	-	-	-	-
Freight transportation arrangement .....	473	38.2	38.4	37.8	37.0	-	-	-	-	-	-
Communications .....	48	40.2	40.0	40.7	40.3	-	-	-	-	-	-
Telephone communications .....	481	41.8	41.6	42.3	41.8	-	-	-	-	-	-
Telephone communications, except radio .....	4813	42.3	42.4	42.7	42.2	-	-	-	-	-	-
Radio and television broadcasting .....	483	35.4	35.1	35.9	35.7	-	-	-	-	-	-
Cable and other pay television services .....	484	39.2	39.0	40.0	39.9	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	42.1	42.4	41.9	41.6	-	-	-	-	-	-
Electric services .....	491	41.7	42.4	41.4	41.2	-	-	-	-	-	-
Gas production and distribution .....	492	42.5	42.1	41.8	41.5	-	-	-	-	-	-
Combination utility services .....	493	42.9	43.5	42.8	41.8	-	-	-	-	-	-
Sanitary services .....	495	42.0	41.8	42.3	42.2	-	-	-	-	-	-
<b>Wholesale trade</b> .....		<b>38.4</b>	<b>38.3</b>	<b>38.4</b>	<b>38.1</b>	<b>38.4</b>	-	-	-	-	-
Durable goods .....	50	39.2	39.0	39.2	38.8	-	-	-	-	-	-
Motor vehicles, parts, and supplies .....	501	38.0	38.1	37.5	37.2	-	-	-	-	-	-
Furniture and home furnishings .....	502	37.6	37.1	37.9	37.6	-	-	-	-	-	-
Lumber and other construction materials .....	503	40.0	40.0	39.1	39.5	-	-	-	-	-	-
Professional and commercial equipment .....	504	39.7	39.3	40.3	39.4	-	-	-	-	-	-
Medical and hospital equipment .....	5047	39.6	39.3	40.0	39.2	-	-	-	-	-	-
Metals and minerals, except petroleum .....	505	41.8	41.7	41.1	40.5	-	-	-	-	-	-
Electrical goods .....	506	39.2	39.3	39.4	38.8	-	-	-	-	-	-
Hardware, plumbing, and heating equipment .....	507	39.2	39.1	39.2	38.9	-	-	-	-	-	-
Machinery, equipment, and supplies .....	508	39.4	39.3	39.6	39.3	-	-	-	-	-	-
Misc. wholesale trade durable goods .....	509	37.8	38.0	37.3	37.0	-	-	-	-	-	-
Nondurable goods .....	51	37.4	37.3	37.3	37.2	-	-	-	-	-	-
Paper and paper products .....	511	36.2	35.6	36.9	36.5	-	-	-	-	-	-
Drugs, proprietaries, and sundries .....	512	36.2	36.2	36.7	36.2	-	-	-	-	-	-
Apparel, piece goods, and notions .....	513	37.2	36.7	37.3	36.7	-	-	-	-	-	-
Groceries and related products .....	514	38.5	38.5	38.1	38.2	-	-	-	-	-	-
Farm-product raw materials .....	515	34.9	34.5	32.7	33.9	-	-	-	-	-	-
Chemicals and allied products .....	516	40.2	40.4	40.0	39.2	-	-	-	-	-	-
Petroleum and petroleum products .....	517	37.8	37.4	37.4	37.3	-	-	-	-	-	-
Beer, wine, and distilled beverages .....	518	37.7	37.7	37.7	37.7	-	-	-	-	-	-
Misc. wholesale trade nondurable goods .....	519	36.3	36.5	36.1	36.6	-	-	-	-	-	-
<b>Retail trade</b> .....		<b>28.9</b>	<b>28.6</b>	<b>28.7</b>	<b>28.7</b>	<b>29.0</b>	-	-	-	-	-
Building materials and garden supplies .....	52	34.9	34.7	34.7	34.8	-	-	-	-	-	-
Lumber and other building materials .....	521	36.5	36.3	36.2	36.4	-	-	-	-	-	-
Paint, glass, and wallpaper stores .....	523	35.8	35.6	35.4	35.7	-	-	-	-	-	-
Hardware stores .....	525	31.1	30.8	30.5	30.6	-	-	-	-	-	-
Retail nurseries and garden stores .....	526	31.4	31.2	30.7	31.7	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	\$18.10	\$18.10	\$18.10	\$18.00	—	\$892.33	\$886.90	\$890.52	\$873.00	—
Local and interurban passenger transit .....	41	10.90	10.87	10.97	11.16	—	373.87	369.58	379.56	373.86	—
Local and suburban transportation .....	411	11.41	11.45	11.59	11.74	—	437.00	436.25	445.06	453.16	—
Intercity and rural bus transportation .....	413	13.45	13.28	13.08	13.16	—	512.45	503.31	495.73	501.40	—
Trucking and warehousing .....	42	13.23	13.13	13.56	13.60	—	531.85	523.89	532.91	534.48	—
Trucking and courier services, except air .....	421	13.44	13.34	13.80	13.83	—	540.29	533.60	542.34	543.52	—
Public warehousing and storage .....	422	10.88	10.88	11.08	11.11	—	437.38	424.32	438.77	436.62	—
Water transportation:											
Water transportation services .....	449	19.68	19.10	20.56	20.49	—	753.74	723.89	781.28	782.72	—
Pipelines, except natural gas .....	46	20.54	20.67	20.67	20.34	—	901.71	895.01	901.21	896.99	—
Transportation services .....	47	13.14	12.87	13.68	13.59	—	498.01	489.06	519.84	509.63	—
Passenger transportation arrangement .....	472	13.26	12.65	14.11	14.13	—	498.58	476.91	537.59	531.29	—
Travel agencies .....	4724	13.55	12.88	14.50	14.56	—	508.13	480.42	555.35	550.37	—
Freight transportation arrangement .....	473	13.33	13.32	13.57	13.34	—	509.21	511.49	512.95	493.58	—
Communications .....	48	16.92	16.66	17.16	16.97	—	680.18	666.40	698.41	683.89	—
Telephone communications .....	481	17.51	17.27	17.78	17.42	—	731.92	718.43	752.09	728.16	—
Telephone communications, except radio .....	4813	18.03	17.71	18.30	17.90	—	762.67	750.90	781.41	755.38	—
Radio and television broadcasting .....	483	17.03	16.82	17.35	17.65	—	602.86	590.38	622.87	630.11	—
Cable and other pay television services .....	484	13.51	13.27	13.79	13.76	—	529.59	517.53	551.60	549.02	—
Electric, gas, and sanitary services .....	49	19.09	19.00	19.74	19.83	—	803.69	805.60	827.11	824.93	—
Electric services .....	491	20.08	19.97	20.64	20.93	—	837.34	846.73	854.50	862.32	—
Gas production and distribution .....	492	17.99	17.73	18.60	18.73	—	764.58	746.43	777.48	777.30	—
Combination utility services .....	493	23.16	23.33	24.03	23.88	—	993.56	1,014.86	1,028.48	998.18	—
Sanitary services .....	495	14.70	14.34	15.53	15.49	—	617.40	599.41	656.92	653.68	—
<b>Wholesale trade</b> .....		13.44	13.34	13.86	13.92	\$13.97	516.10	510.92	532.22	530.35	\$536.45
Durable goods .....	50	14.01	13.92	14.45	14.54	—	549.19	542.88	566.44	564.15	—
Motor vehicles, parts, and supplies .....	501	12.21	12.17	12.86	12.91	—	463.98	463.68	482.25	480.25	—
Furniture and home furnishings .....	502	12.49	12.51	12.84	12.88	—	469.62	464.12	486.64	484.29	—
Lumber and other construction materials .....	503	12.70	12.55	12.97	13.04	—	508.00	502.00	507.13	515.08	—
Professional and commercial equipment .....	504	16.61	16.57	17.00	17.21	—	659.42	651.20	685.10	678.07	—
Medical and hospital equipment .....	5047	15.99	15.72	16.94	17.06	—	633.20	617.80	677.60	668.75	—
Metals and minerals, except petroleum .....	505	13.46	13.40	13.89	13.95	—	562.63	558.78	570.88	564.98	—
Electrical goods .....	506	15.19	15.09	15.67	15.76	—	595.45	593.04	617.40	611.49	—
Hardware, plumbing, and heating equipment .....	507	13.24	13.05	13.63	13.59	—	519.01	510.26	534.30	528.65	—
Machinery, equipment, and supplies .....	508	14.05	13.95	14.39	14.52	—	553.57	548.24	569.84	570.64	—
Misc. wholesale trade durable goods .....	509	10.90	10.79	11.34	11.38	—	412.02	410.02	422.98	421.06	—
Nondurable goods .....	51	12.59	12.50	12.98	13.00	—	470.87	466.25	484.15	483.60	—
Paper and paper products .....	511	12.78	12.58	13.28	13.49	—	462.64	447.85	490.03	492.39	—
Drugs, proprietaries, and sundries .....	512	16.41	16.25	16.72	16.91	—	594.04	588.25	613.62	612.14	—
Apparel, piece goods, and notions .....	513	12.98	12.50	12.92	12.90	—	460.54	458.75	481.92	473.43	—
Groceries and related products .....	514	12.87	12.82	13.17	13.22	—	495.50	493.57	501.78	505.00	—
Farm-product raw materials .....	515	9.57	9.56	9.94	9.95	—	333.99	329.82	325.04	337.31	—
Chemicals and allied products .....	516	14.21	13.89	14.79	14.76	—	571.24	561.16	591.60	578.59	—
Petroleum and petroleum products .....	517	11.66	11.63	11.85	11.89	—	440.75	434.96	443.19	443.50	—
Beer, wine, and distilled beverages .....	518	14.70	14.59	15.07	15.32	—	554.19	550.04	568.14	577.56	—
Misc. wholesale trade nondurable goods .....	519	10.35	10.20	10.76	10.70	—	375.71	372.30	388.44	391.62	—
<b>Retail trade</b> .....		8.34	8.27	8.67	8.71	8.73	241.03	236.52	248.83	249.98	253.17
Building materials and garden supplies .....	52	9.85	9.75	10.09	10.11	—	343.77	338.33	350.12	351.83	—
Lumber and other building materials .....	521	10.24	10.17	10.49	10.55	—	373.76	369.17	379.74	384.02	—
Paint, glass, and wallpaper stores .....	523	10.38	10.17	10.50	10.42	—	371.60	362.05	371.70	371.99	—
Hardware stores .....	525	8.24	8.22	8.48	8.57	—	256.26	253.18	256.64	262.24	—
Retail nurseries and garden stores .....	526	8.85	8.62	9.10	8.94	—	277.89	268.94	279.37	283.40	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	29.7	29.0	29.5	29.3	-	-	-	-	-	-
Department stores .....	531	29.8	29.0	29.6	29.4	-	-	-	-	-	-
Variety stores .....	533	27.5	27.0	27.2	27.3	-	-	-	-	-	-
Misc. general merchandise stores .....	539	30.0	29.6	29.9	30.2	-	-	-	-	-	-
Food stores .....	54	29.8	29.4	29.4	29.5	-	-	-	-	-	-
Grocery stores .....	541	29.9	29.6	29.5	29.6	-	-	-	-	-	-
Retail bakeries .....	546	28.7	27.9	28.6	28.9	-	-	-	-	-	-
Automotive dealers and service stations .....	55	35.6	35.4	35.4	35.4	-	-	-	-	-	-
New and used car dealers .....	551	36.9	36.8	36.9	36.9	-	-	-	-	-	-
Auto and home supply stores .....	553	37.8	37.8	37.7	37.8	-	-	-	-	-	-
Gasoline service stations .....	554	32.1	31.7	31.6	31.5	-	-	-	-	-	-
Automotive dealers, nec .....	559	35.6	36.3	34.6	36.8	-	-	-	-	-	-
Apparel and accessory stores .....	56	26.8	26.5	26.4	26.4	-	-	-	-	-	-
Men's and boys' clothing stores .....	561	29.0	28.3	27.9	28.1	-	-	-	-	-	-
Women's clothing stores .....	562	25.0	24.9	24.4	24.6	-	-	-	-	-	-
Family clothing stores .....	565	27.5	27.3	27.2	27.2	-	-	-	-	-	-
Shoe stores .....	566	26.5	26.1	26.1	26.0	-	-	-	-	-	-
Furniture and home furnishings stores .....	57	33.0	32.6	32.9	32.5	-	-	-	-	-	-
Furniture and home furnishings stores .....	571	32.9	32.8	32.7	32.4	-	-	-	-	-	-
Household appliance stores .....	572	34.6	34.3	33.9	33.9	-	-	-	-	-	-
Radio, television, and computer stores .....	573	32.8	32.0	33.1	32.5	-	-	-	-	-	-
Radio, television, and electronic stores .....	5731	33.1	32.1	33.2	32.3	-	-	-	-	-	-
Record and prerecorded tape stores .....	5735	25.5	24.6	25.1	25.7	-	-	-	-	-	-
Eating and drinking places <sup>4</sup> .....	58	25.3	25.2	25.2	25.2	-	-	-	-	-	-
Miscellaneous retail establishments .....	59	29.6	29.2	29.0	29.2	-	-	-	-	-	-
Drug stores and proprietary stores .....	591	28.9	28.7	28.3	28.7	-	-	-	-	-	-
Used merchandise stores .....	593	30.6	30.6	30.0	30.2	-	-	-	-	-	-
Miscellaneous shopping goods stores .....	594	28.0	27.5	27.3	27.4	-	-	-	-	-	-
Nonstore retailers .....	596	32.5	32.1	31.8	31.7	-	-	-	-	-	-
Fuel dealers .....	598	38.1	37.3	37.7	36.8	-	-	-	-	-	-
Retail stores, nec .....	599	30.3	29.6	29.8	30.5	-	-	-	-	-	-
Optical goods stores .....	5995	33.2	33.0	33.7	33.4	-	-	-	-	-	-
Miscellaneous retail stores, nec .....	5999	30.4	30.0	30.3	30.5	-	-	-	-	-	-
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		36.1	35.9	36.8	36.1	36.1	-	-	-	-	-
Depository institutions .....	60	35.3	35.1	35.8	35.2	-	-	-	-	-	-
Commercial banks .....	602	35.0	34.8	35.6	34.9	-	-	-	-	-	-
State commercial banks .....	6022	35.4	35.0	35.7	35.1	-	-	-	-	-	-
National and commercial banks, nec .....	6021,9	34.7	34.6	35.6	34.8	-	-	-	-	-	-
Credit unions .....	606	36.0	36.0	36.0	35.6	-	-	-	-	-	-
Nondepository institutions .....	61	38.0	37.7	39.2	38.0	-	-	-	-	-	-
Personal credit institutions .....	614	38.6	38.2	39.7	38.0	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services .....	628	37.9	37.6	39.6	38.5	-	-	-	-	-	-
Insurance carriers .....	63	38.5	38.3	39.6	38.8	-	-	-	-	-	-
Life insurance .....	631	38.0	37.8	40.0	38.9	-	-	-	-	-	-
Medical service and health insurance .....	632	38.9	38.8	39.7	38.9	-	-	-	-	-	-
Hospital and medical service plans .....	6324	39.2	39.1	40.1	39.4	-	-	-	-	-	-
Fire, marine, and casualty insurance .....	633	38.8	38.4	39.3	38.7	-	-	-	-	-	-
<b>Services</b> .....		32.6	32.4	32.7	32.4	32.5	-	-	-	-	-
Agricultural services .....	07	34.3	34.4	33.1	35.0	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	\$8.16	\$8.12	\$8.58	\$8.71	—	\$242.35	\$235.48	\$253.11	\$255.20	—
Department stores .....	531	8.20	8.17	8.65	8.78	—	244.36	236.93	256.04	258.13	—
Variety stores .....	533	7.43	7.45	7.74	7.79	—	204.33	201.15	210.53	212.67	—
Misc. general merchandise stores .....	539	7.99	7.90	8.27	8.33	—	239.70	233.84	247.27	251.57	—
Food stores .....	54	8.69	8.71	8.99	8.99	—	258.96	256.07	264.31	265.21	—
Grocery stores .....	541	8.80	8.81	9.08	9.09	—	263.12	260.78	267.86	269.06	—
Retail bakeries .....	546	7.65	7.65	8.00	7.97	—	219.56	213.44	228.80	230.33	—
Automotive dealers and service stations .....	55	11.42	11.35	11.85	12.05	—	406.55	401.79	419.49	426.57	—
New and used car dealers .....	551	14.39	14.29	14.83	15.15	—	530.99	525.87	547.23	559.04	—
Auto and home supply stores .....	553	9.48	9.39	9.81	9.91	—	358.34	354.94	369.84	374.60	—
Gasoline service stations .....	554	7.47	7.39	7.73	7.76	—	239.79	234.26	244.27	244.44	—
Automotive dealers, nec .....	559	12.65	12.33	12.46	12.13	—	450.34	447.58	431.12	446.38	—
Apparel and accessory stores .....	56	8.06	8.01	8.40	8.40	—	216.01	212.27	221.76	221.76	—
Men's and boys' clothing stores .....	561	9.74	9.68	10.19	10.13	—	282.46	273.94	284.30	284.65	—
Women's clothing stores .....	562	7.95	7.88	8.34	8.22	—	198.75	196.21	203.50	202.21	—
Family clothing stores .....	565	7.79	7.74	8.14	8.20	—	214.23	211.30	221.41	223.04	—
Shoe stores .....	566	7.96	7.94	8.21	8.33	—	210.94	207.23	214.28	216.58	—
Furniture and home furnishings stores .....	57	11.26	11.03	11.75	11.75	—	371.58	359.58	386.58	381.88	—
Furniture and home furnishings stores .....	571	10.56	10.32	11.00	11.06	—	347.42	338.50	359.70	358.34	—
Household appliance stores .....	572	10.65	10.40	11.13	11.05	—	368.49	356.72	377.31	374.60	—
Radio, television, and computer stores .....	573	12.20	12.04	12.71	12.67	—	400.16	385.28	420.70	411.78	—
Radio, television, and electronic stores .....	5731	11.07	10.86	11.77	11.68	—	366.42	348.61	390.76	377.26	—
Record and prerecorded tape stores .....	5735	6.96	6.99	7.31	7.15	—	177.48	171.95	183.48	183.76	—
Eating and drinking places <sup>4</sup> .....	58	6.05	5.96	6.26	6.30	—	153.07	150.19	157.75	158.76	—
Miscellaneous retail establishments .....	59	9.11	9.07	9.45	9.41	—	269.66	264.84	274.05	274.77	—
Drug stores and proprietary stores .....	591	9.72	9.67	9.96	10.00	—	280.91	277.53	281.87	287.00	—
Used merchandise stores .....	593	7.62	7.60	7.90	7.88	—	233.17	232.56	237.00	237.98	—
Miscellaneous shopping goods stores .....	594	8.40	8.36	8.79	8.69	—	235.20	229.90	239.97	238.11	—
Nonstore retailers .....	596	9.61	9.65	10.03	10.00	—	312.33	309.77	318.95	317.00	—
Fuel dealers .....	598	12.35	12.15	12.66	12.68	—	470.54	453.20	477.28	466.62	—
Retail stores, nec .....	599	9.18	9.13	9.45	9.46	—	278.15	270.25	281.61	288.53	—
Optical goods stores .....	5995	11.25	11.34	10.99	11.00	—	373.50	374.22	370.36	367.40	—
Miscellaneous retail stores, nec .....	5999	9.48	9.41	9.79	9.92	—	288.19	282.30	296.64	302.56	—
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		13.33	13.12	13.97	13.98	\$13.97	481.21	471.01	514.10	504.68	\$504.32
Depository institutions .....	60	10.29	10.10	10.77	10.73	—	363.24	354.51	385.57	377.70	—
Commercial banks .....	602	9.82	9.65	10.28	10.24	—	343.70	335.82	365.97	357.38	—
State commercial banks .....	6022	9.69	9.57	10.15	10.09	—	343.03	334.95	362.36	354.16	—
National and commercial banks, nec .....	6021,9	9.91	9.71	10.37	10.34	—	343.88	335.97	369.17	359.83	—
Credit unions .....	606	10.16	10.05	10.50	10.54	—	365.76	361.80	378.00	375.22	—
Nondepository institutions .....	61	13.68	13.31	14.42	14.58	—	519.84	501.79	565.26	554.04	—
Personal credit institutions .....	614	11.70	11.59	12.05	12.21	—	451.62	442.74	478.39	463.98	—
Security and commodity brokers:											
Security and commodity services .....	628	19.11	18.70	20.16	20.35	—	724.27	703.12	798.34	783.48	—
Insurance carriers .....	63	15.83	15.55	16.49	16.59	—	609.46	595.57	653.00	643.69	—
Life insurance .....	631	14.47	14.36	14.89	14.97	—	549.86	542.81	595.60	582.33	—
Medical service and health insurance .....	632	14.82	14.59	15.58	15.63	—	576.50	566.09	618.53	608.01	—
Hospital and medical service plans .....	6324	15.12	14.89	15.93	15.97	—	592.70	582.20	638.79	629.22	—
Fire, marine, and casualty insurance .....	633	17.35	16.98	18.10	18.23	—	673.18	652.03	711.33	705.50	—
<b>Services</b> .....		12.28	12.19	12.77	12.75	12.73	400.33	394.96	417.58	413.10	413.73
Agricultural services .....	07	9.51	9.38	9.89	9.75	—	326.19	322.67	327.36	341.25	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	28.9	28.8	28.8	28.9	-	-	-	-	-	-
Landscape and horticultural services .....	078	36.7	36.7	35.3	37.6	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	30.9	30.6	31.3	31.1	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services .....	721	34.1	34.1	34.0	34.3	-	-	-	-	-	-
Beauty shops <sup>4</sup> .....	723	27.9	27.8	28.4	28.0	-	-	-	-	-	-
Miscellaneous personal services .....	729	27.1	27.4	25.8	26.3	-	-	-	-	-	-
Business services											
Advertising .....	731	36.6	36.5	37.2	36.6	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	36.3	36.1	37.2	36.0	-	-	-	-	-	-
Services to buildings											
Disinfecting and pest control services .....	7342	36.7	36.9	37.0	37.2	-	-	-	-	-	-
Building maintenance services, nec .....	7349	27.8	28.2	27.6	27.6	-	-	-	-	-	-
Miscellaneous equipment rental and leasing .....	735	39.1	39.1	38.5	38.6	-	-	-	-	-	-
Medical equipment rental .....	7352	37.1	37.7	36.5	37.3	-	-	-	-	-	-
Heavy construction equipment rental .....	7353	40.4	40.3	40.2	40.3	-	-	-	-	-	-
Equipment rental and leasing, nec .....	7359	39.2	39.0	38.5	38.4	-	-	-	-	-	-
Personnel supply services:											
Help supply services .....	7363	32.4	32.3	32.4	31.6	-	-	-	-	-	-
Computer and data processing services .....	737	38.3	38.2	38.5	38.2	-	-	-	-	-	-
Computer programming services .....	7371	38.4	38.5	38.1	37.7	-	-	-	-	-	-
Computer integrated systems design .....	7373	38.9	38.4	40.1	39.6	-	-	-	-	-	-
Information retrieval services .....	7375	38.0	37.8	38.5	38.4	-	-	-	-	-	-
Computer maintenance and repair .....	7378	38.7	38.1	39.0	38.7	-	-	-	-	-	-
Miscellaneous business services .....	738	33.1	32.9	32.8	32.7	-	-	-	-	-	-
Detective and armored car services .....	7381	34.4	34.2	34.5	34.1	-	-	-	-	-	-
Security systems services .....	7382	35.9	35.3	35.7	35.8	-	-	-	-	-	-
Auto repair, services, and parking											
Automotive rentals, without drivers .....	751	36.3	36.0	37.2	37.0	-	-	-	-	-	-
Passenger car rental .....	7514	36.4	36.1	37.1	37.3	-	-	-	-	-	-
Automobile parking .....	752	33.6	32.8	33.0	31.9	-	-	-	-	-	-
Automotive repair shops .....	753	38.3	38.1	37.7	37.8	-	-	-	-	-	-
Automotive and tire repair shops .....	7532,4	38.2	38.2	37.7	37.9	-	-	-	-	-	-
General automotive repair shops .....	7538	37.8	37.6	37.3	37.7	-	-	-	-	-	-
Automotive services, except repair .....	754	31.5	31.1	30.5	30.1	-	-	-	-	-	-
Carwashes .....	7542	28.7	28.2	27.3	26.8	-	-	-	-	-	-
Miscellaneous repair services .....	76	38.4	38.5	38.3	38.1	-	-	-	-	-	-
Motion pictures											
Motion picture production and services .....	781	39.1	39.3	38.5	38.3	-	-	-	-	-	-
Video tape rental .....	784	23.9	23.7	23.5	22.7	-	-	-	-	-	-
Amusement and recreation services											
Bowling centers .....	793	24.6	24.6	25.1	24.7	-	-	-	-	-	-
Misc. amusement and recreation services .....	799	26.6	25.6	25.5	25.9	-	-	-	-	-	-
Physical fitness facilities .....	7991	19.0	18.6	19.4	18.8	-	-	-	-	-	-
Membership sports and recreation clubs .....	7997	28.5	27.8	27.8	28.1	-	-	-	-	-	-
Health services											
Offices and clinics of medical doctors .....	801	33.2	33.0	33.2	33.0	-	-	-	-	-	-
Offices and clinics of dentists .....	802	28.4	28.5	28.5	28.1	-	-	-	-	-	-
Offices and clinics of other health practitioners .....	804	30.3	30.3	30.5	29.8	-	-	-	-	-	-
Nursing and personal care facilities .....	805	32.4	32.1	32.4	32.4	-	-	-	-	-	-
Intermediate care facilities .....	8052	32.0	31.7	31.7	31.7	-	-	-	-	-	-
Hospitals .....	806	34.9	34.7	35.1	34.8	-	-	-	-	-	-

See footnotes at end of table.



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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	\$9.56	\$9.45	\$9.85	\$9.90	—	\$276.28	\$272.16	\$283.68	\$286.11	—
Landscape and horticultural services .....	078	9.55	9.41	9.98	9.74	—	350.49	345.35	352.29	366.22	—
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	8.55	8.48	8.91	8.90	—	264.20	259.49	278.88	276.79	—
Personal services:											
Laundry, cleaning, and garment services .....	721	8.07	8.01	8.28	8.32	—	275.19	273.14	281.52	285.38	—
Beauty shops <sup>4</sup> .....	723	9.12	8.98	9.24	9.34	—	254.45	249.64	262.42	261.52	—
Miscellaneous personal services .....	729	8.43	7.97	8.86	8.63	—	228.45	218.38	228.59	226.97	—
Business services .....											
Advertising .....	731	11.83	11.72	12.41	12.45	—	396.31	391.45	415.74	412.10	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	10.96	10.81	11.13	11.04	—	397.85	390.24	414.04	397.44	—
Services to buildings .....	734	7.91	7.80	8.13	8.19	—	226.23	225.42	231.71	232.60	—
Disinfecting and pest control services .....	7342	10.60	10.16	11.13	11.15	—	389.02	374.90	411.81	414.78	—
Building maintenance services, nec .....	7349	7.58	7.51	7.75	7.80	—	210.72	211.78	213.90	215.28	—
Miscellaneous equipment rental and leasing .....	735	11.95	11.89	12.50	12.47	—	467.25	464.90	481.25	481.34	—
Medical equipment rental .....	7352	11.25	10.93	12.16	12.20	—	417.38	412.06	443.84	455.06	—
Heavy construction equipment rental .....	7353	15.77	15.69	16.04	16.18	—	637.11	632.31	644.81	652.05	—
Equipment rental and leasing, nec .....	7359	10.99	10.97	11.50	11.40	—	430.81	427.83	442.75	437.76	—
Personnel supply services:											
Help supply services .....	7363	9.64	9.58	10.11	10.15	—	312.34	309.43	327.56	320.74	—
Computer and data processing services .....	737	20.09	19.75	20.93	20.88	—	769.45	754.45	805.81	797.62	—
Computer programming services .....	7371	23.03	22.60	24.19	24.10	—	884.35	870.10	921.64	908.57	—
Computer integrated systems design .....	7373	20.46	20.10	20.74	20.87	—	795.89	771.84	831.67	826.45	—
Information retrieval services .....	7375	15.30	15.23	16.13	15.88	—	581.40	575.69	621.01	609.79	—
Computer maintenance and repair .....	7378	14.77	14.41	15.84	15.80	—	571.60	549.02	617.76	611.46	—
Miscellaneous business services .....	738	9.75	9.72	10.04	10.10	—	322.73	319.79	329.31	330.27	—
Detective and armored car services .....	7381	7.83	7.71	8.09	8.18	—	269.35	263.68	279.11	278.94	—
Security systems services .....	7382	12.29	12.10	13.06	13.46	—	441.21	427.13	466.24	481.87	—
Auto repair, services, and parking .....											
Automotive rentals, without drivers .....	751	10.06	9.89	10.42	10.43	—	365.18	356.04	387.62	385.91	—
Passenger car rental .....	7514	9.04	8.86	9.47	9.53	—	329.06	319.85	351.34	355.47	—
Automobile parking .....	752	7.79	7.47	8.16	8.13	—	261.74	245.02	269.28	259.35	—
Automotive repair shops .....	753	11.91	11.84	12.22	12.31	—	456.15	451.10	460.69	465.32	—
Automotive and tire repair shops .....	7532,4	12.50	12.40	12.76	12.89	—	477.50	473.68	481.05	488.53	—
General automotive repair shops .....	7538	11.89	11.78	12.24	12.26	—	449.44	442.93	456.55	462.20	—
Automotive services, except repair .....	754	8.02	7.85	8.34	8.38	—	252.63	244.14	254.37	252.24	—
Carwashes .....	7542	7.00	6.96	7.29	7.43	—	200.90	196.27	199.02	199.12	—
Miscellaneous repair services .....											
Motion pictures .....	78	14.17	14.00	14.54	14.52	—	423.68	415.80	428.93	423.98	—
Motion picture production and services .....	781	19.85	19.59	19.96	19.97	—	776.14	769.89	768.46	764.85	—
Video tape rental .....	784	6.54	6.45	7.14	7.23	—	156.31	152.87	167.79	164.12	—
Amusement and recreation services .....											
Bowling centers .....	793	7.40	7.26	7.43	7.54	—	182.04	178.60	186.49	186.24	—
Misc. amusement and recreation services .....	799	8.58	8.74	9.09	8.97	—	228.23	223.74	231.80	232.32	—
Physical fitness facilities .....	7991	8.42	8.38	8.74	8.80	—	159.98	155.87	169.56	165.44	—
Membership sports and recreation clubs .....	7997	8.95	9.06	9.62	9.53	—	255.08	251.87	267.44	267.79	—
Health services .....											
Offices and clinics of medical doctors .....	801	13.78	13.64	14.19	14.22	—	457.50	450.12	471.11	469.26	—
Offices and clinics of dentists .....	802	13.63	13.58	13.98	14.09	—	387.09	387.03	398.43	395.93	—
Offices and clinics of other health practitioners .....	804	12.50	12.33	13.16	13.25	—	378.75	373.60	401.38	394.85	—
Nursing and personal care facilities .....	805	9.34	9.24	9.63	9.71	—	302.62	296.60	312.01	314.60	—
Intermediate care facilities .....	8052	8.81	8.67	9.13	9.19	—	281.92	274.84	289.42	291.32	—
Hospitals .....	806	15.03	14.94	15.30	15.35	—	524.55	518.42	537.03	534.18	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	28.9	28.7	29.1	29.0	-	-	-	-	-	-
Legal services .....	81	34.9	34.6	35.4	34.7	-	-	-	-	-	-
Social services .....	83	31.3	31.0	31.3	31.1	-	-	-	-	-	-
Individual and family services .....	832	31.4	31.1	31.3	31.1	-	-	-	-	-	-
Job training and related services .....	833	31.0	31.0	30.9	30.5	-	-	-	-	-	-
Child day care services .....	835	30.0	29.8	30.0	29.9	-	-	-	-	-	-
Residential care .....	836	32.1	31.8	32.2	32.1	-	-	-	-	-	-
Social services, nec .....	839	31.9	31.6	32.5	32.1	-	-	-	-	-	-
Membership organizations:											
Professional organizations .....	862	35.1	35.0	35.5	34.8	-	-	-	-	-	-
Engineering and management services .....	87	37.4	37.7	37.9	37.5	-	-	-	-	-	-
Engineering and architectural services .....	871	39.4	39.4	39.6	39.2	-	-	-	-	-	-
Engineering services .....	8711	39.7	39.7	39.9	39.4	-	-	-	-	-	-
Architectural services .....	8712	38.5	38.5	38.5	38.3	-	-	-	-	-	-
Surveying services .....	8713	38.0	37.7	38.6	38.4	-	-	-	-	-	-
Accounting, auditing, and bookkeeping .....	872	36.6	38.9	38.9	38.8	-	-	-	-	-	-
Research and testing services .....	873	36.8	36.5	36.3	36.0	-	-	-	-	-	-
Commercial physical research .....	8731	40.1	39.9	39.9	39.9	-	-	-	-	-	-
Commercial nonphysical research .....	8732	30.9	30.7	30.0	29.5	-	-	-	-	-	-
Noncommercial research organizations .....	8733	36.7	36.6	35.9	35.5	-	-	-	-	-	-
Management and public relations .....	874	36.1	36.0	36.4	35.9	-	-	-	-	-	-
Management services .....	8741	35.3	35.2	35.7	34.9	-	-	-	-	-	-
Management consulting services .....	8742	36.5	36.4	36.8	36.4	-	-	-	-	-	-
Public relations services .....	8743	35.3	34.5	36.5	35.0	-	-	-	-	-	-
Services, nec .....	89	35.3	35.6	34.6	33.8	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	\$11.35	\$11.26	\$11.44	\$11.41	—	\$328.02	\$323.16	\$332.90	\$330.89	—
Legal services .....	81	17.30	17.06	17.97	17.77	—	603.77	590.28	636.14	616.62	—
Social services .....	83	8.82	8.74	9.09	9.08	—	276.07	270.94	284.52	282.39	—
Individual and family services .....	832	9.35	9.26	9.63	9.58	—	293.59	287.99	301.42	297.94	—
Job training and related services .....	833	8.54	8.48	8.81	8.79	—	264.74	262.88	272.23	268.10	—
Child day care services .....	835	7.54	7.49	7.82	7.83	—	226.20	223.20	234.60	234.12	—
Residential care .....	836	8.93	8.86	9.16	9.22	—	286.65	281.75	294.95	295.96	—
Social services, nec .....	839	10.72	10.52	11.14	11.02	—	341.97	332.43	362.05	353.74	—
Membership organizations:											
Professional organizations .....	862	17.63	17.23	18.38	18.20	—	618.81	603.05	652.49	633.36	—
Engineering and management services .....	87	17.14	16.95	17.76	17.70	—	641.04	639.02	673.10	663.75	—
Engineering and architectural services .....	871	18.94	18.90	19.67	19.53	—	746.24	744.66	778.93	765.58	—
Engineering services .....	8711	19.80	19.75	20.53	20.41	—	786.06	784.08	819.15	804.15	—
Architectural services .....	8712	16.86	16.84	17.73	17.55	—	649.11	648.34	682.61	672.17	—
Surveying services .....	8713	13.33	13.33	13.59	13.62	—	506.54	502.54	524.57	523.01	—
Accounting, auditing, and bookkeeping .....	872	14.69	14.39	15.31	15.04	—	537.65	559.77	595.56	583.55	—
Research and testing services .....	873	17.75	17.72	18.37	18.37	—	653.20	646.78	666.83	661.32	—
Commercial physical research .....	8731	19.82	19.77	20.12	20.23	—	794.78	788.82	802.79	807.18	—
Commercial nonphysical research .....	8732	13.80	13.68	14.97	14.83	—	426.42	419.98	449.10	437.49	—
Noncommercial research organizations .....	8733	20.89	20.92	21.64	21.78	—	766.66	765.67	776.88	773.19	—
Management and public relations .....	874	16.24	16.05	16.98	17.13	—	586.26	577.80	618.07	614.97	—
Management services .....	8741	14.72	14.49	15.23	15.42	—	519.62	510.05	543.71	538.16	—
Management consulting services .....	8742	18.19	18.06	19.03	19.15	—	663.94	657.38	700.30	697.06	—
Public relations services .....	8743	14.97	14.71	15.64	15.77	—	528.44	507.50	570.86	551.95	—
Services, nec .....	89	16.87	16.89	17.55	17.71	—	595.51	601.28	607.23	598.60	—

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

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

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

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

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

— Data not available.

<sup>P</sup> = preliminary.

NOTE: Data have been revised to reflect March 1997 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. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	Mar. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>
Average hourly earnings, excluding lump-sum payments .....	\$20.73	\$20.65	\$21.03	\$20.63	\$20.76	\$20.53	\$21.33	\$20.50
Average hourly earnings, including lump-sum payments .....	21.11	21.02	21.07	20.67	20.76	20.53	21.57	20.76

<sup>P</sup> = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

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

Industry	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998P	May 1998P
<b>Manufacturing</b> .....	<b>\$12.45</b>	<b>\$12.39</b>	<b>\$12.76</b>	<b>\$12.83</b>	<b>\$12.77</b>
<b>Durable goods</b> .....	12.95	12.87	13.25	13.30	13.22
Lumber and wood products .....	10.23	10.11	10.41	10.47	(2)
Furniture and fixtures .....	10.11	10.04	10.36	10.43	(2)
Stone, clay, and glass products .....	12.34	12.25	12.63	12.76	(2)
Primary metal industries .....	14.16	14.12	14.47	14.68	(2)
Fabricated metal products .....	12.07	12.06	12.31	12.33	(2)
Industrial machinery and equipment .....	13.23	13.13	13.50	13.63	(2)
Electronic and other electrical equipment .....	12.09	11.98	12.49	12.60	(2)
Transportation equipment .....	16.38	16.26	16.76	16.73	(2)
Instruments and related products .....	12.90	12.84	13.13	13.28	(2)
Miscellaneous manufacturing .....	10.18	10.13	10.37	10.42	(2)
<b>Nondurable goods</b> .....	11.71	11.68	12.02	12.14	<b>\$12.09</b>
Food and kindred products .....	10.82	10.86	11.08	11.17	(2)
Tobacco products .....	18.53	19.70	17.95	18.34	(2)
Textile mill products .....	9.50	9.44	9.77	9.90	(2)
Apparel and other textile products .....	8.02	7.99	8.20	8.28	(2)
Paper and allied products .....	14.12	14.09	14.40	14.61	(2)
Printing and publishing .....	12.50	12.45	12.82	12.83	(2)
Chemicals and allied products .....	15.64	15.53	16.00	16.21	(2)
Petroleum and coal products .....	18.83	18.64	19.70	19.59	(2)
Rubber and misc. plastics products .....	10.97	10.95	11.19	11.29	(2)
Leather and leather products .....	8.73	8.66	9.04	9.12	(2)

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

<sup>2</sup> Not available.

P = preliminary.

NOTE: Data have been revised to reflect March 1997 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 workers<sup>1</sup> on private nonfarm payrolls by major industry, in current and constant (1982) dollars**

Industry	Average hourly earnings					Average weekly earnings				
	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>	Avg. 1997	Apr. 1997	Mar. 1998	Apr. 1998 <sup>P</sup>	May 1998 <sup>P</sup>
<b>Total private:</b>										
Current dollars .....	\$12.28	\$12.18	\$12.68	\$12.69	\$12.70	\$424.89	\$418.99	\$437.46	\$434.00	\$438.15
Constant (1982) dollars .....	7.55	7.51	7.74	7.73	(2)	261.31	258.32	267.07	264.31	(2)
<b>Mining:</b>										
Current dollars .....	16.17	16.08	16.89	16.82	\$16.76	734.12	725.21	733.03	731.67	\$744.14
Constant (1982) dollars .....	9.94	9.91	10.31	10.24	(2)	451.49	447.11	447.52	445.60	(2)
<b>Construction:</b>										
Current dollars .....	16.03	15.78	16.29	16.35	\$16.45	623.57	612.26	617.39	621.30	\$646.49
Constant (1982) dollars .....	9.86	9.73	9.95	9.96	(2)	383.50	377.47	376.92	378.38	(2)
<b>Manufacturing:</b>										
Current dollars .....	13.17	13.08	13.47	13.46	\$13.47	553.14	546.74	561.70	547.82	\$560.35
Constant (1982) dollars .....	8.10	8.06	8.22	8.20	(2)	340.18	337.08	342.92	333.63	(2)
<b>Transportation and public utilities:</b>										
Current dollars .....	14.93	14.81	15.24	15.26	\$15.20	592.72	582.03	600.46	596.67	\$603.44
Constant (1982) dollars .....	9.18	9.13	9.30	9.29	(2)	364.53	358.83	366.58	363.38	(2)
<b>Wholesale trade:</b>										
Current dollars .....	13.44	13.34	13.86	13.92	\$13.97	516.10	510.92	532.22	530.35	\$536.45
Constant (1982) dollars .....	8.27	8.22	8.46	8.48	(2)	317.40	314.99	324.92	322.99	(2)
<b>Retail trade</b>										
Current dollars .....	8.34	8.27	8.67	8.71	\$8.73	241.03	236.52	248.83	249.98	\$253.17
Constant (1982) dollars .....	5.13	5.10	5.29	5.30	(2)	148.23	145.82	151.91	152.24	(2)
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	13.33	13.12	13.97	13.98	\$13.97	481.21	471.01	514.10	504.68	\$504.32
Constant (1982) dollars .....	8.20	8.09	8.53	8.51	(2)	295.95	290.39	313.86	307.36	(2)
<b>Services:</b>										
Current dollars .....	12.28	12.19	12.77	12.75	\$12.73	400.33	394.96	417.58	413.10	\$413.73
Constant (1982) dollars .....	7.55	7.52	7.80	7.76	(2)	246.21	243.50	254.93	251.58	(2)

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

<sup>2</sup> Not available.

<sup>P</sup> = 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 1997 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 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Alabama</b> .....	41.3	41.8	41.4	\$11.78	\$12.05	\$11.98	\$486.51	\$503.69	\$495.97
Birmingham .....	42.1	43.4	42.8	12.49	12.69	12.74	525.83	550.75	545.27
Mobile .....	43.5	44.3	44.8	13.81	14.19	14.26	600.74	628.62	638.85
<b>Alaska</b> .....	43.7	59.6	43.4	11.02	10.13	11.11	481.57	603.75	482.17
<b>Arizona</b> .....	41.6	41.3	40.7	11.66	11.85	11.86	485.06	489.41	482.70
<b>Arkansas</b> .....	40.8	41.7	40.4	10.69	11.00	11.02	436.15	458.70	445.21
Fayetteville-Springdale-Rogers .....	40.1	41.0	40.5	10.40	10.71	10.69	417.04	439.11	432.95
Fort Smith .....	39.7	43.1	40.0	10.62	10.90	10.78	421.61	469.79	431.20
Little Rock-North Little Rock .....	41.3	43.4	41.2	11.47	11.94	11.91	473.71	518.20	490.69
Pine Bluff .....	41.7	40.5	40.0	12.32	12.52	12.82	513.74	507.06	512.80
<b>California</b> .....	41.6	41.8	40.8	13.12	13.49	13.48	545.79	563.88	549.98
Bakersfield .....	41.3	42.2	42.2	13.55	13.95	13.99	559.62	588.69	590.38
Fresno .....	40.6	40.8	40.1	11.79	12.01	12.04	478.67	490.01	482.80
Los Angeles-Long Beach .....	42.3	42.5	41.8	12.30	12.67	12.66	520.29	538.48	529.19
Modesto .....	42.6	41.5	40.3	13.42	13.70	13.68	571.69	568.55	551.90
Oakland .....	41.9	41.4	41.4	15.51	15.56	15.57	649.87	644.18	644.60
Orange County .....	42.4	43.7	42.5	12.73	12.87	12.95	539.75	562.42	550.38
Riverside-San Bernardino .....	41.4	42.4	42.1	11.78	11.95	11.98	487.69	506.68	504.36
Sacramento .....	41.1	40.7	40.7	14.09	14.55	14.62	579.10	592.19	595.03
Salinas .....	37.6	36.6	38.2	13.93	14.20	14.00	523.77	519.72	534.80
San Diego .....	39.7	40.3	39.7	13.17	13.54	13.54	522.85	545.66	537.54
San Francisco .....	40.6	41.1	40.8	14.18	14.51	14.56	575.71	596.36	594.05
San Jose .....	41.5	42.6	42.3	16.33	16.62	16.67	677.70	708.01	705.14
Santa Barbara-Santa Maria-Lompoc .....	40.8	41.9	40.9	13.51	14.28	14.10	551.21	598.33	576.69
Santa Rosa .....	39.9	40.2	39.8	14.75	14.98	15.18	588.53	602.20	604.16
Stockton-Lodi .....	42.3	42.0	41.1	13.25	13.45	13.52	560.48	564.90	555.67
Vallejo-Fairfield-Napa .....	41.0	42.2	41.4	15.33	15.58	15.52	628.53	657.48	642.53
Ventura .....	41.6	43.7	43.2	12.33	12.48	12.45	512.93	545.38	537.84
<b>Colorado</b> .....	41.3	41.2	41.7	13.29	13.52	13.83	548.88	557.02	576.71
Denver .....	40.4	41.7	43.1	13.13	12.75	13.06	530.45	531.68	562.89
<b>Connecticut</b> .....	42.5	42.7	41.7	14.29	14.74	14.64	607.33	629.40	610.49
Bridgeport .....	42.4	42.4	41.2	14.93	15.17	15.15	633.03	643.21	624.18
Danbury .....	43.6	43.0	41.6	14.87	14.84	14.91	648.33	638.12	620.26
Hartford .....	43.0	44.0	41.7	15.26	15.64	15.52	656.18	688.16	647.18
New Haven-Meriden .....	42.3	42.5	41.1	14.23	14.64	14.78	601.93	622.20	607.46
New London-Norwich .....	42.9	42.2	41.1	15.23	15.23	15.27	631.06	642.71	627.60
Stamford-Norwalk .....	40.9	40.6	39.7	13.60	13.87	13.77	556.24	563.12	546.67
Waterbury .....	44.6	43.7	42.7	13.50	13.69	13.84	602.10	598.25	590.97
<b>Delaware</b> .....	41.0	41.9	41.5	14.73	15.28	15.29	603.93	640.23	634.54
Dover .....	40.1	40.1	40.8	13.13	13.72	13.80	526.51	550.17	563.04
Wilmington-Newark .....	43.0	44.3	43.4	17.71	18.60	18.71	761.53	823.98	812.01
<b>District of Columbia:</b>									
Washington PMSA .....	38.9	39.0	38.1	14.04	14.13	14.28	546.16	551.07	544.07
<b>Florida</b> .....	41.2	41.7	41.0	10.89	11.28	11.34	448.67	470.38	464.94
<b>Georgia</b> .....	42.4	41.8	41.1	11.59	11.91	12.00	491.42	497.84	493.20
Atlanta .....	42.7	40.9	40.1	12.58	12.88	12.98	537.17	526.79	520.50
Savannah .....	46.7	46.3	45.3	13.95	14.32	14.50	651.47	663.02	656.85
<b>Hawaii</b> .....	38.1	37.8	36.5	13.32	13.33	13.28	507.49	503.87	484.72
Honolulu .....	39.3	39.7	39.0	13.32	13.28	13.10	523.48	527.22	510.90
<b>Idaho</b> .....	39.5	37.3	37.9	12.74	12.88	13.16	503.23	480.42	498.76
<b>Illinois</b> .....	42.2	41.4	41.5	13.33	13.61	13.68	562.53	563.45	567.72
Bloomington-Normal .....	40.3	39.1	39.5	17.10	17.28	17.37	689.13	675.65	686.12
Champaign-Urbana .....	41.4	41.0	41.4	10.84	11.29	11.26	448.78	462.89	466.16
Chicago .....	42.0	41.3	41.3	13.18	13.47	13.48	553.56	556.31	556.72
Davenport-Moline-Rock Island .....	42.3	43.3	43.3	15.34	15.58	15.52	648.88	674.61	672.02
Decatur .....	43.0	42.7	42.4	16.49	16.76	16.80	709.07	715.65	712.32
Kankakee .....	42.6	41.9	41.8	14.80	15.07	14.95	630.48	631.43	624.91
Peoria-Pekin .....	43.2	42.7	42.9	16.60	16.67	16.68	717.12	711.81	715.57
Rockford .....	43.0	42.8	43.3	15.11	15.53	15.62	649.73	664.68	676.35
Springfield .....	42.5	41.7	41.4	11.94	12.12	12.05	507.45	505.40	498.87

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 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>	April 1997	March 1998	April 1998 <sup>P</sup>
<b>Indiana</b>	43.2	42.8	42.1	\$14.71	\$14.97	\$14.97	\$635.47	\$640.72	\$630.24
Bloomington	40.3	40.4	40.2	13.22	11.97	12.02	532.77	483.59	483.20
Elkhart-Goshen	39.9	39.2	39.4	12.30	12.40	12.65	490.77	486.08	498.41
Evansville-Henderson	43.3	43.3	43.2	14.36	15.07	15.01	621.79	652.53	648.43
Fort Wayne	41.6	41.7	41.5	14.63	14.69	14.74	608.61	612.57	611.71
Gary	42.4	41.7	42.0	18.50	18.85	18.79	784.40	786.05	789.18
Indianapolis	44.3	44.2	44.2	15.59	15.65	15.67	690.64	691.73	692.61
Kokomo	48.9	50.9	49.2	18.62	20.89	21.04	910.52	1,063.30	1,035.17
Lafayette	43.5	42.8	40.8	14.90	15.93	15.33	648.15	681.80	625.46
Muncie	43.6	45.1	45.0	14.42	14.51	14.38	628.71	654.40	647.10
South Bend	41.6	39.4	40.9	13.08	12.50	12.74	544.13	492.50	521.07
Terre Haute	42.9	44.8	44.3	14.62	14.80	15.08	627.20	663.04	668.04
<b>Iowa</b>	42.2	41.5	41.5	13.50	13.85	14.01	569.70	574.78	581.42
Cedar Rapids	43.2	41.7	39.4	16.13	17.27	17.48	696.82	720.16	688.71
Des Moines	43.1	40.7	41.8	13.53	14.06	14.32	583.14	572.24	598.58
Dubuque	41.4	39.4	40.8	14.80	15.03	15.16	612.72	592.18	618.53
Sioux City	39.3	41.8	41.0	10.99	11.38	11.70	431.91	475.68	479.70
<b>Kansas</b>	42.1	42.1	41.6	13.43	13.82	13.66	565.40	581.82	568.26
Topeka	40.8	41.8	41.7	14.60	15.82	15.89	595.68	661.28	662.61
Wichita	43.9	43.8	42.2	15.63	16.29	15.96	686.16	713.50	673.51
<b>Kentucky</b>	42.0	41.5	40.9	13.06	13.67	13.63	548.52	567.31	557.47
Lexington	43.2	42.2	41.6	13.88	13.80	13.73	599.62	582.36	571.17
Louisville	41.9	41.3	40.8	14.62	15.18	15.11	612.58	626.93	616.49
<b>Louisiana</b>	43.7	44.6	43.3	14.01	14.87	14.83	612.24	663.20	642.14
Baton Rouge	42.6	43.9	42.7	16.17	17.84	17.69	688.84	720.16	688.71
New Orleans	44.5	43.8	43.1	14.33	14.63	14.50	637.69	640.79	624.95
Shreveport-Bossier City	42.6	42.0	41.8	13.91	14.40	14.04	592.57	604.80	586.87
<b>Maine</b>	40.7	40.8	40.4	13.18	13.21	13.39	536.43	538.97	540.96
Lewiston-Auburn	42.5	40.0	39.1	11.16	11.32	11.34	474.30	452.80	443.39
Portland	36.4	40.7	41.6	11.00	11.29	11.21	400.40	459.50	466.34
<b>Maryland</b>	41.0	41.9	41.5	14.21	14.28	14.41	582.61	598.33	598.02
Baltimore PMSA	41.3	41.5	40.4	14.83	14.84	15.06	612.48	615.86	608.42
<b>Massachusetts</b>	42.4	42.4	41.9	13.35	13.69	13.69	566.04	580.46	573.61
Boston	42.0	41.9	41.5	14.41	14.75	14.75	605.22	618.03	612.13
Springfield	41.8	41.8	41.1	12.88	13.35	13.45	538.38	558.03	552.80
Worcester	43.1	43.2	42.5	13.43	13.76	13.81	578.83	594.43	586.93
<b>Michigan</b>	44.7	43.2	41.9	17.07	17.67	17.62	763.03	763.34	738.28
Ann Arbor	46.2	45.3	42.9	17.77	18.88	19.19	820.97	855.26	823.25
Detroit	45.9	44.5	42.7	18.68	19.22	19.30	857.41	855.29	824.11
Flint	47.5	43.5	43.6	22.17	24.67	24.65	1,073.14	1,073.14	1,074.74
Grand Rapids-Muskegon-Holland	42.2	40.2	39.9	14.60	14.67	14.49	616.12	589.73	578.15
Jackson	41.2	43.3	40.5	13.07	12.78	12.61	538.48	553.37	510.70
Kalamazoo-Battle Creek	44.2	44.7	43.2	15.34	15.34	15.60	678.03	685.70	673.92
Lansing East Lansing	44.9	39.8	39.8	18.42	19.39	19.32	827.06	771.72	768.94
Saginaw-Bay City-Midland	48.6	44.9	45.3	20.36	21.49	21.51	989.50	964.90	974.40
<b>Minnesota</b>	41.2	41.3	41.0	13.63	13.92	13.84	561.56	574.90	567.44
Duluth-Superior	39.1	41.4	41.4	12.16	12.31	12.54	475.46	509.63	519.16
Minneapolis-St. Paul	41.1	42.1	41.8	14.51	14.89	14.77	596.36	626.87	617.39
St. Cloud	41.7	44.6	43.2	12.72	13.51	13.02	530.42	602.55	562.46
<b>Mississippi</b>	41.1	41.3	40.6	10.39	10.68	10.63	427.03	441.08	431.58
Jackson	41.7	39.1	39.0	12.07	12.01	11.96	503.32	469.59	466.44
<b>Missouri</b>	41.0	41.3	40.3	12.88	13.25	13.17	528.08	547.23	530.75
Kansas City	43.2	43.1	42.6	14.22	14.35	14.38	614.30	618.49	612.59
St. Louis	42.6	42.5	40.5	14.92	15.71	15.59	635.59	667.68	631.40
Springfield	39.4	38.5	40.3	11.00	11.35	11.18	433.40	436.98	450.55
<b>Montana</b>	39.6	39.0	39.6	13.17	13.66	13.75	521.53	532.74	544.50
<b>Nebraska</b>	40.2	40.6	40.8	12.05	12.15	12.23	484.41	493.29	498.98
Lincoln	45.1	43.2	43.2	13.69	13.85	14.10	617.42	598.32	609.12
Omaha	41.5	41.6	42.0	13.29	13.34	12.78	551.54	554.94	536.76
<b>Nevada</b>	42.9	41.2	41.5	14.63	14.01	14.42	627.63	577.21	598.43
Las Vegas	41.5	40.9	41.6	15.83	15.69	16.60	656.95	641.72	690.56

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 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>New Hampshire</b> .....	42.4	41.7	40.9	\$12.38	\$12.59	\$12.69	\$524.91	\$525.00	\$519.02
Manchester .....	41.8	38.7	40.1	13.55	14.18	13.75	566.39	548.77	551.38
Nashua .....	41.6	42.0	40.4	14.51	14.38	14.70	603.62	603.96	593.88
Portsmouth-Rochester .....	42.8	42.3	41.9	11.47	11.79	11.87	490.92	498.72	497.35
<b>New Jersey</b> .....	41.8	41.8	40.5	14.13	14.49	14.59	590.63	605.68	590.90
<b>New Mexico</b> .....	40.3	38.9	38.3	11.23	12.80	12.65	452.57	497.92	484.50
Albuquerque .....	41.2	38.3	36.7	12.49	14.07	13.73	514.59	538.88	503.89
<b>New York</b> .....	41.1	41.4	40.3	13.12	13.48	13.54	539.23	558.07	545.66
Albany-Schenectady-Troy .....	41.1	41.5	41.5	14.61	14.57	14.42	600.47	604.66	598.43
Binghamton .....	40.7	41.3	40.5	10.43	10.72	10.77	424.50	442.74	436.19
Buffalo-Niagara Falls .....	43.3	43.7	42.2	16.42	17.38	17.26	710.99	759.51	728.37
Dutchess County .....	38.4	40.0	40.1	11.86	12.06	12.18	455.42	482.40	488.42
Elmira .....	41.5	42.0	39.7	12.03	12.74	12.51	499.25	535.08	496.65
Nassau-Suffolk .....	40.3	40.6	39.0	12.16	12.52	12.46	490.05	508.31	485.94
New York PMSA .....	38.6	39.5	38.2	11.87	12.36	12.46	458.18	488.22	475.97
New York City .....	38.3	39.3	37.9	11.63	12.13	12.23	445.43	476.71	463.52
Newburgh .....	37.8	41.3	39.9	11.24	11.08	11.51	424.87	457.60	459.25
Rochester .....	43.5	42.2	41.9	14.79	14.90	14.95	643.37	628.78	626.41
Rockland County .....	42.5	42.0	41.3	15.56	15.78	15.53	661.30	662.76	641.39
Syracuse .....	43.3	43.6	42.5	14.56	14.43	14.40	630.45	629.15	612.00
Utica-Rome .....	40.2	40.8	40.1	11.49	11.62	11.70	461.90	474.10	469.17
Westchester County .....	40.5	40.5	39.4	12.43	13.04	13.17	503.42	528.12	518.90
<b>North Carolina</b> .....	41.0	41.1	40.2	11.35	11.69	11.68	465.35	480.46	469.54
Asheville .....	41.6	41.1	39.6	10.93	11.43	11.39	454.69	469.77	451.04
Charlotte-Gastonia-Rock Hill .....	41.1	41.3	40.0	12.27	12.79	12.77	504.30	528.23	510.80
Greensboro--Winston-Salem--High Point .....	40.6	40.3	39.9	11.54	11.78	11.83	468.52	474.73	472.02
Raleigh-Durham-Chapel Hill .....	41.7	41.4	40.3	12.30	12.77	12.75	512.91	528.68	513.83
<b>North Dakota</b> .....	38.5	40.3	40.6	11.36	11.43	11.49	437.36	460.63	466.49
Fargo-Moorhead .....	38.0	38.3	41.5	11.40	10.51	10.47	433.20	402.53	434.51
<b>Ohio</b> .....	43.6	43.2	41.6	15.10	15.70	15.63	658.36	678.24	650.21
Akron .....	42.7	43.2	42.0	12.72	13.04	12.86	543.14	563.33	540.12
Canton-Massillon .....	41.4	43.2	41.4	13.39	13.81	13.87	554.35	596.59	574.22
Cincinnati .....	43.0	43.4	43.3	14.40	14.98	15.09	619.20	650.13	653.40
Cleveland-Lorain-Elyria .....	43.9	43.4	42.2	15.02	15.26	15.10	659.38	662.28	637.22
Columbus .....	42.3	42.7	41.5	14.16	14.63	14.68	598.97	624.70	609.22
Dayton-Springfield .....	44.7	43.5	42.1	16.48	16.62	16.52	736.66	722.97	695.49
Hamilton-Middletown .....	45.6	45.6	45.3	16.61	17.19	17.44	757.42	783.86	790.03
Lima .....	43.9	43.1	41.9	15.98	16.11	15.80	701.52	694.34	662.02
Mansfield .....	44.2	43.2	40.4	15.76	16.26	15.74	696.59	702.43	635.90
Staubenville-Weirton .....	42.3	41.8	42.6	16.04	16.57	17.37	678.49	692.63	739.96
Toledo .....	45.2	45.2	42.4	16.67	17.21	16.89	753.48	777.89	716.14
Youngstown-Warren .....	43.9	42.4	41.1	17.03	17.91	17.97	747.62	759.38	738.57
<b>Oklahoma</b> .....	41.7	42.4	40.8	11.78	12.31	12.48	491.23	521.94	509.18
Oklahoma City .....	42.1	44.6	43.0	12.17	13.27	13.85	512.36	591.84	595.55
Tulsa .....	42.3	43.7	41.4	12.79	12.86	12.82	541.02	561.98	530.75
<b>Oregon</b> .....	40.6	40.9	40.7	13.30	13.84	13.95	539.98	566.06	567.77
Eugene-Springfield .....	40.3	40.9	40.6	12.67	13.32	13.46	510.60	544.79	546.48
Medford-Ashland .....	39.6	40.0	38.8	12.05	12.69	12.67	477.18	507.60	491.60
Portland-Vancouver .....	40.8	41.1	40.9	13.19	13.98	14.13	538.15	574.58	577.92
Salem .....	39.9	39.0	39.8	11.55	11.97	12.10	460.85	466.83	481.58
<b>Pennsylvania</b> .....	41.7	41.9	41.0	13.69	14.01	13.98	570.87	587.02	573.18
Allentown-Bethlem-Easton .....	41.5	42.4	42.0	13.70	14.28	14.44	568.55	605.47	606.48
Altoona .....	40.7	40.3	38.8	11.49	11.93	12.14	467.64	480.78	471.03
Erie .....	44.0	44.9	42.1	13.66	14.22	13.92	601.04	638.48	586.03
Harrisburg-Lebanon-Carlisle .....	39.8	40.2	39.8	13.09	13.38	13.39	520.98	537.88	532.92
Johnstown .....	40.0	39.7	39.5	10.04	10.40	10.28	401.60	412.88	406.06
Lancaster .....	40.1	41.0	39.6	12.60	12.83	12.81	505.26	526.03	507.28
Philadelphia PMSA .....	41.5	41.3	40.8	14.81	15.29	15.26	614.62	631.48	622.61
Pittsburgh .....	42.2	42.7	42.5	14.68	15.07	14.86	619.50	643.49	631.55
Reading .....	42.7	42.1	40.4	14.96	15.17	15.00	638.79	638.66	606.00
Scranton-Wilkes-Barre-Hazleton .....	40.9	41.1	41.2	12.43	12.68	12.59	508.39	521.15	518.71
Sharon .....	44.1	42.8	38.9	14.50	15.03	14.95	639.45	643.28	581.56
State College .....	41.8	42.5	41.0	11.83	11.99	11.94	494.49	509.58	489.54
Williamsport .....	40.4	40.3	39.2	11.03	11.60	11.84	445.61	467.48	464.13
York .....	41.9	42.4	41.2	14.00	14.24	14.15	586.60	603.78	582.98

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 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P	April 1997	March 1998	April 1998P
<b>Rhode Island</b> .....	41.0	40.9	40.3	\$11.23	\$11.53	\$11.52	\$460.43	\$471.58	\$464.26
Providence-Fall River-Warwick .....	41.1	41.4	40.3	11.35	11.75	11.86	466.49	486.45	477.96
<b>South Carolina</b> .....	42.1	42.5	42.3	10.30	10.47	10.48	433.63	444.98	443.30
<b>South Dakota</b> .....	41.9	42.5	42.5	9.93	10.08	10.12	416.07	428.40	430.10
Rapid City .....	40.4	41.1	41.2	9.72	10.31	10.36	392.69	423.74	426.83
Sioux Falls .....	41.7	43.4	43.5	10.29	10.52	10.56	429.09	456.57	459.36
<b>Tennessee</b> .....	41.0	41.1	39.8	11.57	11.91	11.99	474.37	489.50	477.20
Chattanooga .....	42.9	42.3	41.3	10.73	10.98	11.05	460.32	464.45	456.37
Johnson City-Kingsport-Bristol .....	39.4	39.5	38.5	12.48	12.78	12.87	491.71	504.81	495.50
Knoxville .....	40.5	40.9	40.3	10.99	11.72	11.90	445.10	479.35	479.57
Memphis .....	42.0	40.1	40.7	12.08	12.46	12.71	507.36	499.65	517.30
Nashville .....	40.9	41.2	40.2	12.50	12.88	13.02	511.25	530.66	523.40
<b>Texas</b> .....	43.0	43.5	42.6	12.01	12.15	12.13	516.43	528.53	516.74
Dallas .....	43.6	42.6	42.0	12.05	12.33	12.31	525.38	525.26	517.02
Ft. Worth-Arlington .....	43.1	43.3	42.1	12.67	12.97	13.04	546.08	561.60	548.98
Houston .....	44.9	45.4	45.0	13.79	14.20	14.19	619.17	644.68	638.55
San Antonio .....	41.0	43.0	42.3	9.65	9.80	9.69	395.65	421.40	409.89
<b>Utah</b> .....	39.9	40.1	39.5	12.65	12.99	13.00	504.74	520.90	513.50
Salt Lake City-Ogden .....	40.3	39.9	40.1	12.39	12.75	12.88	499.32	508.73	516.49
<b>Vermont</b> .....	40.4	40.0	38.7	12.66	12.91	12.91	511.46	516.40	499.62
Burlington .....	43.0	43.7	42.7	13.05	13.70	13.42	561.15	598.69	573.03
<b>Virginia</b> .....	41.9	41.9	41.2	12.33	12.75	12.89	516.63	534.23	531.07
Bristol .....	41.8	40.9	37.5	10.59	10.51	10.31	442.66	429.86	386.63
Charlottesville .....	39.6	43.0	44.6	10.04	10.59	10.18	397.58	455.37	454.03
Danville .....	43.8	43.1	42.9	12.46	12.83	13.38	545.75	552.97	574.00
Lynchburg .....	41.7	45.9	42.3	12.11	12.57	12.50	504.99	576.96	528.75
Northern Virginia .....	41.0	41.1	39.9	12.68	13.09	13.32	519.88	538.00	531.47
Richmond-Petersburg .....	42.7	40.5	40.5	15.69	15.54	16.31	669.96	629.37	660.56
Roanoke .....	38.7	41.3	38.9	14.21	14.00	13.58	549.93	578.20	528.26
<b>Washington</b> .....	39.6	40.8	40.3	15.07	15.64	15.51	596.77	638.11	625.05
<b>West Virginia</b> .....	41.7	41.6	41.3	13.21	13.51	13.95	550.86	562.02	576.14
Charleston .....	46.8	47.6	47.6	14.55	15.14	15.64	680.94	720.66	744.46
Huntington-Ashland .....	42.5	43.1	42.9	14.34	15.01	15.75	609.45	646.93	675.68
Parkersburg-Marietta .....	44.4	42.7	41.8	17.26	17.15	17.14	766.34	732.31	716.45
Wheeling .....	41.7	38.9	39.3	14.51	15.71	16.16	605.07	611.12	635.09
<b>Wisconsin</b> .....	42.3	41.7	41.2	13.60	13.97	13.91	575.28	582.55	573.09
Appleton-Oshkosh-Neenah .....	43.8	44.6	43.5	14.62	14.89	14.91	640.36	664.09	648.59
Eau Claire .....	42.8	39.8	41.7	12.68	12.89	12.49	542.70	513.02	520.83
Green Bay .....	42.8	41.4	40.8	14.67	15.21	15.43	627.88	629.69	629.54
Janesville-Beloit .....	45.4	42.9	41.8	17.64	17.91	17.29	800.86	768.34	722.72
Kenosha .....	39.2	39.9	38.4	14.93	15.43	15.51	585.26	615.66	595.58
La Crosse .....	41.5	42.8	41.9	11.88	12.22	12.19	493.02	523.02	510.76
Madison .....	41.6	40.2	39.0	12.59	12.97	13.01	523.74	521.39	507.39
Milwaukee-Waukesha .....	42.2	42.2	40.9	14.90	15.06	14.82	628.78	635.53	606.14
Recine .....	41.9	40.8	38.6	13.85	14.39	14.23	580.32	587.11	549.28
Sheboygan .....	42.9	41.4	41.4	13.03	13.57	13.81	558.99	561.80	571.73
Wausau .....	43.0	41.7	42.2	13.07	13.23	13.44	562.01	551.69	567.17
<b>Wyoming</b> .....	39.8	40.1	41.2	14.42	14.88	15.76	573.92	596.69	649.31
<b>Puerto Rico</b> .....	39.6	39.8	38.5	7.83	8.45	8.29	310.07	336.31	319.17
<b>Virgin Islands</b> .....	41.9	39.4	39.1	17.99	18.32	18.86	753.78	721.81	737.43

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

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

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

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

(Numbers in thousands)

Census region and division	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>
<b>NORTHEAST</b>													
Civilian labor force .....	26,094.6	26,126.6	26,135.7	26,159.5	26,153.9	26,142.6	26,140.0	26,114.2	26,078.5	26,077.0	26,097.5	26,105.9	26,042.0
Employed .....	24,659.9	24,693.4	24,706.7	24,744.0	24,748.0	24,749.8	24,771.1	24,769.1	24,758.5	24,799.0	24,806.3	24,797.5	24,824.5
Unemployed .....	1,434.7	1,433.2	1,428.9	1,415.5	1,405.9	1,392.8	1,368.8	1,345.1	1,320.0	1,278.0	1,291.1	1,308.4	1,217.5
Unemployment rate .....	5.5	5.5	5.5	5.4	5.4	5.3	5.2	5.2	5.1	4.9	4.9	5.0	4.7
<b>New England</b>													
Civilian labor force .....	7,112.1	7,120.1	7,122.9	7,128.7	7,130.7	7,131.3	7,140.9	7,137.9	7,132.8	7,130.7	7,123.0	7,139.0	7,102.5
Employed .....	6,784.8	6,796.7	6,803.3	6,815.2	6,819.0	6,822.6	6,837.6	6,839.4	6,840.1	6,861.1	6,864.6	6,862.8	6,860.7
Unemployed .....	327.3	323.4	319.6	313.5	311.7	308.7	303.3	298.5	292.7	269.7	258.4	276.2	241.7
Unemployment rate .....	4.6	4.5	4.5	4.4	4.4	4.3	4.2	4.2	4.1	3.8	3.6	3.9	3.4
<b>Middle Atlantic</b>													
Civilian labor force .....	18,982.5	19,006.6	19,012.7	19,030.8	19,023.2	19,011.3	18,999.1	18,976.3	18,945.7	18,946.3	18,974.5	18,966.9	18,939.5
Employed .....	17,875.1	17,896.7	17,903.4	17,928.8	17,929.0	17,927.2	17,933.5	17,929.8	17,918.4	17,937.9	17,941.7	17,934.7	17,963.8
Unemployed .....	1,107.5	1,109.9	1,109.3	1,102.0	1,094.2	1,084.1	1,065.5	1,046.5	1,027.3	1,008.3	1,032.7	1,032.2	975.8
Unemployment rate .....	5.8	5.8	5.8	5.8	5.8	5.7	5.6	5.5	5.4	5.3	5.4	5.4	5.2
<b>SOUTH</b>													
Civilian labor force .....	46,960.3	47,041.6	47,116.6	47,215.1	47,278.9	47,364.2	47,490.8	47,600.5	47,694.8	47,816.2	47,818.3	47,879.6	47,922.8
Employed .....	44,599.6	44,675.3	44,738.5	44,861.3	44,961.2	45,063.7	45,245.0	45,387.7	45,523.3	45,689.9	45,752.0	45,761.0	45,871.7
Unemployed .....	2,360.6	2,366.3	2,378.2	2,353.9	2,317.7	2,300.6	2,245.9	2,212.8	2,171.5	2,126.3	2,066.4	2,118.6	2,051.1
Unemployment rate .....	5.0	5.0	5.0	5.0	4.9	4.9	4.7	4.6	4.6	4.4	4.3	4.4	4.3
<b>South Atlantic</b>													
Civilian labor force .....	24,275.7	24,325.9	24,365.4	24,413.3	24,456.8	24,502.9	24,569.1	24,635.4	24,677.1	24,738.2	24,765.7	24,763.1	24,793.8
Employed .....	23,150.4	23,197.5	23,235.9	23,301.7	23,355.7	23,410.1	23,503.8	23,575.5	23,630.4	23,695.5	23,724.7	23,720.6	23,792.4
Unemployed .....	1,125.3	1,128.4	1,129.5	1,111.6	1,101.1	1,092.8	1,065.2	1,060.0	1,046.7	1,042.6	1,041.0	1,042.5	1,001.5
Unemployment rate .....	4.6	4.6	4.6	4.6	4.5	4.5	4.3	4.3	4.2	4.2	4.2	4.2	4.0
<b>East South Central</b>													
Civilian labor force .....	8,039.8	8,051.5	8,067.5	8,092.5	8,085.8	8,097.1	8,118.6	8,135.3	8,145.8	8,144.8	8,136.3	8,167.0	8,147.6
Employed .....	7,602.4	7,611.7	7,622.5	7,646.7	7,654.0	7,663.0	7,700.9	7,725.7	7,748.2	7,775.6	7,785.3	7,784.1	7,791.0
Unemployed .....	437.4	439.9	445.1	445.8	431.7	434.1	417.7	409.7	397.5	369.1	351.0	382.8	356.6
Unemployment rate .....	5.4	5.5	5.5	5.5	5.3	5.4	5.1	5.0	4.9	4.5	4.3	4.7	4.4
<b>West South Central</b>													
Civilian labor force .....	14,644.8	14,664.2	14,683.7	14,709.3	14,736.4	14,764.3	14,803.2	14,829.8	14,871.9	14,933.3	14,916.3	14,949.5	14,981.4
Employed .....	13,846.9	13,866.2	13,880.1	13,912.9	13,951.5	13,990.6	14,040.3	14,086.6	14,144.7	14,218.8	14,241.9	14,256.2	14,288.3
Unemployed .....	798.0	798.0	803.6	796.4	784.9	773.7	762.9	743.2	727.2	714.5	674.4	693.3	693.0
Unemployment rate .....	5.4	5.4	5.5	5.4	5.3	5.2	5.2	5.0	4.9	4.8	4.5	4.6	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 adjusted<sup>1</sup> — Continued**

(Numbers in thousands)

Census region and division	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>
<b>MIDWEST</b>													
Civilian labor force .....	32,830.1	32,851.3	32,860.8	32,923.9	32,955.3	33,007.1	33,106.2	33,170.2	33,246.3	33,363.0	33,376.7	33,383.1	33,282.4
Employed .....	31,477.4	31,540.1	31,553.2	31,608.1	31,651.0	31,697.0	31,803.8	31,877.5	31,959.7	32,117.0	32,147.6	32,126.5	32,156.0
Unemployed .....	1,352.7	1,311.2	1,307.6	1,315.7	1,304.3	1,310.2	1,302.5	1,292.6	1,286.6	1,246.0	1,229.1	1,256.6	1,126.4
Unemployment rate .....	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.7	3.7	3.8	3.4
<b>East North Central</b>													
Civilian labor force .....	22,776.4	22,795.0	22,798.5	22,843.0	22,859.6	22,885.1	22,949.1	22,987.8	23,027.2	23,113.2	23,114.8	23,134.0	23,012.8
Employed .....	21,795.3	21,843.0	21,841.8	21,872.6	21,898.4	21,918.7	21,982.3	22,024.9	22,068.0	22,182.4	22,197.5	22,209.7	22,204.9
Unemployed .....	981.1	952.0	956.7	970.5	961.2	966.4	966.8	962.9	959.3	930.8	917.3	924.3	807.9
Unemployment rate .....	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	3.5
<b>West North Central</b>													
Civilian labor force .....	10,053.8	10,056.3	10,062.3	10,080.8	10,095.7	10,122.0	10,157.1	10,182.3	10,219.1	10,249.8	10,262.0	10,249.1	10,269.6
Employed .....	9,682.2	9,697.1	9,711.4	9,735.6	9,752.6	9,778.2	9,821.4	9,852.6	9,891.7	9,934.6	9,950.1	9,916.8	9,951.1
Unemployed .....	371.6	359.3	350.9	345.3	343.1	343.8	335.7	329.7	327.4	315.2	311.8	332.3	318.5
Unemployment rate .....	3.7	3.6	3.5	3.4	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.2	3.1
<b>WEST</b>													
Civilian labor force .....	29,829.6	29,872.3	29,942.0	30,058.3	30,127.4	30,185.9	30,265.7	30,323.8	30,425.5	30,478.9	30,513.8	30,617.8	30,589.6
Employed .....	28,124.3	28,201.8	28,275.7	28,404.9	28,478.0	28,532.5	28,634.1	28,713.7	28,819.0	28,893.5	28,944.5	29,004.2	29,000.9
Unemployed .....	1,705.4	1,670.5	1,666.3	1,653.4	1,649.4	1,653.4	1,631.6	1,610.2	1,606.5	1,585.4	1,569.3	1,613.7	1,588.7
Unemployment rate .....	5.7	5.6	5.6	5.5	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.3	5.2
<b>Mountain</b>													
Civilian labor force .....	8,324.2	8,341.8	8,365.8	8,400.4	8,420.9	8,458.2	8,507.1	8,550.2	8,599.7	8,633.8	8,672.2	8,685.1	8,706.6
Employed .....	7,954.4	7,982.2	8,009.0	8,046.1	8,069.8	8,107.6	8,159.7	8,201.2	8,250.1	8,298.2	8,323.7	8,317.0	8,335.3
Unemployed .....	369.8	359.6	356.8	354.3	351.1	350.6	347.5	349.0	349.7	335.6	348.5	368.1	371.4
Unemployment rate .....	4.4	4.3	4.3	4.2	4.2	4.1	4.1	4.1	4.1	3.9	4.0	4.2	4.3
<b>Pacific</b>													
Civilian labor force .....	21,505.4	21,530.5	21,576.2	21,657.9	21,706.5	21,727.7	21,758.6	21,773.6	21,825.8	21,845.1	21,841.6	21,932.8	21,883.0
Employed .....	20,169.8	20,219.6	20,266.7	20,358.8	20,408.2	20,424.9	20,474.5	20,512.5	20,569.0	20,595.3	20,620.8	20,687.2	20,665.6
Unemployed .....	1,335.6	1,310.9	1,309.5	1,299.1	1,298.3	1,302.8	1,284.2	1,261.1	1,256.8	1,249.8	1,220.8	1,245.6	1,217.4
Unemployment rate .....	6.2	6.1	6.1	6.0	6.0	6.0	5.9	5.8	5.8	5.7	5.6	5.7	5.6

<sup>P</sup> = preliminary.

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

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

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

STATE LABOR FORCE DATA  
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>
<b>Alabama</b>													
Civilian labor force .....	2,180.7	2,185.8	2,187.7	2,189.7	2,182.2	2,178.1	2,172.7	2,164.6	2,154.1	2,146.3	2,141.6	2,149.9	2,137.0
Employed .....	2,066.7	2,071.6	2,071.6	2,074.4	2,070.3	2,067.4	2,067.0	2,061.9	2,055.0	2,057.3	2,059.8	2,060.0	2,058.5
Unemployed .....	114.1	114.2	116.1	115.3	111.9	110.7	105.7	102.7	99.1	89.1	81.8	89.9	78.4
Unemployment rate .....	5.2	5.2	5.3	5.3	5.1	5.1	4.9	4.7	4.6	4.1	3.8	4.2	3.7
<b>Alaska</b>													
Civilian labor force .....	315.3	314.3	314.9	315.6	316.1	316.7	317.0	317.4	318.5	317.6	318.0	317.4	316.3
Employed .....	289.2	289.4	289.8	290.5	291.0	292.1	293.0	294.4	295.9	297.8	297.9	298.5	298.3
Unemployed .....	26.1	24.9	25.1	25.1	25.1	24.5	24.0	23.1	22.6	19.8	20.1	19.0	18.1
Unemployment rate .....	8.3	7.9	8.0	8.0	7.9	7.7	7.6	7.3	7.1	6.2	6.3	6.0	5.7
<b>Arizona</b>													
Civilian labor force .....	2,141.0	2,140.7	2,141.3	2,147.8	2,157.2	2,170.8	2,188.9	2,211.5	2,237.7	2,243.0	2,252.4	2,263.3	2,269.6
Employed .....	2,035.8	2,039.1	2,043.0	2,050.2	2,061.6	2,076.2	2,095.7	2,116.8	2,144.7	2,159.2	2,163.0	2,164.4	2,169.7
Unemployed .....	105.2	101.6	98.4	97.6	95.5	94.6	93.3	94.7	93.0	83.8	89.3	99.0	99.8
Unemployment rate .....	4.9	4.7	4.6	4.5	4.4	4.4	4.3	4.3	4.2	3.7	4.0	4.4	4.4
<b>Arkansas</b>													
Civilian labor force .....	1,198.3	1,196.6	1,199.6	1,205.2	1,210.2	1,213.3	1,219.8	1,229.7	1,240.6	1,245.8	1,243.9	1,248.9	1,249.0
Employed .....	1,135.5	1,135.1	1,135.2	1,139.6	1,145.8	1,150.3	1,158.2	1,167.9	1,178.5	1,180.2	1,178.5	1,178.8	1,184.1
Unemployed .....	62.8	61.5	64.4	65.6	64.4	63.0	61.6	61.7	62.1	65.6	65.4	70.1	64.9
Unemployment rate .....	5.2	5.1	5.4	5.4	5.3	5.2	5.0	5.0	5.0	5.3	5.3	5.6	5.2
<b>California</b>													
Civilian labor force .....	15,910.2	15,935.7	15,962.4	16,014.3	16,050.6	16,058.0	16,073.4	16,086.1	16,122.8	16,114.0	16,147.0	16,218.2	16,204.2
Employed .....	14,891.5	14,927.9	14,957.7	15,019.5	15,054.3	15,058.7	15,084.1	15,112.5	15,151.8	15,145.7	15,189.0	15,238.2	15,252.3
Unemployed .....	1,018.7	1,007.8	1,004.8	994.8	996.3	999.4	989.3	973.6	971.0	968.3	958.0	980.0	951.9
Unemployment rate .....	6.4	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.0	6.0	5.9	6.0	5.9
<b>Colorado</b>													
Civilian labor force .....	2,137.8	2,143.9	2,154.3	2,166.3	2,166.9	2,177.5	2,189.1	2,196.4	2,199.7	2,216.2	2,232.9	2,231.4	2,238.6
Employed .....	2,065.6	2,073.7	2,084.7	2,097.7	2,098.1	2,108.9	2,122.6	2,129.0	2,132.8	2,153.1	2,165.7	2,161.5	2,164.7
Unemployed .....	72.2	70.2	69.7	68.6	68.8	68.6	66.5	67.4	66.9	63.1	67.2	69.9	73.9
Unemployment rate .....	3.4	3.3	3.2	3.2	3.2	3.1	3.0	3.1	3.0	2.8	3.0	3.1	3.3
<b>Connecticut</b>													
Civilian labor force .....	1,722.2	1,721.0	1,721.7	1,722.0	1,722.9	1,723.9	1,725.7	1,726.6	1,728.2	1,720.0	1,716.8	1,722.4	1,714.7
Employed .....	1,629.0	1,630.1	1,632.2	1,634.9	1,637.8	1,639.7	1,643.1	1,646.6	1,650.7	1,654.7	1,651.8	1,653.0	1,647.8
Unemployed .....	93.3	91.0	89.5	87.1	85.1	84.2	82.6	80.0	77.5	65.3	65.0	69.4	66.9
Unemployment rate .....	5.4	5.3	5.2	5.1	4.9	4.9	4.8	4.6	4.5	3.8	3.8	4.0	3.9
<b>Delaware</b>													
Civilian labor force .....	376.3	376.4	377.6	378.6	379.7	380.5	381.9	383.9	387.0	387.9	388.7	393.2	393.1
Employed .....	360.0	360.4	361.6	363.3	365.1	366.7	368.7	371.2	374.0	374.6	375.0	379.6	378.3
Unemployed .....	16.3	16.0	15.9	15.3	14.6	13.8	13.3	12.7	13.0	13.3	13.6	13.6	14.8
Unemployment rate .....	4.3	4.3	4.2	4.0	3.8	3.6	3.5	3.3	3.4	3.4	3.5	3.5	3.8
<b>District of Columbia</b>													
Civilian labor force .....	258.1	256.9	254.3	255.0	256.2	256.1	255.7	255.6	255.7	258.5	260.6	260.6	268.4
Employed .....	238.2	237.2	234.7	234.9	235.6	235.0	234.6	234.8	234.9	236.7	237.0	236.3	244.6
Unemployed .....	19.9	19.7	19.6	20.1	20.6	21.1	21.1	20.8	20.8	21.8	23.6	24.2	23.7
Unemployment rate .....	7.7	7.7	7.7	7.9	8.0	8.2	8.3	8.1	8.1	8.4	9.1	9.3	8.8
<b>Florida</b>													
Civilian labor force .....	7,040.6	7,061.5	7,079.1	7,106.1	7,129.9	7,152.5	7,189.9	7,221.2	7,253.6	7,265.1	7,258.3	7,269.7	7,300.5
Employed .....	6,698.5	6,720.0	6,739.6	6,774.0	6,796.1	6,817.0	6,856.0	6,884.3	6,916.0	6,927.2	6,922.1	6,923.3	6,964.3
Unemployed .....	342.2	341.5	339.5	332.1	333.8	335.5	333.9	337.0	337.7	337.8	336.1	346.4	336.2
Unemployment rate .....	4.9	4.8	4.8	4.7	4.7	4.7	4.6	4.7	4.7	4.7	4.6	4.8	4.6

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	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
<b>Georgia</b>													
Civilian labor force .....	3,895.4	3,907.8	3,916.5	3,915.2	3,928.8	3,930.3	3,932.2	3,928.5	3,918.0	3,928.7	3,950.0	3,931.6	3,959.6
Employed .....	3,712.8	3,723.3	3,732.6	3,734.3	3,751.6	3,757.2	3,765.3	3,764.4	3,759.1	3,771.7	3,786.3	3,772.5	3,804.0
Unemployed .....	182.6	184.5	183.9	180.9	177.2	173.0	166.9	164.2	158.9	157.0	163.6	159.1	155.6
Unemployment rate .....	4.7	4.7	4.7	4.6	4.5	4.4	4.2	4.2	4.1	4.0	4.1	4.0	3.9
<b>Hawaii</b>													
Civilian labor force .....	590.5	590.4	591.7	592.4	592.1	592.8	592.4	592.5	593.1	593.4	592.8	592.9	592.4
Employed .....	551.7	551.5	552.5	553.6	554.4	555.2	556.3	557.1	557.7	560.4	558.7	558.6	561.1
Unemployed .....	38.8	38.9	39.2	38.8	37.7	37.6	36.1	35.4	35.4	33.0	34.1	34.4	31.3
Unemployment rate .....	6.6	6.6	6.6	6.5	6.4	6.3	6.1	6.0	6.0	5.6	5.7	5.8	5.3
<b>Idaho</b>													
Civilian labor force .....	630.1	631.7	633.8	634.8	634.9	636.2	638.0	638.4	641.0	640.1	641.7	644.8	646.1
Employed .....	596.1	597.9	599.8	601.4	600.8	602.5	604.2	605.8	607.4	608.1	609.5	611.2	613.0
Unemployed .....	34.1	33.8	33.9	33.4	34.1	33.7	33.7	32.6	33.6	32.0	32.2	33.5	33.2
Unemployment rate .....	5.4	5.4	5.4	5.3	5.4	5.3	5.3	5.1	5.2	5.0	5.0	5.2	5.1
<b>Illinois</b>													
Civilian labor force .....	6,109.7	6,111.1	6,115.8	6,132.1	6,135.3	6,133.2	6,149.5	6,156.7	6,162.1	6,190.5	6,186.3	6,189.1	6,140.1
Employed .....	5,826.4	5,839.8	5,834.8	5,847.1	5,852.1	5,849.2	5,862.0	5,861.9	5,867.0	5,887.8	5,902.8	5,909.1	5,885.0
Unemployed .....	283.2	271.2	281.0	284.9	283.2	284.0	287.6	294.8	295.1	302.7	283.6	280.0	255.0
Unemployment rate .....	4.6	4.4	4.6	4.6	4.6	4.6	4.7	4.8	4.8	4.9	4.6	4.5	4.2
<b>Indiana</b>													
Civilian labor force .....	3,087.0	3,092.3	3,093.6	3,098.4	3,104.6	3,103.6	3,111.2	3,113.8	3,113.0	3,115.4	3,111.1	3,133.9	3,116.8
Employed .....	2,980.5	2,985.3	2,986.6	2,989.6	2,991.5	2,990.9	2,997.7	3,004.6	3,003.9	3,013.8	3,010.6	3,027.0	3,029.7
Unemployed .....	106.5	107.0	107.0	108.9	113.0	112.7	113.5	109.2	109.1	101.8	100.5	106.9	87.1
Unemployment rate .....	3.4	3.5	3.5	3.5	3.6	3.6	3.6	3.5	3.5	3.3	3.2	3.4	2.8
<b>Iowa</b>													
Civilian labor force .....	1,577.7	1,575.2	1,574.6	1,572.2	1,568.3	1,571.5	1,574.0	1,573.9	1,581.7	1,589.9	1,594.3	1,588.6	1,582.4
Employed .....	1,523.6	1,524.1	1,523.3	1,522.7	1,519.1	1,523.4	1,528.4	1,528.6	1,535.7	1,545.4	1,552.9	1,547.1	1,544.3
Unemployed .....	54.0	51.1	51.3	49.5	49.2	48.1	45.7	45.3	46.0	44.5	41.4	41.5	38.1
Unemployment rate .....	3.4	3.2	3.3	3.1	3.1	3.1	2.9	2.9	2.9	2.8	2.6	2.6	2.4
<b>Kansas</b>													
Civilian labor force .....	1,349.8	1,349.6	1,353.5	1,365.8	1,372.2	1,377.5	1,386.2	1,394.0	1,404.4	1,407.7	1,409.7	1,409.8	1,414.4
Employed .....	1,297.4	1,298.4	1,303.5	1,315.9	1,322.6	1,326.9	1,335.9	1,343.4	1,351.6	1,358.9	1,362.0	1,360.3	1,367.0
Unemployed .....	52.4	51.1	50.0	49.9	49.7	50.6	50.4	50.6	52.7	48.8	47.7	49.5	47.4
Unemployment rate .....	3.9	3.8	3.7	3.7	3.6	3.7	3.6	3.6	3.8	3.5	3.4	3.5	3.4
<b>Kentucky</b>													
Civilian labor force .....	1,921.2	1,927.4	1,931.7	1,935.3	1,936.5	1,934.4	1,936.8	1,938.7	1,937.2	1,931.3	1,936.3	1,945.8	1,938.0
Employed .....	1,815.2	1,819.5	1,825.6	1,831.0	1,834.8	1,834.4	1,839.8	1,843.8	1,844.9	1,842.9	1,856.5	1,858.9	1,860.8
Unemployed .....	106.0	107.9	106.1	104.3	101.7	100.0	97.0	94.9	92.3	88.4	79.9	86.9	77.2
Unemployment rate .....	5.5	5.6	5.5	5.4	5.2	5.2	5.0	4.9	4.8	4.6	4.1	4.5	4.0
<b>Louisiana</b>													
Civilian labor force .....	2,019.3	2,022.1	2,019.8	2,021.3	2,024.5	2,024.5	2,034.1	2,037.2	2,043.8	2,067.6	2,038.0	2,033.2	2,053.8
Employed .....	1,893.8	1,891.9	1,891.2	1,895.9	1,901.8	1,904.3	1,914.4	1,917.8	1,926.5	1,962.3	1,949.8	1,937.4	1,940.3
Unemployed .....	125.5	130.2	128.7	125.4	122.7	120.2	119.7	119.4	117.3	105.3	88.2	95.8	113.5
Unemployment rate .....	6.2	6.4	6.4	6.2	6.1	5.9	5.9	5.9	5.7	5.1	4.3	4.7	5.5
<b>Maine</b>													
Civilian labor force .....	659.2	657.5	656.6	655.1	655.6	656.4	657.8	659.0	661.1	660.9	657.9	655.0	653.1
Employed .....	622.4	621.6	620.9	620.0	620.6	621.1	622.5	624.0	626.3	627.7	627.6	626.6	627.1
Unemployed .....	36.7	35.9	35.7	35.1	35.0	35.3	35.3	35.0	34.9	33.1	30.3	28.4	26.0
Unemployment rate .....	5.6	5.5	5.4	5.4	5.3	5.4	5.4	5.3	5.3	5.0	4.6	4.3	4.0

See footnotes at end of table.

STATE LABOR FORCE DATA  
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
<b>Maryland</b>													
Civilian labor force .....	2,790.2	2,790.6	2,788.3	2,787.0	2,781.4	2,783.8	2,784.1	2,789.1	2,790.8	2,803.7	2,802.1	2,796.9	2,792.4
Employed .....	2,647.3	2,646.7	2,642.0	2,641.7	2,638.5	2,637.7	2,644.5	2,651.8	2,657.1	2,668.8	2,667.2	2,666.5	2,668.6
Unemployed .....	142.9	143.9	146.4	145.3	142.9	146.1	139.6	137.4	133.7	134.9	134.9	130.4	123.8
Unemployment rate .....	5.1	5.2	5.2	5.2	5.1	5.2	5.0	4.9	4.8	4.8	4.8	4.7	4.4
<b>Massachusetts</b>													
Civilian labor force .....	3,261.7	3,266.9	3,267.7	3,269.7	3,271.2	3,269.1	3,268.5	3,263.2	3,254.5	3,258.8	3,258.3	3,268.4	3,244.6
Employed .....	3,126.3	3,132.5	3,135.1	3,138.4	3,138.3	3,138.0	3,141.2	3,136.8	3,130.3	3,141.8	3,149.4	3,146.5	3,149.4
Unemployed .....	135.5	134.4	132.6	131.4	132.9	131.2	127.3	126.4	124.3	116.9	108.9	121.9	95.2
Unemployment rate .....	4.2	4.1	4.1	4.0	4.1	4.0	3.9	3.9	3.8	3.6	3.3	3.7	2.9
<b>Michigan</b>													
Civilian labor force .....	4,983.1	4,987.5	4,977.9	4,987.3	4,971.2	4,982.3	4,999.9	5,003.4	5,013.0	5,047.2	5,051.1	5,047.6	5,027.4
Employed .....	4,765.9	4,778.7	4,771.7	4,774.1	4,770.5	4,779.0	4,798.9	4,804.4	4,815.7	4,849.4	4,846.1	4,848.8	4,851.7
Unemployed .....	217.2	208.9	206.2	213.2	200.7	203.2	200.9	199.0	197.3	197.7	205.0	198.8	175.6
Unemployment rate .....	4.4	4.2	4.1	4.3	4.0	4.1	4.0	4.0	3.9	3.9	4.1	3.9	3.5
<b>Minnesota</b>													
Civilian labor force .....	2,605.0	2,608.9	2,614.2	2,623.3	2,632.5	2,640.3	2,650.1	2,660.8	2,670.8	2,672.5	2,675.4	2,684.1	2,692.4
Employed .....	2,513.5	2,521.3	2,529.1	2,538.9	2,548.6	2,557.0	2,568.8	2,581.2	2,593.5	2,600.0	2,606.3	2,607.0	2,624.0
Unemployed .....	91.5	87.6	85.2	84.4	83.9	83.2	81.3	79.6	77.3	72.6	69.1	77.1	68.4
Unemployment rate .....	3.5	3.4	3.3	3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.9	2.5
<b>Mississippi</b>													
Civilian labor force .....	1,255.9	1,258.0	1,258.4	1,266.1	1,267.7	1,272.6	1,277.6	1,278.4	1,279.3	1,284.8	1,281.5	1,289.9	1,282.8
Employed .....	1,184.5	1,186.9	1,186.3	1,193.6	1,193.8	1,196.1	1,204.4	1,208.8	1,213.7	1,214.9	1,212.4	1,214.5	1,214.5
Unemployed .....	71.4	71.1	72.1	72.5	74.0	76.5	73.2	69.6	65.6	69.8	69.1	75.4	68.3
Unemployment rate .....	5.7	5.7	5.7	5.7	5.8	6.0	5.7	5.4	5.1	5.4	5.4	5.8	5.3
<b>Missouri</b>													
Civilian labor force .....	2,885.2	2,882.9	2,880.4	2,876.6	2,877.2	2,883.0	2,892.3	2,892.5	2,895.0	2,911.3	2,911.7	2,894.8	2,910.6
Employed .....	2,759.1	2,761.7	2,762.3	2,759.1	2,759.9	2,762.8	2,772.5	2,775.6	2,779.2	2,796.3	2,793.0	2,770.2	2,781.7
Unemployed .....	126.2	121.2	118.2	117.5	117.3	120.3	119.9	116.9	115.7	115.0	118.7	124.7	128.8
Unemployment rate .....	4.4	4.2	4.1	4.1	4.1	4.2	4.1	4.0	4.0	4.0	4.1	4.3	4.4
<b>Montana</b>													
Civilian labor force .....	451.6	452.3	452.2	454.2	455.2	455.7	458.0	459.0	460.6	462.2	462.5	461.8	462.1
Employed .....	426.6	428.2	427.8	429.6	430.8	431.4	433.3	434.2	435.9	437.1	438.2	436.8	436.9
Unemployed .....	25.0	24.1	24.4	24.6	24.4	24.3	24.7	24.8	24.7	25.1	24.3	25.0	25.2
Unemployment rate .....	5.5	5.3	5.4	5.4	5.4	5.3	5.4	5.4	5.4	5.4	5.3	5.4	5.5
<b>Nebraska</b>													
Civilian labor force .....	897.1	898.6	900.5	903.9	906.5	910.6	913.9	919.0	923.6	924.2	926.2	926.8	926.7
Employed .....	872.2	873.3	875.6	880.2	883.2	888.3	893.4	899.9	905.9	907.6	908.4	906.3	908.5
Unemployed .....	24.9	25.3	24.9	23.7	23.3	22.3	20.5	19.1	17.7	16.6	17.9	20.5	18.2
Unemployment rate .....	2.8	2.8	2.8	2.6	2.6	2.5	2.2	2.1	1.9	1.8	1.9	2.2	2.0
<b>Nevada</b>													
Civilian labor force .....	874.3	878.2	882.5	885.9	888.3	892.1	895.1	897.1	900.6	905.7	911.4	909.6	913.2
Employed .....	837.6	842.6	846.9	850.5	853.5	856.6	859.7	861.7	864.8	866.7	869.7	867.2	870.1
Unemployed .....	36.7	35.6	35.6	35.4	34.8	35.6	35.4	35.4	35.8	39.0	41.8	42.4	43.1
Unemployment rate .....	4.2	4.1	4.0	4.0	3.9	4.0	4.0	3.9	4.0	4.3	4.6	4.7	4.7
<b>New Hampshire</b>													
Civilian labor force .....	640.3	644.7	647.0	650.9	649.1	648.3	652.8	653.2	651.2	653.3	652.7	652.0	653.5
Employed .....	619.4	623.9	626.0	630.8	629.5	629.1	633.3	633.7	632.1	635.4	634.6	632.7	634.9
Unemployed .....	20.9	20.7	21.0	20.1	19.5	19.2	19.5	19.5	19.1	17.9	18.1	19.3	18.5
Unemployment rate .....	3.3	3.2	3.2	3.1	3.0	3.0	3.0	3.0	2.9	2.7	2.8	3.0	2.8

See footnotes at end of table.

**STATE LABOR FORCE DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>
<b>New Jersey</b>													
Civilian labor force .....	4,195.6	4,200.0	4,205.7	4,203.0	4,200.5	4,197.0	4,194.1	4,186.2	4,178.1	4,181.8	4,185.9	4,192.5	4,187.6
Employed .....	3,979.9	3,983.3	3,987.9	3,990.4	3,988.7	3,984.2	3,983.9	3,979.3	3,971.6	3,977.1	3,975.3	3,978.5	3,974.2
Unemployed .....	215.7	216.8	217.8	212.6	211.8	212.8	210.1	206.9	206.6	204.7	210.6	214.0	213.5
Unemployment rate .....	5.1	5.2	5.2	5.1	5.0	5.1	5.0	4.9	4.9	4.9	5.0	5.1	5.1
<b>New Mexico</b>													
Civilian labor force .....	813.2	815.8	819.2	823.1	824.1	825.7	829.8	832.8	835.5	836.1	837.7	841.7	841.9
Employed .....	762.5	766.7	770.2	773.5	775.8	776.2	779.8	781.3	782.2	784.9	785.1	787.7	790.7
Unemployed .....	50.6	49.1	49.0	49.5	48.4	49.6	50.0	51.5	53.3	51.2	52.5	54.0	51.2
Unemployment rate .....	6.2	6.0	6.0	6.0	5.9	6.0	6.0	6.2	6.4	6.1	6.3	6.4	6.1
<b>New York</b>													
Civilian labor force .....	8,809.4	8,819.6	8,825.2	8,841.6	8,834.9	8,825.2	8,818.5	8,799.5	8,775.9	8,786.7	8,810.2	8,795.3	8,773.0
Employed .....	8,238.7	8,247.4	8,253.3	8,269.8	8,266.2	8,261.8	8,261.5	8,252.7	8,241.8	8,259.4	8,267.9	8,261.8	8,267.5
Unemployed .....	570.8	572.2	571.9	571.8	568.7	563.4	557.0	546.7	534.0	527.2	542.3	533.5	505.4
Unemployment rate .....	6.5	6.5	6.5	6.5	6.4	6.4	6.3	6.2	6.1	6.0	6.2	6.1	5.8
<b>North Carolina</b>													
Civilian labor force .....	3,846.2	3,852.0	3,847.3	3,850.6	3,842.2	3,844.3	3,842.4	3,843.3	3,828.0	3,842.0	3,847.8	3,846.9	3,822.0
Employed .....	3,713.1	3,713.7	3,706.9	3,710.2	3,702.1	3,706.3	3,705.7	3,704.0	3,688.2	3,703.7	3,706.5	3,698.0	3,682.7
Unemployed .....	133.1	138.4	140.4	140.4	140.1	138.0	136.7	139.4	139.8	138.4	141.3	148.8	139.4
Unemployment rate .....	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.6	3.7	3.9	3.6
<b>North Dakota</b>													
Civilian labor force .....	348.5	349.9	348.2	347.6	346.9	346.7	346.1	346.3	346.1	346.2	346.0	346.4	344.8
Employed .....	338.5	338.7	339.0	339.1	339.0	338.9	339.5	339.2	339.1	339.8	339.4	338.0	338.2
Unemployed .....	10.0	11.2	9.2	8.5	7.9	7.7	6.6	7.1	7.0	6.4	6.6	8.4	6.6
Unemployment rate .....	2.9	3.2	2.7	2.5	2.3	2.2	1.9	2.0	2.0	1.8	1.9	2.4	1.9
<b>Ohio</b>													
Civilian labor force .....	5,679.0	5,684.7	5,687.4	5,697.4	5,718.4	5,732.3	5,746.7	5,767.0	5,786.2	5,796.7	5,803.6	5,805.8	5,781.3
Employed .....	5,413.6	5,427.3	5,434.6	5,444.0	5,463.1	5,473.2	5,487.0	5,510.9	5,531.5	5,561.9	5,562.7	5,558.4	5,560.5
Unemployed .....	265.5	257.4	252.8	253.4	255.3	259.0	259.7	256.1	254.6	234.7	240.9	247.5	220.8
Unemployment rate .....	4.7	4.5	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.0	4.2	4.3	3.8
<b>Oklahoma</b>													
Civilian labor force .....	1,596.8	1,597.2	1,596.0	1,598.9	1,600.0	1,603.9	1,605.0	1,607.7	1,607.5	1,608.2	1,612.4	1,616.2	1,611.0
Employed .....	1,528.4	1,528.8	1,527.4	1,531.6	1,534.0	1,538.4	1,542.2	1,546.9	1,550.2	1,555.4	1,555.6	1,558.7	1,550.9
Unemployed .....	68.4	68.4	68.6	67.3	66.0	65.6	62.8	60.8	57.3	52.7	56.9	57.5	60.1
Unemployment rate .....	4.3	4.3	4.3	4.2	4.1	4.1	3.9	3.8	3.6	3.3	3.5	3.6	3.7
<b>Oregon</b>													
Civilian labor force .....	1,712.7	1,705.3	1,711.5	1,720.4	1,738.1	1,751.3	1,764.7	1,767.3	1,775.4	1,807.9	1,774.4	1,778.5	1,769.2
Employed .....	1,609.4	1,609.0	1,612.6	1,620.2	1,638.6	1,651.3	1,665.7	1,670.8	1,681.2	1,713.8	1,690.5	1,691.3	1,679.1
Unemployed .....	103.3	96.4	98.8	100.2	99.5	99.9	99.0	96.5	94.2	94.1	83.9	87.2	90.1
Unemployment rate .....	6.0	5.7	5.8	5.8	5.7	5.7	5.6	5.5	5.3	5.2	4.7	4.9	5.1
<b>Pennsylvania</b>													
Civilian labor force .....	5,977.5	5,986.9	5,981.9	5,986.2	5,987.8	5,989.1	5,986.5	5,990.7	5,991.7	5,977.8	5,978.3	5,979.1	5,978.9
Employed .....	5,656.5	5,666.0	5,662.2	5,668.6	5,674.1	5,681.3	5,688.1	5,697.7	5,705.0	5,701.4	5,698.5	5,694.3	5,722.1
Unemployed .....	321.0	320.9	319.7	317.6	313.8	307.8	298.4	292.9	286.7	276.4	279.8	284.8	256.9
Unemployment rate .....	5.4	5.4	5.3	5.3	5.2	5.1	5.0	4.9	4.8	4.6	4.7	4.8	4.3
<b>Rhode Island</b>													
Civilian labor force .....	505.2	505.8	505.3	505.5	506.0	507.1	507.7	506.7	507.5	508.6	506.5	509.5	506.3
Employed .....	477.4	477.3	477.3	478.4	479.5	480.9	481.6	481.4	482.9	484.1	481.9	483.7	481.7
Unemployed .....	27.9	28.5	28.0	27.1	26.5	26.2	26.0	25.2	24.6	24.5	24.6	25.8	24.6
Unemployment rate .....	5.5	5.6	5.5	5.4	5.2	5.2	5.1	5.0	4.9	4.8	4.9	5.1	4.9

See footnotes at end of table.



STATE LABOR FORCE DATA  
SEASONALLY ADJUSTED

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

(Numbers in thousands)

State	1997									1998			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.P
<b>South Carolina</b>													
Civilian labor force .....	1,911.9	1,918.1	1,923.0	1,928.0	1,925.4	1,918.6	1,912.2	1,907.7	1,902.9	1,908.4	1,910.4	1,902.6	1,912.8
Employed .....	1,820.1	1,826.7	1,833.5	1,842.5	1,842.9	1,839.6	1,839.4	1,836.9	1,832.9	1,834.5	1,844.5	1,856.3	1,856.8
Unemployed .....	91.8	91.4	89.5	85.5	82.5	79.0	72.8	70.8	70.0	73.8	65.8	46.2	56.0
Unemployment rate .....	4.8	4.8	4.7	4.4	4.3	4.1	3.8	3.7	3.7	3.9	3.4	2.4	2.9
<b>South Dakota</b>													
Civilian labor force .....	390.6	391.3	390.8	391.5	392.1	392.5	394.4	395.9	397.5	398.0	398.7	398.6	398.2
Employed .....	377.9	379.5	378.7	379.8	380.3	380.9	383.0	384.8	386.7	386.7	388.2	387.8	387.3
Unemployed .....	12.7	11.8	12.1	11.7	11.8	11.6	11.3	11.2	10.8	11.3	10.5	10.8	10.9
Unemployment rate .....	3.2	3.0	3.1	3.0	3.0	2.9	2.9	2.8	2.7	2.8	2.6	2.7	2.7
<b>Tennessee</b>													
Civilian labor force .....	2,682.0	2,680.3	2,689.8	2,701.5	2,699.4	2,712.0	2,731.5	2,753.6	2,775.2	2,782.4	2,776.9	2,781.4	2,789.8
Employed .....	2,536.1	2,533.7	2,539.1	2,547.8	2,555.2	2,565.0	2,589.6	2,611.2	2,634.7	2,660.5	2,656.6	2,650.8	2,657.2
Unemployed .....	145.9	146.6	150.7	153.7	144.2	146.9	141.9	142.5	140.6	121.9	120.3	130.7	132.6
Unemployment rate .....	5.4	5.5	5.6	5.7	5.3	5.4	5.2	5.2	5.1	4.4	4.3	4.7	4.8
<b>Texas</b>													
Civilian labor force .....	9,830.4	9,848.3	9,868.2	9,883.9	9,901.6	9,922.5	9,944.2	9,955.2	9,979.9	10,011.7	10,022.0	10,051.2	10,067.6
Employed .....	9,289.1	9,310.3	9,326.2	9,345.7	9,369.9	9,397.6	9,425.5	9,454.0	9,489.4	9,520.9	9,558.1	9,581.3	9,613.0
Unemployed .....	541.3	538.0	541.9	538.2	531.7	524.9	518.8	501.3	490.5	490.9	463.9	469.9	454.6
Unemployment rate .....	5.5	5.5	5.5	5.4	5.4	5.3	5.2	5.0	4.9	4.9	4.6	4.7	4.5
<b>Utah</b>													
Civilian labor force .....	1,027.2	1,030.6	1,034.0	1,038.7	1,044.2	1,049.7	1,056.1	1,061.9	1,069.7	1,076.5	1,079.5	1,077.5	1,080.4
Employed .....	994.7	998.2	1,001.1	1,006.4	1,011.7	1,017.6	1,024.2	1,030.9	1,038.8	1,045.6	1,048.4	1,043.9	1,045.9
Unemployed .....	32.5	32.3	32.9	32.3	32.5	32.1	31.9	31.1	30.9	30.9	31.1	33.6	34.5
Unemployment rate .....	3.2	3.1	3.2	3.1	3.1	3.1	3.0	2.9	2.9	2.9	2.9	3.1	3.2
<b>Vermont</b>													
Civilian labor force .....	323.4	324.2	324.7	325.4	325.9	326.4	328.5	329.3	330.3	329.2	330.8	331.8	330.3
Employed .....	310.4	311.3	311.9	312.7	313.3	313.8	315.9	316.9	318.0	317.2	319.3	320.4	319.7
Unemployed .....	13.0	12.8	12.8	12.7	12.7	12.6	12.6	12.4	12.3	12.0	11.5	11.4	10.6
Unemployment rate .....	4.0	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.7	3.6	3.5	3.4	3.2
<b>Virginia</b>													
Civilian labor force .....	3,351.4	3,362.5	3,375.7	3,389.4	3,411.1	3,435.0	3,465.9	3,500.9	3,538.4	3,541.0	3,547.6	3,554.8	3,540.3
Employed .....	3,212.0	3,223.0	3,236.7	3,252.9	3,276.3	3,302.9	3,338.8	3,376.1	3,417.2	3,424.7	3,431.8	3,436.2	3,441.7
Unemployed .....	139.4	139.5	139.0	136.6	134.7	132.1	127.1	124.8	121.2	116.4	115.8	118.6	98.6
Unemployment rate .....	4.2	4.1	4.1	4.0	4.0	3.8	3.7	3.6	3.4	3.3	3.3	3.3	2.8
<b>Washington</b>													
Civilian labor force .....	2,976.7	2,984.7	2,995.7	3,015.2	3,009.7	3,008.9	3,011.2	3,010.2	3,016.0	3,012.2	3,009.4	3,025.7	3,000.8
Employed .....	2,827.9	2,841.7	2,854.1	2,875.0	2,869.9	2,867.6	2,875.3	2,877.7	2,882.4	2,877.6	2,884.7	2,900.7	2,874.9
Unemployed .....	148.7	143.0	141.7	140.2	139.7	141.3	135.8	132.6	133.6	134.6	124.6	125.0	125.9
Unemployment rate .....	5.0	4.8	4.7	4.7	4.6	4.7	4.5	4.4	4.4	4.5	4.1	4.1	4.2
<b>West Virginia</b>													
Civilian labor force .....	805.5	800.1	803.7	803.4	802.2	801.7	804.6	805.0	802.7	802.9	800.4	807.0	804.7
Employed .....	748.4	746.6	748.3	747.9	747.4	747.6	750.8	752.1	751.0	753.7	754.2	752.0	751.4
Unemployed .....	57.2	53.5	55.4	55.5	54.7	54.1	53.8	52.9	51.6	49.2	46.2	55.1	53.3
Unemployment rate .....	7.1	6.7	6.9	6.9	6.8	6.7	6.7	6.6	6.4	6.1	5.8	6.8	6.6
<b>Wisconsin</b>													
Civilian labor force .....	2,917.6	2,919.4	2,923.7	2,927.8	2,930.1	2,933.8	2,941.9	2,947.0	2,953.0	2,963.4	2,962.7	2,957.6	2,947.3
Employed .....	2,808.9	2,811.9	2,814.0	2,817.8	2,821.2	2,826.4	2,836.7	2,843.1	2,849.8	2,869.6	2,875.3	2,866.5	2,878.0
Unemployed .....	108.7	107.5	109.7	110.1	108.9	107.4	105.1	103.8	103.2	93.8	87.3	91.1	69.3
Unemployment rate .....	3.7	3.7	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.2	2.9	3.1	2.4
<b>Wyoming</b>													
Civilian labor force .....	249.1	248.5	248.4	249.7	250.1	250.5	252.1	253.0	254.9	254.0	254.2	255.0	254.8
Employed .....	235.5	235.8	235.5	236.9	237.5	238.2	240.1	241.4	243.5	243.5	244.0	244.3	244.3
Unemployed .....	13.7	12.7	12.9	12.8	12.6	12.3	12.1	11.6	11.4	10.6	10.2	10.7	10.5
Unemployment rate .....	5.5	5.1	5.2	5.1	5.0	4.9	4.8	4.6	4.5	4.2	4.0	4.2	4.1

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	
	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>
<b>Alabama</b> .....	2,158.3	2,134.5	2,177.3	2,133.8	99.2	77.8	108.1	72.6	4.6	3.6	5.0	3.4
Anniston .....	54.8	53.4	55.4	53.4	2.7	2.0	2.8	2.0	4.9	3.8	5.1	3.7
Birmingham .....	465.5	467.2	469.7	468.5	13.8	11.2	15.3	10.4	3.0	2.4	3.3	2.2
Decatur .....	72.6	71.2	72.2	70.9	3.5	2.6	3.8	2.3	4.8	3.6	5.3	3.2
Dothan .....	66.8	66.6	67.4	66.5	2.9	2.0	3.2	1.7	4.4	2.9	4.8	2.6
Florence .....	71.2	70.0	71.6	69.9	4.2	4.5	4.8	4.7	5.9	6.4	6.7	6.7
Gadsden .....	49.7	50.0	50.6	50.2	2.6	1.7	2.7	1.6	5.1	3.5	5.4	3.1
Huntsville .....	169.0	170.5	169.3	170.1	4.8	4.4	5.1	4.1	2.8	2.6	3.0	2.4
Mobile .....	267.3	266.6	270.7	266.6	12.7	8.5	13.4	8.1	4.8	3.2	5.0	3.0
Montgomery .....	161.3	158.0	162.0	158.5	6.4	4.5	6.8	4.2	3.9	2.8	4.2	2.6
Tuscaloosa .....	82.8	84.2	83.0	84.3	2.6	1.9	2.8	1.8	3.1	2.2	3.3	2.1
<b>Alaska</b> .....	311.3	312.1	310.2	310.8	29.9	21.7	27.1	18.8	9.6	7.0	8.7	6.0
Anchorage .....	137.2	139.4	135.9	139.0	9.4	6.8	8.4	6.1	6.8	4.8	6.2	4.4
<b>Arizona</b> .....	2,112.9	2,234.8	2,117.5	2,244.6	89.9	83.5	91.2	85.8	4.3	3.7	4.3	3.8
Flagstaff .....	57.1	58.7	57.0	60.8	4.4	4.6	4.0	3.9	7.7	7.9	7.1	6.5
Phoenix-Mesa .....	1,388.2	1,482.2	1,387.7	1,486.6	41.1	37.2	38.7	35.4	3.0	2.5	2.8	2.4
Tucson .....	353.1	367.8	354.1	365.4	10.9	10.4	10.5	9.7	3.1	2.8	3.0	2.7
Yuma .....	57.5	58.1	62.3	64.0	11.2	10.4	17.5	17.3	19.5	18.0	28.0	27.1
<b>Arkansas</b> .....	1,194.7	1,242.4	1,195.7	1,245.9	66.5	71.5	58.6	60.4	5.6	5.8	4.9	4.9
Fayetteville-Springdale-Rogers .....	135.2	140.5	135.6	141.3	4.5	5.4	3.9	4.3	3.3	3.8	2.9	3.1
Fort Smith .....	93.9	96.3	93.7	96.7	5.0	5.1	4.5	4.3	5.3	4.8	4.5	4.5
Jonesboro .....	39.7	41.8	39.4	41.8	1.8	1.9	1.6	1.6	4.6	4.5	4.1	3.9
Little Rock-North Little Rock .....	289.4	302.7	290.1	303.9	11.3	12.4	10.5	10.7	3.9	4.1	3.6	3.5
Pine Bluff .....	35.8	36.7	35.5	36.6	2.8	3.0	2.6	2.6	7.7	8.2	7.2	7.1
<b>California</b> .....	15,777.7	16,138.7	15,803.9	16,098.4	1,031.2	988.0	991.6	924.7	6.5	6.1	6.3	5.7
Bakersfield .....	277.7	276.4	278.7	282.5	39.4	40.2	33.3	34.5	14.2	14.5	11.9	12.2
Chico-Paradise .....	84.8	86.4	84.9	86.3	7.9	8.2	7.4	7.6	9.3	9.4	8.8	8.8
Fresno .....	412.6	424.0	428.0	437.8	64.7	70.3	58.8	65.2	15.7	16.6	13.7	14.9
Los Angeles-Long Beach .....	4,433.1	4,596.7	4,451.6	4,556.8	305.9	285.3	302.8	278.9	6.9	6.2	6.8	6.1
Merced .....	82.3	83.9	83.2	84.8	15.5	15.9	14.2	14.6	18.8	19.0	17.0	17.2
Modesto .....	194.7	200.0	196.9	201.0	29.0	28.0	28.5	26.6	14.9	14.0	14.5	13.3
Oakland .....	1,164.1	1,180.3	1,161.2	1,175.9	48.9	45.5	48.8	43.4	4.2	3.9	4.2	3.7
Orange County .....	1,366.1	1,403.7	1,362.1	1,400.6	43.6	39.3	43.2	37.4	3.2	2.8	3.2	2.7
Redding .....	71.8	72.6	71.9	72.0	7.5	7.7	6.9	6.8	10.4	10.6	9.5	9.5
Riverside-San Bernardino .....	1,347.2	1,383.0	1,341.3	1,376.1	85.9	80.1	86.5	76.1	6.4	5.8	6.4	5.5
Sacramento .....	734.4	744.2	730.7	741.2	39.9	38.0	38.4	35.4	5.4	5.1	5.3	4.8
Salinas .....	181.8	184.8	183.9	184.1	27.2	27.9	20.9	20.8	15.0	15.1	11.4	11.3
San Diego .....	1,272.8	1,286.0	1,267.9	1,281.2	54.1	45.0	53.8	41.7	4.3	3.5	4.2	3.3
San Francisco .....	924.0	931.4	924.8	926.9	29.2	27.6	29.2	25.9	3.2	3.0	3.2	2.8
San Jose .....	925.5	953.9	922.8	951.9	28.4	27.1	28.6	26.5	3.1	2.8	3.1	2.8
San Luis Obispo-Atascadero-Paso Robles .....	104.7	107.7	107.5	108.9	5.1	4.4	4.6	4.6	4.9	4.1	4.3	4.2
Santa Barbara-Santa Maria-Lompoc .....	197.1	193.1	197.1	194.0	11.1	10.4	9.4	8.3	5.6	5.4	4.8	4.3
Santa Cruz-Watsonville .....	141.4	145.2	144.1	148.9	14.2	14.1	12.5	12.0	10.0	9.7	8.6	8.1
Santa Rosa .....	236.8	242.4	237.2	242.5	9.3	8.7	9.1	8.1	3.9	3.6	3.8	3.3
Stockton-Lodi .....	243.5	247.0	243.8	246.4	28.2	29.3	27.1	27.2	11.6	11.8	11.1	11.0
Vallejo-Fairfield-Napa .....	234.8	241.8	233.8	241.7	14.9	13.3	14.4	12.3	6.3	5.5	6.1	5.1
Ventura .....	382.9	385.0	382.4	382.5	21.4	18.8	21.1	16.9	5.6	4.9	5.5	4.4
Visalia-Tulare-Porterville .....	159.6	159.5	160.5	163.1	27.7	29.4	22.6	25.5	17.3	18.4	14.1	15.7
Yolo .....	86.6	86.2	85.8	86.6	5.9	5.9	4.8	5.0	6.8	6.9	5.6	5.8
Yuba City .....	55.5	57.2	56.3	57.1	9.6	10.7	8.9	10.1	17.4	18.7	15.8	17.7
<b>Colorado</b> .....	2,100.3	2,202.7	2,102.8	2,203.3	75.3	72.1	64.6	66.2	3.6	3.3	3.1	3.0
Boulder-Longmont .....	161.6	170.3	162.0	170.1	4.8	4.5	4.2	4.1	3.0	2.6	2.6	2.4
Colorado Springs .....	238.3	244.2	238.7	246.4	9.3	9.3	8.1	8.6	3.9	3.8	3.4	3.5
Denver .....	1,056.5	1,105.6	1,059.0	1,109.2	33.0	29.6	28.5	27.3	3.1	2.7	2.7	2.5
Fort Collins-Loveland .....	128.1	135.4	129.5	136.0	4.7	4.3	3.9	3.8	3.6	3.2	3.0	2.8
Grand Junction .....	55.0	57.8	54.8	57.6	2.6	2.5	2.2	2.1	4.7	4.3	4.0	3.7
Greeley .....	77.7	82.4	78.3	82.2	3.4	3.0	2.8	2.7	4.4	3.7	3.5	3.3
Pueblo .....	57.5	62.6	57.8	62.3	2.9	4.2	2.4	3.8	5.0	6.8	4.2	6.1
<b>Connecticut</b> .....	1,710.4	1,712.1	1,707.6	1,700.1	94.1	70.7	88.5	62.1	5.5	4.1	5.2	3.7
Bridgeport .....	218.7	217.5	218.0	215.1	14.0	10.6	13.3	9.0	6.4	4.9	6.1	4.2
Danbury .....	106.8	108.7	106.7	108.6	3.9	3.0	3.6	2.9	3.7	2.8	3.3	2.7
Hartford .....	591.3	584.5	585.6	578.0	34.5	24.9	31.4	21.0	5.8	4.3	5.4	3.6
New Haven-Meriden .....	269.6	267.7	273.7	267.6	14.8	10.6	15.6	10.1	5.5	4.0	5.7	3.8
New London-Norwich .....	150.7	153.0	150.7	152.3	8.5	7.2	7.9	6.6	5.6	4.7	5.3	4.3
Stamford-Norwalk .....	189.4	194.2	189.9	193.7	6.5	5.2	5.9	4.4	3.4	2.7	3.1	2.3
Waterbury .....	117.0	118.9	116.0	116.9	7.8	5.9	7.3	5.2	6.7	5.0	6.3	4.4
<b>Delaware</b> .....	376.3	391.8	371.9	388.8	17.8	14.5	14.6	13.1	4.7	3.7	3.9	3.4
Dover .....	67.0	69.4	65.5	68.7	3.6	3.0	2.9	2.7	5.3	4.3	4.4	4.0
Wilmington-Newark .....	285.5	295.1	281.8	292.1	14.5	11.7	11.8	10.6	5.1	4.0	4.2	3.6

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	
	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>
<b>District of Columbia</b> .....	258.0	259.3	255.0	265.2	19.5	23.6	18.2	22.1	7.6	9.1	7.2	8.3
Washington .....	2,485.8	2,561.7	2,482.3	2,562.2	90.0	84.0	86.2	72.9	3.6	3.3	3.5	2.8
<b>Florida</b> .....	6,966.7	7,219.5	6,983.1	7,240.8	312.1	317.0	316.7	311.3	4.5	4.4	4.5	4.3
Daytona Beach .....	184.4	190.5	184.9	190.2	6.9	7.0	6.9	6.6	3.7	3.7	3.7	3.5
Fort Lauderdale .....	733.7	760.6	734.6	761.4	34.1	37.5	35.6	37.3	4.7	4.9	4.9	4.9
Fort Myers-Cape Coral .....	170.7	172.4	170.1	172.0	5.5	5.5	5.8	5.1	3.2	3.2	3.4	2.9
Fort Pierce-Port St. Lucie .....	119.8	121.3	118.9	121.1	9.0	8.3	8.8	8.0	7.5	6.9	7.4	6.6
Fort Walton Beach .....	75.6	79.2	77.2	80.2	2.7	2.9	2.6	2.7	3.6	3.7	3.3	3.3
Gainesville .....	99.4	102.7	100.2	103.3	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7
Jacksonville .....	512.7	536.9	518.3	542.0	18.1	18.2	18.0	17.8	3.5	3.4	3.5	3.3
Lakeland-Winter Haven .....	192.5	196.6	193.0	196.8	10.3	9.3	10.3	8.9	5.3	4.7	5.3	4.5
Melbourne-Titusville-Palm Bay .....	198.4	203.3	195.5	203.9	9.0	9.0	9.3	8.9	4.5	4.4	4.6	4.3
Miami .....	1,026.7	1,043.8	1,024.9	1,044.1	70.5	70.0	73.0	71.0	6.9	6.7	7.1	6.8
Naples .....	86.6	89.5	85.2	88.9	3.4	2.9	3.1	2.7	3.9	3.3	3.6	3.1
Ocala .....	92.4	94.8	92.2	95.2	4.4	4.1	4.2	3.8	4.8	4.3	4.5	4.0
Orlando .....	789.2	828.0	794.4	833.4	26.1	25.7	26.2	25.0	3.3	3.1	3.3	3.0
Panama City .....	64.3	67.1	65.4	67.5	4.1	4.9	3.7	3.9	6.3	7.2	5.7	5.8
Pensacola .....	165.2	170.5	166.0	171.9	6.5	7.2	6.6	7.3	3.9	4.2	4.0	4.3
Punta Gorda .....	45.7	46.6	45.6	46.3	1.8	1.7	1.8	1.6	4.0	3.7	4.0	3.5
Sarasota-Bradenton .....	255.3	274.9	256.8	276.6	6.5	6.6	6.9	6.9	2.5	2.4	2.7	2.5
Tallahassee .....	140.2	142.7	140.7	143.5	4.1	4.7	4.1	4.6	2.9	3.3	2.9	3.2
Tampa-St. Petersburg-Clearwater .....	1,112.0	1,159.5	1,111.3	1,161.0	37.3	38.5	37.9	37.0	3.4	3.3	3.4	3.2
West Palm Beach-Boca Raton .....	474.2	493.6	474.8	496.3	26.8	26.4	26.9	27.4	5.6	5.3	5.7	5.5
<b>Georgia</b> .....	3,893.9	3,938.5	3,876.7	3,939.8	184.4	158.4	166.7	139.7	4.7	4.0	4.3	3.5
Albany .....	57.5	57.5	57.3	57.5	3.6	4.4	3.4	3.9	6.2	7.7	5.9	6.7
Athens .....	72.9	74.7	73.3	74.4	2.2	2.2	1.9	2.0	3.1	3.0	2.6	2.7
Atlanta .....	2,046.2	2,083.4	2,040.9	2,087.9	78.3	65.9	72.9	58.9	3.8	3.2	3.6	2.8
Augusta-Aiken .....	204.7	201.7	204.5	202.5	12.9	9.3	11.7	8.6	6.3	4.6	5.7	4.2
Columbus .....	122.4	122.5	122.0	122.5	5.8	5.2	5.5	4.8	4.7	4.2	4.5	4.0
Macon .....	152.7	154.4	151.8	154.2	8.0	7.7	7.0	7.0	5.3	5.0	4.6	4.5
Savannah .....	134.8	133.2	133.8	133.4	7.7	5.3	6.3	4.8	5.7	4.0	4.7	3.6
<b>Hawaii</b> .....	590.3	591.4	590.9	592.7	37.5	32.8	39.2	31.7	6.4	5.5	6.6	5.3
Honolulu .....	425.0	424.9	425.3	426.1	22.6	19.6	23.0	19.4	5.3	4.6	5.4	4.5
<b>Idaho</b> .....	622.1	638.5	623.4	639.3	40.4	39.8	36.0	35.1	6.5	6.2	5.8	5.5
Boise City .....	210.8	217.8	210.4	216.7	8.6	8.6	8.1	8.1	4.1	4.0	3.9	3.7
Pocatello .....	39.3	40.9	38.9	40.6	2.3	2.2	2.0	2.0	5.9	5.5	5.2	4.9
<b>Illinois</b> .....	6,073.9	6,147.6	6,076.9	6,107.3	310.4	297.7	279.8	251.7	5.1	4.8	4.6	4.1
Bloomington-Normal .....	80.3	83.4	81.0	83.3	2.3	2.4	2.0	2.0	2.9	2.9	2.4	2.4
Champaign-Urbana .....	94.2	95.0	93.7	93.6	2.8	3.1	2.6	2.4	3.0	3.3	2.7	2.6
Chicago .....	4,036.9	4,095.5	4,038.5	4,065.6	198.2	186.6	181.2	161.0	4.9	4.6	4.5	4.0
Davenport-Moline-Rock Island .....	182.1	185.9	182.1	185.2	7.9	7.0	6.9	5.7	4.4	3.8	3.8	3.1
Decatur .....	57.9	57.4	58.4	57.6	4.4	3.4	4.1	3.1	7.6	5.9	7.0	5.3
Kankakee .....	51.2	51.7	51.3	51.5	3.3	3.4	2.9	2.9	6.5	6.5	5.7	5.7
Peoria-Pekin .....	178.6	181.6	179.7	180.3	9.0	7.7	7.9	5.8	5.0	4.2	4.4	3.2
Rockford .....	193.1	196.2	193.6	194.5	9.0	9.3	8.0	7.7	4.7	4.7	4.1	3.9
Springfield .....	104.4	106.1	105.1	105.7	4.7	4.8	4.2	3.8	4.5	4.5	4.0	3.6
<b>Indiana</b> .....	3,050.8	3,105.4	3,083.5	3,113.6	117.1	116.9	109.7	90.2	3.8	3.8	3.6	2.9
Bloomington .....	61.5	62.6	62.6	63.1	1.5	1.6	1.4	1.7	2.5	2.6	2.2	2.7
Elkhart-Goshen .....	93.4	92.9	94.0	92.7	3.1	2.7	2.9	2.2	3.3	2.9	3.0	2.3
Evansville-Henderson .....	155.8	156.0	156.9	155.8	7.4	6.3	7.1	5.6	4.8	4.0	4.5	3.6
Fort Wayne .....	260.6	266.4	263.8	266.7	8.3	8.6	7.7	6.4	3.2	3.2	2.9	2.4
Gary .....	299.4	303.3	304.3	304.9	12.9	14.7	13.8	10.8	4.3	4.9	4.5	3.6
Indianapolis .....	814.5	842.3	821.4	842.3	23.8	24.5	22.9	20.0	2.9	2.9	2.8	2.4
Kokomo .....	50.9	52.1	51.2	52.6	1.8	1.9	1.6	1.4	3.5	3.6	3.2	2.7
Lafayette .....	88.8	91.0	89.7	91.5	2.4	2.5	2.1	2.0	2.7	2.8	2.4	2.2
Muncie .....	63.3	63.6	64.0	63.4	2.6	3.1	2.5	2.6	4.1	4.9	4.0	4.1
South Bend .....	134.8	136.9	136.0	136.3	4.9	4.7	4.6	3.5	3.6	3.5	3.4	2.6
Terre Haute .....	72.4	71.8	73.0	71.5	4.6	4.5	4.4	3.6	6.3	6.2	6.0	5.0
<b>Iowa</b> .....	1,576.7	1,579.6	1,571.9	1,576.9	66.8	49.9	54.7	38.6	4.2	3.2	3.5	2.5
Cedar Rapids .....	109.0	112.4	108.3	111.2	3.8	2.5	3.2	2.0	3.4	2.2	3.0	1.8
Des Moines .....	254.2	254.4	251.0	252.3	8.1	6.3	7.0	4.7	3.2	2.5	2.8	1.9
Dubuque .....	49.7	50.4	49.4	50.1	2.6	1.9	2.2	1.5	5.2	3.8	4.5	2.9
Iowa City .....	65.7	67.0	65.5	66.7	1.8	1.4	1.6	1.2	2.7	2.1	2.4	1.8
Sioux City .....	65.2	65.4	65.2	65.1	2.9	2.0	2.6	1.7	4.4	3.0	4.0	2.6
Waterloo-Cedar Falls .....	69.4	70.6	68.7	69.7	3.2	2.5	2.8	2.1	4.6	3.5	4.1	3.0

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	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Kansas</b> .....	1,340.7	1,403.0	1,341.2	1,404.9	52.7	50.8	51.1	46.1	3.9	3.6	3.8	3.3
Lawrence .....	52.6	55.9	53.2	55.6	2.2	2.2	2.2	2.0	4.1	3.9	4.1	3.5
Topeka .....	88.4	89.4	87.0	88.6	4.2	4.1	4.0	3.3	4.8	4.6	4.6	3.7
Wichita .....	268.4	284.3	269.2	284.0	9.3	7.8	9.4	7.6	3.5	2.8	3.5	2.7
<b>Kentucky</b> .....	1,890.4	1,919.2	1,906.2	1,924.0	110.8	88.3	102.8	74.9	5.9	4.6	5.4	3.9
Lexington .....	245.3	255.2	250.0	259.0	6.6	5.4	6.7	4.7	2.7	2.1	2.7	1.8
Louisville .....	535.3	554.8	540.2	555.4	22.8	18.4	21.9	15.2	4.3	3.3	4.0	2.7
Owensboro .....	48.9	49.8	49.1	49.3	3.3	2.1	2.9	1.6	6.7	4.3	5.9	3.3
<b>Louisiana</b> .....	2,008.5	2,024.4	2,007.4	2,042.1	121.8	90.9	113.4	101.2	6.1	4.5	5.6	5.0
Alexandria .....	58.3	58.5	58.1	58.9	3.6	2.5	3.2	2.6	6.1	4.2	5.5	4.4
Baton Rouge .....	289.0	294.0	287.5	296.0	13.9	10.4	13.8	11.7	4.8	3.5	4.8	3.9
Houma .....	86.6	92.0	88.0	93.3	3.4	2.4	3.1	2.8	3.9	2.6	3.5	3.0
Lafayette .....	171.6	177.5	173.0	179.0	8.8	8.0	8.3	8.7	5.1	4.5	4.8	4.9
Lake Charles .....	91.2	90.6	90.8	91.5	5.5	3.7	5.3	4.2	6.0	4.1	5.9	4.6
Monroe .....	70.0	69.9	69.9	70.2	4.5	3.1	4.1	3.2	6.4	4.4	5.8	4.6
New Orleans .....	613.6	614.2	612.8	619.0	32.1	23.4	30.3	26.5	5.2	3.8	5.0	4.3
Shreveport-Bossier City .....	183.4	187.2	183.1	188.3	12.0	9.4	11.4	10.0	6.6	5.0	6.2	5.3
<b>Maine</b> .....	655.9	649.5	650.7	644.6	43.8	36.1	40.6	30.0	6.7	5.6	6.2	4.6
Bangor .....	49.3	50.8	50.3	50.7	2.5	2.0	2.4	1.6	5.2	3.9	4.7	3.1
Lewiston-Auburn .....	51.7	51.6	51.0	50.7	3.8	2.9	3.2	2.4	7.3	5.6	6.3	4.7
Portland .....	131.7	133.0	130.6	130.4	4.4	3.8	3.9	3.1	3.4	2.9	3.0	2.3
<b>Maryland</b> .....	2,764.0	2,767.4	2,758.5	2,760.6	142.1	131.1	132.9	113.8	5.1	4.7	4.8	4.1
Baltimore .....	1,308.6	1,307.7	1,305.8	1,306.0	73.3	67.7	69.1	60.1	5.6	5.2	5.3	4.6
Cumberland .....	45.6	46.3	45.7	46.0	4.4	3.9	3.8	3.2	9.6	8.4	8.3	7.0
Hagerstown .....	69.9	72.2	69.4	71.4	4.0	3.7	3.1	2.6	5.8	5.1	4.4	3.6
<b>Massachusetts</b> .....	3,236.1	3,249.3	3,231.4	3,213.0	147.8	137.4	131.9	91.9	4.6	4.2	4.1	2.9
Barnstable-Yarmouth .....	66.9	67.7	68.9	68.7	5.1	4.9	3.9	2.7	7.6	7.2	5.6	3.9
Boston .....	1,800.3	1,806.3	1,793.9	1,788.0	66.4	60.7	60.9	42.6	3.7	3.4	3.4	2.4
Brockton .....	131.4	131.7	131.3	130.1	6.8	6.2	6.2	4.2	5.2	4.7	4.7	3.2
Fitchburg-Leominster .....	69.5	70.4	70.4	69.4	3.7	3.3	3.4	2.2	5.3	4.7	4.9	3.1
Lawrence .....	195.4	197.6	196.4	196.1	10.4	9.5	9.8	7.6	5.3	4.8	5.0	3.9
Lowell .....	161.0	166.8	161.0	164.2	6.9	6.5	6.2	4.5	4.3	3.9	3.8	2.7
New Bedford .....	82.1	82.4	81.3	80.1	7.6	7.5	6.3	4.6	9.2	9.0	7.8	5.7
Pittsfield .....	39.8	39.6	39.6	38.9	2.8	2.4	2.4	1.5	7.0	6.0	6.1	4.0
Springfield .....	283.8	286.3	283.7	283.3	13.6	14.0	11.9	9.3	4.8	4.9	4.2	3.3
Worcester .....	249.1	248.9	248.1	246.2	10.5	10.0	9.3	6.8	4.2	4.0	3.8	2.8
<b>Michigan</b> .....	4,940.8	5,008.3	4,916.1	4,957.7	241.4	222.5	210.3	169.1	4.9	4.4	4.3	3.4
Ann Arbor .....	290.1	294.9	288.0	292.3	8.6	7.3	7.6	5.5	3.0	2.5	2.6	1.9
Benton Harbor .....	82.9	82.6	82.5	82.0	4.9	4.3	4.2	3.3	5.9	5.2	5.0	4.1
Detroit .....	2,217.4	2,251.7	2,204.5	2,230.4	92.4	84.4	84.4	68.2	4.2	3.7	3.8	3.1
Flint .....	204.8	205.4	201.8	202.0	12.2	10.9	10.7	8.9	6.0	5.3	5.3	4.4
Grand Rapids-Muskegon-Holland .....	575.2	589.1	573.8	585.2	21.6	20.4	17.9	15.1	3.7	3.5	3.1	2.6
Jackson .....	75.9	76.2	75.8	75.7	3.8	3.3	3.4	2.5	5.1	4.3	4.5	3.3
Kalamazoo-Battle Creek .....	229.2	230.9	228.6	228.3	10.2	9.2	8.5	7.0	4.4	4.0	3.7	3.1
Lansing-East Lansing .....	243.5	244.4	241.9	242.6	8.3	9.1	6.9	5.8	3.4	3.7	2.9	2.4
Saginaw-Bay City-Midland .....	198.7	200.6	197.9	199.0	11.0	10.4	8.8	8.1	5.6	5.2	4.4	4.1
<b>Minnesota</b> .....	2,572.2	2,657.4	2,592.2	2,679.3	97.0	84.5	94.6	71.5	3.8	3.2	3.6	2.7
Duluth-Superior .....	121.2	124.4	121.6	125.1	7.1	6.3	7.3	5.5	5.9	5.1	6.0	4.4
Minneapolis-St. Paul .....	1,608.1	1,670.0	1,612.0	1,678.8	43.3	37.3	41.4	32.5	2.7	2.2	2.6	1.9
Rochester .....	64.7	67.7	65.0	68.0	1.6	1.3	1.5	1.2	2.5	1.9	2.4	1.7
St. Cloud .....	91.7	93.8	92.7	94.6	4.8	3.9	4.5	2.9	5.2	4.1	4.9	3.1
<b>Mississippi</b> .....	1,254.7	1,286.6	1,245.3	1,272.1	74.0	74.5	64.1	60.9	5.9	5.8	5.1	4.8
Biloxi-Gulfport-Pascagoula .....	159.4	163.8	158.4	163.0	8.5	6.4	7.9	5.8	5.3	3.9	5.0	3.6
Hattiesburg .....	50.1	52.2	49.9	51.5	1.6	2.0	1.4	1.5	3.1	3.8	2.9	2.8
Jackson .....	218.9	228.9	218.7	228.4	7.7	7.8	7.0	6.7	3.5	3.4	3.2	2.9
<b>Missouri</b> .....	2,868.0	2,872.9	2,884.1	2,909.4	130.7	128.0	120.7	123.5	4.6	4.5	4.2	4.2
Columbia .....	80.3	79.7	81.2	81.1	1.3	1.3	1.1	1.2	1.7	1.7	1.4	1.5
Joplin .....	80.6	79.9	80.7	81.0	3.2	3.0	3.0	3.2	4.0	3.8	3.7	4.0
Kansas City .....	946.8	983.9	948.3	986.0	34.5	36.6	37.7	35.3	3.6	3.7	4.0	3.6
St. Joseph .....	49.0	49.4	49.0	49.7	2.8	2.8	2.6	2.6	5.7	5.6	5.2	5.2
St. Louis LMA .....	1,340.5	1,342.2	1,344.9	1,353.0	55.2	57.5	51.3	57.4	4.1	4.3	3.8	4.2
Springfield .....	165.8	166.0	168.2	170.5	6.3	5.7	5.5	5.5	3.8	3.4	3.3	3.2
<b>Montana</b> .....	448.1	459.7	451.6	462.1	28.1	28.9	24.6	24.9	6.3	6.3	5.5	5.4
Billings .....	68.1	70.2	68.7	70.3	3.4	3.5	3.1	2.9	5.0	5.0	4.5	4.1
Great Falls .....	37.5	37.5	37.8	37.7	2.2	2.2	2.0	1.9	6.0	5.9	5.3	5.0

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	
	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>
<b>Nebraska</b> .....	890.9	918.5	892.0	921.5	26.8	21.2	21.6	14.9	3.0	2.3	2.4	1.6
Lincoln .....	140.2	141.8	140.0	140.9	3.5	2.4	2.9	1.7	2.5	1.7	2.0	1.2
Omaha .....	379.4	395.5	377.2	396.8	11.3	9.0	9.4	6.4	3.0	2.3	2.5	1.6
<b>Nevada</b> .....	864.6	902.7	867.4	906.2	33.8	39.4	34.3	40.6	3.9	4.4	3.9	4.5
Las Vegas .....	652.8	684.8	653.4	686.2	25.0	27.9	25.0	28.8	3.8	4.1	3.8	4.2
Reno .....	167.5	172.3	168.7	173.4	6.2	7.1	6.4	7.1	3.7	4.1	3.8	4.1
<b>New Hampshire</b> .....	631.2	647.9	636.4	649.5	21.3	21.4	22.0	19.6	3.4	3.3	3.5	3.0
Manchester .....	99.6	102.2	100.1	101.8	2.9	2.8	2.9	2.4	2.9	2.8	2.9	2.4
Nashua .....	98.8	104.0	99.6	105.1	2.8	2.9	2.7	2.8	2.9	2.8	2.8	2.6
Portsmouth-Rochester .....	120.7	122.2	121.8	124.2	3.7	3.3	3.8	2.9	3.1	2.7	3.2	2.3
<b>New Jersey</b> .....	4,172.9	4,172.8	4,161.4	4,153.2	226.0	220.1	200.4	197.7	5.4	5.3	4.8	4.8
Atlantic-Cape May .....	169.0	170.9	169.9	171.3	16.5	18.5	13.9	15.4	9.7	10.8	8.2	9.0
Bergen-Passaic .....	676.6	674.4	674.9	671.7	36.9	33.4	33.6	29.8	5.5	5.0	5.0	4.4
Jersey City .....	285.8	282.8	283.9	280.5	22.6	22.6	21.1	21.0	7.9	8.0	7.4	7.5
Middlesex-Somerset-Hunterdon .....	632.9	647.0	632.8	642.3	23.3	23.3	20.7	21.6	3.7	3.6	3.3	3.4
Monmouth-Ocean .....	510.9	509.6	514.1	510.0	26.7	25.8	23.0	23.0	5.2	5.1	4.5	4.5
Newark .....	1,021.2	1,020.7	1,013.6	1,011.7	54.6	50.8	48.8	46.1	5.3	5.0	4.8	4.6
Trenton .....	171.9	170.0	171.2	168.3	8.1	7.9	7.1	6.6	4.7	4.6	4.2	3.9
Vineland-Millville-Bridgeton .....	65.1	66.5	64.5	66.5	6.2	7.2	5.5	6.3	9.5	10.8	8.5	9.5
<b>New Mexico</b> .....	809.9	840.7	812.4	841.0	52.9	54.3	49.7	50.1	6.5	6.5	6.1	6.0
Albuquerque .....	351.5	367.5	354.3	368.6	14.6	16.1	13.7	15.2	4.1	4.4	3.9	4.1
Las Cruces .....	65.8	69.5	66.4	68.7	6.5	7.1	6.2	5.9	9.9	10.2	9.3	8.6
Santa Fe .....	73.7	75.8	73.3	76.4	2.9	2.6	2.7	2.4	3.9	3.4	3.7	3.1
<b>New York</b> .....	8,782.4	8,775.4	8,741.0	8,704.9	611.4	571.1	559.4	494.5	7.0	6.5	6.4	5.7
Albany-Schenectady-Troy .....	451.4	451.0	450.0	449.0	20.8	20.6	17.7	16.5	4.6	4.6	3.9	3.7
Binghamton .....	123.4	126.1	123.2	124.6	6.0	6.3	5.2	4.9	4.9	5.0	4.2	3.9
Buffalo-Niagara Falls .....	577.2	578.1	574.4	573.3	32.8	35.0	28.6	31.6	5.7	6.1	5.0	5.5
Dutchess County .....	118.7	118.8	118.5	118.5	5.3	4.6	4.6	3.9	4.5	3.9	3.9	3.3
Elmira .....	44.3	44.3	44.0	43.7	2.0	2.3	1.7	1.8	4.5	5.1	3.9	4.2
Glens Falls .....	59.5	59.9	59.4	59.6	5.0	4.9	4.1	3.6	8.3	8.2	6.9	6.1
Jamestown .....	67.8	67.6	67.1	66.7	4.1	4.2	3.7	3.6	6.1	6.1	5.5	5.4
Nassau-Suffolk .....	1,371.8	1,388.0	1,373.0	1,385.5	52.2	51.3	46.4	46.9	3.8	3.7	3.4	3.4
New York .....	4,042.2	4,015.7	4,005.6	3,971.4	372.1	327.8	349.1	290.2	9.2	8.2	8.7	7.3
New York City .....	3,410.4	3,380.1	3,377.8	3,337.1	348.4	304.9	328.1	269.9	10.2	9.0	9.7	8.1
Newburgh .....	170.2	169.5	169.2	168.1	7.9	7.2	7.1	6.2	4.6	4.3	4.2	3.7
Rochester .....	569.2	568.2	568.8	564.6	24.9	26.5	21.8	22.6	4.4	4.7	3.8	4.0
Syracuse .....	364.3	362.7	366.2	360.1	18.8	18.9	16.6	14.8	5.2	5.2	4.5	4.1
Utica-Rome .....	141.1	141.9	141.1	140.7	8.4	8.5	7.7	6.8	5.9	6.0	5.5	4.9
<b>North Carolina</b> .....	3,808.7	3,809.7	3,819.2	3,795.4	134.4	145.0	121.3	127.5	3.5	3.8	3.2	3.4
Asheville .....	110.4	110.9	111.5	110.6	3.3	3.5	2.9	2.8	3.0	3.2	2.6	2.5
Charlotte-Gastonia-Rock Hill .....	746.7	748.7	747.3	743.2	21.8	20.7	20.1	18.2	2.9	2.8	2.7	2.4
Fayetteville .....	112.1	115.0	112.3	113.7	4.2	4.8	4.1	3.9	3.7	4.2	3.6	3.5
Goldensboro .....	46.8	48.5	46.9	48.3	1.6	2.1	1.6	1.9	3.4	4.2	3.3	3.9
Greensboro-Winston-Salem-High Point .....	641.7	636.4	640.5	631.8	18.3	19.0	15.8	17.8	2.9	3.0	2.5	2.8
Greenville .....	64.2	66.1	64.1	65.5	2.8	2.9	2.9	2.8	4.3	4.4	4.5	4.3
Hickory-Morganton-Lenoir .....	175.8	171.4	175.0	170.8	5.2	5.6	5.1	5.3	2.9	3.3	2.9	3.1
Jacksonville .....	44.1	45.3	43.9	44.9	1.4	1.9	1.2	1.4	3.1	4.1	2.8	3.1
Raleigh-Durham-Chapel Hill .....	601.5	616.8	608.7	614.2	11.2	11.5	10.1	10.1	1.9	1.9	1.7	1.6
Rocky Mount .....	71.2	69.6	71.3	68.9	5.1	5.4	4.8	4.7	7.2	7.7	6.7	6.8
Wilmington .....	107.9	106.6	108.0	106.3	3.9	5.2	3.4	4.0	3.6	4.8	3.2	3.8
<b>North Dakota</b> .....	340.4	338.8	346.7	343.0	11.0	9.5	10.2	6.8	3.2	2.8	2.9	2.0
Bismarck .....	53.3	53.1	53.6	53.2	1.9	1.5	1.6	1.0	3.6	2.9	3.0	1.9
Fargo-Moorhead .....	100.3	102.9	101.8	103.0	2.3	1.9	2.4	1.4	2.3	1.8	2.3	1.3
Grand Forks .....	53.9	53.9	53.9	54.0	1.8	1.4	1.7	1.1	3.3	2.6	3.2	2.1
<b>Ohio</b> .....	5,611.0	5,745.8	5,619.1	5,719.3	290.5	270.8	253.8	208.9	5.2	4.7	4.5	3.7
Akron .....	358.8	367.4	358.7	364.7	17.9	16.9	15.3	12.4	5.0	4.6	4.3	3.4
Canton-Massillon .....	200.2	205.2	199.9	204.6	11.5	9.9	10.0	7.4	5.7	4.8	5.0	3.6
Cincinnati .....	820.8	847.4	824.6	848.5	33.3	30.0	30.5	24.3	4.1	3.5	3.7	2.9
Cleveland-Lorain-Elyria .....	1,095.2	1,125.6	1,098.0	1,120.0	60.5	55.6	53.4	42.2	5.5	4.9	4.9	3.8
Columbus .....	788.2	815.6	790.7	815.9	25.0	23.8	22.0	19.0	3.2	2.9	2.8	2.3
Dayton-Springfield .....	471.5	479.3	470.4	475.6	20.5	18.6	17.8	15.0	4.3	3.9	3.8	3.1
Hamilton-Middletown .....	172.4	175.7	172.5	175.7	6.4	6.5	5.6	5.2	3.7	3.7	3.2	3.0
Lima .....	73.6	75.6	74.1	76.0	4.0	3.6	3.7	3.1	5.5	4.8	4.9	4.1
Mansfield .....	82.0	82.9	82.1	82.3	5.2	4.8	4.6	4.0	6.3	5.8	5.6	4.8
Steubenville-Weirton .....	58.0	57.2	58.9	57.5	7.9	4.2	8.0	3.7	13.7	7.3	13.6	6.5
Toledo .....	312.4	316.5	311.1	315.2	15.5	15.5	13.5	13.1	5.0	4.9	4.3	4.2
Youngstown-Warren .....	282.2	289.6	281.7	287.7	18.0	17.7	15.8	13.9	6.4	6.1	5.6	4.8

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	March		April		March		April		March		April	
	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>	1997	1998	1997	1998 <sup>P</sup>
<b>Oklahoma</b> .....	1,592.3	1,613.5	1,595.9	1,610.7	68.4	57.9	65.1	56.8	4.3	3.6	4.1	3.5
Enid .....	27.5	28.6	28.0	28.4	0.9	0.9	0.9	0.8	3.2	3.1	3.0	2.8
Lawton .....	41.1	40.1	40.9	40.0	2.1	1.7	2.1	1.7	5.2	4.3	5.1	4.2
Oklahoma City .....	523.1	530.1	524.1	529.2	17.1	15.3	16.5	15.3	3.3	2.9	3.1	2.9
Tulsa .....	394.9	406.1	395.2	404.9	14.3	11.1	13.8	11.0	3.6	2.7	3.5	2.7
<b>Oregon</b> .....	1,698.4	1,767.4	1,707.5	1,764.2	122.9	102.0	105.9	92.8	7.2	5.8	6.2	5.3
Eugene-Springfield .....	156.4	161.7	156.9	161.7	11.0	9.3	9.5	8.4	7.0	5.7	6.1	5.2
Medford-Ashland .....	85.4	87.7	85.0	87.5	8.4	6.8	7.2	5.9	9.9	7.7	8.4	6.8
Portland-Vancouver .....	1,003.9	1,054.5	1,011.5	1,050.6	50.6	42.5	45.0	39.7	5.0	4.0	4.4	3.8
Salem .....	160.1	163.3	161.0	164.0	11.6	9.4	10.3	8.7	7.2	5.7	6.4	5.3
<b>Pennsylvania</b> .....	5,923.1	5,923.5	5,924.2	5,925.6	337.9	301.9	322.8	258.9	5.7	5.1	5.4	4.4
Allentown-Bethlehem-Easton .....	307.0	306.0	306.1	305.4	16.9	14.8	16.3	13.7	5.5	4.8	5.3	4.5
Altoona .....	61.8	62.7	62.6	62.9	3.8	3.5	3.7	3.2	6.1	5.5	6.0	5.0
Erie .....	139.6	138.9	139.0	138.1	9.4	8.1	9.0	7.1	6.7	5.8	6.5	5.1
Harrisburg-Lebanon-Carlisle .....	345.5	349.1	346.4	351.0	12.3	12.0	11.7	10.2	3.6	3.4	3.4	2.9
Johnstown .....	106.8	105.5	105.6	105.5	10.0	8.3	9.0	6.6	9.3	7.8	8.6	6.2
Lancaster .....	236.8	243.2	238.5	245.9	7.2	7.5	6.6	6.4	3.0	3.1	2.8	2.6
Philadelphia .....	2,481.5	2,463.0	2,481.5	2,469.7	124.9	111.5	120.6	103.2	5.0	4.5	4.9	4.2
Pittsburgh .....	1,150.5	1,146.0	1,147.8	1,138.8	63.9	60.5	60.0	49.6	5.6	5.3	5.2	4.4
Reading .....	182.8	184.4	182.5	185.0	8.6	8.2	8.0	7.3	4.7	4.5	4.4	4.0
Scranton-Wilkes-Barre-Hazleton .....	313.3	310.7	311.9	309.0	25.0	21.6	23.6	17.9	8.0	7.0	7.6	5.8
Sharon .....	55.3	56.2	56.8	56.5	3.8	2.7	3.9	2.4	6.8	4.9	6.8	4.2
State College .....	65.3	67.4	66.3	68.3	2.4	2.1	2.0	1.6	3.6	3.2	2.9	2.3
Williamsport .....	57.4	57.8	57.1	57.9	4.2	3.9	3.8	3.1	7.2	6.7	6.7	5.3
York .....	192.3	194.3	192.8	194.5	8.8	7.8	8.5	6.6	4.6	4.0	4.4	3.4
<b>Rhode Island</b> .....	496.0	502.5	495.3	496.4	29.7	27.9	26.2	22.9	6.0	5.6	5.3	4.6
Providence-Fall River-Warwick .....	571.2	576.5	569.3	566.9	36.6	33.9	32.4	25.9	6.4	5.9	5.7	4.6
<b>South Carolina</b> .....	1,906.8	1,898.2	1,910.9	1,911.6	96.6	44.8	83.2	47.1	5.1	2.4	4.4	2.5
Charleston-North Charleston .....	251.0	255.5	251.6	258.1	11.8	4.7	10.5	5.2	4.7	1.8	4.2	2.0
Columbia .....	270.1	271.9	270.1	274.0	8.3	3.6	7.0	3.8	3.1	1.3	2.6	1.4
Florence .....	64.5	61.9	63.9	62.0	4.0	1.8	3.5	1.8	6.2	3.0	5.4	3.0
Greenville-Spartanburg-Anderson .....	481.4	483.1	483.4	488.3	17.4	7.3	15.3	8.2	3.6	1.5	3.2	1.7
Myrtle Beach .....	96.1	98.0	98.9	100.6	5.1	2.6	3.6	2.1	5.3	2.7	3.7	2.1
Sumter .....	46.7	46.2	46.6	46.2	2.8	1.4	2.4	1.5	6.0	3.0	5.2	3.2
<b>South Dakota</b> .....	384.7	392.5	389.3	396.9	14.8	13.0	12.1	10.4	3.8	3.3	3.1	2.6
Rapid City .....	45.0	45.6	44.8	45.8	1.8	1.4	1.5	1.2	3.9	3.0	3.4	2.6
Sioux Falls .....	96.0	101.2	96.7	101.5	2.4	2.0	1.9	1.6	2.5	2.0	2.0	1.6
<b>Tennessee</b> .....	2,660.7	2,760.2	2,647.8	2,755.4	147.0	130.7	135.7	122.1	5.5	4.7	5.1	4.4
Chattanooga .....	219.7	225.5	219.2	225.1	10.6	9.9	10.4	9.4	4.8	4.4	4.7	4.2
Clarksville-Hopkinsville .....	79.3	82.6	79.0	82.6	3.5	3.1	3.2	2.9	4.4	3.8	4.0	3.5
Jackson .....	54.2	56.8	53.5	56.6	2.7	2.1	2.5	2.1	5.0	3.8	4.7	3.7
Johnson City-Kingsport-Bristol .....	223.8	233.0	223.2	232.0	10.7	10.8	10.2	9.9	4.8	4.6	4.6	4.3
Knoxville .....	328.9	341.2	329.0	340.6	17.8	14.9	14.9	12.2	5.4	4.4	4.5	3.6
Memphis .....	522.8	540.1	517.6	539.3	22.9	21.9	22.4	21.7	4.4	4.1	4.3	4.0
Nashville .....	601.5	635.5	599.4	635.6	20.7	18.9	20.4	18.6	3.4	3.0	3.4	2.9
<b>Texas</b> .....	9,750.1	9,973.8	9,751.9	9,996.0	535.6	459.5	502.1	421.4	5.5	4.6	5.1	4.2
Abilene .....	60.1	60.5	59.9	60.6	2.7	2.0	2.4	1.8	4.5	3.3	4.0	3.0
Amarillo .....	109.8	111.5	110.0	111.6	4.5	3.8	4.1	3.4	4.1	3.4	3.8	3.1
Austin-San Marcos .....	641.2	663.9	642.0	666.1	20.1	16.5	18.1	15.0	3.1	2.5	2.8	2.3
Beaumont-Port Arthur .....	179.2	181.0	179.1	181.5	14.9	12.2	14.4	11.7	8.3	6.8	8.1	6.4
Brazoria .....	105.3	105.0	104.2	104.6	7.4	6.0	7.5	5.6	7.0	5.7	7.2	5.3
Brownsville-Harlingen-San Benito .....	124.8	127.8	124.6	126.9	15.1	15.6	15.0	14.0	12.1	12.2	12.0	11.1
Bryan-College Station .....	70.7	72.1	71.5	72.8	1.5	1.1	1.4	1.0	2.1	1.5	2.0	1.4
Corpus Christi .....	177.7	175.1	177.1	175.8	14.7	10.5	13.7	10.2	8.3	6.0	7.7	5.8
Dallas .....	1,771.6	1,844.8	1,777.9	1,846.9	67.0	57.2	63.1	53.0	3.8	3.1	3.5	2.9
El Paso .....	286.4	287.1	286.2	287.5	32.6	27.4	30.9	25.5	11.4	9.5	10.8	8.9
Fort Worth-Arlington .....	833.2	853.8	836.6	859.7	30.7	26.9	29.0	25.0	3.7	3.1	3.5	2.9
Galveston-Texas City .....	123.4	123.3	123.8	123.6	10.2	7.8	10.2	7.2	8.3	6.3	8.2	5.8
Houston .....	2,027.3	2,080.7	2,023.2	2,085.4	105.5	81.6	101.6	76.4	5.2	3.9	5.0	3.7
Killeen-Temple .....	112.4	113.8	112.8	114.5	5.9	4.8	5.4	4.4	5.3	4.2	4.8	3.9
Laredo .....	69.6	70.2	69.5	70.3	8.1	6.6	7.2	6.2	11.6	9.4	10.4	8.8
Longview-Marshall .....	102.4	102.6	102.6	102.6	7.7	6.5	7.2	5.9	7.5	6.4	7.0	5.8
Lubbock .....	121.1	123.2	121.1	123.7	4.7	4.1	4.4	3.7	3.9	3.3	3.7	3.0
McAllen-Edinburg-Mission .....	191.9	199.5	188.8	195.9	36.0	34.8	31.1	28.9	18.8	17.5	16.5	14.8
Odessa-Midland .....	121.4	124.9	122.4	125.4	6.5	5.3	6.3	5.3	5.4	4.2	5.1	4.2
San Angelo .....	51.2	50.8	51.3	50.6	1.7	1.5	1.6	1.4	3.4	3.0	3.2	2.7
San Antonio .....	735.5	755.0	735.8	757.9	28.9	27.4	26.9	24.4	3.9	3.6	3.7	3.2
Sherman-Denison .....	50.0	49.8	49.8	50.0	2.4	2.0	2.3	1.9	4.8	4.0	4.6	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	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Texas—Continued</b>												
Texarkana .....	56.3	57.2	56.2	57.1	4.3	4.3	4.0	3.9	7.6	7.4	7.1	6.8
Tyler .....	87.6	89.1	87.6	89.5	5.0	4.3	4.6	4.0	5.7	4.8	5.3	4.4
Victoria .....	42.5	43.1	42.6	43.3	2.3	1.8	2.2	1.7	5.4	4.1	5.1	4.0
Waco .....	99.0	100.7	99.1	101.2	4.5	4.4	4.2	4.0	4.6	4.4	4.2	4.0
Wichita Falls .....	65.1	65.8	65.5	66.1	2.9	3.0	2.7	2.7	4.4	4.5	4.2	4.1
<b>Utah</b> .....	1,005.4	1,058.6	1,012.7	1,064.8	30.3	32.5	30.6	32.5	3.0	3.1	3.0	3.1
Provo-Orem .....	150.4	156.9	151.2	157.8	3.8	4.0	3.8	4.1	2.6	2.6	2.5	2.6
Salt Lake City-Ogden .....	645.4	680.9	649.5	684.5	17.7	19.5	18.3	20.0	2.7	2.9	2.8	2.9
<b>Vermont</b> .....	320.6	329.1	320.4	327.1	14.5	12.6	13.9	11.3	4.5	3.8	4.3	3.4
Burlington .....	95.0	99.4	95.8	98.7	2.9	2.5	2.8	2.0	3.1	2.5	2.9	2.1
<b>Virginia</b> .....	3,321.8	3,531.1	3,339.3	3,531.4	131.5	112.1	126.8	89.7	4.0	3.2	3.8	2.5
Charlottesville .....	70.8	74.6	71.6	75.1	1.8	1.1	1.5	0.8	2.5	1.5	2.1	1.1
Danville .....	54.8	57.7	55.2	58.1	3.2	2.9	3.5	3.0	5.9	5.1	6.3	5.2
Lynchburg .....	99.3	103.4	99.4	103.4	4.0	2.8	3.6	2.3	4.0	2.7	3.6	2.2
Norfolk-Virginia Beach-Newport News .....	702.6	740.6	705.9	739.1	32.5	26.7	32.4	21.7	4.6	3.6	4.6	2.9
Richmond-Petersburg .....	482.4	522.9	486.7	522.8	15.8	14.5	15.8	11.7	3.3	2.8	3.2	2.2
Roanoke .....	123.9	130.1	124.4	128.9	4.3	3.6	4.4	2.8	3.5	2.8	3.5	2.2
<b>Washington</b> .....	2,941.0	3,008.6	2,954.4	2,978.4	164.3	141.1	146.7	124.0	5.6	4.7	5.0	4.2
Bellingham .....	77.7	79.3	77.9	77.7	5.3	4.6	4.4	3.9	6.9	5.8	5.7	5.0
Bremerton .....	92.8	90.8	92.6	89.1	5.6	4.5	4.9	4.1	6.0	4.9	5.3	4.6
Olympia .....	98.0	99.4	97.6	98.4	5.5	4.8	4.9	4.3	5.6	4.8	5.0	4.3
Richland-Kennewick-Pasco .....	91.6	90.0	93.5	90.9	7.5	6.7	6.6	6.0	8.2	7.5	7.0	6.6
Seattle-Bellevue-Everett .....	1,322.7	1,375.3	1,326.2	1,361.7	50.8	40.2	45.8	37.2	3.8	2.9	3.5	2.7
Spokane .....	205.0	208.9	205.7	205.6	11.7	9.9	9.6	8.0	5.7	4.7	4.7	3.9
Tacoma .....	327.5	333.1	328.5	328.0	16.5	14.5	15.0	13.1	5.0	4.4	4.6	4.0
Yakima .....	109.6	109.9	111.8	109.2	13.4	12.7	12.8	10.7	12.2	11.6	11.5	9.8
<b>West Virginia</b> .....	797.3	797.8	800.1	799.3	62.4	60.3	57.6	53.8	7.8	7.6	7.2	6.7
Charleston .....	129.8	129.8	129.6	130.2	6.9	6.8	6.5	6.1	5.3	5.2	5.0	4.7
Huntington-Ashland .....	135.9	138.5	137.0	137.7	9.8	9.4	9.2	8.2	7.2	6.8	6.7	6.0
Parkersburg-Marietta .....	75.9	77.7	76.3	77.4	4.9	5.2	4.3	4.4	6.5	6.7	5.6	5.7
Wheeling .....	73.4	73.6	74.2	73.4	6.5	5.0	6.2	3.8	8.9	6.8	8.3	5.2
<b>Wisconsin</b> .....	2,883.1	2,928.6	2,896.7	2,924.9	128.1	110.9	117.7	78.5	4.4	3.8	4.1	2.7
Appleton-Oshkosh-Neenah .....	218.6	224.3	219.4	224.8	8.6	6.9	7.4	5.3	3.9	3.1	3.4	2.4
Eau Claire .....	81.3	83.0	82.5	83.0	3.9	3.4	3.6	2.2	4.8	4.1	4.4	2.6
Green Bay .....	130.4	130.8	131.0	130.6	4.8	4.1	4.5	2.9	3.7	3.1	3.4	2.3
Janesville-Beloit .....	79.1	79.9	79.4	79.2	3.4	2.9	3.2	2.2	4.4	3.6	4.1	2.7
Kenosha .....	77.3	78.7	77.6	78.6	2.9	2.5	2.7	1.9	3.7	3.1	3.4	2.5
La Crosse .....	70.1	71.2	71.0	71.7	2.7	2.4	2.3	1.5	3.9	3.4	3.3	2.1
Madison .....	256.1	260.7	257.1	261.3	5.3	4.7	4.7	3.1	2.1	1.8	1.8	1.2
Milwaukee-Waukesha .....	796.5	812.5	795.4	810.9	29.9	24.7	28.9	20.9	3.8	3.0	3.6	2.6
Racine .....	91.7	95.0	92.0	95.0	4.5	3.9	4.0	3.1	4.9	4.1	4.3	3.3
Sheboygan .....	59.2	60.2	59.4	59.9	1.7	1.6	1.5	1.0	2.8	2.6	2.6	1.7
Wausau .....	71.3	72.8	71.5	72.3	3.6	3.3	3.0	2.1	5.0	4.5	4.2	2.8
<b>Wyoming</b> .....	248.1	254.0	248.0	253.7	15.8	13.4	14.7	11.5	6.4	5.3	5.9	4.5
Casper .....	32.8	33.8	32.5	33.4	2.3	1.8	2.1	1.6	7.1	5.3	6.6	4.7
Cheyenne .....	38.4	39.5	38.8	39.5	1.7	1.5	1.6	1.2	4.4	3.8	4.1	3.1
<b>Puerto Rico</b> .....	1,296.8	1,326.4	1,294.3	1,307.7	167.7	177.6	175.9	174.4	12.9	13.4	13.6	13.3
Aguadilla .....	50.9	52.3	51.7	51.8	9.3	9.9	9.9	9.5	18.3	18.9	19.2	18.4
Arecibo .....	52.6	54.1	52.8	52.7	8.5	8.8	9.2	8.4	16.2	16.3	17.4	15.9
Caguas .....	114.7	117.7	113.9	114.8	13.0	14.6	13.7	13.6	11.4	12.4	12.0	11.8
Mayaguez .....	91.8	93.8	92.0	92.6	13.9	15.2	14.7	14.8	15.2	16.2	15.9	16.0
Ponce .....	110.3	113.9	109.7	112.0	19.9	19.7	20.1	19.8	18.1	17.3	18.3	17.7
San Juan-Bayamon .....	702.4	719.8	700.3	711.8	71.8	76.7	74.5	75.5	10.2	10.7	10.6	10.6

P = preliminary.

when new benchmark and population information becomes available.

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

# Explanatory Notes and Estimates of Error

## Introduction

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

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

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

### RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

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

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

### Employment

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

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

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

### Hours of work

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



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

### Earnings

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

### COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

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

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

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

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

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

### COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

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

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

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

# Household Data

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

### COLLECTION AND COVERAGE

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

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

### CONCEPTS AND DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## HISTORICAL COMPARABILITY

### Changes in concepts and methods

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

- In 1945, the questionnaire was radically changed with

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **Noncomparability of labor force levels**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **Sampling**

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## ESTIMATING METHODS

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

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

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

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

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

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

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

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

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

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

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

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

### Rounding of estimates

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

### Reliability of the estimates

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
Labor force and not-in-labor-force data other than agricultural employment and unemployment:		
Total or white:		
Most characteristics .....	-0.000012482	2001.12
High correlation characteristics <sup>1</sup> .....	-0.000009288	1564.84
Low correlation characteristics <sup>1</sup> .....	-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 .....	-0.001928030	6513.82
Men:		
Most characteristics .....	-0.000234427	2280.03
Low correlation characteristics .....	-0.002881467	5829.60
Women:		
Most characteristics .....	-0.000156363	1860.78
Low correlation characteristics .....	-0.002311407	5420.13
Both sexes, 16 to 19 years .....	-0.001288452	3131.77
Hispanic origin:		
Total .....	-0.000157201	2774.53
Civilian labor force and not in labor force .....	-0.000102898	1930.51
Low correlation characteristics .....	-0.002624078	8620.43
Men, civilian labor force and not in labor force .....	-0.000248038	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 .....	-0.000122355	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: <sup>2</sup>		
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

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

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

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

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

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

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

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

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

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

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

# Establishment Data ("B" tables)

## COLLECTION

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

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

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

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

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

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

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

graphic stratification and differences in the timing of benchmark adjustments.

## CONCEPTS

### Industrial classification

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

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

### Industry employment

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

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

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

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

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

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

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

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

### Industry hours and earnings

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

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

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

by members of the construction trades.

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

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

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

*Overtime hours.* These are hours worked by production or related workers for which overtime premiums were paid because the hours were in excess of the number of hours of either the straight-time workday or the workweek during the pay period which included the 12th of the month. 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. <sup>1</sup>	Sum of all-employee estimates for component cells.
Production or nonsupervisory workers, women employees .....	All-employee estimate for current month multiplied by (1) ratio of production or nonsupervisory workers to all employees in sample establishments for current month, (2) estimated ratio of women to all employees. <sup>2</sup>	Sum of production or nonsupervisory worker estimates, or estimates of women employees, for component cells.
Average weekly hours .....	Production or nonsupervisory worker hours divided by number of production or nonsupervisory workers. <sup>2</sup>	Average, weighted by production or nonsupervisory worker employment, of the average weekly hours for component cells.
Average weekly overtime hours .....	Production worker overtime hours divided by number of production workers. <sup>2</sup>	Average, weighted by production worker employment, of the average weekly overtime hours for component cells.
Average hourly earnings .....	Total production or nonsupervisory worker payroll divided by total production or nonsupervisory worker hours. <sup>2</sup>	Average, weighted by aggregate hours, of the average hourly earnings for component cells.
Average weekly earnings .....	Product of average weekly hours and average hourly earnings.	Product of average weekly hours and average hourly earnings.
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.

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

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

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



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

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

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

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

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

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

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

## THE SAMPLE

### Design

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

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

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

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

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

### Coverage

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

### Reliability

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

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

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

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

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

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

<sup>3</sup> The average amount of bias adjustment each month over the

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

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

<sup>5</sup> March-to-March changes in the benchmark employment level.

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

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

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

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

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

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

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

If  $S_1 = S_2$ , then:

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

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

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

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

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

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

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

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

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

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

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

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

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

See footnotes at end of table.

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

(Numbers in thousands)

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

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

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

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

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

**Table 2-E. Relative standard errors<sup>1</sup> for estimates of employment, hours, and earnings**  
(In percent)

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

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

**Table 2-F. Relative standard errors<sup>1</sup> for estimates of employment, hours, and earnings by industry**  
(In percent)

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

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

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

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

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

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

## STATISTICS FOR STATES AND AREAS

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

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

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

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

Table 2-G. Errors of preliminary employment estimates

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

See footnotes at end of table.

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

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

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

<sup>2</sup> Includes other industries, not shown separately.

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



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

## FEDERAL-STATE COOPERATIVE PROGRAM

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

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

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

## ESTIMATING METHODS

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

### Estimates for States

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

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

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

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

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

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

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

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

### **Estimates for sub-State areas**

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

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

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

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

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

# Seasonal Adjustment

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

## Household data

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

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

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

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

All labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, for each of the three major labor force components—agricultural employment, nonagricultural employment, and unemployment—data for four sex-age groups (men and women under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. The seasonally adjusted figure for the labor force is a sum of eight seasonally adjusted civilian employment components and four seasonally adjusted unemployment components. The total for unemployment is the sum of the four unemployment components, and the unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force. Because of the independent seasonal adjustment of various series, components will not necessarily add to totals.

In each January issue (March issue in 1996), *Employment and Earnings* publishes revised seasonally adjusted data for selected labor force series based on the experience through December, new seasonal adjustment factors to be used to calculate the civilian unemployment estimate for the first 6 months of the following year, and a description of the current seasonal adjustment procedure.

## Establishment data

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

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

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

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

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

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

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing the average weekly earnings series by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours, seasonally adjusted, by production or nonsupervisory workers, seasonally adjusted, and dividing by the 1982 annual average base. For total private, total goods-producing, total private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours for the appropriate component industries and dividing by the 1982 annual average base.

Seasonally adjusted data are not published for a number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These series, however, are used in the aggregation to broader level seasonally adjusted series.

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

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

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

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

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

### **Region and State labor force data**

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

# INDEX TO STATISTICAL TABLES

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

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**U.S. DEPARTMENT OF LABOR  
Bureau of Labor Statistics**

Regional Office	Cooperating State Agencies Current Employment Statistics (CES) and State and Local Area Unemployment Statistics (LAUS) Programs			
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	X ALASKA	Department of Labor, Research and Analysis Section, 1111 West 8th St., Juneau 99802-5501	VII NEBRASKA	Department of Labor, P.O. Box 94600, Lincoln 68509-4600
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REGION III—PHILADELPHIA 3535 Market Street P.O. Box 13309 Philadelphia, PA 19101 Phone: (215) 596-1154	IX CALIFORNIA	Employment Development Department, Employment Data and Research Division, 7000 Franklin Blvd., Bldg. 1100, Sacramento 95823	II NEW JERSEY	Department of Labor, Division of Planning and Research, P.O. Box 2765, Trenton 08625
	VIII COLORADO	Department of Labor and Employment, Suite 801, 1120 Lincoln Street, Denver 80203	VI NEW MEXICO	Employment Security Commission, 401 Broadway, TIWA Bldg., Albuquerque 87103
REGION IV—ATLANTA Room 7T50 61 Forsyth Street, SW. Atlanta, GA 30303 Phone: (404) 562-2463	I CONNECTICUT	Labor Department, Employment Security Division, 200 Folly Brook Blvd., Wethersfield 06109	II NEW YORK	Department of Labor, Division of Research and Statistics, State Campus, Room 400, Bldg. 12, Albany 12240-0020
	III DELAWARE	Department of Labor, Office of Occupational and Labor Market Information, P.O. Box 9029, Newark 19714-9029	IV NORTH CAROLINA	Employment Security Commission, Labor Market Information Division, P.O. Box 25903, Raleigh 27611
REGION V—CHICAGO 9th Floor 230 South Dearborn Street Chicago, IL 60604 Phone: (312) 353-1880	III DIST. OF COL.	Department of Employment Services, Division of Labor Market Information and Analysis, Room 201, 500 C St., NW., Washington, DC 20001	V NORTH DAKOTA	Job Service, P.O. Box 1537, Bismarck 58502
	IV FLORIDA	Florida Department of Labor and Employment Security, Bureau of Labor Market Information, Suite 203, 2574 Seagate Dr., Tallahassee 32399-0674	V OHIO	Bureau of Employment Services, Labor Market Information Division, 1160 Dublin Rd., Columbus 43215
REGION VI—DALLAS Room 221 Federal Building 525 Griffin Street Dallas, TX 75202 Phone: (214) 767-6970	IV GEORGIA	Department of Labor, Labor Information Systems, 148 International Blvd., NE., Atlanta 30303	VI OKLAHOMA	Employment Security Commission, Research and Planning Division, 2401 North Lincoln, Oklahoma City 73105
	X IDAHO	Department of Labor and Industrial Relations, Research and Statistics Office, Room 304, 830 Punchbowl St., Honolulu 96813	X OREGON	Employment Division, 875 Union St., NE., Salem 97311
REGIONS VII and VIII—KANSAS CITY City Center Square 1100 Main, Suite 600 Kansas City, MO 64105-2112 Phone: (816) 426-2481	V ILLINOIS	Department of Employment Security, (2 South), 401 South State St., Chicago 60605	III PENNSYLVANIA	Bureau of Research and Statistics, 300 Capitol Associates Building, Harrisburg, PA 17120-0034
	V INDIANA	Department of Employment and Training Services, Statistical Services Division, 10 North Senate Avenue, Indianapolis 46204	II PUERTO RICO	Department of Labor and Human Resources, Bureau of Labor Statistics, 17th Fl., 505 Munoz Rivera Avenue, Hato Rey 00918 (CES), Bureau of Employment Security, Research and Analysis Section, 15th Fl., 505 Munoz Rivera Avenue, Hato Rey 00918 (LAUS)
REGIONS IX and X—SAN FRANCISCO 71 Stevenson Street P.O. Box 193766 San Francisco, CA 94119 Phone: (415) 975-4384	VII IOWA	Department of Employment Services, 1000 East Grand Avenue, Des Moines 50319	I RHODE ISLAND	Department of Employment Security, 24 Mason St., Providence 02903
	VII KANSAS	Department of Human Resources, 401 Topeka Avenue, Topeka 66603	IV SOUTH CAROLINA	Employment Security Commission, Labor Market Information Division, P.O. Box 995, Columbia 29202
	IV KENTUCKY	Department for Employment Services, Labor Market Research and Analysis Branch, 275 East Main St., Frankfort 40621	VIII SOUTH DAKOTA	Department of Labor, Labor Market Information Center, P.O. Box 4730, Aberdeen 57401
	VI LOUISIANA	Department of Labor, Research and Statistics Section, 1001 North 23rd St., Baton Rouge 70804-9094	IV TENNESSEE	Department of Employment Security, Research and Statistics Division, 519 Cordell Hull Office Bldg., Nashville 37219
	I MAINE	Department of Labor, Division of Economic Analysis and Research, 20 Union St., Augusta 04330	VI TEXAS	Employment Commission, Room 208-T, 1117 Trinity St., Austin 78778
	III MARYLAND	Department of Employment and Training, Research and Analysis Division, 1100 North Eutaw St., Baltimore 21201	VIII UTAH	Department of Employment Security, Labor Market Information Services, P.O. Box 11249, Salt Lake City 84147
	I MASSACHUSETTS	Department of Employment and Training, Government Center, Charles F. Hurley Bldg., Boston 02114	I VERMONT	Department of Employment and Training, Office of Policy and Public Information, P.O. Box 488, Montpelier 05602
	V MICHIGAN	Employment Security Commission, Research and Statistics Division, Room 516, 7310 Woodward Avenue, Detroit 48202	III VIRGINIA	Employment Commission, Economic Information Services, P.O. Box 1358, Richmond 23211
	V MINNESOTA	Department of Jobs and Training, Research and Statistics Division, 5th Fl., 390 North Robert St., St. Paul 55101	II VIRGIN ISLANDS	Department of Labor, Bureau of Labor Statistics, 53-A, 54-A&B Kronprindsens Gade Charlotte Amalie, St. Thomas 00801-3359 (CES)
	IV MISSISSIPPI	Employment Security Commission, Labor Market Information Division, P.O. Box 1699, Jackson 39215-1699	X WASHINGTON	Employment Security Department, Labor Market and Economic Analysis Branch, 605 Woodview Dr., Olympia 98503
	VII MISSOURI	Division of Employment Security, P.O. Box 59, Jefferson City 65104	III WEST VIRGINIA	Department of Employment Security, Division of Labor and Economic Security, 112 California Avenue, Charleston 25305
			V WISCONSIN	Department of Industry, Labor, and Human Relations, Labor Market Information Bureau, 201 East Washington Avenue, Madison 53707
			VIII WYOMING	Employment Security Commission, Research and Analysis Section, P.O. Box 2760, Casper 82602