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NEWS

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January 1999

***In this issue:***

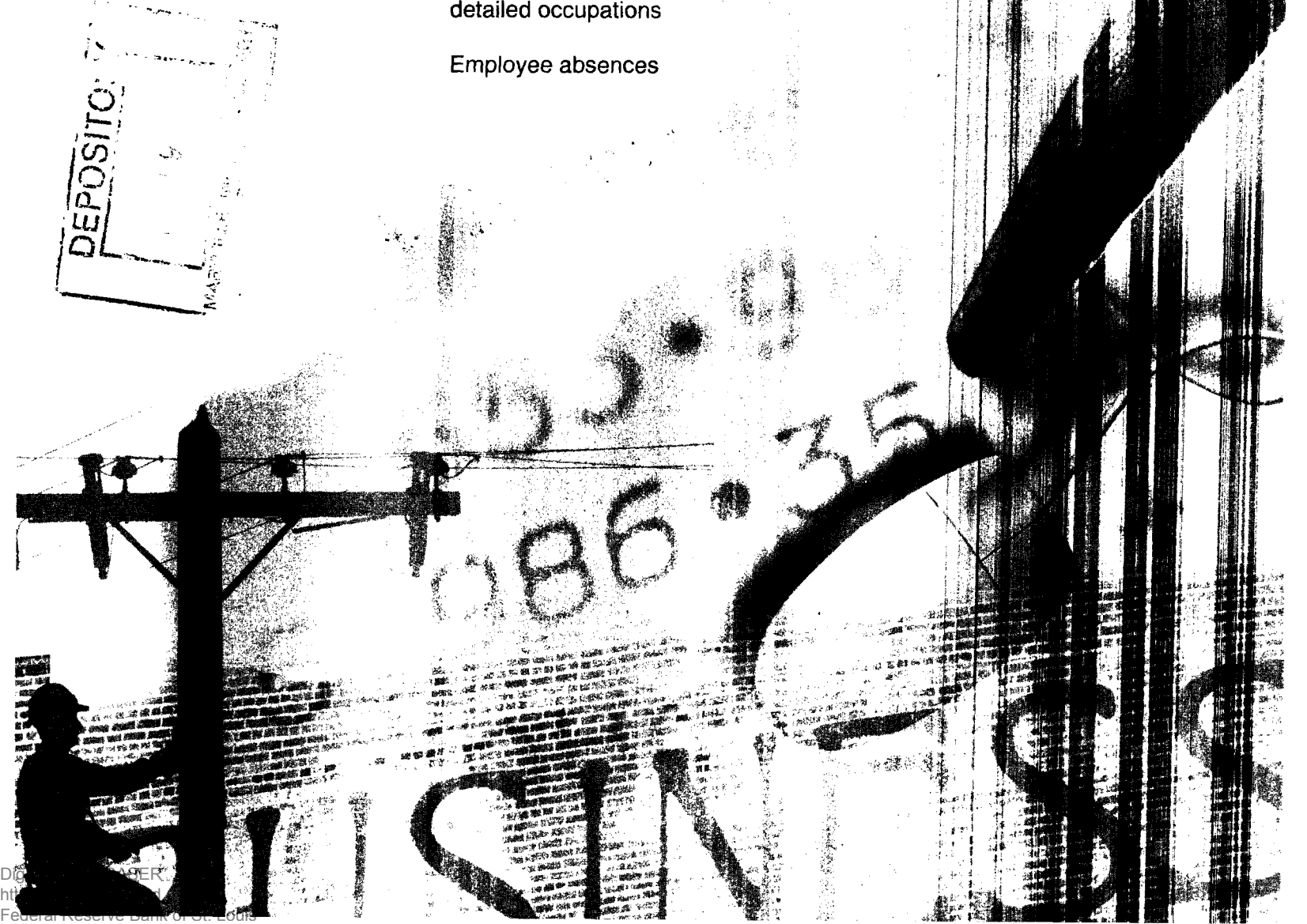
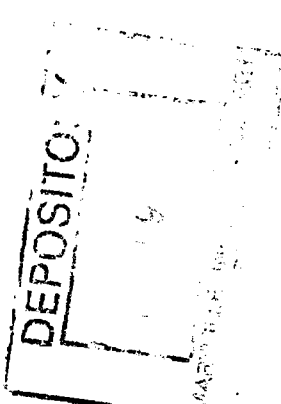
1998 annual averages

Revised seasonally adjusted  
household data

Data on union affiliation

Median weekly earnings for  
detailed occupations

Employee absences





**U.S. DEPARTMENT OF LABOR**  
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BUREAU OF LABOR STATISTICS  
Katharine G. Abraham, *Commissioner*

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**January 1999**  
**Vol. 46 No. 1**

**Calendar of Features**

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

**Household data**

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

**Establishment data**

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

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# Employment and Earnings

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## Editors' Note

With this issue, seasonally adjusted unemployment and other labor force series derived from the Current Population Survey (household survey) have been revised to reflect updated seasonal adjustment factors which incorporate the experience through December 1998. As a result, seasonally adjusted data for 1994-98 are subject to revision. Revised current data appear in table A, tables A-1 through A-13, and D-1 through D-11.

The article beginning on page 3 discusses the effect of the revisions, describes the seasonal adjustment method, and includes the new seasonal adjustment factors to be used to calculate the major civilian labor force series for January-June 1999.

Historical seasonally adjusted monthly and quarterly data also are available on the Internet. Internet users can access these data from the <ftp://ftp.bls.gov/pub/special.requests/lf> directory.

## Contents

	<i>Page</i>
List of statistical tables .....	ii
Contents to the explanatory notes and estimates of error .....	vii
Employment and unemployment developments, December 1998 .....	1
Summary tables and charts .....	7
Explanatory notes and estimates of error .....	231
Index to statistical tables .....	268

## Statistical tables

Source	Historical	Seasonally adjusted	Not seasonally adjusted	Other features
Household data .....	9	11	22	
Establishment data:				
Employment:				
National .....	48	52	69	
State .....		57	82	
Area .....			82	
Hours and earnings:				
National .....	49	65	100	
State and area .....			123	
Local area labor force data:				
Region .....		127		
State .....		129	134	
Area .....			134	
Household data:				
Quarterly averages .....		140	151	
Annual averages .....				166
Establishment data:				
Annual averages .....				227

# Monthly Household Data

Page

## Historical

A-1. Employment status of the civilian noninstitutional population 16 years and over, 1965 to date .....	9
A-2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1987 to date .....	10

## Seasonally Adjusted Data

### Employment Status

A-3. Employment status of the civilian noninstitutional population by sex and age .....	11
A-4. Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin .....	12
A-5. Employment status of the civilian noninstitutional population 25 years and over by educational attainment .....	14
A-6. Employed and unemployed full- and part-time workers by sex and age .....	15

### Characteristics of the Employed

A-7. Employed persons by marital status, occupation, class of worker, and part-time status .....	16
A-8. Employed persons by age and sex .....	17

### Characteristics of the Unemployed

A-9. Unemployed persons by age and sex .....	18
A-10. Unemployment rates by age and sex .....	19
A-11. Unemployment rates by occupation, industry, and selected demographic characteristics .....	20
A-12. Unemployed persons by reason for unemployment .....	21
A-13. Unemployed persons by duration of unemployment .....	21

## Not Seasonally Adjusted Data

### Employment Status

A-14. Employment status of the civilian noninstitutional population by age, sex, and race .....	22
A-15. Employment status of the civilian noninstitutional population by race, sex, and age .....	25
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 .....	26
A-17. Employment status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic origin .....	28
A-18. Employed and unemployed full- and part-time workers by age, sex, and race .....	29

### Characteristics of the Employed

A-19. Employed persons by occupation, sex, and age .....	30
A-20. Employed persons by occupation, race, and sex .....	31
A-21. Employed persons by industry and occupation .....	32
A-22. Employed persons in agriculture and nonagricultural industries by age, sex, and class of worker .....	33
A-23. Persons at work in agriculture and nonagricultural industries by hours of work .....	34
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 .....	34
A-25. Persons at work in nonagricultural industries by class of worker and usual full- or part-time status .....	35
A-26. Persons at work in nonagricultural industries by age, sex, race, marital status, and usual full- or part-time status ..	36
A-27. Persons at work in nonfarm occupations by sex and usual full- or part-time status .....	37

### Characteristics of the Unemployed

A-28. Unemployed persons by marital status, race, age, and sex .....	38
A-29. Unemployed persons by occupation and sex .....	39
A-30. Unemployed persons by industry and sex .....	40
A-31. Unemployed persons by reason for unemployment, sex, age, and race .....	41
A-32. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment .....	42
A-33. Unemployed total and full-time workers by duration of unemployment .....	42
A-34. Unemployed persons by age, sex, race, marital status, and duration of unemployment .....	43
A-35. Unemployed persons by occupation, industry, and duration of unemployment .....	44

### Persons Not in the Labor Force

A-36. Persons not in the labor force by desire and availability for work, age, and sex .....	44
--	----

### Multiple Jobholders

A-37. Multiple jobholders by selected demographic and economic characteristics .....	45
--	----

### Vietnam-era Veterans and Nonveterans

A-38. Employment status of male Vietnam-era veterans and nonveterans by age .....	46
---	----

# Monthly Establishment Data

Page

## Historical

B-1. Employees on nonfarm payrolls by major industry, 1947 to date .....	48
B-2. Average hours and earnings of production or nonsupervisory workers on private nonfarm payrolls by major industry, 1964 to date .....	49

## Seasonally Adjusted Data

### Employment

#### National

B-3. Employees on nonfarm payrolls by major industry and selected component groups .....	52
B-4. Women employees on nonfarm payrolls by major industry and manufacturing group .....	54
B-5. Production or nonsupervisory workers on private nonfarm payrolls by major industry and manufacturing group .....	55
B-6. Diffusion indexes of employment change .....	56

#### States

B-7. Employees on nonfarm payrolls by State and major industry .....	57
--	----

### Hours and Earnings

#### National

B-8. Average weekly hours of production or nonsupervisory workers on private nonfarm payrolls by major industry and manufacturing group .....	65
B-9. Indexes of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls by major industry and manufacturing group .....	66
B-10. Hours of wage and salary workers on nonfarm payrolls by major industry .....	67
B-11. Average hourly and weekly earnings of production or nonsupervisory workers on private nonfarm payrolls by major industry .....	68

## Not Seasonally Adjusted Data

### Employment

#### National

B-12. Employees on nonfarm payrolls by detailed industry .....	69
B-13. Women employees on nonfarm payrolls by major industry and manufacturing group .....	81

#### States and Areas

B-14. Employees on nonfarm payrolls in States and selected areas by major industry .....	82
--	----

### Hours and Earnings

#### National

B-15. Average hours and earnings of production or nonsupervisory workers on private nonfarm payrolls by detailed industry .....	100
B-15a. Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing .....	120
B-16. Average hourly earnings, excluding overtime, of production workers on manufacturing payrolls .....	121
B-17. Average hourly and weekly earnings of production or nonsupervisory workers on private nonfarm payrolls by major industry, in current and constant (1982) dollars .....	122

#### States and Areas

B-18. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas .....	123
---	-----

## Monthly Regional, State, and Area Labor Force Data

### Seasonally Adjusted Data

C-1. Labor force status by census region and division .....	127
C-2. Labor force status by State .....	129

### Not Seasonally Adjusted Data

C-3. Labor force status by State and metropolitan area .....	134
--	-----

## Annual Averages—Household Data—Continued

Page

### Union Affiliation Data

40. Union affiliation of employed wage and salary workers by selected characteristics .....	219
41. Median weekly earnings of full-time wage and salary workers by union affiliation and selected characteristics .....	220
42. Union affiliation of employed wage and salary workers by occupation and industry .....	221
43. Median weekly earnings of full-time wage and salary workers by union affiliation, occupation, and industry .....	222

### Employee Absences Data

44. Absences from work of employed full-time wage and salary workers by age and sex .....	223
45. Absences from work of employed full-time wage and salary workers by occupation and industry .....	224

### Vietnam-era Veterans and Nonveterans Data

46. Employment status of male Vietnam-era veterans and nonveterans by age .....	225
47. Employment status of male Vietnam-era veterans and nonveterans by age, race, and Hispanic origin .....	226

## Annual Averages—Establishment Data

### Employment—National

48. Employees on nonfarm payrolls by major industry and selected component groups .....	227
49. Production or nonsupervisory workers on private nonfarm payrolls by major industry and manufacturing group ....	229

### Hours and Earnings—National

50. Average hours and earnings of production or nonsupervisory workers on private nonfarm payrolls by major industry and manufacturing group .....	230
--	-----

# Explanatory Notes and Estimates of Error

	<i>Page</i>		<i>Page</i>
Introduction .....	231	Establishment data—Continued	
Relation between the household and establishment series .....	231	Estimating methods .....	254
Comparability of household data with other series .....	232	Benchmarks .....	254
Comparability of payroll employment data with other series .....	232	Monthly estimation .....	254
Household data .....	233	Stratification .....	254
Collection and coverage .....	233	Link relative technique .....	254
Concepts and definitions .....	233	Bias adjustment .....	254
Historical comparability .....	235	Summary of methods table .....	255
Changes in concepts and methods .....	235	The sample .....	256
Noncomparability of labor force levels .....	237	Design .....	256
Changes in the occupational and industrial classification systems .....	239	Coverage .....	257
Sampling .....	239	Reliability .....	257
Selection of sample areas .....	240	Measures of error tables .....	257
Selection of sample households .....	240	Benchmark revision as a measure of survey error .....	257
Rotation of sample .....	241	Estimated standard errors for employment, hours, and earnings .....	258
CPS sample, 1947 to present .....	241	Standard errors for differences between industries and times .....	258
Estimating methods .....	242	Noneconomic code changes .....	258
Noninterview adjustment .....	242	Revisions between preliminary and final data .....	261
Ratio estimates .....	242	Statistics for States and areas .....	261
First stage .....	242	Region, State, and area labor force data .....	264
Second stage .....	242	Federal-State cooperative program .....	264
Composite estimation procedure .....	242	Estimating methods .....	264
Rounding of estimates .....	243	Estimates for States .....	264
Reliability of the estimates .....	243	Current monthly estimates .....	264
Nonsampling error .....	243	Benchmark correction procedures .....	264
Sampling error (Revised effective Jan. 1996) .....	243	Estimates for sub-State areas .....	265
Tables 1-B through 1-H .....	244	Preliminary estimate:	
Establishment data .....	251	Employment .....	265
Collection .....	251	Unemployment .....	265
Concepts .....	251	Sub-State adjustment for additivity .....	265
		Benchmark correction .....	265
		Seasonal adjustment .....	266

# Employment and Unemployment Developments, December 1998

**E**mployment rose in December and the unemployment rate, at 4.3 percent, was little changed. Nonfarm payroll employment rose by 378,000. Growth was spread throughout the service-producing sector, and unusually mild weather across much of the country contributed to strength in construction.

## Unemployment

Both the number of unemployed persons, 6.0 million, and the unemployment rate, 4.3 percent, were little changed in December. The jobless rate has remained within a narrow range of 4.3 to 4.5 percent since April. The unemployment rates for the major worker groups—adult men (3.6 percent), adult women (3.9 percent), teenagers (14.0 percent), whites (3.8 percent), blacks (7.9 percent), and Hispanics (7.6 percent)—showed little or no change in December. (See tables A-3 and A-4.)

Although essentially unchanged in December, the number of persons unemployed 15 weeks and over has declined by about 300,000 over the year, after adjusting for the changes in the composite estimation procedure introduced last January. (See table A-13.)

## Total employment and the labor force

Total employment increased by 413,000 in December to 132.5 million, seasonally adjusted. The employment-population ratio—the proportion of the population age 16 and older with jobs—was essentially unchanged at 64.2 percent. Over the year, employment grew by 2.2 million, after adjusting for the changes in the composite estimation procedure. (See table A-3.)

The number of persons employed part time for economic reasons (those who would have preferred full-time work) was 3.4 million in December, about the same as in the previous month. The number of such workers declined by about 330,000 during the past year, after adjusting for changes in the composite estimation procedure. (See table A-7.)

Approximately 8.2 million persons (not seasonally adjusted) held more than one job in December. These multiple jobholders comprised 6.2 percent of total employment, the same share as a year earlier. (See table A-37.)

Over the month, the civilian labor force rose by 354,000 to 138.5 million, seasonally adjusted. The labor force participation rate was 67.2 percent, about unchanged from the previous month. (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 December. 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. In December, the number of marginally attached workers was 257,000 lower than a year earlier.

The number of discouraged workers—a subset of the marginally attached who were not currently looking for work specifically because they believed no jobs were available for them—was 358,000 in December, about the same as a year earlier. (See table A-36.)

## Industry payroll employment

Nonfarm payroll employment rose by 378,000 in December to 127.2 million, seasonally adjusted. Job growth in 1998 totaled 2.9 million, a 2.3-percent increase. In December, job gains were spread throughout the service-producing sector, construction employment increased sharply, and job losses slowed in manufacturing. (See table B-3.)

The services industry added 111,000 jobs in December, about equal to the monthly average for the year. Employment in business services rose by 49,000, led by the largest increase in personnel supply since August. Nevertheless, growth in personnel supply, which includes temporary help agencies, slowed substantially in 1998 compared to recent years. Robust job growth continued in computer services where employment rose by 13.3 percent for the year. Engineering and management services employment also continued its strong growth, increasing by 7.3 percent in 1998. For the second straight month, agricultural services benefited from unusually mild weather. Employment in health services was little changed in December, and, over the year, the number of health service jobs grew by only 1.3 percent, half its 1997 rate. Home health care and nursing homes both lost jobs in 1998.

Construction employment grew throughout much of 1998 and in December jumped by 104,000 (after seasonal adjustment). This robust increase was due in part to unseasonably warm temperatures in the North and East. Employment gains were widespread within the industry, with the largest increases in outside activities such as highway construction, masonry, roofing, and concrete.



Employment in retail trade rose by 53,000 in December, the second large increase in a row. Over the year, retail trade employment increased by 462,000. In December, eating and drinking places added 33,000 jobs. A strong employment build-up for the holiday shopping season in department stores also contributed to the over-the-month gain in retail trade. In contrast, apparel stores and miscellaneous retail establishments did not hire for the holiday season at the usual pace, resulting in employment declines after seasonal adjustment both in December and over the September-December period as a whole. Reflecting the strength in construction, employment in building material and garden supply stores had its largest increase of the year in December (9,000).

Transportation and public utilities employment rose in December by 32,000, the largest over-the-month change for that industry in 1998. Strong growth in air transportation (13,000), trucking and warehousing (9,000), and communications (9,000) accounted for most of the increase.

Finance, insurance, and real estate added 28,000 jobs in December, bringing its over-the-year growth to 273,000 jobs. Within finance, strong growth continued in mortgage banking and brokerages, where employment rose by 4,000 in December and by 19.8 percent over the year. Security brokerages also added 4,000 workers in December, offsetting a decline in the prior month; this industry grew by 7.6 percent in 1998. Insurance and real estate both continued their growth trends.

Government employment increased by 59,000 in December, led by gains in State and local education. Federal Government employment declined by 21,000, seasonally adjusted, due in part to light holiday hiring in December by the Postal Service and the ending of an early phase of work on the decennial census.

Manufacturing employment continued to decline, although the loss of 13,000 jobs in December was much smaller than

the declines in the prior 2 months. Since March, the number of factory jobs has fallen by 272,000. Within durable goods industries, employment in industrial machinery declined by 10,000 in December, bringing the total losses since March to 54,000. A decline of 9,000 jobs in motor vehicles manufacturing followed a small drop in November and left auto employment down 12,000 for the year. Within nondurable goods industries, employment in food products increased by 8,000, primarily in the preserved fruits and vegetables industry, which tends to have volatile month-to-month movements. Employment in manufacturing industries related to construction and home purchases (lumber; furniture; and stone, clay, and glass) grew in December and over the year.

### Weekly hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls edged up by 0.1 hour in December to 34.6 hours, seasonally adjusted. The manufacturing workweek increased by 0.2 hour to 41.8 hours, while factory overtime was 4.5 hours for the fourth consecutive month. (See table B-8.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls rose by 0.5 percent to 146.5 (1982=100), seasonally adjusted. The manufacturing index increased by 0.3 percent to 107.5. (See table B-9.)

### Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls rose 5 cents in December to \$12.98, seasonally adjusted; this follows 3 months of smaller gains. Average weekly earnings increased 0.7 percent to \$449.11. Over the year, average hourly and weekly earnings have risen by 3.8 percent and 3.5 percent, respectively. (See table B-11.)

### Planned Changes in the Household Survey Data

Effective with the release of data for January 1999, revisions will be introduced into the population controls used for the household survey. These revisions primarily reflect new information on immigration and will result in an upward shift in the estimated total civilian noninstitutional population 16 years and over for January 1999. The changes will add approximately 308,000 to routine population trend growth between December 1998 and January 1999. The impact will vary for subpopulations such as men (-183,000), women (491,000), Hispanic origin (-163,000), and non-Hispanic origin (471,000). The changes and their effect on the estimates of labor force change and composition will be described in an article slated to appear in the February 1999 issue of *Employment and Earnings*.

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
Reference month	Release date	Reference month	Release date
January	February 5	April	May 7
February	March 5	May	June 4
March	April 2	June	July 2

# Revision of Seasonally Adjusted Labor Force Series

Robert J. McIntire

The original data values for many economic time series are often substantially influenced by seasonality, reflecting recurring calendar-related effects caused by weather, holidays, the opening and closing of schools, and other such seasonal events. Seasonal adjustment is a process used to estimate and remove that seasonality. The reason for doing so is to make it easier to observe and analyze the nonseasonal movements in the series, particularly short-term movements associated with business cycles.

The seasonal adjustment process produces estimates of seasonality, called seasonal factors, for the period of observations used in the process and for some projected observations immediately following that period. For the labor force series, initial seasonal adjustment of current data is done using the projected seasonal factors. These factors are estimates of how much the original unadjusted values can be expected to deviate from underlying trend-cycle levels due to recurring behavior as projected from average seasonal patterns in the recent past.

Even though seasonality involves regularly recurring patterns, it does tend to change or at least evolve over time, creating a need for periodic reestimation of factors and revision of recently adjusted estimates. By including more recent data in the estimation process, the revision process can provide better estimates of how much the original, unadjusted estimates actually deviated from underlying trend-cycle levels during the recent period, thereby improving the historical seasonally adjusted data for that period. In addition, the new information is incorporated to produce the new projected factors to be used for current seasonal adjustment.

Therefore, at the end of each calendar year, the Bureau of Labor Statistics reestimates the seasonality of the unemployment, employment, and other labor force series derived from the Current Population Survey (CPS) by including another full year of data in the estimation process. Based on this annual reestimation, BLS issues the projected factors for the first 6 months of the new year as well as revised estimates of historical seasonally adjusted data. Prior to 1994, when significant changes were introduced in the survey and the processing procedures on which the labor force series estimates are based<sup>1</sup>, the usual practice had been to subject each year's seasonally adjusted data to five revision cycles before the values were considered final. With the accumu-

lation of 5 years of data since 1994, this year's revisions reflect a return to that usual practice. The fifth and final revisions in the earliest of the 5 years are usually quite small, while the first-time revisions in the most recent year can be much more substantial, although even these rarely alter the essential trends observed in the initial major estimates. This year's revisions incorporate data through December 1998 and provide revised estimates for January 1994 through December 1998 for all previously seasonally adjusted labor force series.

Table 1 contains the new projected seasonal factors to be applied during the first 6 months of 1999 to the 12 component series used in the computation of the seasonally adjusted civilian labor force and unemployment rate. (See the section on aggregation procedures later in the article.) Projected factors for the last 6 months of 1999 will be published in the July issue of this publication.

## Effect of revisions

One of the criteria used to evaluate alternative methods of seasonal adjustment is how close initial estimates are to subsequent revisions. Policy makers and analysts must make determinations based on current information. Therefore, it is important that the initial estimates of current factors for the seasonal adjustment of major economic series produce estimates of level and change that are as close as possible to the improved estimates that will be made after more data have become available. Even though the revisions currently being released for the 1998 seasonally adjusted data are not final, the first revisions are usually more substantial than, and often indicate the direction of, any subsequent revisions. Therefore, it is appropriate to compare these first revisions with the initial estimates. Table 2 shows the civilian unemployment rate for 1998 as first computed and as revised, as well as the changes due to revision. Rounded to one decimal place as published, the rate changed in only 5 of the 12 months, and the absolute effect of the changes never exceeded 0.1 percentage point in any of those months. The revised rates suggest slightly smoother behavior during 1998 than the initial estimates did.

## Adjustment methods and procedures

The official seasonal adjustment procedure for the labor force series is the X-11 ARIMA program, which was developed at Statistics Canada during the 1970s as an extension of and

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<sup>1</sup> The changes were described in "Revisions in the Current Population Survey Effective January 1994" in the February 1994 issue of this publication.

**Table 1. Pre-1994 prior adjustment and January–June 1999 seasonal adjustment factors for the 12 major civilian labor force components**

Procedure and series	Prior adjustment factors	Seasonal adjustment factors					
		January	February	March	April	May	June
<b>Multiplicative adjustment</b> (Divide factor into original value)							
Agricultural employment:							
Men, 20 years and over .....	( <sup>1</sup> )	.891	.883	.939	.994	1.065	1.082
Women, 20 years and over .....	.776	.903	.903	.916	.970	1.005	1.043
Men, 16 to 19 years .....	.860	.680	.675	.756	.914	1.183	1.480
Women, 16 to 19 years .....	.853	.686	.626	.805	.785	1.168	1.513
Nonagricultural employment:							
Men, 20 years and over .....	<sup>2</sup> .996	.987	.991	.994	.998	1.003	1.005
Women, 20 years and over .....	( <sup>1</sup> )	.995	1.000	1.005	1.001	1.000	.993
Unemployment:							
Men, 20 years and over .....	.938	1.206	1.161	1.160	1.001	.920	.939
Women, 20 years and over .....	.976	1.087	1.029	1.013	.912	.944	1.010
<b>Additive adjustment</b> (Subtract factor from original value)							
Nonagricultural employment:							
Men, 16 to 19 years .....	-68	-316	-276	-235	-187	-104	391
Women, 16 to 19 years .....	-96	-213	-208	-134	-193	-98	313
Unemployment:							
Men, 16 to 19 years .....	-47	7	-12	2	-53	-9	212
Women, 16 to 19 years .....	( <sup>1</sup> )	-46	-37	-55	-66	48	212

<sup>1</sup> No prior adjustment was done.

<sup>2</sup> For this series, the prior adjusted period was pre-1997 rather than pre-1994.

improvement to the widely used X-11 method developed at the U.S. Bureau of the Census in the 1960s.<sup>2</sup> The X-11 ARIMA method improves current estimates for most series by allowing recent observations, especially those of the last 6 months, to weigh more heavily in the estimates of current and recent seasonal factors than did the X-11 alone. The method provides this improvement through the use of ARIMA models to extend the data series by 12 months. The X-11 algorithm for seasonal adjustment is then applied to the extended series.

*ARIMA models.* ARIMA projections are based only on the past experience observed in a series itself. ARIMA models have proved to have good properties for short-term projection or extrapolation of a large class of time series, especially in a seasonal adjustment context, since the extrapolations tend to track intra-year movements quite well. The ARIMA models in the X-11 ARIMA program used to seasonally adjust the labor force series are of the Box-Jenkins type.<sup>3</sup> They can generally be described with the notation:

(p,d,q)(P,D,Q) TRANSFORMATION,

<sup>2</sup> The primary documentation for the X-11 ARIMA procedure is *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum (Statistics Canada Catalogue No. 12-564E, January 1983). (ARIMA is an acronym for Auto-Regressive Integrated Moving Average.) The X-11 method is described in *The X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Alan Young, and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

Where:

- (1) p is the number of regular (nonseasonal) autoregressive parameters
- (2) d is the number of regular differences
- (3) q is the number of regular moving average parameters
- (4) P is the number of seasonal autoregressive parameters
- (5) D is the number of seasonal differences
- (6) Q is the number of seasonal moving average parameters
- (7) TRANSFORMATION may be NONE, LOG, or POWER(n).

Although the lettered elements within the parentheses of the model specifications can theoretically take on many values, in practice, only small values are useful. (See table 3.)

For each labor force series which has been extended based on an ARIMA model, the model has been specifically chosen as well suited to the particular series, based on a set of established criteria. The criteria essentially require a model to: (1) Fit the series well, (2) have low average forecasting

<sup>3</sup> For a more detailed discussion of ARIMA models, refer to previously cited Dagum (1983) and to G.E.P. Box and G.M. Jenkins, *Time Series Analysis, Forecasting and Control* (San Francisco, Holden Day, 1970); and C.W.J. Granger and P. Newbold, *Forecasting Economic Time Series* (New York, Academic Press, 1977).

**Table 2. Seasonally adjusted unemployment rates in 1998 and change due to revision**

Month	As first computed	As revised	Change
January .....	4.7	4.6	-0.1
February .....	4.6	4.6	0
March .....	4.7	4.7	0
April .....	4.3	4.3	0
May .....	4.3	4.4	.1
June .....	4.5	4.5	0
July .....	4.5	4.5	0
August .....	4.5	4.5	0
September .....	4.6	4.5	-.1
October .....	4.6	4.5	-.1
November .....	4.4	4.4	0
December .....	<sup>1</sup> 4.4	4.3	-.1

<sup>1</sup> This rate reflects the use of seasonal factors projected for December 1998 as published in the July 1998 issue of *Employment and Earnings* and was subject to revision before regular publication of December data.

errors in the last 3 years prior to the projected year, and (3) produce residuals (the differences between the observed values and the values forecast by the model for the observed period) which follow a random pattern. Acceptable ARIMA models have been identified and were used for 175 of the 181 labor force series that were directly adjusted at the end of 1998, including all 12 major civilian labor force components, whose ARIMA models are unchanged since 1997 and are shown in table 3. The six remaining series for which acceptable models have not been identified were simply run through the X-11 part of the program without any ARIMA extrapolations.

*X-11 procedures.* The procedures used for this year's adjustment of the labor force series within the X-11 part of the process were different from the standard procedures of most previous years in two respects.

First, temporary prior adjustment factors identical to those used last year were used again in these X-11 ARIMA runs to help prevent estimation of the seasonal component from being distorted by the changes that affected the continuity of many of the series in 1994 or 1997.<sup>4</sup> The prior adjustment factors used for all 12 major components are shown in table 1 alongside the seasonal factors.

Second, instead of a 10-year span, a 9-year time period, including data from January 1990 through December 1998, was used for the adjustment of all the labor force series except for the eight educational attainment series (which began in 1992). This was done primarily for the sake of keeping the seasonal adjustment process no more complicated than it has to be to serve its principal objectives. Population-related revisions to the unadjusted data discussed in

<sup>4</sup>For further discussion of these prior adjustment factors and the changes that they control for, see the following articles in previous issues of this publication: "Revisions in Household Survey Data Effective February 1996" in the March 1996 issue; "Revisions in the Current Population Survey Effective January 1997" in the February 1997 issue; and "Revision of Seasonally Adjusted Labor force Series" in the January 1998 issue.

the March 1996 version of this article could be done only back to 1990. Inclusion of pre-1990 data in these runs, therefore, would have required the computation and use of additional prior adjustment factors for many series that would have had little or no effect on the seasonal adjustment of current data.

The X-11 method of seasonal adjustment contained in the X-11 ARIMA procedure assumes that the original series, including the 12 extrapolated observations if an ARIMA model has been applied, is either the product or the sum of three components—trend-cycle, seasonal, and irregular. The method uses either a ratio-to- or difference-from-moving-average approach to estimate the components, depending on whether the multiplicative or additive model is used. The seasonally adjusted series values are computed by dividing each month's original value by the corresponding seasonal factor if the multiplicative model is used, or by subtracting the factor if the additive model is used. Of the 12 major civilian labor force components, the 4 teenage unemployment and nonagricultural employment series were adjusted using the additive model, and the other 8 series with the multiplicative model. Of all the 181 directly adjusted series, 48 were adjusted with the additive model, including most teenage employment and unemployment series, for which the seasonal components were found to be fairly independent of the trend-cycle.

*Moving-holiday adjustment.* Two of the series directly adjusted with multiplicative models were seasonally adjusted using the moving-holiday extension of X-11 ARIMA which was developed at BLS. Both holiday-adjusted series—persons at work on part-time schedules for noneconomic reasons who usually work part time in all industries and nonagricultural industries—had tested as having significant and well-defined effects in their April data related to the timing of Easter. A detailed discussion of the nature of the Easter effect in these series and of the procedure used to

**Table 3. ARIMA models used in end-of-1998 seasonal adjustment for the 12 major civilian labor force components**

Series	Model	Transformation
<b>Agricultural employment:</b>		
Men, 20 years and over .....	(1,0,0)(0,1,1)	LOG
Women, 20 years and over .....	(0,1,1)(0,1,1)	LOG
Men, 16 to 19 years .....	(0,1,2)(0,1,1)	NONE
Women, 16 to 19 years .....	(2,1,2)(0,1,1)	NONE
<b>Nonagricultural employment:</b>		
Men, 20 years and over .....	(0,1,1)(0,1,1)	LOG
Women, 20 years and over .....	(0,1,4)(0,1,1)	LOG
Men, 16 to 19 years .....	(2,1,0)(0,1,1)	NONE
Women, 16 to 19 years .....	(2,1,0)(0,1,1)	NONE
<b>Unemployment:</b>		
Men, 20 years and over .....	(0,1,3)(0,1,1)	LOG
Women, 20 years and over .....	(0,1,1)(0,1,1)	LOG
Men, 16 to 19 years .....	(0,1,1)(0,1,1)	NONE
Women, 16 to 19 years .....	(2,1,2)(0,1,1)	NONE

control for it as part of the seasonal adjustment process was included in the January 1990 version of this article.

*Six-month updates.* The current official practice for the seasonal adjustment of the labor force series involves the running of all directly adjusted series through X-11 ARIMA twice each year. This is done after receipt of June and December data, with 6 months of projected factors drawn from each run and historical revisions drawn from the end-of-year run. This practice allows, among other things, the prior publication of seasonal factors, which historically has been regarded by the Bureau of Labor Statistics and other statistical agencies as an important way of ensuring the openness of their seasonal adjustment procedures, especially where very sensitive indicators such as the unemployment rate have been involved. A number of research studies, including a 1987 one on the labor force series,<sup>5</sup> have indicated that the alternative practice of concurrent adjustment, where the seasonal adjustment procedure is run with all available data each month and factors cannot be published ahead of time, generally produces initial seasonally adjusted estimates requiring smaller revisions than those produced by adjustment using projected factors. BLS is continuing to compute and evaluate concurrent adjustment for the labor force series.

### **Aggregation procedures**

BLS maintains and publishes several hundred seasonally adjusted labor force series in addition to the 181 directly adjusted series discussed above. These additional series are produced by arithmetically combining or aggregating the directly adjusted series with each other or, in some cases, with series on population which are not seasonally adjusted because they are not considered to have any significant seasonal variation. For example, the seasonally adjusted levels of total unemployment, civilian employment, and civilian labor force, and the seasonally adjusted unemployment rate for all civilian workers, are all produced by aggregation of some or all of the seasonally adjusted results for the 12 major civilian labor force components. The seasonally adjusted level of total unemployment is the sum of the seasonally adjusted levels of unemployment for the four age-sex groups—men and women 16 to 19, and men and women 20 years and over. Seasonally adjusted civilian employment is the sum of the seasonally adjusted levels of employment for the eight employment components—the same four age-sex groups as noted above employed in nonagricultural and agricultural industries. The seasonally adjusted civilian labor force is the sum of all 12 components. The

<sup>5</sup> G.R. Methee and R.J. McIntire, "An Evaluation of Concurrent Seasonal Adjustment for the Major Labor Force Series," in the 1987 *Proceedings of the Business and Economic Statistics Section*, American Statistical Association.

seasonally adjusted civilian unemployment rate is calculated by taking the total seasonally adjusted unemployment level as a percent of the total seasonally adjusted civilian labor force.

The principal reason for producing many of the major seasonally adjusted estimates for the labor force by aggregation rather than by direct adjustment is that this approach ensures that the major seasonally adjusted totals will be arithmetically consistent with at least one major set of components. If the totals were directly adjusted along with the components, such consistency would not, in all likelihood, occur, because the X-11 is not a sum-preserving procedure. That is, the sum of the result for two or more directly adjusted series will not generally be the same as the result of directly adjusting the sum of the unadjusted versions of the same series. Another factor is that it would generally be inappropriate to apply seasonal factors computed for an aggregate series to the components of the aggregate. The various labor force components tend to have significantly different patterns of seasonal variation; for example, teenage unemployment tends to peak in June, while unemployment of adult men tends to peak in the winter months of January and February. In order to estimate properly these varying seasonal patterns, it is necessary to adjust the components directly. Of course, one of the implications of producing seasonally adjusted estimates for many major series by aggregation is that exact factors cannot be projected for those series. However, implicit seasonal adjustment factors can be calculated after the fact by taking the ratio of the unadjusted aggregate to the seasonally adjusted aggregate, or, for additive implicit factors, the difference between those two aggregates.

### **Availability of revised series**

This issue of *Employment and Earnings* contains revised monthly and quarterly data for the most recent 13 months and calendar quarters for many seasonally adjusted labor force series. These revisions replace the seasonally adjusted estimates previously published for those periods. Revised historical seasonally adjusted labor force data also are available in various forms on the Internet ([stats.bls.gov](http://stats.bls.gov)), including ftp access (<ftp://stats.bls.gov/pub/special.requests/lf>) to all the revised data. The seasonally adjusted data last published for 1993 and earlier years were not further revised.

The January-June 1999 factors for any of the directly adjusted series beyond the 12 major components can be obtained from BLS upon request. Requests for the seasonal factors or inquiries concerning the seasonal adjustment methodology used for the labor force data should be addressed to the Division of Data Development and Publications, Office of Employment and Unemployment Statistics, Bureau of Labor Statistics, Washington, DC 20212.

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

(Numbers in thousands)

Category	1997		1998										
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Labor force status													
Civilian noninstitutional population .....	204,098	204,238	204,400	204,547	204,731	204,899	205,085	205,270	205,479	205,699	205,919	206,104	206,270
Civilian labor force .....	137,086	137,288	137,384	137,340	137,232	137,369	137,498	137,407	137,481	138,081	138,116	138,193	138,547
Percent of population .....	67.2	67.2	67.2	67.1	67.0	67.0	67.0	66.9	66.9	67.1	67.1	67.1	67.2
Employed .....	130,638	130,943	131,021	130,908	131,280	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526
Percent of population .....	64.0	64.1	64.1	64.0	64.1	64.1	64.0	63.9	63.9	64.1	64.0	64.1	64.2
Unemployed .....	6,448	6,345	6,363	6,432	5,952	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021
Not in labor force .....	67,012	66,950	67,016	67,207	67,499	67,530	67,587	67,863	67,998	67,618	67,803	67,911	67,723
Unemployment rates													
All workers .....	4.7	4.6	4.6	4.7	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3
Men, 20 years and over .....	4.1	3.8	3.8	3.9	3.5	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6
Women, 20 years and over .....	4.1	4.2	4.2	4.2	4.1	3.9	4.1	4.0	4.0	4.0	4.0	4.0	3.9
Both sexes, 16 to 19 years .....	14.1	14.2	14.7	14.9	13.5	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0
White .....	3.9	4.0	3.9	4.0	3.7	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8
Black .....	10.1	9.4	9.4	9.2	9.0	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9
Hispanic origin .....	7.2	7.0	6.9	7.0	6.7	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

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

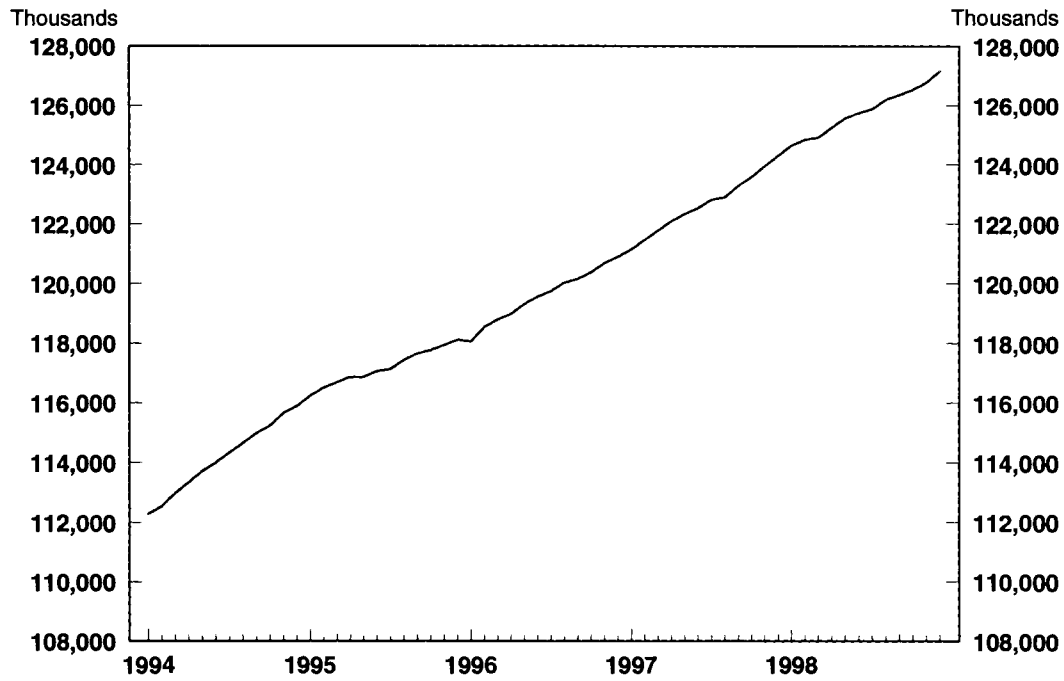
(Numbers in thousands)

Industry	1997		1998										
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>	Dec. <sup>P</sup>
Employment													
Total .....	124,289	124,640	124,832	124,914	125,234	125,562	125,751	125,869	126,191	126,363	126,527	126,778	127,156
Total private .....	104,609	104,954	105,112	105,186	105,470	105,734	105,938	106,043	106,269	106,435	106,579	106,802	107,121
Goods-producing industries .....	25,193	25,297	25,314	25,276	25,339	25,301	25,304	25,135	25,253	25,241	25,209	25,184	25,272
Mining .....	592	592	590	587	582	579	578	571	571	568	564	560	557
Construction .....	5,810	5,881	5,902	5,860	5,930	5,917	5,946	5,970	5,989	5,981	6,012	6,054	6,158
Manufacturing .....	18,791	18,824	18,822	18,829	18,827	18,805	18,780	18,594	18,693	18,692	18,633	18,570	18,557
Service-producing industries .....	99,096	99,343	99,518	99,638	99,895	100,261	100,447	100,734	100,938	101,122	101,318	101,594	101,884
Transportation and public utilities .....	6,451	6,473	6,494	6,504	6,513	6,534	6,538	6,550	6,570	6,579	6,595	6,609	6,641
Wholesale trade .....	6,731	6,759	6,769	6,783	6,798	6,815	6,821	6,827	6,838	6,862	6,864	6,875	6,882
Retail trade .....	22,245	22,280	22,283	22,259	22,335	22,423	22,448	22,547	22,545	22,592	22,589	22,654	22,707
Finance, insurance, and real estate .....	7,194	7,213	7,232	7,258	7,289	7,311	7,333	7,370	7,372	7,393	7,417	7,439	7,467
Services .....	36,795	36,932	37,020	37,106	37,196	37,350	37,494	37,614	37,691	37,768	37,905	38,041	38,152
Government .....	19,680	19,686	19,720	19,728	19,764	19,828	19,813	19,826	19,922	19,928	19,948	19,976	20,035
Over-the-month change													
Total .....	345	351	192	82	320	328	189	118	322	172	164	251	378
Total private .....	327	345	158	74	284	264	204	105	226	166	144	223	319
Goods-producing industries .....	94	104	17	-38	63	-38	3	-169	118	-12	-32	-25	88
Mining .....	1	0	-2	-3	-5	-3	-1	-7	0	-3	-4	-4	-3
Construction .....	60	71	21	-42	70	-13	29	24	19	-8	31	42	104
Manufacturing .....	33	33	-2	7	-2	-22	-25	-186	99	-1	-59	-83	-13
Service-producing industries .....	251	247	175	120	257	366	186	287	204	184	196	276	290
Transportation and public utilities .....	-5	22	21	10	9	21	4	12	20	9	16	14	32
Wholesale trade .....	20	28	10	14	15	17	6	6	11	24	2	11	7
Retail trade .....	39	35	3	-24	76	88	25	99	-2	47	-3	65	53
Finance, insurance, and real estate .....	22	19	19	26	31	22	22	37	2	21	24	22	28
Services .....	157	137	88	86	90	154	144	120	77	77	137	136	111
Government .....	18	6	34	8	36	64	-15	13	96	6	20	28	59
Hours of work <sup>1</sup>													
Total private .....	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6	34.6	34.4	34.6	34.5	34.6
Manufacturing .....	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7	41.7	41.6	41.7	41.6	41.8
Overtime .....	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5
Indexes of aggregate weekly hours (1982=100) <sup>1</sup>													
Total private .....	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2	145.3	144.9	145.8	145.7	146.5
Manufacturing .....	110.6	110.6	110.3	109.7	108.7	109.4	109.0	107.2	108.0	108.0	107.8	107.2	107.5
Earnings <sup>1</sup>													
Average hourly earnings, total private:													
Current dollars .....	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79	\$12.85	\$12.87	\$12.90	\$12.93	\$12.98
Constant (1982) dollars <sup>2</sup> .....	7.63	7.66	7.69	7.72	7.74	7.73	7.75	7.75	7.78	7.79	7.79	7.79	N.A.
Average weekly earnings, total private .....	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53	444.61	442.73	446.34	446.09	449.11

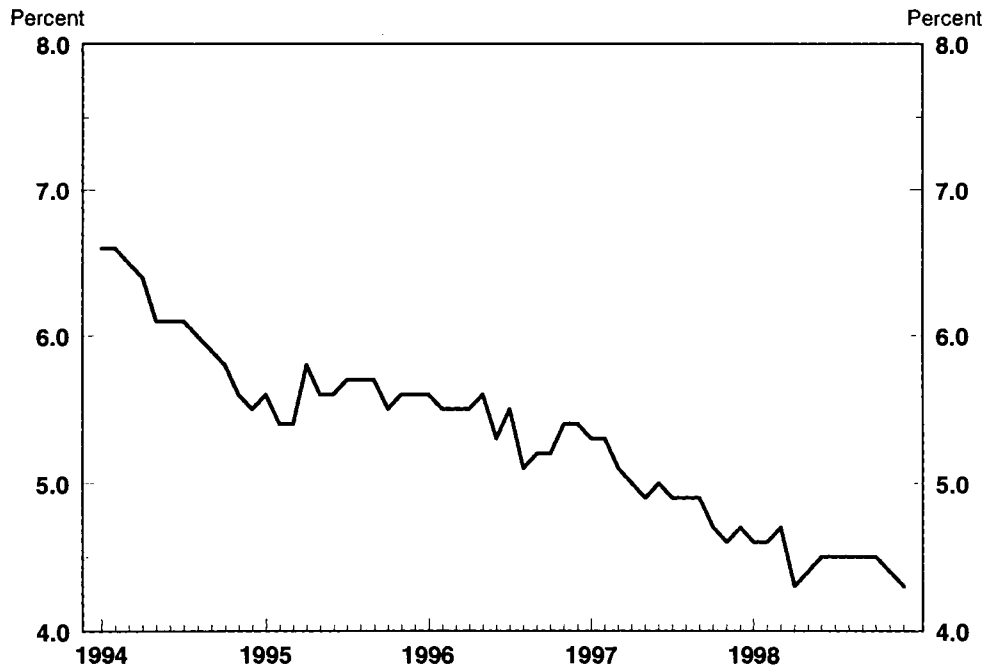
<sup>1</sup> Data relate to private production or nonsupervisory workers.  
<sup>2</sup> The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

N.A. = not available.  
<sup>P</sup> = preliminary.

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



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



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

A-1. Employment status of the civilian noninstitutional population 16 years and over, 1965 to date

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Annual averages										
1965 .....	126,513	74,455	58.9	71,088	56.2	4,361	66,726	3,366	4.5	52,058
1966 .....	128,058	75,770	59.2	72,895	56.9	3,979	68,915	2,875	3.8	52,288
1967 .....	129,874	77,347	59.6	74,372	57.3	3,844	70,527	2,975	3.8	52,527
1968 .....	132,028	78,737	59.6	75,920	57.5	3,817	72,103	2,817	3.6	53,291
1969 .....	134,335	80,734	60.1	77,902	58.0	3,606	74,296	2,832	3.5	53,602
1970 .....	137,085	82,771	60.4	78,678	57.4	3,463	75,215	4,093	4.9	54,315
1971 .....	140,216	84,382	60.2	79,367	56.6	3,394	75,972	5,016	5.9	55,834
1972 <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
1998 <sup>2</sup> .....	205,220	137,673	67.1	131,463	64.1	3,378	128,085	6,210	4.5	67,547
Monthly data, seasonally adjusted <sup>3</sup>										
<b>1997:</b>										
December .....	204,098	137,086	67.2	130,638	64.0	3,383	127,255	6,448	4.7	67,012
<b>1998:</b>										
January <sup>2</sup> .....	204,238	137,288	67.2	130,943	64.1	3,337	127,606	6,345	4.6	66,950
February .....	204,400	137,384	67.2	131,021	64.1	3,345	127,676	6,363	4.6	67,016
March .....	204,547	137,340	67.1	130,908	64.0	3,173	127,735	6,432	4.7	67,207
April .....	204,731	137,232	67.0	131,280	64.1	3,381	127,899	5,952	4.3	67,499
May .....	204,899	137,369	67.0	131,330	64.1	3,351	127,979	6,039	4.4	67,530
June .....	205,085	137,498	67.0	131,253	64.0	3,363	127,890	6,245	4.5	67,587
July .....	205,270	137,407	66.9	131,176	63.9	3,423	127,753	6,231	4.5	67,863
August .....	205,479	137,481	66.9	131,264	63.9	3,492	127,772	6,217	4.5	67,998
September .....	205,699	138,081	67.1	131,818	64.1	3,470	128,348	6,263	4.5	67,618
October .....	205,919	138,116	67.1	131,858	64.0	3,558	128,300	6,258	4.5	67,803
November .....	206,104	138,193	67.1	132,113	64.1	3,348	128,765	6,080	4.4	67,911
December .....	206,270	138,547	67.2	132,526	64.2	3,222	129,304	6,021	4.3	67,723

<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> 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.

<sup>3</sup> The population figures are not adjusted for seasonal variation.

NOTE: Seasonally adjusted data shown in tables A-1 through A-13 have been revised based on the experience through December 1998. Data for 1994-98 are subject to revision. See the article in this issue for additional information.



**HOUSEHOLD DATA  
HISTORICAL**

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

(Numbers in thousands)

Sex, year, and month	Civilian noninstitutional population	Civilian labor force								Not in labor force
		Number	Percent of population	Employed				Unemployed		
				Number	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>Annual averages</b>										
<b>MEN</b>										
1987	86,899	66,207	76.2	62,107	71.5	2,543	59,564	4,101	6.2	20,692
1988	87,857	66,927	76.2	63,273	72.0	2,493	60,780	3,655	5.5	20,990
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	69,188	75.8	64,223	70.4	2,589	61,634	4,946	7.2	22,110
1992	92,270	69,964	75.8	64,440	69.8	2,575	61,866	5,523	7.9	22,306
1993	93,332	70,404	75.4	65,349	70.0	2,478	62,871	5,055	7.2	22,927
1994 <sup>1</sup>	94,355	70,817	75.1	66,450	70.4	2,554	63,896	4,367	6.2	23,538
1995	95,178	71,360	75.0	67,377	70.8	2,559	64,818	3,983	5.6	23,818
1996	96,206	72,087	74.9	68,207	70.9	2,573	65,634	3,880	5.4	24,119
1997 <sup>1</sup>	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
1998 <sup>2</sup>	98,758	73,959	74.9	70,693	71.6	2,553	68,140	3,266	4.4	24,799
<b>Monthly data, seasonally adjusted<sup>3</sup></b>										
<b>1997:</b>										
December	98,225	73,562	74.9	70,133	71.4	2,506	67,627	3,429	4.7	24,663
<b>1998:</b>										
January <sup>2</sup>	98,241	73,719	75.0	70,387	71.6	2,483	67,904	3,332	4.5	24,522
February	98,331	73,735	75.0	70,411	71.6	2,475	67,936	3,324	4.5	24,596
March	98,405	73,657	74.9	70,295	71.4	2,380	67,915	3,362	4.6	24,748
April	98,503	73,723	74.8	70,695	71.8	2,595	68,100	3,028	4.1	24,780
May	98,591	73,792	74.8	70,603	71.6	2,508	68,095	3,189	4.3	24,799
June	98,691	73,866	74.8	70,592	71.5	2,541	68,051	3,274	4.4	24,825
July	98,785	73,989	74.9	70,629	71.5	2,589	68,040	3,360	4.5	24,796
August	98,892	73,754	74.6	70,503	71.3	2,631	67,872	3,251	4.4	25,138
September	99,006	74,202	74.9	70,841	71.6	2,644	68,197	3,361	4.5	24,804
October	99,121	74,189	74.8	70,925	71.6	2,734	68,191	3,264	4.4	24,932
November	99,217	74,345	74.9	71,182	71.7	2,578	68,604	3,163	4.3	24,872
December	99,309	74,437	75.0	71,204	71.7	2,414	68,790	3,233	4.3	24,872
<b>Annual averages</b>										
<b>WOMEN</b>										
1987	95,853	53,658	56.0	50,334	52.5	666	49,668	3,324	6.2	42,195
1988	96,756	54,742	56.6	51,696	53.4	676	51,020	3,046	5.6	42,014
1989	97,630	56,030	57.4	53,027	54.3	687	52,341	3,003	5.4	41,601
1990 <sup>1</sup>	98,787	56,829	57.5	53,689	54.3	678	53,011	3,140	5.5	41,957
1991	99,646	57,178	57.4	53,496	53.7	680	52,815	3,683	6.4	42,468
1992	100,535	58,141	57.8	54,052	53.8	672	53,380	4,090	7.0	42,394
1993	101,506	58,795	57.9	54,910	54.1	637	54,273	3,885	6.6	42,711
1994 <sup>1</sup>	102,480	60,239	58.8	56,610	55.3	855	55,755	3,629	6.0	42,221
1995	103,406	60,944	58.9	57,523	55.6	881	56,642	3,421	5.6	42,462
1996	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997 <sup>1</sup>	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
1998 <sup>2</sup>	106,462	63,714	59.8	60,771	57.1	825	59,945	2,944	4.6	42,748
<b>Monthly data, seasonally adjusted<sup>3</sup></b>										
<b>1997:</b>										
December	105,873	63,524	60.0	60,505	57.1	877	59,628	3,019	4.8	42,349
<b>1998:</b>										
January <sup>2</sup>	105,997	63,569	60.0	60,556	57.1	854	59,702	3,013	4.7	42,428
February	106,070	63,649	60.0	60,610	57.1	870	59,740	3,039	4.8	42,421
March	106,141	63,683	60.0	60,613	57.1	793	59,820	3,070	4.8	42,458
April	106,228	63,509	59.8	60,585	57.0	786	59,799	2,924	4.6	42,719
May	106,308	63,577	59.8	60,727	57.1	843	59,884	2,850	4.5	42,731
June	106,394	63,632	59.8	60,661	57.0	822	59,839	2,971	4.7	42,762
July	106,484	63,418	59.6	60,547	56.9	834	59,713	2,871	4.5	43,066
August	106,587	63,727	59.8	60,761	57.0	861	59,900	2,966	4.7	42,860
September	106,693	63,879	59.9	60,977	57.2	826	60,151	2,902	4.5	42,814
October	106,798	63,927	59.9	60,933	57.1	824	60,109	2,994	4.7	42,871
November	106,887	63,848	59.7	60,931	57.0	770	60,161	2,917	4.6	43,039
December	106,960	64,110	59.9	61,322	57.3	808	60,514	2,788	4.3	42,850

<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> 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.

<sup>3</sup> The population figures are not adjusted for seasonal variation.

NOTE: Seasonally adjusted data have been revised based on the experience through December 1998. Data for 1994-98 are subject to revision. See the article in this issue for additional information.



**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> ..	170,649	170,810	170,917	171,016	171,141	171,257	171,387	171,513	171,655	171,804	171,956	172,084	172,197
Civilian labor force .....	115,118	115,226	115,271	115,184	115,121	115,312	115,208	115,071	115,385	115,751	115,714	115,687	115,996
Percent of population .....	67.5	67.5	67.4	67.4	67.3	67.3	67.2	67.1	67.2	67.4	67.3	67.2	67.4
Employed .....	110,612	110,659	110,731	110,556	110,858	110,959	110,638	110,676	110,848	111,221	111,162	111,304	111,560
Employment-population ratio .....	64.8	64.8	64.8	64.6	64.8	64.8	64.6	64.5	64.6	64.7	64.6	64.7	64.8
Unemployed .....	4,506	4,567	4,540	4,628	4,263	4,353	4,570	4,395	4,537	4,530	4,552	4,383	4,436
Unemployment rate .....	3.9	4.0	3.9	4.0	3.7	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8
<b>Men, 20 years and over</b>													
Civilian labor force .....	59,313	59,277	59,314	59,179	59,324	59,338	59,298	59,406	59,384	59,587	59,579	59,634	59,712
Percent of population .....	77.4	77.3	77.3	77.1	77.2	77.2	77.1	77.2	77.1	77.3	77.2	77.2	77.2
Employed .....	57,246	57,320	57,378	57,201	57,538	57,452	57,348	57,447	57,450	57,615	57,646	57,806	57,813
Employment-population ratio .....	74.7	74.8	74.8	74.5	74.9	74.7	74.6	74.6	74.6	74.7	74.7	74.8	74.8
Unemployed .....	2,067	1,957	1,936	1,978	1,786	1,886	1,950	1,959	1,934	1,972	1,933	1,828	1,899
Unemployment rate .....	3.5	3.3	3.3	3.3	3.0	3.2	3.3	3.3	3.3	3.3	3.2	3.1	3.2
<b>Women, 20 years and over</b>													
Civilian labor force .....	49,078	49,046	49,031	49,028	48,972	49,048	48,930	48,770	49,025	49,108	49,062	49,065	49,230
Percent of population .....	60.0	59.9	59.9	59.9	59.8	59.8	59.6	59.4	59.7	59.8	59.7	59.6	59.8
Employed .....	47,387	47,252	47,283	47,271	47,304	47,423	47,244	47,129	47,321	47,456	47,401	47,415	47,585
Employment-population ratio .....	58.0	57.7	57.7	57.7	57.7	57.8	57.6	57.4	57.6	57.7	57.6	57.6	57.8
Unemployed .....	1,691	1,794	1,748	1,757	1,668	1,625	1,686	1,641	1,704	1,652	1,661	1,650	1,645
Unemployment rate .....	3.4	3.7	3.6	3.6	3.4	3.3	3.4	3.4	3.5	3.4	3.4	3.4	3.3
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,727	6,903	6,926	6,977	6,825	6,926	6,980	6,895	6,976	7,056	7,073	6,988	7,054
Percent of population .....	54.9	56.2	56.3	56.6	55.2	55.8	56.1	55.3	55.8	56.4	56.4	55.7	56.1
Employed .....	5,979	6,087	6,070	6,084	6,016	6,084	6,046	6,100	6,077	6,150	6,115	6,083	6,162
Employment-population ratio .....	48.8	49.6	49.3	49.3	48.6	49.0	48.6	48.9	48.6	49.1	48.8	48.5	49.0
Unemployed .....	748	816	856	893	809	842	934	795	899	906	958	905	892
Unemployment rate .....	11.1	11.8	12.4	12.8	11.9	12.2	13.4	11.5	12.9	12.8	13.5	13.0	12.6
Men .....	11.3	14.1	14.4	14.7	12.9	14.0	14.4	13.2	14.2	14.7	14.1	14.1	14.5
Women .....	10.9	9.4	10.1	10.7	10.7	10.1	12.3	9.7	11.5	10.8	13.0	11.6	10.6
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> ..	24,180	24,196	24,229	24,257	24,289	24,317	24,349	24,381	24,418	24,458	24,496	24,529	24,561
Civilian labor force .....	15,733	15,770	15,834	15,931	15,901	15,760	16,025	16,045	15,937	16,027	16,163	16,201	16,157
Percent of population .....	65.1	65.2	65.4	65.7	65.5	64.8	65.8	65.8	65.3	65.5	66.0	66.0	65.8
Employed .....	14,147	14,288	14,340	14,463	14,477	14,351	14,662	14,511	14,517	14,584	14,776	14,804	14,884
Employment-population ratio .....	58.5	59.1	59.2	59.6	59.6	59.0	60.2	59.5	59.5	59.6	60.3	60.4	60.6
Unemployed .....	1,586	1,482	1,494	1,468	1,424	1,409	1,363	1,534	1,420	1,443	1,387	1,397	1,273
Unemployment rate .....	10.1	9.4	9.4	9.2	9.0	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,966	6,998	6,993	7,037	7,077	7,005	7,080	7,111	7,021	6,999	7,144	7,086	7,063
Percent of population .....	72.1	72.5	72.3	72.7	73.0	72.2	72.9	73.1	72.1	71.7	73.1	72.4	72.0
Employed .....	6,366	6,442	6,448	6,503	6,548	6,523	6,574	6,491	6,487	6,499	6,653	6,590	6,588
Employment-population ratio .....	65.9	66.7	66.7	67.2	67.6	67.2	67.7	66.7	66.6	66.6	68.0	67.3	67.2
Unemployed .....	600	556	545	534	529	482	506	620	534	500	491	496	475
Unemployment rate .....	8.6	7.9	7.8	7.6	7.5	6.9	7.1	8.7	7.6	7.1	6.9	7.0	6.7
<b>Women, 20 years and over</b>													
Civilian labor force .....	7,804	7,802	7,895	7,902	7,830	7,792	7,870	7,916	7,903	7,948	7,992	8,051	8,035
Percent of population .....	64.5	64.3	65.0	65.0	64.4	64.0	64.6	64.9	64.7	64.9	65.2	65.6	65.4
Employed .....	7,157	7,169	7,238	7,256	7,192	7,146	7,255	7,294	7,302	7,320	7,391	7,443	7,474
Employment-population ratio .....	59.1	59.1	59.6	59.7	59.1	58.7	59.5	59.8	59.7	59.8	60.3	60.6	60.8
Unemployed .....	647	633	657	646	638	646	615	622	601	628	601	608	561
Unemployment rate .....	8.3	8.1	8.3	8.2	8.1	8.3	7.8	7.9	7.6	7.9	7.5	7.6	7.0

See footnotes at end of table.

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	963	970	946	992	994	963	1,075	1,018	1,013	1,080	1,027	1,064	1,059
Percent of population .....	39.9	40.2	39.1	40.9	40.8	39.5	44.0	41.5	41.3	44.0	41.8	43.3	43.0
Employed .....	624	677	654	704	737	682	833	726	728	765	732	771	822
Employment-population ratio .....	25.8	28.0	27.0	29.0	30.3	27.9	34.1	29.6	29.7	31.1	29.8	31.4	33.4
Unemployed .....	339	293	292	288	257	281	242	292	285	315	295	293	237
Unemployment rate .....	35.2	30.2	30.9	29.0	25.9	29.2	22.5	28.7	28.1	29.2	28.7	27.5	22.4
Men .....	36.7	31.7	34.0	28.5	26.0	31.2	22.4	30.2	29.7	32.7	34.7	33.0	27.3
Women .....	34.0	28.8	28.0	29.5	25.7	27.4	22.6	27.0	26.8	25.7	23.5	22.1	17.6
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> ..	20,629	20,741	20,798	20,851	20,915	20,975	21,036	21,097	21,159	21,224	21,286	21,349	21,405
Civilian labor force .....	13,985	14,020	14,145	14,254	14,289	14,378	14,375	14,267	14,316	14,457	14,437	14,389	14,488
Percent of population .....	67.8	67.6	68.0	68.4	68.3	68.5	68.3	67.6	67.7	68.1	67.8	67.4	67.7
Employed .....	12,977	13,038	13,165	13,263	13,332	13,387	13,301	13,245	13,257	13,394	13,382	13,345	13,383
Employment-population ratio .....	62.9	62.9	63.3	63.6	63.7	63.8	63.2	62.8	62.7	63.1	62.9	62.5	62.5
Unemployed .....	1,008	982	980	991	957	991	1,074	1,022	1,059	1,063	1,055	1,044	1,105
Unemployment rate .....	7.2	7.0	6.9	7.0	6.7	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6

<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. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Less than a high school diploma</b>													
Civilian noninstitutional population <sup>1</sup> .....	29,566	29,981	29,228	29,251	29,638	29,931	30,064	29,027	29,204	29,290	28,713	29,084	29,094
Civilian labor force .....	12,555	12,629	12,561	12,516	12,624	12,630	12,784	12,561	12,496	12,563	12,408	12,463	12,500
Percent of population .....	42.5	42.1	43.0	42.8	42.6	42.2	42.5	43.3	42.8	42.9	43.2	42.9	43.0
Employed .....	11,619	11,715	11,670	11,622	11,729	11,762	11,873	11,665	11,612	11,692	11,556	11,574	11,626
Employment-population ratio .....	39.3	39.1	39.9	39.7	39.6	39.3	39.5	40.2	39.8	39.9	40.2	39.8	40.0
Unemployed .....	936	914	891	894	895	868	911	896	884	871	852	889	874
Unemployment rate .....	7.5	7.2	7.1	7.1	7.1	6.9	7.1	7.1	7.1	6.9	6.9	7.1	7.0
<b>High school graduates, no college<sup>2</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	57,631	57,606	57,418	57,885	57,484	57,706	57,446	57,374	57,729	57,589	57,666	57,273	57,115
Civilian labor force .....	37,805	37,745	37,730	37,850	37,412	37,488	37,171	37,290	37,367	37,289	37,540	37,408	37,296
Percent of population .....	65.6	65.5	65.7	65.4	65.1	65.0	64.7	65.0	64.7	64.8	65.1	65.3	65.3
Employed .....	36,255	36,249	36,225	36,262	35,935	36,071	35,681	35,779	35,883	35,783	36,056	35,947	35,873
Employment-population ratio .....	62.9	62.9	63.1	62.6	62.5	62.5	62.1	62.4	62.2	62.1	62.5	62.8	62.8
Unemployed .....	1,550	1,496	1,505	1,588	1,477	1,417	1,490	1,511	1,484	1,506	1,484	1,461	1,423
Unemployment rate .....	4.1	4.0	4.0	4.2	3.9	3.8	4.0	4.1	4.0	4.0	4.0	3.9	3.8
<b>Less than a bachelor's degree<sup>3</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	42,085	41,718	42,527	42,313	42,303	42,024	41,880	42,293	41,842	41,769	42,573	42,863	43,022
Civilian labor force .....	31,357	31,385	31,418	31,459	31,435	31,411	31,283	31,220	31,117	31,271	31,349	31,727	31,800
Percent of population .....	74.5	75.2	73.9	74.3	74.3	74.7	74.7	73.8	74.4	74.9	73.6	74.0	73.9
Employed .....	30,335	30,383	30,448	30,448	30,572	30,447	30,371	30,274	30,231	30,343	30,423	30,825	30,911
Employment-population ratio .....	72.1	72.8	71.6	72.0	72.3	72.5	72.5	71.6	72.3	72.6	71.5	71.9	71.8
Unemployed .....	1,022	1,002	970	1,011	863	964	912	946	886	928	926	902	889
Unemployment rate .....	3.3	3.2	3.1	3.2	2.7	3.1	2.9	3.0	2.8	3.0	3.0	2.8	2.8
<b>College graduates</b>													
Civilian noninstitutional population <sup>1</sup> .....	41,822	41,974	42,238	42,085	42,197	42,090	42,464	43,309	43,431	43,669	43,520	43,408	43,484
Civilian labor force .....	33,683	33,698	33,742	33,833	34,039	34,028	34,281	34,637	34,739	34,914	34,779	34,554	34,838
Percent of population .....	80.5	80.3	79.9	80.4	80.7	80.8	80.7	80.0	80.0	80.0	79.9	79.6	80.1
Employed .....	33,086	33,067	33,114	33,210	33,456	33,451	33,681	34,051	34,129	34,335	34,108	33,922	34,205
Employment-population ratio .....	79.1	78.8	78.4	78.9	79.3	79.5	79.3	78.6	78.6	78.6	78.4	78.1	78.7
Unemployed .....	597	631	628	623	583	577	600	586	610	579	671	632	633
Unemployment rate .....	1.8	1.9	1.9	1.8	1.7	1.7	1.8	1.7	1.8	1.7	1.9	1.8	1.8

<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. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**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											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>EMPLOYED</b>													
Full-time workers .....	107,306	107,642	107,712	107,741	107,992	108,048	107,748	107,856	108,150	108,512	108,561	109,016	109,483
Men, 16 years and over .....	62,742	62,858	62,830	62,841	63,045	63,055	63,108	63,138	63,202	63,216	63,417	63,726	63,829
Men, 20 years and over .....	61,434	61,586	61,557	61,537	61,750	61,721	61,721	61,729	61,808	61,911	62,039	62,312	62,375
Women, 16 years and over .....	44,540	44,698	44,787	44,839	44,910	44,943	44,656	44,845	45,097	45,344	45,154	45,289	45,604
Women, 20 years and over .....	43,629	43,790	43,834	43,841	43,944	43,967	43,756	43,819	44,019	44,265	44,231	44,387	44,675
Both sexes, 16 to 19 years .....	2,243	2,266	2,321	2,363	2,298	2,360	2,271	2,308	2,323	2,336	2,291	2,317	2,433
Part-time workers .....	23,487	23,364	23,241	23,339	23,207	23,239	23,460	23,231	22,975	23,284	23,281	23,249	23,258
Men, 16 years and over .....	7,489	7,467	7,518	7,531	7,594	7,468	7,485	7,496	7,332	7,644	7,490	7,554	7,490
Men, 20 years and over .....	5,278	5,278	5,303	5,307	5,362	5,294	5,256	5,322	5,181	5,364	5,295	5,332	5,272
Women, 16 years and over .....	16,001	15,817	15,736	15,794	15,637	15,769	16,027	15,732	15,638	15,682	15,797	15,690	15,770
Women, 20 years and over .....	13,580	13,289	13,231	13,325	13,160	13,245	13,446	13,258	13,230	13,154	13,197	13,125	13,134
Both sexes, 16 to 19 years .....	4,629	4,797	4,707	4,707	4,685	4,700	4,758	4,651	4,564	4,766	4,789	4,792	4,852
<b>UNEMPLOYED</b>													
Looking for full-time work .....	5,196	5,048	5,093	5,079	4,763	4,877	4,915	4,943	4,919	4,916	4,871	4,736	4,781
Men, 16 years and over .....	2,961	2,702	2,687	2,741	2,538	2,690	2,768	2,823	2,739	2,788	2,698	2,611	2,675
Men, 20 years and over .....	2,645	2,446	2,410	2,449	2,219	2,337	2,399	2,461	2,364	2,383	2,324	2,235	2,319
Women, 16 years and over .....	2,255	2,284	2,330	2,292	2,249	2,176	2,221	2,077	2,209	2,159	2,215	2,179	2,131
Women, 20 years and over .....	1,959	2,037	2,115	2,025	1,991	1,933	1,936	1,918	1,959	1,924	1,944	1,918	1,891
Both sexes, 16 to 19 years .....	592	565	568	605	553	607	580	564	596	609	603	583	571
Looking for part-time work .....	1,262	1,325	1,277	1,386	1,192	1,194	1,288	1,283	1,298	1,298	1,362	1,340	1,263
Men, 16 years and over .....	486	549	569	569	526	523	564	551	539	571	594	577	581
Men, 20 years and over .....	219	212	220	226	224	196	193	221	205	213	223	219	209
Women, 16 years and over .....	753	757	720	803	705	698	753	749	744	708	748	757	663
Women, 20 years and over .....	476	494	448	530	436	417	482	482	459	424	442	464	412
Both sexes, 16 to 19 years .....	567	619	609	630	532	581	613	580	634	661	697	657	642
<b>UNEMPLOYMENT RATES<sup>1</sup></b>													
Full-time workers .....	4.6	4.5	4.5	4.5	4.2	4.3	4.4	4.4	4.4	4.3	4.3	4.2	4.2
Men, 16 years and over .....	4.5	4.1	4.1	4.2	3.9	4.1	4.2	4.3	4.2	4.2	4.1	3.9	4.0
Men, 20 years and over .....	4.1	3.8	3.8	3.8	3.5	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6
Women, 16 years and over .....	4.8	4.9	4.9	4.9	4.8	4.6	4.7	4.4	4.7	4.5	4.7	4.6	4.5
Women, 20 years and over .....	4.3	4.4	4.6	4.4	4.3	4.2	4.2	4.2	4.3	4.2	4.2	4.1	4.1
Both sexes, 16 to 19 years .....	20.9	20.0	19.7	20.4	19.4	20.5	20.3	19.6	20.4	20.7	20.8	20.1	19.0
Part-time workers .....	5.1	5.4	5.2	5.6	4.9	4.9	5.2	5.2	5.3	5.3	5.5	5.4	5.2
Men, 16 years and over .....	6.1	6.8	7.0	7.0	6.5	6.5	7.0	6.8	6.8	7.0	7.3	7.1	7.2
Men, 20 years and over .....	4.0	3.9	4.0	4.1	4.0	3.6	3.5	4.0	3.8	3.8	4.0	3.9	3.8
Women, 16 years and over .....	4.5	4.6	4.4	4.8	4.3	4.2	4.5	4.5	4.5	4.3	4.5	4.6	4.0
Women, 20 years and over .....	3.4	3.6	3.3	3.8	3.2	3.1	3.5	3.5	3.4	3.1	3.2	3.4	3.0
Both sexes, 16 to 19 years .....	10.9	11.4	11.5	11.8	10.2	11.0	11.4	11.1	12.2	12.2	12.7	12.1	11.7

<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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(In thousands)

Category	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>MARITAL STATUS</b>													
Total .....	130,638	130,943	131,021	130,908	131,280	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526
Married men, spouse present .....	42,879	42,894	42,869	42,789	42,860	42,560	42,648	42,850	42,874	43,170	43,090	43,209	43,227
Married women, spouse present .....	32,899	32,837	32,829	32,853	32,919	32,815	32,820	32,719	32,670	32,891	33,037	32,953	33,093
Women who maintain families .....	7,788	7,797	7,872	7,802	7,829	7,854	7,909	7,875	7,928	7,984	7,940	7,969	8,087
<b>OCCUPATION</b>													
Managerial and professional specialty .....	38,159	38,124	38,210	38,433	38,617	38,681	38,786	39,020	38,942	39,553	39,679	39,459	39,729
Technical, sales, and administrative support .....	38,570	38,462	38,519	38,631	38,568	38,493	38,573	38,513	38,843	38,478	38,431	38,430	38,307
Service occupations .....	17,847	18,089	17,899	17,796	17,527	17,776	17,856	17,683	17,770	17,926	17,692	18,024	17,976
Precision production, craft, and repair .....	14,309	14,298	14,368	14,552	14,566	14,766	14,466	14,334	14,158	14,045	14,192	14,552	14,685
Operators, fabricators, and laborers .....	18,302	18,556	18,526	18,226	18,374	18,284	18,152	18,157	17,968	18,118	18,168	18,067	18,480
Farming, forestry, and fishing .....	3,484	3,418	3,477	3,326	3,494	3,487	3,513	3,519	3,590	3,585	3,604	3,538	3,396
<b>CLASS OF WORKER</b>													
Agriculture:													
Wage and salary workers .....	1,870	1,929	1,936	1,905	1,990	1,920	1,857	2,010	2,111	2,145	2,247	2,005	1,912
Self-employed workers .....	1,479	1,367	1,362	1,264	1,345	1,391	1,445	1,374	1,342	1,290	1,282	1,304	1,304
Unpaid family workers .....	53	44	42	34	33	50	44	32	31	40	33	40	34
Nonagricultural industries:													
Wage and salary workers .....	118,255	118,491	118,704	118,797	118,705	118,852	118,733	118,647	118,840	119,148	119,275	119,718	120,380
Private industries .....	100,055	100,184	100,402	100,673	100,474	100,690	100,266	100,273	100,508	100,700	100,728	101,111	101,694
Private households .....	960	981	1,017	997	996	992	962	966	871	918	946	969	943
Other industries .....	99,095	99,203	99,385	99,676	99,478	99,698	99,304	99,307	99,637	99,782	99,782	100,142	100,751
Government .....	18,200	18,307	18,302	18,124	18,231	18,162	18,467	18,374	18,332	18,448	18,547	18,607	18,686
Self-employed workers .....	8,918	8,958	8,826	8,831	9,064	9,012	8,971	9,060	8,955	9,096	9,030	8,929	8,814
Unpaid family workers .....	101	115	113	105	119	95	97	91	88	88	95	112	122
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
All industries:													
Part time for economic reasons .....	3,836	4,015	3,864	3,866	3,755	3,754	3,792	3,757	3,503	3,419	3,404	3,340	3,417
Slack work or business conditions .....	2,237	2,254	2,145	2,183	2,095	2,119	2,183	2,299	2,019	1,913	2,031	1,910	1,927
Could only find part-time work .....	1,309	1,388	1,415	1,398	1,308	1,317	1,248	1,213	1,188	1,168	1,136	1,157	1,148
Part time for noneconomic reasons .....	18,487	18,429	18,407	18,434	18,296	18,544	18,619	18,589	18,653	18,687	18,667	18,634	18,674
Nonagricultural industries:													
Part time for economic reasons .....	3,663	3,829	3,714	3,698	3,606	3,608	3,618	3,606	3,339	3,191	3,253	3,191	3,257
Slack work or business conditions .....	2,122	2,138	2,044	2,062	2,010	2,033	2,102	2,193	1,926	1,800	1,927	1,824	1,841
Could only find part-time work .....	1,283	1,361	1,390	1,370	1,282	1,286	1,210	1,182	1,155	1,132	1,110	1,130	1,116
Part time for noneconomic reasons .....	17,864	17,793	17,791	17,872	17,653	17,956	17,992	17,982	18,031	18,161	18,107	18,110	18,155

<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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

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

(In thousands)

Age and sex	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total, 16 years and over .....	130,638	130,943	131,021	130,908	131,280	131,330	131,253	131,176	131,264	131,818	131,858	132,113	132,526
16 to 24 years .....	19,293	19,553	19,540	19,492	19,615	19,568	19,569	19,471	19,490	19,676	19,757	19,705	19,859
16 to 19 years .....	6,837	7,000	6,997	7,003	6,990	7,011	7,069	7,042	7,029	7,130	7,059	7,037	7,228
16 to 17 years .....	2,665	2,806	2,779	2,804	2,797	2,746	2,710	2,752	2,730	2,788	2,721	2,709	2,808
18 to 19 years .....	4,170	4,196	4,206	4,206	4,189	4,264	4,392	4,302	4,286	4,339	4,332	4,340	4,419
20 to 24 years .....	12,456	12,553	12,543	12,489	12,625	12,557	12,500	12,429	12,461	12,546	12,698	12,668	12,631
25 years and over .....	111,323	111,417	111,442	111,397	111,669	111,810	111,681	111,679	111,820	112,115	112,126	112,409	112,654
25 to 54 years .....	94,895	95,055	95,079	95,063	95,168	95,181	95,134	95,102	95,212	95,364	95,309	95,623	95,822
55 years and over .....	16,454	16,355	16,421	16,383	16,478	16,553	16,503	16,647	16,607	16,783	16,771	16,781	16,871
Men, 16 years and over .....	70,133	70,387	70,411	70,295	70,695	70,603	70,592	70,629	70,503	70,841	70,925	71,182	71,204
16 to 24 years .....	9,982	10,149	10,128	10,133	10,213	10,138	10,203	10,118	10,141	10,206	10,246	10,332	10,347
16 to 19 years .....	3,497	3,495	3,484	3,526	3,522	3,519	3,598	3,573	3,563	3,579	3,563	3,609	3,651
16 to 17 years .....	1,360	1,449	1,401	1,433	1,428	1,384	1,381	1,396	1,377	1,393	1,348	1,380	1,405
18 to 19 years .....	2,133	2,058	2,087	2,100	2,101	2,131	2,247	2,180	2,177	2,172	2,213	2,218	2,243
20 to 24 years .....	6,485	6,654	6,644	6,607	6,691	6,619	6,605	6,545	6,578	6,627	6,683	6,723	6,696
25 years and over .....	60,131	60,243	60,258	60,152	60,467	60,502	60,380	60,508	60,444	60,617	60,680	60,840	60,843
25 to 54 years .....	51,043	51,180	51,186	51,160	51,311	51,273	51,182	51,205	51,167	51,232	51,299	51,606	51,502
55 years and over .....	9,117	9,069	9,113	9,015	9,124	9,207	9,162	9,327	9,238	9,386	9,340	9,311	9,374
Women, 16 years and over .....	60,505	60,556	60,610	60,613	60,585	60,727	60,661	60,547	60,761	60,977	60,933	60,931	61,322
16 to 24 years .....	9,311	9,404	9,412	9,359	9,402	9,430	9,366	9,353	9,349	9,470	9,511	9,373	9,512
16 to 19 years .....	3,340	3,505	3,513	3,477	3,468	3,492	3,471	3,469	3,466	3,551	3,496	3,428	3,577
16 to 17 years .....	1,305	1,357	1,378	1,371	1,369	1,362	1,329	1,356	1,353	1,395	1,373	1,329	1,403
18 to 19 years .....	2,037	2,138	2,119	2,106	2,088	2,133	2,145	2,122	2,109	2,167	2,119	2,122	2,176
20 to 24 years .....	5,971	5,899	5,899	5,882	5,934	5,938	5,895	5,884	5,883	5,919	6,015	5,945	5,935
25 years and over .....	51,192	51,174	51,184	51,245	51,202	51,308	51,301	51,171	51,376	51,498	51,446	51,569	51,811
25 to 54 years .....	43,852	43,875	43,893	43,903	43,857	43,908	43,952	43,897	44,045	44,132	44,010	44,017	44,320
55 years and over .....	7,337	7,286	7,308	7,368	7,354	7,346	7,341	7,320	7,369	7,397	7,431	7,470	7,497

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.



**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total, 16 years and over .....	6,448	6,345	6,363	6,432	5,952	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021
16 to 24 years .....	2,287	2,375	2,350	2,321	2,122	2,215	2,329	2,267	2,366	2,400	2,320	2,171	2,153
16 to 19 years .....	1,122	1,158	1,203	1,225	1,087	1,167	1,226	1,162	1,226	1,278	1,318	1,237	1,172
16 to 17 years .....	577	584	622	572	521	535	593	513	565	596	607	595	573
18 to 19 years .....	556	559	567	655	576	640	634	646	669	679	704	646	611
20 to 24 years .....	1,165	1,217	1,147	1,096	1,035	1,048	1,103	1,105	1,140	1,122	1,002	934	981
25 years and over .....	4,162	4,011	3,999	4,115	3,815	3,845	3,901	3,930	3,865	3,894	3,931	3,879	3,864
25 to 54 years .....	3,668	3,576	3,561	3,661	3,365	3,385	3,455	3,437	3,419	3,416	3,475	3,377	3,340
55 years and over .....	469	457	450	476	434	423	432	483	449	464	466	516	517
Men, 16 years and over .....	3,429	3,332	3,324	3,362	3,028	3,189	3,274	3,360	3,251	3,361	3,264	3,163	3,233
16 to 24 years .....	1,229	1,285	1,317	1,280	1,135	1,263	1,276	1,289	1,286	1,374	1,255	1,190	1,247
16 to 19 years .....	576	677	692	685	585	665	678	678	673	754	713	713	717
16 to 17 years .....	307	322	360	322	269	309	356	307	320	352	357	344	349
18 to 19 years .....	266	350	327	364	329	361	332	365	360	386	351	373	364
20 to 24 years .....	653	608	625	595	550	598	598	611	613	620	542	477	530
25 years and over .....	2,201	2,049	1,997	2,068	1,898	1,949	1,991	2,068	1,983	1,994	2,006	1,952	1,987
25 to 54 years .....	1,881	1,789	1,734	1,805	1,640	1,677	1,748	1,777	1,739	1,711	1,739	1,652	1,688
55 years and over .....	319	279	268	275	250	238	238	288	247	286	276	296	300
Women, 16 years and over .....	3,019	3,013	3,039	3,070	2,924	2,850	2,971	2,871	2,966	2,902	2,994	2,917	2,788
16 to 24 years .....	1,058	1,090	1,033	1,041	987	952	1,053	978	1,080	1,026	1,065	981	906
16 to 19 years .....	546	481	511	540	502	502	548	484	553	524	605	524	455
16 to 17 years .....	270	262	262	250	252	226	237	206	245	244	250	251	224
18 to 19 years .....	290	209	240	291	247	279	302	281	309	293	353	273	247
20 to 24 years .....	512	609	522	501	485	450	505	494	527	502	460	457	451
25 years and over .....	1,961	1,962	2,002	2,047	1,917	1,896	1,910	1,862	1,882	1,900	1,925	1,927	1,877
25 to 54 years .....	1,787	1,787	1,827	1,856	1,725	1,708	1,707	1,660	1,680	1,705	1,736	1,725	1,652
55 years and over .....	150	178	182	201	184	185	194	195	202	178	190	220	217

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

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

(Percent)

Age and sex	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total, 16 years and over .....	4.7	4.6	4.6	4.7	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3
16 to 24 years .....	10.6	10.8	10.7	10.6	9.8	10.2	10.6	10.4	10.8	10.9	10.5	9.9	9.8
16 to 19 years .....	14.1	14.2	14.7	14.9	13.5	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0
16 to 17 years .....	17.8	17.2	18.3	16.9	15.7	16.3	18.0	15.7	17.1	17.6	18.2	18.0	16.9
18 to 19 years .....	11.8	11.8	11.9	13.5	12.1	13.1	12.6	13.1	13.5	13.5	14.0	13.0	12.1
20 to 24 years .....	8.6	8.8	8.4	8.1	7.6	7.7	8.1	8.2	8.4	8.2	7.3	6.9	7.2
25 years and over .....	3.6	3.5	3.5	3.6	3.3	3.3	3.4	3.4	3.3	3.4	3.4	3.3	3.3
25 to 54 years .....	3.7	3.6	3.6	3.7	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.4	3.4
55 years and over .....	2.8	2.7	2.7	2.8	2.6	2.5	2.6	2.8	2.6	2.7	2.7	3.0	3.0
Men, 16 years and over .....	4.7	4.5	4.5	4.6	4.1	4.3	4.4	4.5	4.4	4.5	4.4	4.3	4.3
16 to 24 years .....	11.0	11.2	11.5	11.2	10.0	11.1	11.1	11.3	11.3	11.9	10.9	10.3	10.8
16 to 19 years .....	14.1	16.2	16.6	16.3	14.2	15.9	15.9	15.9	15.9	17.4	16.7	16.5	16.4
16 to 17 years .....	18.4	18.2	20.4	18.3	15.9	18.3	20.5	18.0	18.9	20.2	20.9	20.0	19.9
18 to 19 years .....	11.1	14.5	13.5	14.8	13.5	14.5	12.9	14.3	14.2	15.1	13.7	14.4	14.0
20 to 24 years .....	9.1	8.4	8.6	8.3	7.6	8.3	8.3	8.5	8.5	8.6	7.5	6.6	7.3
25 years and over .....	3.5	3.3	3.2	3.3	3.0	3.1	3.2	3.3	3.2	3.2	3.2	3.1	3.2
25 to 54 years .....	3.6	3.4	3.3	3.4	3.1	3.2	3.3	3.4	3.3	3.2	3.3	3.1	3.2
55 years and over .....	3.4	3.0	2.9	3.0	2.7	2.5	2.5	3.0	2.6	3.0	2.9	3.1	3.1
Women, 16 years and over .....	4.8	4.7	4.8	4.8	4.6	4.5	4.7	4.5	4.7	4.5	4.7	4.6	4.3
16 to 24 years .....	10.2	10.4	9.9	10.0	9.5	9.2	10.1	9.5	10.4	9.8	10.1	9.5	8.7
16 to 19 years .....	14.1	12.1	12.7	13.4	12.6	12.6	13.6	12.2	13.8	12.9	14.8	13.3	11.3
16 to 17 years .....	17.1	16.2	16.0	15.4	15.5	14.2	15.1	13.2	15.3	14.9	15.4	15.9	13.8
18 to 19 years .....	12.5	8.9	10.2	12.1	10.6	11.6	12.3	11.7	12.8	11.9	14.3	11.4	10.2
20 to 24 years .....	7.9	9.4	8.1	7.8	7.6	7.0	7.9	7.7	8.2	7.8	7.1	7.1	7.1
25 years and over .....	3.7	3.7	3.8	3.8	3.6	3.6	3.6	3.5	3.5	3.6	3.6	3.6	3.5
25 to 54 years .....	3.9	3.9	4.0	4.1	3.8	3.7	3.7	3.6	3.7	3.7	3.8	3.8	3.6
55 years and over .....	2.0	2.4	2.4	2.7	2.4	2.5	2.6	2.6	2.7	2.3	2.5	2.9	2.8

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Percent)

Category	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>CHARACTERISTIC</b>													
Total .....	4.7	4.6	4.6	4.7	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3
Men, 20 years and over .....	4.1	3.8	3.8	3.9	3.5	3.6	3.7	3.8	3.7	3.7	3.6	3.5	3.6
Women, 20 years and over .....	4.1	4.2	4.2	4.2	4.1	3.9	4.1	4.0	4.0	4.0	4.0	4.0	3.9
Both sexes, 16 to 19 years .....	14.1	14.2	14.7	14.9	13.5	14.3	14.8	14.2	14.9	15.2	15.7	15.0	14.0
White .....	3.9	4.0	3.9	4.0	3.7	3.8	4.0	3.8	3.9	3.9	3.9	3.8	3.8
Black and other .....	8.8	8.2	8.2	8.1	7.6	7.7	7.6	8.1	7.6	7.9	7.6	7.5	7.0
Black .....	10.1	9.4	9.4	9.2	9.0	8.9	8.5	9.6	8.9	9.0	8.6	8.6	7.9
Hispanic origin .....	7.2	7.0	6.9	7.0	6.7	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.6
Married men, spouse present .....	2.6	2.5	2.5	2.5	2.3	2.4	2.2	2.3	2.3	2.3	2.3	2.2	2.3
Married women, spouse present .....	2.9	3.0	3.0	3.2	2.8	2.8	2.9	2.8	3.1	2.7	2.8	2.9	2.8
Women who maintain families .....	7.8	7.6	7.5	7.5	7.5	7.5	7.1	6.9	6.8	7.6	6.9	6.9	6.3
<b>OCCUPATION<sup>1</sup></b>													
Managerial and professional specialty .....	1.9	1.9	2.0	1.8	1.9	1.7	1.7	1.7	1.9	1.8	1.9	1.8	1.8
Technical, sales, and administrative support .....	4.0	4.1	4.0	4.0	3.7	3.9	3.9	3.8	3.7	3.9	3.9	3.7	3.7
Precision production, craft, and repair .....	4.7	4.6	4.3	4.4	3.8	4.4	4.3	4.3	4.5	4.3	4.0	3.8	3.2
Operators, fabricators, and laborers .....	6.8	6.1	6.6	6.8	6.4	6.6	6.9	6.9	6.6	7.0	6.8	6.7	6.7
Farming, forestry, and fishing .....	6.9	6.7	6.4	6.9	6.1	6.5	6.4	6.6	5.9	7.0	5.4	6.3	7.5
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers ...	4.8	4.7	4.7	4.7	4.4	4.5	4.6	4.6	4.7	4.8	4.6	4.5	4.4
Goods-producing industries .....	5.1	4.8	4.8	5.0	4.5	4.6	4.7	4.8	4.8	5.1	4.6	4.6	4.6
Mining .....	2.6	3.7	2.7	3.4	2.9	1.6	4.0	3.9	3.6	3.0	2.4	2.2	4.3
Construction .....	9.3	8.1	8.0	8.4	6.6	8.0	7.9	6.8	7.4	8.6	6.7	7.0	6.4
Manufacturing .....	3.8	3.8	3.8	3.9	3.9	3.6	3.6	4.3	3.9	4.0	3.9	3.8	4.0
Durable goods .....	3.1	3.3	3.0	3.6	3.4	3.0	3.0	4.1	3.5	3.7	3.2	3.2	3.4
Nondurable goods .....	4.8	4.6	4.9	4.3	4.5	4.6	4.6	4.6	4.5	4.6	5.1	4.8	4.9
Service-producing industries .....	4.7	4.7	4.7	4.6	4.4	4.5	4.6	4.6	4.7	4.6	4.7	4.5	4.4
Transportation and public utilities .....	3.3	3.8	3.3	3.3	3.2	3.1	3.5	3.4	3.5	3.5	3.5	3.2	3.2
Wholesale and retail trade .....	5.8	5.8	5.7	5.5	5.4	5.3	5.6	5.6	5.6	5.7	5.6	5.2	5.5
Finance, insurance, and real estate .....	2.7	2.6	2.5	2.5	2.3	2.1	2.2	2.1	2.7	2.4	2.5	2.8	2.8
Services .....	4.6	4.4	4.6	4.7	4.3	4.7	4.6	4.6	4.7	4.5	4.7	4.6	4.1
Government workers .....	2.1	2.4	2.3	2.8	2.0	2.4	2.2	2.4	2.2	2.2	2.2	2.1	2.0
Agricultural wage and salary workers .....	9.4	10.3	8.5	9.2	8.0	8.0	8.4	8.2	7.4	7.9	6.7	7.6	8.3

<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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

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

(Numbers in thousands)

Reason	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>NUMBER OF UNEMPLOYED</b>													
Job losers and persons who completed temporary jobs .....	2,966	2,826	2,827	2,950	2,706	2,822	2,832	2,865	2,834	2,865	2,813	2,758	2,754
On temporary layoff .....	955	862	836	966	723	816	851	931	937	909	857	850	841
Not on temporary layoff .....	2,011	1,964	1,991	1,984	1,983	2,006	1,981	1,934	1,897	1,956	1,956	1,908	1,913
Job leavers .....	715	792	773	745	641	749	754	770	734	727	730	677	709
Reentrants .....	2,193	2,215	2,206	2,187	2,115	2,081	2,112	2,072	2,124	2,161	2,142	2,130	2,031
New entrants .....	549	524	538	544	518	505	517	474	507	501	577	534	504
<b>PERCENT DISTRIBUTION</b>													
Job losers and persons who completed temporary jobs .....	46.2	44.5	44.6	45.9	45.3	45.8	45.6	46.4	45.7	45.8	44.9	45.2	45.9
On temporary layoff .....	14.9	13.6	13.2	15.0	12.1	13.3	13.7	15.1	15.1	14.5	13.7	13.9	14.0
Not on temporary layoff .....	31.3	30.9	31.4	30.9	33.2	32.6	31.9	31.3	30.6	31.3	31.2	31.3	31.9
Job leavers .....	11.1	12.5	12.2	11.6	10.7	12.2	12.1	12.5	11.8	11.6	11.7	11.1	11.8
Reentrants .....	34.1	34.8	34.8	34.0	35.4	33.8	34.0	33.5	34.3	34.6	34.2	34.9	33.9
New entrants .....	8.5	8.2	8.5	8.5	8.7	8.2	8.3	7.7	8.2	8.0	9.2	8.8	8.4
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers and persons who completed temporary jobs .....	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0
Job leavers .....	.5	.6	.6	.5	.5	.5	.5	.6	.5	.5	.5	.5	.5
Reentrants .....	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.5
New entrants .....	.4	.4	.4	.4	.4	.4	.4	.3	.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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

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

(Numbers in thousands)

Duration	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>NUMBER OF UNEMPLOYED</b>													
Less than 5 weeks .....	2,558	2,520	2,598	2,792	2,626	2,608	2,553	2,626	2,652	2,638	2,754	2,546	2,614
5 to 14 weeks .....	1,962	1,976	1,931	1,971	1,929	1,967	2,022	1,975	1,956	1,968	1,896	1,983	1,839
15 weeks and over .....	1,926	1,811	1,804	1,728	1,461	1,509	1,641	1,606	1,644	1,636	1,598	1,611	1,578
15 to 26 weeks .....	921	802	849	830	605	671	833	783	810	732	732	752	754
27 weeks and over .....	1,005	1,009	955	898	856	838	808	823	834	904	866	859	824
Average (mean) duration, in weeks .....	16.0	15.5	15.4	14.6	14.5	14.7	14.1	14.3	13.7	14.3	14.1	14.4	14.1
Median duration, in weeks .....	7.4	7.3	7.1	6.9	6.6	6.1	6.7	6.7	6.8	6.6	5.9	6.7	6.7
<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 .....	39.7	40.0	41.0	43.0	43.7	42.9	41.1	42.3	42.4	42.3	44.1	41.5	43.3
5 to 14 weeks .....	30.4	31.3	30.5	30.4	32.1	32.3	32.5	31.8	31.3	31.5	30.3	32.3	30.5
15 weeks and over .....	29.9	28.7	28.5	26.6	24.3	24.8	26.4	25.9	26.3	26.2	25.6	26.2	26.2
15 to 26 weeks .....	14.3	12.7	13.4	12.8	10.1	11.0	13.4	12.6	13.0	11.7	11.7	12.2	12.5
27 weeks and over .....	15.6	16.0	15.1	13.8	14.2	13.8	13.0	13.3	13.3	14.5	13.9	14.0	13.7

NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA**  
**NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	December 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>TOTAL</b>									
16 years and over .....	206,270	138,297	67.0	132,732	64.3	2,953	129,779	5,565	67,973
16 to 19 years .....	15,868	8,011	50.5	7,020	44.2	161	6,860	990	7,858
16 to 17 years .....	7,919	3,203	40.4	2,738	34.6	81	2,657	465	4,716
18 to 19 years .....	7,950	4,808	60.5	4,283	53.9	80	4,203	525	3,142
20 to 24 years .....	17,687	13,514	76.4	12,633	71.4	260	12,374	880	4,173
25 to 54 years .....	117,789	99,268	84.3	96,046	81.5	1,914	94,132	3,222	18,521
25 to 34 years .....	38,514	32,610	84.7	31,344	81.4	636	30,707	1,267	5,903
25 to 29 years .....	18,563	15,808	85.2	15,156	81.6	317	14,839	651	2,755
30 to 34 years .....	19,951	16,802	84.2	16,187	81.1	319	15,868	615	3,148
35 to 44 years .....	44,346	37,675	85.0	36,470	82.2	719	35,751	1,205	6,671
35 to 39 years .....	22,319	18,915	84.7	18,276	81.9	384	17,892	639	3,404
40 to 44 years .....	22,027	18,760	85.2	18,194	82.6	335	17,859	566	3,267
45 to 54 years .....	34,929	28,982	83.0	28,233	80.8	558	27,674	750	5,946
45 to 49 years .....	19,002	16,184	85.2	15,720	82.7	319	15,401	464	2,818
50 to 54 years .....	15,927	12,798	80.4	12,513	78.6	239	12,273	286	3,129
55 to 64 years .....	22,651	13,508	59.6	13,177	58.2	363	12,814	331	9,143
55 to 59 years .....	12,496	8,723	69.8	8,513	68.1	210	8,304	210	3,773
60 to 64 years .....	10,154	4,784	47.1	4,663	45.9	153	4,510	121	5,370
65 years and over .....	32,275	3,997	12.4	3,855	11.9	256	3,599	142	28,278
65 to 69 years .....	9,342	2,166	23.2	2,096	22.4	109	1,987	70	7,176
70 to 74 years .....	8,521	1,090	12.8	1,054	12.4	73	981	36	7,432
75 years and over .....	14,411	741	5.1	705	4.9	74	632	36	13,670
<b>Men</b>									
16 years and over .....	99,309	74,055	74.6	70,930	71.4	2,201	68,729	3,125	25,254
16 to 19 years .....	8,089	4,106	50.8	3,492	43.2	125	3,366	615	3,983
16 to 17 years .....	4,062	1,627	40.0	1,338	32.9	63	1,275	288	2,436
18 to 19 years .....	4,027	2,480	61.6	2,153	53.5	62	2,091	327	1,547
20 to 24 years .....	8,889	7,194	80.9	6,670	75.0	215	6,455	524	1,695
25 to 54 years .....	57,832	53,064	91.8	51,360	88.8	1,403	49,957	1,704	4,768
25 to 34 years .....	18,943	17,629	93.1	16,956	89.5	482	16,474	673	1,314
25 to 29 years .....	9,108	8,468	93.0	8,122	89.2	249	7,874	345	640
30 to 34 years .....	9,835	9,162	93.2	8,833	89.8	233	8,600	328	674
35 to 44 years .....	21,870	20,295	92.8	19,674	90.0	547	19,127	621	1,575
35 to 39 years .....	10,995	10,265	93.4	9,948	90.5	310	9,639	317	730
40 to 44 years .....	10,875	10,030	92.2	9,726	89.4	238	9,489	304	845
45 to 54 years .....	17,019	15,139	89.0	14,729	86.5	373	14,356	410	1,879
45 to 49 years .....	9,267	8,408	90.7	8,153	88.0	209	7,944	255	859
50 to 54 years .....	7,752	6,732	86.8	6,576	84.8	164	6,412	155	1,020
55 to 64 years .....	10,846	7,377	68.0	7,166	66.1	254	6,913	210	3,669
55 to 59 years .....	6,015	4,674	77.7	4,543	75.5	144	4,399	131	1,341
60 to 64 years .....	4,831	2,702	55.9	2,623	54.3	110	2,514	79	2,128
65 years and over .....	13,653	2,314	17.0	2,243	16.4	204	2,039	71	11,339
65 to 69 years .....	4,285	1,239	28.9	1,203	28.1	84	1,119	36	3,045
70 to 74 years .....	3,746	601	16.1	584	15.6	59	524	18	3,145
75 years and over .....	5,623	474	8.4	456	8.1	61	395	17	5,149
<b>Women</b>									
16 years and over .....	106,960	64,242	60.1	61,801	57.8	752	61,049	2,440	42,719
16 to 19 years .....	7,779	3,904	50.2	3,529	45.4	35	3,493	375	3,875
16 to 17 years .....	3,856	1,576	40.9	1,399	36.3	18	1,381	177	2,280
18 to 19 years .....	3,923	2,328	59.3	2,130	54.3	18	2,112	198	1,595
20 to 24 years .....	8,798	6,320	71.8	5,964	67.8	45	5,919	356	2,478
25 to 54 years .....	59,957	46,204	77.1	44,687	74.5	512	44,175	1,517	13,753
25 to 34 years .....	19,570	14,981	76.5	14,388	73.5	154	14,234	593	4,590
25 to 29 years .....	9,455	7,340	77.6	7,034	74.4	69	6,965	306	2,115
30 to 34 years .....	10,116	7,641	75.5	7,354	72.7	86	7,268	287	2,475
35 to 44 years .....	22,476	17,380	77.3	16,796	74.7	172	16,624	585	5,096
35 to 39 years .....	11,325	8,651	76.4	8,328	73.5	75	8,253	323	2,674
40 to 44 years .....	11,152	8,730	78.3	8,468	75.9	97	8,371	262	2,422
45 to 54 years .....	17,910	13,843	77.3	13,503	75.4	185	13,318	340	4,067
45 to 49 years .....	9,735	7,776	79.9	7,567	77.7	110	7,456	209	1,959
50 to 54 years .....	8,175	6,067	74.2	5,936	72.6	75	5,861	130	2,109
55 to 64 years .....	11,804	6,131	51.9	6,010	50.9	109	5,901	120	5,674
55 to 59 years .....	6,481	4,049	62.5	3,970	61.3	65	3,905	79	2,432
60 to 64 years .....	5,324	2,082	39.1	2,040	38.3	44	1,996	42	3,242
65 years and over .....	18,822	1,683	9.0	1,612	8.7	51	1,561	71	16,939
65 to 69 years .....	5,058	927	18.3	893	17.7	25	868	34	4,131
70 to 74 years .....	4,776	488	10.2	470	9.8	13	457	18	4,287
75 years and over .....	8,788	268	3.0	249	2.8	13	236	18	8,521

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	December 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>WHITE</b>										
16 years and over .....	172,197	115,796	67.2	111,647	64.8	2,784	108,863	4,149	3.6	56,401
16 to 19 years .....	12,568	6,705	53.4	5,962	47.4	156	5,807	743	11.1	5,863
16 to 17 years .....	6,260	2,737	43.7	2,378	38.0	81	2,297	360	13.1	3,523
18 to 19 years .....	6,308	3,968	62.9	3,585	56.8	75	3,510	383	9.7	2,340
20 to 24 years .....	14,243	11,121	78.1	10,526	73.9	239	10,287	594	5.3	3,122
25 to 54 years .....	97,148	82,610	85.0	80,181	82.5	1,801	78,380	2,429	2.9	14,538
25 to 34 years .....	30,917	26,417	85.4	25,512	82.5	594	24,918	905	3.4	4,500
25 to 29 years .....	14,851	12,762	85.9	12,288	82.7	293	11,994	475	3.7	2,088
30 to 34 years .....	16,066	13,654	85.0	13,224	82.3	300	12,924	430	3.1	2,412
35 to 44 years .....	36,720	31,438	85.8	30,539	83.2	681	29,857	899	2.9	5,283
35 to 39 years .....	18,477	15,775	85.4	15,310	82.9	370	14,940	465	2.9	2,701
40 to 44 years .....	18,244	15,663	85.9	15,229	83.5	311	14,917	434	2.8	2,581
45 to 54 years .....	29,511	24,755	83.9	24,131	81.8	526	23,604	625	2.5	4,755
45 to 49 years .....	15,938	13,723	86.1	13,349	83.8	306	13,043	374	2.7	2,215
50 to 54 years .....	13,573	11,033	81.3	10,782	79.4	221	10,561	251	2.3	2,540
55 to 64 years .....	19,568	11,815	60.4	11,547	59.0	347	11,200	268	2.3	7,753
55 to 59 years .....	10,765	7,618	70.8	7,447	69.2	198	7,249	171	2.2	3,147
60 to 64 years .....	8,803	4,197	47.7	4,100	46.6	149	3,951	97	2.3	4,606
65 years and over .....	28,670	3,545	12.4	3,430	12.0	241	3,189	115	3.2	25,125
65 to 69 years .....	8,082	1,908	23.6	1,846	22.8	105	1,740	62	3.3	6,174
70 to 74 years .....	7,553	971	12.9	948	12.5	64	884	23	2.4	6,582
75 years and over .....	13,035	666	5.1	637	4.9	72	565	29	4.4	12,369
<b>Men</b>										
16 years and over .....	83,748	63,116	75.4	60,722	72.5	2,073	58,650	2,394	3.8	20,632
16 to 19 years .....	6,448	3,454	53.6	2,998	46.5	120	2,877	457	13.2	2,993
16 to 17 years .....	3,230	1,395	43.2	1,171	36.3	63	1,108	224	16.0	1,835
18 to 19 years .....	3,218	2,060	64.0	1,827	56.8	57	1,769	233	11.3	1,158
20 to 24 years .....	7,227	6,031	83.5	5,657	78.3	201	5,456	375	6.2	1,196
25 to 54 years .....	48,431	45,033	93.0	43,702	90.2	1,317	42,385	1,332	3.0	3,397
25 to 34 years .....	15,467	14,624	94.5	14,109	91.2	450	13,659	515	3.5	843
25 to 29 years .....	7,426	7,002	94.3	6,728	90.6	227	6,501	274	3.9	424
30 to 34 years .....	8,041	7,622	94.8	7,381	91.8	223	7,158	241	3.2	419
35 to 44 years .....	18,373	17,249	93.9	16,784	91.4	518	16,266	465	2.7	1,124
35 to 39 years .....	9,251	8,723	94.3	8,494	91.8	297	8,196	230	2.6	527
40 to 44 years .....	9,122	8,526	93.5	8,291	90.9	221	8,070	235	2.8	596
45 to 54 years .....	14,591	13,160	90.2	12,809	87.8	348	12,460	352	2.7	1,431
45 to 49 years .....	7,912	7,280	92.0	7,069	89.3	201	6,868	210	2.9	833
50 to 54 years .....	6,879	5,881	88.0	5,739	85.9	147	5,592	141	2.4	798
55 to 64 years .....	9,451	6,533	69.1	6,363	67.3	245	6,118	171	2.6	2,918
55 to 59 years .....	5,234	4,149	79.3	4,042	77.2	139	3,903	107	2.6	1,085
60 to 64 years .....	4,217	2,384	56.5	2,321	55.0	106	2,215	64	2.7	1,832
65 years and over .....	12,191	2,064	16.9	2,004	16.4	191	1,813	60	2.9	10,127
65 to 69 years .....	3,754	1,095	29.2	1,062	28.3	80	982	33	3.0	2,659
70 to 74 years .....	3,356	538	16.0	525	15.6	50	474	13	2.5	2,818
75 years and over .....	5,082	431	8.5	417	8.2	60	357	13	3.1	4,651
<b>Women</b>										
16 years and over .....	88,449	52,680	59.6	50,924	57.6	711	50,213	1,755	3.3	35,769
16 to 19 years .....	6,120	3,251	53.1	2,965	48.4	35	2,929	286	8.8	2,870
16 to 17 years .....	3,030	1,343	44.3	1,207	39.8	18	1,189	136	10.1	1,688
18 to 19 years .....	3,090	1,908	61.8	1,758	56.9	18	1,741	150	7.9	1,182
20 to 24 years .....	7,016	5,089	72.5	4,869	69.4	39	4,831	220	4.3	1,926
25 to 54 years .....	48,717	37,576	77.1	36,479	74.9	484	35,995	1,097	2.9	11,141
25 to 34 years .....	15,450	11,793	76.3	11,403	73.8	143	11,259	390	3.3	3,657
25 to 29 years .....	7,425	5,760	77.6	5,560	74.9	66	5,494	201	3.5	1,664
30 to 34 years .....	8,025	6,032	75.2	5,843	72.8	77	5,766	189	3.1	1,993
35 to 44 years .....	18,348	14,189	77.3	13,754	75.0	163	13,592	435	3.1	4,159
35 to 39 years .....	9,226	7,052	76.4	6,816	73.9	72	6,744	235	3.3	2,174
40 to 44 years .....	9,122	7,137	78.2	6,938	76.1	90	6,847	199	2.8	1,985
45 to 54 years .....	14,920	11,595	77.7	11,322	75.9	178	11,144	273	2.4	3,325
45 to 49 years .....	8,026	6,443	80.3	6,280	78.2	105	6,175	163	2.5	1,583
50 to 54 years .....	6,894	5,152	74.7	5,042	73.1	74	4,969	110	2.1	1,742
55 to 64 years .....	10,117	5,282	52.2	5,185	51.2	103	5,082	97	1.8	4,835
55 to 59 years .....	5,531	3,469	62.7	3,405	61.6	59	3,346	64	1.8	2,062
60 to 64 years .....	4,586	1,813	39.5	1,779	38.8	44	1,736	33	1.8	2,773
65 years and over .....	16,479	1,482	9.0	1,426	8.7	50	1,376	55	3.7	14,998
65 to 69 years .....	4,328	813	18.8	784	18.1	25	759	29	3.6	3,515
70 to 74 years .....	4,197	433	10.3	423	10.1	13	410	10	2.2	3,765
75 years and over .....	7,954	235	3.0	219	2.8	12	208	16	6.9	7,718

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	December 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>BLACK</b>										
16 years and over .....	24,561	16,136	65.7	14,993	61.0	117	14,876	1,143	7.1	8,425
16 to 19 years .....	2,462	999	40.6	801	32.6	4	798	198	19.8	1,462
16 to 17 years .....	1,236	345	27.9	261	21.1	-	261	84	24.3	891
18 to 19 years .....	1,225	654	53.4	540	44.1	4	536	114	17.5	571
20 to 24 years .....	2,570	1,786	69.5	1,538	59.8	13	1,525	248	13.9	784
25 to 54 years .....	14,560	11,846	81.4	11,210	77.0	87	11,123	636	5.4	2,714
25 to 34 years .....	5,196	4,336	83.4	4,051	78.0	34	4,018	284	6.6	861
25 to 29 years .....	2,543	2,143	84.3	2,004	78.8	18	1,986	139	6.5	400
30 to 34 years .....	2,654	2,193	82.6	2,048	77.2	16	2,032	145	6.6	461
35 to 44 years .....	5,554	4,577	82.4	4,322	77.8	32	4,289	255	5.6	977
35 to 39 years .....	2,843	2,331	82.0	2,195	77.2	12	2,184	135	5.8	513
40 to 44 years .....	2,710	2,246	82.9	2,127	78.5	21	2,106	120	5.3	464
45 to 54 years .....	3,810	2,934	77.0	2,837	74.5	21	2,816	97	3.3	876
45 to 49 years .....	2,209	1,758	79.6	1,688	76.4	8	1,680	69	3.9	452
50 to 54 years .....	1,601	1,176	73.5	1,149	71.8	13	1,135	27	2.3	425
55 to 64 years .....	2,262	1,189	52.6	1,155	51.1	8	1,147	34	2.9	1,072
55 to 59 years .....	1,244	776	62.3	761	61.2	6	755	14	1.8	469
60 to 64 years .....	1,017	414	40.7	394	38.7	2	392	20	4.8	604
65 years and over .....	2,707	315	11.6	288	10.6	5	283	27	8.5	2,392
65 to 69 years .....	918	169	18.4	162	17.6	2	160	8	4.4	749
70 to 74 years .....	734	94	12.8	81	11.1	3	79	13	13.4	640
75 years and over .....	1,054	51	4.9	45	4.2	-	45	6	( <sup>1</sup> )	1,003
<b>Men</b>										
16 years and over .....	11,018	7,523	68.3	6,945	63.0	89	6,856	578	7.7	3,495
16 to 19 years .....	1,209	475	39.3	353	29.2	4	349	122	25.7	734
16 to 17 years .....	621	166	26.8	119	19.2	-	119	47	28.3	454
18 to 19 years .....	589	309	52.5	234	39.7	4	230	75	24.3	280
20 to 24 years .....	1,178	819	69.5	693	58.9	7	686	126	15.3	359
25 to 54 years .....	6,582	5,536	84.1	5,239	79.6	68	5,172	296	5.4	1,047
25 to 34 years .....	2,325	1,992	85.7	1,872	80.5	23	1,849	120	6.0	333
25 to 29 years .....	1,125	984	87.5	930	82.6	15	914	55	5.5	141
30 to 34 years .....	1,200	1,008	84.0	942	78.5	8	935	66	6.5	193
35 to 44 years .....	2,542	2,175	85.6	2,047	80.5	26	2,021	128	5.9	367
35 to 39 years .....	1,296	1,125	86.8	1,056	81.5	12	1,045	69	6.1	171
40 to 44 years .....	1,246	1,050	84.2	990	79.5	14	976	60	5.7	196
45 to 54 years .....	1,715	1,369	79.8	1,321	77.0	19	1,302	48	3.5	347
45 to 49 years .....	1,002	819	81.7	783	78.1	6	777	36	4.4	183
50 to 54 years .....	713	550	77.1	538	75.4	26	525	12	2.1	164
55 to 64 years .....	978	531	54.3	509	52.0	5	503	22	4.2	447
55 to 59 years .....	542	333	61.5	326	60.1	3	322	8	2.3	209
60 to 64 years .....	436	198	45.3	183	41.9	2	181	15	7.4	239
65 years and over .....	1,070	162	15.1	150	14.1	5	146	11	7.1	908
65 to 69 years .....	384	92	24.0	89	23.2	2	87	3	3.5	292
70 to 74 years .....	289	39	13.6	35	12.2	3	32	4	( <sup>1</sup> )	250
75 years and over .....	396	30	7.6	26	6.6	-	26	4	( <sup>1</sup> )	366
<b>Women</b>										
16 years and over .....	13,543	8,613	63.6	8,048	59.4	29	8,020	565	6.6	4,930
16 to 19 years .....	1,252	524	41.8	448	35.8	-	448	76	14.4	728
16 to 17 years .....	616	179	29.1	142	23.1	-	142	37	20.5	437
18 to 19 years .....	637	345	54.2	306	48.1	-	306	39	11.3	292
20 to 24 years .....	1,392	967	69.5	845	60.7	6	839	123	12.7	425
25 to 54 years .....	7,978	6,311	79.1	5,971	74.8	19	5,951	340	5.4	1,667
25 to 34 years .....	2,871	2,343	81.6	2,179	75.9	11	2,169	164	7.0	527
25 to 29 years .....	1,418	1,158	81.7	1,074	75.8	2	1,071	84	7.3	259
30 to 34 years .....	1,453	1,185	81.6	1,105	76.1	8	1,097	80	6.7	268
35 to 44 years .....	3,012	2,402	79.7	2,275	75.5	7	2,269	127	5.3	610
35 to 39 years .....	1,548	1,206	77.9	1,139	73.6	-	1,139	67	5.5	342
40 to 44 years .....	1,465	1,197	81.7	1,136	77.6	7	1,130	60	5.0	268
45 to 54 years .....	2,095	1,565	74.7	1,516	72.4	2	1,514	49	3.1	530
45 to 49 years .....	1,207	939	77.7	905	75.0	2	903	33	3.5	269
50 to 54 years .....	887	626	70.6	611	68.8	-	611	16	2.5	261
55 to 64 years .....	1,284	659	51.3	647	50.4	3	644	12	1.8	625
55 to 59 years .....	703	442	62.9	436	62.0	3	433	7	1.5	260
60 to 64 years .....	581	216	37.2	211	36.3	-	211	5	2.5	365
65 years and over .....	1,637	153	9.3	138	8.4	-	138	15	9.9	1,485
65 to 69 years .....	534	77	14.4	73	13.6	-	73	4	5.5	457
70 to 74 years .....	445	55	12.3	46	10.4	-	46	9	( <sup>1</sup> )	390
75 years and over .....	658	21	3.2	19	2.8	-	19	2	( <sup>1</sup> )	637

<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-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	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	204,098	206,270	90,339	91,220	98,300	99,181	15,459	15,868
Civilian labor force .....	136,742	138,297	69,350	69,949	59,834	60,337	7,558	8,011
Percent of population .....	67.0	67.0	76.8	76.7	60.9	60.8	48.9	50.5
Employed .....	130,785	132,732	66,524	67,439	57,647	58,273	6,614	7,020
Agriculture .....	3,103	2,953	2,151	2,076	788	717	164	161
Nonagricultural industries .....	127,682	129,779	64,373	65,363	56,859	57,556	6,450	6,860
Unemployed .....	5,957	5,565	2,826	2,510	2,187	2,065	944	990
Unemployment rate .....	4.4	4.0	4.1	3.6	3.7	3.4	12.5	12.4
Not in labor force .....	67,356	67,973	20,989	21,272	38,466	38,844	7,901	7,858
<b>White</b>								
Civilian noninstitutional population .....	170,649	172,197	76,650	77,300	81,744	82,329	12,255	12,568
Civilian labor force .....	114,867	115,796	59,253	59,662	49,233	49,429	6,380	6,705
Percent of population .....	67.3	67.2	77.3	77.2	60.2	60.0	52.1	53.4
Employed .....	110,662	111,647	57,162	57,725	47,726	47,960	5,773	5,962
Agriculture .....	2,945	2,784	2,032	1,953	754	676	159	156
Nonagricultural industries .....	107,717	108,863	55,131	55,772	46,973	47,284	5,614	5,807
Unemployed .....	4,205	4,149	2,091	1,937	1,507	1,469	607	743
Unemployment rate .....	3.7	3.6	3.5	3.2	3.1	3.0	9.5	11.1
Not in labor force .....	55,782	56,401	17,397	17,638	32,510	32,900	5,875	5,863
<b>Black</b>								
Civilian noninstitutional population .....	24,180	24,561	9,659	9,808	12,106	12,291	2,415	2,462
Civilian labor force .....	15,685	16,136	6,945	7,047	7,840	8,089	900	999
Percent of population .....	64.9	65.7	71.9	71.9	64.8	65.8	37.3	40.6
Employed .....	14,248	14,993	6,374	6,592	7,273	7,600	601	801
Agriculture .....	91	117	66	85	21	29	4	4
Nonagricultural industries .....	14,157	14,876	6,308	6,507	7,252	7,571	597	798
Unemployed .....	1,437	1,143	571	455	567	490	299	198
Unemployment rate .....	9.2	7.1	8.2	6.5	7.2	6.1	33.3	19.8
Not in labor force .....	8,495	8,425	2,714	2,761	4,266	4,201	1,515	1,462

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	December 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 .....	18,438	9,198	49.9	8,456	1,655	6,800	742	137	605	8.1
16 to 19 years .....	12,474	5,530	44.3	4,929	477	4,453	600	78	522	10.9
20 to 24 years .....	5,964	3,668	61.5	3,526	1,178	2,348	142	59	83	3.9
High school .....	9,249	3,828	41.4	3,322	253	3,069	506	52	454	13.2
College .....	9,189	5,370	58.4	5,133	1,402	3,731	237	85	151	4.4
Full-time students .....	7,900	4,270	54.1	4,098	771	3,327	172	48	124	4.0
Part-time students .....	1,289	1,100	85.3	1,036	632	404	65	37	28	5.9
Men, 16 to 24 years .....	9,204	4,430	48.1	3,984	878	3,107	446	53	392	10.1
16 to 19 years .....	6,262	2,647	42.3	2,275	237	2,038	372	36	336	14.0
20 to 24 years .....	2,942	1,784	60.6	1,709	641	1,069	74	18	56	4.2
High school .....	4,901	1,969	40.2	1,644	133	1,511	324	25	299	16.5
College .....	4,303	2,461	57.2	2,340	745	1,595	121	28	93	4.9
Full-time students .....	3,696	1,921	52.0	1,829	415	1,414	92	18	74	4.8
Part-time students .....	607	541	89.1	511	330	181	30	10	19	5.5
Women, 16 to 24 years .....	9,234	4,768	51.6	4,471	777	3,694	296	84	213	6.2
16 to 19 years .....	6,211	2,883	46.4	2,654	240	2,415	228	43	186	7.9
20 to 24 years .....	3,022	1,885	62.4	1,817	538	1,279	68	41	27	3.6
High school .....	4,347	1,859	42.8	1,678	120	1,558	181	26	155	9.7
College .....	4,886	2,909	59.5	2,793	658	2,136	115	57	58	4.0
Full-time students .....	4,204	2,349	55.9	2,269	356	1,913	80	31	50	3.4
Part-time students .....	682	560	82.0	525	302	223	35	27	8	6.3
<b>White</b>										
Total, 16 to 24 years .....	14,658	7,709	52.6	7,134	1,333	5,801	575	98	477	7.5
16 to 19 years .....	9,862	4,660	47.3	4,192	373	3,819	468	52	416	10.0
20 to 24 years .....	4,795	3,049	63.6	2,942	960	1,982	108	47	61	3.5
Men .....	7,344	3,724	50.7	3,382	716	2,666	342	34	308	9.2
Women .....	7,313	3,986	54.5	3,752	617	3,135	233	65	168	5.8
High school .....	7,253	3,231	44.6	2,837	204	2,633	395	38	356	12.2
College .....	7,405	4,478	60.5	4,298	1,129	3,169	181	60	120	4.0
Full-time students .....	6,378	3,595	56.4	3,464	626	2,838	131	36	95	3.6
Part-time students .....	1,027	883	86.0	833	503	331	50	24	25	5.6
<b>Black</b>										
Total, 16 to 24 years .....	2,678	1,064	39.7	928	237	692	136	36	100	12.8
16 to 19 years .....	1,898	657	34.6	545	83	462	112	26	86	17.1
20 to 24 years .....	780	408	52.3	384	154	230	24	10	14	5.9
Men .....	1,284	480	37.4	397	113	285	82	17	65	17.1
Women .....	1,394	585	41.9	531	124	407	54	19	35	9.2
High school .....	1,492	459	30.8	366	38	329	92	14	79	20.1
College .....	1,186	606	51.1	562	199	363	44	22	21	7.2
Full-time students .....	1,038	480	46.3	449	116	332	31	10	21	6.5
Part-time students .....	149	126	84.5	113	82	31	13	13	-	10.0
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,138	862	40.3	727	174	553	134	28	106	15.6
16 to 19 years .....	1,492	476	31.9	367	38	329	109	20	89	22.9
20 to 24 years .....	646	385	59.7	360	136	224	25	8	17	6.5
Men .....	1,075	393	36.5	333	87	246	59	12	48	15.1
Women .....	1,062	469	44.2	394	87	307	75	16	58	16.0
High school .....	1,281	362	28.3	276	39	238	86	14	72	23.7
College .....	857	499	58.3	451	135	316	48	14	34	9.7
Full-time students .....	634	314	49.4	288	49	239	25	6	19	8.0
Part-time students .....	222	186	83.7	163	86	76	23	8	15	12.5

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	December 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 .....	15,117	12,326	81.5	11,198	9,458	1,741	1,128	1,036	92	9.2
16 to 19 years .....	3,395	2,481	73.1	2,091	1,556	535	390	338	52	15.7
20 to 24 years .....	11,723	9,845	84.0	9,107	7,901	1,206	738	698	40	7.5
Less than a high school diploma .....	3,883	2,593	66.8	2,093	1,689	404	500	443	57	19.3
High school graduates, no college .....	6,604	5,571	84.4	5,085	4,247	839	485	463	22	8.7
Less than a bachelor's degree .....	3,227	2,837	87.9	2,738	2,320	418	99	88	11	3.5
College graduates .....	1,403	1,326	94.5	1,282	1,202	81	43	42	2	3.3
Men, 16 to 24 years .....	7,774	6,870	88.4	6,177	5,504	673	693	662	31	10.1
16 to 19 years .....	1,827	1,460	79.9	1,216	985	231	243	221	23	16.7
20 to 24 years .....	5,947	5,410	91.0	4,960	4,518	442	450	441	9	8.3
Less than a high school diploma .....	2,206	1,733	78.5	1,410	1,251	159	323	302	21	18.6
High school graduates, no college .....	3,515	3,217	91.5	2,925	2,584	341	292	282	10	9.1
Less than a bachelor's degree .....	1,476	1,363	92.4	1,300	1,156	144	64	63	-	4.7
College graduates .....	577	557	96.5	542	512	31	14	14	-	2.6
Women, 16 to 24 years .....	7,344	5,456	74.3	5,021	3,954	1,067	435	374	61	8.0
16 to 19 years .....	1,568	1,021	65.1	874	571	303	147	117	30	14.4
20 to 24 years .....	5,778	4,435	76.8	4,147	3,383	764	288	257	31	6.5
Less than a high school diploma .....	1,677	860	51.3	683	438	245	177	141	37	20.6
High school graduates, no college .....	3,090	2,354	76.2	2,161	1,662	498	193	181	12	8.2
Less than a bachelor's degree .....	1,752	1,474	84.1	1,438	1,164	274	36	25	11	2.4
College graduates .....	826	769	93.1	740	690	50	29	27	2	3.8
<b>White</b>										
Total, 16 to 24 years .....	12,153	10,116	83.2	9,355	7,921	1,434	762	712	50	7.5
16 to 19 years .....	2,706	2,045	75.6	1,770	1,340	430	275	253	23	13.5
20 to 24 years .....	9,447	8,071	85.4	7,585	6,581	1,004	487	459	27	6.0
Men .....	6,330	5,762	91.0	5,273	4,726	547	489	478	11	8.5
Women .....	5,823	4,354	74.8	4,082	3,195	887	273	234	39	6.3
Less than a high school diploma .....	2,987	2,093	70.1	1,769	1,442	326	325	297	28	15.5
High school graduates, no college .....	5,331	4,566	85.7	4,221	3,541	679	345	331	15	7.6
Less than a bachelor's degree .....	2,625	2,306	87.9	2,250	1,901	349	56	50	6	2.4
College graduates .....	1,210	1,150	95.0	1,115	1,036	79	35	34	2	3.1
<b>Black</b>										
Total, 16 to 24 years .....	2,354	1,721	73.1	1,411	1,162	249	310	275	35	18.0
16 to 19 years .....	564	343	60.7	257	173	83	86	64	22	25.1
20 to 24 years .....	1,790	1,379	77.0	1,155	989	166	224	211	13	16.3
Men .....	1,103	815	73.8	649	553	96	166	153	13	20.3
Women .....	1,251	907	72.5	762	609	153	145	122	22	15.9
Less than a high school diploma .....	785	446	56.8	294	220	75	152	129	23	34.0
High school graduates, no college .....	1,015	780	76.8	659	523	136	121	113	8	15.5
Less than a bachelor's degree .....	456	407	89.2	372	333	39	35	30	5	8.6
College graduates .....	98	89	90.5	86	86	-	3	3	-	3.3
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,898	2,215	76.4	1,975	1,714	261	240	230	10	10.8
16 to 19 years .....	750	520	69.4	447	347	100	73	69	5	14.1
20 to 24 years .....	2,149	1,695	78.9	1,528	1,367	162	166	161	5	9.8
Men .....	1,619	1,429	88.3	1,283	1,163	119	147	147	-	10.3
Women .....	1,280	786	61.4	693	550	142	93	83	10	11.8
Less than a high school diploma .....	1,348	941	69.8	807	686	121	133	126	7	14.2
High school graduates, no college .....	1,070	878	82.0	790	697	93	87	87	-	10.0
Less than a bachelor's degree .....	416	348	83.7	332	290	42	16	13	3	4.5
College graduates .....	64	48	( <sup>1</sup> )	45	41	4	3	3	-	( <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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Educational attainment	Total		Men		Women		White		Black		Hispanic origin	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>TOTAL</b>												
Civilian noninstitutional population ...	171,104	172,714	81,569	82,331	89,535	90,383	144,345	145,386	19,232	19,529	15,830	16,369
Civilian labor force .....	115,679	116,772	62,247	62,755	53,432	54,017	97,436	97,970	12,948	13,350	11,073	11,408
Percent of population .....	67.6	67.6	76.3	76.2	59.7	59.8	67.5	67.4	67.3	68.4	69.9	69.7
Employed .....	111,710	113,078	60,060	60,769	51,650	52,309	94,549	95,158	12,084	12,654	10,432	10,695
Employment-population ratio .....	65.3	65.5	73.6	73.8	57.7	57.9	65.5	65.5	62.8	64.8	65.9	65.3
Unemployed .....	3,969	3,694	2,187	1,986	1,782	1,708	2,888	2,812	864	697	640	713
Unemployment rate .....	3.4	3.2	3.5	3.2	3.3	3.2	3.0	2.9	6.7	5.2	5.8	6.2
<b>Less than a high school diploma</b>												
Civilian noninstitutional population ...	29,566	29,094	14,039	13,670	15,527	15,424	23,655	23,418	4,570	4,454	6,949	7,177
Civilian labor force .....	12,560	12,509	7,700	7,451	4,861	5,058	10,130	10,105	1,832	1,813	4,079	4,185
Percent of population .....	42.5	43.0	54.8	54.5	31.3	32.8	42.8	43.1	40.1	40.7	58.7	58.3
Employed .....	11,599	11,609	7,128	6,949	4,471	4,660	9,435	9,423	1,607	1,635	3,752	3,822
Employment-population ratio .....	39.2	39.9	50.8	50.8	28.8	30.2	39.9	40.2	35.2	36.7	54.0	53.3
Unemployed .....	962	900	572	501	390	398	695	681	226	178	327	364
Unemployment rate .....	7.7	7.2	7.4	6.7	8.0	7.9	6.9	6.7	12.3	9.8	8.0	8.7
<b>High school graduates, no college</b>												
Civilian noninstitutional population ...	57,631	57,115	26,108	26,073	31,523	31,042	48,791	48,292	6,956	6,892	4,359	4,472
Civilian labor force .....	37,940	37,442	20,025	19,932	17,916	17,510	31,771	31,349	4,875	4,844	3,285	3,383
Percent of population .....	65.8	65.6	76.7	76.4	56.8	56.4	65.1	64.9	70.1	70.3	75.4	75.7
Employed .....	36,444	36,066	19,198	19,188	17,246	16,878	30,704	30,340	4,521	4,557	3,079	3,195
Employment-population ratio .....	63.2	63.1	73.5	73.6	54.7	54.4	62.9	62.8	65.0	66.1	70.6	71.4
Unemployed .....	1,497	1,376	827	744	670	632	1,067	1,009	354	286	205	189
Unemployment rate .....	3.9	3.7	4.1	3.7	3.7	3.6	3.4	3.2	7.3	5.9	6.3	5.6
<b>Less than a bachelor's degree<sup>1</sup></b>												
Civilian noninstitutional population ...	42,085	43,022	19,592	19,908	22,493	23,114	35,719	36,269	4,851	5,133	2,803	2,919
Civilian labor force .....	31,440	31,933	15,939	16,087	15,501	15,846	26,483	26,625	3,811	4,106	2,277	2,347
Percent of population .....	74.7	74.2	81.4	80.8	68.9	68.6	74.1	73.4	78.6	80.0	81.2	80.4
Employed .....	30,464	31,080	15,469	15,648	14,995	15,432	25,794	25,986	3,583	3,925	2,200	2,235
Employment-population ratio .....	72.4	72.2	79.0	78.6	66.7	66.8	72.2	71.6	73.9	76.5	78.5	76.6
Unemployed .....	976	853	469	439	506	414	689	639	228	181	77	112
Unemployment rate .....	3.1	2.7	2.9	2.7	3.3	2.6	2.6	2.4	6.0	4.4	3.4	4.8
<b>Some college, no degree</b>												
Civilian noninstitutional population ...	29,512	29,850	14,052	14,098	15,459	15,751	24,891	25,030	3,589	3,750	2,005	2,136
Civilian labor force .....	21,365	21,459	11,186	11,141	10,179	10,318	17,870	17,716	2,744	2,951	1,608	1,699
Percent of population .....	72.4	71.9	79.6	79.0	65.8	65.5	71.8	70.8	76.5	78.7	80.2	79.5
Employed .....	20,645	20,860	10,836	10,840	9,809	10,021	17,379	17,274	2,561	2,816	1,556	1,622
Employment-population ratio .....	70.0	69.9	77.1	76.9	63.4	63.6	69.8	69.0	71.4	75.1	77.6	75.9
Unemployed .....	720	599	350	302	370	297	491	442	183	135	52	77
Unemployment rate .....	3.4	2.8	3.1	2.7	3.6	2.9	2.7	2.5	6.7	4.6	3.3	4.5
<b>Associate degree</b>												
Civilian noninstitutional population ...	12,573	13,173	5,539	5,810	7,034	7,363	10,828	11,239	1,263	1,384	798	783
Civilian labor force .....	10,075	10,473	4,753	4,945	5,322	5,528	8,614	8,909	1,067	1,152	668	649
Percent of population .....	80.1	79.5	85.8	85.1	75.7	75.1	79.5	79.3	84.5	83.5	83.8	82.8
Employed .....	9,819	10,220	4,634	4,808	5,186	5,411	8,415	8,712	1,022	1,110	644	613
Employment-population ratio .....	78.1	77.6	83.7	82.8	73.7	73.5	77.7	77.5	80.9	80.2	80.7	78.3
Unemployed .....	255	253	119	137	136	116	198	197	45	46	24	36
Unemployment rate .....	2.5	2.4	2.5	2.8	2.6	2.1	2.3	2.2	4.2	4.0	3.6	5.5
<b>College graduates</b>												
Civilian noninstitutional population ...	41,822	43,484	21,830	22,681	19,992	20,803	36,180	37,407	2,856	3,050	1,719	1,801
Civilian labor force .....	33,739	34,889	18,584	19,285	15,155	15,603	29,052	29,892	2,430	2,588	1,432	1,492
Percent of population .....	80.7	80.2	85.1	85.0	75.8	75.0	80.3	79.9	85.1	84.9	83.3	82.8
Employed .....	33,204	34,323	18,265	18,984	14,939	15,339	28,616	29,410	2,374	2,537	1,401	1,444
Employment-population ratio .....	79.4	78.9	83.7	83.7	74.7	73.7	79.1	78.6	83.1	83.2	81.5	80.2
Unemployed .....	535	566	319	302	217	264	436	482	56	51	32	48
Unemployment rate .....	1.6	1.6	1.7	1.6	1.4	1.7	1.5	1.6	2.3	2.0	2.2	3.2

<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.

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

(In thousands)

Age, sex, and race	December 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 .....	108,780	97,922	8,379	2,479	23,952	2,285	20,583	1,085	4,452	1,113
16 to 19 years .....	2,033	1,760	253	20	4,987	230	4,617	140	416	574
16 to 17 years .....	214	164	46	3	2,524	25	2,438	61	74	392
18 to 19 years .....	1,820	1,596	206	18	2,463	205	2,179	79	343	182
20 years and over .....	106,746	96,162	8,126	2,458	18,965	2,055	15,965	945	4,036	539
20 to 24 years .....	9,080	8,115	772	193	3,554	390	3,037	127	757	124
25 years and over .....	97,667	88,048	7,354	2,266	15,411	1,665	12,928	818	3,279	416
25 to 54 years .....	85,069	77,046	6,221	1,802	10,977	1,475	8,948	554	2,961	260
55 years and over .....	12,598	11,001	1,133	463	4,434	190	3,981	264	318	155
<b>Men, 16 years and over .....</b>	<b>63,209</b>	<b>57,651</b>	<b>4,184</b>	<b>1,373</b>	<b>7,722</b>	<b>1,057</b>	<b>6,357</b>	<b>308</b>	<b>2,574</b>	<b>551</b>
16 to 19 years .....	1,223	1,071	137	14	2,269	119	2,084	66	256	359
16 to 17 years .....	61,986	56,580	4,047	1,359	5,453	938	4,273	242	2,317	192
18 to 19 years .....	5,159	4,663	404	91	1,511	198	1,265	48	459	65
20 years and over .....	56,827	51,917	3,643	1,267	3,942	740	3,008	194	1,858	127
20 to 24 years .....	49,197	45,147	3,042	1,007	2,163	666	1,418	79	1,639	65
25 years and over .....	7,631	6,770	600	260	1,779	74	1,590	115	219	62
25 to 54 years .....	45,571	40,271	4,194	1,106	16,230	1,228	14,226	777	1,878	562
55 years and over .....	811	689	115	6	2,718	111	2,533	74	160	215
<b>Women, 16 years and over .....</b>	<b>44,760</b>	<b>39,582</b>	<b>4,079</b>	<b>1,100</b>	<b>13,512</b>	<b>1,117</b>	<b>11,693</b>	<b>703</b>	<b>1,718</b>	<b>347</b>
16 to 19 years .....	3,921	3,451	368	102	2,043	191	1,772	79	298	59
16 to 17 years .....	40,840	36,131	3,711	998	11,469	926	9,920	624	1,420	288
18 to 19 years .....	35,873	31,900	3,178	795	8,814	809	7,530	475	1,322	195
20 years and over .....	4,967	4,231	533	203	2,655	116	2,391	148	98	93
20 to 24 years .....										
25 years and over .....										
25 to 54 years .....										
55 years and over .....										
<b>White</b>										
<b>Men, 16 years and over .....</b>	<b>54,124</b>	<b>49,374</b>	<b>3,607</b>	<b>1,143</b>	<b>6,598</b>	<b>828</b>	<b>5,495</b>	<b>275</b>	<b>1,969</b>	<b>424</b>
16 to 19 years .....	1,052	921	119	12	1,945	98	1,796	51	182	275
16 to 17 years .....	53,072	48,453	3,488	1,131	4,653	730	3,699	224	1,787	150
18 to 19 years .....	4,389	3,960	354	75	1,268	157	1,065	45	330	44
20 years and over .....	48,683	44,493	3,134	1,056	3,385	573	2,634	178	1,457	105
20 to 24 years .....	41,941	38,518	2,590	834	1,760	506	1,178	75	1,276	56
25 years and over .....	6,741	5,976	544	222	1,625	66	1,456	103	181	49
25 to 54 years .....										
55 years and over .....										
<b>Women, 16 years and over .....</b>	<b>36,736</b>	<b>32,399</b>	<b>3,468</b>	<b>869</b>	<b>14,188</b>	<b>936</b>	<b>12,576</b>	<b>676</b>	<b>1,316</b>	<b>439</b>
16 to 19 years .....	661	555	100	6	2,304	90	2,159	55	123	163
16 to 17 years .....	36,075	31,844	3,368	863	11,884	846	10,418	621	1,194	275
18 to 19 years .....	3,152	2,785	295	72	1,718	154	1,497	68	176	44
20 years and over .....	32,924	29,059	3,073	791	10,167	692	8,921	554	1,018	232
20 to 24 years .....	28,695	25,453	2,619	622	7,785	597	6,768	420	935	162
25 years and over .....	4,229	3,606	454	169	2,382	95	2,154	134	83	70
25 to 54 years .....										
55 years and over .....										
<b>Black</b>										
<b>Men, 16 years and over .....</b>	<b>6,195</b>	<b>5,581</b>	<b>462</b>	<b>151</b>	<b>750</b>	<b>180</b>	<b>549</b>	<b>21</b>	<b>487</b>	<b>91</b>
16 to 19 years .....	127	117	10	-	226	17	197	12	61	62
16 to 17 years .....	6,068	5,465	453	151	524	163	351	10	426	29
18 to 19 years .....	539	490	42	7	154	37	117	-	109	16
20 years and over .....	5,529	4,975	410	144	370	126	234	10	317	13
20 to 24 years .....	4,978	4,496	361	120	262	121	140	-	292	4
25 years and over .....	551	479	49	24	108	5	94	10	24	9
25 to 54 years .....										
55 years and over .....										
<b>Women, 16 years and over .....</b>	<b>6,573</b>	<b>5,837</b>	<b>573</b>	<b>163</b>	<b>1,476</b>	<b>247</b>	<b>1,149</b>	<b>80</b>	<b>462</b>	<b>103</b>
16 to 19 years .....	130	115	14	-	319	16	290	12	29	46
16 to 17 years .....	6,443	5,721	559	163	1,157	231	858	68	433	56
18 to 19 years .....	603	511	66	26	241	31	199	12	112	11
20 years and over .....	5,840	5,210	493	137	915	201	659	56	321	46
20 to 24 years .....	5,284	4,742	427	116	686	179	466	41	317	23
25 years and over .....	555	468	66	21	229	22	192	15	4	23
25 to 54 years .....										
55 years and over .....										

<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**

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total .....	130,785	132,732	69,849	70,930	66,524	67,439	60,936	61,801	57,647	58,273
Managerial and professional specialty .....	38,416	40,007	19,582	20,266	19,473	20,156	18,834	19,741	18,688	19,557
Executive, administrative, and managerial .....	18,663	19,415	10,348	10,729	10,300	10,686	8,315	8,686	8,280	8,642
Officials and administrators, public administration .....	729	840	417	463	416	463	311	377	311	373
Other executive, administrative, and managerial .....	13,272	13,707	7,944	8,209	7,902	8,170	5,328	5,498	5,297	5,461
Management-related occupations .....	4,662	4,868	1,986	2,057	1,982	2,053	2,676	2,811	2,671	2,808
Professional specialty .....	19,753	20,592	9,234	9,537	9,173	9,471	10,519	11,055	10,408	10,914
Engineers .....	2,032	2,121	1,851	1,888	1,852	1,886	181	233	181	233
Mathematical and computer scientists .....	1,575	1,743	1,118	1,189	1,115	1,181	457	554	451	554
Natural scientists .....	498	603	331	430	331	430	167	174	167	174
Health diagnosing occupations .....	1,063	1,100	817	839	817	839	246	261	246	258
Health assessment and treating occupations .....	2,963	2,997	405	415	405	415	2,558	2,582	2,555	2,579
Teachers, college and university .....	927	1,033	528	544	521	540	398	489	398	481
Teachers, except college and university .....	5,010	5,188	1,252	1,378	1,234	1,362	3,759	3,810	3,710	3,765
Lawyers and judges .....	985	925	712	647	712	647	273	278	273	278
Other professional specialty occupations .....	4,701	4,881	2,221	2,208	2,187	2,171	2,480	2,674	2,427	2,592
Technical, sales, and administrative support .....	38,791	38,517	13,899	13,794	13,077	12,889	24,892	24,723	23,143	22,779
Technicians and related support .....	4,212	4,137	2,028	1,869	1,999	1,827	2,183	2,269	2,152	2,239
Health technologists and technicians .....	1,647	1,691	293	316	291	304	1,354	1,375	1,342	1,348
Engineering and science technicians .....	1,302	1,102	1,016	805	999	783	286	297	274	295
Technicians, except health, engineering, and science .....	1,262	1,345	719	748	709	739	543	597	536	596
Sales occupations .....	16,077	16,189	7,936	7,981	7,366	7,375	8,141	8,208	6,946	6,907
Supervisors and proprietors .....	4,584	4,803	2,794	2,911	2,776	2,883	1,790	1,892	1,750	1,858
Sales representatives, finance and business services .....	2,692	2,733	1,462	1,563	1,451	1,532	1,230	1,170	1,207	1,138
Sales representatives, commodities, except retail .....	1,618	1,543	1,201	1,169	1,195	1,159	417	374	411	359
Sales workers, retail and personal services .....	7,066	7,031	2,446	2,313	1,911	1,776	4,620	4,718	3,505	3,498
Sales-related occupations .....	117	79	33	24	33	24	84	54	73	54
Administrative support, including clerical .....	18,503	18,190	3,935	3,944	3,712	3,688	14,568	14,246	14,044	13,633
Supervisors .....	710	702	291	290	291	289	419	412	414	410
Computer equipment operators .....	401	373	146	183	144	181	254	190	249	187
Secretaries, stenographers, and typists .....	3,638	3,452	85	100	73	91	3,552	3,352	3,454	3,269
Financial records processing .....	2,175	2,221	168	203	161	199	2,007	2,018	1,985	1,986
Mail and message distributing .....	970	984	605	599	581	589	365	385	354	373
Other administrative support, including clerical .....	10,609	10,459	2,639	2,571	2,462	2,338	7,971	7,889	7,589	7,408
Service occupations .....	17,738	17,873	7,093	7,094	6,140	6,129	10,645	10,779	9,498	9,658
Private household .....	887	870	64	49	53	44	822	821	732	741
Protective service .....	2,323	2,356	1,925	1,936	1,886	1,885	398	420	378	400
Service, except private household and protective .....	14,528	14,647	5,103	5,109	4,201	4,200	9,424	9,538	8,388	8,517
Food service .....	6,148	6,140	2,619	2,699	1,909	1,983	3,529	3,441	2,820	2,769
Health service .....	2,531	2,447	298	252	285	228	2,234	2,196	2,115	2,119
Cleaning and building service .....	3,037	3,006	1,676	1,635	1,540	1,509	1,360	1,372	1,300	1,301
Personal service .....	2,812	3,053	511	524	467	480	2,301	2,529	2,153	2,329
Precision production, craft, and repair .....	14,213	14,586	12,951	13,279	12,646	12,941	1,262	1,308	1,246	1,273
Mechanics and repairers .....	4,828	4,875	4,644	4,700	4,517	4,566	184	175	181	172
Construction trades .....	5,298	5,665	5,187	5,529	5,051	5,374	111	136	110	134
Other precision production, craft, and repair .....	4,087	4,047	3,120	3,050	3,078	3,001	967	997	955	967
Operators, fabricators, and laborers .....	18,495	18,702	13,815	14,066	12,843	13,055	4,680	4,636	4,469	4,420
Machine operators, assemblers, and inspectors .....	7,897	7,787	4,820	4,899	4,643	4,735	3,077	2,889	3,002	2,823
Transportation and material moving occupations .....	5,496	5,633	4,969	5,028	4,855	4,901	527	605	515	602
Motor vehicle operators .....	4,276	4,367	3,805	3,839	3,708	3,736	471	528	459	525
Other transportation and material moving occupations .....	1,220	1,266	1,164	1,189	1,147	1,165	56	77	56	77
Handlers, equipment cleaners, helpers, and laborers .....	5,102	5,282	4,025	4,139	3,345	3,419	1,076	1,143	951	995
Construction laborers .....	735	799	707	769	653	700	28	30	27	30
Other handlers, equipment cleaners, helpers, and laborers .....	4,367	4,482	3,319	3,370	2,693	2,718	1,048	1,112	925	965
Farming, forestry, and fishing .....	3,132	3,046	2,509	2,431	2,345	2,268	622	615	602	586
Farm operators and managers .....	1,282	1,080	977	813	974	810	306	267	306	264
Other farming, forestry, and fishing occupations .....	1,849	1,966	1,533	1,618	1,371	1,458	316	348	296	322

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

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	130,785	132,732	69,849	70,930	60,936	61,801
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	29.4	30.1	28.0	28.6	30.9	31.9
Executive, administrative, and managerial .....	14.3	14.6	14.8	15.1	13.6	14.1
Professional specialty .....	15.1	15.5	13.2	13.4	17.3	17.9
Technical, sales, and administrative support .....	29.7	29.0	19.9	19.4	40.8	40.0
Technicians and related support .....	3.2	3.1	2.9	2.6	3.6	3.7
Sales occupations .....	12.3	12.2	11.4	11.3	13.4	13.3
Administrative support, including clerical .....	14.1	13.7	5.6	5.6	23.9	23.1
Service occupations .....	13.6	13.5	10.2	10.0	17.5	17.4
Private household .....	.7	.7	( <sup>1</sup> )	.1	1.3	1.3
Protective service .....	1.8	1.8	2.8	2.7	.7	.7
Service, except private household and protective .....	11.1	11.0	7.3	7.2	15.5	15.4
Precision production, craft, and repair .....	10.9	11.0	18.5	18.7	2.1	2.1
Operators, fabricators, and laborers .....	14.1	14.1	19.8	19.8	7.7	7.5
Machine operators, assemblers, and inspectors .....	6.0	5.9	6.9	6.9	5.0	4.7
Transportation and material moving occupations .....	4.2	4.2	7.1	7.1	.9	1.0
Handlers, equipment cleaners, helpers, and laborers .....	3.9	4.0	5.8	5.8	1.8	1.8
Farming, forestry, and fishing .....	2.4	2.3	3.6	3.4	1.0	1.0
<b>White</b>						
Total, 16 years and over (thousands) .....	110,662	111,647	60,128	60,722	50,534	50,924
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	30.3	31.1	28.8	29.5	32.1	33.1
Executive, administrative, and managerial .....	14.9	15.3	15.5	15.9	14.2	14.5
Professional specialty .....	15.4	15.9	13.3	13.5	17.9	18.7
Technical, sales, and administrative support .....	29.8	29.1	19.9	19.4	41.5	40.6
Technicians and related support .....	3.2	3.1	2.9	2.6	3.6	3.7
Sales occupations .....	12.7	12.4	11.8	11.6	13.7	13.5
Administrative support, including clerical .....	13.9	13.5	5.3	5.2	24.1	23.4
Service occupations .....	12.4	12.3	9.1	9.0	16.3	16.3
Private household .....	.6	.6	( <sup>1</sup> )	.1	1.3	1.3
Protective service .....	1.7	1.7	2.6	2.6	.5	.6
Service, except private household and protective .....	10.1	10.0	6.5	6.3	14.4	14.4
Precision production, craft, and repair .....	11.3	11.5	19.2	19.5	1.9	2.0
Operators, fabricators, and laborers .....	13.5	13.4	19.0	18.9	7.0	6.9
Machine operators, assemblers, and inspectors .....	5.7	5.5	6.7	6.6	4.5	4.3
Transportation and material moving occupations .....	4.1	4.1	6.9	6.9	.8	.9
Handlers, equipment cleaners, helpers, and laborers .....	3.7	3.8	5.5	5.5	1.7	1.8
Farming, forestry, and fishing .....	2.6	2.5	3.9	3.7	1.1	1.1
<b>Black</b>						
Total, 16 years and over (thousands) .....	14,248	14,993	6,618	6,945	7,630	8,048
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	20.5	20.9	17.8	18.1	22.8	23.3
Executive, administrative, and managerial .....	9.5	10.1	8.7	9.4	10.2	10.6
Professional specialty .....	11.0	10.8	9.1	8.6	12.6	12.7
Technical, sales, and administrative support .....	29.5	28.9	18.7	18.4	38.9	38.0
Technicians and related support .....	2.8	3.0	2.5	2.4	3.1	3.4
Sales occupations .....	9.5	10.1	7.7	7.9	11.1	12.0
Administrative support, including clerical .....	17.2	15.8	8.5	8.1	24.7	22.5
Service occupations .....	21.9	21.7	17.9	17.2	25.3	25.5
Private household .....	1.0	.9	.1	.1	1.8	1.6
Protective service .....	3.0	2.7	4.7	4.2	1.5	1.5
Service, except private household and protective .....	17.9	18.0	13.1	13.0	22.0	22.4
Precision production, craft, and repair .....	7.7	7.9	14.3	14.5	2.1	2.2
Operators, fabricators, and laborers .....	19.5	19.5	29.8	29.9	10.6	10.6
Machine operators, assemblers, and inspectors .....	8.3	8.1	9.6	10.1	7.1	6.4
Transportation and material moving occupations .....	5.8	5.8	10.9	10.4	1.5	1.8
Handlers, equipment cleaners, helpers, and laborers .....	5.4	5.6	9.3	9.4	2.0	2.4
Farming, forestry, and fishing .....	.9	1.1	1.5	1.9	.4	.5

<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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	December 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 .....	2,953	140	89	33	20	121	-	9	38	19	38	22	2,423
Mining .....	568	85	67	11	7	45	-	9	183	29	107	24	2
Construction .....	8,670	1,436	142	53	80	384	-	17	5,002	108	545	894	9
Manufacturing .....	20,547	2,936	2,059	670	779	1,815	-	258	3,939	6,266	753	980	91
Durable goods .....	12,521	1,736	1,398	440	325	989	-	129	2,801	3,724	371	521	87
Nondurable goods .....	8,026	1,200	661	230	455	826	-	129	1,137	2,542	382	460	4
Transportation and public utilities .....	9,675	1,320	554	375	284	2,472	-	314	1,403	111	2,357	469	17
Wholesale and retail trade .....	28,037	2,529	631	269	11,688	2,278	-	5,184	1,507	381	1,168	2,302	99
Wholesale trade .....	5,233	607	153	39	2,073	809	-	52	349	124	539	422	69
Retail trade .....	22,804	1,922	478	230	9,615	1,470	-	5,132	1,159	256	630	1,881	31
Finance, insurance, and real estate .....	8,727	2,626	376	174	2,165	2,789	-	309	176	15	14	31	52
Services .....	47,507	6,860	15,672	2,346	1,134	7,005	870	9,193	2,136	822	626	518	324
Private households .....	963	-	10	-	-	1	870	51	-	-	3	11	17
Other service industries .....	46,543	6,860	15,662	2,346	1,134	7,004	-	9,142	2,136	822	623	507	307
Professional services .....	31,834	4,162	13,601	1,968	196	5,107	-	5,645	478	170	357	83	67
Public administration .....	6,047	1,483	1,001	207	31	1,281	-	1,710	203	36	25	40	29

<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.

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

(In thousands)

Age and sex	December 1998									
	Agriculture			Nonagricultural industries						
	Wage and salary workers	Self-employed workers	Unpaid family workers	Wage and salary workers				Self-employed workers	Unpaid family workers	
				Total	Private industries					Government
Total	Private household workers	Other private industries								
Total, 16 years and over .....	1,683	1,241	29	120,917	102,015	962	101,053	18,902	8,745	117
16 to 19 years .....	137	16	7	6,769	6,431	93	6,339	338	91	-
16 to 17 years .....	68	11	2	2,632	2,531	63	2,468	100	25	-
18 to 19 years .....	70	6	4	4,137	3,900	30	3,870	237	66	-
20 to 24 years .....	233	17	9	12,145	11,116	110	11,006	1,029	220	9
25 to 34 years .....	464	168	4	29,294	25,572	191	25,380	3,723	1,398	15
35 to 44 years .....	403	313	3	33,147	27,823	217	27,606	5,325	2,564	39
45 to 54 years .....	267	289	3	25,206	19,540	174	19,366	5,666	2,442	27
55 to 64 years .....	125	236	2	11,437	9,058	120	8,938	2,379	1,366	11
65 years and over .....	54	202	-	2,918	2,475	57	2,417	444	665	16
Men, 16 years and over .....	1,257	924	20	63,356	54,913	83	54,830	8,443	5,336	37
16 to 19 years .....	110	9	7	3,320	3,152	10	3,142	167	47	-
16 to 17 years .....	52	9	2	1,268	1,213	5	1,208	54	8	-
18 to 19 years .....	58	-	4	2,052	1,939	5	1,934	113	39	-
20 to 24 years .....	190	16	9	6,336	5,890	8	5,882	447	111	7
25 to 34 years .....	346	132	4	15,635	13,904	18	13,886	1,731	838	-
35 to 44 years .....	311	237	-	17,576	15,273	22	15,251	2,303	1,536	15
45 to 54 years .....	168	205	-	12,874	10,443	9	10,434	2,431	1,477	6
55 to 64 years .....	95	159	-	6,030	4,884	9	4,876	1,146	880	2
65 years and over .....	39	166	-	1,585	1,367	8	1,359	218	446	8
Women, 16 years and over .....	426	318	8	57,561	47,101	879	46,223	10,459	3,409	80
16 to 19 years .....	28	8	-	3,450	3,279	82	3,197	170	44	-
16 to 17 years .....	16	2	-	1,364	1,318	58	1,261	46	17	-
18 to 19 years .....	12	6	-	2,086	1,961	25	1,936	125	27	-
20 to 24 years .....	44	1	-	5,808	5,226	102	5,124	582	108	2
25 to 34 years .....	118	37	-	13,659	11,667	173	11,494	1,992	560	15
35 to 44 years .....	93	76	3	15,571	12,550	195	12,355	3,022	1,028	24
45 to 54 years .....	99	84	3	12,332	9,097	165	8,932	3,235	965	21
55 to 64 years .....	30	76	2	5,407	4,174	111	4,063	1,233	486	8
65 years and over .....	15	36	-	1,333	1,108	50	1,058	226	218	9

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



**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Hours of work	December 1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	129,168	2,786	126,383	100.0	100.0	100.0
1 to 34 hours .....	30,260	899	29,361	23.4	32.3	23.2
1 to 4 hours .....	1,042	61	980	.8	2.2	.8
5 to 14 hours .....	5,130	209	4,921	4.0	7.5	3.9
15 to 29 hours .....	15,210	411	14,799	11.8	14.8	11.7
30 to 34 hours .....	8,878	217	8,661	6.9	7.8	6.9
35 hours and over .....	98,908	1,886	97,022	76.6	67.7	76.8
35 to 39 hours .....	8,537	140	8,396	6.6	5.0	6.6
40 hours .....	47,768	700	47,068	37.0	25.1	37.2
41 hours and over .....	42,603	1,046	41,558	33.0	37.5	32.9
41 to 48 hours .....	15,348	238	15,110	11.9	8.5	12.0
49 to 59 hours .....	16,016	374	15,643	12.4	13.4	12.4
60 hours and over .....	11,239	434	10,805	8.7	15.6	8.5
Average hours, total at work .....	39.8	39.9	39.8	-	-	-
Average hours, persons who usually work full time .....	43.9	45.7	43.9	-	-	-

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	December 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 .....	30,260	8,379	21,882	29,361	8,044	21,317
Economic reasons .....	3,455	1,343	2,112	3,242	1,195	2,047
Slack work or business conditions .....	2,005	1,047	958	1,901	961	939
Could only find part-time work .....	1,088	-	1,088	1,057	-	1,057
Seasonal work .....	207	142	65	134	83	51
Job started or ended during week .....	154	154	-	150	150	-
Noneconomic reasons .....	26,806	7,035	19,770	26,119	6,849	19,270
Child-care problems .....	910	106	804	898	104	794
Other family or personal obligations .....	5,726	709	5,017	5,584	692	4,892
Health or medical limitations .....	696	-	696	668	-	668
In school or training .....	7,287	104	7,183	7,162	102	7,060
Retired or Social Security limit on earnings .....	2,076	-	2,076	1,970	-	1,970
Vacation or personal day .....	2,740	2,740	-	2,696	2,696	-
Holiday, legal or religious .....	87	87	-	82	82	-
Weather-related curtailment .....	297	297	-	245	245	-
All other reasons .....	6,987	2,993	3,994	6,814	2,927	3,887
Average hours:						
Economic reasons .....	23.4	24.5	22.6	23.4	24.5	22.7
Other reasons .....	21.2	26.0	19.5	21.3	26.1	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	December 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 .....	126,383	29,361	3,242	6,849	19,270	97,022	39.8	43.9
Wage and salary workers .....	118,034	26,801	2,869	6,382	17,550	91,233	39.7	43.6
Mining .....	531	37	6	30	1	494	47.3	47.4
Construction .....	6,935	1,041	289	437	315	5,894	41.4	42.9
Manufacturing .....	19,734	2,133	277	1,059	796	17,602	42.9	44.0
Durable goods .....	12,046	1,166	106	683	377	10,879	43.3	44.1
Nondurable goods .....	7,689	966	171	376	419	6,722	42.3	43.7
Transportation and public utilities .....	8,919	1,260	165	518	577	7,659	43.0	44.7
Wholesale and retail trade .....	25,871	8,638	981	965	6,692	17,233	37.2	44.1
Finance, insurance, and real estate .....	7,927	1,367	59	501	807	6,560	40.7	43.1
Service industries .....	42,228	11,485	1,059	2,369	8,057	30,742	38.3	43.3
Private households .....	930	503	77	31	396	427	29.1	41.4
All other industries .....	41,297	10,982	982	2,339	7,661	30,315	38.5	43.3
Public administration .....	5,889	839	32	502	305	5,049	41.5	42.9
Self-employed workers .....	8,232	2,504	369	461	1,674	5,728	40.7	47.5
Unpaid family workers .....	117	56	5	6	46	61	32.3	( 1 )

<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-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	December 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 .....	126,383	29,361	3,242	6,849	19,270	97,022	39.8	43.9
16 to 19 years .....	6,706	4,917	274	188	4,456	1,789	24.1	39.9
16 to 17 years .....	2,600	2,435	47	19	2,369	165	17.4	37.1
18 to 19 years .....	4,106	2,483	227	169	2,087	1,624	28.4	40.2
20 years and over .....	119,677	24,444	2,968	6,661	14,814	95,233	40.7	43.9
20 to 24 years .....	12,067	3,976	510	598	2,868	8,090	36.2	42.1
25 years and over .....	107,610	20,467	2,458	6,063	11,947	87,143	41.2	44.1
25 to 54 years .....	91,878	15,632	2,139	5,166	8,328	76,246	41.8	44.2
55 years and over .....	15,732	4,835	319	897	3,619	10,897	37.6	43.6
<b>Men, 16 years and over</b> .....	67,161	10,726	1,604	3,250	5,872	56,435	42.7	45.3
16 to 19 years .....	3,293	2,215	142	102	1,972	1,077	26.0	40.3
16 to 17 years .....	1,248	1,153	30	12	1,111	95	18.1	36.6
18 to 19 years .....	2,044	1,062	112	90	861	982	30.9	40.7
20 years and over .....	63,869	8,511	1,463	3,148	3,900	55,358	43.5	45.4
20 to 24 years .....	6,328	1,743	276	281	1,186	4,585	38.2	43.1
25 years and over .....	57,540	6,767	1,187	2,867	2,714	50,773	44.1	45.6
25 to 54 years .....	48,932	4,753	1,037	2,419	1,297	44,179	44.8	45.7
55 years and over .....	8,608	2,014	150	448	1,416	6,594	40.3	44.9
<b>Women, 16 years and over</b> .....	59,222	18,635	1,638	3,599	13,398	40,587	36.5	41.9
16 to 19 years .....	3,414	2,702	132	86	2,484	712	22.2	39.2
16 to 17 years .....	1,351	1,281	17	6	1,258	70	16.7	( <sup>1</sup> )
18 to 19 years .....	2,062	1,421	115	79	1,226	642	25.9	39.4
20 years and over .....	55,808	15,933	1,506	3,513	10,914	39,875	37.4	42.0
20 to 24 years .....	5,738	2,233	235	317	1,681	3,505	34.1	40.9
25 years and over .....	50,070	13,700	1,271	3,196	9,233	36,370	37.8	42.1
25 to 54 years .....	42,946	10,879	1,102	2,747	7,030	32,066	38.3	42.1
55 years and over .....	7,124	2,821	169	448	2,203	4,303	34.3	41.6
<b>Race</b>								
<b>White, 16 years and over</b> .....	106,057	25,213	2,583	5,762	16,869	80,844	39.8	44.0
Men .....	57,335	9,148	1,323	2,773	5,052	48,187	42.9	45.5
Women .....	48,722	16,065	1,259	2,989	11,817	32,657	36.2	42.0
<b>Black, 16 years and over</b> .....	14,471	3,031	537	861	1,634	11,439	39.5	42.5
Men .....	6,694	1,134	229	375	530	5,560	41.4	43.8
Women .....	7,777	1,897	308	485	1,104	5,880	37.9	41.3
<b>Marital status</b>								
<b>Men, 16 years and over:</b>								
Married, spouse present .....	41,164	4,459	645	1,978	1,835	36,705	44.6	45.9
Widowed, divorced, or separated .....	7,866	1,053	241	434	377	6,813	43.5	45.1
Single (never married) .....	18,132	5,215	718	837	3,660	12,917	38.0	43.6
<b>Women, 16 years and over:</b>								
Married, spouse present .....	31,862	9,721	659	1,954	7,108	22,141	36.7	41.8
Widowed, divorced, or separated .....	11,917	2,837	422	793	1,623	9,079	38.9	42.4
Single (never married) .....	15,443	6,077	557	852	4,668	9,366	34.3	41.9

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

(Numbers in thousands)

Occupation and sex	December 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> .....	126,295	29,363	3,247	6,837	19,279	96,932	39.8	43.9
Managerial and professional specialty .....	39,054	6,518	475	2,075	3,968	32,536	42.6	45.5
Executive, administrative, and managerial .....	19,000	2,302	185	941	1,175	16,699	44.5	46.3
Professional specialty .....	20,054	4,217	290	1,134	2,793	15,837	40.8	44.6
Technical, sales, and administrative support .....	37,538	10,537	749	2,117	7,670	27,001	38.0	43.0
Technicians and related support .....	4,031	950	52	302	596	3,080	39.1	42.4
Sales occupations .....	15,803	4,790	439	606	3,745	11,013	39.0	45.6
Administrative support, including clerical .....	17,705	4,796	258	1,209	3,330	12,908	36.8	41.0
Service occupations .....	17,309	6,822	904	835	5,083	10,487	34.8	42.5
Private household .....	845	470	66	26	379	375	28.6	41.2
Protective service .....	2,282	380	32	131	217	1,902	42.7	45.5
Service, except private household and protective .....	14,182	5,972	806	678	4,487	8,210	34.0	41.8
Precision production, craft, and repair .....	14,164	1,871	424	846	601	12,293	42.3	43.6
Operators, fabricators, and laborers .....	18,230	3,615	695	963	1,957	14,615	40.4	43.3
Machine operators, assemblers, and inspectors .....	7,634	1,026	215	443	368	6,607	41.3	42.5
Transportation and material moving occupations .....	5,428	948	171	251	527	4,480	43.2	46.0
Handlers, equipment cleaners, helpers, and laborers .....	5,169	1,641	310	269	1,062	3,528	36.1	41.4
Men, 16 years and over <sup>1</sup> .....	66,938	10,668	1,607	3,234	5,827	56,270	42.7	45.3
Managerial and professional specialty .....	19,866	2,129	208	889	1,032	17,736	45.7	47.4
Executive, administrative, and managerial .....	10,525	924	113	445	366	9,601	47.0	48.2
Professional specialty .....	9,341	1,206	95	444	667	8,135	44.3	46.5
Technical, sales, and administrative support .....	13,510	2,424	209	600	1,616	11,086	42.4	45.8
Technicians and related support .....	1,822	268	25	111	132	1,555	42.2	44.0
Sales occupations .....	7,836	1,367	104	248	1,014	6,469	43.9	47.7
Administrative support, including clerical .....	3,852	790	80	241	469	3,062	39.5	42.8
Service occupations .....	6,904	2,026	308	325	1,393	4,879	37.9	43.6
Private household .....	49	24	9	-	14	26	( <sup>2</sup> )	( <sup>2</sup> )
Protective service .....	1,868	257	27	104	126	1,611	44.0	46.2
Service, except private household and protective .....	4,987	1,745	272	220	1,252	3,242	35.8	42.4
Precision production, craft, and repair .....	12,912	1,648	396	770	481	11,264	42.5	43.7
Operators, fabricators, and laborers .....	13,746	2,441	485	651	1,305	11,305	41.2	44.0
Machine operators, assemblers, and inspectors .....	4,830	477	91	237	149	4,353	42.6	43.5
Transportation and material moving occupations .....	4,850	718	126	220	373	4,132	44.1	46.4
Handlers, equipment cleaners, helpers, and laborers .....	4,065	1,245	268	194	783	2,820	36.2	41.4
Women, 16 years and over <sup>1</sup> .....	59,357	18,695	1,641	3,602	13,452	40,662	36.5	41.9
Managerial and professional specialty .....	19,189	4,389	267	1,187	2,935	14,800	39.3	43.2
Executive, administrative, and managerial .....	8,476	1,378	72	497	809	7,098	41.3	43.7
Professional specialty .....	10,713	3,011	195	690	2,126	7,702	37.8	42.7
Technical, sales, and administrative support .....	24,028	8,112	540	1,517	6,055	15,915	35.5	41.1
Technicians and related support .....	2,208	683	28	191	464	1,526	36.6	40.8
Sales occupations .....	7,967	3,423	335	358	2,730	4,543	34.1	42.7
Administrative support, including clerical .....	13,853	4,006	178	968	2,861	9,846	36.1	40.4
Service occupations .....	10,405	4,797	595	511	3,691	5,608	32.8	41.5
Private household .....	796	447	56	26	364	349	28.6	41.4
Protective service .....	414	123	5	26	91	291	36.9	42.0
Service, except private household and protective .....	9,195	4,227	534	458	3,235	4,968	33.0	41.5
Precision production, craft, and repair .....	1,252	222	27	75	120	1,029	40.0	42.1
Operators, fabricators, and laborers .....	4,485	1,175	211	312	652	3,310	37.7	41.1
Machine operators, assemblers, and inspectors .....	2,803	549	124	206	219	2,254	39.0	40.8
Transportation and material moving occupations .....	577	230	45	31	154	348	35.6	42.2
Handlers, equipment cleaners, helpers, and laborers .....	1,104	396	42	75	279	708	35.8	41.4

<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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total, 16 years and over .....	3,304	3,125	4.5	4.2	2,653	2,440	4.2	3.8
Married, spouse present .....	1,133	1,030	2.6	2.3	884	849	2.6	2.5
Widowed, divorced, or separated .....	495	462	5.8	5.2	621	611	4.8	4.7
Single (never married) .....	1,676	1,633	8.2	7.9	1,148	980	6.9	5.8
White, 16 years and over .....	2,417	2,394	3.9	3.8	1,788	1,755	3.4	3.3
Married, spouse present .....	909	870	2.3	2.2	700	719	2.3	2.4
Widowed, divorced, or separated .....	398	365	5.6	5.0	429	449	4.2	4.4
Single (never married) .....	1,110	1,158	6.7	6.9	660	587	5.4	4.7
Black, 16 years and over .....	707	578	9.7	7.7	730	565	8.7	6.6
Married, spouse present .....	142	109	4.2	3.2	122	84	4.7	3.0
Widowed, divorced, or separated .....	74	77	6.6	6.3	165	137	7.2	6.1
Single (never married) .....	491	392	17.3	13.6	443	344	12.7	9.6
Total, 25 years and over .....	2,187	1,986	3.5	3.2	1,782	1,708	3.3	3.2
Married, spouse present .....	1,079	972	2.5	2.3	789	793	2.4	2.4
Widowed, divorced, or separated .....	463	441	5.6	5.1	575	586	4.6	4.6
Single (never married) .....	644	573	5.9	5.2	418	329	5.0	3.9
White, 25 years and over .....	1,652	1,562	3.1	2.9	1,236	1,249	2.8	2.8
Married, spouse present .....	860	813	2.3	2.1	618	667	2.2	2.3
Widowed, divorced, or separated .....	370	349	5.4	4.9	391	430	4.0	4.3
Single (never married) .....	422	400	4.9	4.6	226	152	3.9	2.6
Black, 25 years and over .....	413	330	6.8	5.3	451	367	6.6	5.2
Married, spouse present .....	138	109	4.2	3.2	109	83	4.4	3.1
Widowed, divorced, or separated .....	72	73	6.7	6.1	157	132	7.0	6.0
Single (never married) .....	203	148	11.9	8.8	185	152	8.5	6.8

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

A-29. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total, 16 years and over <sup>1</sup> .....	5,957	5,565	4.4	4.0	4.5	4.2	4.2	3.8
Managerial and professional specialty .....	669	665	1.7	1.6	1.8	1.7	1.7	1.5
Executive, administrative, and managerial .....	357	332	1.9	1.7	1.9	1.7	1.9	1.6
Professional specialty .....	313	333	1.6	1.6	1.6	1.7	1.5	1.5
Technical, sales, and administrative support .....	1,436	1,319	3.6	3.3	3.1	3.1	3.8	3.5
Technicians and related support .....	92	92	2.1	2.2	2.1	2.4	2.2	2.0
Sales occupations .....	733	614	4.4	3.7	3.0	3.0	5.7	4.3
Administrative support, including clerical .....	611	614	3.2	3.3	4.0	3.4	3.0	3.2
Service occupations .....	1,065	1,061	5.7	5.6	5.6	6.1	5.7	5.3
Private household .....	79	81	8.2	8.5	( <sup>2</sup> )	( <sup>2</sup> )	8.0	8.7
Protective service .....	86	56	3.6	2.3	2.8	1.7	7.2	5.0
Service, except private household and protective .....	900	924	5.8	5.9	6.6	7.6	5.4	5.0
Precision production, craft, and repair .....	714	503	4.8	3.3	4.9	3.3	3.6	3.5
Mechanics and repairers .....	190	103	3.8	2.1	3.9	2.1	1.6	1.1
Construction trades .....	420	278	7.3	4.7	7.4	4.6	5.1	6.6
Other precision production, craft, and repair .....	104	122	2.5	2.9	2.1	2.8	3.8	3.5
Operators, fabricators, and laborers .....	1,298	1,274	6.6	6.4	6.5	6.2	6.9	7.1
Machine operators, assemblers, and inspectors .....	466	501	5.6	6.0	5.2	5.2	6.2	7.4
Transportation and material moving occupations .....	272	271	4.7	4.6	4.7	4.5	5.2	5.3
Handlers, equipment cleaners, helpers, and laborers .....	560	502	9.9	8.7	10.0	9.1	9.5	7.0
Construction laborers .....	157	137	17.6	14.7	17.2	14.2	( <sup>2</sup> )	( <sup>2</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	403	365	8.5	7.5	8.3	7.9	8.9	6.4
Farming, forestry, and fishing .....	325	355	9.4	10.4	8.9	10.4	11.6	10.7
No previous work experience .....	423	381	-	-	-	-	-	-
16 to 19 years .....	289	252	-	-	-	-	-	-
20 to 24 years .....	65	68	-	-	-	-	-	-
25 years and over .....	69	62	-	-	-	-	-	-

<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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total, 16 years and over .....	5,957	5,565	4.4	4.0	4.5	4.2	4.2	3.8
Nonagricultural private wage and salary workers .....	4,699	4,408	4.5	4.1	4.6	4.3	4.4	4.0
Mining .....	21	31	3.0	5.3	2.9	5.7	3.5	1.8
Construction .....	636	459	9.4	6.5	9.5	6.5	8.1	6.7
Manufacturing .....	778	807	3.7	3.9	3.1	3.3	4.9	5.1
Durable goods .....	386	415	3.1	3.3	3.2	2.8	2.8	4.5
Lumber and wood products .....	44	33	5.8	4.2	6.4	4.2	2.9	3.8
Furniture and fixtures .....	15	23	2.3	3.4	2.5	1.4	1.8	8.2
Stone, clay, and glass products .....	27	23	4.2	3.7	4.6	4.1	2.5	2.1
Primary metal industries .....	16	25	2.2	3.2	2.3	3.0	1.9	4.5
Fabricated metal products .....	39	45	3.0	3.3	2.7	2.3	3.7	6.7
Machinery and computing equipment .....	75	94	2.9	3.7	3.1	3.8	2.1	3.6
Electrical machinery, equipment, and supplies .....	66	41	3.2	2.0	2.4	2.1	4.5	1.8
Transportation equipment .....	65	69	2.6	2.9	3.1	2.0	1.0	6.0
Automobiles .....	37	54	2.7	3.8	3.2	2.6	1.2	7.4
Other transportation equipment .....	28	16	2.5	1.6	3.0	1.2	.6	3.3
Professional and photographic equipment .....	18	28	2.3	3.5	1.3	3.4	3.5	3.6
Other durable goods industries .....	20	35	3.0	5.5	4.0	3.3	1.7	8.2
Nondurable goods .....	392	392	4.6	4.8	3.0	4.2	6.9	5.7
Food and kindred products .....	141	111	7.2	6.4	4.6	5.7	12.1	7.7
Textile mill products .....	20	29	3.4	5.0	1.3	4.0	6.3	6.2
Apparel and other textile products .....	99	84	9.6	9.8	4.6	7.8	11.6	10.7
Paper and allied products .....	12	10	1.7	1.4	2.2	1.9	-	-
Printing and publishing .....	61	57	3.6	3.2	3.0	3.8	4.4	2.4
Chemicals and allied products .....	26	39	2.0	3.0	2.4	.8	1.2	7.3
Rubber and miscellaneous plastics products .....	25	54	2.8	5.5	1.9	6.5	4.4	3.0
Other nondurable goods industries .....	8	9	2.2	3.1	1.9	4.4	2.9	-
Transportation and public utilities .....	230	223	3.0	2.9	3.0	3.0	2.9	2.5
Transportation .....	172	168	3.7	3.4	3.9	3.7	3.2	2.8
Communications and other public utilities .....	58	56	1.9	1.9	1.5	1.8	2.7	2.0
Wholesale and retail trade .....	1,347	1,330	5.0	4.8	4.6	5.1	5.5	4.5
Wholesale trade .....	207	207	4.4	4.1	4.2	3.9	4.8	4.3
Retail trade .....	1,140	1,122	5.2	5.0	4.8	5.5	5.6	4.5
Finance, insurance, and real estate .....	209	236	2.7	2.9	3.0	3.1	2.5	2.8
Service industries .....	1,477	1,322	4.3	3.8	4.8	4.1	4.0	3.7
Professional services .....	556	529	2.7	2.6	2.5	2.8	2.8	2.5
Other service industries .....	922	793	6.7	5.7	6.7	5.1	6.7	6.3
Agricultural wage and salary workers .....	257	234	13.5	12.2	13.0	13.8	14.8	7.2
Government, self-employed, and unpaid family workers .....	578	542	2.0	1.8	2.3	1.8	1.6	1.9
No previous work experience .....	423	381	-	-	-	-	-	-

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

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

(Numbers in thousands)

Reason	Total, 16 years and over		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	5,957	5,565	2,826	2,510	2,187	2,065	944	990	4,205	4,149	1,437	1,143
Job losers and persons who completed temporary jobs .....	3,051	2,849	1,908	1,643	1,004	987	139	219	2,308	2,228	582	512
On temporary layoff .....	1,053	934	688	579	319	294	46	61	888	793	112	113
Not on temporary layoff .....	1,998	1,915	1,220	1,064	685	693	93	158	1,420	1,435	470	399
Permanent job losers .....	1,355	1,382	816	771	475	513	64	99	1,041	1,046	247	279
Persons who completed temporary jobs .....	643	533	404	294	210	180	28	59	378	389	224	121
Job leavers .....	634	628	279	302	292	263	62	63	478	481	126	127
Reentrants .....	1,849	1,706	598	525	797	725	454	456	1,178	1,208	570	402
New entrants .....	423	381	40	41	94	89	289	252	241	232	159	101
<b>PERCENT DISTRIBUTION</b>												
Job losers and persons who completed temporary jobs .....	51.2	51.2	67.5	65.5	45.9	47.8	14.7	22.1	54.9	53.7	40.5	44.8
On temporary layoff .....	17.7	16.8	24.3	23.1	14.6	14.3	4.9	6.2	21.1	19.1	7.8	9.9
Not on temporary layoff .....	33.5	34.4	43.2	42.4	31.3	33.6	9.8	16.0	33.8	34.6	32.7	34.9
Job leavers .....	10.6	11.3	9.9	12.0	13.4	12.8	6.6	6.4	11.4	11.6	8.8	11.1
Reentrants .....	31.0	30.6	21.2	20.9	36.4	35.1	48.1	46.0	28.0	29.1	39.6	35.2
New entrants .....	7.1	6.9	1.4	1.6	4.3	4.3	30.7	25.4	5.7	5.6	11.1	8.9
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers and persons who completed temporary jobs .....	2.2	2.1	2.8	2.3	1.7	1.6	1.8	2.7	2.0	1.9	3.7	3.2
Job leavers .....	.5	.5	.4	.4	.5	.4	.8	.8	.4	.4	.8	.8
Reentrants .....	1.4	1.2	.9	.7	1.3	1.2	6.0	5.7	1.0	1.0	3.6	2.5
New entrants .....	.3	.3	.1	.1	.2	.1	3.8	3.1	.2	.2	1.0	.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-32. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment**

(Percent distribution)

Reason, sex, and age	December 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 .....	5,565	100.0	41.3	32.7	26.0	12.2	13.8
Job losers and persons who completed temporary jobs .....	2,849	100.0	43.7	33.7	22.5	11.6	11.0
On temporary layoff .....	934	100.0	61.3	26.5	12.2	6.1	6.2
Not on temporary layoff .....	1,915	100.0	35.2	37.3	27.6	14.3	13.3
Permanent job losers .....	1,382	100.0	33.3	36.4	30.3	16.0	14.3
Persons who completed temporary jobs .....	533	100.0	39.9	39.5	20.5	9.9	10.7
Job leavers .....	628	100.0	44.6	36.6	18.8	10.9	7.8
Reentrants .....	1,706	100.0	38.9	28.2	33.0	13.8	19.1
New entrants .....	381	100.0	28.8	38.0	33.2	11.8	21.4
Men, 20 years and over .....	2,510	100.0	43.0	31.3	25.7	10.4	15.3
Job losers and persons who completed temporary jobs .....	1,643	100.0	45.8	32.6	21.6	9.2	12.4
On temporary layoff .....	579	100.0	63.1	25.5	11.3	5.7	5.6
Not on temporary layoff .....	1,064	100.0	36.3	36.4	27.2	11.2	16.1
Permanent job losers .....	771	100.0	35.6	32.6	31.7	13.4	18.3
Persons who completed temporary jobs .....	294	100.0	38.1	46.4	15.5	5.4	10.1
Job leavers .....	302	100.0	44.9	35.1	20.0	13.2	6.8
Reentrants .....	525	100.0	35.9	24.7	39.4	12.5	26.8
New entrants .....	41	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 20 years and over .....	2,065	100.0	36.3	33.1	30.6	16.0	14.6
Job losers and persons who completed temporary jobs .....	987	100.0	38.3	33.8	27.9	17.4	10.6
On temporary layoff .....	294	100.0	54.5	30.2	15.3	6.8	8.5
Not on temporary layoff .....	693	100.0	31.4	35.3	33.3	21.9	11.5
Permanent job losers .....	513	100.0	26.5	40.6	33.0	22.4	10.6
Persons who completed temporary jobs .....	180	100.0	45.4	20.3	34.3	20.4	13.9
Job leavers .....	263	100.0	36.9	41.3	21.9	10.9	11.0
Reentrants .....	725	100.0	34.8	29.2	36.0	16.1	20.0
New entrants .....	89	100.0	25.3	33.2	41.5	16.1	25.3
Both sexes, 16 to 19 years .....	990	100.0	47.4	35.1	17.5	8.9	8.6
Job losers and persons who completed temporary jobs .....	219	100.0	52.8	42.1	5.0	3.2	1.8
On temporary layoff .....	61	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Not on temporary layoff .....	158	100.0	44.0	51.3	4.7	2.1	2.6
Permanent job losers .....	99	100.0	50.9	43.7	5.4	3.4	2.0
Persons who completed temporary jobs .....	59	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Job leavers .....	63	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Reentrants .....	456	100.0	48.8	30.5	20.7	11.7	8.9
New entrants .....	252	100.0	33.0	40.0	27.1	11.0	16.0

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

procedures and revised population controls used in the household survey.

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

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

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total, 16 years and over .....	5,957	5,565	100.0	100.0	4,846	4,452	100.0	100.0
Less than 5 weeks .....	2,243	2,299	37.7	41.3	1,721	1,702	35.5	38.2
5 to 14 weeks .....	1,949	1,817	32.7	32.7	1,588	1,500	32.8	33.7
5 to 10 weeks .....	1,372	1,306	23.0	23.5	1,116	1,070	23.0	24.0
11 to 14 weeks .....	577	512	9.7	9.2	471	430	9.7	9.7
15 weeks and over .....	1,765	1,449	29.6	26.0	1,538	1,250	31.7	28.1
15 to 26 weeks .....	832	680	14.0	12.2	708	582	14.6	13.1
27 weeks and over .....	933	769	15.7	13.8	830	668	17.1	15.0
27 to 51 weeks .....	380	326	6.4	5.9	327	270	6.8	6.1
52 weeks and over .....	553	443	9.3	8.0	502	397	10.4	8.9
Average (mean) duration, in weeks .....	16.0	14.1	-	-	17.1	15.2	-	-
Median duration, in weeks .....	7.4	6.7	-	-	8.0	7.4	-	-

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

procedures and revised population controls used in the household survey.

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

Sex, age, race, and marital status	December 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>TOTAL</b>									
Total, 16 years and over .....	5,565	2,299	1,817	1,449	680	769	14.1	6.7	
16 to 19 years .....	990	469	348	173	88	85	10.2	5.4	
20 to 24 years .....	880	445	255	180	80	100	11.5	4.4	
25 to 34 years .....	1,267	493	413	360	171	189	14.8	7.1	
35 to 44 years .....	1,205	448	412	345	162	183	15.4	7.3	
45 to 54 years .....	750	256	264	229	102	128	16.6	8.4	
55 to 64 years .....	331	110	101	120	60	60	19.7	9.6	
65 years and over .....	142	77	25	40	15	25	16.4	4.2	
<b>Men, 16 years and over</b> .....	<b>3,125</b>	<b>1,372</b>	<b>999</b>	<b>754</b>	<b>324</b>	<b>430</b>	<b>14.0</b>	<b>6.2</b>	
16 to 19 years .....	615	292	213	110	63	46	10.5	5.5	
20 to 24 years .....	524	290	149	85	27	59	11.2	4.1	
25 to 34 years .....	673	282	221	170	66	104	15.1	6.5	
35 to 44 years .....	621	243	212	166	72	94	14.9	7.1	
45 to 54 years .....	410	144	137	129	54	75	16.6	8.2	
55 to 64 years .....	210	81	53	77	36	41	20.0	8.8	
65 years and over .....	71	40	14	17	5	12	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Women, 16 years and over</b> .....	<b>2,440</b>	<b>927</b>	<b>818</b>	<b>695</b>	<b>356</b>	<b>339</b>	<b>14.3</b>	<b>7.4</b>	
16 to 19 years .....	375	177	135	63	25	39	9.6	5.3	
20 to 24 years .....	356	155	106	95	53	42	11.9	6.7	
25 to 34 years .....	593	211	192	190	105	85	14.3	8.0	
35 to 44 years .....	585	205	200	180	90	89	16.1	7.6	
45 to 54 years .....	340	113	127	100	47	53	16.5	8.6	
55 to 64 years .....	120	30	47	44	24	19	19.0	10.7	
65 years and over .....	71	36	11	23	10	13	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Race</b>									
White, 16 years and over .....	4,149	1,832	1,346	971	465	506	12.9	5.9	
Men .....	2,394	1,110	752	531	242	289	12.8	5.4	
Women .....	1,755	722	594	440	223	217	12.9	6.4	
Black, 16 years and over .....	1,143	354	372	417	188	230	18.9	10.2	
Men .....	578	182	199	196	76	120	19.3	9.8	
Women .....	565	171	173	221	112	109	18.6	10.8	
<b>Marital status</b>									
Men, 16 years and over:									
Married, spouse present .....	1,030	424	334	271	129	142	13.7	6.9	
Widowed, divorced, or separated .....	462	216	131	115	42	72	14.9	5.3	
Single (never married) .....	1,633	732	533	368	152	216	14.0	6.0	
Women, 16 years and over:									
Married, spouse present .....	849	340	282	227	130	97	13.8	6.5	
Widowed, divorced, or separated .....	611	222	202	188	88	100	16.0	8.0	
Single (never married) .....	980	365	335	281	139	142	13.7	7.5	

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

Occupation and industry	December 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>OCCUPATION</b>									
Managerial and professional specialty .....	665	239	221	205	87	118	16.7	8.2	
Technical, sales, and administrative support .....	1,319	536	429	354	193	160	13.7	7.1	
Service occupations .....	1,061	422	328	312	130	182	15.5	6.9	
Precision production, craft, and repair .....	503	258	142	102	52	50	10.5	4.4	
Operators, fabricators, and laborers .....	1,274	574	418	281	140	141	12.6	5.8	
Farming, forestry, and fishing .....	355	156	130	68	32	36	13.0	6.1	
<b>INDUSTRY<sup>1</sup></b>									
Agriculture .....	234	103	97	34	14	20	11.9	5.8	
Construction .....	468	241	126	101	41	60	13.1	4.4	
Manufacturing .....	814	339	269	207	138	69	12.4	6.5	
Durable goods .....	417	168	145	104	63	41	13.4	6.6	
Nondurable goods .....	397	171	123	103	75	28	11.3	6.2	
Transportation and public utilities .....	718	129	63	50	12	38	12.9	4.2	
Wholesale and retail trade .....	4,034	569	441	329	158	171	13.5	6.6	
Finance, insurance, and real estate .....	740	61	111	71	28	42	15.9	9.4	
Services .....	2,815	605	451	437	195	241	14.9	6.8	
Public administration .....	309	30	30	43	21	21	19.5	11.1	
No previous work experience .....	381	110	145	127	45	82	18.9	9.9	

<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			
	Dec. 1997	Dec. 1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
Total not in the labor force .....	67,356	67,973	11,932	12,031	18,517	18,521	36,908	37,421	25,072	25,254	42,284	42,719
Do not want a job now <sup>1</sup> .....	62,967	63,786	10,256	10,529	16,591	16,638	36,119	36,619	23,244	23,492	39,722	40,293
Want a job <sup>1</sup> .....	4,390	4,187	1,675	1,502	1,926	1,883	789	802	1,828	1,762	2,562	2,425
Did not search for work in previous year .....	2,391	2,463	802	811	1,043	1,058	547	595	923	1,032	1,468	1,432
Searched for work in previous year <sup>2</sup> .....	1,999	1,724	874	692	883	825	242	207	905	730	1,094	994
Not available to work now .....	546	527	317	273	202	220	28	35	237	182	309	345
Available to work now .....	1,453	1,196	557	419	681	605	215	172	668	548	785	649
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	345	358	92	107	189	187	63	64	185	214	160	145
Reasons other than discouragement .....	1,108	838	465	312	492	419	152	108	483	334	625	504
Family responsibilities .....	110	76	25	18	66	55	19	3	12	7	97	70
In school or training .....	248	194	211	159	37	23	-	-	120	83	128	110
Ill health or disability .....	121	87	16	5	64	64	41	18	49	34	72	52
Other <sup>4</sup> .....	630	481	212	130	326	277	91	75	302	210	327	271

<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.

**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>	
	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>AGE</b>												
Total, 16 years and over <sup>2</sup> .....	8,108	8,220	6.2	6.2	4,212	4,163	6.0	5.9	3,896	4,057	6.4	6.6
16 to 19 years .....	311	324	4.7	4.6	133	138	4.0	4.0	178	186	5.4	5.3
20 years and over .....	7,797	7,896	6.3	6.3	4,079	4,025	6.1	6.0	3,718	3,871	6.4	6.6
20 to 24 years .....	859	770	6.9	6.1	374	338	5.8	5.1	486	432	8.1	7.3
25 years and over .....	6,938	7,125	6.2	6.3	3,706	3,687	6.2	6.1	3,232	3,439	6.3	6.6
25 to 54 years .....	6,195	6,281	6.5	6.5	3,227	3,244	6.3	6.3	2,969	3,037	6.7	6.8
55 years and over .....	742	844	4.5	5.0	479	442	5.2	4.7	263	402	3.5	5.3
55 to 64 years .....	634	720	5.0	5.5	406	357	5.9	5.0	228	363	3.9	6.0
65 years and over .....	109	125	2.8	3.2	73	85	3.2	3.8	36	39	2.2	2.4
<b>RACE AND HISPANIC ORIGIN</b>												
White .....	6,935	7,003	6.3	6.3	3,648	3,567	6.1	5.9	3,287	3,436	6.5	6.7
Black .....	827	956	5.8	6.4	374	478	5.6	6.9	453	477	5.9	5.9
Hispanic origin .....	516	543	4.0	4.1	316	303	4.0	3.8	200	240	3.9	4.5
<b>MARITAL STATUS</b>												
Married, spouse present .....	4,563	4,488	6.0	5.8	2,711	2,623	6.3	6.0	1,852	1,865	5.6	5.6
Widowed, divorced, or separated .....	1,364	1,434	6.7	6.9	453	467	5.6	5.5	910	967	7.4	7.8
Single (never married) .....	2,181	2,298	6.4	6.6	1,048	1,073	5.6	5.6	1,133	1,225	7.4	7.7
<b>FULL- OR PART-TIME STATUS</b>												
Primary job full time, secondary job part time .....	4,574	4,561	-	-	2,680	2,574	-	-	1,894	1,988	-	-
Primary and secondary jobs both part time .....	1,779	1,778	-	-	570	522	-	-	1,210	1,255	-	-
Primary and secondary jobs both full time .....	231	233	-	-	148	149	-	-	83	84	-	-
Hours vary on primary or secondary job .....	1,487	1,613	-	-	795	898	-	-	693	715	-	-

<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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

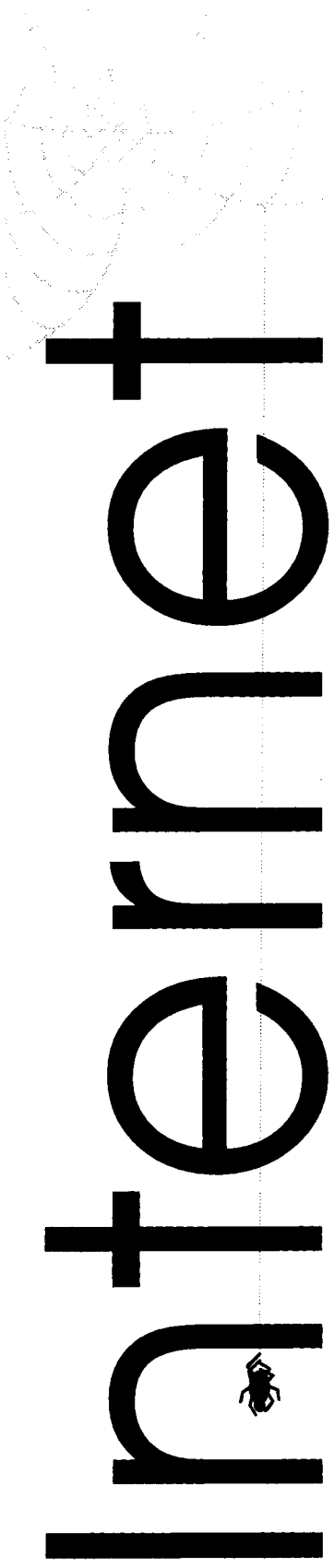
**A-38. Employment status of male Vietnam-era veterans and nonveterans by age**

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Dec. 1997	Dec. 1998	Total		Employed		Unemployed			
			Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998	Number		Percent of labor force	
							Dec. 1997	Dec. 1998	Dec. 1997	Dec. 1998
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,781	7,774	6,637	6,446	6,468	6,293	169	153	2.5	2.4
40 to 54 years .....	6,129	5,756	5,532	5,094	5,391	4,967	141	126	2.5	2.5
40 to 44 years .....	850	610	757	542	748	517	9	24	1.2	4.4
45 to 49 years .....	2,458	2,054	2,232	1,852	2,174	1,807	58	46	2.6	2.5
50 to 54 years .....	2,821	3,092	2,542	2,700	2,469	2,643	73	57	2.9	2.1
55 years and over .....	1,652	2,018	1,105	1,353	1,077	1,325	28	27	2.5	2.0
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	19,873	20,690	17,954	18,736	17,385	18,213	569	523	3.2	2.8
40 to 44 years .....	9,144	9,344	8,409	8,614	8,141	8,382	267	231	3.2	2.7
45 to 49 years .....	6,512	7,006	5,916	6,374	5,748	6,168	168	206	2.8	3.2
50 to 54 years .....	4,217	4,339	3,629	3,749	3,496	3,663	133	86	3.7	2.3

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.



## Need information from the Bureau of Labor Statistics?

You can get it now on the WEB.

Here are the Bureau's addresses.

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

### **Employment and Unemployment:**

National establishment data ..... <http://stats.bls.gov/ceshome.htm>  
State and area establishment data ..... <http://stats.bls.gov/790home.htm>  
National labor force data ..... <http://stats.bls.gov/cpshome.htm>  
Region, State, and metropolitan area  
labor force data ..... <http://stats.bls.gov/lauhome.htm>  
Longitudinal research ..... <http://stats.bls.gov/nlshome.htm>  
Covered employment and wages ..... <http://stats.bls.gov/cewhome.htm>  
Occupational employment statistics ..... <http://stats.bls.gov/oeshome.htm>  
Mass layoff statistics ..... <http://stats.bls.gov/lauhome.htm>

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

Consumer price indexes ..... <http://stats.bls.gov/cpihome.htm>  
Producer price indexes ..... <http://stats.bls.gov/ppihome.htm>  
Consumer Expenditure Survey ..... <http://stats.bls.gov/csxhome.htm>

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

National Compensation Survey ..... <http://stats.bls.gov/comhome.htm>  
Collective bargaining ..... <http://stats.bls.gov/lmrhome.htm>  
Employment cost trends ..... <http://stats.bls.gov/ecthome.htm>  
Employee Benefits Survey ..... <http://stats.bls.gov/ebshome.htm>  
Occupational Compensation Survey ..... <http://stats.bls.gov/ocshome.htm>  
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### **Productivity:**

Quarterly labor productivity ..... <http://stats.bls.gov/lprhome.htm>  
Industry productivity ..... <http://stats.bls.gov/iprhome.htm>  
Federal Government productivity ..... <http://stats.bls.gov/gprhome.htm>  
Multifactor productivity ..... <http://stats.bls.gov/mprhome.htm>

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

### **International data:**

Foreign labor statistics ..... <http://stats.bls.gov/flshome.htm>  
U.S. import and export price indexes ..... <http://stats.bls.gov/ipphome.htm>  
Foreign direct investment ..... <http://stats.bls.gov/fdihome.htm>



**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	399.28
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
1998P .....	34.6	12.77	441.84	43.9	16.95	744.11	38.8	16.56	642.53
<b>Monthly data, not seasonally adjusted</b>									
<b>1997:</b>									
December .....	34.8	\$12.53	\$436.04	45.2	\$16.52	\$746.70	38.5	\$16.37	\$630.25
<b>1998:</b>									
January .....	34.2	12.60	430.92	45.0	16.65	749.25	37.4	16.25	607.75
February .....	34.6	12.65	437.69	44.0	16.89	743.16	37.9	16.21	614.36
March .....	34.5	12.68	437.46	43.4	16.89	733.03	37.9	16.29	617.39
April .....	34.2	12.69	434.00	43.4	16.84	730.86	38.0	16.34	620.92
May .....	34.6	12.70	439.42	44.4	16.73	742.81	39.2	16.42	643.66
June .....	34.7	12.66	439.30	44.0	16.73	736.12	39.1	16.44	642.80
July .....	34.8	12.66	440.57	44.0	16.81	739.64	40.1	16.63	666.86
August .....	35.1	12.74	447.17	44.0	16.94	745.36	40.1	16.74	671.27
September .....	34.3	12.89	442.13	42.9	17.16	736.16	37.5	16.76	628.50
October .....	34.6	12.92	447.03	43.9	17.13	752.01	40.0	16.86	674.40
November <sup>P</sup> .....	34.7	12.99	450.75	43.9	17.32	760.35	38.5	16.80	646.80
December <sup>P</sup> .....	34.7	12.99	450.75	43.5	17.41	757.34	39.2	16.83	659.74

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
1998 <sup>P</sup> .....	41.7	13.49	12.79	562.53	39.5	15.35	606.33	38.4	14.01	537.98
Monthly data, not seasonally adjusted										
<b>1997:</b>										
December .....	43.0	\$13.47	\$12.68	\$579.21	39.8	\$15.17	\$603.77	38.4	\$13.72	\$526.85
<b>1998:</b>										
January .....	41.9	13.40	12.70	561.46	39.3	15.27	600.11	38.1	13.77	524.64
February .....	41.7	13.41	12.72	559.20	39.9	15.29	610.07	38.5	13.85	533.23
March .....	41.7	13.47	12.76	561.70	39.4	15.24	600.46	38.4	13.86	532.22
April .....	40.8	13.46	12.83	549.17	39.1	15.27	597.06	38.1	13.90	529.59
May .....	41.8	13.47	12.78	563.05	39.5	15.21	600.80	38.4	13.96	536.06
June .....	41.8	13.44	12.74	561.79	39.6	15.22	602.71	38.3	13.89	531.99
July .....	41.1	13.37	12.70	549.51	39.7	15.31	607.81	38.3	13.99	535.82
August .....	41.7	13.44	12.73	560.45	39.9	15.33	611.67	38.7	14.13	546.83
September .....	41.5	13.60	12.88	564.40	39.3	15.46	607.58	38.1	14.10	537.21
October .....	41.9	13.54	12.82	567.33	39.3	15.43	606.40	38.3	14.13	541.18
November <sup>P</sup> .....	42.1	13.60	12.87	572.56	39.7	15.53	616.54	38.7	14.29	553.02
December <sup>P</sup> .....	42.6	13.69	12.94	583.19	39.0	15.57	607.23	38.5	14.27	549.40

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
1998 <sup>P</sup> .....	29.1	8.75	254.63	36.4	14.05	511.42	32.7	12.85	420.20
<b>Monthly data, not seasonally adjusted</b>									
<b>1997:</b>									
December .....	29.2	\$8.51	\$248.49	35.9	\$13.64	\$489.68	32.6	\$12.61	\$411.09
<b>1998:</b>									
January .....	28.1	8.63	242.50	36.1	13.70	494.57	32.4	12.66	410.18
February .....	28.7	8.62	247.39	37.1	13.95	517.55	32.8	12.75	418.20
March .....	28.7	8.67	248.83	36.8	13.97	514.10	32.7	12.77	417.58
April .....	28.7	8.70	249.69	36.1	13.98	504.68	32.4	12.77	413.75
May .....	29.0	8.71	252.59	36.1	13.99	505.04	32.5	12.75	414.38
June .....	29.3	8.70	254.91	36.0	13.93	501.48	32.7	12.70	415.29
July .....	29.8	8.71	259.56	36.1	13.94	503.23	32.9	12.67	416.84
August .....	29.9	8.74	261.33	36.9	14.11	520.66	33.2	12.75	423.30
September .....	29.1	8.90	258.99	35.9	14.10	506.19	32.3	12.97	418.93
October .....	28.9	8.86	256.05	36.1	14.20	512.62	32.6	13.01	424.13
November <sup>P</sup> .....	28.9	8.87	256.34	37.0	14.41	533.17	32.8	13.14	430.99
December <sup>P</sup> .....	29.2	8.89	259.59	36.1	14.33	517.31	32.7	13.18	430.99

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

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Dec.P
<b>Total</b> .....	124,289	124,640	124,832	124,914	125,234	125,562	125,751	125,869	126,191	126,363	126,527	126,778	127,156
<b>Total private</b> .....	104,609	104,954	105,112	105,186	105,470	105,734	105,938	106,043	106,269	106,435	106,579	106,802	107,121
<b>Goods-producing</b> .....	25,193	25,297	25,314	25,276	25,339	25,301	25,304	25,135	25,253	25,241	25,209	25,184	25,272
<b>Mining</b> .....	592	592	590	587	582	579	578	571	571	568	564	560	557
Metal mining .....	52	52	52	51	51	51	51	50	50	50	50	50	50
Coal mining .....	94	94	93	93	92	92	90	89	90	89	89	90	89
Oil and gas extraction .....	338	338	338	336	332	329	330	325	323	321	317	312	309
Nonmetallic minerals, except fuels .....	108	108	107	107	107	107	107	107	108	108	108	108	109
<b>Construction</b> .....	5,810	5,881	5,902	5,860	5,930	5,917	5,946	5,970	5,989	5,981	6,012	6,054	6,158
General building contractors .....	1,351	1,365	1,371	1,373	1,385	1,388	1,401	1,410	1,413	1,410	1,419	1,412	1,434
Heavy construction, except building .....	805	817	813	805	819	819	821	828	829	820	825	835	865
Special trade contractors .....	3,654	3,699	3,718	3,682	3,726	3,710	3,724	3,732	3,747	3,751	3,768	3,807	3,859
<b>Manufacturing</b> .....	18,791	18,824	18,822	18,829	18,827	18,805	18,780	18,594	18,693	18,692	18,633	18,570	18,557
<b>Durable goods</b> .....	11,118	11,154	11,159	11,166	11,170	11,156	11,144	10,989	11,106	11,090	11,059	11,010	10,997
Lumber and wood products .....	798	800	800	801	802	803	801	802	802	805	806	808	810
Furniture and fixtures .....	515	517	519	520	524	526	524	528	526	524	524	524	527
Stone, clay, and glass products .....	555	562	561	558	561	559	562	561	564	564	564	567	570
Primary metal industries .....	716	719	718	719	718	716	717	706	714	712	706	698	697
Fabricated metal products .....	1,491	1,496	1,497	1,497	1,498	1,495	1,490	1,477	1,490	1,487	1,486	1,481	1,480
Industrial machinery and equipment .....	2,196	2,200	2,202	2,205	2,201	2,201	2,202	2,193	2,190	2,185	2,175	2,161	2,151
Computer and office equipment .....	381	381	381	381	377	376	375	375	373	374	371	369	366
Electronic and other electrical .....	1,712	1,719	1,720	1,722	1,720	1,716	1,714	1,701	1,694	1,688	1,680	1,669	1,667
Electronic components and .....	676	680	680	681	678	677	672	667	661	659	654	650	648
accessories .....	1,878	1,882	1,886	1,887	1,890	1,886	1,882	1,772	1,884	1,883	1,887	1,878	1,872
Transportation equipment .....	1,001	1,002	1,004	1,002	1,004	998	993	878	995	995	1,000	998	989
Motor vehicles and equipment .....	519	521	523	525	525	524	524	526	526	524	523	520	519
Aircraft and parts .....	869	870	866	868	867	866	864	861	857	855	850	846	844
Miscellaneous manufacturing .....	388	389	390	389	389	388	388	388	385	387	381	378	379
<b>Nondurable goods</b> .....	7,673	7,670	7,663	7,663	7,657	7,649	7,636	7,605	7,587	7,602	7,574	7,560	7,560
Food and kindred products .....	1,702	1,702	1,703	1,704	1,708	1,710	1,706	1,696	1,690	1,704	1,702	1,710	1,718
Tobacco products .....	41	40	41	41	42	41	40	40	40	39	40	40	39
Textile mill products .....	611	608	606	604	605	603	599	594	591	593	589	583	579
Apparel and other textile products .....	808	805	796	796	787	780	776	772	762	761	746	735	731
Paper and allied products .....	686	688	688	688	686	685	682	680	680	679	677	674	673
Printing and publishing .....	1,561	1,564	1,564	1,564	1,565	1,566	1,570	1,571	1,568	1,568	1,569	1,566	1,564
Chemicals and allied products .....	1,036	1,035	1,036	1,036	1,035	1,039	1,037	1,038	1,036	1,036	1,034	1,034	1,035
Petroleum and coal products .....	139	136	136	136	137	136	137	135	134	135	134	134	136
Rubber and misc. plastics products .....	1,002	1,007	1,007	1,009	1,008	1,006	1,006	998	1,006	1,007	1,004	1,006	1,008
Leather and leather products .....	87	86	86	85	84	83	83	81	80	80	79	78	77
<b>Service-producing</b> .....	99,096	99,343	99,518	99,638	99,895	100,261	100,447	100,734	100,938	101,122	101,318	101,594	101,884
<b>Transportation and public utilities</b> .....	6,451	6,473	6,494	6,504	6,513	6,534	6,538	6,550	6,570	6,579	6,595	6,609	6,641
Transportation .....	4,135	4,148	4,164	4,170	4,173	4,191	4,196	4,208	4,235	4,237	4,247	4,254	4,277
Railroad transportation .....	230	231	231	231	231	232	232	231	232	234	234	234	235
Local and interurban passenger .....	455	456	459	460	453	459	458	466	469	466	467	469	469
transit .....	1,676	1,684	1,688	1,690	1,702	1,703	1,709	1,709	1,719	1,716	1,721	1,720	1,729
Trucking and warehousing .....	179	177	181	183	181	185	183	188	192	191	191	194	193
Water transportation .....	1,138	1,142	1,145	1,146	1,147	1,151	1,154	1,154	1,161	1,166	1,167	1,168	1,181
Transportation by air .....	14	14	14	14	14	14	14	14	14	14	14	14	14
Pipelines, except natural gas .....	443	444	446	446	445	447	446	446	448	450	453	455	456
Transportation services .....	2,316	2,325	2,330	2,334	2,340	2,343	2,342	2,342	2,335	2,342	2,348	2,355	2,364
Communications and public utilities .....	1,457	1,466	1,471	1,475	1,484	1,486	1,488	1,488	1,483	1,490	1,498	1,501	1,510
Communications .....	859	859	859	859	856	857	854	854	852	852	850	854	854
Electric, gas, and sanitary services .....	6,731	6,759	6,769	6,783	6,798	6,815	6,821	6,827	6,838	6,862	6,864	6,875	6,882
<b>Wholesale trade</b> .....	4,002	4,017	4,030	4,039	4,050	4,059	4,067	4,072	4,084	4,094	4,096	4,103	4,105
Durable goods .....	2,729	2,742	2,739	2,744	2,748	2,756	2,754	2,755	2,754	2,768	2,768	2,772	2,777
Nondurable goods .....													

See footnotes at end of table.



**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1997			1998									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
<b>Total</b> .....	59,810	59,974	60,114	60,220	60,308	60,380	60,460	60,689	60,791	60,893	61,008	61,130	61,184
<b>Total private</b> .....	48,884	49,026	49,142	49,239	49,306	49,369	49,446	49,626	49,725	49,854	49,893	49,975	50,024
<b>Goods-producing</b> .....	6,732	6,741	6,759	6,766	6,767	6,770	6,759	6,762	6,763	6,703	6,722	6,724	6,696
<b>Mining</b> .....	82	82	83	83	83	83	82	82	82	81	82	82	80
<b>Construction</b> .....	643	645	648	650	654	655	656	662	669	672	677	676	679
<b>Manufacturing</b> .....	6,007	6,014	6,028	6,033	6,030	6,032	6,021	6,018	6,012	5,950	5,963	5,966	5,937
<b>Durable goods</b> .....	2,945	2,952	2,962	2,973	2,979	2,982	2,980	2,976	2,976	2,938	2,954	2,951	2,941
Lumber and wood products .....	138	139	139	140	141	141	141	141	142	143	143	144	144
Furniture and fixtures .....	161	161	162	163	164	165	166	166	167	168	167	166	167
Stone, clay, and glass products .....	105	106	105	107	107	107	106	107	107	107	107	106	107
Primary metal industries .....	103	104	104	104	104	104	105	103	105	102	104	104	104
Fabricated metal products .....	330	330	331	333	334	334	334	334	334	334	336	336	336
Industrial machinery and equipment .....	481	482	484	485	486	485	485	482	482	478	475	474	472
Electronic and other electrical equipment .....	706	708	712	714	716	716	712	710	708	702	697	695	687
Transportation equipment .....	397	399	401	400	401	402	404	406	406	380	402	404	406
Instruments and related products .....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Miscellaneous manufacturing .....	171	169	170	171	171	171	171	171	170	169	169	169	166
<b>Nondurable goods</b> .....	3,062	3,062	3,066	3,060	3,051	3,050	3,041	3,042	3,036	3,012	3,009	3,015	2,996
Food and kindred products .....	555	557	558	559	559	559	560	562	560	548	554	559	555
Tobacco products .....	13	13	13	13	13	13	14	13	13	12	12	12	13
Textile mill products .....	284	283	283	281	280	278	279	279	277	276	274	275	274
Apparel and other textile products .....	598	594	594	589	582	583	575	571	567	565	557	555	542
Paper and allied products .....	167	168	168	168	168	168	167	167	167	165	165	165	165
Printing and publishing .....	704	705	705	706	705	706	705	707	710	710	707	708	709
Chemicals and allied products .....	330	330	331	330	331	330	330	332	331	333	332	333	331
Petroleum and coal products .....	24	24	25	24	24	24	24	24	24	23	23	23	23
Rubber and misc. plastics products .....	341	342	343	345	344	344	343	343	343	338	343	343	342
Leather and leather products .....	46	46	46	45	45	45	44	44	44	42	42	42	42
<b>Service-producing</b> .....	53,078	53,233	53,355	53,454	53,541	53,610	53,701	53,927	54,028	54,190	54,286	54,406	54,488
<b>Transportation and public utilities</b> .....	1,944	1,944	1,939	1,946	1,948	1,949	1,951	1,960	1,963	1,969	1,980	1,991	2,002
<b>Wholesale trade</b> .....	2,066	2,066	2,067	2,078	2,077	2,078	2,082	2,089	2,090	2,096	2,096	2,096	2,099
<b>Retail trade</b> .....	11,632	11,677	11,700	11,713	11,712	11,707	11,720	11,786	11,819	11,884	11,875	11,902	11,898
<b>Finance, insurance, and real estate</b> .....	4,498	4,511	4,526	4,539	4,546	4,563	4,582	4,593	4,604	4,617	4,619	4,629	4,643
<b>Services</b> .....	22,012	22,087	22,151	22,197	22,256	22,302	22,352	22,436	22,486	22,585	22,601	22,633	22,686
<b>Government</b> .....	10,926	10,948	10,972	10,981	11,002	11,011	11,014	11,063	11,066	11,039	11,115	11,155	11,160
Federal .....	1,142	1,144	1,154	1,141	1,140	1,137	1,136	1,136	1,142	1,127	1,133	1,137	1,148
State .....	2,360	2,365	2,363	2,365	2,367	2,371	2,369	2,375	2,377	2,385	2,397	2,405	2,406
Local .....	7,424	7,439	7,455	7,475	7,495	7,503	7,509	7,552	7,547	7,527	7,585	7,613	7,606

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

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

**B-5. Production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>	Dec. <sup>P</sup>
<b>Total private</b> .....	85,705	85,947	86,073	86,113	86,282	86,526	86,698	86,787	86,903	87,072	87,188	87,319	87,570
<b>Goods-producing</b> .....	17,947	18,039	18,037	17,996	18,043	17,989	17,984	17,803	17,896	17,910	17,889	17,860	17,960
<b>Mining</b> .....	449	450	450	445	440	440	438	434	432	431	428	424	423
<b>Construction</b> .....	4,497	4,566	4,563	4,538	4,596	4,578	4,603	4,623	4,628	4,614	4,640	4,669	4,773
<b>Manufacturing</b> .....	13,001	13,023	13,024	13,013	13,007	12,971	12,943	12,746	12,836	12,865	12,821	12,767	12,764
<b>Durable goods</b> .....	7,644	7,669	7,676	7,669	7,666	7,642	7,626	7,468	7,577	7,584	7,566	7,526	7,522
Lumber and wood products .....	658	660	660	659	660	660	658	661	660	661	662	664	664
Furniture and fixtures .....	410	412	413	415	418	419	417	420	418	417	417	417	421
Stone, clay, and glass products .....	436	441	441	436	436	436	438	438	440	441	441	444	446
Primary metal industries .....	562	564	564	565	563	561	561	551	558	557	553	546	545
Fabricated metal products .....	1,125	1,130	1,132	1,131	1,132	1,127	1,122	1,111	1,118	1,120	1,118	1,115	1,114
Industrial machinery and equipment .....	1,386	1,389	1,391	1,391	1,389	1,389	1,392	1,385	1,384	1,380	1,377	1,368	1,361
Electronic and other electrical equipment .....	1,086	1,089	1,087	1,085	1,081	1,079	1,075	1,062	1,056	1,059	1,050	1,039	1,041
Transportation equipment .....	1,280	1,279	1,283	1,281	1,279	1,267	1,262	1,136	1,245	1,251	1,257	1,245	1,241
Motor vehicles and equipment .....	790	787	788	784	784	774	768	641	752	757	762	754	752
Instruments and related products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Miscellaneous manufacturing .....	272	273	273	273	274	271	270	271	269	269	264	263	264
<b>Nondurable goods</b> .....	5,357	5,354	5,348	5,344	5,341	5,329	5,317	5,278	5,259	5,281	5,255	5,241	5,242
Food and kindred products .....	1,263	1,265	1,267	1,267	1,271	1,273	1,270	1,256	1,249	1,265	1,264	1,272	1,277
Tobacco products .....	32	32	32	32	33	32	31	30	30	31	31	31	31
Textile mill products .....	519	516	514	513	513	511	509	503	499	502	499	493	488
Apparel and other textile products .....	656	652	645	643	633	627	624	622	613	612	596	587	584
Paper and allied products .....	524	525	525	525	524	522	520	516	517	517	515	512	513
Printing and publishing .....	850	850	848	845	846	847	848	846	844	844	844	840	836
Chemicals and allied products .....	578	580	582	583	583	584	584	584	581	582	581	580	583
Petroleum and coal products .....	92	89	89	89	90	89	89	89	88	89	89	89	91
Rubber and misc. plastics products .....	777	780	781	783	784	781	780	771	778	780	777	779	782
Leather and leather products .....	66	65	65	64	64	63	62	61	60	59	59	58	57
<b>Service-producing</b> .....	67,758	67,908	68,036	68,117	68,239	68,537	68,714	68,984	69,007	69,162	69,299	69,459	69,610
<b>Transportation and public utilities</b> .....	5,367	5,374	5,372	5,375	5,373	5,402	5,401	5,424	5,456	5,457	5,472	5,484	5,509
<b>Wholesale trade</b> .....	5,407	5,426	5,431	5,436	5,448	5,457	5,464	5,477	5,479	5,497	5,500	5,505	5,511
<b>Retail trade</b> .....	19,570	19,585	19,605	19,582	19,596	19,710	19,719	19,817	19,795	19,828	19,825	19,860	19,890
<b>Finance, insurance, and real estate</b> .....	5,264	5,287	5,307	5,329	5,353	5,367	5,391	5,416	5,417	5,426	5,449	5,460	5,481
<b>Services</b> .....	32,150	32,236	32,321	32,395	32,469	32,601	32,739	32,850	32,860	32,954	33,053	33,150	33,219

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

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

cannot be separated with sufficient precision.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA  
DIFFUSION INDEXES  
SEASONALLY ADJUSTED**

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

(Percent)

Time span	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Private nonfarm payrolls, 356 industries <sup>1</sup>												
Over 1-month span:												
1994 .....	59.3	60.5	67.0	64.5	58.6	63.3	63.8	61.7	61.5	60.4	64.0	61.7
1995 .....	62.5	60.0	54.9	55.6	47.8	55.6	54.8	59.0	58.0	55.8	54.5	58.8
1996 .....	50.8	64.6	59.6	56.6	62.8	61.0	57.3	61.5	56.0	62.5	62.2	60.7
1997 .....	58.0	61.4	59.8	63.6	60.1	54.6	61.1	59.1	60.0	64.3	62.4	64.9
1998 .....	63.8	58.7	59.6	56.9	56.6	59.0	55.1	53.9	53.5	52.4	P54.4	P59.3
Over 3-month span:												
1994 .....	64.5	69.2	69.9	68.4	66.6	67.1	69.0	69.5	66.2	65.6	66.6	66.3
1995 .....	63.6	61.4	59.4	53.1	55.2	53.2	59.7	60.1	59.1	58.0	56.6	54.6
1996 .....	61.9	62.8	64.0	63.8	63.5	64.9	64.2	61.5	63.9	64.2	67.0	66.6
1997 .....	64.9	63.3	65.6	66.2	63.9	61.2	60.1	65.9	67.4	68.1	70.8	71.9
1998 .....	68.4	67.3	64.2	61.7	60.4	58.4	57.2	56.7	56.0	P54.4	P58.0	
Over 6-month span:												
1994 .....	70.9	69.9	69.7	71.2	70.2	69.8	69.8	70.2	68.7	67.4	66.7	65.4
1995 .....	66.4	60.1	59.1	57.3	59.0	60.1	57.6	60.4	59.7	59.3	61.1	63.2
1996 .....	62.8	65.4	64.7	65.7	66.2	65.0	66.4	66.0	66.2	67.6	66.9	66.3
1997 .....	67.6	67.0	65.3	64.9	65.6	67.3	68.0	67.3	70.6	72.3	73.3	72.6
1998 .....	72.1	70.9	69.4	63.5	64.5	61.8	59.0	P58.6	P59.1			
Over 12-month span:												
1994 .....	70.2	71.6	71.8	71.8	72.1	71.8	71.5	72.1	70.1	69.5	66.6	65.0
1995 .....	63.6	62.4	62.6	63.3	61.7	61.9	58.7	62.2	62.2	61.5	63.5	65.4
1996 .....	64.5	66.7	64.5	65.6	68.5	67.3	67.7	66.4	68.0	69.9	69.1	68.3
1997 .....	69.8	67.6	69.2	70.1	69.8	69.8	71.2	71.2	71.1	73.0	72.9	72.3
1998 .....	71.2	69.5	69.5	66.6	P64.5	P63.2						
Manufacturing payrolls, 139 industries <sup>1</sup>												
Over 1-month span:												
1994 .....	56.8	56.5	60.1	59.0	53.6	58.3	59.0	55.8	53.6	56.5	58.3	56.8
1995 .....	54.7	54.3	46.4	53.2	42.4	44.2	46.4	49.6	48.6	52.2	45.3	48.2
1996 .....	42.8	54.7	48.2	42.1	55.4	50.7	47.1	55.4	47.8	52.9	54.3	55.4
1997 .....	49.3	54.3	50.0	56.8	51.4	52.2	50.4	48.9	56.5	57.2	56.1	60.8
1998 .....	55.8	51.8	52.5	48.6	45.0	47.8	39.6	47.5	43.2	38.8	P37.4	P47.8
Over 3-month span:												
1994 .....	60.4	63.7	63.7	60.4	57.6	59.7	61.9	56.8	54.3	55.4	60.8	59.0
1995 .....	56.8	50.0	47.8	42.1	43.2	38.8	40.6	43.5	48.2	47.1	45.3	39.9
1996 .....	43.9	46.8	46.0	47.5	46.4	49.3	51.4	50.0	53.6	51.1	57.6	54.7
1997 .....	54.3	49.3	54.3	54.0	55.4	50.4	47.5	52.2	57.9	62.6	64.7	65.5
1998 .....	60.1	59.0	50.7	46.4	43.2	38.8	36.7	34.2	41.4	P30.9	P35.6	
Over 6-month span:												
1994 .....	60.4	62.9	61.2	62.6	59.4	57.2	57.6	58.6	58.6	54.7	57.2	55.0
1995 .....	55.4	46.4	42.8	40.3	41.4	42.4	41.0	41.0	43.9	43.2	43.2	45.3
1996 .....	42.1	45.3	46.4	47.1	48.2	48.6	51.1	50.4	52.9	52.9	53.2	52.2
1997 .....	54.3	54.3	51.4	52.9	51.4	55.0	56.8	57.6	60.4	64.4	67.6	65.8
1998 .....	61.5	56.8	52.2	39.2	40.6	34.5	30.9	P29.1	P32.4			
Over 12-month span:												
1994 .....	57.9	58.6	60.8	60.8	60.8	63.3	59.4	60.1	57.2	56.5	50.4	49.6
1995 .....	46.0	44.2	46.0	47.8	41.0	41.7	38.5	38.8	36.3	38.5	39.9	44.6
1996 .....	43.5	47.5	45.3	45.3	50.4	49.6	50.4	48.6	51.1	55.0	54.0	51.8
1997 .....	57.2	52.5	54.7	56.5	57.9	57.6	58.6	58.6	60.4	60.4	59.4	58.3
1998 .....	50.7	51.1	50.4	41.7	P37.4	P36.0						

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

P = preliminary.

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

where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1997) and all seasonally adjusted data (beginning January 1994) are subject to revision.

**ESTABLISHMENT DATA**  
**STATE EMPLOYMENT**  
**SEASONALLY ADJUSTED**

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

(In thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P
	Total <sup>1</sup>												
Alabama	1,871.0	1,871.9	1,876.0	1,877.2	1,879.4	1,878.2	1,882.3	1,884.4	1,881.5	1,886.3	1,886.1	1,886.2	1,886.4
Alaska	268.8	268.3	270.2	273.1	273.7	273.8	274.1	274.1	276.1	274.1	273.9	273.8	274.5
Arizona	2,011.8	2,021.9	2,031.5	2,037.9	2,045.6	2,048.3	2,060.0	2,073.8	2,064.2	2,072.9	2,092.9	2,091.0	2,105.8
Arkansas	1,110.6	1,111.6	1,110.5	1,113.1	1,118.9	1,124.0	1,125.8	1,125.5	1,125.7	1,130.1	1,125.5	1,126.1	1,129.2
California	13,367.0	13,398.3	13,401.2	13,439.9	13,485.6	13,512.4	13,556.0	13,582.6	13,586.2	13,619.7	13,656.0	13,698.2	13,727.9
Colorado	2,003.3	2,009.5	2,017.8	2,019.9	2,023.9	2,022.0	2,038.1	2,045.3	2,054.9	2,054.2	2,062.0	2,065.5	2,063.3
Connecticut	1,634.6	1,642.6	1,639.6	1,641.2	1,639.6	1,641.9	1,641.8	1,644.9	1,643.8	1,649.9	1,640.7	1,649.7	1,654.6
Delaware	393.6	395.5	394.6	396.6	398.0	398.3	400.3	399.7	399.0	401.1	403.1	404.2	406.0
District of Columbia	610.8	610.4	613.1	609.4	610.9	609.7	610.3	610.6	605.0	611.9	612.2	611.7	612.2
Florida	6,534.1	6,551.6	6,566.0	6,577.9	6,604.1	6,610.3	6,645.5	6,667.0	6,692.9	6,708.3	6,728.4	6,743.6	6,765.6
Georgia	3,674.8	3,690.0	3,690.7	3,707.4	3,714.9	3,718.2	3,729.2	3,727.7	3,724.9	3,740.4	3,752.8	3,757.5	3,773.9
Hawaii	532.8	530.5	528.6	528.4	529.0	527.8	527.7	525.6	522.6	526.6	531.0	526.7	524.3
Idaho	513.5	514.0	515.1	516.1	516.7	516.6	516.1	516.9	519.4	521.3	519.1	523.6	524.1
Illinois	5,823.5	5,833.8	5,837.8	5,833.2	5,834.5	5,852.9	5,863.7	5,877.4	5,884.7	5,879.1	5,880.0	5,890.5	5,884.4
Indiana	2,873.9	2,884.0	2,874.6	2,878.8	2,880.0	2,891.4	2,898.7	2,885.8	2,861.6	2,879.3	2,884.9	2,886.7	2,882.4
Iowa	1,416.9	1,419.2	1,423.0	1,426.1	1,429.2	1,436.7	1,439.0	1,439.9	1,450.6	1,442.2	1,442.2	1,448.5	1,444.4
Kansas	1,282.8	1,287.4	1,291.5	1,294.4	1,294.4	1,297.7	1,305.7	1,304.2	1,305.4	1,305.3	1,309.2	1,312.2	1,315.3
Kentucky	1,726.2	1,732.0	1,738.5	1,735.4	1,738.0	1,745.1	1,749.3	1,751.9	1,747.1	1,759.2	1,756.4	1,755.4	1,757.9
Louisiana	1,867.7	1,869.8	1,870.5	1,875.8	1,879.5	1,879.4	1,884.5	1,890.0	1,885.4	1,882.6	1,884.8	1,885.5	1,890.3
Maine	560.8	561.4	558.1	560.8	561.0	561.0	560.9	562.3	564.1	564.9	567.9	569.3	570.3
Maryland	2,272.1	2,273.8	2,282.0	2,282.4	2,277.2	2,272.8	2,272.0	2,275.9	2,279.2	2,282.4	2,298.8	2,309.3	2,317.5
Massachusetts	3,157.6	3,168.4	3,173.0	3,185.5	3,190.6	3,196.7	3,207.5	3,205.1	3,212.4	3,208.9	3,210.3	3,212.4	3,218.6
Michigan	4,471.1	4,489.6	4,495.7	4,506.7	4,503.3	4,525.7	4,541.4	4,541.2	4,474.9	4,541.9	4,554.9	4,565.4	4,564.8
Minnesota	2,512.6	2,518.5	2,514.1	2,522.3	2,530.1	2,528.3	2,541.8	2,551.7	2,554.7	2,559.6	2,547.5	2,564.1	2,568.4
Mississippi	1,113.1	1,112.6	1,117.6	1,120.9	1,117.2	1,120.7	1,122.9	1,121.4	1,128.9	1,122.6	1,119.3	1,124.7	1,124.2
Missouri	2,652.0	2,658.9	2,664.4	2,662.9	2,651.6	2,663.3	2,675.3	2,677.7	2,666.5	2,676.2	2,686.7	2,687.5	2,689.3
Montana	369.0	370.3	368.7	370.6	370.2	370.6	373.0	368.4	370.9	369.9	370.1	370.5	371.8
Nebraska	866.4	868.6	874.0	878.5	873.0	878.2	876.5	876.2	880.6	877.0	878.8	879.8	879.4
Nevada	904.2	907.2	907.0	912.8	916.0	920.9	921.8	927.8	931.8	935.2	940.5	948.1	948.5
New Hampshire	572.5	570.0	572.7	572.6	570.7	573.8	574.2	573.9	575.6	570.4	569.3	571.6	569.9
New Jersey	3,758.2	3,766.5	3,771.3	3,784.2	3,788.0	3,785.2	3,796.8	3,801.8	3,796.4	3,804.0	3,815.0	3,815.6	3,821.9
New Mexico	713.3	713.9	712.7	713.1	714.4	713.0	715.2	719.2	720.5	722.5	722.2	723.3	723.7
New York	8,083.4	8,095.6	8,082.4	8,098.6	8,117.5	8,124.9	8,140.0	8,146.4	8,138.4	8,166.8	8,187.1	8,207.4	8,218.0
North Carolina	3,716.8	3,715.4	3,719.6	3,734.1	3,735.5	3,739.3	3,746.2	3,739.5	3,728.2	3,776.5	3,753.3	3,760.4	3,767.4
North Dakota	315.1	316.2	317.4	319.0	318.1	318.0	318.6	320.0	319.9	317.0	317.5	316.8	316.1
Ohio	5,417.1	5,421.7	5,439.2	5,436.3	5,445.3	5,448.6	5,460.4	5,459.1	5,431.7	5,470.7	5,475.6	5,484.4	5,485.2
Oklahoma	1,403.4	1,405.1	1,405.7	1,410.7	1,415.9	1,418.4	1,427.8	1,423.5	1,421.9	1,430.3	1,436.7	1,436.7	1,443.9
Oregon	1,536.9	1,551.0	1,551.8	1,557.3	1,561.9	1,563.9	1,564.6	1,563.6	1,564.5	1,563.8	1,566.7	1,573.0	1,579.4
Pennsylvania	5,434.4	5,446.5	5,453.9	5,448.0	5,447.2	5,455.7	5,457.8	5,444.0	5,464.2	5,460.8	5,491.8	5,479.5	5,487.7
Rhode Island	451.1	453.4	452.7	454.1	453.7	455.3	456.8	455.0	454.6	453.4	455.2	455.2	456.4
South Carolina	1,735.0	1,749.1	1,763.5	1,767.8	1,775.6	1,784.8	1,788.2	1,804.1	1,794.9	1,797.3	1,804.3	1,806.4	1,816.3
South Dakota	355.7	356.1	354.9	357.0	357.3	358.0	360.3	358.5	360.0	360.5	361.0	361.8	362.1
Tennessee	2,603.0	2,605.3	2,618.6	2,620.7	2,623.6	2,623.5	2,621.3	2,623.5	2,620.9	2,616.2	2,625.9	2,634.8	2,637.9
Texas	8,732.1	8,760.7	8,755.4	8,801.2	8,824.5	8,855.0	8,873.9	8,877.8	8,888.3	8,915.1	8,938.6	8,955.4	8,970.0
Utah	1,010.6	1,014.3	1,015.6	1,018.2	1,024.3	1,024.4	1,026.3	1,024.1	1,022.0	1,024.4	1,027.8	1,030.9	1,031.9
Vermont	279.7	281.4	279.3	280.0	280.1	281.5	282.6	283.8	282.3	283.9	283.7	282.9	283.7
Virginia	3,267.2	3,278.7	3,280.0	3,291.1	3,303.6	3,306.9	3,314.1	3,322.2	3,331.8	3,337.7	3,340.1	3,343.1	3,345.9
Washington	2,534.5	2,543.6	2,546.0	2,558.5	2,566.4	2,576.5	2,587.9	2,593.4	2,606.1	2,615.1	2,603.4	2,609.9	2,612.3
West Virginia	717.7	717.1	715.3	715.6	715.2	715.1	724.2	714.2	713.3	717.2	721.7	726.6	724.8
Wisconsin	2,679.4	2,684.9	2,691.4	2,694.1	2,696.5	2,702.6	2,709.6	2,713.1	2,709.5	2,724.8	2,717.0	2,715.8	2,725.4
Wyoming	223.2	223.0	222.8	222.4	223.9	224.3	225.8	224.4	227.9	229.0	226.2	225.6	226.5

See footnotes at end of table.



**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P
	Construction												
Alabama .....	96.5	96.2	97.1	97.9	97.0	98.7	100.2	100.8	101.2	101.9	100.0	99.7	100.6
Alaska .....	12.7	12.8	12.8	12.8	12.8	13.0	13.0	13.2	13.2	13.2	12.9	12.9	13.2
Arizona .....	131.4	131.6	134.5	133.5	134.5	133.3	135.2	136.7	137.7	137.0	139.5	139.9	140.9
Arkansas .....	48.0	48.1	47.5	47.5	47.7	48.8	49.4	49.3	49.6	49.3	49.9	49.9	50.2
California .....	573.1	577.9	583.4	582.3	591.9	591.6	593.1	604.6	613.1	616.2	615.3	623.8	627.2
Colorado .....	118.0	122.1	127.3	128.0	127.9	126.5	127.1	126.8	127.6	128.2	131.2	132.5	131.3
Connecticut .....	58.1	58.9	60.1	60.1	59.8	59.6	59.0	58.4	58.5	58.8	59.6	59.8	60.3
Delaware .....	22.2	22.5	23.1	22.8	22.2	22.1	21.7	22.1	22.5	22.6	22.9	22.9	23.4
District of Columbia .....	8.4	8.8	8.7	8.8	8.9	8.7	8.6	8.8	8.9	8.6	8.5	8.4	8.3
Florida .....	339.3	339.9	340.5	340.6	342.6	344.5	347.0	348.1	348.8	351.7	350.3	352.6	353.4
Georgia .....	173.3	175.2	177.2	177.2	178.2	178.5	179.7	180.0	179.8	181.7	182.7	183.0	183.1
Hawaii <sup>2</sup> .....	21.9	21.8	21.9	21.9	22.1	21.8	21.9	21.6	20.9	21.3	20.8	19.8	19.6
Idaho .....	32.5	32.3	32.7	33.2	32.6	32.9	31.9	32.4	32.2	32.8	32.3	32.7	32.7
Illinois .....	239.3	239.1	239.8	240.8	235.9	241.4	238.8	239.5	237.6	238.8	240.3	242.2	241.3
Indiana .....	142.3	142.9	143.3	143.8	140.6	144.5	143.2	138.6	139.9	139.1	138.4	139.3	139.7
Iowa .....	60.5	61.0	60.1	60.3	60.6	62.3	62.6	62.5	63.3	62.4	62.3	62.3	61.9
Kansas .....	59.4	59.3	60.7	60.8	58.5	60.2	61.7	62.0	62.2	62.7	61.9	62.1	62.0
Kentucky .....	81.6	82.3	85.2	83.3	85.4	86.3	86.4	86.1	85.8	86.1	85.9	85.9	85.4
Louisiana .....	117.4	117.1	117.9	118.0	118.4	118.6	119.8	122.2	123.3	122.8	122.4	123.8	125.8
Maine .....	24.4	24.4	24.4	24.4	24.2	24.1	24.2	24.4	24.6	25.0	25.4	25.4	25.6
Maryland .....	139.7	140.3	140.6	140.1	137.4	136.6	134.4	134.6	135.8	137.4	137.2	138.9	139.9
Massachusetts .....	102.5	104.4	107.9	108.8	108.3	108.2	107.8	107.4	108.9	108.8	107.4	108.2	110.7
Michigan .....	184.1	186.1	184.8	187.3	184.6	190.3	188.0	189.0	187.7	185.9	185.3	188.3	189.5
Minnesota .....	95.7	96.3	97.6	99.4	99.2	99.7	100.4	99.7	99.2	100.2	101.2	100.9	102.5
Mississippi .....	51.6	51.5	52.7	52.6	51.9	52.4	52.2	53.5	55.3	55.0	54.6	55.6	56.7
Missouri .....	125.2	124.9	123.1	124.8	118.5	123.6	124.0	122.8	127.8	126.8	127.3	128.7	129.9
Montana .....	18.6	18.9	18.9	18.7	18.2	18.0	18.2	17.8	18.3	18.0	17.3	17.4	17.7
Nebraska .....	39.2	40.9	42.8	42.4	40.8	40.9	40.7	39.9	40.3	41.0	40.6	40.6	40.4
Nevada .....	83.7	84.0	85.1	85.2	86.1	87.0	87.6	89.6	90.5	91.3	90.6	89.6	89.7
New Hampshire .....	21.0	21.4	21.8	22.0	22.2	22.4	22.4	21.9	22.0	21.8	21.8	21.6	21.7
New Jersey .....	131.8	131.9	135.6	137.1	136.4	136.2	135.4	135.8	136.7	137.3	138.5	137.8	138.4
New Mexico .....	42.2	42.2	42.1	42.1	42.2	42.6	42.9	43.2	43.4	43.5	43.0	43.2	42.7
New York .....	267.8	268.1	265.6	268.5	270.6	271.8	273.5	275.8	280.5	280.0	280.7	283.5	285.4
North Carolina .....	207.9	208.7	211.7	208.7	209.5	210.3	210.6	210.6	210.0	210.2	210.3	212.1	213.1
North Dakota .....	14.8	14.9	15.1	15.2	15.1	15.3	15.5	16.2	16.1	15.6	15.1	15.0	14.6
Ohio .....	225.4	225.3	226.7	228.4	228.1	232.9	233.5	233.4	232.0	234.4	233.8	232.9	233.9
Oklahoma .....	50.9	50.8	51.8	52.1	52.3	52.5	53.0	53.0	52.9	52.8	53.2	52.8	52.8
Oregon .....	83.1	84.6	82.3	84.3	84.9	85.7	83.0	82.0	82.0	82.9	81.7	84.6	85.1
Pennsylvania .....	216.4	217.1	218.4	219.4	220.6	222.2	223.2	222.9	220.8	221.6	220.6	220.2	222.8
Rhode Island .....	14.9	15.1	15.4	15.5	16.1	16.9	16.6	16.4	16.3	16.7	16.7	17.1	17.3
South Carolina .....	101.6	103.3	104.9	106.0	106.7	107.9	108.8	109.7	109.4	110.4	111.1	111.5	111.9
South Dakota .....	15.7	15.9	15.9	16.0	15.6	15.9	15.9	15.8	15.7	15.5	15.6	15.7	15.8
Tennessee .....	117.8	118.1	117.0	117.7	119.2	120.3	120.7	119.4	121.0	121.3	121.9	122.7	123.6
Texas .....	464.5	467.0	468.1	476.7	477.8	480.3	484.7	484.6	487.6	488.7	485.8	488.6	490.4
Utah .....	65.8	66.5	65.7	66.5	67.3	67.7	68.6	67.9	68.3	68.3	67.1	68.2	69.3
Vermont .....	12.8	13.3	12.7	12.6	12.5	13.0	13.2	13.3	13.2	13.0	13.0	13.1	13.3
Virginia .....	188.3	189.0	190.2	191.5	192.9	193.4	194.9	195.5	196.8	198.0	196.9	198.5	198.9
Washington .....	136.8	136.6	137.7	138.2	138.9	140.1	141.5	141.9	143.2	143.4	142.1	142.5	143.3
West Virginia .....	35.6	35.5	36.2	35.4	34.3	35.5	33.9	35.2	35.2	34.9	35.0	36.5	36.1
Wisconsin .....	109.4	110.0	110.2	111.6	110.9	111.9	113.3	112.8	113.6	114.2	113.7	114.2	116.6
Wyoming .....	15.2	14.9	14.9	15.0	15.1	15.3	15.9	15.2	15.7	16.1	15.4	15.2	15.1

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P.
	Manufacturing												
Alabama .....	378.7	378.6	380.2	379.2	378.0	377.1	376.6	375.0	372.1	373.2	373.9	371.4	369.4
Alaska .....	15.5	13.9	15.5	16.4	16.3	15.5	14.1	14.8	15.9	14.7	14.8	15.0	15.3
Arizona .....	211.6	212.9	214.7	215.0	215.1	215.5	215.1	215.7	216.3	216.5	216.6	216.6	216.0
Arkansas .....	253.3	254.0	255.5	255.3	255.1	255.6	255.3	255.8	253.2	254.7	253.9	253.9	253.6
California .....	1,936.5	1,941.6	1,943.2	1,945.2	1,947.1	1,944.3	1,947.4	1,944.9	1,931.6	1,934.0	1,943.0	1,946.1	1,939.9
Colorado .....	206.6	207.7	206.9	208.4	208.8	208.4	208.0	208.3	208.4	207.2	205.8	206.5	206.8
Connecticut .....	276.0	276.3	277.1	276.9	277.0	277.6	276.7	276.4	277.2	278.0	276.4	275.9	275.0
Delaware .....	58.4	58.7	56.7	57.3	58.8	58.8	59.1	59.4	56.9	59.0	58.9	59.0	59.4
District of Columbia .....	12.6	12.6	12.8	12.7	12.8	12.8	12.8	12.7	12.8	12.9	12.8	12.9	12.8
Florida .....	491.5	491.9	491.8	491.7	491.3	491.9	492.1	490.6	491.2	491.0	491.7	490.3	488.8
Georgia .....	589.3	590.0	589.1	587.1	589.9	590.4	591.4	591.3	587.5	594.0	590.9	593.7	593.2
Hawaii .....	16.5	16.5	16.5	16.4	16.4	16.3	16.2	16.1	16.0	15.9	16.1	16.0	16.0
Idaho .....	75.5	75.8	76.4	76.7	76.3	76.3	76.2	75.7	75.7	75.4	74.9	75.7	75.7
Illinois .....	979.5	980.9	981.3	980.2	980.5	981.8	980.1	980.2	978.0	976.7	978.2	981.3	973.9
Indiana .....	678.4	679.6	678.6	680.1	682.9	681.4	682.0	681.8	668.8	682.0	680.0	681.4	681.1
Iowa .....	256.1	256.3	256.5	257.0	258.4	258.3	259.1	259.2	263.6	260.1	258.7	259.8	259.1
Kansas .....	208.4	208.9	209.7	210.2	210.4	210.8	211.8	210.6	208.9	212.4	212.0	212.3	212.7
Kentucky .....	315.9	316.7	318.6	317.9	314.9	315.7	316.1	316.0	312.9	315.4	315.9	315.6	314.9
Louisiana .....	190.7	190.8	190.8	190.4	190.5	189.9	190.2	189.0	187.5	190.5	189.8	188.6	190.1
Maine .....	87.8	88.1	88.1	88.2	87.4	87.3	87.0	86.8	86.5	86.1	87.2	86.6	86.1
Maryland .....	176.6	176.7	176.6	177.1	176.8	176.1	175.8	175.8	173.1	172.0	175.0	174.7	174.7
Massachusetts .....	451.6	452.9	455.8	456.9	456.3	454.5	453.3	452.3	455.2	450.2	448.0	446.8	444.8
Michigan .....	970.7	969.3	970.9	973.2	973.8	981.3	978.8	972.8	916.1	977.7	977.5	978.7	971.1
Minnesota .....	439.3	440.4	440.7	438.7	442.4	441.6	442.5	444.8	442.0	443.1	440.8	441.8	441.7
Mississippi .....	241.2	241.1	241.8	242.6	241.5	241.8	242.2	240.6	240.2	238.2	239.1	239.4	238.4
Missouri .....	419.8	420.2	426.7	420.0	421.6	421.4	421.7	421.7	410.6	421.8	423.7	420.2	417.4
Montana .....	24.5	24.3	24.4	24.6	24.5	24.7	24.9	24.3	24.1	24.0	24.1	24.1	24.2
Nebraska .....	116.8	117.0	117.7	118.7	118.2	119.8	119.8	119.6	120.5	118.6	118.5	118.1	117.5
Nevada .....	41.2	41.4	41.7	41.9	42.4	42.3	42.5	42.9	42.8	42.8	43.0	43.0	42.9
New Hampshire .....	107.7	108.1	108.8	108.5	108.7	108.2	108.0	106.7	106.1	105.3	104.9	104.9	104.6
New Jersey .....	483.5	484.4	486.0	485.5	485.2	483.3	482.0	481.7	477.4	477.1	476.0	473.9	474.2
New Mexico .....	47.3	47.3	46.9	46.3	45.6	45.2	45.1	45.2	44.8	45.3	44.8	44.7	44.4
New York .....	923.3	925.1	923.0	920.3	920.4	918.2	916.9	917.2	901.8	917.6	917.6	916.5	914.4
North Carolina .....	834.7	833.5	833.1	833.7	833.1	831.2	830.8	827.1	823.4	823.8	822.1	819.1	818.5
North Dakota .....	23.7	23.6	24.0	23.9	23.9	23.8	24.1	23.6	23.6	23.8	23.6	23.3	23.6
Ohio .....	1,090.8	1,093.8	1,095.3	1,096.9	1,097.8	1,094.9	1,091.2	1,088.9	1,054.1	1,090.1	1,090.0	1,093.1	1,088.1
Oklahoma .....	183.2	183.7	184.2	184.4	184.4	183.7	185.1	185.3	184.3	185.7	185.5	185.8	186.8
Oregon .....	246.2	246.7	247.0	247.5	247.7	246.7	247.4	246.0	246.8	243.8	241.9	241.3	243.1
Pennsylvania .....	938.6	938.6	943.0	941.6	939.7	938.5	937.3	935.0	937.9	937.9	932.2	928.7	927.4
Rhode Island .....	78.8	80.1	79.4	79.4	79.3	78.8	79.1	78.9	79.5	78.1	78.3	78.2	77.8
South Carolina .....	362.1	362.2	362.2	361.4	362.5	364.2	364.2	364.1	367.5	361.8	364.2	363.3	363.0
South Dakota .....	49.7	49.9	49.0	49.6	49.6	49.2	49.0	48.9	49.7	50.1	50.1	50.2	50.1
Tennessee .....	517.5	517.7	517.8	518.2	518.5	516.4	514.2	514.2	511.1	509.5	507.9	507.4	506.0
Texas .....	1,091.8	1,093.9	1,093.3	1,093.4	1,095.9	1,097.2	1,098.0	1,098.0	1,095.6	1,098.5	1,097.6	1,096.8	1,095.4
Utah .....	134.0	134.0	135.1	135.3	135.4	135.4	135.7	135.0	134.3	134.4	134.5	134.4	134.8
Vermont .....	46.9	47.2	47.3	47.4	47.3	47.9	48.0	48.1	48.1	48.3	48.4	48.2	48.0
Virginia .....	405.3	405.8	406.4	406.6	407.6	407.5	405.7	405.5	404.3	404.8	406.0	404.8	403.2
Washington .....	375.1	376.0	376.5	377.4	377.8	376.9	378.2	379.5	379.8	377.7	375.7	373.1	371.8
West Virginia .....	82.4	82.7	83.0	83.1	82.9	83.1	83.0	82.9	81.8	82.3	82.5	82.5	82.1
Wisconsin .....	615.8	617.4	620.8	619.4	620.0	620.1	619.3	621.3	613.8	621.1	617.0	615.0	617.3
Wyoming .....	10.9	10.9	10.9	10.8	11.0	11.0	11.0	11.1	11.0	11.1	11.1	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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P
	Transportation and public utilities												
Alabama .....	90.7	91.0	91.6	91.7	91.8	91.5	91.7	91.3	91.9	92.1	91.7	91.6	91.5
Alaska .....	24.0	24.4	24.4	24.7	24.6	25.0	25.7	25.2	25.3	25.6	25.1	25.0	24.9
Arizona .....	97.0	97.8	98.2	97.0	97.5	97.7	98.5	98.8	98.9	99.6	100.5	100.3	102.1
Arkansas .....	66.9	67.2	67.1	67.5	67.7	67.7	68.0	67.8	67.8	68.0	67.7	68.1	68.3
California .....	675.4	675.1	675.6	676.5	679.0	680.1	680.1	680.2	679.7	677.9	681.8	681.0	686.0
Colorado .....	121.8	121.2	122.5	122.5	122.0	122.7	123.3	124.7	126.4	126.7	126.9	126.5	125.5
Connecticut .....	75.3	75.7	75.3	75.8	76.1	76.0	76.7	76.4	76.3	76.3	70.5	76.0	76.2
Delaware .....	15.7	15.8	15.5	15.6	15.6	15.6	15.7	15.6	15.9	16.0	15.8	16.1	16.2
District of Columbia .....	17.5	17.5	17.7	17.3	17.2	17.1	17.0	16.8	16.9	16.9	16.7	16.6	16.7
Florida .....	330.9	332.2	335.6	336.2	338.1	336.6	338.9	339.9	340.2	341.7	343.7	343.4	344.1
Georgia .....	235.7	236.4	236.3	237.5	238.4	238.4	238.6	239.7	241.1	241.3	243.0	244.0	244.7
Hawaii .....	41.5	41.0	41.1	41.2	40.9	40.2	40.4	40.6	40.5	40.5	40.8	40.5	40.1
Idaho .....	24.1	24.2	24.7	24.4	25.8	24.4	24.3	24.4	24.3	24.8	24.8	24.7	24.9
Illinois .....	340.8	342.0	342.0	341.3	342.1	343.7	345.7	344.5	344.7	345.0	343.3	342.5	344.3
Indiana .....	140.7	141.5	142.3	142.6	142.8	142.9	142.5	140.7	141.1	140.7	140.8	142.1	142.0
Iowa .....	66.5	66.7	66.9	67.0	67.2	68.1	68.2	68.4	68.8	68.6	68.6	69.2	69.4
Kansas .....	73.0	72.9	72.9	73.0	73.3	73.5	73.9	74.1	73.6	74.6	74.5	75.2	75.6
Kentucky .....	98.6	99.4	99.5	99.7	100.0	101.5	101.7	102.4	102.1	103.0	102.7	102.3	101.9
Louisiana .....	111.8	112.1	111.7	112.5	112.8	113.4	113.8	114.2	114.1	114.2	113.9	114.1	114.6
Maine .....	23.4	23.5	23.5	23.9	23.8	23.8	24.0	24.1	24.1	23.7	24.0	23.9	23.9
Maryland .....	105.9	106.3	105.3	106.2	105.5	105.4	105.9	106.0	105.5	105.8	106.3	106.7	106.6
Massachusetts .....	138.0	135.3	136.8	137.5	137.6	138.6	138.4	138.6	138.1	137.2	138.2	137.2	135.9
Michigan .....	175.1	175.3	175.4	175.0	174.0	174.4	176.3	175.9	175.1	174.6	174.4	175.9	175.9
Minnesota .....	125.3	126.0	125.9	125.4	125.6	125.6	126.0	126.1	127.1	127.1	114.7	127.0	127.1
Mississippi .....	53.6	53.5	54.1	53.9	53.7	53.9	53.8	53.3	52.9	53.0	52.8	52.8	52.2
Missouri .....	163.6	164.3	165.9	165.4	165.6	166.4	166.0	165.5	164.8	164.8	164.8	165.1	165.5
Montana .....	21.4	21.3	21.5	21.6	21.5	21.6	21.5	21.3	21.2	21.0	21.1	21.3	21.3
Nebraska .....	54.4	54.6	54.9	55.0	54.8	55.1	54.9	55.6	56.1	56.2	56.8	56.7	56.8
Nevada .....	46.7	46.7	46.7	46.9	46.9	47.0	47.3	47.5	47.6	47.6	48.0	48.2	48.2
New Hampshire .....	19.4	19.4	19.7	19.4	19.3	19.8	19.3	19.0	19.2	19.3	19.2	19.1	19.1
New Jersey .....	259.4	260.4	260.4	261.9	261.9	262.0	263.0	263.8	263.9	264.3	265.9	264.2	264.1
New Mexico .....	32.6	32.5	32.5	32.5	32.7	33.0	33.3	33.3	33.5	33.4	33.2	33.6	33.6
New York .....	410.6	410.7	411.7	410.6	411.1	409.8	409.8	410.2	409.5	409.7	411.9	412.8	412.3
North Carolina .....	171.0	170.9	171.0	171.3	170.7	169.8	169.2	169.8	170.5	171.3	170.6	170.5	171.3
North Dakota .....	18.0	18.0	18.3	18.2	18.3	18.4	18.6	18.5	18.5	18.3	18.0	18.2	18.1
Ohio .....	233.8	233.3	235.4	235.4	235.2	234.9	234.9	234.4	233.4	234.1	234.0	234.8	234.3
Oklahoma .....	80.7	80.9	80.7	81.1	81.6	81.7	82.3	82.4	82.9	83.3	83.0	83.5	83.8
Oregon .....	74.6	74.4	74.5	74.6	74.7	75.6	75.7	75.5	75.3	75.0	76.0	75.6	75.7
Pennsylvania .....	278.4	278.2	281.0	280.8	280.4	281.5	280.7	280.3	281.5	280.6	282.7	281.7	281.2
Rhode Island .....	15.7	15.9	15.4	15.9	16.0	15.8	15.8	15.8	15.9	15.9	16.0	15.7	15.9
South Carolina .....	76.5	76.9	75.8	76.3	77.2	77.5	77.3	77.3	78.8	77.9	78.8	79.3	79.7
South Dakota .....	15.9	15.8	16.1	16.0	15.9	16.1	16.1	15.8	15.8	16.1	16.3	16.3	16.3
Tennessee .....	150.4	150.1	153.1	153.0	152.4	153.3	152.6	151.9	152.4	151.6	152.2	152.0	152.2
Texas .....	524.7	526.0	527.8	531.2	532.4	538.0	540.1	540.7	541.5	546.5	547.4	548.2	548.7
Utah .....	57.3	57.7	57.4	57.5	57.8	58.2	58.1	58.1	58.3	58.2	58.3	58.2	58.2
Vermont .....	12.3	12.3	12.4	12.5	12.5	12.6	12.4	12.4	12.3	12.2	12.3	12.2	12.3
Virginia .....	170.7	171.3	170.9	171.6	172.0	173.1	172.3	172.0	172.5	172.7	173.2	174.1	174.4
Washington .....	133.9	133.9	135.6	136.3	136.7	136.9	137.5	137.0	137.3	138.6	138.9	138.9	139.6
West Virginia .....	39.2	38.8	39.2	38.7	38.5	38.6	38.6	38.7	38.8	38.5	39.5	39.4	39.3
Wisconsin .....	123.0	122.5	124.0	124.4	123.8	124.1	123.6	124.1	123.9	124.2	124.3	124.1	123.8
Wyoming .....	14.0	13.9	13.7	13.8	13.9	13.9	14.0	13.9	13.9	13.9	14.0	13.9	14.0

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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P
	Trade												
Alabama .....	429.2	429.4	430.3	431.4	432.9	432.2	434.5	435.5	435.9	435.0	434.8	436.5	437.0
Alaska .....	54.9	55.4	55.9	56.4	56.9	56.6	57.2	57.5	57.1	56.9	56.8	56.0	56.0
Arizona .....	487.8	491.3	496.7	497.6	499.0	498.8	500.0	500.4	496.5	499.6	503.1	504.6	505.6
Arkansas .....	253.7	252.7	251.6	251.2	254.4	255.1	256.3	256.5	256.3	256.4	256.4	255.4	256.9
California .....	3,100.1	3,106.6	3,091.3	3,107.1	3,114.7	3,117.4	3,129.0	3,129.1	3,132.3	3,134.4	3,139.3	3,146.6	3,156.5
Colorado .....	486.6	486.5	489.5	490.7	491.9	492.2	496.3	499.7	501.5	503.4	504.6	505.7	506.1
Connecticut .....	359.6	362.3	360.2	359.9	359.0	357.9	358.8	358.4	359.1	360.0	359.2	359.6	362.7
Delaware .....	85.9	86.1	86.7	87.7	87.7	87.2	87.3	86.4	86.9	86.9	88.1	88.5	88.2
District of Columbia .....	48.6	48.8	48.6	48.2	48.7	48.1	48.1	48.3	48.7	48.6	48.9	48.3	48.5
Florida .....	1,675.7	1,680.9	1,678.4	1,681.8	1,687.8	1,686.9	1,690.5	1,696.4	1,698.6	1,704.4	1,711.4	1,717.0	1,723.6
Georgia .....	929.1	932.4	931.9	936.9	936.5	936.8	941.9	937.0	934.0	929.8	935.8	939.4	945.1
Hawaii .....	134.7	134.4	133.8	133.7	133.3	132.5	132.6	131.9	130.6	131.4	132.1	132.4	131.5
Idaho .....	129.4	129.7	129.6	130.1	129.2	130.1	131.1	131.2	130.6	130.5	130.5	130.6	132.5
Illinois .....	1,331.7	1,336.8	1,339.7	1,335.1	1,337.3	1,340.0	1,343.3	1,344.4	1,338.0	1,337.1	1,339.0	1,339.3	1,341.9
Indiana .....	682.9	681.9	676.9	682.5	683.8	684.6	684.7	684.3	687.7	684.9	684.8	684.8	682.8
Iowa .....	348.5	347.7	347.8	348.0	348.5	349.5	350.2	350.0	349.9	349.6	350.1	352.1	351.2
Kansas .....	313.6	314.4	314.7	316.1	316.4	317.3	318.6	318.6	319.8	321.3	321.3	322.2	322.7
Kentucky .....	414.4	416.1	416.2	416.4	415.6	417.4	419.0	417.2	416.7	419.8	418.8	418.2	421.4
Louisiana .....	434.7	436.2	434.7	436.8	436.7	436.0	438.1	437.3	437.6	437.5	436.9	437.2	437.7
Maine .....	142.8	142.4	140.4	139.9	140.8	141.0	140.6	141.2	141.6	142.1	142.6	143.7	144.7
Maryland .....	539.1	539.1	543.2	541.0	541.6	538.9	539.4	539.2	539.5	536.7	536.9	539.4	540.6
Massachusetts .....	722.0	723.6	727.4	729.4	729.2	728.6	732.1	729.1	731.5	732.0	731.1	728.9	731.2
Michigan .....	1,047.9	1,050.9	1,050.2	1,056.0	1,055.3	1,059.1	1,066.6	1,061.8	1,059.4	1,064.0	1,069.9	1,071.5	1,075.4
Minnesota .....	607.0	608.6	605.1	605.5	606.2	604.1	608.0	610.5	615.8	614.0	613.3	615.6	618.0
Mississippi .....	238.0	237.8	238.7	238.6	238.1	239.9	239.6	238.5	240.5	238.1	238.0	239.6	238.5
Missouri .....	625.4	626.4	625.4	626.5	628.4	631.5	632.8	632.7	633.8	633.9	637.0	636.9	636.5
Montana .....	99.3	99.4	98.8	99.4	99.4	99.2	99.7	99.0	98.9	99.4	100.1	99.9	100.1
Nebraska .....	212.0	211.7	214.5	214.2	213.2	214.8	214.3	214.7	214.9	214.8	214.9	215.1	215.1
Nevada .....	182.4	183.1	183.1	184.3	185.9	186.2	186.6	186.7	187.7	187.6	188.9	189.9	191.0
New Hampshire .....	150.1	150.2	149.8	149.3	148.8	149.5	149.7	150.5	150.9	150.6	149.5	151.3	150.1
New Jersey .....	877.8	880.1	879.5	885.9	886.6	884.3	890.7	891.1	891.3	891.4	892.0	894.1	895.0
New Mexico .....	168.8	169.1	168.7	169.2	169.9	169.7	170.8	171.0	171.9	171.9	173.7	173.3	173.4
New York .....	1,651.6	1,655.5	1,654.3	1,650.1	1,654.3	1,657.3	1,660.4	1,662.6	1,665.4	1,666.3	1,671.8	1,672.8	1,677.5
North Carolina .....	845.1	840.5	841.8	846.6	847.2	847.1	845.9	845.0	850.0	849.7	850.8	855.7	859.6
North Dakota .....	81.5	82.0	81.3	81.9	81.5	80.9	80.8	80.6	81.0	80.6	80.8	81.4	80.9
Ohio .....	1,318.5	1,321.3	1,317.1	1,317.6	1,318.1	1,316.5	1,318.7	1,320.5	1,318.9	1,320.9	1,320.9	1,322.7	1,325.3
Oklahoma .....	326.6	327.3	326.4	327.0	327.9	328.3	328.3	327.7	327.5	328.7	330.0	331.6	332.9
Oregon .....	381.9	384.8	383.0	384.5	387.0	386.5	388.1	387.0	388.4	385.2	386.3	389.3	390.1
Pennsylvania .....	1,223.9	1,228.0	1,216.7	1,221.3	1,224.1	1,227.9	1,230.4	1,229.9	1,237.1	1,236.7	1,236.7	1,235.6	1,234.3
Rhode Island .....	98.7	98.6	98.5	99.2	99.0	98.6	99.1	98.8	98.4	98.7	99.1	98.6	99.2
South Carolina .....	426.5	427.6	430.0	431.0	433.2	436.2	437.7	439.8	440.8	441.8	443.2	443.9	449.5
South Dakota .....	88.3	88.1	87.2	87.5	87.3	87.9	89.3	89.5	89.3	89.4	89.9	89.6	89.0
Tennessee .....	614.8	618.4	618.1	619.5	620.1	624.6	621.5	617.6	618.1	617.6	619.4	621.0	622.1
Texas .....	2,071.0	2,081.5	2,084.5	2,086.0	2,091.1	2,092.0	2,097.2	2,097.4	2,097.5	2,102.2	2,108.1	2,113.1	2,117.0
Utah .....	241.2	242.7	242.7	243.9	245.0	244.2	244.6	242.9	243.1	243.3	244.4	244.6	243.9
Vermont .....	65.1	65.3	64.8	65.0	65.4	65.2	65.5	65.9	65.8	65.6	65.9	65.7	66.1
Virginia .....	732.3	734.4	730.9	735.3	737.5	735.4	736.6	739.5	740.6	742.2	741.5	743.5	744.5
Washington .....	611.9	612.8	615.4	618.1	621.3	621.4	625.6	626.6	628.5	631.0	631.9	633.5	635.7
West Virginia .....	164.3	164.5	163.4	163.6	164.7	163.9	163.1	163.3	162.6	162.7	163.9	166.2	165.1
Wisconsin .....	608.5	609.5	608.6	611.7	613.4	613.0	615.3	614.5	616.0	618.9	617.4	618.8	620.2
Wyoming .....	52.3	52.3	52.5	51.9	52.3	52.4	52.3	52.5	52.9	53.0	52.4	52.9	52.9

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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P
	Finance, insurance, and real estate												
Alabama .....	84.9	85.1	85.1	85.3	85.6	85.8	86.2	86.4	86.5	87.0	86.8	87.4	87.6
Alaska .....	12.2	12.2	12.1	12.1	12.2	12.3	12.4	12.5	12.6	12.6	12.6	12.5	12.4
Arizona .....	130.0	130.3	130.5	131.4	132.4	132.9	133.4	134.7	135.1	135.4	135.2	135.8	136.2
Arkansas .....	44.4	44.5	44.3	44.4	44.8	44.8	44.8	44.7	44.5	44.0	44.1	44.1	44.2
California .....	764.7	765.1	765.8	769.9	772.7	776.1	780.0	782.2	786.0	786.3	788.2	789.1	788.4
Colorado .....	129.5	130.0	130.0	130.9	131.2	130.7	131.5	132.5	133.6	134.3	134.0	134.0	133.7
Connecticut .....	132.8	133.6	133.7	133.8	134.7	134.5	135.5	135.6	135.8	135.9	135.6	135.8	136.2
Delaware .....	48.2	48.6	48.4	48.6	48.9	49.5	49.7	49.3	49.4	49.7	49.8	50.0	49.9
District of Columbia .....	28.3	28.4	28.9	28.4	28.5	28.4	28.4	28.5	28.9	28.6	28.9	28.9	28.8
Florida .....	419.3	419.2	418.8	419.9	422.8	424.5	426.3	427.4	427.0	428.4	429.5	431.5	433.2
Georgia .....	190.8	191.7	191.8	192.8	193.8	194.5	195.1	195.3	196.1	197.3	197.2	197.6	198.2
Hawaii .....	35.8	35.7	35.6	35.3	35.3	35.3	35.1	34.9	35.2	35.0	34.9	35.1	34.8
Idaho .....	25.6	25.6	25.7	26.0	26.2	26.5	26.6	26.7	26.9	26.9	26.6	27.0	26.5
Illinois .....	404.3	405.2	406.3	406.5	406.8	407.9	409.2	410.4	412.4	412.3	412.6	413.4	413.4
Indiana .....	140.1	140.4	140.2	140.0	140.2	140.6	140.8	140.6	141.4	142.1	142.5	143.4	143.5
Iowa .....	80.7	80.9	81.3	81.0	81.1	81.3	81.8	81.9	82.0	82.1	82.3	82.7	82.6
Kansas .....	60.8	60.9	60.8	61.1	61.0	61.4	61.2	61.2	61.1	61.3	60.6	60.7	60.9
Kentucky .....	70.4	70.6	70.5	70.7	70.8	71.1	71.2	71.0	71.1	71.1	71.0	71.1	71.0
Louisiana .....	86.5	86.8	86.5	86.6	86.8	86.5	86.6	87.1	86.6	86.6	86.2	86.2	86.6
Maine .....	29.0	29.2	29.4	29.7	30.2	30.2	30.4	30.1	30.6	30.8	30.8	31.2	31.2
Maryland .....	130.9	131.3	131.5	131.8	131.1	131.9	132.3	132.8	132.8	133.1	133.2	133.3	133.5
Massachusetts .....	215.2	215.7	215.9	216.1	216.5	216.3	216.7	217.4	218.0	218.0	218.7	219.2	220.2
Michigan .....	206.6	207.1	207.9	208.9	209.4	209.7	209.0	207.9	207.8	208.9	207.5	207.6	208.1
Minnesota .....	148.5	149.1	149.2	149.8	149.9	150.9	151.3	151.4	152.2	152.8	153.0	153.5	154.1
Mississippi .....	41.1	41.1	41.2	41.5	41.3	41.5	41.5	41.5	41.5	41.7	41.5	42.0	42.2
Missouri .....	154.8	155.5	155.8	156.0	156.7	156.8	157.7	158.2	159.7	159.8	159.6	159.9	160.2
Montana .....	16.6	16.6	16.7	16.8	16.7	16.9	16.8	16.8	16.8	16.9	16.8	17.0	17.1
Nebraska .....	55.4	55.9	55.8	56.4	56.5	56.9	57.1	57.5	57.8	57.5	57.7	57.9	58.4
Nevada .....	41.1	41.2	41.4	41.5	41.7	41.8	42.2	42.6	42.9	42.9	43.4	43.8	43.9
New Hampshire .....	29.4	29.2	29.3	29.3	29.4	29.8	29.5	29.2	29.3	29.6	30.2	29.7	29.9
New Jersey .....	240.9	242.2	243.3	244.1	244.0	244.6	244.2	244.0	244.9	244.9	244.4	245.5	246.4
New Mexico .....	31.3	31.4	31.5	31.5	31.6	31.5	31.5	31.6	31.7	31.8	31.9	31.9	32.1
New York .....	721.5	722.1	721.3	724.1	725.8	726.3	727.6	728.7	730.3	731.8	732.4	733.1	734.0
North Carolina .....	168.9	169.3	170.6	172.5	173.4	173.0	174.2	174.8	175.6	177.4	178.5	178.6	178.7
North Dakota .....	15.0	15.2	15.3	15.4	15.3	15.4	15.4	15.5	15.7	15.7	15.6	15.7	15.9
Ohio .....	288.7	288.9	290.0	289.8	290.5	291.9	292.1	292.0	292.6	293.2	293.4	294.2	294.4
Oklahoma .....	70.2	70.2	70.3	70.5	70.7	70.9	71.1	71.0	71.3	70.8	71.0	71.3	71.5
Oregon .....	96.1	96.0	96.4	96.0	96.7	96.5	97.0	97.4	97.3	97.4	98.1	97.7	97.6
Pennsylvania .....	315.3	317.6	317.5	318.5	318.5	319.3	320.2	320.6	321.4	321.4	321.5	321.4	321.5
Rhode Island .....	26.7	26.6	26.9	27.0	26.8	27.0	27.2	27.7	27.7	27.9	27.9	28.1	28.5
South Carolina .....	75.3	75.8	76.0	76.6	76.9	77.6	78.1	78.5	79.0	79.1	79.3	79.4	79.9
South Dakota .....	21.6	21.7	21.7	21.6	21.6	21.7	22.0	22.3	22.2	22.5	22.7	22.9	23.1
Tennessee .....	121.7	121.7	123.4	123.5	123.2	122.7	122.8	122.8	122.9	122.9	122.8	122.9	123.2
Texas .....	469.7	471.2	473.5	475.6	477.4	478.5	479.8	481.8	482.8	484.0	484.7	486.0	486.1
Utah .....	54.0	53.9	53.7	53.8	53.7	53.7	53.5	54.1	54.4	54.4	54.4	54.2	54.3
Vermont .....	12.3	12.2	12.2	12.1	12.1	12.2	12.3	12.2	12.3	12.3	12.3	12.2	12.4
Virginia .....	169.1	169.5	170.6	170.7	170.7	170.6	171.1	170.9	172.5	172.5	172.9	173.8	173.7
Washington .....	130.4	131.0	131.5	132.0	132.5	133.7	134.5	134.4	135.6	136.4	136.3	136.5	136.6
West Virginia .....	28.5	28.6	28.4	28.3	28.4	28.4	28.2	28.1	28.5	28.6	28.5	28.9	29.0
Wisconsin .....	141.8	141.9	141.8	142.2	142.3	142.6	143.0	144.2	145.0	145.3	145.2	145.6	146.4
Wyoming .....	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.2	8.4	8.4	8.5	8.4	8.5

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P
	Services												
Alabama .....	433.9	434.3	435.1	435.6	438.0	437.8	438.4	439.6	439.7	440.4	439.1	440.3	441.6
Alaska .....	66.1	66.0	66.5	67.0	67.1	67.4	67.8	67.4	67.9	67.9	67.9	68.3	68.4
Arizona .....	612.5	616.3	617.3	619.9	621.1	624.3	630.9	633.0	632.6	636.1	638.5	639.4	642.7
Arkansas .....	257.3	257.7	257.2	259.6	260.9	263.0	263.2	262.4	260.8	263.2	263.8	263.9	264.5
California .....	4,124.2	4,142.0	4,154.9	4,168.6	4,180.9	4,198.7	4,217.7	4,226.9	4,241.8	4,256.4	4,268.6	4,280.3	4,295.1
Colorado .....	610.4	610.8	609.5	607.4	609.8	609.0	617.0	620.6	620.4	621.0	622.9	623.7	621.5
Connecticut .....	506.4	508.7	506.6	506.9	505.4	509.3	509.0	512.9	511.1	514.7	512.3	515.7	518.0
Delaware .....	109.5	109.9	110.2	110.7	111.0	110.9	111.9	112.2	112.1	112.4	112.7	113.3	114.5
District of Columbia .....	266.0	265.6	266.3	266.0	267.5	265.7	266.2	268.7	269.2	268.1	270.3	271.5	271.8
Florida .....	2,321.5	2,330.5	2,337.5	2,347.9	2,363.5	2,370.1	2,389.7	2,403.3	2,417.7	2,428.0	2,433.3	2,433.4	2,442.9
Georgia .....	967.4	973.2	972.3	981.5	982.8	983.4	983.3	986.9	987.8	992.4	992.4	996.3	1,007.0
Hawaii .....	170.3	169.5	168.4	169.1	169.7	170.3	169.5	169.4	168.3	169.6	168.8	169.8	169.9
Idaho .....	123.9	123.9	121.8	121.4	121.5	121.2	121.4	121.7	124.1	125.0	124.3	126.2	126.1
Illinois .....	1,709.9	1,714.0	1,713.4	1,716.7	1,717.1	1,722.6	1,732.7	1,740.0	1,749.0	1,744.4	1,748.8	1,751.2	1,751.6
Indiana .....	696.7	700.7	691.3	692.1	693.1	699.4	702.9	697.5	696.5	697.1	697.1	699.8	699.7
Iowa .....	369.1	369.9	371.6	373.0	373.9	376.6	377.0	378.5	381.5	379.1	378.0	380.7	381.2
Kansas .....	324.1	325.0	324.9	325.8	326.9	329.5	329.1	330.3	331.0	330.2	330.5	330.5	333.6
Kentucky .....	431.7	433.3	432.0	432.3	434.5	437.5	441.5	442.8	442.6	445.4	444.0	444.7	445.9
Louisiana .....	504.6	506.0	507.4	507.7	511.0	511.6	512.6	515.2	515.5	510.2	512.2	511.8	512.1
Maine .....	160.5	160.7	160.6	161.6	162.0	162.4	163.2	163.0	164.3	164.7	165.3	166.3	166.8
Maryland .....	762.7	764.0	763.1	764.5	763.7	762.3	763.4	763.2	769.4	772.5	773.4	780.9	785.1
Massachusetts .....	1,121.6	1,126.1	1,119.3	1,126.2	1,133.6	1,140.3	1,148.0	1,147.1	1,151.5	1,152.5	1,153.1	1,157.8	1,160.8
Michigan .....	1,235.2	1,243.2	1,244.1	1,243.7	1,246.3	1,249.9	1,259.8	1,260.8	1,260.0	1,268.1	1,270.5	1,278.5	1,279.9
Minnesota .....	708.9	710.5	708.1	714.6	716.3	718.2	724.9	729.3	730.3	728.9	730.6	730.6	732.7
Mississippi .....	261.5	261.3	262.7	263.7	263.7	263.8	265.3	264.9	264.6	265.1	262.5	262.7	263.9
Missouri .....	744.3	746.5	746.2	747.0	740.7	742.1	749.0	744.1	745.9	745.2	745.6	747.5	750.7
Montana .....	106.0	106.6	106.1	107.1	107.0	107.1	107.5	107.8	107.5	107.7	107.7	107.1	107.5
Nebraska .....	233.4	233.3	234.3	236.8	235.6	236.1	236.4	236.4	237.4	237.2	235.8	236.8	237.6
Nevada .....	386.7	387.2	386.5	388.6	390.0	392.2	392.3	393.1	394.0	395.5	396.3	406.2	406.5
New Hampshire .....	166.0	165.7	165.2	165.3	164.0	164.2	165.7	167.4	166.7	165.3	164.0	165.4	165.0
New Jersey .....	1,192.9	1,195.1	1,194.6	1,198.2	1,203.7	1,206.3	1,212.5	1,217.7	1,218.6	1,222.3	1,225.4	1,227.7	1,232.4
New Mexico .....	197.4	197.2	196.8	197.7	197.7	197.7	198.5	199.8	199.7	200.9	203.1	203.9	204.7
New York .....	2,729.4	2,736.5	2,734.3	2,750.1	2,759.4	2,769.0	2,774.6	2,777.9	2,785.2	2,795.6	2,798.6	2,811.1	2,819.9
North Carolina .....	896.2	899.5	899.8	904.2	905.4	909.5	916.3	916.7	910.0	908.6	915.9	918.1	919.4
North Dakota .....	87.5	87.8	88.4	89.1	89.0	89.1	89.4	89.1	89.2	89.1	89.2	88.8	88.4
Ohio .....	1,485.0	1,484.7	1,497.6	1,494.3	1,500.5	1,501.6	1,510.4	1,511.6	1,514.6	1,516.8	1,516.9	1,523.9	1,528.1
Oklahoma .....	382.6	383.0	382.9	385.2	386.2	389.7	394.2	393.1	393.0	395.9	396.1	396.9	400.5
Oregon .....	404.2	408.7	412.0	412.9	412.7	414.7	413.9	415.6	417.2	420.1	421.0	421.5	424.9
Pennsylvania .....	1,728.8	1,732.9	1,739.0	1,733.9	1,732.6	1,733.4	1,733.4	1,738.1	1,741.3	1,742.7	1,750.1	1,751.2	1,755.4
Rhode Island .....	152.3	152.1	151.9	151.7	151.6	152.2	152.6	151.4	151.5	151.7	153.1	153.7	153.3
South Carolina .....	400.2	401.4	409.3	410.9	413.0	415.4	416.3	417.9	418.7	421.1	421.3	421.7	424.6
South Dakota .....	92.2	92.5	92.9	94.4	94.5	95.0	95.6	94.4	95.2	95.2	94.5	95.5	95.0
Tennessee .....	692.6	691.1	699.0	698.7	700.4	696.6	700.0	698.7	701.2	703.0	699.8	703.6	706.7
Texas .....	2,447.2	2,457.1	2,448.9	2,473.4	2,479.6	2,492.8	2,498.8	2,506.9	2,510.4	2,521.7	2,524.7	2,533.1	2,541.9
Utah .....	275.6	276.4	277.7	277.1	279.1	278.7	279.5	279.8	277.7	280.1	281.7	283.6	283.5
Vermont .....	84.3	84.7	83.9	84.2	84.4	84.8	85.9	85.9	85.7	86.7	85.7	85.3	85.3
Virginia .....	991.9	999.2	1,004.5	1,007.8	1,014.7	1,018.1	1,024.6	1,028.3	1,034.1	1,035.7	1,034.1	1,033.3	1,036.8
Washington .....	686.6	689.4	689.5	695.6	698.8	704.6	709.5	710.2	712.8	716.9	715.0	719.5	721.0
West Virginia .....	202.9	202.5	202.5	203.4	203.7	202.7	203.5	204.4	205.6	205.3	206.6	208.7	208.5
Wisconsin .....	690.7	692.3	693.5	691.0	693.6	696.0	700.9	703.0	702.4	704.8	704.1	704.1	705.7
Wyoming .....	48.9	49.0	48.8	48.5	48.8	48.7	49.6	48.8	49.2	49.4	49.4	49.7	50.2

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE EMPLOYMENT  
SEASONALLY ADJUSTED**

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

(In thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P
	Government												
Alabama .....	347.1	347.3	346.7	346.2	346.3	345.2	344.9	346.3	344.9	346.9	350.1	349.7	349.1
Alaska .....	73.3	73.5	73.1	73.3	73.2	73.6	73.4	73.1	73.6	72.7	73.1	73.6	73.8
Arizona .....	327.3	327.5	325.4	329.5	332.6	332.3	333.5	341.2	333.9	335.5	346.3	341.2	349.2
Arkansas .....	183.5	183.9	183.7	184.0	184.7	185.3	185.1	185.5	189.9	190.9	186.4	187.3	188.0
California .....	2,163.6	2,160.5	2,157.5	2,161.0	2,170.2	2,175.6	2,180.2	2,186.0	2,173.3	2,186.2	2,191.8	2,203.3	2,206.9
Colorado .....	316.2	317.0	318.2	317.8	318.0	318.3	320.7	318.9	323.3	319.9	323.0	322.9	324.6
Connecticut .....	225.6	226.3	225.8	227.0	226.8	226.2	225.3	226.0	225.0	225.5	226.3	226.1	225.4
Delaware .....	53.6	53.8	53.9	53.8	53.7	54.1	54.8	54.6	55.2	54.4	54.8	54.3	54.3
District of Columbia .....	229.3	228.6	230.0	227.9	227.2	228.8	229.1	226.7	219.5	228.1	226.0	225.0	225.2
Florida .....	949.3	950.5	956.9	953.2	951.3	949.1	954.2	954.6	962.6	956.2	961.6	968.4	972.6
Georgia .....	581.1	582.9	584.0	586.2	587.1	588.0	590.8	588.9	590.0	595.3	602.1	594.8	593.8
Hawaii .....	112.1	111.6	111.3	110.8	111.3	111.4	112.0	111.1	111.1	112.9	117.5	113.1	112.4
Idaho .....	99.6	99.4	101.1	101.4	102.1	102.1	101.4	101.5	102.4	102.8	102.6	103.5	102.7
Illinois .....	806.2	804.1	803.8	801.2	803.4	804.1	802.4	806.8	813.2	813.5	806.5	808.1	806.7
Indiana .....	386.1	390.4	395.2	391.0	389.9	391.4	396.1	395.8	379.7	386.8	394.8	389.4	387.0
Iowa .....	233.4	234.6	236.8	237.8	237.5	238.6	238.0	237.4	239.5	238.2	240.1	239.6	237.0
Kansas .....	235.2	237.8	239.4	239.0	239.7	236.8	241.2	239.3	240.5	234.7	240.7	241.3	239.9
Kentucky .....	291.0	291.1	294.1	292.5	294.3	293.1	291.1	294.1	293.4	295.9	296.0	295.5	295.2
Louisiana .....	366.5	365.2	365.4	367.7	367.0	367.4	367.9	369.3	365.5	365.8	369.7	370.6	370.2
Maine .....	92.8	93.0	91.6	93.0	92.5	92.1	91.4	92.6	92.3	92.4	92.5	92.1	91.9
Maryland .....	416.0	414.8	420.4	420.4	419.8	420.3	419.5	422.4	421.9	423.6	435.5	434.1	435.9
Massachusetts .....	407.3	409.0	408.5	409.3	407.7	408.8	409.8	411.8	407.7	408.7	412.4	412.8	413.6
Michigan .....	643.9	650.0	654.7	655.1	652.3	655.5	655.5	665.3	661.3	657.3	662.1	657.4	657.2
Minnesota .....	380.1	379.9	379.7	381.1	382.6	380.2	380.9	382.0	380.4	385.8	386.2	387.0	384.5
Mississippi .....	220.3	220.3	220.2	221.7	220.7	221.3	222.2	223.1	227.9	225.4	225.1	226.7	226.6
Missouri .....	414.1	416.4	416.4	418.3	415.3	416.5	419.1	427.9	419.1	419.1	423.7	424.3	424.0
Montana .....	77.3	77.9	77.0	77.0	77.6	77.8	79.0	76.3	78.9	77.7	78.2	78.3	78.7
Nebraska .....	153.9	154.0	152.8	153.6	152.7	153.3	152.0	151.2	152.2	150.4	153.2	153.3	152.2
Nevada .....	108.0	109.2	108.4	109.5	109.3	110.5	109.5	111.6	112.4	113.7	114.6	113.9	112.8
New Hampshire .....	78.4	75.6	77.8	78.4	77.9	79.5	79.1	78.7	80.9	78.0	79.2	79.2	79.1
New Jersey .....	570.0	570.5	570.0	569.6	568.4	566.6	567.2	565.9	561.8	564.8	570.9	570.5	569.5
New Mexico .....	178.2	178.6	178.7	178.3	179.1	177.6	177.4	179.4	180.1	180.5	177.5	177.9	178.1
New York .....	1,374.7	1,373.3	1,368.3	1,370.6	1,371.4	1,368.0	1,372.8	1,369.6	1,361.2	1,361.4	1,369.5	1,373.1	1,370.0
North Carolina .....	589.0	589.0	587.5	593.0	592.3	594.5	595.2	590.7	584.7	631.5	601.0	602.3	602.8
North Dakota .....	70.4	70.5	70.9	71.1	70.9	70.9	70.7	72.4	71.8	70.0	71.3	70.5	70.7
Ohio .....	761.4	760.9	763.4	760.6	761.7	762.7	766.3	765.0	773.0	768.0	773.5	769.8	768.1
Oklahoma .....	277.6	277.3	277.6	278.7	280.4	280.1	282.0	279.3	278.1	281.4	285.9	283.1	284.2
Oregon .....	248.9	253.9	254.7	255.6	256.3	256.3	257.7	258.2	255.7	257.6	259.9	261.2	261.1
Pennsylvania .....	712.7	713.8	717.8	712.2	711.2	712.6	712.4	697.2	704.0	699.9	728.3	721.1	725.1
Rhode Island .....	63.8	64.8	65.1	65.3	64.7	65.8	66.2	65.8	65.1	64.2	63.9	63.6	64.2
South Carolina .....	290.9	300.0	303.4	303.7	304.2	304.1	303.9	314.9	298.8	303.3	304.5	305.4	305.7
South Dakota .....	70.1	70.1	69.9	69.8	70.7	70.5	70.7	70.1	70.3	70.0	70.2	69.9	71.1
Tennessee .....	383.9	383.6	385.6	385.6	385.4	385.1	385.0	394.5	389.8	385.8	397.4	400.7	399.7
Texas .....	1,495.8	1,496.7	1,490.8	1,495.1	1,502.0	1,507.7	1,507.2	1,500.3	1,505.5	1,507.0	1,524.6	1,525.9	1,527.2
Utah .....	174.3	174.8	175.0	175.7	177.5	178.2	178.1	178.1	177.9	177.7	179.5	179.7	180.0
Vermont .....	45.4	45.7	45.4	45.6	45.4	45.4	44.8	45.5	44.5	45.3	45.5	45.7	45.7
Virginia .....	598.6	598.5	595.7	596.7	597.2	597.8	597.9	599.7	600.2	600.8	604.5	603.9	603.2
Washington .....	456.3	460.3	458.3	457.5	457.0	459.5	457.7	460.3	465.5	467.7	460.1	462.4	460.9
West Virginia .....	140.9	140.8	139.3	140.2	139.9	139.8	150.8	138.5	137.7	141.8	142.6	141.4	141.7
Wisconsin .....	387.7	388.7	390.0	391.3	390.0	392.5	391.8	391.1	392.5	394.0	393.1	391.7	393.1
Wyoming .....	56.9	57.1	56.9	57.0	57.3	57.5	57.8	57.4	59.5	59.7	57.9	57.1	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										
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Dec.P
<b>Total private</b> .....	34.7	34.8	34.7	34.6	34.5	34.7	34.6	34.6	34.6	34.4	34.6	34.5	34.6
<b>Goods-producing</b> .....	41.4	41.6	41.4	41.0	40.8	41.1	41.0	41.1	41.1	40.8	41.1	40.9	41.2
<b>Mining</b> .....	44.9	45.4	44.4	43.8	44.1	44.6	43.8	44.8	43.8	43.2	43.8	43.5	43.2
<b>Construction</b> .....	39.0	39.8	39.2	38.5	38.7	38.6	38.4	39.2	39.1	38.4	39.1	38.8	39.7
<b>Manufacturing</b> .....	42.2	42.1	42.0	41.8	41.4	41.8	41.8	41.7	41.7	41.6	41.7	41.6	41.8
<i>Overtime hours</i> .....	4.9	4.9	4.8	4.8	4.5	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5
<b>Durable goods</b> .....	43.0	42.8	42.8	42.5	41.9	42.4	42.3	42.2	42.3	42.2	42.3	42.2	42.3
<i>Overtime hours</i> .....	5.2	5.2	5.1	5.0	4.6	4.8	4.8	4.8	4.8	4.7	4.6	4.6	4.6
Lumber and wood products .....	41.0	41.2	41.1	41.2	41.2	41.2	41.3	41.2	41.2	40.6	41.1	41.2	41.7
Furniture and fixtures .....	40.7	41.0	41.0	40.7	40.7	40.7	41.0	40.7	40.7	40.1	40.4	40.1	40.3
Stone, clay, and glass products .....	43.6	43.7	43.6	43.2	43.3	43.5	43.2	43.5	43.6	43.3	43.4	43.4	43.8
Primary metal industries .....	45.2	45.2	44.8	44.6	43.9	44.5	44.4	43.6	44.1	43.7	43.7	43.8	43.8
Blast furnaces and basic steel products .....	45.4	46.0	45.4	45.3	44.9	45.6	45.1	43.8	44.5	44.2	43.9	43.1	43.6
Fabricated metal products .....	42.9	42.7	42.7	42.4	41.8	42.6	42.5	42.4	42.3	42.3	42.3	42.1	42.4
Industrial machinery and equipment .....	43.7	43.6	43.4	43.3	42.6	43.0	43.2	43.0	43.1	42.7	42.7	42.3	41.9
Electronic and other electrical equipment .....	42.0	41.8	41.9	41.4	41.1	41.4	41.4	41.3	41.7	41.5	41.5	41.4	41.1
Transportation equipment .....	44.5	43.9	43.8	43.4	42.1	43.3	42.7	42.6	42.6	43.7	43.7	43.9	44.7
Motor vehicles and equipment .....	44.9	43.9	43.8	43.5	42.0	43.3	42.4	41.7	42.3	44.3	43.8	44.4	45.6
Instruments and related products .....	41.9	41.9	42.0	41.5	41.3	41.4	41.3	41.3	41.4	41.0	41.1	41.0	41.0
Miscellaneous manufacturing .....	40.6	40.4	40.4	40.5	40.1	40.0	40.0	40.0	40.1	39.6	39.7	39.4	39.5
<b>Nondurable goods</b> .....	41.0	41.1	40.9	40.8	40.7	41.0	40.9	41.0	40.9	40.8	40.9	40.8	40.9
<i>Overtime hours</i> .....	4.4	4.4	4.4	4.4	4.2	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3
Food and kindred products .....	41.6	41.8	41.5	41.5	41.3	41.8	41.7	42.0	41.5	41.7	41.5	41.7	42.2
Tobacco products .....	38.8	38.3	38.5	37.7	38.2	39.3	39.0	40.6	39.6	37.7	38.5	38.1	36.7
Textile mill products .....	41.7	41.8	41.5	41.2	41.0	41.3	41.1	41.0	41.0	40.4	41.1	40.8	40.8
Apparel and other textile products .....	37.5	37.4	37.4	37.2	37.7	37.4	37.4	37.4	37.5	37.3	37.3	37.3	37.3
Paper and allied products .....	43.7	43.6	43.4	43.4	43.0	43.5	43.6	43.5	43.3	43.6	43.5	43.5	43.3
Printing and publishing .....	38.6	38.5	38.5	38.4	38.2	38.4	38.2	38.4	38.5	38.1	38.2	38.1	38.1
Chemicals and allied products .....	43.2	43.5	43.4	43.4	43.1	43.1	43.2	43.0	43.3	43.2	43.3	43.0	42.6
Petroleum and coal products .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products .....	42.1	42.0	41.8	41.5	41.7	42.1	42.0	42.1	41.6	41.7	41.8	41.6	41.9
Leather and leather products .....	38.4	38.3	38.8	37.9	37.3	37.3	37.6	37.0	38.1	37.4	37.4	37.5	37.8
<b>Service-producing</b> .....	32.9	33.0	33.0	32.8	32.9	33.0	32.9	32.9	32.9	32.8	32.9	32.9	32.9
<b>Transportation and public utilities</b> .....	39.9	40.0	39.9	39.8	39.6	39.8	39.5	39.6	39.3	39.3	39.3	39.3	39.0
<b>Wholesale trade</b> .....	38.3	38.5	38.5	38.3	38.3	38.5	38.2	38.3	38.4	38.2	38.3	38.5	38.5
<b>Retail trade</b> .....	28.9	29.0	29.0	28.9	29.0	29.1	29.0	29.1	29.0	29.0	29.1	29.0	28.9
<b>Finance, insurance, and real estate</b> .....	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Services</b> .....	32.7	32.8	32.7	32.6	32.6	32.7	32.7	32.7	32.7	32.5	32.7	32.6	32.8

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

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

components, cannot be separated with sufficient precision.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.



**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**B-9. Indexes of aggregate weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group, seasonally adjusted**

(1982=100)

Industry	1997	1998											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>	Dec. <sup>P</sup>
<b>Total private</b> .....	143.6	144.6	144.4	143.8	144.0	144.9	144.8	145.2	145.3	144.9	145.8	145.7	146.5
<b>Goods-producing</b> .....	116.0	117.1	116.4	115.1	114.9	115.3	114.9	114.2	114.7	114.1	114.6	114.0	115.6
<b>Mining</b> .....	57.5	58.3	57.0	55.6	55.4	56.0	54.7	55.5	54.0	53.1	53.5	52.6	52.1
<b>Construction</b> .....	159.3	165.0	162.4	158.7	161.5	160.5	160.5	164.6	164.3	160.9	164.8	164.5	172.1
<b>Manufacturing</b> .....	110.6	110.6	110.3	109.7	108.7	109.4	109.0	107.2	108.0	108.0	107.8	107.2	107.5
<b>Durable goods</b> .....	114.6	114.6	114.5	113.7	112.2	113.1	112.7	109.9	111.8	111.7	111.6	110.8	111.1
Lumber and wood products .....	142.6	143.8	143.4	143.6	143.8	143.8	143.7	144.0	143.8	141.9	143.9	144.6	146.4
Furniture and fixtures .....	131.1	132.8	133.1	132.7	133.7	134.0	134.4	134.3	133.7	131.4	132.4	131.4	133.3
Stone, clay, and glass products .....	114.9	116.5	116.2	113.9	114.1	114.7	114.4	115.2	116.0	115.4	115.7	116.5	118.1
Primary metal industries .....	96.3	96.6	95.8	95.5	93.7	94.6	94.4	91.1	93.3	92.3	91.6	90.7	90.5
Blast furnaces and basic steel products .....	73.8	75.6	74.6	74.4	73.4	74.5	73.7	71.2	71.9	71.0	70.1	67.3	68.9
Fabricated metal products .....	119.9	119.8	120.1	119.1	117.5	119.2	118.4	117.0	117.5	117.7	117.5	116.6	117.3
Industrial machinery and equipment .....	111.7	111.7	111.3	111.1	109.1	110.1	110.9	109.8	110.0	108.7	108.4	106.7	105.2
Electronic and other electrical equipment .....	113.0	112.8	112.8	111.3	110.1	110.7	110.3	108.7	109.1	108.9	108.0	106.6	106.0
Transportation equipment .....	131.8	130.0	130.1	128.7	124.6	127.0	124.7	112.2	122.8	126.5	127.1	126.5	128.4
Motor vehicles and equipment .....	171.2	166.8	166.6	164.6	158.9	161.8	157.2	129.0	153.5	161.9	161.1	161.6	165.5
Instruments and related products .....	76.9	77.4	77.6	76.8	76.6	76.6	76.1	76.1	75.9	75.2	75.0	74.5	74.5
Miscellaneous manufacturing .....	103.9	103.8	103.8	104.1	103.4	102.0	101.6	102.0	101.5	100.3	98.6	97.5	98.1
<b>Nondurable goods</b> .....	105.1	105.2	104.6	104.3	104.0	104.4	104.0	103.5	102.8	103.0	102.6	102.2	102.6
Food and kindred products .....	118.4	119.2	118.5	118.5	118.3	119.9	119.3	118.9	116.8	118.9	118.2	119.5	121.4
Tobacco products .....	61.5	60.7	61.0	59.7	62.5	62.3	59.9	60.3	58.8	57.9	59.1	58.5	56.4
Textile mill products .....	89.9	89.6	88.6	87.8	87.4	87.7	86.9	85.7	85.0	84.3	85.2	83.6	82.7
Apparel and other textile products .....	72.2	71.6	70.8	70.2	70.0	68.8	68.5	68.3	67.5	67.0	65.2	64.3	63.9
Paper and allied products .....	111.6	111.6	111.1	111.1	109.9	110.7	110.5	109.4	109.1	109.9	109.2	108.6	108.3
Printing and publishing .....	126.7	126.3	126.0	125.3	124.7	125.6	125.0	125.4	125.4	124.1	124.5	123.5	123.0
Chemicals and allied products .....	102.0	103.1	103.2	103.4	102.7	102.8	103.1	102.6	102.8	102.7	102.8	101.9	101.5
Petroleum and coal products .....	74.2	75.0	71.9	73.6	73.1	73.9	73.1	75.5	73.8	73.9	73.6	74.1	77.3
Rubber and misc. plastics products .....	148.2	148.4	147.9	147.2	148.1	148.9	148.4	147.0	146.6	147.3	147.1	146.8	148.4
Leather and leather products .....	38.9	38.3	38.7	37.3	36.7	36.1	35.8	34.7	35.1	33.9	33.9	33.4	33.1
<b>Service-producing</b> .....	156.0	156.9	157.0	156.7	157.0	158.2	158.2	159.1	159.0	158.7	159.7	159.9	160.3
<b>Transportation and public utilities</b> .....	131.0	131.5	131.1	130.9	130.2	131.5	130.5	131.4	131.2	131.2	131.6	131.9	131.4
<b>Wholesale trade</b> .....	126.9	128.0	128.2	127.6	127.9	128.8	127.9	128.6	129.0	128.7	129.1	129.9	130.0
<b>Retail trade</b> .....	139.2	139.8	139.9	139.3	139.8	141.1	140.7	141.9	141.3	141.5	142.0	141.7	141.5
<b>Finance, insurance, and real estate</b> .....	130.9	132.5	133.4	133.6	134.2	134.9	134.8	136.1	136.2	135.6	136.6	137.6	137.0
<b>Services</b> .....	191.0	192.1	192.0	191.9	192.3	193.7	194.5	195.2	195.2	194.6	196.4	196.3	197.9

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

P = preliminary.  
NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

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

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

Industry	Millions of hours (annual rate) <sup>1</sup>			Percent change		
	Oct. 1998 <sup>r</sup>	Nov. 1998 <sup>r</sup>	Dec. 1998 <sup>p</sup>	Dec. 1997 to Dec. 1998 <sup>p</sup>	Oct. 1998 to Nov. 1998 <sup>r</sup>	Nov. 1998 To Dec. 1998 <sup>p</sup>
Total .....	231,364	232,159	233,835	2.4	0.3	0.7
Private sector .....	194,593	194,856	195,681	2.4	.1	.4
Mining .....	1,279	1,266	1,250	-9.7	-1.0	-1.2
Construction .....	12,224	12,215	12,713	7.9	-1	4.1
Manufacturing .....	40,422	40,232	40,292	-1.9	-5	.2
Durable goods .....	24,282	24,134	24,162	-2.1	-6	.1
Nondurable goods .....	16,140	16,097	16,131	-1.6	-3	.2
Transportation and public utilities .....	13,539	13,546	13,554	1.1	.0	.1
Wholesale trade .....	13,670	13,764	13,778	2.8	.7	.1
Retail trade .....	34,182	34,162	34,124	2.1	-1	-1
Finance, insurance, and real estate .....	14,019	14,132	14,092	4.6	.8	-3
Services .....	65,258	65,540	65,878	4.2	.4	.5
Government .....	36,772	37,303	38,154	2.8	1.4	2.3

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

<sup>p</sup> = preliminary.

<sup>r</sup> = revised.

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

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

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

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

**ESTABLISHMENT DATA  
EARNINGS  
SEASONALLY ADJUSTED**

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

Industry	1997		1998										
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>	Dec. <sup>P</sup>
Average hourly earnings													
<b>Total private</b> (in current dollars) .....	\$12.50	\$12.54	\$12.59	\$12.63	\$12.70	\$12.73	\$12.76	\$12.79	\$12.85	\$12.87	\$12.90	\$12.93	\$12.98
<b>Goods-producing</b> .....	14.15	14.16	14.21	14.25	14.25	14.27	14.28	14.31	14.39	14.39	14.43	14.46	14.50
Mining .....	16.46	16.47	16.76	16.82	16.72	16.77	16.73	16.88	17.10	17.15	17.20	17.35	17.32
Construction .....	16.34	16.27	16.34	16.40	16.45	16.46	16.51	16.64	16.67	16.57	16.69	16.76	16.81
Manufacturing .....	13.37	13.38	13.42	13.46	13.44	13.47	13.47	13.42	13.52	13.57	13.57	13.58	13.58
Excluding overtime <sup>2</sup> .....	12.63	12.66	12.69	12.73	12.76	12.78	12.76	12.71	12.81	12.90	12.88	12.89	12.89
<b>Service-producing</b> .....	11.95	12.00	12.06	12.10	12.19	12.23	12.26	12.30	12.35	12.38	12.41	12.44	12.49
Transportation and public utilities .....	15.16	15.21	15.25	15.27	15.32	15.31	15.29	15.33	15.35	15.42	15.42	15.45	15.56
Wholesale trade .....	13.71	13.75	13.81	13.84	13.88	14.00	13.98	14.07	14.16	14.14	14.19	14.24	14.26
Retail trade .....	8.51	8.56	8.59	8.64	8.70	8.72	8.73	8.78	8.83	8.86	8.85	8.85	8.90
Finance, insurance, and real estate .....	13.66	13.72	13.83	13.85	14.00	14.03	14.07	14.10	14.16	14.17	14.24	14.34	14.36
Services .....	12.50	12.54	12.60	12.65	12.76	12.81	12.87	12.90	12.95	12.99	13.03	13.05	13.09
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	7.63	7.66	7.69	7.72	7.74	7.73	7.75	7.75	7.78	7.79	7.79	7.79	(4)
<b>Goods-producing</b> .....	8.64	8.64	8.68	8.70	8.68	8.67	8.67	8.67	8.72	8.71	8.71	8.72	(4)
<b>Service-producing</b> .....	7.30	7.33	7.36	7.39	7.43	7.43	7.44	7.45	7.48	7.49	7.49	7.50	(4)
Average weekly earnings													
<b>Total private</b> (in current dollars) .....	433.75	436.39	436.87	437.00	438.15	441.73	441.50	442.53	444.61	442.73	446.34	446.09	449.11
<b>Goods-producing</b> .....	585.81	589.06	588.29	584.25	581.40	586.50	585.48	588.14	591.43	587.11	593.07	591.41	597.40
Mining .....	739.05	747.74	744.14	736.72	737.35	747.94	732.77	756.22	748.98	740.88	753.36	754.73	748.22
Construction .....	637.26	647.55	640.53	631.40	636.62	635.36	633.98	652.29	651.80	636.29	652.58	650.29	667.36
Manufacturing .....	564.21	563.30	563.64	562.63	556.42	563.05	563.05	559.61	563.78	564.51	565.87	564.93	567.64
<b>Service-producing</b> .....	393.16	396.00	397.98	396.88	401.05	403.59	403.35	404.67	406.32	406.06	408.29	409.28	410.92
Transportation and public utilities .....	604.88	608.40	608.48	607.75	606.67	609.34	603.96	607.07	603.26	606.01	606.01	607.19	606.84
Wholesale trade .....	525.09	529.38	531.69	530.07	531.60	539.00	534.04	538.88	543.74	540.15	543.48	548.24	549.01
Retail trade .....	245.94	248.24	249.11	249.70	252.30	253.75	253.17	255.50	256.07	256.94	257.54	256.65	257.21
Finance, insurance, and real estate .....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Services .....	408.75	411.31	412.02	412.39	415.98	418.89	420.85	421.83	423.47	422.18	426.08	425.43	429.35
<b>Total private</b> (in constant (1982) dollars) <sup>3</sup> .....	264.80	266.42	266.71	266.95	267.00	268.37	268.06	268.20	269.30	268.00	269.37	268.89	(4)
<b>Goods-producing</b> .....	357.64	359.62	359.15	356.90	354.30	356.32	355.48	356.45	358.23	355.39	357.92	356.49	(4)
<b>Service-producing</b> .....	240.02	241.76	242.97	242.44	244.39	245.19	244.90	245.25	246.11	245.80	246.40	246.70	(4)

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

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

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

<sup>4</sup> Not available.

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

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1994 forward are subject to revision.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Total</b> .....		124,965	125,123	127,504	127,820	127,976	-	-	-	-	-
<b>Total private</b> .....		104,869	105,077	107,250	107,372	107,575	86,024	86,161	87,816	87,908	88,024
<b>Mining</b> .....		594	591	570	563	556	450	447	433	427	421
Metal mining .....	10	52.9	51.8	50.4	50.0	49.8	40.4	39.4	38.2	37.7	-
Iron ores .....	101	8.4	8.4	8.2	8.2	-	7.0	6.9	6.8	6.8	-
Copper ores .....	102	16.0	16.0	14.6	14.5	-	12.0	12.0	11.0	10.8	-
Coal mining .....	12	94.3	93.9	89.0	90.1	89.4	77.3	77.0	73.2	74.0	-
Bituminous coal and lignite mining .....	122	88.7	88.5	83.2	84.3	-	72.6	72.4	68.2	69.0	-
Oil and gas extraction .....	13	338.6	339.8	319.3	313.5	310.5	249.7	251.2	236.6	232.3	-
Crude petroleum and natural gas .....	131	140.6	141.0	133.2	131.4	-	81.1	81.5	80.2	79.3	-
Oil and gas field services .....	138	193.1	193.9	181.7	177.7	-	164.5	165.6	152.6	148.9	-
Nonmetallic minerals, except fuels .....	14	108.2	105.1	111.3	109.3	106.3	82.1	79.3	84.8	83.3	-
Crushed and broken stone .....	142	41.9	40.6	42.9	42.5	-	32.7	31.5	33.5	33.0	-
Sand and gravel .....	144	36.2	34.5	38.3	37.0	-	-	-	-	-	-
Chemical and fertilizer minerals .....	147	11.5	11.6	11.5	11.4	-	-	-	-	-	-
<b>Construction</b> .....		5,879	5,704	6,269	6,186	6,047	4,580	4,403	4,895	4,808	4,667
General building contractors .....	15	1,355.8	1,343.5	1,452.2	1,437.2	1,425.3	959.5	945.7	1,023.1	1,007.9	-
Residential building construction .....	152	703.1	696.8	762.9	755.8	-	479.9	472.8	519.0	511.1	-
Operative builders .....	153	26.9	26.6	29.1	28.5	-	10.8	10.7	11.2	11.1	-
Nonresidential building construction .....	154	625.8	620.1	660.2	652.9	-	468.8	462.2	492.9	485.7	-
Heavy construction, except building .....	16	823.4	757.6	905.9	869.0	813.9	688.2	624.2	769.5	733.3	-
Highway and street construction .....	161	250.7	208.4	288.2	262.7	-	204.8	163.4	241.6	216.7	-
Heavy construction, except highway .....	162	572.7	549.2	617.7	606.3	-	483.4	460.8	527.9	516.6	-
Special trade contractors .....	17	3,699.8	3,602.6	3,911.1	3,880.1	3,807.9	2,932.2	2,833.0	3,102.4	3,067.2	-
Plumbing, heating, and air conditioning .....	171	802.7	804.6	838.9	836.4	-	593.5	594.7	620.5	617.2	-
Painting and paper hanging .....	172	206.8	195.6	215.7	210.5	-	172.2	160.6	179.6	174.6	-
Electrical work .....	173	709.2	708.5	747.4	747.4	-	565.2	564.7	593.3	592.1	-
Masonry, stonework, and plastering .....	174	487.3	474.8	531.2	532.9	-	420.7	407.7	461.8	462.5	-
Carpentry and floor work .....	175	257.2	259.9	283.7	280.9	-	197.4	198.6	215.3	213.0	-
Roofing, siding, and sheet metal work .....	176	250.0	238.1	264.5	259.9	-	199.4	186.9	212.0	206.9	-
<b>Manufacturing</b> .....		18,814	18,817	18,683	18,621	18,580	13,023	13,016	12,867	12,814	12,785
<b>Durable goods</b> .....		11,126	11,149	11,066	11,038	11,021	7,649	7,664	7,570	7,550	7,546
Lumber and wood products .....	24	799.3	797.2	815.3	812.0	808.6	659.2	656.7	670.1	667.5	663.2
Logging .....	241	83.8	82.3	82.0	79.9	-	67.3	66.2	64.6	63.1	-
Sawmills and planing mills .....	242	181.8	182.3	180.1	179.6	-	158.5	158.9	157.0	156.6	-
Sawmills and planing mills, general .....	2421	143.4	143.9	140.3	139.4	-	124.7	125.0	121.9	121.1	-
Hardwood dimension and flooring mills .....	2426	36.5	36.4	37.5	37.7	-	32.2	32.2	33.2	33.4	-
Millwork, plywood, and structural members .....	243	296.1	296.5	312.2	312.0	-	238.5	237.7	251.3	251.2	-
Millwork .....	2431	117.0	117.9	123.1	122.7	-	90.5	90.3	95.6	95.5	-
Wood kitchen cabinets .....	2434	82.7	83.0	88.6	88.9	-	67.2	67.4	71.9	72.1	-
Hardwood veneer and plywood .....	2435	28.6	28.6	29.2	29.0	-	24.3	24.3	24.7	24.6	-
Softwood veneer and plywood .....	2436	28.9	28.6	28.8	29.0	-	26.6	26.2	26.1	26.2	-
Wood containers .....	244	54.0	54.0	52.7	52.0	-	46.1	46.3	44.9	44.6	-
Wood buildings and mobile homes .....	245	93.8	92.5	97.8	98.0	-	75.4	74.1	78.6	78.3	-
Mobile homes .....	2451	71.3	70.1	75.1	75.1	-	59.9	58.6	63.0	62.8	-
Miscellaneous wood products .....	249	89.8	89.6	90.5	90.5	-	73.4	73.5	73.7	73.7	-
Furniture and fixtures .....	25	515.6	517.8	525.8	526.6	529.8	410.1	412.2	418.4	419.0	422.8
Household furniture .....	251	278.7	280.0	281.7	282.1	-	235.1	236.6	238.4	238.6	-
Wood household furniture .....	2511	124.8	124.4	126.4	126.9	-	108.2	108.0	109.7	109.9	-
Upholstered household furniture .....	2512	88.4	88.8	89.6	89.8	-	74.5	74.9	76.1	76.4	-
Metal household furniture .....	2514	19.4	20.8	18.2	18.4	-	16.1	17.4	14.9	15.1	-
Mattresses and bedsprings .....	2515	34.6	34.9	35.2	34.9	-	26.7	27.1	27.2	26.9	-

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Furniture and fixtures—Continued											
Office furniture .....	252	64.7	65.1	65.6	65.7	-	48.0	48.3	47.7	47.8	-
Public building and related furniture .....	253	43.6	43.9	45.9	46.3	-	34.3	34.5	35.5	36.1	-
Partitions and fixtures .....	254	88.6	88.6	90.7	90.7	-	66.1	66.2	68.2	68.1	-
Miscellaneous furniture and fixtures .....	259	40.0	40.2	41.9	41.8	-	26.6	26.6	28.6	28.4	-
Stone, clay, and glass products .....	32	557.4	550.0	572.6	570.7	565.1	436.9	429.4	449.6	447.8	441.8
Flat glass .....	321	17.0	16.8	16.5	16.5	-	13.8	13.6	13.0	13.1	-
Glass and glassware, pressed or blown .....	322	72.7	72.8	71.3	71.2	-	60.4	60.3	58.8	58.7	-
Glass containers .....	3221	25.8	26.0	25.6	25.4	-	23.1	23.2	22.5	22.5	-
Pressed and blown glass, nec .....	3229	46.9	46.8	45.7	45.8	-	37.3	37.1	36.3	36.2	-
Products of purchased glass .....	323	64.2	63.4	64.6	64.8	-	51.0	49.9	50.1	50.0	-
Cement, hydraulic .....	324	17.3	17.2	17.5	17.5	-	13.2	13.1	13.1	13.1	-
Structural clay products .....	325	33.6	33.4	33.1	33.1	-	26.3	26.0	25.4	25.4	-
Pottery and related products .....	326	38.9	38.6	38.2	38.1	-	30.6	30.4	29.9	29.9	-
Concrete, gypsum, and plaster products .....	327	219.9	213.9	231.7	230.0	-	169.8	164.1	180.8	179.2	-
Concrete block and brick .....	3271	18.4	17.8	18.6	18.6	-	11.9	11.4	12.0	12.0	-
Concrete products, nec .....	3272	73.6	72.9	78.1	78.0	-	56.5	55.7	60.5	60.5	-
Ready-mixed concrete .....	3273	110.0	105.2	116.9	115.4	-	87.3	82.8	94.0	92.5	-
Misc. nonmetallic mineral products .....	329	78.7	79.0	80.3	80.0	-	60.6	60.8	63.3	62.9	-
Abrasive products .....	3291	20.0	20.3	20.2	20.0	-	15.9	16.1	16.0	15.9	-
Asbestos products .....	3292	2.5	2.5	2.5	2.5	-	2.1	2.1	2.2	2.1	-
Mineral wool .....	3296	24.2	24.3	24.6	24.7	-	-	-	-	-	-
Primary metal industries .....	33	718.0	720.1	705.3	700.7	700.0	563.0	564.5	551.6	547.5	547.7
Blast furnaces and basic steel products .....	331	236.3	236.2	229.5	226.5	227.6	182.3	182.4	176.8	174.4	176.1
Blast furnaces and steel mills .....	3312	163.6	163.1	158.3	155.9	-	127.4	127.2	123.1	121.2	-
Steel pipe and tubes .....	3317	28.5	28.7	28.3	28.2	-	21.4	21.6	21.4	21.3	-
Iron and steel foundries .....	332	133.0	133.5	130.9	130.2	-	109.3	109.8	107.3	106.7	-
Gray and ductile iron foundries .....	3321	81.5	81.7	79.7	79.2	-	67.8	67.9	66.0	65.6	-
Malleable iron foundries .....	3322	4.7	4.7	4.6	4.6	-	3.6	3.7	3.5	3.4	-
Steel foundries, nec .....	3325	27.9	28.0	28.5	28.5	-	22.8	22.9	23.4	23.4	-
Primary nonferrous metals .....	333	39.4	39.4	37.7	37.5	-	30.5	30.4	29.2	29.0	-
Primary aluminum .....	3334	22.2	22.2	21.6	21.6	-	18.0	17.9	17.5	17.5	-
Nonferrous rolling and drawing .....	335	168.6	169.3	168.0	167.7	-	129.7	130.1	128.8	128.3	-
Copper rolling and drawing .....	3351	22.3	22.6	22.2	22.1	-	17.7	18.0	18.1	18.1	-
Aluminum sheet, plate, and foil .....	3353	21.3	21.0	19.8	19.8	-	15.8	15.7	14.5	14.5	-
Nonferrous wire drawing and insulating .....	3357	72.1	72.5	72.4	72.6	-	55.2	55.2	54.6	54.5	-
Nonferrous foundries (castings) .....	336	93.1	93.6	91.7	91.2	-	75.9	76.3	74.5	74.2	-
Aluminum foundries .....	3365	25.9	25.9	26.3	26.0	-	21.3	21.3	21.7	21.5	-
Fabricated metal products .....	34	1,493.9	1,497.8	1,487.0	1,486.3	1,485.5	1,127.9	1,131.3	1,120.0	1,119.7	1,118.7
Metal cans and shipping containers .....	341	37.2	37.2	36.3	36.2	-	31.7	31.7	30.7	30.6	-
Metal cans .....	3411	29.8	29.7	29.2	29.2	-	25.7	25.6	25.2	25.2	-
Cutlery, handtools, and hardware .....	342	126.5	126.7	124.8	124.5	-	97.0	97.3	95.9	95.7	-
Hand and edge tools, and blades and handsaws .....	3423.5	43.2	43.3	42.4	42.3	-	33.4	33.3	32.8	32.9	-
Hardware, nec .....	3429	70.1	70.4	69.3	69.1	-	53.6	54.2	53.0	52.8	-
Plumbing and heating, except electric .....	343	60.0	60.3	59.3	59.9	-	43.1	43.2	42.1	42.7	-
Plumbing fixture fittings and trim .....	3432	23.8	24.0	23.9	24.4	-	17.2	17.4	17.3	17.9	-
Heating equipment, except electric .....	3433	21.8	21.8	21.1	21.1	-	15.0	14.8	13.9	13.9	-
Fabricated structural metal products .....	344	456.4	455.7	459.4	459.2	-	334.3	334.1	336.8	336.2	-
Fabricated structural metal .....	3441	79.4	78.8	80.7	81.1	-	58.2	57.7	59.5	59.6	-
Metal doors, sash, and trim .....	3442	79.6	78.7	80.8	80.8	-	58.9	58.0	60.1	60.1	-
Fabricated plate work (boiler shops) .....	3443	101.2	101.8	98.6	97.8	-	73.0	73.7	70.7	69.6	-
Sheet metal work .....	3444	121.6	121.7	123.4	123.1	-	93.1	93.4	94.5	94.5	-
Architectural metal work .....	3446	31.2	31.1	32.4	32.8	-	22.7	22.7	23.9	24.2	-
Screw machine products, bolts, etc .....	345	106.8	107.6	107.1	107.1	-	84.0	84.5	83.8	83.9	-
Screw machine products .....	3451	55.8	56.3	55.8	55.9	-	45.4	45.7	45.5	45.6	-
Bolts, nuts, rivets, and washers .....	3452	51.0	51.3	51.3	51.2	-	38.6	38.8	38.3	38.3	-
Metal forgings and stampings .....	346	258.9	260.6	259.0	260.1	-	205.8	206.9	204.2	205.2	-
Iron and steel forgings .....	3462	32.8	33.0	33.3	33.3	-	25.1	25.4	25.2	25.2	-
Automotive stampings .....	3465	115.7	116.9	114.7	115.8	-	95.3	95.8	93.6	94.8	-
Metal stampings, nec .....	3469	97.2	97.5	97.6	97.5	-	75.5	75.7	75.1	74.8	-

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Metal services, nec .....	347	140.7	140.9	138.5	138.1	—	113.5	113.8	111.6	111.5	—
Plating and polishing .....	3471	86.4	86.8	84.7	84.6	—	70.4	71.0	69.1	69.1	—
Metal coating and allied services .....	3479	54.3	54.1	53.8	53.5	—	43.1	42.8	42.5	42.4	—
Ordnance and accessories, nec .....	348	41.8	41.8	39.8	39.5	—	23.3	23.4	23.3	23.0	—
Ammunition, except for small arms, nec .....	3483	22.2	22.3	21.1	21.0	—	10.3	10.3	9.7	9.8	—
Miscellaneous fabricated metal products .....	349	265.6	267.0	262.8	261.7	—	195.2	196.4	191.6	190.9	—
Valves and pipe fittings, nec .....	3494	26.2	26.2	24.6	24.6	—	19.4	19.3	17.7	17.6	—
Misc. fabricated wire products .....	3496	57.0	57.1	57.4	57.0	—	42.9	43.0	43.2	43.1	—
Industrial machinery and equipment .....	35	2,186.5	2,198.5	2,164.0	2,156.1	2,153.3	1,377.9	1,388.0	1,367.5	1,363.5	1,363.5
Engines and turbines .....	351	82.8	82.9	83.3	83.2	—	52.3	52.2	54.3	54.4	—
Turbines and turbine generator sets .....	3511	24.3	24.3	23.4	23.3	—	13.7	13.8	13.1	13.0	—
Internal combustion engines, nec .....	3519	58.5	58.6	59.9	59.9	—	38.6	38.4	41.2	41.4	—
Farm and garden machinery .....	352	102.9	105.7	99.0	96.4	—	74.9	77.5	71.0	68.8	—
Farm machinery and equipment .....	3523	78.0	79.1	75.6	72.6	—	56.6	57.6	53.7	51.0	—
Construction and related machinery .....	353	249.6	251.8	251.5	251.1	—	163.4	164.9	162.8	162.3	—
Construction machinery .....	3531	90.3	91.1	91.6	91.4	—	61.7	62.4	61.9	62.2	—
Mining machinery .....	3532	17.1	17.2	16.8	16.7	—	10.3	10.4	9.9	9.9	—
Oil and gas field machinery .....	3533	50.7	51.2	49.3	48.2	—	34.6	34.8	33.2	31.7	—
Conveyors and conveying equipment .....	3535	40.9	41.4	41.9	42.4	—	22.8	23.0	22.6	22.8	—
Industrial trucks and tractors .....	3537	31.6	31.8	32.5	33.0	—	22.0	22.1	22.6	23.1	—
Metalworking machinery .....	354	352.1	352.8	345.1	344.8	—	251.1	252.7	245.7	246.0	—
Machine tools, metal cutting types .....	3541	42.2	42.9	41.9	41.9	—	26.6	27.3	26.4	26.3	—
Machine tools, metal forming types .....	3542	18.0	18.0	17.8	17.7	—	11.3	11.4	11.2	11.1	—
Special dies, tools, jigs, and fixtures .....	3544	169.4	169.9	166.2	166.5	—	129.7	130.4	126.3	126.8	—
Machine tool accessories .....	3545	53.8	53.6	53.3	53.3	—	38.2	38.1	38.0	38.0	—
Power driven handtools .....	3546	20.9	20.6	20.0	19.8	—	14.4	14.3	14.4	14.4	—
Special industry machinery .....	355	184.6	185.1	177.9	177.3	—	101.0	101.4	97.9	98.1	—
Textile machinery .....	3552	15.2	15.1	14.9	14.8	—	9.9	10.0	9.7	9.6	—
Printing trades machinery .....	3555	23.0	23.1	23.0	23.0	—	13.0	13.2	12.9	13.0	—
Food products machinery .....	3556	25.3	25.3	24.5	24.6	—	15.1	14.9	14.6	14.7	—
General industrial machinery .....	356	264.9	266.4	263.0	262.2	—	169.5	170.4	167.3	166.7	—
Pumps and pumping equipment .....	3561	30.4	30.5	29.9	29.9	—	17.6	17.7	17.4	17.3	—
Ball and roller bearings .....	3562	40.5	40.6	41.0	40.7	—	31.6	31.6	31.6	31.4	—
Air and gas compressors .....	3563	26.4	26.4	26.6	26.4	—	15.3	15.3	14.9	14.6	—
Blowers and fans .....	3564	35.3	35.5	35.5	35.5	—	23.8	24.0	24.6	24.7	—
Speed changers, drives, and gears .....	3566	18.1	18.3	18.2	18.2	—	13.2	13.3	13.3	13.3	—
Power transmission equipment, nec .....	3568	22.2	22.3	21.5	21.3	—	15.4	15.6	15.1	15.0	—
Computer and office equipment .....	357	378.7	380.7	370.9	368.2	365.6	143.2	144.4	144.2	144.2	—
Electronic computers .....	3571	198.5	199.6	192.2	190.3	—	67.5	68.6	71.0	71.7	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	61.0	61.2	62.8	62.0	—	24.3	24.1	24.3	23.6	—
Refrigeration and service machinery .....	358	200.8	200.0	199.4	199.4	—	143.2	143.0	143.5	142.8	—
Refrigeration and heating equipment .....	3585	138.2	137.5	135.8	136.7	—	104.0	103.8	102.9	103.1	—
Misc. industrial and commercial machinery .....	359	370.1	373.1	373.9	373.5	—	279.3	281.5	280.8	280.2	—
Carburetors, pistons, rings, valves .....	3592	22.7	22.9	23.4	23.1	—	18.1	18.3	18.8	18.5	—
Scales, balances, and industrial machinery, nec .....	3596,9	300.2	302.5	301.8	301.8	—	231.8	233.4	231.5	231.2	—
Electronic and other electrical equipment .....	36	1,714.9	1,720.5	1,678.6	1,674.3	1,672.6	1,086.5	1,092.7	1,049.1	1,043.6	1,047.5
Electric distribution equipment .....	361	83.3	82.0	83.2	83.2	—	56.5	55.3	55.1	55.0	—
Transformers, except electronic .....	3612	40.2	39.6	38.9	38.7	—	27.6	27.0	25.3	25.2	—
Switchgear and switchboard apparatus .....	3613	43.1	42.4	44.3	44.5	—	28.9	28.3	29.8	29.8	—
Electrical industrial apparatus .....	362	153.5	154.2	151.0	150.7	—	107.1	107.2	104.3	104.0	—
Motors and generators .....	3621	76.1	76.6	74.8	74.8	—	59.2	59.3	57.6	57.2	—
Relays and industrial controls .....	3625	57.0	57.1	55.5	55.3	—	33.1	33.1	32.0	32.2	—
Household appliances .....	363	115.3	115.3	115.0	115.0	—	90.9	91.0	92.3	92.6	—
Household refrigerators and freezers .....	3632	23.2	23.3	23.4	23.5	—	17.9	18.0	18.8	19.0	—
Household laundry equipment .....	3633	17.3	17.4	18.0	18.0	—	13.7	13.8	14.9	15.1	—
Electric housewares and fans .....	3634	27.1	26.3	25.5	25.0	—	20.7	20.0	19.3	18.8	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Electronic and other electrical equipment—Continued											
Electric lighting and wiring equipment .....	364	182.5	183.1	181.4	181.4	—	130.8	131.1	130.1	129.5	—
Electric lamps .....	3641	21.8	22.1	20.5	20.4	—	16.9	17.1	16.4	16.3	—
Current-carrying wiring devices .....	3643	62.8	62.9	62.0	61.7	—	41.5	41.5	40.8	40.6	—
Noncurrent-carrying wiring devices .....	3644	18.0	18.0	18.4	18.6	—	13.6	13.5	13.9	13.9	—
Residential lighting fixtures .....	3645	22.2	21.5	21.4	21.2	—	16.5	16.1	16.3	16.0	—
Household audio and video equipment .....	365	79.5	79.5	78.4	79.0	—	51.2	51.6	50.1	50.5	—
Household audio and video equipment .....	3651	53.7	53.8	52.7	53.2	—	31.6	31.8	30.8	31.1	—
Communications equipment .....	366	278.1	278.8	272.0	271.4	—	133.2	133.6	126.0	124.8	—
Telephone and telegraph apparatus .....	3661	122.5	123.1	125.9	123.9	—	60.2	60.0	57.8	55.9	—
Electronic components and accessories .....	367	672.8	677.6	652.8	650.1	648.6	408.4	413.9	388.2	385.1	—
Electron tubes .....	3671	22.8	22.9	21.8	21.7	—	16.8	16.9	15.8	15.9	—
Semiconductors and related devices .....	3674	288.7	291.3	279.6	278.5	—	131.2	134.1	122.8	120.9	—
Electronic components, nec .....	3679	148.8	149.6	145.0	144.2	—	102.5	103.6	98.7	97.8	—
Misc. electrical equipment and supplies .....	369	149.9	150.0	144.8	143.5	—	108.4	109.0	103.0	102.1	—
Storage batteries .....	3691	26.6	26.5	25.6	25.5	—	20.8	20.7	20.0	20.0	—
Engine electrical equipment .....	3694	66.5	66.9	65.2	63.9	—	52.3	52.8	49.6	48.8	—
Transportation equipment .....	37	1,882.1	1,890.2	1,882.0	1,882.5	1,884.3	1,285.5	1,289.5	1,248.6	1,250.6	1,252.3
Motor vehicles and equipment .....	371	1,006.6	1,010.4	997.6	999.3	1,000.1	798.0	799.1	758.3	761.6	762.8
Motor vehicles and car bodies .....	3711	361.5	361.4	357.1	357.5	—	280.5	278.2	256.2	257.3	—
Truck and bus bodies .....	3713	41.0	41.4	42.3	42.7	—	32.7	32.9	33.4	33.7	—
Motor vehicle parts and accessories .....	3714	549.1	551.8	538.4	539.3	—	439.9	442.3	420.1	422.1	—
Truck trailers .....	3715	34.9	35.9	38.7	38.7	—	28.4	29.3	31.1	31.1	—
Aircraft and parts .....	372	518.7	521.6	522.4	522.0	520.8	264.6	265.7	261.6	261.5	—
Aircraft .....	3721	272.9	274.8	271.8	271.0	—	117.0	117.8	114.5	114.4	—
Aircraft engines and engine parts .....	3724	101.3	101.5	103.6	103.6	—	54.8	54.6	52.2	52.1	—
Aircraft parts and equipment, nec .....	3728	144.5	145.3	147.0	147.4	—	92.8	93.3	94.9	95.0	—
Ship and boat building and repairing .....	373	156.3	157.3	162.6	162.4	—	117.8	119.7	123.6	123.6	—
Ship building and repairing .....	3731	99.0	99.7	100.5	100.4	—	70.1	71.7	72.3	72.3	—
Boat building and repairing .....	3732	57.3	57.6	62.1	62.0	—	47.7	48.0	51.3	51.3	—
Railroad equipment .....	374	33.4	33.6	34.7	34.7	—	25.1	25.3	25.4	25.1	—
Guided missiles, space vehicles, and parts .....	376	91.1	91.3	86.8	86.8	—	24.5	24.5	22.6	22.7	—
Guided missiles and space vehicles .....	3761	62.9	63.1	60.4	60.2	—	15.4	15.4	14.4	14.2	—
Miscellaneous transportation equipment .....	379	52.9	53.0	55.2	54.5	—	38.5	38.6	41.1	39.8	—
Travel trailers and campers .....	3792	22.0	22.3	23.8	23.1	—	18.5	18.7	20.1	19.4	—
Instruments and related products .....	38	867.3	868.7	849.8	845.7	843.5	427.4	429.1	426.5	424.2	425.7
Search and navigation equipment .....	381	161.3	161.3	158.1	156.7	—	42.9	43.0	44.3	43.8	—
Measuring and controlling devices .....	382	300.4	301.3	296.0	293.9	—	153.6	154.4	150.9	149.5	—
Environmental controls .....	3822	40.6	40.4	38.9	38.8	—	27.4	27.3	27.1	27.0	—
Process control instruments .....	3823	66.0	66.2	64.8	64.3	—	33.6	34.1	32.6	32.1	—
Instruments to measure electricity .....	3825	76.2	76.6	76.0	75.2	—	31.9	32.2	30.9	30.3	—
Medical instruments and supplies .....	384	277.9	278.7	277.6	276.9	—	161.6	162.2	165.1	164.9	—
Surgical and medical instruments .....	3841	108.4	108.7	108.3	107.7	—	68.0	68.5	70.1	69.8	—
Surgical appliances and supplies .....	3842	95.8	96.2	96.5	96.7	—	59.5	59.8	59.8	59.9	—
Ophthalmic goods .....	385	35.9	36.0	36.2	36.0	—	23.3	23.7	25.3	25.2	—
Photographic equipment and supplies .....	386	83.9	83.4	74.6	75.0	—	39.5	39.2	34.9	34.9	—
Watches, clocks, watchcases, and parts .....	387	7.9	8.0	7.3	7.2	—	6.5	6.6	6.0	5.9	—
Miscellaneous manufacturing industries .....	39	390.9	388.0	386.0	382.6	378.2	274.1	270.8	268.7	266.6	262.8
Jewelry, silverware, and plated ware .....	391	49.3	49.0	51.4	51.3	—	34.4	33.8	35.3	35.4	—
Jewelry, precious metal .....	3911	37.1	36.8	38.5	38.5	—	25.5	25.0	26.0	26.1	—
Musical instruments .....	393	16.3	16.4	16.8	16.7	—	12.8	13.0	13.4	13.4	—
Toys and sporting goods .....	394	107.5	107.0	97.8	96.7	—	73.6	72.7	65.2	65.2	—
Dolls, games, toys, and children's vehicles .....	3942.4	37.4	36.5	33.3	32.2	—	24.7	23.4	21.0	20.9	—
Sporting and athletic goods, nec .....	3949	70.1	70.5	64.5	64.5	—	48.9	49.3	44.2	44.3	—
Pens, pencils, office, and art supplies .....	395	30.4	30.4	29.9	29.7	—	20.5	20.7	20.7	20.7	—
Costume jewelry and notions .....	396	23.9	23.7	23.4	23.3	—	17.1	16.8	17.0	16.8	—
Costume jewelry .....	3961	13.9	13.6	13.6	13.5	—	10.2	9.8	10.2	9.9	—
Miscellaneous manufactures .....	399	163.5	161.5	166.7	164.9	—	115.7	113.8	117.1	115.1	—
Signs and advertising specialties .....	3993	70.4	70.4	74.9	73.9	—	45.9	45.9	49.3	48.2	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Nondurable goods</b> .....		7,688	7,688	7,617	7,583	7,559	5,374	5,352	5,297	5,264	5,239
Food and kindred products .....	20	1,704.9	1,688.3	1,733.8	1,719.1	1,705.9	1,269.8	1,251.6	1,294.9	1,281.6	1,265.6
Meat products .....	201	496.4	497.6	507.5	511.3	—	422.5	422.7	432.8	437.3	—
Meat packing plants .....	2011	153.0	153.2	155.3	156.3	—	128.6	128.4	129.8	131.2	—
Sausages and other prepared meats .....	2013	97.8	97.8	100.8	101.9	—	75.8	75.6	79.6	80.8	—
Poultry slaughtering and processing .....	2015	245.6	246.6	251.4	253.1	—	218.1	218.7	223.4	225.3	—
Dairy products .....	202	140.5	140.6	142.3	142.0	—	93.2	93.4	97.2	96.8	—
Cheese, natural and processed .....	2022	39.9	40.2	40.2	40.4	—	32.5	32.8	32.6	32.7	—
Fluid milk .....	2026	62.0	61.8	62.4	62.5	—	35.3	35.2	37.1	37.2	—
Preserved fruits and vegetables .....	203	225.3	214.6	240.9	226.3	—	189.3	178.2	204.0	189.5	—
Canned specialties .....	2032	18.6	18.8	19.3	18.9	—	14.7	14.8	15.6	15.0	—
Canned fruits and vegetables .....	2033	65.8	58.7	72.0	62.8	—	54.6	47.3	60.5	51.6	—
Frozen fruits and vegetables .....	2037	48.3	46.1	55.3	49.9	—	42.2	39.8	48.5	43.3	—
Grain mill products .....	204	125.7	125.4	125.1	124.6	—	90.5	90.6	88.0	88.1	—
Flour and other grain mill products .....	2041	19.1	19.0	19.5	19.3	—	11.7	11.8	11.7	11.6	—
Prepared feeds, nec .....	2048	39.5	39.5	40.0	39.9	—	26.0	26.3	25.7	25.8	—
Bakery products .....	205	211.4	211.0	208.8	211.3	—	142.4	141.5	141.6	143.3	—
Bread, cake, and related products .....	2051	151.3	151.3	151.4	152.6	—	91.6	91.2	92.5	93.0	—
Cookies, crackers, and frozen bakery products, except bread .....	2052.3	60.1	59.7	57.4	58.7	—	50.8	50.3	49.1	50.3	—
Sugar and confectionery products .....	206	109.9	107.1	108.0	106.7	—	88.0	85.0	86.4	85.2	—
Raw cane sugar .....	2061	7.9	7.9	6.5	8.1	—	6.0	6.0	5.0	6.6	—
Cane sugar refining .....	2062	4.2	4.3	4.0	4.2	—	3.1	3.1	3.1	3.2	—
Beet sugar .....	2063	11.1	9.7	12.8	10.2	—	10.2	8.7	11.7	9.1	—
Candy and other confectionery products .....	2064	59.6	58.3	57.3	57.8	—	48.3	47.0	45.4	46.1	—
Fats and oils .....	207	33.7	33.7	35.9	35.7	—	23.8	23.7	24.8	24.7	—
Beverages .....	208	181.0	181.1	186.3	184.9	—	88.6	88.6	91.1	90.2	—
Malt beverages .....	2082	33.4	33.6	32.9	33.2	—	21.2	21.5	20.3	20.7	—
Bottled and canned soft drinks .....	2086	93.8	94.0	97.1	96.7	—	38.6	38.4	39.6	39.3	—
Misc. food and kindred products .....	209	181.0	177.2	179.0	176.3	—	131.5	127.9	129.0	126.5	—
Tobacco products .....	21	43.6	43.5	41.9	41.8	42.0	34.5	34.3	33.1	33.0	33.4
Cigarettes .....	211	27.7	27.7	25.6	25.7	—	20.6	20.7	19.0	19.1	—
Textile mill products .....	22	611.2	611.3	588.3	583.6	579.8	518.2	518.7	497.5	492.9	488.6
Broadwoven fabric mills, cotton .....	221	71.9	71.8	68.3	67.9	—	64.4	64.4	61.2	60.8	—
Broadwoven fabric mills, synthetics .....	222	65.2	66.1	64.0	63.8	—	54.8	55.7	54.5	54.3	—
Broadwoven fabric mills, wool .....	223	13.9	13.9	11.8	11.7	—	11.7	11.8	9.9	9.8	—
Narrow fabric mills .....	224	21.2	21.3	20.9	21.0	—	17.7	17.7	17.1	17.2	—
Knitting mills .....	225	168.6	167.6	156.9	153.9	—	144.0	142.9	132.9	130.2	—
Women's hosiery, except socks .....	2251	19.2	19.1	16.9	16.9	—	16.9	16.8	14.5	14.6	—
Hosiery, nec .....	2252	37.5	37.2	36.5	36.3	—	32.7	32.5	31.8	31.4	—
Knit outerwear mills .....	2253	50.5	49.8	47.5	45.4	—	43.3	42.7	40.5	38.5	—
Knit underwear mills .....	2254	14.3	14.1	12.2	12.1	—	12.5	12.4	10.9	10.8	—
Weft knit fabric mills .....	2257	25.2	25.4	22.6	22.0	—	21.0	21.0	18.8	18.4	—
Textile finishing, except wool .....	226	66.0	65.9	61.9	61.5	—	53.9	53.9	51.1	50.4	—
Finishing plants, cotton .....	2261	30.9	30.8	28.4	28.7	—	25.3	25.2	23.3	23.5	—
Finishing plants, synthetics .....	2262	20.7	20.8	19.3	19.3	—	16.6	16.7	15.8	15.6	—
Carpets and rugs .....	227	65.0	65.3	66.7	67.2	—	54.3	54.8	55.4	56.1	—
Yarn and thread mills .....	228	85.4	85.6	83.0	82.4	—	75.4	75.7	73.1	72.6	—
Yarn spinning mills .....	2281	62.2	62.4	60.3	59.9	—	55.4	55.6	53.5	53.1	—
Throwing and winding mills .....	2282	16.2	16.2	16.3	16.1	—	13.8	13.8	14.0	13.8	—
Miscellaneous textile goods .....	229	54.0	53.8	54.8	54.2	—	42.0	41.8	42.3	41.5	—
Apparel and other textile products .....	23	814.1	805.9	753.0	739.1	730.2	663.1	654.3	603.3	590.8	583.3
Men's and boys' suits and coats .....	231	29.1	29.3	26.6	26.9	—	23.6	23.7	21.2	21.5	—
Men's and boys' furnishings .....	232	200.8	199.6	181.8	175.9	—	169.9	168.9	152.8	147.6	—
Men's and boys' shirts .....	2321	40.6	40.4	35.4	32.9	—	35.0	34.9	30.5	28.3	—
Men's and boys' trousers and slacks .....	2325	68.3	67.9	64.5	63.3	—	59.1	58.6	55.5	54.5	—
Men's and boys' work clothing .....	2326	29.7	30.4	27.8	27.5	—	25.4	26.3	24.0	23.7	—
Women's and misses' outerwear .....	233	249.8	245.2	223.1	219.1	—	202.4	197.1	175.2	171.2	—
Women's and misses' blouses and shirts .....	2331	22.2	21.8	19.8	19.1	—	17.1	16.6	14.8	14.1	—
Women's, juniors', and misses' dresses .....	2335	39.7	39.0	35.9	35.4	—	30.9	30.2	27.5	27.0	—
Women's and misses' suits and coats .....	2337	25.8	25.2	22.9	22.3	—	20.2	19.6	17.2	16.8	—
Women's and misses' outerwear, nec .....	2339	162.1	159.2	144.5	142.3	—	134.2	130.7	115.7	113.3	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Nondurable goods—Continued</b>											
<b>Apparel and other textile products—Continued</b>											
Women's and children's undergarments .....	234	34.0	33.6	30.9	30.7	-	26.7	26.5	24.5	24.6	-
Women's and children's underwear .....	2341	24.7	24.5	22.4	22.4	-	19.9	19.7	17.8	17.9	-
Brassieres, girdles, and allied garments .....	2342	9.3	9.1	8.5	8.3	-	6.8	6.8	6.7	6.7	-
Girls' and children's outerwear .....	236	29.3	28.9	24.7	24.1	-	24.1	23.7	19.9	19.5	-
Girls' and children's dresses and blouses .....	2361	11.7	11.4	9.4	9.3	-	10.1	9.7	8.0	8.1	-
Misc. apparel and accessories .....	238	33.9	33.1	31.2	30.7	-	26.9	26.3	24.2	23.9	-
Misc. fabricated textile products .....	239	220.0	219.0	217.7	214.8	-	176.0	174.6	172.1	169.2	-
Curtains and draperies .....	2391	18.6	18.6	17.9	17.0	-	14.5	14.3	14.0	13.2	-
House furnishings, nec .....	2392	56.6	56.6	57.6	57.0	-	47.9	47.7	48.7	48.1	-
Automotive and apparel trimmings .....	2396	61.2	61.0	61.4	61.1	-	48.3	48.0	47.4	47.0	-
Paper and allied products .....	26	686.6	687.1	676.5	674.1	674.2	523.5	524.3	514.2	512.4	513.6
Paper mills .....	262	157.2	157.4	152.0	152.5	-	122.2	122.2	119.2	119.7	-
Paperboard mills .....	263	49.6	49.8	49.6	49.4	-	38.5	38.5	37.9	37.8	-
Paperboard containers and boxes .....	265	220.9	220.9	217.1	216.5	-	171.1	171.2	168.0	167.7	-
Corrugated and solid fiber boxes .....	2653	133.7	133.9	131.6	131.4	-	100.2	100.4	98.0	98.1	-
Sanitary food containers .....	2656	17.1	16.7	16.5	16.3	-	15.3	15.0	14.8	14.7	-
Folding paperboard boxes .....	2657	47.5	47.6	46.5	46.5	-	38.2	38.4	37.7	37.7	-
Misc. converted paper products .....	267	247.3	247.3	246.2	244.2	-	182.4	183.1	179.9	178.0	-
Paper, coated and laminated, nec .....	2672	47.4	47.8	47.9	47.5	-	24.5	25.7	23.6	23.1	-
Bags: plastics, laminated, and coated .....	2673	40.8	40.6	39.9	39.8	-	32.1	31.9	31.2	31.1	-
Envelopes .....	2677	25.8	25.9	24.9	25.0	-	20.1	20.3	19.3	19.3	-
Printing and publishing .....	27	1,564.6	1,571.2	1,566.4	1,571.0	1,572.9	853.3	858.3	841.9	843.6	843.7
Newspapers .....	271	445.1	445.7	443.3	445.3	-	149.3	149.7	146.8	148.3	-
Periodicals .....	272	136.4	137.8	139.1	140.0	-	47.1	47.2	44.3	45.1	-
Books .....	273	127.3	129.1	125.7	126.4	-	65.5	67.2	58.6	58.4	-
Book publishing .....	2731	89.0	89.4	87.3	87.6	-	35.1	35.7	28.6	28.0	-
Book printing .....	2732	38.3	39.7	38.4	38.8	-	30.4	31.5	30.0	30.4	-
Miscellaneous publishing .....	274	89.6	89.7	91.9	92.8	-	42.3	42.8	43.8	44.4	-
Commercial printing .....	275	577.0	579.4	579.4	580.0	-	413.0	414.6	413.5	413.6	-
Commercial printing, lithographic .....	2752	375.6	377.3	378.7	379.6	-	268.2	269.3	270.7	271.1	-
Commercial printing, nec .....	2759	181.3	181.9	181.5	181.0	-	128.8	129.3	127.8	127.3	-
Manifold business forms .....	276	42.9	43.0	42.7	42.3	-	30.4	30.6	29.3	28.8	-
Blankbooks and bookbinding .....	278	66.7	67.3	65.6	65.6	-	50.5	51.1	49.9	49.6	-
Printing trade services .....	279	49.6	49.3	49.2	49.1	-	33.4	33.4	33.0	32.9	-
Chemicals and allied products .....	28	1,034.0	1,034.3	1,034.1	1,032.3	1,033.6	576.1	577.8	580.6	579.3	582.0
Industrial inorganic chemicals .....	281	116.5	116.0	114.1	113.0	-	59.2	59.7	63.5	63.3	-
Industrial inorganic chemicals, nec .....	2819	70.4	70.0	68.8	68.5	-	35.4	35.4	35.9	36.1	-
Plastics materials and synthetics .....	282	157.0	157.0	152.1	150.8	-	104.6	104.6	99.3	98.5	-
Plastics materials and resins .....	2821	80.2	80.4	79.9	79.2	-	49.7	49.9	48.0	47.6	-
Organic fibers, noncellulosic .....	2824	45.1	44.9	42.3	41.7	-	35.5	35.4	33.3	32.9	-
Drugs .....	283	268.4	268.7	275.4	277.4	-	120.8	121.1	124.6	125.5	-
Pharmaceutical preparations .....	2834	212.5	212.6	218.6	220.1	-	97.1	97.3	101.3	101.5	-
Soap, cleaners, and toilet goods .....	284	158.4	158.3	158.1	157.0	-	97.5	97.6	98.2	96.9	-
Soap and other detergents .....	2841	42.5	42.5	41.4	41.6	-	22.5	22.5	23.4	23.1	-
Polishing, sanitation, and finishing preparations .....	2842,3	40.3	40.4	41.7	41.7	-	22.7	22.8	23.5	23.3	-
Toilet preparations .....	2844	75.6	75.4	75.0	73.7	-	52.3	52.3	51.3	50.5	-
Paints and allied products .....	285	51.7	51.5	52.4	52.1	-	27.4	27.4	27.5	27.4	-
Industrial organic chemicals .....	286	137.2	137.4	136.9	136.9	-	78.9	79.3	79.4	79.3	-
Cyclic crudes and intermediates .....	2865	23.2	23.3	23.0	22.9	-	14.0	14.0	13.9	13.8	-
Industrial organic chemicals, nec .....	2869	111.5	111.6	111.5	111.6	-	63.1	63.5	63.7	63.7	-
Agricultural chemicals .....	287	50.6	50.9	50.9	50.8	-	30.7	30.8	30.6	30.6	-
Miscellaneous chemical products .....	289	94.2	94.5	94.2	94.3	-	57.0	57.3	57.5	57.8	-
Petroleum and coal products .....	29	139.4	136.6	136.5	135.3	133.3	91.8	89.2	91.0	90.0	88.1
Petroleum refining .....	291	95.8	96.1	91.9	91.6	-	62.5	62.8	60.2	60.0	-
Asphalt paving and roofing materials .....	295	29.2	26.0	30.1	29.1	-	21.6	18.6	22.8	21.9	-
Rubber and misc. plastics products .....	30	1,000.8	1,002.7	1,006.4	1,007.4	1,009.2	776.5	777.8	780.6	781.4	783.2
Tires and inner tubes .....	301	76.3	77.2	77.7	77.7	-	58.3	56.0	57.1	57.9	-
Rubber and plastics footwear .....	302	7.3	7.1	6.0	5.9	-	5.8	5.7	4.3	4.3	-
Hose, belting, gaskets, and packing .....	305	70.5	70.5	71.3	71.4	-	54.2	54.5	54.7	54.7	-
Rubber and plastics hose and belting .....	3052	28.4	28.6	29.8	30.0	-	22.1	22.4	23.3	23.4	-
Fabricated rubber products, nec .....	306	112.3	113.0	110.8	111.0	-	85.8	86.6	84.9	85.1	-
Miscellaneous plastics products, nec .....	308	734.4	734.9	740.6	741.4	-	574.4	575.0	579.6	579.4	-

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Finance, insurance, and real estate—Continued</b>											
Insurance .....	63,64	2,279	2,289	2,349	2,355	2,362	-	-	-	-	-
Insurance carriers .....	63	1,549.9	1,556.1	1,601.6	1,604.2	1,609.0	1,142.8	1,153.6	1,219.3	1,219.8	-
Life insurance .....	631	521.3	524.3	530.1	529.4	-	341.1	344.5	356.1	354.4	-
Medical service and health insurance .....	632	343.0	345.3	359.2	360.7	-	278.2	279.9	288.7	289.6	-
Hospital and medical service plans .....	6324	280.9	282.9	295.1	296.3	-	231.5	232.9	241.5	242.2	-
Fire, marine, and casualty insurance .....	633	541.3	541.5	551.6	551.5	-	407.6	412.8	443.9	443.9	-
Title insurance .....	636	73.9	74.1	86.0	87.4	-	-	-	-	-	-
Insurance agents, brokers, and service .....	64	729.1	732.7	747.8	751.0	753.3	-	-	-	-	-
Real estate .....	65	1,416	1,406	1,471	1,464	1,462	-	-	-	-	-
Real estate operators and lessors .....	651	575.1	576.3	586.1	587.1	-	-	-	-	-	-
Real estate agents and managers .....	653	692.3	685.8	722.3	717.0	-	-	-	-	-	-
Subdividers and developers .....	655	114.3	109.5	121.8	119.2	-	-	-	-	-	-
<b>Services .....</b>		<b>36,647</b>	<b>36,647</b>	<b>38,136</b>	<b>38,042</b>	<b>37,990</b>	<b>32,035</b>	<b>32,010</b>	<b>33,265</b>	<b>33,153</b>	<b>33,070</b>
Agricultural services .....	07	693.0	636.9	755.9	736.7	687.4	585.1	530.6	640.5	622.6	-
Veterinary services .....	074	183.6	183.4	192.0	192.5	-	154.6	154.1	162.0	162.6	-
Landscape and horticultural services .....	078	459.0	404.1	512.5	493.3	-	388.7	335.4	435.8	417.9	-
Hotels and other lodging places .....	70	1,687.2	1,677.9	1,778.9	1,711.8	1,700.9	-	-	-	-	-
Hotels and motels .....	701	1,645.8	1,638.5	1,731.2	1,668.4	-	1,445.9	1,439.1	1,518.7	1,458.8	-
Personal services .....	72	1,155.5	1,159.9	1,148.4	1,151.1	1,165.2	-	-	-	-	-
Laundry, cleaning, and garment services .....	721	444.5	444.2	439.4	441.5	-	391.2	391.4	386.8	388.6	-
Photographic studios, portrait .....	722	79.8	72.2	55.1	55.0	-	-	-	-	-	-
Beauty shops .....	723	395.7	397.8	404.0	407.6	-	352.2	353.6	356.0	359.2	-
Funeral service and crematories .....	726	97.8	98.0	100.6	100.4	-	-	-	-	-	-
Miscellaneous personal services .....	729	121.8	131.9	134.2	131.8	-	100.6	109.2	111.4	109.4	-
Business services .....	73	8,342.3	8,359.6	8,838.0	8,836.1	8,829.0	7,424.4	7,433.2	7,826.6	7,819.6	-
Advertising .....	731	259.0	261.7	271.8	273.0	-	188.3	189.1	195.3	196.1	-
Advertising agencies .....	7311	170.5	170.6	177.2	177.4	-	-	-	-	-	-
Credit reporting and collection .....	732	136.8	137.3	138.8	140.3	-	-	-	-	-	-
Mailing, reproduction, and stenographic services .....	733	313.2	314.0	318.0	320.3	-	-	-	-	-	-
Photocopying and duplicating services .....	7334	77.4	77.1	79.6	79.9	-	65.4	65.1	67.2	67.1	-
Services to buildings .....	734	948.1	948.8	989.8	989.8	988.7	845.3	846.6	884.8	883.0	-
Disinfecting and pest control services .....	7342	89.0	88.8	97.0	96.4	-	71.1	71.4	78.7	78.0	-
Building maintenance services, nec .....	7349	859.1	860.0	892.8	893.4	-	774.2	775.2	806.1	805.0	-
Miscellaneous equipment rental and leasing .....	735	255.1	253.8	266.6	263.6	-	203.9	202.3	212.0	209.4	-
Medical equipment rental .....	7352	41.7	42.0	40.2	40.5	-	31.3	31.4	29.8	30.5	-
Heavy construction equipment rental .....	7353	45.2	44.9	48.6	48.0	-	38.4	38.0	41.3	40.7	-
Equipment rental and leasing, nec .....	7359	168.2	166.9	177.8	175.1	-	134.2	132.9	140.9	138.2	-
Personnel supply services .....	736	3,180.7	3,169.0	3,313.8	3,291.4	3,262.1	-	-	-	-	-
Employment agencies .....	7361	335.1	339.8	344.0	346.1	-	-	-	-	-	-
Help supply services .....	7363	2,845.6	2,829.2	2,969.8	2,945.3	2,911.0	2,776.4	2,756.4	2,871.9	2,849.0	-
Computer and data processing services .....	737	1,475.7	1,496.6	1,658.5	1,678.2	1,694.2	1,175.1	1,193.4	1,329.0	1,346.0	-
Computer programming services .....	7371	339.0	343.2	382.1	383.8	-	288.9	292.8	326.9	328.2	-
Prepackaged software .....	7372	241.5	245.8	277.9	280.4	-	-	-	-	-	-
Computer integrated systems design .....	7373	169.1	170.4	189.9	191.5	-	118.3	119.5	137.1	139.3	-
Data processing and preparation .....	7374	257.5	261.0	279.2	284.6	-	-	-	-	-	-
Information retrieval services .....	7375	84.8	85.3	96.5	97.7	-	60.6	60.5	71.7	73.2	-
Computer maintenance and repair .....	7378	58.1	58.6	58.8	59.0	-	39.9	40.1	43.0	43.1	-
Miscellaneous business services .....	738	1,773.7	1,778.4	1,880.7	1,879.5	-	1,545.0	1,549.3	1,637.4	1,634.7	-
Detective and armored car services .....	7381	591.3	591.7	625.2	621.7	-	545.8	546.0	576.0	572.1	-
Security systems services .....	7382	61.2	61.4	59.5	59.5	-	52.3	52.2	48.7	48.6	-
Photofinishing laboratories .....	7384	82.5	82.1	85.3	86.3	-	-	-	-	-	-
Auto repair, services, and parking .....	75	1,135.8	1,138.3	1,171.0	1,171.3	1,171.4	929.8	930.4	946.7	947.0	-
Automotive rentals, without drivers .....	751	200.0	200.5	210.9	210.6	-	164.1	164.2	172.7	172.1	-
Passenger car rental .....	7514	133.0	133.7	140.5	139.9	-	110.2	110.7	116.0	115.1	-
Automobile parking .....	752	73.7	74.7	77.4	76.9	-	64.2	65.2	67.4	67.1	-
Automotive repair shops .....	753	626.7	625.4	641.5	642.3	-	501.0	498.4	500.5	501.3	-
Automotive and tire repair shops .....	7532.4	218.8	219.6	225.0	226.8	-	178.9	179.1	183.0	184.2	-
General automotive repair shops .....	7538	266.5	267.0	271.6	270.8	-	211.4	210.9	203.9	203.2	-

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Nondurable goods—Continued</b>											
Leather and leather products .....	31	88.4	87.2	80.0	79.1	77.5	67.0	65.9	59.7	59.1	57.6
Leather tanning and finishing .....	311	12.8	13.0	11.9	11.6	—	10.6	10.7	9.7	9.4	—
Footwear, except rubber .....	314	39.0	37.8	33.9	33.6	—	31.1	30.3	27.2	27.0	—
Men's footwear, except athletic .....	3143	21.2	21.1	18.5	18.5	—	16.7	16.6	14.2	14.3	—
Women's footwear, except athletic .....	3144	10.4	10.0	8.6	8.6	—	8.0	7.8	6.9	6.9	—
Luggage .....	316	10.4	10.6	9.7	9.6	—	7.7	7.6	6.7	6.8	—
Handbags and personal leather goods .....	317	9.4	9.3	8.8	8.7	—	5.6	5.4	5.0	4.9	—
<b>Transportation and public utilities .....</b>		<b>6,498</b>	<b>6,508</b>	<b>6,643</b>	<b>6,651</b>	<b>6,692</b>	<b>5,416</b>	<b>5,417</b>	<b>5,523</b>	<b>5,531</b>	<b>5,560</b>
Transportation .....		4,188	4,196	4,295	4,297	4,333	—	—	—	—	—
Railroad transportation .....	40	229.1	229.1	235.5	234.9	234.3	—	—	—	—	—
Class I railroads plus Amtrak <sup>2</sup> .....	4011	203.0	202.9	208.2	207.7	—	—	—	—	—	—
Local and interurban passenger transit .....	41	467.5	469.6	484.4	483.6	484.2	428.1	431.2	443.8	442.4	—
Local and suburban transportation .....	411	232.3	233.8	238.8	239.1	—	210.9	212.7	216.3	216.5	—
Taxicabs .....	412	30.9	31.2	31.0	31.4	—	—	—	—	—	—
Intercity and rural bus transportation .....	413	21.1	21.2	23.1	23.6	—	19.0	19.2	20.6	21.2	—
School buses .....	415	149.1	149.8	157.6	156.3	—	—	—	—	—	—
Trucking and warehousing .....	42	1,692.1	1,683.7	1,746.7	1,734.4	1,730.7	1,486.0	1,477.0	1,532.9	1,519.7	—
Trucking and courier services, except air .....	421	1,526.0	1,519.1	1,577.3	1,566.3	—	1,346.7	1,339.2	1,391.1	1,378.5	—
Public warehousing and storage .....	422	160.6	159.0	164.5	163.1	—	134.4	132.8	137.4	136.7	—
Water transportation .....	44	177.5	173.9	193.8	190.5	186.7	—	—	—	—	—
Water transportation of freight, nec .....	444	14.5	14.3	15.3	15.5	—	—	—	—	—	—
Water transportation services .....	449	119.6	117.2	131.4	129.3	—	105.7	102.7	116.4	114.4	—
Transportation by air .....	45	1,165.8	1,183.4	1,165.8	1,184.6	1,228.4	—	—	—	—	—
Air transportation, scheduled .....	451	999.6	1,014.9	986.5	1,006.1	—	—	—	—	—	—
Air transportation, scheduled .....	4512	516.5	519.4	532.0	531.3	—	—	—	—	—	—
Airports, flying fields, and services .....	458	123	125	134	133	—	—	—	—	—	—
Pipelines, except natural gas .....	46	14.2	14.1	14.2	14.1	14.1	11.5	11.5	11.6	11.5	—
Transportation services .....	47	442.1	441.8	454.8	454.9	454.3	361.6	361.3	372.9	372.7	—
Passenger transportation arrangement .....	472	213.9	212.7	219.4	217.4	—	178.5	178.2	185.3	183.0	—
Travel agencies .....	4724	170.4	169.5	174.1	172.7	—	142.5	142.1	146.9	145.5	—
Freight transportation arrangement .....	473	179.2	180.5	185.7	188.0	—	141.9	142.4	146.2	148.5	—
Communications and public utilities .....		2,310	2,312	2,348	2,354	2,359	—	—	—	—	—
Communications .....	48	1,452.6	1,455.0	1,499.6	1,503.3	1,507.6	1,089.5	1,083.8	1,096.5	1,101.6	—
Telephone communications .....	481	1,000.0	1,002.9	1,030.5	1,033.1	—	724.5	719.5	727.1	731.7	—
Telephone communications, except radio .....	4813	837.6	839.1	867.8	871.6	—	597.2	593.3	603.3	608.0	—
Radio and television broadcasting .....	483	245.2	244.6	247.8	246.4	—	204.2	203.3	202.7	201.6	—
Radio broadcasting stations .....	4832	117.1	117.1	118.6	120.1	—	—	—	—	—	—
Television broadcasting stations .....	4833	128.1	127.5	129.2	126.3	—	—	—	—	—	—
Cable and other pay television services .....	484	176.6	176.6	187.4	189.8	—	146.8	147.2	152.2	153.8	—
Electric, gas, and sanitary services .....	49	857.3	856.5	848.6	851.1	851.4	681.3	680.8	681.8	685.1	—
Electric services .....	491	364.0	363.6	360.1	361.2	—	290.9	291.0	292.1	293.7	—
Gas production and distribution .....	492	139.8	139.7	137.1	138.5	—	107.8	107.9	106.4	107.4	—
Combination utility services .....	493	159.0	159.1	155.5	155.4	—	122.8	122.8	122.4	122.9	—
Sanitary services .....	495	162.1	161.7	163.2	163.4	—	134.2	133.6	135.0	135.4	—
<b>Wholesale trade .....</b>		<b>6,724</b>	<b>6,731</b>	<b>6,889</b>	<b>6,887</b>	<b>6,882</b>	<b>5,406</b>	<b>5,405</b>	<b>5,526</b>	<b>5,519</b>	<b>5,509</b>
Durable goods .....	50	3,987	4,000	4,097	4,101	4,103	3,158	3,162	3,233	3,232	—
Motor vehicles, parts, and supplies .....	501	512.7	514.7	521.0	523.1	—	414.7	414.6	413.5	414.5	—
Automobiles and other motor vehicles .....	5012	145.2	146.4	150.9	152.4	—	—	—	—	—	—
Motor vehicle supplies and new parts .....	5013	289.7	290.6	289.4	290.2	—	—	—	—	—	—
Furniture and home furnishings .....	502	160.6	161.7	167.2	168.2	—	128.4	128.7	134.6	134.9	—
Furniture .....	5021	77.1	77.8	81.7	82.3	—	—	—	—	—	—
Home furnishings .....	5023	83.5	83.9	85.5	85.9	—	—	—	—	—	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Wholesale trade—Continued</b>											
Durable goods—Continued											
Lumber and other construction materials .....	503	260.1	258.0	274.1	274.2	—	215.6	213.5	227.5	227.8	—
Lumber, plywood, and millwork .....	5031	132.7	132.3	139.7	140.2	—	—	—	—	—	—
Construction materials, nec .....	5039	38.7	38.4	40.5	40.8	—	—	—	—	—	—
Professional and commercial equipment .....	504	877.7	882.2	923.9	929.4	—	685.5	686.4	720.7	723.2	—
Office equipment .....	5044	203.0	204.8	215.4	216.6	—	—	—	—	—	—
Computers, peripherals and software .....	5045	349.7	350.9	369.5	371.9	—	—	—	—	—	—
Medical and hospital equipment .....	5047	183.6	184.3	193.3	194.3	—	148.4	148.8	155.8	156.8	—
Metals and minerals, except petroleum .....	505	148.4	148.8	152.7	152.2	—	120.1	120.5	123.1	122.7	—
Electrical goods .....	506	548.6	552.6	557.5	557.0	—	403.8	406.7	405.2	405.9	—
Electrical apparatus and equipment .....	5063	228.9	230.4	234.2	234.5	—	—	—	—	—	—
Electrical appliances, television and radio sets .....	5064	49.7	50.1	50.5	50.5	—	—	—	—	—	—
Electronic parts and equipment .....	5065	270.0	272.1	272.8	272.0	—	—	—	—	—	—
Hardware, plumbing, and heating equipment .....	507	300.4	300.9	303.7	302.9	—	244.1	244.8	247.8	246.7	—
Hardware .....	5072	107.0	107.5	109.3	109.2	—	—	—	—	—	—
Plumbing and hydronic heating supplies .....	5074	118.5	118.9	118.5	118.4	—	—	—	—	—	—
Machinery, equipment, and supplies .....	508	825.0	826.3	836.0	836.0	—	659.7	659.6	667.4	666.8	—
Construction and mining machinery .....	5082	90.1	90.2	92.6	93.0	—	—	—	—	—	—
Farm and garden machinery .....	5083	120.4	120.4	122.7	121.4	—	—	—	—	—	—
Industrial machinery and equipment .....	5084	334.6	335.7	337.0	337.3	—	—	—	—	—	—
Industrial supplies .....	5085	154.7	154.8	157.3	157.0	—	—	—	—	—	—
Misc. wholesale trade durable goods .....	509	353.8	354.8	360.4	357.6	—	286.5	287.6	292.9	289.7	—
Scrap and waste materials .....	5093	134.0	134.0	130.7	129.7	—	—	—	—	—	—
Nondurable goods .....	51	2,737	2,731	2,792	2,786	2,779	2,248	2,243	2,293	2,287	—
Paper and paper products .....	511	264.5	266.8	270.9	271.7	—	220.9	223.0	226.7	227.3	—
Stationery and office supplies .....	5112	153.8	155.8	157.7	160.4	—	—	—	—	—	—
Drugs, proprietaries, and sundries .....	512	215.6	217.3	217.5	217.5	—	179.2	180.6	181.5	181.2	—
Apparel, piece goods, and notions .....	513	227.9	223.0	231.0	231.6	—	184.4	180.8	188.7	189.0	—
Groceries and related products .....	514	906.8	905.8	918.5	920.0	—	764.3	763.7	771.2	772.5	—
Groceries, general line .....	5141	289.6	289.9	288.1	287.5	—	—	—	—	—	—
Meats and meat products .....	5147	55.6	56.0	56.2	56.6	—	—	—	—	—	—
Fresh fruits and vegetables .....	5148	100.1	97.4	101.6	101.2	—	—	—	—	—	—
Farm-product raw materials .....	515	110.5	107.4	116.2	110.4	—	89.0	86.4	95.7	90.1	—
Chemicals and allied products .....	516	150.3	150.4	150.9	151.3	—	109.7	109.4	109.9	110.0	—
Petroleum and petroleum products .....	517	156.7	158.2	158.0	158.5	—	129.7	131.1	130.4	130.7	—
Petroleum bulk stations and terminals .....	5171	64.3	65.3	66.9	67.0	—	—	—	—	—	—
Petroleum products, nec .....	5172	92.4	92.9	91.1	91.5	—	—	—	—	—	—
Beer, wine, and distilled beverages .....	518	153.9	154.2	156.2	156.6	—	124.2	124.6	126.4	126.9	—
Beer and ale .....	5181	98.5	98.4	100.3	100.1	—	—	—	—	—	—
Wine and distilled beverages .....	5182	55.4	55.8	55.9	56.5	—	—	—	—	—	—
Misc. wholesale trade nondurable goods .....	519	551.1	548.2	572.7	568.7	—	446.2	443.4	462.3	459.2	—
Farm supplies .....	5191	164.4	162.1	172.2	167.8	—	—	—	—	—	—
<b>Retail trade .....</b>		<b>22,562</b>	<b>22,906</b>	<b>22,653</b>	<b>23,005</b>	<b>23,383</b>	<b>19,891</b>	<b>20,222</b>	<b>19,873</b>	<b>20,221</b>	<b>20,556</b>
Building materials and garden supplies .....	52	938.6	934.9	986.9	982.3	983.3	778.9	776.0	819.1	814.7	—
Lumber and other building materials .....	521	568.8	565.4	601.9	598.5	—	479.8	476.7	508.0	504.6	—
Paint, glass, and wallpaper stores .....	523	69.3	69.4	70.4	70.1	—	53.7	54.1	53.6	52.7	—
Hardware stores .....	525	164.3	165.2	166.0	166.8	—	135.4	136.2	136.9	138.1	—
Retail nurseries and garden stores .....	526	91.6	90.4	98.2	97.2	—	75.2	74.4	80.8	80.1	—
General merchandise stores .....	53	2,972.3	3,072.8	2,858.9	3,037.8	3,159.4	2,772.9	2,869.9	2,664.0	2,841.2	—
Department stores .....	531	2,624.1	2,693.7	2,525.6	2,686.9	2,784.0	2,471.9	2,539.8	2,378.0	2,537.9	—
Variety stores .....	533	147.5	161.6	141.5	148.1	—	125.8	138.2	120.7	127.4	—
Miscellaneous general merchandise stores .....	539	200.7	217.5	191.8	202.8	—	175.2	191.9	165.3	175.9	—
Food stores .....	54	3,551.7	3,581.3	3,561.4	3,592.8	3,623.9	3,229.3	3,257.0	3,222.3	3,253.6	—
Grocery stores .....	541	3,108.9	3,116.6	3,102.5	3,116.2	—	2,847.0	2,853.7	2,829.2	2,844.3	—
Meat and fish markets .....	542	51.1	56.4	49.2	56.7	—	—	—	—	—	—
Dairy products stores .....	545	14.3	14.8	13.9	13.1	—	—	—	—	—	—
Retail bakeries .....	546	217.6	222.5	230.1	233.1	—	190.5	194.5	199.8	202.9	—
Automotive dealers and service stations .....	55	2,325.9	2,317.8	2,375.8	2,367.2	2,365.5	1,940.3	1,933.7	1,969.1	1,960.6	—
New and used car dealers .....	551	1,055.5	1,051.9	1,070.2	1,069.0	1,070.5	886.4	882.8	897.0	897.1	—

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987 SIC Code	All employees					Production workers <sup>1</sup>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Retail trade—Continued</b>											
Automotive dealers and service stations—Continued											
Auto and home supply stores .....	553	403.7	402.9	418.5	418.6	—	315.6	314.1	316.8	316.8	—
Gasoline service stations .....	554	670.7	668.3	678.4	674.5	—	582.4	581.9	588.5	583.2	—
Automotive dealers, nec .....	559	9.7	9.7	9.7	9.8	—	8.1	8.1	8.0	8.0	—
Apparel and accessory stores .....											
Men's and boys' clothing stores .....	56	1,155.2	1,206.9	1,096.7	1,154.0	1,204.0	970.1	1,020.2	914.5	972.4	—
Women's clothing stores .....	561	82.3	86.5	77.5	82.0	—	66.0	70.7	62.3	67.1	—
Family clothing stores .....	562	289.7	301.3	268.4	278.5	—	240.8	252.2	221.9	231.7	—
Shoe stores .....	565	385.3	407.3	357.9	391.8	—	345.7	367.3	318.9	352.5	—
Shoe stores .....	566	201.9	210.3	199.4	202.6	—	160.1	167.4	157.2	160.1	—
Furniture and home furnishings stores .....											
Furniture and home furnishings stores .....	57	1,052.9	1,081.4	1,078.7	1,107.7	1,137.0	870.7	896.4	888.6	916.8	—
Furniture stores .....	571	536.0	548.7	550.5	561.4	—	438.9	449.4	448.9	459.0	—
Household appliance stores .....	5712	310.7	316.1	324.3	328.3	—	—	—	—	—	—
Radio, television, and computer stores .....	572	71.3	72.7	68.7	70.1	—	57.9	59.2	55.9	57.0	—
Radio, television, and electronic stores .....	573	445.6	460.0	459.5	476.2	—	373.9	387.8	383.8	400.8	—
Record and prerecorded tape stores .....	5731	197.9	203.9	202.2	209.5	—	166.2	170.7	169.2	176.6	—
Record and prerecorded tape stores .....	5735	84.3	90.2	87.2	95.6	—	70.7	78.1	73.7	82.1	—
Eating and drinking places .....											
Miscellaneous retail establishments .....	58	7,596.0	7,637.7	7,760.5	7,735.8	7,793.5	6,828.8	6,870.2	6,950.6	6,928.6	—
Drug stores and proprietary stores .....	59	2,969.7	3,073.0	2,934.4	3,026.9	3,115.9	2,500.1	2,598.1	2,444.7	2,533.2	—
Liquor stores .....	591	639.6	652.1	651.8	658.4	—	534.8	547.2	541.9	547.2	—
Used merchandise stores .....	592	113.3	115.2	113.2	114.1	—	—	—	—	—	—
Miscellaneous shopping goods stores .....	593	118.5	119.2	122.8	123.4	—	98.9	99.0	102.3	102.8	—
Sporting goods and bicycle shops .....	594	1,088.9	1,162.1	1,025.2	1,086.8	—	927.8	998.0	858.4	918.5	—
Book stores .....	5941	205.8	215.0	201.3	208.4	—	—	—	—	—	—
Stationery stores .....	5942	138.2	147.1	134.1	136.8	—	—	—	—	—	—
Jewelry stores .....	5943	91.1	92.6	94.8	95.9	—	—	—	—	—	—
Gift, novelty, and souvenir shops .....	5944	151.5	161.5	146.2	152.5	—	—	—	—	—	—
Sewing, needlework, and piece goods .....	5947	239.3	251.1	237.0	248.5	—	—	—	—	—	—
Nonstore retailers .....	5949	53.2	52.6	50.7	50.2	—	—	—	—	—	—
Catalog and mail-order houses .....	596	384.7	384.3	376.2	394.2	—	328.3	327.9	320.6	337.4	—
Merchandising machine operators .....	5961	260.0	258.8	255.0	272.0	—	—	—	—	—	—
Fuel dealers .....	5962	68.2	68.3	68.7	69.2	—	—	—	—	—	—
Retail stores, nec .....	598	99.9	101.4	97.2	99.5	—	83.0	84.3	80.1	82.0	—
Florists, tobacco stores, and newsstands .....	599	524.8	538.7	548.0	550.5	—	434.7	447.4	449.7	452.5	—
Optical goods stores .....	5992,3,4	152.2	163.8	155.8	158.8	—	—	—	—	—	—
Miscellaneous retail stores, nec .....	5995	69.6	69.6	76.4	75.5	—	57.5	57.1	61.2	60.0	—
Miscellaneous retail stores, nec .....	5999	303.0	305.3	315.8	316.2	—	247.3	249.9	257.2	258.5	—
<b>Finance, insurance, and real estate<sup>3</sup></b>											
Finance .....		7,151	7,173	7,407	7,417	7,445	5,223	5,241	5,434	5,435	5,456
Depository institutions .....											
Commercial banks .....	60	2,030.6	2,040.8	2,035.1	2,038.8	2,047.6	1,456.6	1,464.8	1,459.0	1,463.6	—
State commercial banks .....	602	1,461.9	1,467.3	1,450.7	1,453.2	1,459.9	1,034.0	1,038.7	1,025.3	1,028.7	—
National and commercial banks, nec .....	6022	592.4	595.5	602.4	604.5	—	423.2	425.9	431.6	433.6	—
Savings institutions .....	6021,9	869.5	871.8	848.3	848.7	—	610.8	612.8	593.7	595.1	—
Federal savings institutions .....	603	259.6	262.4	263.2	263.3	264.3	—	—	—	—	—
Savings institutions, except federal .....	6035	144.3	146.5	145.4	145.3	—	—	—	—	—	—
Credit unions .....	6036	115.3	115.9	117.8	118.0	—	—	—	—	—	—
Credit unions .....	606	174.0	175.2	180.0	180.8	—	138.2	139.2	143.3	143.9	—
Nondepository institutions .....											
Personal credit institutions .....	61	579.6	586.2	638.3	646.4	654.2	404.8	407.7	435.1	441.1	—
Business credit institutions .....	614	183.3	186.5	187.4	188.9	—	119.6	119.5	106.8	106.7	—
Mortgage bankers and brokers .....	615	116.7	117.1	125.0	127.2	—	—	—	—	—	—
Security and commodity brokers .....	616	258.6	261.4	303.7	307.8	312.8	—	—	—	—	—
Security and commodity brokers .....	62	615.0	618.8	665.2	662.1	666.3	—	—	—	—	—
Security brokers and dealers .....	621	456.9	458.9	487.4	483.8	—	—	—	—	—	—
Commodity contracts brokers, dealers, and exchanges .....	622,3	25.5	25.5	25.5	25.5	—	—	—	—	—	—
Security and commodity services .....	628	132.6	134.4	152.3	152.8	—	88.3	89.5	102.4	103.0	—
Holding and other investment offices .....											
Holding offices .....	67	230.3	231.8	248.4	250.4	252.6	—	—	—	—	—
Holding offices .....	671	107.3	107.9	114.2	114.9	—	—	—	—	—	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Services—Continued</b>											
Auto repair, services, and parking—Continued											
Automotive services, except repair .....	754	235.4	237.7	241.2	241.5	—	200.5	202.6	206.1	206.5	—
Carwashes .....	7542	121.1	124.2	126.5	126.6	—	106.9	109.5	112.1	112.2	—
Miscellaneous repair services .....	76	379.5	379.4	391.4	390.8	392.3	311.1	311.1	320.7	319.7	—
Electrical repair shops .....	762	115.6	115.8	119.1	118.6	—	—	—	—	—	—
Motion pictures .....	78	553.4	567.8	556.3	556.5	567.8	462.2	475.2	462.9	463.4	—
Motion picture production and services .....	781	239.5	241.6	244.8	243.3	—	201.2	202.4	204.6	202.8	—
Motion picture theaters .....	783	125.4	132.2	124.4	125.6	—	—	—	—	—	—
Video tape rental .....	784	169.0	174.6	168.9	169.6	—	135.7	140.4	136.2	136.7	—
Amusement and recreation services .....	79	1,444.6	1,455.6	1,658.3	1,563.9	1,555.5	1,247.3	1,256.8	1,444.0	1,349.7	—
Bowling centers .....	793	84.3	84.4	82.9	82.9	—	75.3	75.4	73.8	74.1	—
Misc. amusement and recreation services .....	799	1,023.1	1,036.4	1,201.2	1,110.5	—	883.1	893.6	1,044.5	954.4	—
Physical fitness facilities .....	7991	170.6	170.6	184.3	184.8	—	151.9	152.2	162.7	162.9	—
Membership sports and recreation clubs .....	7997	301.0	297.2	354.6	328.5	—	261.7	258.0	310.7	285.2	—
Health services .....	80	9,815.9	9,844.8	9,948.3	9,964.1	9,978.4	8,699.1	8,723.3	8,809.3	8,817.5	—
Offices and clinics of medical doctors .....	801	1,770.2	1,785.3	1,842.3	1,847.2	1,852.8	1,453.1	1,467.8	1,515.3	1,516.9	—
Offices and clinics of dentists .....	802	631.1	635.8	648.9	651.7	—	551.1	554.9	565.0	567.5	—
Offices and clinics of other health practitioners .....	804	450.7	454.3	468.2	468.9	—	374.9	377.5	389.5	389.6	—
Offices and clinics of chiropractors and optometrists .....	8041,2	168.3	168.4	169.5	169.3	—	—	—	—	—	—
Nursing and personal care facilities .....	805	1,763.6	1,765.5	1,755.7	1,756.4	1,754.8	1,585.1	1,586.8	1,578.2	1,578.3	—
Skilled nursing care facilities .....	8051	1,338.0	1,339.7	1,332.6	1,333.8	—	—	—	—	—	—
Intermediate care facilities .....	8052	208.1	207.8	207.8	208.2	—	186.5	186.4	186.9	186.8	—
Nursing and personal care, nec .....	8059	217.5	218.0	215.3	214.4	—	—	—	—	—	—
Hospitals .....	806	3,902.2	3,910.3	3,974.7	3,979.7	3,984.3	3,578.7	3,584.3	3,641.8	3,643.6	—
General medical and surgical hospitals .....	8062	3,596.6	3,603.4	3,662.1	3,665.8	—	—	—	—	—	—
Psychiatric hospitals .....	8063	84.0	84.7	86.0	86.6	—	—	—	—	—	—
Specialty hospitals, excluding psychiatric .....	8069	221.6	222.2	226.6	227.3	—	—	—	—	—	—
Medical and dental laboratories .....	807	199.2	199.4	202.8	203.3	—	—	—	—	—	—
Home health care services .....	808	719.3	714.7	667.3	666.3	665.6	662.9	658.5	615.3	614.2	—
Legal services .....	81	957.2	962.5	989.7	993.0	996.2	763.0	767.5	789.7	793.0	—
Educational services .....	82	2,325.5	2,273.3	2,385.9	2,422.0	2,371.2	—	—	—	—	—
Elementary and secondary schools .....	821	653.9	655.3	682.0	687.5	—	—	—	—	—	—
Colleges and universities .....	822	1,400.8	1,351.1	1,420.4	1,449.5	—	—	—	—	—	—
Vocational schools .....	824	86.7	85.4	88.9	92.3	—	—	—	—	—	—
Social services .....	83	2,562.5	2,567.4	2,668.7	2,682.9	2,693.1	2,221.8	2,225.2	2,313.4	2,323.7	—
Individual and family services .....	832	688.5	689.5	718.5	724.3	—	596.6	597.2	624.5	629.2	—
Job training and related services .....	833	355.3	355.9	377.3	379.0	—	305.4	305.4	328.0	328.1	—
Child day care services .....	835	585.7	583.2	598.3	601.4	600.8	520.1	517.1	528.7	531.5	—
Residential care .....	836	728.5	734.9	759.4	762.3	766.2	631.8	638.4	657.7	660.4	—
Social services, nec .....	839	204.5	203.9	215.2	215.9	—	167.7	167.1	174.5	174.5	—
Museums and botanical and zoological gardens .....	84	88.4	88.5	93.1	90.9	91.7	—	—	—	—	—
Membership organizations .....	86	2,233.8	2,242.9	2,267.1	2,265.5	2,270.6	—	—	—	—	—
Business associations .....	861	108.0	108.1	110.7	110.1	—	—	—	—	—	—
Professional organizations .....	862	59.8	59.9	62.5	62.9	—	43.1	43.1	45.2	45.5	—
Labor organizations .....	863	142.0	145.0	141.8	141.1	—	—	—	—	—	—
Civic and social associations .....	864	432.2	436.2	448.9	448.8	—	—	—	—	—	—
Engineering and management services .....	87	3,077.4	3,097.4	3,288.0	3,306.7	3,321.5	2,343.2	2,358.2	2,504.3	2,519.5	—
Engineering and architectural services .....	871	885.5	889.7	929.4	930.2	931.2	727.8	731.1	764.0	764.6	—
Engineering services .....	8711	680.2	683.3	708.8	708.5	—	565.3	568.0	589.5	589.3	—
Architectural services .....	8712	148.6	149.9	160.5	161.0	—	116.1	117.1	125.6	125.8	—
Surveying services .....	8713	56.7	56.5	60.1	60.7	—	46.4	46.0	48.9	49.5	—
Accounting, auditing, and bookkeeping .....	872	610.3	612.9	643.4	647.1	—	425.3	425.0	452.5	456.5	—

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>				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Services—Continued</b>											
Engineering and management services—Continued											
Research and testing services .....	873	607.3	608.4	637.0	638.6	—	463.9	464.7	487.6	488.9	—
Commercial physical research .....	8731	229.5	229.7	238.4	238.5	—	159.0	158.8	164.4	164.9	—
Commercial nonphysical research .....	8732	140.1	139.8	150.1	150.4	—	115.9	115.9	125.1	125.4	—
Noncommercial research organizations .....	8733	143.4	144.4	150.2	152.1	—	112.3	113.1	117.7	119.2	—
Management and public relations .....	874	974.3	986.4	1,078.2	1,090.8	1,094.2	726.2	737.4	800.2	809.5	—
Management services .....	8741	324.0	325.7	363.5	365.5	—	237.4	239.7	271.2	272.1	—
Management consulting services .....	8742	348.4	354.7	395.8	400.1	—	261.3	265.2	291.1	293.5	—
Public relations services .....	8743	40.6	41.0	44.8	45.6	—	27.4	27.6	29.7	30.8	—
Services, nec .....	89	51.3	51.5	53.2	54.6	54.4	40.6	40.7	41.8	42.7	—
<b>Government</b>											
Federal Government <sup>4</sup> .....		2,679	2,720	2,694	2,705	2,723	—	—	—	—	—
Executive, by agency <sup>4</sup> .....		2,617.5	2,659.1	2,632.4	—	—	—	—	—	—	—
Department of Defense .....		681.8	679.0	655.1	—	—	—	—	—	—	—
Postal Service <sup>5</sup> .....		867.7	917.0	870.8	—	—	—	—	—	—	—
Other executive agencies .....		1,068.0	1,063.1	1,106.5	—	—	—	—	—	—	—
Legislative .....		31.1	30.9	30.1	—	—	—	—	—	—	—
Judicial .....		30.0	30.1	31.1	—	—	—	—	—	—	—
Federal Government, except Postal Service .....		1,810.9	1,803.1	1,822.8	1,816.3	1,804.8	—	—	—	—	—
Federal Government, by industry:											
Manufacturing activities .....		48.5	48.1	47.2	46.7	—	—	—	—	—	—
Ship building and repairing .....	3731	21.8	21.8	22.0	21.7	—	—	—	—	—	—
Transportation and public utilities, except Postal Service .....		12.9	12.7	12.1	12.2	—	—	—	—	—	—
Services .....		359.0	358.4	352.0	349.5	—	—	—	—	—	—
Hospitals .....	806	221.6	222.2	217.9	217.7	—	—	—	—	—	—
State government .....		4,749	4,691	4,788	4,810	4,789	—	—	—	—	—
Construction .....		86.4	86.5	86.8	86.8	—	—	—	—	—	—
Transportation and public utilities .....		52.2	51.8	52.0	51.8	—	—	—	—	—	—
Services .....		2,797.9	2,745.1	2,798.2	2,826.7	—	—	—	—	—	—
Hospitals .....	806	366.3	364.9	364.6	365.1	—	—	—	—	—	—
Education .....	82	2,082.1	2,032.2	2,076.4	2,104.6	2,084.8	—	—	—	—	—
Social services .....		205.9	205.6	208.7	210.2	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		143.6	142.4	148.5	146.8	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		1,812.0	1,807.4	1,850.5	1,844.8	—	—	—	—	—	—
State government, except education .....		2,666.4	2,658.6	2,711.1	2,705.5	2,704.6	—	—	—	—	—
Local government .....		12,668	12,635	12,772	12,933	12,889	—	—	—	—	—
Transportation and public utilities .....		453.7	455.0	453.4	453.4	—	—	—	—	—	—
Services .....		8,468.1	8,443.0	8,525.6	8,653.3	—	—	—	—	—	—
Hospitals .....	806	643.0	644.7	657.3	657.7	—	—	—	—	—	—
Education .....	82	7,330.2	7,309.2	7,359.6	7,491.9	7,485.9	—	—	—	—	—
Social services .....		139.8	139.8	142.4	142.4	—	—	—	—	—	—
Services, except hospitals, education, and social services .....		355.1	349.3	366.3	361.3	—	—	—	—	—	—
General administration, including executive, legislative, and judicial functions .....		3,746.0	3,737.1	3,793.0	3,826.4	—	—	—	—	—	—
Local government, except education .....		5,337.6	5,325.9	5,412.4	5,441.2	5,403.5	—	—	—	—	—

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

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

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

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

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

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

— Data not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	Sept. 1997	Oct. 1997	Aug. 1998	Sept. 1998	Oct. 1998
<b>Total</b> .....	59,623	60,316	60,128	61,093	61,686
<b>Total private</b> .....	48,873	49,159	50,015	50,086	50,290
<b>Goods-producing</b> .....	6,769	6,779	6,786	6,780	6,734
<b>Mining</b> .....	82	83	83	82	81
<b>Construction</b> .....	650	651	692	688	688
<b>Manufacturing</b> .....	6,037	6,045	6,011	6,010	5,965
<b>Durable goods</b> .....	2,932	2,950	2,956	2,952	2,942
Lumber and wood products .....	139	140	145	146	146
Furniture and fixtures .....	160	161	166	166	167
Stone, clay, and glass products .....	106	106	108	107	107
Primary metal industries .....	103	103	105	105	104
Fabricated metal products .....	329	331	336	337	337
Industrial machinery and equipment .....	475	478	473	469	469
Electronic and other electrical equipment .....	703	707	695	695	687
Transportation equipment .....	394	396	403	404	405
Instruments and related products .....	352	353	354	353	352
Miscellaneous manufacturing .....	173	174	170	171	169
<b>Nondurable goods</b> .....	3,105	3,095	3,055	3,058	3,023
Food and kindred products .....	588	575	590	595	574
Tobacco products .....	14	14	13	13	14
Textile mill products .....	286	284	275	277	274
Apparel and other textile products .....	607	606	559	560	548
Paper and allied products .....	168	168	167	166	165
Printing and publishing .....	700	703	708	705	707
Chemicals and allied products .....	330	331	335	333	332
Petroleum and coal products .....	25	25	24	24	24
Rubber and misc. plastics products .....	341	343	342	344	343
Leather and leather products .....	47	47	43	42	43
<b>Service-producing</b> .....	52,854	53,537	53,342	54,313	54,952
<b>Transportation and public utilities</b> .....	1,953	1,958	1,953	2,002	2,019
<b>Wholesale trade</b> .....	2,064	2,081	2,094	2,100	2,115
<b>Retail trade</b> .....	11,637	11,697	11,934	11,933	11,962
<b>Finance, insurance, and real estate</b> .....	4,482	4,492	4,654	4,622	4,636
<b>Services</b> .....	21,968	22,152	22,594	22,649	22,824
<b>Government</b> .....	10,750	11,157	10,113	11,007	11,396
Federal .....	1,136	1,132	1,136	1,134	1,140
State .....	2,323	2,419	2,256	2,384	2,467
Local .....	7,291	7,606	6,721	7,489	7,789

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1997 forward are subject to revision.



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

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

(In thousands)

State and area	Total			Mining			Construction		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Alabama</b> .....	1,887.0	1,895.7	1,902.6	10.0	9.6	9.6	97.5	101.9	101.6
Birmingham .....	468.7	476.6	478.9	3.1	3.0	3.0	27.9	29.8	29.5
Huntsville .....	176.1	175.6	176.6	(1)	(1)	(1)	6.0	6.3	6.3
Mobile .....	222.0	225.5	226.5	(1)	(1)	(1)	16.5	17.1	17.1
Montgomery .....	157.5	158.5	159.7	(1)	(1)	(1)	8.0	8.2	8.2
Tuscaloosa .....	81.4	82.9	83.8	2.7	2.6	2.6	5.7	6.4	6.4
<b>Alaska</b> .....	262.3	274.9	268.0	10.0	11.0	10.4	12.4	14.7	12.9
Anchorage .....	125.0	129.5	128.7	2.5	2.7	2.6	6.5	7.6	6.9
<b>Arizona</b> .....	2,037.6	2,101.0	2,131.9	14.2	13.1	13.1	133.1	142.3	142.7
Phoenix-Mesa .....	1,432.3	1,481.2	1,508.1	6.7	5.9	5.9	95.9	103.4	103.9
Tucson .....	320.6	326.5	329.9	2.4	2.3	2.3	19.8	21.3	21.4
<b>Arkansas</b> .....	1,119.5	1,136.9	1,138.1	3.6	3.6	3.6	48.2	51.4	50.4
Fayetteville-Springdale-Rogers .....	141.8	142.7	143.3	(1)	(1)	(1)	5.7	5.6	5.5
Fort Smith .....	96.4	97.0	96.9	.9	8	8	4.1	4.4	4.4
Little Rock-North Little Rock .....	307.6	307.6	309.4	(1)	(1)	(1)	14.2	15.0	14.9
Pine Bluff .....	36.0	36.2	36.3	(1)	(1)	(1)	.9	1.0	1.0
<b>California</b> .....	13,463.9	13,753.1	13,824.8	29.5	28.1	28.0	581.9	641.9	636.1
Bakersfield .....	182.8	183.1	184.0	10.9	10.3	10.2	8.5	8.4	8.3
Fresno .....	279.2	284.6	283.5	.5	.5	.5	13.7	15.2	15.2
Los Angeles-Long Beach .....	3,941.2	4,010.7	4,031.4	5.7	5.5	5.4	112.7	117.3	116.5
Modesto .....	136.2	139.3	140.1	(2)	(2)	(2)	7.2	7.7	7.6
Oakland .....	971.8	990.8	996.4	2.3	2.3	2.3	51.6	59.9	58.4
Orange County .....	1,256.2	1,296.9	1,302.5	.9	.9	.9	61.4	67.4	67.3
Riverside-San Bernardino .....	864.0	896.2	905.5	1.1	1.1	1.1	54.0	60.9	60.6
Sacramento .....	635.7	644.7	650.2	.2	.2	.2	34.9	37.7	37.6
Salinas .....	119.8	122.9	123.6	.1	.1	.1	4.8	5.5	5.5
San Diego .....	1,071.9	1,091.1	1,099.1	.4	.4	.4	55.0	57.1	56.5
San Francisco .....	1,004.5	1,016.6	1,023.1	.6	.5	.5	36.6	39.6	39.2
San Jose .....	950.4	959.0	959.7	.1	.2	.2	40.9	44.2	44.0
Santa Barbara-Santa Maria-Lompoc .....	154.0	156.3	157.5	1.1	.9	.9	6.7	7.0	7.1
Santa Rosa .....	168.8	172.9	173.3	.5	.5	.5	9.7	9.7	9.8
Stockton-Lodi .....	171.0	175.4	175.0	.1	.1	.1	7.9	8.7	8.4
Vallejo-Fairfield-Napa .....	154.3	160.0	160.1	.5	.6	.6	10.7	11.2	11.1
Ventura .....	247.7	254.5	257.2	1.6	1.4	1.4	11.5	12.2	12.4
<b>Colorado</b> .....	2,015.3	2,065.6	2,075.5	14.2	13.8	13.8	119.7	135.9	133.0
Boulder-Longmont .....	165.0	166.2	166.3	(1)	(1)	(1)	6.1	7.0	6.9
Colorado Springs .....	220.4	226.9	228.3	(1)	(1)	(1)	12.1	13.2	12.9
Denver .....	1,074.1	1,106.3	1,110.6	6.8	6.4	6.3	62.3	71.4	70.1
<b>Connecticut</b> .....	1,655.6	1,665.0	1,675.9	.8	.8	.8	60.0	62.8	62.2
Bridgeport .....	186.6	185.4	186.0	(2)	(2)	(2)	6.8	7.2	7.2
Danbury .....	88.1	88.4	89.0	(1)	(1)	(1)	3.7	4.0	3.9
Hartford .....	605.2	604.6	607.5	(1)	(1)	(1)	20.4	19.9	20.1
New Haven-Meriden .....	253.2	253.2	254.2	(1)	(1)	(1)	9.4	9.6	9.4
New London-Norwich .....	138.1	139.7	139.9	(1)	(1)	(1)	4.6	4.9	4.9
Stamford-Norwalk .....	208.3	210.1	211.2	(1)	(1)	(1)	6.0	6.0	5.8
Waterbury .....	89.1	89.2	89.8	(2)	(2)	(2)	3.6	3.9	3.9
<b>Delaware</b> .....	396.8	406.4	409.3	.1	.1	.1	22.9	24.0	24.1
Dover .....	53.6	56.2	57.3	.1	.1	.1	2.4	2.5	2.5
Wilmington-Newark .....	309.7	316.7	319.8	.2	.2	.2	17.7	18.2	18.6
<b>District of Columbia</b> .....	613.2	614.0	614.7	.1	.1	.1	8.5	8.5	8.4
Washington PMSA .....	2,517.0	2,570.5	2,585.3	1.1	1.1	1.2	128.0	137.4	136.6
<b>Florida</b> .....	6,573.8	6,730.0	6,804.5	6.6	7.0	7.0	341.9	355.4	356.0
Daytona Beach .....	152.3	155.0	156.2	(2)	(2)	(2)	7.8	7.9	7.9
Fort Lauderdale .....	640.7	651.5	658.5	.1	.1	.1	34.0	34.6	34.6
Fort Myers-Cape Coral .....	152.4	153.4	155.3	(2)	(2)	(2)	12.9	12.9	13.1
Gainesville .....	114.9	116.6	117.4	(2)	(2)	(2)	4.4	4.5	4.6
Jacksonville .....	529.8	547.5	551.4	(2)	(2)	(2)	28.6	28.8	28.9
Lakeland-Winter Haven .....	170.8	174.1	176.3	2.9	3.1	3.1	8.4	8.3	8.3
Melbourne-Titusville-Palm Bay .....	180.0	182.4	183.5	(2)	(2)	(2)	9.2	9.8	9.9
Miami .....	975.9	985.8	997.8	.3	.3	.3	34.4	35.1	35.0
Orlando .....	814.4	843.5	852.0	(2)	(2)	(2)	44.7	47.3	48.1
Pensacola .....	153.3	157.3	157.8	(2)	(2)	(2)	11.0	11.2	11.3
Sarasota-Bradenton .....	262.3	273.8	279.3	(2)	(2)	(2)	13.0	13.5	13.5
Tallahassee .....	149.1	150.9	151.7	(2)	(2)	(2)	5.9	5.7	5.6
Tampa-St. Petersburg-Clearwater .....	1,091.8	1,127.5	1,138.3	.4	.4	.4	52.8	55.5	55.5
West Palm Beach-Boca Raton .....	450.1	458.3	468.6	(2)	(2)	(2)	26.1	27.3	27.2

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		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Alabama</b> .....	380.3	372.2	370.9	91.0	92.1	91.8	435.8	437.4	443.8
Birmingham .....	50.8	49.7	50.1	30.1	30.7	30.8	113.5	116.6	117.8
Huntsville .....	40.7	39.4	39.0	3.7	3.3	3.3	35.8	35.9	36.4
Mobile .....	27.7	28.0	27.9	13.2	13.6	13.6	59.2	59.3	60.1
Montgomery .....	17.6	17.8	17.7	6.3	6.6	6.6	37.7	37.0	38.1
Tuscaloosa .....	11.9	12.4	12.5	2.5	2.6	2.6	19.2	18.9	19.7
<b>Alaska</b> .....	11.1	13.1	10.9	23.2	25.2	24.1	55.0	56.0	56.1
Anchorage .....	1.8	2.0	1.9	12.2	12.9	12.8	30.9	31.3	31.5
<b>Arizona</b> .....	211.8	216.7	216.1	97.0	101.2	102.1	497.0	502.9	514.7
Phoenix-Mesa .....	165.2	168.8	168.7	72.3	76.4	77.1	351.3	355.8	365.3
Tucson .....	28.5	29.6	29.5	13.2	13.5	13.6	70.0	70.8	72.6
<b>Arkansas</b> .....	253.5	253.9	253.8	67.5	68.7	68.9	256.4	256.7	259.5
Fayetteville-Springdale-Rogers .....	34.0	33.6	33.7	9.5	9.8	9.9	40.7	40.6	41.3
Fort Smith .....	27.4	27.1	26.9	6.7	6.4	6.4	20.1	19.8	19.9
Little Rock-North Little Rock .....	33.5	32.9	32.8	21.4	21.6	21.6	71.3	71.1	72.2
Pine Bluff .....	8.1	8.4	8.4	1.9	1.9	1.8	7.4	7.1	7.3
<b>California</b> .....	1,936.4	1,947.3	1,939.5	679.7	688.5	690.1	3,146.9	3,148.9	3,204.0
Bakersfield .....	9.9	10.6	10.5	10.2	10.8	10.7	43.5	42.5	43.2
Fresno .....	30.0	32.0	30.3	14.6	14.8	14.8	69.0	68.5	69.7
Los Angeles-Long Beach .....	673.0	680.6	681.1	214.8	219.5	220.0	877.0	879.4	892.9
Modesto .....	25.9	27.2	26.8	5.7	6.1	6.2	35.2	35.1	35.8
Oakland .....	120.3	120.8	120.1	61.6	61.9	63.0	220.1	219.4	223.7
Orange County .....	226.0	234.3	234.8	46.2	48.6	48.7	315.5	321.0	326.4
Riverside-San Bernardino .....	107.3	114.1	114.2	44.4	46.5	46.8	224.1	227.8	233.7
Sacramento .....	46.7	46.6	46.2	25.6	26.1	26.2	141.3	139.7	143.0
Salinas .....	8.9	8.8	8.9	6.0	5.9	5.9	32.1	32.6	33.2
San Diego .....	123.8	124.0	124.3	42.2	41.9	42.2	246.8	248.9	253.5
San Francisco .....	77.8	76.9	76.4	80.3	79.7	80.0	212.6	209.2	213.8
San Jose .....	259.7	253.2	251.1	28.4	29.0	29.0	191.4	190.4	193.5
Santa Barbara-Santa Maria-Lompoc .....	17.0	17.0	16.9	5.9	5.9	6.0	36.9	37.2	37.7
Santa Rosa .....	25.8	26.5	26.2	6.4	6.4	6.5	42.3	43.4	43.7
Stockton-Lodi .....	23.0	25.3	24.3	10.8	11.5	11.3	41.7	41.7	42.1
Vallejo-Fairfield-Napa .....	18.4	19.3	19.2	6.2	6.5	6.4	40.4	40.7	41.1
Ventura .....	33.3	34.2	34.0	9.8	10.1	10.2	60.9	61.1	62.3
<b>Colorado</b> .....	207.5	207.3	207.7	122.8	126.7	126.5	491.7	503.6	511.4
Boulder-Longmont .....	32.8	32.9	32.9	3.9	4.1	4.0	36.4	36.1	36.3
Colorado Springs .....	27.4	27.3	27.8	11.9	12.1	12.1	49.6	51.5	52.1
Denver .....	93.8	93.9	94.0	85.8	88.7	88.8	262.0	269.9	273.3
<b>Connecticut</b> .....	277.6	276.7	276.6	76.1	76.8	77.0	365.6	362.4	368.8
Bridgeport .....	40.1	39.5	39.4	7.2	7.1	7.1	42.0	41.9	42.3
Danbury .....	18.9	18.4	18.4	2.6	2.8	2.8	22.9	22.2	22.8
Hartford .....	93.9	94.6	94.4	27.3	27.6	27.8	126.7	124.5	126.2
New Haven-Meriden .....	39.3	38.9	39.2	16.3	16.6	16.7	53.7	53.3	54.1
New London-Norwich .....	24.4	24.0	24.1	6.4	6.6	6.6	28.8	28.7	29.1
Stamford-Norwalk .....	27.6	26.6	26.5	10.1	10.1	10.0	47.2	47.2	48.0
Waterbury .....	19.2	18.9	18.7	3.6	3.5	3.5	19.2	19.0	19.5
<b>Delaware</b> .....	58.4	59.2	59.4	15.8	16.3	16.3	87.2	88.7	89.5
Dover .....	6.1	6.3	6.3	1.9	2.1	2.1	12.8	13.3	13.5
Wilmington-Newark .....	44.1	45.1	45.2	14.0	14.2	14.3	63.2	63.6	64.9
<b>District of Columbia</b> .....	12.7	12.9	12.9	17.4	16.7	16.6	49.3	48.6	49.2
Washington PMSA .....	99.9	102.0	102.1	112.6	113.9	114.1	482.2	477.3	487.0
<b>Florida</b> .....	494.0	490.0	491.2	331.1	342.4	344.4	1,695.0	1,698.7	1,743.3
Daytona Beach .....	14.4	14.8	14.9	4.3	4.6	4.7	43.1	43.3	44.0
Fort Lauderdale .....	40.4	40.4	40.4	31.1	31.3	31.6	182.2	182.3	187.4
Fort Myers-Cape Coral .....	6.9	7.0	6.9	7.0	7.0	7.1	43.7	43.2	44.5
Gainesville .....	5.4	5.1	5.1	2.5	2.7	2.7	24.7	25.3	25.8
Jacksonville .....	37.8	39.1	39.1	36.7	37.3	37.6	131.6	133.7	135.7
Lakeland-Winter Haven .....	20.9	20.4	20.7	8.8	9.1	9.1	49.2	50.5	52.0
Melbourne-Titusville-Palm Bay .....	28.1	28.6	28.8	5.3	5.7	5.7	42.4	42.9	43.8
Miami .....	74.6	72.6	72.5	84.2	85.7	86.5	260.7	260.1	266.5
Orlando .....	53.1	53.7	54.1	41.5	43.0	43.2	204.9	208.5	212.5
Pensacola .....	10.9	10.7	10.7	7.2	7.8	7.8	38.8	41.0	41.2
Sarasota-Bradenton .....	20.9	21.8	22.0	5.3	5.5	5.5	61.5	61.6	64.3
Tallahassee .....	5.1	5.0	5.0	4.2	4.4	4.4	30.5	30.2	30.8
Tampa-St. Petersburg-Clearwater .....	88.0	87.5	87.5	49.3	51.4	51.8	265.9	264.5	271.5
West Palm Beach-Boca Raton .....	31.5	31.3	32.2	16.7	17.0	17.3	115.9	115.9	120.4

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	Finance, insurance, and real estate			Services			Government		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Alabama</b> .....	84.6	87.1	87.2	435.9	442.5	443.8	351.9	352.9	353.9
Birmingham .....	34.6	36.3	36.3	139.4	141.2	141.8	69.3	69.3	69.6
Huntsville .....	4.7	4.7	4.7	46.4	48.3	49.1	38.8	37.7	37.8
Mobile .....	10.0	10.1	10.1	60.5	61.7	61.8	34.9	35.7	35.9
Montgomery .....	9.2	9.4	9.5	41.7	42.3	42.3	37.0	37.2	37.3
Tuscaloosa .....	2.5	2.6	2.7	14.0	14.6	14.4	22.9	22.8	22.9
<b>Alaska</b> .....	12.1	12.5	12.3	64.3	67.6	66.6	74.2	74.8	74.7
Anchorage .....	7.2	7.3	7.3	35.3	36.6	36.4	28.6	29.1	29.3
<b>Arizona</b> .....	130.1	136.1	136.3	614.1	638.1	644.6	340.3	350.6	362.3
Phoenix-Mesa .....	109.7	117.3	117.5	448.2	465.7	472.3	183.0	187.9	197.4
Tucson .....	12.1	12.8	12.8	100.2	102.0	102.6	74.4	74.2	75.1
<b>Arkansas</b> .....	44.3	44.1	44.1	258.0	266.8	265.3	188.0	191.7	192.5
Fayetteville-Springdale-Rogers .....	4.8	5.0	5.0	27.1	27.8	27.6	20.0	20.3	20.3
Fort Smith .....	3.1	3.1	3.1	24.3	25.4	25.4	9.8	10.0	10.0
Little Rock-North Little Rock .....	17.4	17.0	17.0	90.2	90.2	90.7	59.6	59.8	60.2
Pine Bluff .....	1.3	1.3	1.3	8.5	8.6	8.6	7.9	7.9	7.9
<b>California</b> .....	764.9	787.7	788.7	4,133.7	4,293.1	4,303.7	2,190.9	2,217.6	2,234.7
Bakersfield .....	6.9	7.5	7.5	43.0	43.6	43.7	49.9	49.4	49.9
Fresno .....	13.7	13.4	13.4	72.0	72.3	72.0	65.7	67.9	67.6
Los Angeles-Long Beach .....	221.3	225.0	225.7	1,289.8	1,324.7	1,327.7	546.9	558.7	562.1
Modesto .....	4.6	4.5	4.5	32.3	33.8	33.7	25.3	24.9	25.5
Oakland .....	55.7	55.7	55.9	287.5	295.8	297.2	172.7	175.0	175.8
Orange County .....	92.4	96.6	95.5	375.9	388.6	388.1	137.9	139.5	140.8
Riverside-San Bernardino .....	30.6	31.6	31.8	226.9	235.7	237.8	175.6	178.5	179.5
Sacramento .....	42.1	43.7	43.8	174.5	180.0	181.7	170.4	170.7	171.5
Salinas .....	5.7	5.9	5.9	33.4	34.5	34.5	28.8	29.6	29.6
San Diego .....	61.8	62.5	62.6	344.3	358.1	359.0	197.6	198.2	200.6
San Francisco .....	103.2	106.2	106.1	366.3	378.4	380.3	127.1	126.1	126.8
San Jose .....	31.0	31.5	31.6	309.1	319.3	318.8	89.8	91.2	91.5
Santa Barbara-Santa Maria-Lompoc .....	7.4	7.5	7.6	47.3	48.9	49.2	31.7	31.9	32.1
Santa Rosa .....	9.5	9.9	10.0	48.3	49.7	49.6	26.3	26.8	27.0
Stockton-Lodi .....	8.7	8.5	8.6	43.1	44.1	44.4	35.7	35.5	35.8
Vallejo-Fairfield-Napa .....	6.2	6.4	6.4	40.7	43.4	42.6	31.2	31.9	32.7
Ventura .....	13.5	14.4	14.5	73.0	76.9	77.2	44.1	44.2	45.2
<b>Colorado</b> .....	129.0	133.1	133.2	606.6	615.0	617.8	323.8	330.2	332.1
Boulder-Longmont .....	5.5	5.6	5.7	53.1	52.6	52.7	27.2	27.9	27.8
Colorado Springs .....	11.7	12.2	12.0	72.4	75.1	75.5	35.3	35.5	35.9
Denver .....	85.5	89.2	89.1	329.8	337.7	339.3	148.1	149.1	149.7
<b>Connecticut</b> .....	132.6	135.7	135.9	509.7	519.8	521.6	233.2	230.0	233.0
Bridgeport .....	10.4	10.3	10.3	58.6	58.3	58.5	21.5	21.1	21.2
Danbury .....	4.7	5.1	5.1	24.8	25.5	25.4	10.5	10.4	10.6
Hartford .....	68.5	67.9	68.7	172.3	174.2	174.0	96.1	95.9	96.3
New Haven-Meriden .....	12.8	12.9	12.8	90.1	90.4	90.3	31.6	31.5	31.7
New London-Norwich .....	3.7	3.9	3.9	34.2	35.0	34.8	36.0	36.6	36.5
Stamford-Norwalk .....	24.9	26.5	26.7	74.2	75.9	76.2	18.3	17.8	18.0
Waterbury .....	4.3	4.2	4.2	26.9	27.2	27.5	12.3	12.5	12.5
<b>Delaware</b> .....	48.0	49.6	49.7	109.8	114.0	114.8	54.6	54.5	55.4
Dover .....	2.5	2.7	2.8	12.4	12.9	13.2	15.5	16.4	16.9
Wilmington-Newark .....	41.8	43.1	43.0	89.6	93.5	94.2	39.1	38.8	39.4
<b>District of Columbia</b> .....	28.3	28.8	28.8	268.4	274.5	274.2	228.5	223.9	224.5
Washington PMSA .....	133.9	135.5	135.3	964.7	1,005.6	1,008.6	594.6	597.7	600.4
<b>Florida</b> .....	419.5	431.5	433.5	2,318.0	2,421.2	2,438.0	967.7	983.8	991.1
Daytona Beach .....	6.5	6.6	6.6	52.4	53.6	53.9	23.8	24.2	24.2
Fort Lauderdale .....	45.8	46.7	46.9	222.5	230.8	232.0	84.6	85.3	85.5
Fort Myers-Cape Coral .....	9.1	9.2	9.3	47.3	47.7	48.0	25.4	26.3	26.3
Gainesville .....	5.1	5.4	5.4	33.1	34.3	34.2	39.7	39.3	39.6
Jacksonville .....	53.0	55.4	55.7	173.1	183.8	184.2	68.6	69.0	69.8
Lakeland-Winter Haven .....	7.8	8.3	8.3	47.1	48.5	48.7	25.7	25.9	26.1
Melbourne-Titusville-Palm Bay .....	6.0	6.0	6.0	63.9	63.9	63.9	25.1	25.5	25.4
Miami .....	68.3	67.4	67.8	315.7	324.8	326.6	137.7	139.8	142.6
Orlando .....	47.1	48.9	49.2	336.4	352.4	354.9	86.3	89.3	89.6
Pensacola .....	6.1	6.5	6.5	49.9	50.9	51.0	29.1	28.9	29.0
Sarasota-Bradenton .....	11.6	11.9	12.0	125.7	135.9	138.1	24.2	23.5	23.8
Tallahassee .....	5.7	5.8	5.8	38.6	39.8	39.7	58.9	59.8	60.2
Tampa-St. Petersburg-Clearwater .....	77.5	81.5	81.5	423.2	449.5	452.1	134.7	137.2	138.0
West Palm Beach-Boca Raton .....	30.6	31.4	31.4	174.5	180.5	184.5	54.8	54.9	55.6

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		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Georgia</b> .....	3,707.2	3,777.5	3,806.8	8.1	8.7	8.8	175.7	185.1	185.5
Albany .....	60.7	60.4	60.7	(2)	(2)	(2)	3.8	3.9	3.8
Athens .....	73.5	75.2	75.8	(1)	(1)	(1)	2.6	2.6	2.5
Atlanta .....	2,014.0	2,054.7	2,069.8	1.6	1.7	1.7	98.5	103.4	103.4
Augusta-Aiken .....	194.1	196.5	197.7	.4	.4	.4	11.1	11.3	11.4
Columbus .....	116.6	117.7	118.8	(1)	(1)	(1)	5.3	5.5	5.5
Macon .....	151.1	152.6	153.0	1.2	1.3	1.3	6.3	6.8	6.8
Savannah .....	134.0	134.4	136.0	(1)	(1)	(1)	7.6	7.7	8.1
<b>Hawaii</b> .....	535.5	523.3	526.9	(1)	(1)	(1)	22.6	20.6	20.3
Honolulu .....	406.0	395.6	398.2	(1)	(1)	(1)	17.4	15.8	15.5
<b>Idaho</b> .....	518.5	530.0	529.1	3.0	3.1	3.1	33.3	34.4	33.5
Boise City .....	199.1	202.4	203.4	(1)	(1)	(1)	13.7	13.4	13.4
<b>Illinois</b> .....	5,882.6	5,935.4	5,943.9	11.9	11.6	11.4	250.1	260.0	252.1
Bloomington-Normal .....	81.3	83.6	83.9	(1)	(1)	(1)	2.7	2.9	2.8
Champaign-Urbana .....	100.3	100.2	100.7	(1)	(1)	(1)	3.3	3.5	3.4
Chicago .....	4,108.6	4,144.1	4,155.0	1.7	1.8	1.8	167.1	173.1	168.6
Davenport-Moline-Rock Island .....	184.0	183.4	184.1	(1)	(1)	(1)	10.2	10.4	10.1
Decatur .....	57.2	57.6	57.8	(1)	(1)	(1)	3.7	4.1	4.0
Kankakee .....	44.2	43.4	43.9	(1)	(1)	(1)	2.1	2.2	2.1
Peoria-Pekin .....	176.4	174.7	174.7	(1)	(1)	(1)	8.7	8.5	8.2
Rockford .....	180.0	178.6	176.7	(1)	(1)	(1)	7.1	7.1	7.0
Springfield .....	114.3	113.6	114.0	(1)	(1)	(1)	5.3	5.3	5.1
<b>Indiana</b> .....	2,913.1	2,920.7	2,921.4	6.8	6.7	6.7	145.5	146.1	142.8
Bloomington .....	67.2	66.4	66.8	(1)	(1)	(1)	3.3	3.2	3.2
Elkhart-Goshen .....	116.7	118.1	118.5	(1)	(1)	(1)	4.9	5.0	5.0
Evansville-Henderson .....	155.5	155.3	155.2	1.4	1.3	1.3	10.0	10.3	10.4
Fort Wayne .....	271.3	272.1	272.2	(1)	(1)	(1)	13.4	14.6	14.2
Gary .....	266.0	268.0	268.6	(1)	(1)	(1)	17.8	17.4	17.8
Indianapolis .....	844.3	859.7	863.8	.8	.8	.8	48.2	51.1	50.6
Kokomo .....	53.4	54.6	54.8	(1)	(1)	(1)	2.3	2.7	2.7
Lafayette .....	95.6	96.6	96.8	(1)	(1)	(1)	3.9	4.2	4.1
Muncie .....	61.6	60.8	61.6	(1)	(1)	(1)	2.3	2.3	2.2
South Bend .....	134.7	137.1	137.1	(1)	(1)	(1)	7.7	7.1	7.0
Terre Haute .....	69.7	69.2	69.1	.2	.3	.3	3.4	3.7	3.3
<b>Iowa</b> .....	1,434.3	1,459.5	1,462.0	2.2	2.2	2.1	63.3	67.1	64.7
Cedar Rapids .....	115.9	114.9	115.8	(1)	(1)	(1)	6.1	6.2	6.3
Des Moines .....	272.4	274.2	276.2	(1)	(1)	(1)	12.4	13.0	12.6
Dubuque .....	52.2	52.3	52.8	(1)	(1)	(1)	2.0	2.1	2.0
Iowa City .....	68.2	66.7	67.6	(1)	(1)	(1)	2.2	2.7	2.7
Sioux City .....	66.4	66.5	66.4	(1)	(1)	(1)	4.2	4.2	4.0
Waterloo-Cedar Falls .....	73.6	74.3	74.7	(1)	(1)	(1)	2.8	2.9	2.8
<b>Kansas</b> .....	1,296.4	1,320.9	1,328.8	8.3	7.9	7.9	60.4	64.3	63.0
Lawrence .....	48.7	49.3	50.1	(1)	(1)	(1)	2.1	2.2	2.3
Topeka .....	100.3	100.1	100.5	(1)	(1)	(1)	4.7	5.0	5.0
Wichita .....	280.9	285.7	286.4	1.4	1.4	1.4	14.4	14.7	14.5
<b>Kentucky</b> .....	1,745.2	1,770.7	1,776.8	22.7	22.1	22.3	84.6	90.4	88.4
Lexington .....	278.2	283.9	284.7	.3	.2	.2	13.3	13.9	13.8
Louisville .....	561.1	575.3	578.9	.5	.6	.6	30.2	31.8	31.6
Owensboro .....	43.9	44.6	44.9	.3	.3	.3	3.5	3.7	3.8
<b>Louisiana</b> .....	1,878.8	1,895.0	1,901.5	55.6	53.4	53.3	117.7	125.7	126.0
Alexandria .....	54.2	55.4	55.7	.1	.1	.1	3.3	3.5	3.5
Baton Rouge .....	287.1	296.2	296.8	.9	1.0	1.0	31.7	35.4	35.0
Houma .....	76.4	77.7	77.6	7.6	6.8	6.8	3.7	3.9	3.9
Lafayette .....	164.2	166.9	168.1	15.8	15.4	15.4	10.0	10.7	10.7
Lake Charles .....	86.4	86.2	86.2	1.3	1.3	1.3	10.4	10.3	10.1
Monroe .....	69.1	69.0	69.1	.2	.2	.2	3.6	3.5	3.5
New Orleans .....	622.2	622.4	624.4	15.4	15.6	15.6	30.9	31.8	32.2
Shreveport-Bossier City .....	172.5	176.7	176.6	2.5	2.6	2.6	9.7	10.9	10.6
<b>Maine</b> .....	569.9	579.9	579.5	.1	.1	.1	26.3	28.0	27.5
Lewiston-Auburn .....	43.6	43.4	43.7	(2)	(2)	(2)	1.9	1.7	1.7
Portland .....	144.9	142.1	143.6	(2)	(2)	(2)	7.1	8.2	7.4

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Georgia</b> .....	591.0	594.4	595.0	236.8	245.7	245.9	945.3	942.5	961.8
Albany .....	9.2	8.6	8.7	3.0	3.2	3.2	14.5	14.3	14.5
Athens .....	11.5	11.7	11.8	1.8	1.8	1.8	18.4	18.7	19.3
Atlanta .....	221.2	221.6	221.9	168.4	174.3	174.5	537.9	537.2	547.3
Augusta-Aiken .....	40.9	41.8	41.9	6.7	6.6	6.7	43.4	43.3	43.9
Columbus .....	21.6	20.9	20.8	4.0	4.1	4.1	27.2	27.4	28.2
Macon .....	20.6	20.3	20.2	5.3	5.4	5.4	35.4	33.6	34.1
Savannah .....	18.2	18.8	18.6	9.9	9.6	9.5	34.1	34.2	35.3
<b>Hawaii</b> .....	16.5	15.9	15.9	41.5	40.4	40.1	135.4	131.0	132.2
Honolulu .....	12.6	12.1	12.0	33.3	32.4	32.1	100.6	96.8	97.7
<b>Idaho</b> .....	76.1	76.6	76.3	24.6	25.2	25.4	131.3	132.2	134.4
Boise City .....	35.7	37.0	37.2	9.8	10.0	9.9	47.8	47.1	47.7
<b>Illinois</b> .....	980.9	978.0	975.3	343.7	346.0	347.1	1,354.6	1,344.2	1,365.4
Bloomington-Normal .....	8.8	8.8	8.8	3.0	2.9	2.9	17.7	17.9	18.3
Champaign-Urbana .....	11.8	11.4	11.3	2.8	2.7	2.7	22.2	21.8	22.1
Chicago .....	661.8	662.4	661.6	254.4	254.1	255.0	939.3	928.6	943.6
Davenport-Moline-Rock Island .....	31.2	31.7	31.5	9.9	10.0	10.0	48.9	47.9	48.7
Decatur .....	13.5	13.5	13.6	5.0	5.0	5.0	12.7	12.5	12.6
Kankakee .....	8.4	8.0	8.2	2.1	2.1	2.2	11.3	11.0	11.2
Peoria-Pekin .....	32.5	33.0	33.0	9.7	9.8	9.8	42.6	42.4	42.5
Rockford .....	53.6	53.4	51.5	9.8	9.7	9.7	38.1	37.2	37.7
Springfield .....	4.5	4.5	4.5	4.8	4.8	4.8	24.7	24.4	24.8
<b>Indiana</b> .....	678.8	681.8	681.5	141.8	143.1	143.0	696.2	688.1	695.7
Bloomington .....	10.4	10.7	10.7	1.9	1.8	1.8	15.7	15.6	16.1
Elkhart-Goshen .....	58.6	59.5	59.8	2.9	2.8	2.8	22.4	22.5	22.6
Evansville-Henderson .....	31.8	31.7	31.8	7.0	7.1	7.1	39.1	38.2	38.5
Fort Wayne .....	74.3	73.4	73.6	13.0	12.7	12.7	66.0	65.3	65.9
Gary .....	49.8	49.4	48.9	15.3	15.5	15.3	64.7	64.6	65.5
Indianapolis .....	127.7	126.9	126.6	51.3	52.6	52.6	222.3	220.1	223.3
Kokomo .....	21.3	21.2	21.4	1.2	1.2	1.2	11.5	11.5	11.6
Lafayette .....	22.2	22.1	22.1	2.3	2.3	2.3	19.8	19.5	20.0
Muncie .....	10.7	9.7	9.8	3.5	3.5	3.6	14.5	14.0	14.5
South Bend .....	22.4	23.0	22.9	5.5	5.8	5.6	34.2	34.1	34.2
Terre Haute .....	11.9	12.2	12.3	2.8	2.7	2.6	20.0	19.3	19.6
<b>Iowa</b> .....	257.2	260.0	260.3	66.7	69.6	69.6	352.7	352.0	355.5
Cedar Rapids .....	22.1	22.3	22.5	8.0	7.7	7.6	26.2	25.3	25.7
Des Moines .....	25.4	25.4	25.3	13.6	14.0	14.0	71.2	69.9	71.6
Dubuque .....	12.0	11.9	11.9	2.1	2.1	2.1	12.4	12.4	12.7
Iowa City .....	4.9	4.9	5.0	2.2	2.2	2.2	13.7	12.7	12.5
Sioux City .....	13.2	13.2	13.2	3.8	3.8	3.7	16.0	15.8	16.0
Waterloo-Cedar Falls .....	14.8	14.7	14.5	2.3	2.4	2.4	17.2	17.2	17.6
<b>Kansas</b> .....	208.4	212.4	212.6	72.9	75.2	75.4	317.2	323.1	326.3
Lawrence .....	5.3	5.3	5.3	1.4	1.3	1.3	12.4	12.2	12.4
Topeka .....	9.6	9.6	9.7	6.3	6.2	6.1	21.8	21.4	21.9
Wichita .....	72.1	74.1	74.4	11.0	11.3	11.3	62.6	63.1	63.6
<b>Kentucky</b> .....	316.1	316.2	315.0	100.4	103.3	103.7	422.6	420.6	429.8
Lexington .....	47.6	49.9	49.2	11.1	11.0	11.1	63.8	64.6	66.1
Louisville .....	88.1	89.5	89.6	43.1	44.7	44.9	140.1	140.7	144.2
Owensboro .....	7.0	7.2	7.2	2.2	2.4	2.4	11.3	11.1	11.3
<b>Louisiana</b> .....	192.2	190.2	191.6	112.1	114.6	114.9	440.5	438.6	443.5
Alexandria .....	3.4	3.6	3.6	2.7	2.7	2.7	12.6	13.1	13.2
Baton Rouge .....	25.0	24.8	25.2	12.4	13.1	13.2	68.1	70.0	71.2
Houma .....	7.7	8.0	7.8	8.0	8.7	8.8	17.6	17.7	17.8
Lafayette .....	14.9	14.8	15.0	10.2	10.3	10.4	42.5	42.8	43.3
Lake Charles .....	11.8	11.7	11.7	4.5	4.5	4.4	18.5	18.8	19.0
Monroe .....	7.9	7.9	7.8	3.7	3.5	3.5	17.4	17.5	17.7
New Orleans .....	49.5	49.0	49.4	42.7	42.1	41.9	153.3	151.8	153.2
Shreveport-Bossier City .....	19.3	19.5	19.4	8.4	8.6	8.6	40.1	40.7	41.0
<b>Maine</b> .....	89.2	87.0	87.5	23.6	24.3	24.1	145.3	146.3	147.3
Lewiston-Auburn .....	7.9	8.0	7.8	1.8	1.8	1.8	11.5	11.2	11.5
Portland .....	15.2	15.1	14.9	6.4	6.6	6.2	44.6	41.6	43.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>Georgia</b> .....	190.9	197.6	198.3	970.5	1,003.3	1,010.0	588.9	600.2	601.5
Albany .....	2.1	2.2	2.2	15.6	15.6	15.5	12.5	12.6	12.8
Athens .....	2.2	2.2	2.2	15.9	15.3	15.2	21.1	22.9	23.0
Atlanta .....	130.3	133.2	133.2	597.7	618.2	621.9	258.4	265.1	265.9
Augusta-Aiken .....	6.1	5.9	5.8	45.5	46.9	47.4	40.0	40.3	40.2
Columbus .....	8.1	8.7	8.7	30.1	30.8	30.9	20.3	20.3	20.6
Macon .....	8.7	9.8	9.8	40.3	41.3	41.4	33.3	34.1	34.0
Savannah .....	4.3	4.3	4.3	39.1	39.0	39.3	20.8	20.8	20.9
<b>Hawaii</b> .....	35.8	35.0	34.8	170.5	169.1	170.1	113.2	111.3	113.5
Honolulu .....	28.6	28.0	27.8	122.6	121.2	121.9	90.9	89.3	91.2
<b>Idaho</b> .....	25.8	26.8	26.7	122.5	125.9	124.6	101.9	105.8	105.1
Boise City .....	11.5	12.1	12.1	50.0	50.9	51.0	30.6	31.9	32.1
<b>Illinois</b> .....	403.0	411.9	412.2	1,713.5	1,761.7	1,755.1	824.9	822.0	825.3
Bloomington-Normal .....	14.1	15.6	15.6	20.4	20.5	20.3	14.6	15.0	15.2
Champaign-Urbana .....	3.7	3.8	3.8	21.3	21.6	21.5	35.2	35.4	35.9
Chicago .....	313.7	322.0	322.1	1,278.2	1,314.9	1,313.0	492.4	487.2	489.3
Davenport-Moline-Rock Island .....	8.2	8.3	8.3	47.5	48.2	47.9	28.1	26.9	27.6
Decatur .....	2.0	2.1	2.0	13.5	13.8	13.9	6.8	6.6	6.7
Kankakee .....	1.7	1.7	1.7	11.5	11.7	11.7	7.1	6.7	6.8
Peoria-Pekin .....	7.9	8.0	8.0	54.0	53.6	53.4	21.0	19.4	19.8
Rockford .....	7.6	7.5	7.4	46.4	46.3	45.9	17.4	17.4	17.5
Springfield .....	7.9	7.8	7.8	33.0	33.2	32.9	34.1	33.6	33.8
<b>Indiana</b> .....	139.5	142.7	142.9	700.3	706.8	703.2	404.2	405.4	405.6
Bloomington .....	2.1	2.2	2.2	12.2	11.9	11.9	21.6	21.0	20.9
Elkhart-Goshen .....	3.1	3.3	3.3	17.9	18.0	18.1	6.9	7.0	6.9
Evansville-Henderson .....	7.4	7.8	7.8	43.7	43.8	43.2	15.1	15.1	15.1
Fort Wayne .....	14.8	14.5	14.4	62.2	63.1	62.9	27.6	28.5	28.5
Gary .....	9.4	9.4	9.4	71.9	73.5	73.5	37.1	38.2	38.2
Indianapolis .....	63.3	66.5	66.5	227.4	234.9	236.6	103.3	106.8	106.8
Kokomo .....	1.6	1.5	1.5	8.6	9.2	9.2	6.9	7.3	7.2
Lafayette .....	3.9	4.3	4.3	19.3	19.0	19.1	24.2	25.2	24.9
Muncie .....	1.8	1.9	1.9	16.5	17.3	17.4	12.3	12.1	12.2
South Bend .....	6.3	6.3	6.1	44.5	46.8	47.2	14.1	14.0	14.1
Terre Haute .....	2.3	2.3	2.3	16.8	16.6	16.7	12.3	12.1	12.0
<b>Iowa</b> .....	80.3	82.2	82.2	370.9	383.0	383.0	241.0	243.4	244.6
Cedar Rapids .....	6.2	6.4	6.4	35.8	35.4	35.7	11.5	11.6	11.6
Des Moines .....	37.9	38.9	39.0	77.7	79.9	80.1	34.2	33.1	33.6
Dubuque .....	1.7	1.8	1.9	18.2	18.1	18.3	3.8	3.9	3.9
Iowa City .....	1.9	2.1	2.1	14.4	14.1	14.6	28.9	28.0	28.5
Sioux City .....	2.6	2.6	2.6	18.9	19.3	19.2	7.7	7.6	7.7
Waterloo-Cedar Falls .....	3.3	3.2	3.2	19.9	20.7	20.9	13.3	13.2	13.3
<b>Kansas</b> .....	60.8	60.8	60.9	324.5	331.6	333.9	243.9	245.6	248.8
Lawrence .....	2.0	2.1	2.1	11.4	12.1	12.2	14.1	14.1	14.5
Topeka .....	6.8	6.8	6.7	28.7	29.0	28.9	22.4	22.1	22.2
Wichita .....	11.0	11.3	11.3	74.1	75.3	75.1	34.3	34.5	34.8
<b>Kentucky</b> .....	70.5	71.2	71.1	431.5	447.4	445.5	296.8	299.5	301.0
Lexington .....	10.4	10.3	10.3	74.0	76.7	76.4	57.7	57.3	57.6
Louisville .....	29.1	29.5	29.6	160.4	168.1	167.8	69.6	70.4	70.8
Owensboro .....	1.7	1.8	1.8	10.6	10.8	10.7	7.3	7.3	7.4
<b>Louisiana</b> .....	86.4	86.3	86.5	504.9	512.8	512.6	369.4	373.4	373.1
Alexandria .....	2.2	2.3	2.3	16.7	16.7	16.7	13.2	13.4	13.6
Baton Rouge .....	17.7	17.7	17.7	73.1	74.4	73.9	58.2	59.8	59.6
Houma .....	2.4	2.3	2.3	15.8	16.3	16.2	13.6	14.0	14.0
Lafayette .....	6.3	6.2	6.3	40.7	41.8	42.0	23.8	24.9	25.0
Lake Charles .....	2.6	2.5	2.5	24.1	23.6	23.6	13.2	13.5	13.6
Monroe .....	4.9	5.0	5.0	18.3	18.3	18.3	13.1	13.1	13.1
New Orleans .....	31.7	31.2	31.1	191.3	192.3	193.2	107.4	108.6	107.8
Shreveport-Bossier City .....	6.6	6.6	6.6	52.9	54.6	54.6	33.0	33.2	33.2
<b>Maine</b> .....	28.8	31.0	31.0	158.9	168.2	165.3	97.7	95.0	96.7
Lewiston-Auburn .....	2.1	2.3	2.3	13.4	13.5	13.6	5.0	4.9	5.0
Portland .....	12.4	12.7	13.0	40.3	40.2	40.3	18.9	17.7	18.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Maryland</b>	2,288.7	2,321.7	2,334.1	1.3	1.3	1.3	141.7	142.7	141.9
Baltimore PMSA	1,188.6	1,197.5	1,196.1	.2	.2	.2	66.9	67.8	67.2
Baltimore City	412.8	419.4	418.8	(1)	(1)	(1)	13.2	13.8	13.7
Suburban Maryland-D.C.	847.3	861.4	863.0	(1)	(1)	(1)	60.2	62.9	62.8
<b>Massachusetts</b>	3,194.6	3,244.3	3,255.8	1.4	1.5	1.4	107.0	116.7	115.5
Barnstable-Yarmouth	55.8	59.7	57.6	(1)	(1)	(1)	2.8	2.7	2.8
Boston	1,953.6	1,983.2	1,995.1	.4	.4	.4	59.7	66.8	66.6
Brockton	98.3	99.1	100.0	(2)	(2)	(2)	3.6	3.7	3.8
Fitchburg-Leominster	53.9	53.7	53.7	(2)	(2)	(2)	1.9	2.0	2.0
Lawrence	152.1	150.7	151.3	(2)	(2)	(2)	6.2	6.5	6.4
Lowell	119.9	121.5	122.2	(1)	(1)	(1)	5.0	5.2	5.1
New Bedford	65.5	65.7	66.3	(2)	(2)	(2)	2.4	2.4	2.4
Pittsfield	42.6	43.5	43.4	.1	.1	.1	1.8	1.8	1.8
Springfield	258.9	260.5	261.9	.1	.1	.1	8.1	8.1	7.9
Worcester	228.9	229.4	230.5	.2	.2	.2	7.7	7.8	7.6
<b>Michigan</b>	4,521.9	4,609.5	4,615.8	7.6	7.6	7.7	190.0	200.6	195.3
Ann Arbor	274.0	279.4	279.9	(1)	(1)	(1)	10.6	11.6	11.1
Benton Harbor	73.1	73.8	74.2	(1)	(1)	(1)	2.6	2.9	2.8
Detroit	2,120.6	2,158.4	2,170.2	.8	.9	.9	85.5	93.5	91.6
Flint	183.6	183.7	184.7	(1)	(1)	(1)	7.5	8.6	8.6
Grand Rapids-Muskegon-Holland	563.8	582.5	583.6	(1)	(1)	(1)	25.0	27.7	27.2
Jackson	61.9	63.1	63.5	(1)	(1)	(1)	2.5	2.7	2.7
Kalamazoo-Battle Creek	213.7	216.5	216.9	(1)	(1)	(1)	8.7	9.4	9.2
Lansing-East Lansing	238.2	239.1	240.1	(1)	(1)	(1)	8.9	9.6	9.3
Saginaw-Bay City-Midland	182.8	186.5	185.9	(1)	(1)	(1)	10.1	9.8	9.5
<b>Minnesota</b>	2,538.5	2,590.0	2,594.5	7.9	8.1	7.9	99.4	111.3	106.4
Duluth-Superior	112.5	114.4	114.5	4.9	4.9	4.8	4.6	5.2	5.0
Minneapolis-St. Paul	1,652.7	1,683.4	1,693.0	(2)	(2)	(2)	62.6	68.6	66.6
Rochester	74.8	77.2	77.1	(1)	(1)	(1)	3.0	3.4	3.3
St. Cloud	86.9	87.7	88.4	(1)	(1)	(1)	4.2	4.7	4.5
<b>Mississippi</b>	1,122.0	1,133.6	1,132.9	5.8	5.9	5.7	51.9	56.5	57.0
Jackson	222.6	228.6	228.2	(2)	(2)	(2)	11.4	12.3	12.2
<b>Missouri</b>	2,677.3	2,712.8	2,715.5	4.8	5.0	5.1	126.2	132.9	131.0
Kansas City	936.3	958.0	958.5	(1)	(1)	(1)	48.3	52.2	50.6
St. Louis	1,307.1	1,318.1	1,324.5	(1)	(1)	(1)	68.5	71.9	71.3
Springfield	163.4	165.6	165.9	(1)	(1)	(1)	6.5	6.7	6.7
<b>Montana</b>	372.0	376.6	374.8	5.5	5.5	5.4	19.8	19.9	18.9
<b>Nebraska</b>	876.2	888.0	889.3	1.3	1.4	1.4	40.7	43.0	41.9
Lincoln	149.5	150.0	149.9	(1)	(1)	(1)	7.0	7.5	7.2
Omaha	408.8	419.2	419.6	(1)	(1)	(1)	19.4	21.2	21.0
<b>Nevada</b>	912.4	951.5	956.9	14.5	13.8	13.6	84.6	91.1	90.6
Las Vegas	647.8	680.9	686.9	2.2	2.2	2.2	68.0	70.5	70.5
Reno	180.5	184.4	184.3	.6	.5	.5	12.5	14.3	14.0
<b>New Hampshire</b>	577.2	577.2	574.7	.5	.4	.4	21.9	22.9	22.6
Manchester	97.7	95.4	96.0	(1)	(1)	(1)	4.5	4.7	4.6
Nashua	94.3	93.8	94.0	(1)	(1)	(1)	3.1	3.4	3.4
Portsmouth-Rochester	114.9	113.5	113.1	(1)	(1)	(1)	3.4	3.2	3.2
<b>New Jersey</b>	3,789.9	3,840.3	3,855.0	2.0	2.0	2.0	137.1	144.9	144.0
Atlantic-Cape May	177.4	183.0	179.2	(1)	(1)	(1)	8.0	7.4	7.6
Bergen-Passaic	654.9	659.5	662.8	(1)	(1)	(1)	23.2	24.9	24.6
Camden	479.2	490.3	494.1	(1)	(1)	(1)	22.2	24.1	23.9
Jersey City	245.2	246.5	248.1	(1)	(1)	(1)	4.8	4.7	4.7
Middlesex-Somerset-Hunterdon	623.6	634.5	640.7	.5	.5	.5	19.7	20.7	21.0
Monmouth-Ocean	362.8	367.9	368.9	(1)	(1)	(1)	18.5	19.4	19.0
Newark	963.9	976.4	980.8	.8	.9	.9	33.1	35.3	34.3
Trenton	200.7	199.1	199.8	(1)	(1)	(1)	4.7	5.0	5.1
Vineland-Millville-Bridgeton	59.8	60.3	60.2	.3	.2	.2	2.2	2.3	2.3
<b>New Mexico</b>	716.9	726.6	727.3	15.7	14.9	14.9	42.8	44.0	43.2
Albuquerque	337.6	341.5	342.7	(1)	(1)	(1)	21.6	21.8	21.7
Las Cruces	52.4	53.2	53.6	(1)	(1)	(1)	3.1	3.3	3.2
Santa Fe	71.3	72.9	72.9	(1)	(1)	(1)	3.7	3.8	3.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Maryland</b> .....	176.9	174.7	174.8	105.7	106.9	106.3	547.0	540.3	548.8
Baltimore PMSA .....	101.1	98.3	98.3	59.3	61.7	61.1	276.5	274.5	277.2
Baltimore City .....	31.5	30.3	30.5	20.5	22.1	21.9	65.3	64.5	64.8
Suburban Maryland-D.C. ....	38.4	38.9	38.8	34.3	34.5	34.5	201.7	197.8	199.6
<b>Massachusetts</b> .....	453.4	447.4	446.6	138.4	138.8	138.4	733.9	735.1	742.9
Barnstable-Yarmouth .....	2.1	2.2	2.2	2.9	2.9	2.8	19.1	20.5	20.0
Boston .....	225.4	221.9	221.0	84.5	85.4	85.2	429.6	427.4	435.6
Brockton .....	10.6	10.5	10.5	5.2	4.9	4.9	32.2	31.9	32.3
Fitchburg-Leominster .....	13.8	13.3	13.2	2.2	2.0	2.0	12.6	12.5	12.7
Lawrence .....	38.9	36.6	36.6	4.9	4.9	4.9	35.4	34.7	35.2
Lowell .....	29.4	30.1	30.0	7.3	7.5	7.5	25.6	25.3	25.7
New Bedford .....	13.7	13.2	13.3	3.6	3.8	3.8	16.5	16.4	16.5
Pittsfield .....	7.4	7.5	7.4	1.3	1.3	1.3	10.6	10.6	10.7
Springfield .....	39.4	39.2	39.4	10.4	10.6	10.7	59.9	59.1	59.8
Worcester .....	42.2	41.8	41.9	9.9	9.2	9.2	51.9	51.7	52.5
<b>Michigan</b> .....	976.8	977.9	977.6	175.5	176.8	176.3	1,061.8	1,079.5	1,089.2
Ann Arbor .....	53.0	53.9	54.0	6.5	6.6	6.7	55.4	55.6	56.1
Benton Harbor .....	20.1	20.1	20.1	3.0	3.0	3.0	16.3	16.4	16.7
Detroit .....	447.3	443.7	445.7	96.0	95.0	95.2	500.2	510.5	517.6
Flint .....	40.9	39.5	39.6	5.5	5.6	5.5	46.5	46.2	47.1
Grand Rapids-Muskegon-Holland .....	156.0	158.8	159.5	19.1	19.5	19.4	139.5	144.3	145.9
Jackson .....	12.9	13.0	13.2	3.5	3.5	3.5	15.8	16.1	16.3
Kalamazoo-Battle Creek .....	49.6	49.6	49.5	7.1	7.3	7.3	47.6	48.1	48.7
Lansing-East Lansing .....	30.3	29.0	29.0	6.1	6.0	6.0	53.4	53.4	54.3
Saginaw-Bay City-Midland .....	40.3	40.9	40.4	7.3	7.2	7.1	46.9	47.4	48.1
<b>Minnesota</b> .....	439.2	443.8	441.6	126.8	128.1	128.6	614.6	617.4	625.6
Duluth-Superior .....	8.4	8.7	8.6	7.2	7.6	7.6	28.5	28.6	28.9
Minneapolis-St. Paul .....	275.2	277.5	277.6	90.1	93.5	93.6	398.0	398.3	404.4
Rochester .....	12.6	13.7	13.6	2.2	2.2	2.1	15.0	14.9	15.2
St. Cloud .....	15.5	15.6	15.6	3.0	3.1	3.2	26.2	26.1	26.6
<b>Mississippi</b> .....	242.7	240.2	239.9	54.3	53.6	52.9	240.9	239.9	241.3
Jackson .....	20.8	21.1	20.9	15.8	15.6	15.6	54.7	53.6	53.8
<b>Missouri</b> .....	422.2	420.7	420.0	164.2	166.2	166.1	637.2	642.3	648.5
Kansas City .....	107.5	109.2	109.1	76.6	80.0	80.2	231.9	232.5	235.1
St. Louis .....	197.1	196.1	197.2	83.0	83.0	83.1	312.6	313.2	317.2
Springfield .....	23.9	23.7	23.6	10.5	10.4	10.5	46.3	46.6	46.9
<b>Montana</b> .....	24.7	24.6	24.4	21.7	21.5	21.6	99.6	100.3	100.4
<b>Nebraska</b> .....	117.3	118.3	118.0	54.5	56.8	56.9	215.6	217.3	218.8
Lincoln .....	17.6	17.9	17.7	9.6	10.3	10.3	31.2	31.1	31.3
Omaha .....	39.8	41.9	41.6	28.9	29.8	29.9	99.4	101.1	102.0
<b>Nevada</b> .....	41.2	43.1	42.9	47.0	48.2	48.5	184.9	190.2	193.5
Las Vegas .....	22.1	23.0	23.0	33.6	34.2	34.9	132.8	137.4	139.8
Reno .....	13.6	14.4	14.4	11.7	11.7	11.6	41.6	41.6	42.1
<b>New Hampshire</b> .....	107.7	104.9	104.6	19.6	19.6	19.3	151.6	151.3	151.6
Manchester .....	13.9	13.5	13.7	5.7	6.0	6.1	24.0	23.5	23.8
Nashua .....	27.9	27.3	27.2	2.4	2.3	2.3	23.0	22.8	23.0
Portsmouth-Rochester .....	19.7	19.2	19.1	4.2	3.9	3.8	30.5	30.5	30.4
<b>New Jersey</b> .....	486.6	478.9	477.4	261.8	266.5	266.5	891.7	898.3	909.4
Atlantic-Cape May .....	6.4	6.3	6.3	7.3	7.2	7.1	35.3	36.3	36.5
Bergen-Passaic .....	107.7	106.7	105.6	36.2	37.3	36.9	181.5	180.9	184.2
Camden .....	55.4	55.1	55.3	22.0	22.7	23.0	127.8	129.6	132.0
Jersey City .....	29.8	29.3	29.3	28.8	29.2	29.5	57.0	56.9	57.4
Middlesex-Somerset-Hunterdon .....	93.3	92.1	91.5	51.1	51.3	51.7	147.5	148.3	153.0
Monmouth-Ocean .....	20.8	19.7	19.7	21.2	21.4	21.2	100.1	101.0	102.5
Newark .....	136.6	135.8	135.1	81.6	84.1	84.4	192.9	193.1	195.7
Trenton .....	19.5	17.7	17.7	7.5	7.5	7.4	33.9	33.2	34.0
Vineland-Millville-Bridgeton .....	12.9	12.8	12.6	3.0	3.0	3.1	11.8	11.8	12.1
<b>New Mexico</b> .....	47.6	45.7	44.7	33.1	34.0	34.1	170.0	173.3	174.7
Albuquerque .....	30.2	28.7	28.6	16.1	16.6	16.7	82.6	83.8	84.9
Las Cruces .....	2.8	2.8	2.8	1.8	1.9	1.9	11.4	11.4	11.6
Santa Fe .....	2.0	2.0	2.0	1.2	1.3	1.3	15.4	15.5	15.5

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		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Maryland</b> .....	130.6	133.2	133.2	761.7	783.2	784.3	423.8	439.4	443.5
Baltimore PMSA .....	72.8	73.6	73.7	397.3	406.7	402.5	214.5	214.7	215.9
Baltimore City .....	33.4	34.6	34.7	159.7	161.0	159.8	89.2	93.1	93.4
Suburban Maryland-D.C. ....	49.7	50.7	50.6	289.8	296.9	296.4	173.2	179.7	180.3
<b>Massachusetts</b> .....	214.6	218.5	219.5	1,130.3	1,168.1	1,169.6	415.6	418.2	421.9
Barnstable-Yarmouth .....	3.1	3.4	3.3	18.7	20.4	18.8	7.3	7.6	7.7
Boston .....	159.9	163.4	164.0	763.2	785.3	788.3	230.9	232.6	234.0
Brockton .....	3.3	3.3	3.4	26.5	27.6	27.8	16.9	17.2	17.3
Fitchburg-Leominster .....	1.6	1.7	1.7	13.7	13.7	13.5	8.1	8.5	8.6
Lawrence .....	4.4	4.2	4.2	44.2	45.5	45.6	18.1	18.3	18.4
Lowell .....	3.9	3.8	3.8	33.0	33.8	34.1	15.7	15.8	16.0
New Bedford .....	1.8	1.8	1.8	17.1	17.9	18.0	10.4	10.2	10.5
Pittsfield .....	1.9	2.0	2.0	14.1	14.5	14.3	5.4	5.7	5.8
Springfield .....	12.7	13.1	13.1	80.9	82.7	82.6	47.4	47.6	48.3
Worcester .....	15.0	14.7	14.8	66.8	67.9	67.9	35.2	36.1	36.4
<b>Michigan</b> .....	205.5	207.0	207.0	1,234.1	1,282.3	1,278.6	670.5	677.8	684.1
Ann Arbor .....	9.9	10.2	10.2	65.7	67.9	67.3	73.0	73.6	74.5
Benton Harbor .....	2.6	2.4	2.4	19.7	20.0	20.1	8.8	9.0	9.1
Detroit .....	112.2	112.7	112.8	644.8	665.2	666.9	233.8	236.9	239.5
Flint .....	6.5	6.6	6.5	51.3	52.5	52.6	25.4	24.7	24.8
Grand Rapids-Muskegon-Holland .....	22.4	23.1	23.0	145.9	150.7	150.0	56.0	58.4	58.6
Jackson .....	1.9	1.9	1.9	14.8	15.2	15.1	10.5	10.7	10.8
Kalamazoo-Battle Creek .....	10.9	10.8	10.8	53.9	54.8	54.6	35.8	36.5	36.8
Lansing-East Lansing .....	13.8	14.2	14.2	57.4	58.9	58.9	68.4	68.0	68.4
Saginaw-Bay City-Midland .....	6.9	6.9	6.9	48.7	51.1	50.8	22.6	23.2	23.1
<b>Minnesota</b> .....	148.0	153.2	153.6	709.1	735.3	732.8	393.5	392.8	398.0
Duluth-Superior .....	3.5	3.6	3.6	31.9	32.8	32.8	23.5	23.0	23.2
Minneapolis-St. Paul .....	116.2	118.4	118.6	479.6	494.4	494.3	230.4	232.1	237.3
Rochester .....	2.3	2.4	2.4	32.6	33.7	33.5	7.1	6.9	7.0
St. Cloud .....	3.0	3.2	3.2	21.8	22.2	22.5	13.2	12.8	12.8
<b>Mississippi</b> .....	40.9	41.7	41.9	262.3	266.1	264.8	223.2	229.7	229.4
Jackson .....	15.7	16.6	16.7	58.6	61.8	61.1	44.6	46.7	47.0
<b>Missouri</b> .....	154.5	160.0	159.9	744.1	755.0	750.7	424.1	430.7	434.2
Kansas City .....	65.6	68.8	68.8	272.0	276.8	276.7	134.4	137.5	138.0
St. Louis .....	79.8	81.6	81.5	408.9	417.5	415.9	157.2	154.8	158.3
Springfield .....	6.9	7.2	7.2	48.6	50.0	49.8	20.7	21.0	21.2
<b>Montana</b> .....	16.5	17.0	17.0	104.3	107.0	105.8	79.9	80.8	81.3
<b>Nebraska</b> .....	55.5	58.1	58.5	234.5	238.8	238.7	156.8	154.3	155.1
Lincoln .....	9.5	10.2	10.3	37.4	37.3	37.4	37.2	35.7	35.7
Omaha .....	35.4	36.7	36.9	133.7	138.5	138.5	52.2	50.0	49.7
<b>Nevada</b> .....	41.1	43.6	43.9	388.0	405.9	407.8	111.1	115.6	116.1
Las Vegas .....	31.0	32.8	33.0	291.0	307.5	309.9	69.1	73.3	73.6
Reno .....	8.2	8.6	8.7	68.4	69.0	68.6	23.9	24.3	24.4
<b>New Hampshire</b> .....	29.3	29.7	29.8	165.1	167.1	164.2	81.5	81.3	82.2
Manchester .....	7.3	7.1	7.0	30.9	29.9	30.0	11.4	10.7	10.8
Nashua .....	4.4	4.7	4.8	24.8	24.5	24.4	8.7	8.8	8.9
Portsmouth-Rochester .....	6.2	6.4	6.5	28.9	28.7	28.3	22.0	21.6	21.8
<b>New Jersey</b> .....	240.6	246.3	246.3	1,191.9	1,230.6	1,231.4	578.2	572.8	578.0
Atlantic-Cape May .....	6.4	6.4	6.2	85.2	87.9	86.0	28.8	29.5	29.5
Bergen-Passaic .....	34.4	35.4	35.6	198.3	203.4	204.4	73.6	70.9	71.5
Camden .....	23.0	24.8	25.1	148.5	154.8	154.7	80.3	79.2	80.1
Jersey City .....	26.0	26.7	26.7	59.9	61.5	62.0	38.9	38.2	38.5
Middlesex-Somerset-Hunterdon .....	45.1	46.4	45.5	188.2	196.2	197.7	78.2	79.0	79.8
Monmouth-Ocean .....	18.0	18.0	18.0	120.4	125.5	124.7	63.8	62.9	63.8
Newark .....	72.4	73.4	72.9	302.5	310.1	311.2	144.0	143.7	146.3
Trenton .....	11.4	11.4	11.0	71.1	74.1	74.2	52.6	50.2	50.4
Vineland-Millville-Bridgeton .....	3.1	3.1	3.1	12.9	13.1	12.6	13.6	14.0	14.2
<b>New Mexico</b> .....	31.2	31.9	32.0	195.7	202.5	203.0	180.8	180.3	180.7
Albuquerque .....	16.5	16.9	16.7	105.4	108.3	108.3	65.2	65.4	65.8
Las Cruces .....	2.0	2.0	2.0	11.0	12.0	12.1	20.3	19.8	20.0
Santa Fe .....	3.2	3.4	3.4	20.8	21.4	21.5	25.0	25.5	25.5

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		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>New York</b> .....	8,173.5	8,268.5	8,307.8	4.6	4.8	4.6	278.0	300.2	295.6
Albany-Schenectady-Troy .....	438.4	438.9	443.9	.5	.5	.5	15.7	17.1	16.7
Binghamton .....	116.0	117.0	117.8	(1)	(1)	(1)	4.0	4.4	4.3
Buffalo-Niagara Falls .....	552.5	551.9	553.4	(1)	(1)	(1)	21.0	22.6	21.7
Dutchess County .....	108.5	111.0	111.2	(1)	(1)	(1)	4.4	4.9	4.8
Elmira .....	43.1	43.4	43.9	(1)	(1)	(1)	1.7	1.8	1.8
Glens Falls .....	49.2	50.7	49.5	(1)	(1)	(1)	2.1	2.2	2.2
Nassau-Suffolk .....	1,143.5	1,161.6	1,168.3	(1)	(1)	(1)	52.0	55.4	55.3
New York PMSA .....	3,990.2	4,064.6	4,094.1	(1)	(1)	(1)	124.1	132.1	132.6
New York City .....	3,472.8	3,538.5	3,565.0	.3	.3	.3	98.8	105.1	105.7
Newburgh .....	121.6	122.6	122.8	(1)	(1)	(1)	4.6	4.5	4.4
Rochester .....	535.2	535.3	536.4	.5	.4	.4	17.3	18.7	18.2
Rockland County .....	102.1	106.9	107.8	(1)	(1)	(1)	3.8	4.2	4.3
Syracuse .....	342.3	344.4	344.5	(1)	(1)	(1)	13.5	14.8	13.6
Utica-Rome .....	129.8	132.2	132.3	(1)	(1)	(1)	3.8	4.3	4.0
Westchester County .....	394.9	397.7	399.7	(1)	(1)	(1)	19.5	20.4	20.3
<b>North Carolina</b> .....	3,757.7	3,795.2	3,809.2	4.0	4.0	4.0	209.3	214.0	214.6
Asheville .....	111.8	110.9	113.0	(1)	(1)	(1)	5.9	5.9	5.9
Charlotte-Gastonia-Rock Hill .....	767.4	770.2	771.0	(1)	(1)	(1)	47.3	47.7	47.9
Greensboro-Winston-Salem-High Point .....	641.1	638.2	641.2	(1)	(1)	(1)	31.7	32.7	32.7
Raleigh-Durham-Chapel Hill .....	632.0	646.2	649.5	(1)	(1)	(1)	35.4	36.1	36.2
<b>North Dakota</b> .....	318.8	322.0	319.7	4.3	4.1	4.0	15.0	16.6	14.7
Bismarck .....	49.5	50.1	49.6	(1)	(1)	(1)	2.6	2.6	2.4
Fargo-Moorhead .....	99.5	100.0	99.4	(1)	(1)	(1)	5.4	5.6	5.2
Grand Forks .....	48.8	48.6	48.9	(1)	(1)	(1)	2.8	3.0	2.8
<b>Ohio</b> .....	5,472.2	5,518.6	5,540.8	13.6	13.1	13.1	233.4	247.9	241.8
Akron .....	326.8	331.2	331.8	.5	.5	.5	13.6	14.2	13.8
Canton-Massillon .....	184.2	188.2	188.7	.5	.5	.5	8.8	9.5	9.4
Cincinnati .....	859.6	878.6	884.2	.7	.8	.7	40.7	43.1	42.8
Cleveland-Lorain-Elyria .....	1,155.3	1,174.4	1,178.1	.9	.8	.8	46.3	50.5	48.8
Columbus .....	830.8	840.9	846.8	.7	.6	.6	36.7	39.0	38.6
Dayton-Springfield .....	483.6	481.3	483.2	.4	.4	.4	18.0	18.5	18.4
Hamilton-Middletown .....	120.2	119.4	120.5	(1)	(1)	(1)	7.5	7.4	7.6
Lima .....	78.8	79.3	79.8	(1)	(1)	(1)	3.9	3.7	3.8
Mansfield .....	80.6	79.4	80.0	(1)	(1)	(1)	2.6	2.5	2.5
Steubenville-Weirton .....	51.1	51.3	51.0	.4	.4	.4	1.6	1.8	1.7
Toledo .....	322.5	321.2	322.3	.2	.1	.1	15.3	15.8	15.5
Youngstown-Warren .....	250.1	252.7	253.0	.5	.5	.5	10.4	10.7	10.5
<b>Oklahoma</b> .....	1,411.9	1,448.2	1,453.0	31.3	31.6	31.1	51.2	53.3	53.1
Enid .....	25.1	25.6	25.8	1.2	1.2	1.3	1.0	1.2	1.2
Lawton .....	37.2	37.8	37.7	.1	.1	.1	1.0	1.0	1.0
Oklahoma City .....	508.8	519.1	521.4	7.4	7.2	7.3	18.4	18.8	18.8
Tulsa .....	381.6	392.3	394.9	7.5	7.5	7.5	15.4	17.1	17.1
<b>Oregon</b> .....	1,557.1	1,592.8	1,599.8	1.9	1.9	1.8	83.2	87.7	85.1
Eugene-Springfield .....	141.0	142.0	143.2	.2	.2	.2	7.6	8.2	7.9
Medford-Ashland .....	71.7	73.2	73.4	.1	.1	.1	3.4	3.6	3.6
Portland-Vancouver .....	943.4	957.6	965.6	1.1	1.2	1.2	56.8	56.9	56.0
Salem .....	133.6	137.9	135.8	.2	.3	.3	7.9	8.4	8.1
<b>Pennsylvania</b> .....	5,497.7	5,532.8	5,550.6	20.5	20.1	20.2	224.2	232.9	230.6
Allentown-Bethlehem-Easton .....	269.0	267.2	268.0	(1)	(1)	(1)	10.6	10.9	11.0
Altoona .....	59.1	59.8	59.8	(1)	(1)	(1)	2.5	2.6	2.5
Erie .....	130.9	131.9	132.3	(1)	(1)	(1)	4.5	4.9	4.9
Harrisburg-Lebanon-Carlisle .....	354.5	357.0	358.2	(1)	(1)	(1)	13.4	13.8	13.5
Johnstown .....	88.3	89.1	89.7	(1)	(1)	(1)	4.5	4.6	4.4
Lancaster .....	218.1	219.5	220.1	.4	.4	.4	12.6	12.9	12.9
Philadelphia PMSA .....	2,299.3	2,316.5	2,327.1	(1)	(1)	(1)	91.9	98.3	95.9
Philadelphia City .....	681.7	682.5	686.3	(1)	(1)	(1)	12.1	11.9	11.3
Pittsburgh .....	1,087.5	1,082.8	1,086.1	4.7	4.4	4.4	52.0	52.7	51.9
Reading .....	168.4	167.0	166.3	(1)	(1)	(1)	7.6	7.4	7.1
Scranton-Wilkes-Barre-Hazleton .....	279.7	282.3	283.9	.4	.4	.4	10.8	12.1	11.8
Sharon .....	48.9	48.9	49.3	(1)	(1)	(1)	1.6	1.6	1.6
State College .....	71.3	71.5	71.8	(1)	(1)	(1)	2.5	2.4	2.4
Williamsport .....	53.7	54.7	54.7	(1)	(1)	(1)	2.3	2.5	2.4
York .....	166.0	165.4	165.4	.4	.4	.4	8.5	9.1	8.8

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		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>New York</b> .....	928.6	921.8	919.4	414.8	418.4	416.6	1,683.2	1,680.9	1,709.5
Albany-Schenectady-Troy .....	39.0	38.7	38.8	17.3	17.3	17.3	95.3	93.9	96.3
Binghamton .....	25.3	25.4	25.3	4.8	4.9	4.9	24.4	24.3	24.7
Buffalo-Niagara Falls .....	90.3	89.4	89.3	25.5	26.9	26.7	133.7	130.4	133.5
Dutchess County .....	18.1	18.9	19.0	3.6	3.7	3.6	20.7	21.0	21.2
Elmira .....	9.6	9.6	9.7	1.5	1.5	1.5	10.7	10.4	10.8
Glens Falls .....	8.5	8.2	8.2	1.5	1.7	1.5	11.3	11.8	11.7
Nassau-Suffolk .....	114.7	114.0	114.3	53.4	54.8	54.8	296.0	293.7	298.5
New York PMSA .....	320.0	321.0	319.6	236.0	238.7	237.9	712.9	720.5	732.0
New York City .....	267.1	268.2	266.8	209.2	211.9	211.0	599.3	603.5	612.9
Newburgh .....	11.7	11.7	11.7	6.8	6.9	6.9	33.8	33.9	34.2
Rochester .....	127.7	121.2	120.9	17.0	17.3	17.3	113.4	113.1	114.5
Rockland County .....	12.4	12.4	12.5	6.4	6.3	6.3	22.8	26.3	26.6
Syracuse .....	48.9	49.5	49.6	19.6	20.4	20.3	80.6	79.9	81.2
Utica-Rome .....	19.9	19.6	19.6	3.7	3.8	3.8	27.2	27.6	27.9
Westchester County .....	38.6	38.4	38.3	19.8	19.8	19.9	86.7	86.4	88.1
<b>North Carolina</b> .....	838.1	822.9	822.0	171.8	171.4	172.1	856.9	857.7	871.3
Asheville .....	19.9	19.3	19.3	4.7	4.5	4.6	28.3	27.9	28.8
Charlotte-Gastonia-Rock Hill .....	144.9	140.5	140.6	53.0	53.1	53.1	186.0	185.6	185.8
Greensboro-Winston-Salem-High Point .....	165.6	164.2	164.5	31.9	31.3	31.3	143.1	142.7	143.8
Raleigh-Durham-Chapel Hill .....	85.4	85.6	85.9	27.5	28.3	28.6	133.4	135.5	137.6
<b>North Dakota</b> .....	23.9	24.0	23.8	18.2	18.4	18.3	82.6	81.6	82.0
Bismarck .....	2.7	2.8	2.8	3.1	3.3	3.2	12.5	12.5	12.5
Fargo-Moorhead .....	8.1	8.5	8.4	5.2	5.4	5.3	28.4	28.2	28.3
Grand Forks .....	3.7	3.9	3.9	2.3	2.2	2.2	13.1	13.0	13.1
<b>Ohio</b> .....	1,094.3	1,091.3	1,091.7	236.1	236.4	236.6	1,336.9	1,322.3	1,343.9
Akron .....	64.0	64.3	64.4	14.6	14.9	14.8	81.1	82.5	83.4
Canton-Massillon .....	46.6	47.7	47.8	5.2	5.1	5.0	46.9	46.5	46.9
Cincinnati .....	141.0	142.6	143.2	44.9	45.2	45.3	222.3	220.9	224.4
Cleveland-Lorain-Elyria .....	223.5	223.3	223.3	45.7	46.1	46.1	277.3	277.8	281.9
Columbus .....	93.4	94.2	94.3	37.1	36.2	36.4	218.3	215.9	219.9
Dayton-Springfield .....	100.8	98.3	98.6	21.0	21.5	21.5	112.7	112.7	114.2
Hamilton-Middletown .....	21.0	20.6	20.7	4.8	5.1	5.0	32.1	31.2	31.9
Lima .....	19.5	19.7	19.6	3.1	3.1	3.1	18.9	19.0	19.4
Mansfield .....	22.7	22.5	22.8	3.5	3.1	3.1	18.8	18.5	18.6
Steubenville-Weirton .....	13.9	13.9	13.7	2.8	2.5	2.5	10.9	10.9	10.9
Toledo .....	61.7	60.2	60.4	14.5	14.9	14.8	80.6	77.6	78.5
Youngstown-Warren .....	59.8	58.9	58.6	10.6	10.7	10.7	63.0	63.8	64.4
<b>Oklahoma</b> .....	183.1	186.3	186.7	80.7	83.8	83.8	329.6	331.9	336.1
Enid .....	2.3	2.4	2.4	2.0	2.1	2.1	6.3	6.3	6.4
Lawton .....	3.6	3.5	3.5	1.8	1.8	1.8	9.0	9.0	9.1
Oklahoma City .....	55.3	57.1	57.2	24.8	25.7	25.7	121.7	122.5	124.5
Tulsa .....	57.0	57.4	57.5	30.0	31.6	31.6	88.2	88.7	89.7
<b>Oregon</b> .....	244.9	245.3	241.8	75.3	76.3	76.4	388.7	391.6	396.8
Eugene-Springfield .....	21.7	22.1	21.8	4.6	4.3	4.3	36.0	36.1	37.0
Medford-Ashland .....	9.3	8.8	8.6	3.4	3.5	3.5	22.5	22.7	23.2
Portland-Vancouver .....	150.0	147.9	146.8	53.4	55.2	55.9	234.8	236.8	241.1
Salem .....	17.6	19.2	17.3	3.5	3.5	3.5	28.5	28.6	29.3
<b>Pennsylvania</b> .....	941.3	932.1	930.2	282.7	285.9	285.4	1,246.1	1,239.4	1,256.7
Allentown-Bethlehem-Easton .....	57.0	54.7	55.1	15.6	15.8	15.7	57.6	56.7	57.5
Altoona .....	10.1	10.0	10.0	4.4	4.4	4.4	16.1	16.5	16.7
Erie .....	34.2	34.2	34.4	4.8	4.9	4.8	29.3	29.6	29.8
Harrisburg-Lebanon-Carlisle .....	45.6	44.7	44.7	23.4	23.6	23.7	79.5	80.2	81.7
Johnstown .....	12.8	12.8	12.9	5.3	5.4	5.4	20.7	20.8	21.3
Lancaster .....	57.1	55.7	55.8	8.7	9.0	9.0	54.4	55.0	55.9
Philadelphia PMSA .....	306.3	302.2	301.7	109.2	111.7	111.5	510.6	508.5	517.0
Philadelphia City .....	58.2	57.3	57.1	33.9	34.4	34.3	111.8	111.9	113.0
Pittsburgh .....	138.8	138.5	138.4	66.1	65.6	65.6	261.9	259.9	264.3
Reading .....	44.1	41.5	41.7	8.1	8.3	8.3	39.8	39.6	39.8
Scranton-Wilkes-Barre-Hazleton .....	54.5	55.5	55.2	15.7	15.8	15.9	67.7	67.4	68.4
Sharon .....	11.4	11.0	11.1	2.0	1.9	1.9	12.8	12.5	12.7
State College .....	8.7	8.9	8.9	2.1	2.0	2.1	13.7	13.8	14.0
Williamsport .....	13.3	13.5	13.2	2.0	1.9	1.9	13.3	13.5	13.8
York .....	47.9	46.4	46.2	7.7	7.8	7.6	40.9	40.7	41.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>New York</b> .....	720.8	732.8	733.3	2,749.5	2,833.6	2,839.6	1,393.9	1,375.8	1,389.2
Albany-Schenectady-Troy .....	25.4	25.4	25.4	135.0	136.5	138.5	110.3	109.5	110.3
Binghamton .....	3.8	3.8	3.8	31.2	31.6	32.0	22.4	22.8	22.7
Buffalo-Niagara Falls .....	29.1	29.3	29.3	164.1	165.1	164.1	88.8	88.2	88.9
Dutchess County .....	4.5	4.8	4.9	34.1	34.6	34.6	23.0	23.1	23.3
Elmira .....	1.3	1.2	1.3	10.8	11.1	11.1	7.5	7.7	7.7
Glens Falls .....	2.1	2.1	2.1	13.5	14.4	13.4	10.2	10.3	10.4
Nassau-Suffolk .....	78.4	79.9	79.6	367.9	380.9	380.1	181.3	182.9	185.6
New York PMSA .....	506.4	515.4	515.9	1,482.5	1,537.6	1,551.9	608.3	599.4	604.3
New York City .....	473.6	482.1	482.7	1,300.0	1,350.5	1,365.3	524.5	516.9	520.3
Newburgh .....	5.4	5.4	5.4	31.5	32.5	32.3	27.7	27.7	28.0
Rochester .....	21.0	21.1	21.1	158.6	164.2	163.2	79.6	79.3	80.8
Rockland County .....	4.8	5.0	5.0	32.3	33.1	33.3	19.6	19.6	19.9
Syracuse .....	18.0	17.8	17.6	100.1	100.5	100.1	61.6	61.5	62.1
Utica-Rome .....	7.6	7.8	7.7	39.7	41.2	41.1	27.9	28.1	28.2
Westchester County .....	26.5	26.7	26.7	144.0	147.5	146.9	59.9	58.5	59.6
<b>North Carolina</b> .....	168.4	179.0	178.2	901.4	930.0	924.9	607.8	616.2	622.1
Asheville .....	3.2	3.0	3.1	33.5	34.0	34.8	16.3	16.3	16.5
Charlotte-Gastonia-Rock Hill .....	54.0	56.3	56.0	188.6	190.6	190.7	93.6	96.4	96.9
Greensboro--Winston-Salem--High Point .....	33.2	33.1	33.5	165.5	168.8	169.0	70.1	65.4	66.4
Raleigh-Durham-Chapel Hill .....	29.9	30.6	30.7	194.9	197.6	197.3	125.5	132.5	133.2
<b>North Dakota</b> .....	15.0	15.7	15.9	87.7	89.2	88.7	72.1	72.4	72.3
Bismarck .....	2.3	2.4	2.4	15.5	15.7	15.6	10.8	10.8	10.7
Fargo-Moorhead .....	6.2	6.7	6.8	30.5	30.6	30.5	15.7	15.0	14.9
Grand Forks .....	1.6	1.5	1.5	12.2	11.2	11.4	13.1	13.8	14.0
<b>Ohio</b> .....	288.0	293.3	293.8	1,490.2	1,535.3	1,533.4	779.7	779.0	786.5
Akron .....	13.0	13.2	13.3	90.1	92.0	91.6	49.9	49.6	50.0
Canton-Massillon .....	6.0	6.2	6.2	50.1	52.4	52.4	20.1	20.3	20.5
Cincinnati .....	53.4	55.3	55.5	254.1	265.8	266.0	102.5	104.9	106.3
Cleveland-Lorain-Elyria .....	73.9	75.6	75.5	340.8	352.1	352.0	146.9	148.2	149.7
Columbus .....	71.7	73.2	73.0	234.5	243.4	243.9	138.4	138.7	140.1
Dayton-Springfield .....	18.3	18.4	18.5	139.6	140.1	139.8	72.8	71.4	71.8
Hamilton-Middletown .....	6.4	6.8	6.8	27.1	27.5	27.5	21.3	20.8	21.0
Lima .....	2.1	2.2	2.2	20.7	21.0	21.1	10.6	10.6	10.6
Mansfield .....	2.5	2.4	2.4	20.0	19.7	19.7	10.5	10.7	10.9
Steubenville-Weirton .....	1.5	1.5	1.5	13.6	13.9	13.9	6.4	6.4	6.4
Toledo .....	11.0	11.2	11.3	90.3	91.8	91.4	48.9	49.6	50.3
Youngstown-Warren .....	9.4	9.5	9.4	63.8	65.6	65.3	32.6	33.0	33.6
<b>Oklahoma</b> .....	70.0	71.2	71.4	383.1	400.3	401.1	282.9	289.8	289.7
Enid .....	1.0	1.0	1.0	7.1	7.2	7.2	4.2	4.2	4.2
Lawton .....	1.7	1.7	1.7	8.2	8.4	8.4	11.8	12.3	12.1
Oklahoma City .....	29.6	30.4	30.4	148.3	152.4	152.6	103.3	105.0	104.9
Tulsa .....	20.1	20.8	21.0	120.1	125.4	126.4	43.3	43.8	44.1
<b>Oregon</b> .....	95.9	97.5	97.4	406.8	426.6	427.4	280.4	285.9	273.1
Eugene-Springfield .....	7.4	7.6	7.6	37.6	38.7	38.4	25.9	24.8	26.0
Medford-Ashland .....	3.1	3.2	3.2	18.9	20.1	19.8	11.0	11.2	11.4
Portland-Vancouver .....	66.7	67.6	67.6	259.1	269.5	270.9	121.5	122.5	126.1
Salem .....	6.5	6.7	6.7	32.0	33.1	32.4	37.4	38.1	38.2
<b>Pennsylvania</b> .....	314.5	321.1	320.5	1,739.8	1,768.7	1,765.9	728.6	732.6	741.1
Allentown-Bethlehem-Easton .....	13.2	13.4	13.5	83.5	83.9	82.9	31.5	31.8	32.3
Altoona .....	1.9	1.9	1.9	15.9	16.3	16.1	8.2	8.1	8.2
Erie .....	5.4	5.4	5.4	36.5	36.7	36.7	16.2	16.2	16.3
Harrisburg-Lebanon-Carlisle .....	25.8	25.7	25.7	99.4	101.7	101.3	67.4	67.3	67.6
Johnstown .....	4.2	4.1	4.1	26.8	27.5	27.4	14.0	13.9	14.2
Lancaster .....	9.6	9.9	9.9	56.0	57.5	57.0	19.3	19.1	19.2
Philadelphia PMSA .....	158.5	160.5	160.7	824.2	837.0	839.1	298.6	298.3	301.2
Philadelphia City .....	55.0	54.8	55.2	291.6	293.4	296.0	119.1	118.8	119.4
Pittsburgh .....	62.2	62.3	62.2	372.9	371.2	370.0	128.9	128.2	129.3
Reading .....	8.5	8.9	8.9	40.3	41.4	40.3	20.0	19.9	20.2
Scranton--Wilkes-Barre--Hazleton .....	14.2	14.1	14.2	81.1	82.0	82.6	35.3	35.0	35.4
Sharon .....	1.5	1.7	1.7	14.0	14.5	14.5	5.6	5.7	5.8
State College .....	1.9	1.9	1.9	14.1	14.2	14.0	28.3	28.3	28.5
Williamsport .....	2.1	2.2	2.2	14.5	14.9	14.9	6.2	6.2	6.3
York .....	5.1	5.5	5.4	39.1	39.5	39.7	16.4	16.0	16.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Rhode Island</b>	458.8	462.6	464.1	.2	.2	.2	15.2	17.6	17.6
Providence-Fall River-Warwick	518.3	516.9	520.3	.2	.2	.2	17.5	20.0	20.1
<b>South Carolina</b>	1,750.5	1,814.2	1,831.5	1.9	1.9	2.0	102.1	112.3	112.3
Charleston-North Charleston	226.7	236.4	238.3	(1)	(1)	(1)	16.7	18.5	18.6
Columbia	286.6	294.7	297.3	(1)	(1)	(1)	15.8	16.5	16.7
Greenville-Spartanburg-Anderson	466.4	476.3	480.6	(1)	(1)	(1)	30.5	32.2	32.1
<b>South Dakota</b>	356.9	363.4	363.2	2.1	1.7	1.7	15.7	16.4	15.8
Rapid City	45.9	47.5	46.8	(1)	(1)	(1)	3.1	3.2	3.0
Sioux Falls	104.5	108.9	108.8	(1)	(1)	(1)	4.8	5.5	5.1
<b>Tennessee</b>	2,626.9	2,655.2	2,662.2	4.3	4.5	4.4	118.3	125.5	124.1
Chattanooga	225.3	226.4	227.2	(1)	(1)	(1)	9.7	10.6	10.3
Johnson City-Kingsport-Bristol	202.9	201.0	201.6	(1)	(1)	(1)	11.1	11.4	11.4
Knoxville	320.5	320.1	319.5	3	6	6	15.4	15.4	15.2
Memphis	562.7	572.1	574.0	(1)	(1)	(1)	24.7	24.9	24.8
Nashville	639.2	642.3	647.0	(1)	(1)	(1)	31.9	35.1	34.9
<b>Texas</b>	8,788.6	8,988.9	9,027.0	167.9	164.5	163.8	467.5	492.5	493.4
Abilene	56.5	58.1	58.1	1.7	1.7	1.7	2.4	2.5	2.5
Amarillo	94.5	95.7	96.1	.6	.6	.6	4.8	5.0	4.9
Austin-San Marcos	581.2	600.2	604.1	1.2	1.3	1.3	30.8	34.3	34.6
Beaumont-Port Arthur	159.2	161.1	162.0	.8	.9	.9	15.0	14.5	14.6
Brazoria	75.1	75.6	76.1	1.4	1.3	1.3	9.4	8.8	9.0
Brownsville-Harlingen-San Benito	99.4	100.8	100.5	(1)	(1)	(1)	3.5	3.6	3.6
Bryan-College Station	70.8	71.5	71.9	.9	.8	.8	3.0	3.4	3.4
Corpus Christi	156.2	157.4	157.3	2.4	2.4	2.3	11.3	10.4	10.3
Dallas	1,811.3	1,861.2	1,866.7	11.6	11.6	11.6	85.4	88.7	89.3
El Paso	248.8	255.7	256.2	(1)	(1)	(1)	11.8	12.5	12.4
Ft. Worth-Arlington	722.7	740.4	745.4	4.3	4.3	4.3	35.0	37.2	37.4
Galveston-Texas City	88.9	90.5	90.4	.7	.7	.7	4.6	4.3	4.4
Houston	1,936.8	1,982.0	1,993.2	69.3	69.1	68.6	132.0	137.6	138.1
Killeen-Temple	99.0	102.1	102.4	(1)	(1)	(1)	4.2	4.4	4.3
Laredo	61.8	62.5	63.1	3.1	1.5	1.4	2.2	2.4	2.4
Longview-Marshall	89.8	90.8	91.0	3.4	3.3	3.3	4.5	4.7	4.7
Lubbock	115.7	119.0	119.3	.1	.1	.1	4.3	4.8	4.7
McAllen-Edinburg-Mission	140.6	140.7	141.6	1.2	1.2	1.1	7.2	7.3	7.3
Odessa-Midland	106.8	107.6	107.9	13.8	12.6	12.6	6.0	7.2	7.2
San Angelo	44.2	44.0	44.1	.7	.7	.7	1.9	1.9	1.9
San Antonio	677.1	696.8	701.0	1.9	2.0	2.0	35.1	37.8	37.9
Sherman-Denison	44.4	45.0	44.6	(1)	(1)	(1)	2.2	2.3	2.3
Texarkana	51.9	52.7	53.2	(1)	(1)	(1)	2.1	2.3	2.3
Tyler	78.0	81.1	81.5	1.6	1.6	1.6	2.9	3.2	3.1
Victoria	36.0	37.4	37.4	1.7	1.7	1.7	2.4	2.5	2.5
Waco	97.3	99.8	99.6	(1)	(1)	(1)	4.5	5.0	5.0
Wichita Falls	59.9	60.9	61.1	1.1	1.1	1.1	2.2	2.4	2.4
<b>Utah</b>	1,022.7	1,036.9	1,044.2	8.6	8.2	8.1	66.9	71.0	70.4
Provo-Orem	141.0	141.8	143.8	(1)	(1)	(1)	9.5	9.4	9.4
Salt Lake City-Ogden	688.4	697.2	705.1	3.0	2.8	2.7	44.4	46.9	46.2
<b>Vermont</b>	282.4	288.6	288.3	.6	.6	.6	13.8	14.7	14.3
Barre-Montpelier	30.1	31.6	31.6	(1)	(1)	(1)	1.4	1.5	1.5
Burlington	101.2	102.4	102.1	(1)	(1)	(1)	5.3	4.8	4.7
<b>Virginia</b>	3,296.9	3,360.0	3,376.0	10.9	11.2	11.1	189.9	201.5	200.4
Bristol	37.8	37.3	37.5	(1)	(1)	(1)	1.4	1.4	1.4
Charlottesville	82.0	86.6	86.9	(1)	(1)	(1)	4.3	4.3	4.3
Danville	46.3	46.9	47.0	(1)	(1)	(1)	2.3	2.4	2.4
Lynchburg	98.9	98.6	99.2	(1)	(1)	(1)	5.9	6.1	6.0
Norfolk-Virginia Beach-Newport News	674.4	682.6	682.9	(1)	(1)	(1)	40.6	41.5	41.4
Northern Virginia	1,022.7	1,052.6	1,061.2	.7	.8	.8	57.9	61.5	61.7
Richmond-Petersburg	533.9	537.6	542.0	.8	.7	.7	33.8	34.5	34.2
Roanoke	141.7	141.4	141.7	(1)	(1)	(1)	8.5	8.7	8.5
<b>Washington</b>	2,565.7	2,637.2	2,644.0	3.5	3.5	3.4	139.0	149.5	145.5
Seattle-Bellevue-Everett	1,335.0	1,361.3	1,376.6	.7	.7	.7	68.6	72.2	71.7
Spokane	191.1	187.3	188.1	(1)	(1)	(1)	11.8	10.4	9.9
Tacoma	231.6	237.7	238.1	.2	.2	.2	12.8	15.7	15.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>Rhode Island</b> .....	80.6	79.9	79.6	15.9	16.0	16.1	100.6	100.2	101.1
Providence-Fall River-Warwick .....	103.8	102.8	102.8	17.6	17.9	18.1	118.5	115.8	117.7
<b>South Carolina</b> .....	363.0	363.3	363.8	76.8	79.5	79.9	427.3	445.8	450.3
Charleston-North Charleston .....	21.5	21.6	21.7	12.3	12.9	12.9	56.0	57.7	58.3
Columbia .....	25.9	26.5	26.7	12.6	13.0	13.0	67.2	69.7	70.3
Greenville-Spartanburg-Anderson .....	122.6	122.5	122.6	20.7	21.2	21.2	119.8	122.9	124.2
<b>South Dakota</b> .....	49.6	50.3	49.9	16.1	16.5	16.5	88.7	89.6	89.4
Rapid City .....	4.7	4.8	4.8	1.8	1.8	1.8	13.4	14.2	14.1
Sioux Falls .....	14.4	15.1	15.1	6.5	6.6	6.5	26.5	27.0	27.3
<b>Tennessee</b> .....	518.4	507.9	506.9	151.4	153.1	153.1	627.2	625.2	634.8
Chattanooga .....	42.9	43.3	43.1	12.1	12.2	12.2	54.9	53.8	54.8
Johnson City-Kingsport-Bristol .....	51.9	50.0	49.9	7.8	7.5	7.5	46.2	45.7	46.1
Knoxville .....	49.1	47.2	47.0	14.1	14.1	14.1	85.2	84.8	85.1
Memphis .....	63.2	62.6	62.2	61.3	63.5	63.5	143.9	144.8	147.2
Nashville .....	96.4	94.9	95.1	31.7	31.7	32.0	156.5	156.7	159.7
<b>Texas</b> .....	1,093.7	1,098.2	1,097.3	527.8	550.4	552.0	2,094.7	2,114.2	2,140.9
Abilene .....	3.2	3.4	3.3	2.5	2.5	2.5	14.7	15.0	15.2
Amarillo .....	9.3	9.4	9.4	5.5	5.7	5.8	26.6	26.8	27.0
Austin-San Marcos .....	77.4	76.1	76.4	18.9	19.9	20.1	124.8	129.5	131.3
Beaumont-Port Arthur .....	25.0	25.8	25.9	8.0	8.0	8.0	36.4	37.0	37.4
Brazoria .....	16.5	16.6	16.6	2.6	2.7	2.7	15.1	15.2	15.5
Brownsville-Harlingen-San Benito .....	12.0	12.5	12.1	4.5	4.8	4.8	24.1	24.0	24.2
Bryan-College Station .....	4.2	4.5	4.5	1.5	1.5	1.5	15.2	15.5	15.5
Corpus Christi .....	13.3	13.5	13.5	6.4	6.4	6.4	36.4	36.4	36.7
Dallas .....	248.2	251.8	252.3	124.0	130.9	131.7	439.8	443.8	448.0
El Paso .....	43.4	41.7	41.2	13.8	14.7	14.9	58.8	59.0	60.0
Ft. Worth-Arlington .....	110.6	111.2	111.3	67.2	70.3	70.7	186.6	189.7	193.6
Galveston-Texas City .....	8.1	8.1	8.0	4.3	4.5	4.5	19.3	20.0	20.1
Houston .....	213.4	216.1	215.3	136.3	139.9	140.0	447.7	450.9	458.6
Killeen-Temple .....	9.0	9.4	9.4	3.6	3.7	3.7	23.4	23.4	23.7
Laredo .....	1.6	1.6	1.6	10.4	11.3	11.3	16.7	17.1	17.5
Longview-Marshall .....	19.1	19.1	19.1	4.1	4.3	4.3	22.6	23.0	23.2
Lubbock .....	7.8	8.1	8.1	5.7	5.7	5.8	32.6	33.0	33.4
McAllen-Edinburg-Mission .....	13.8	13.2	12.8	4.8	5.0	4.9	39.4	39.1	40.0
Odessa-Midland .....	7.7	7.4	7.4	4.3	4.2	4.2	28.0	27.8	28.0
San Angelo .....	5.3	4.6	4.6	2.3	2.3	2.3	10.3	10.4	10.5
San Antonio .....	50.2	50.8	51.1	31.0	31.4	31.5	164.9	166.3	168.6
Sherman-Denison .....	10.6	10.6	10.0	1.6	1.7	1.7	9.9	9.9	10.0
Texarkana .....	6.0	5.8	5.8	2.2	2.3	2.4	13.8	13.5	13.9
Tyler .....	10.9	10.7	10.6	3.9	4.1	4.1	20.2	21.0	21.3
Victoria .....	3.2	3.2	3.2	1.5	1.7	1.7	9.5	9.8	9.9
Waco .....	16.3	16.7	16.7	3.9	3.9	3.9	22.6	22.9	22.9
Wichita Falls .....	8.5	8.5	8.4	2.9	2.8	2.8	13.8	13.9	14.1
<b>Utah</b> .....	135.0	135.4	135.8	57.7	58.5	58.6	247.0	244.7	249.7
Provo-Orem .....	20.1	20.0	20.3	2.3	2.2	2.3	31.8	31.4	32.0
Salt Lake City-Ogden .....	83.5	83.3	83.6	45.6	46.4	46.7	169.5	168.6	173.9
<b>Vermont</b> .....	47.4	48.6	48.5	12.3	12.4	12.3	65.2	66.3	66.2
Barre-Montpelier .....	3.6	3.8	3.7	1.1	1.1	1.1	6.6	6.8	6.8
Burlington .....	18.4	19.0	18.9	4.6	4.5	4.3	22.2	22.4	22.8
<b>Virginia</b> .....	407.4	405.8	405.4	171.9	175.5	175.6	746.8	745.3	759.2
Bristol .....	9.8	8.9	8.7	1.3	1.3	1.3	10.4	10.4	10.6
Charlottesville .....	8.2	8.2	8.4	2.3	2.4	2.4	16.6	17.0	17.4
Danville .....	15.5	15.7	15.5	1.0	1.0	1.1	10.1	10.1	10.3
Lynchburg .....	25.2	24.8	24.8	3.6	3.7	3.7	21.7	20.2	20.9
Norfolk-Virginia Beach-Newport News .....	68.8	69.0	69.0	32.2	33.5	33.2	161.4	160.5	163.3
Northern Virginia .....	44.6	45.7	45.7	61.5	62.4	62.5	221.2	219.6	223.7
Richmond-Petersburg .....	61.6	60.2	60.4	27.8	28.1	28.2	128.1	127.6	129.9
Roanoke .....	19.3	18.8	18.5	8.6	8.6	8.6	36.5	36.3	36.8
<b>Washington</b> .....	377.3	378.2	374.0	134.6	140.7	140.3	622.7	639.1	646.5
Seattle-Bellevue-Everett .....	224.2	227.1	227.2	78.3	82.4	82.5	313.9	315.5	322.5
Spokane .....	22.9	20.2	20.1	7.9	8.1	8.1	49.1	47.5	48.2
Tacoma .....	25.7	24.5	23.9	9.3	10.5	10.4	58.9	61.4	62.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Rhode Island</b>	26.6	28.1	28.4	154.3	155.9	155.3	65.4	64.7	65.8
Providence-Fall River-Warwick	29.0	29.3	29.6	165.1	165.5	165.4	66.6	65.4	66.4
<b>South Carolina</b>	74.8	79.2	79.4	399.3	423.8	423.8	305.3	308.4	320.0
Charleston-North Charleston	8.5	8.6	8.6	61.3	65.9	65.9	50.4	51.2	52.3
Columbia	20.2	20.9	21.0	70.2	72.1	72.3	74.7	76.0	77.3
Greenville-Spartanburg-Anderson	15.6	15.9	16.0	98.7	102.8	103.1	58.5	58.8	61.4
<b>South Dakota</b>	21.5	22.9	23.0	91.5	95.3	94.2	71.7	70.7	72.7
Rapid City	1.8	1.9	1.9	13.8	14.2	13.8	7.3	7.4	7.4
Sioux Falls	12.0	13.2	13.3	30.3	31.3	31.1	10.0	10.2	10.4
<b>Tennessee</b>	121.7	123.0	123.2	694.4	710.0	708.6	391.2	406.0	407.1
Chattanooga	15.4	15.6	15.6	55.9	56.8	56.8	34.4	34.1	34.4
Johnson City-Kingsport-Bristol	6.1	6.3	6.2	50.5	50.7	50.7	29.3	29.4	29.8
Knoxville	13.8	14.3	14.2	87.4	88.6	88.1	55.2	55.1	55.2
Memphis	27.8	28.2	28.2	161.3	164.0	163.8	80.5	84.1	84.3
Nashville	39.3	39.4	39.5	199.2	199.2	200.1	84.2	85.3	85.7
<b>Texas</b>	470.6	486.0	486.9	2,447.5	2,542.1	2,542.3	1,518.9	1,541.0	1,550.4
Abilene	2.4	2.5	2.5	19.4	20.2	20.1	10.2	10.3	10.3
Amarillo	5.0	5.1	5.1	25.8	26.5	26.5	16.9	16.6	16.8
Austin-San Marcos	30.1	30.9	30.7	167.1	174.7	175.6	130.9	133.5	134.1
Beaumont-Port Arthur	5.2	5.4	5.5	41.8	42.5	42.6	27.0	27.0	27.1
Brazoria	1.8	1.8	1.8	13.9	14.3	14.2	14.4	14.9	15.0
Brownsville-Harlingen-San Benito	3.7	3.7	3.7	28.1	28.6	28.4	23.5	23.6	23.7
Bryan-College Station	2.3	2.3	2.4	15.1	15.5	15.5	28.6	28.0	28.3
Corpus Christi	6.5	6.5	6.4	48.4	49.8	49.6	31.5	32.0	32.1
Dallas	141.8	146.6	146.7	557.8	580.3	578.8	202.7	207.5	208.3
El Paso	9.8	10.5	10.5	56.1	59.3	59.4	55.1	58.0	57.8
Ft. Worth-Arlington	32.1	33.2	33.2	194.3	202.3	202.4	92.6	92.2	92.5
Galveston-Texas City	5.4	5.6	5.5	18.9	19.5	19.5	27.6	27.8	27.7
Houston	102.1	105.5	105.6	582.6	603.8	605.8	253.4	259.1	261.2
Killeen-Temple	4.0	4.3	4.3	27.1	28.3	28.3	27.7	28.6	28.7
Laredo	2.3	2.5	2.6	11.1	11.6	11.7	14.4	14.5	14.6
Longview-Marshall	3.2	3.3	3.2	21.0	21.4	21.4	11.9	11.7	11.8
Lubbock	5.5	5.7	5.7	34.3	36.2	35.8	25.4	25.4	25.7
McAllen-Edinburg-Mission	5.0	5.0	5.0	31.5	32.2	32.2	37.7	37.7	38.3
Odessa-Midland	3.6	3.5	3.5	24.7	25.4	25.4	18.7	19.5	19.6
San Angelo	1.6	1.6	1.6	13.0	13.4	13.4	9.1	9.1	9.1
San Antonio	44.8	45.6	45.6	214.0	226.8	227.4	135.2	136.1	136.9
Sherman-Denison	2.1	2.1	2.1	12.3	12.7	12.7	5.7	5.7	5.8
Texarkana	1.7	1.8	1.8	14.3	15.1	15.1	11.8	11.9	11.9
Tyler	4.1	4.1	4.2	23.3	25.3	25.3	11.1	11.1	11.3
Victoria	1.6	1.3	1.3	9.7	10.2	10.0	6.4	7.0	7.1
Waco	5.6	6.0	6.0	29.2	30.0	29.7	15.2	15.3	15.4
Wichita Falls	2.2	2.2	2.2	16.5	16.9	17.0	12.7	13.1	13.1
<b>Utah</b>	54.0	54.2	54.4	276.2	283.6	284.1	177.3	181.3	183.1
Provo-Orem	4.1	4.3	4.4	53.6	53.8	54.6	19.6	20.7	20.8
Salt Lake City-Ogden	44.6	44.6	44.9	184.9	191.5	192.7	112.9	113.1	114.4
<b>Vermont</b>	12.2	12.2	12.3	82.8	85.9	83.7	48.1	47.9	48.4
Barre-Montpelier	2.4	2.4	2.4	7.9	8.8	8.8	7.1	7.2	7.3
Burlington	5.1	5.1	5.1	29.0	30.1	29.5	16.6	16.5	16.8
<b>Virginia</b>	168.2	173.1	172.9	990.1	1,037.1	1,034.9	611.7	610.5	616.5
Bristol	1.3	1.3	1.3	7.9	8.4	8.5	5.7	5.6	5.7
Charlottesville	4.1	4.4	4.4	20.0	20.4	20.4	26.5	29.9	29.6
Danville	1.4	1.5	1.5	10.0	10.3	10.2	6.0	5.9	6.0
Lynchburg	4.3	4.2	4.2	25.5	27.0	26.9	12.7	12.6	12.7
Norfolk-Virginia Beach-Newport News	31.3	32.8	32.6	193.8	199.5	198.0	146.3	145.8	145.4
Northern Virginia	55.0	56.8	56.9	400.6	425.1	426.4	181.2	180.7	183.5
Richmond-Petersburg	43.9	44.2	44.4	139.6	145.3	145.2	98.3	97.0	99.0
Roanoke	9.3	9.3	9.4	41.6	41.9	41.9	17.9	17.8	18.0
<b>Washington</b>	130.3	136.3	136.5	687.1	723.8	721.7	471.2	466.1	476.1
Seattle-Bellevue-Everett	80.4	83.4	84.0	383.9	398.3	400.1	185.0	181.7	187.9
Spokane	10.9	11.0	11.0	56.9	57.3	57.9	31.6	32.8	32.9
Tacoma	11.7	12.6	12.6	64.8	64.3	64.1	48.2	48.5	49.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>West Virginia</b> .....	725.1	731.5	732.4	23.9	23.0	23.0	37.3	39.4	37.8
Charleston .....	134.0	135.5	136.3	2.0	1.8	1.8	7.3	7.6	7.5
Huntington-Ashland .....	121.8	122.3	123.1	1.4	1.1	1.2	5.9	5.4	5.2
Parkersburg-Marietta .....	70.6	71.4	71.9	.3	.3	.3	4.5	4.8	4.4
Wheeling .....	67.7	68.1	67.8	1.6	1.5	1.5	2.6	3.1	3.0
<b>Wisconsin</b> .....	2,708.8	2,746.6	2,755.7	2.6	2.5	2.4	114.2	122.4	121.3
Appleton-Oshkosh-Neenah .....	196.5	200.7	201.3	(1)	(1)	(1)	10.9	11.8	11.9
Eau Claire .....	74.5	75.8	76.3	(1)	(1)	(1)	3.2	3.6	3.5
Green Bay .....	136.4	137.0	136.6	(1)	(1)	(1)	7.0	7.0	6.9
Janesville-Beloit .....	70.0	69.7	69.7	(1)	(1)	(1)	2.8	3.0	2.9
Kenosha .....	51.1	53.2	53.4	(1)	(1)	(1)	2.2	2.2	2.2
La Crosse .....	69.8	70.4	70.6	(1)	(1)	(1)	2.9	3.2	3.0
Madison .....	273.5	278.2	280.9	(1)	(1)	(1)	12.9	14.0	14.1
Milwaukee-Waukesha .....	845.0	855.9	861.2	(1)	(1)	(1)	31.9	33.6	33.7
Racine .....	83.5	83.9	83.9	(1)	(1)	(1)	3.4	3.8	3.6
Sheboygan .....	58.3	58.6	58.7	(1)	(1)	(1)	2.4	2.5	2.5
Wausau .....	65.6	66.7	67.3	(1)	(1)	(1)	3.0	3.2	3.4
<b>Wyoming</b> .....	222.9	230.9	226.2	17.1	17.7	17.5	15.9	17.1	15.9
Casper .....	30.3	31.6	31.4	2.2	2.3	2.2	1.7	2.1	2.0
<b>Puerto Rico</b> .....	975.8	938.1	947.5	1.1	1.2	1.2	56.1	55.3	56.4
Caguas .....	67.9	63.5	64.6	(1)	(1)	(1)	3.0	2.8	3.2
Mayaguez .....	69.2	66.5	68.0	(1)	(1)	(1)	4.5	4.5	4.5
Ponce .....	76.4	74.5	75.3	(1)	(1)	(1)	4.7	5.9	6.1
San Juan-Bayamon .....	609.5	586.9	594.5	.6	.6	.6	38.2	37.7	38.6
<b>Virgin Islands</b> .....	40.7	41.3	41.4	(1)	(1)	(1)	2.0	1.9	1.9

See footnotes at end of table.



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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>West Virginia</b> .....	83.1	83.0	82.8	39.3	39.4	39.4	167.3	166.2	168.2
Charleston .....	10.3	10.1	10.1	9.4	9.3	9.2	31.8	32.4	33.1
Huntington-Ashland .....	16.7	15.6	15.7	6.7	6.9	7.0	32.2	32.2	32.8
Parkersburg-Marietta .....	13.2	13.2	13.3	2.6	2.6	2.6	17.4	18.2	18.6
Wheeling .....	6.1	6.2	6.1	3.0	2.9	3.0	17.6	16.9	17.0
<b>Wisconsin</b> .....	614.7	616.7	616.3	124.7	125.8	125.6	620.1	623.3	632.1
Appleton-Oshkosh-Neenah .....	58.8	58.7	58.5	7.4	7.8	7.8	42.8	43.8	44.4
Eau Claire .....	12.7	13.4	13.6	3.6	3.5	3.4	20.4	20.6	21.0
Green Bay .....	28.5	28.9	28.8	9.9	9.8	9.8	32.0	31.8	32.0
Janesville-Beloit .....	21.8	21.9	21.8	2.5	2.6	2.6	16.1	15.6	15.7
Kenosha .....	11.5	11.5	11.6	2.1	2.4	2.4	12.3	12.4	12.6
La Crosse .....	11.8	11.6	11.7	2.9	2.9	2.9	18.7	18.8	19.1
Madison .....	29.5	30.1	30.1	9.6	10.1	10.1	59.4	57.9	59.0
Milwaukee-Waukesha .....	178.2	177.7	178.7	40.3	41.1	41.5	183.3	183.6	186.3
Racine .....	25.8	26.0	25.9	2.4	2.3	2.3	16.6	16.6	17.3
Sheboygan .....	23.9	23.8	23.9	1.8	1.9	1.9	10.8	10.8	10.9
Wausau .....	18.6	19.1	19.0	3.5	3.4	3.4	16.4	16.6	17.0
<b>Wyoming</b> .....	11.2	11.6	11.3	14.0	13.9	14.0	51.8	53.2	52.4
Casper .....	1.5	1.6	1.6	1.7	1.7	1.7	8.4	8.6	8.6
<b>Puerto Rico</b> .....	148.7	139.6	140.0	26.2	24.0	24.3	201.0	191.0	195.8
Caguas .....	16.0	14.8	14.7	.7	.6	.6	15.5	14.4	15.0
Mayaguez .....	18.1	18.4	19.3	.6	.5	.5	11.9	11.4	11.7
Ponce .....	10.3	9.2	9.0	2.2	2.1	2.0	13.7	12.9	13.3
San Juan-Bayamon .....	67.9	61.5	62.1	20.8	18.3	18.5	132.3	125.2	129.9
<b>Virgin Islands</b> .....	2.2	2.4	2.4	2.3	2.4	2.4	9.0	9.0	9.0

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>West Virginia</b> .....	28.4	28.8	28.9	203.2	209.3	208.9	142.6	142.4	143.4
Charleston .....	7.6	8.0	8.1	40.9	42.2	42.3	24.7	24.1	24.2
Huntington-Ashland .....	3.8	4.2	4.3	34.2	35.8	35.7	20.9	21.1	21.2
Parkersburg-Marietta .....	2.6	2.6	2.6	20.3	20.3	20.5	9.7	9.6	9.6
Wheeling .....	2.9	2.9	2.9	23.4	24.2	23.9	10.5	10.4	10.4
<b>Wisconsin</b> .....	141.2	145.3	145.8	691.1	711.1	706.4	400.2	399.5	405.7
Appleton-Oshkosh-Neenah .....	9.7	10.1	10.2	44.1	45.0	44.9	22.7	23.5	23.5
Eau Claire .....	2.5	2.7	2.7	19.4	19.6	19.7	12.6	12.5	12.5
Green Bay .....	9.2	9.3	9.2	33.5	34.0	33.5	16.3	16.2	16.2
Janesville-Beloit .....	1.9	1.9	1.9	16.0	16.0	15.9	8.7	8.8	8.9
Kenosha .....	1.7	1.8	1.8	13.2	14.4	14.3	8.1	8.5	8.5
La Crosse .....	2.5	2.8	2.7	20.7	20.9	20.8	10.4	10.3	10.5
Madison .....	21.4	22.2	22.2	88.3	70.9	71.1	72.4	72.9	74.2
Milwaukee-Waukesha .....	58.4	59.6	59.7	261.7	269.4	268.5	91.2	90.8	92.8
Racine .....	2.4	2.3	2.3	23.4	23.4	22.9	9.6	9.7	9.5
Sheboygan .....	2.1	2.3	2.3	10.9	11.1	10.9	6.3	6.3	6.4
Wausau .....	4.8	4.9	4.9	11.9	12.1	12.0	7.5	7.4	7.6
<b>Wyoming</b> .....	8.2	8.4	8.5	45.8	49.8	47.0	58.9	59.2	59.6
Casper .....	1.2	1.2	1.2	8.2	8.6	8.5	5.4	5.5	5.6
<b>Puerto Rico</b> .....	46.1	45.6	45.4	192.6	186.7	188.0	304.0	294.7	296.4
Caguas .....	1.8	1.9	1.9	12.3	11.8	11.8	18.6	17.2	17.4
Mayaguez .....	2.0	1.8	1.8	11.3	9.6	9.8	20.8	20.3	20.4
Ponce .....	2.3	2.3	2.3	16.9	16.1	16.6	26.3	26.0	26.0
San Juan-Bayamon .....	36.3	35.6	35.6	129.0	128.7	129.1	184.4	179.3	180.1
<b>Virgin Islands</b> .....	1.9	1.9	1.9	9.9	10.2	10.3	13.4	13.5	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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Total private</b> .....		34.8	34.8	34.6	34.7	34.7	-	-	-	-	-
<b>Goods-producing</b> .....		41.4	42.0	41.4	41.2	41.8	-	-	-	-	-
<b>Mining</b> .....		45.6	45.2	43.9	43.9	43.5	-	-	-	-	-
Metal mining .....	10	44.4	44.5	43.4	44.0	-	-	-	-	-	-
Iron ores .....	101	46.1	45.5	44.7	43.5	-	-	-	-	-	-
Copper ores .....	102	45.4	46.2	46.3	45.7	-	-	-	-	-	-
Coal mining .....	12	45.2	44.8	45.0	45.6	-	-	-	-	-	-
Bituminous coal and lignite mining .....	122	45.3	44.8	45.0	45.6	-	-	-	-	-	-
Oil and gas extraction .....	13	45.6	45.1	42.6	42.6	-	-	-	-	-	-
Crude petroleum and natural gas .....	131	43.0	41.6	41.1	42.0	-	-	-	-	-	-
Oil and gas field services .....	138	46.9	46.8	43.3	43.0	-	-	-	-	-	-
Nonmetallic minerals, except fuels .....	14	46.8	46.6	47.0	45.7	-	-	-	-	-	-
Crushed and broken stone .....	142	48.5	48.0	49.4	47.9	-	-	-	-	-	-
<b>Construction</b> .....		37.8	38.5	40.0	38.5	39.2	-	-	-	-	-
General building contractors .....	15	37.6	38.2	38.7	37.9	-	-	-	-	-	-
Residential building construction .....	152	36.5	36.7	37.3	36.8	-	-	-	-	-	-
Operative builders .....	153	37.3	37.9	37.4	36.6	-	-	-	-	-	-
Nonresidential building construction .....	154	38.7	39.7	40.2	39.1	-	-	-	-	-	-
Heavy construction, except building .....	16	39.4	40.9	44.5	41.2	-	-	-	-	-	-
Highway and street construction .....	161	37.4	38.8	45.4	40.3	-	-	-	-	-	-
Heavy construction, except highway .....	162	40.2	41.6	44.1	41.6	-	-	-	-	-	-
Special trade contractors .....	17	37.6	38.1	39.2	38.1	-	-	-	-	-	-
Plumbing, heating, and air conditioning .....	171	39.2	39.7	39.8	39.3	-	-	-	-	-	-
Painting and paper hanging .....	172	36.5	36.8	37.6	36.5	-	-	-	-	-	-
Electrical work .....	173	39.6	40.3	40.1	39.7	-	-	-	-	-	-
Masonry, stonework, and plastering .....	174	35.0	35.4	37.0	35.8	-	-	-	-	-	-
Carpentry and floor work .....	175	35.7	36.2	37.1	37.0	-	-	-	-	-	-
Roofing, siding, and sheet metal work .....	176	32.7	33.3	36.6	34.1	-	-	-	-	-	-
<b>Manufacturing</b> .....		42.6	43.0	41.9	42.1	42.6	5.2	5.4	4.7	4.7	4.9
<b>Durable goods</b> .....		43.3	43.9	42.5	42.7	43.3	5.5	5.8	4.8	4.9	5.2
Lumber and wood products .....	24	41.4	41.2	41.5	41.5	41.8	4.5	4.4	4.6	4.6	-
Logging .....	241	40.3	40.7	42.1	40.5	-	5.1	5.4	6.0	5.3	-
Sawmills and planing mills .....	242	42.3	42.4	42.5	42.5	-	5.1	5.1	5.0	4.9	-
Sawmills and planing mills, general .....	2421	42.7	42.6	42.9	42.9	-	5.5	5.5	5.5	5.3	-
Hardwood dimension and flooring mills .....	2426	41.2	41.6	41.3	41.4	-	3.7	3.7	3.5	3.6	-
Millwork, plywood, and structural members .....	243	42.2	41.7	41.8	42.4	-	4.9	4.6	4.8	5.1	-
Millwork .....	2431	41.9	41.2	41.4	42.3	-	4.3	3.6	4.2	4.7	-
Wood kitchen cabinets .....	2434	41.8	41.5	40.8	41.3	-	5.3	5.5	4.5	4.8	-
Hardwood veneer and plywood .....	2435	42.3	43.0	42.7	43.0	-	4.7	5.3	5.4	5.8	-
Softwood veneer and plywood .....	2436	44.9	44.1	43.3	44.3	-	6.1	5.8	6.1	6.7	-
Wood containers .....	244	39.7	39.9	39.0	39.1	-	3.7	3.9	3.4	3.5	-
Wood buildings and mobile homes .....	245	39.6	38.6	40.2	39.4	-	2.9	2.7	3.3	2.8	-
Mobile homes .....	2451	39.6	38.5	40.4	39.4	-	2.7	2.7	3.2	2.6	-
Miscellaneous wood products .....	249	40.9	40.6	40.7	41.2	-	3.9	3.5	3.7	4.1	-
Furniture and fixtures .....	25	41.2	42.1	40.8	40.8	41.6	3.9	4.3	3.7	3.6	-
Household furniture .....	251	40.1	41.2	39.8	39.8	-	3.2	3.8	3.0	2.9	-
Wood household furniture .....	2511	40.4	41.3	40.3	40.5	-	3.1	3.2	3.2	3.4	-
Upholstered household furniture .....	2512	39.7	41.9	39.5	39.0	-	3.0	4.2	2.7	2.4	-
Metal household furniture .....	2514	41.8	40.8	39.7	39.9	-	5.0	5.6	3.3	3.3	-
Mattresses and bedsprings .....	2515	38.7	39.1	38.0	38.7	-	3.2	3.4	2.6	2.3	-
Office furniture .....	252	44.0	45.4	43.5	44.0	-	5.5	6.0	4.3	4.5	-
Public building and related furniture .....	253	40.8	41.1	42.0	40.7	-	3.9	4.0	5.4	4.5	-
Partitions and fixtures .....	254	42.9	43.1	42.7	42.2	-	4.7	4.7	5.1	4.3	-
Miscellaneous furniture and fixtures .....	259	42.8	43.3	39.3	41.1	-	5.2	5.6	3.5	4.4	-

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Total private</b> .....		\$12.53	\$12.53	\$12.92	\$12.99	\$12.99	\$436.04	\$436.04	\$447.03	\$450.75	\$450.75
<b>Goods-producing</b> .....		14.12	14.21	14.49	14.49	14.55	584.57	596.82	599.89	596.99	608.19
<b>Mining</b> .....		16.41	16.52	17.13	17.32	17.41	748.30	746.70	752.01	760.35	757.34
Metal mining .....	10	18.28	18.02	18.44	18.46	-	811.63	801.89	800.30	812.24	-
Iron ores .....	101	19.74	19.16	20.78	20.39	-	910.01	871.78	928.87	886.97	-
Copper ores .....	102	16.51	16.38	17.02	17.08	-	749.55	756.76	788.03	780.56	-
Coal mining .....	12	19.10	19.47	19.15	19.26	-	863.32	872.26	861.75	878.26	-
Bituminous coal and lignite mining .....	122	19.36	19.73	19.41	19.50	-	877.01	883.90	873.45	889.20	-
Oil and gas extraction .....	13	16.00	16.10	17.10	17.37	-	729.60	726.11	728.46	739.96	-
Crude petroleum and natural gas .....	131	21.74	21.99	23.16	23.48	-	934.82	914.78	951.88	986.16	-
Oil and gas field services .....	138	13.35	13.47	14.05	14.14	-	626.12	630.40	608.37	608.02	-
Nonmetallic minerals, except fuels .....	14	14.32	14.36	14.96	14.98	-	670.18	669.18	703.12	684.59	-
Crushed and broken stone .....	142	13.69	13.72	14.24	14.13	-	663.97	658.56	703.46	676.83	-
<b>Construction</b> .....		16.28	16.37	16.86	16.80	16.83	615.38	630.25	674.40	646.80	659.74
General building contractors .....	15	15.55	15.67	16.15	16.17	-	584.68	598.59	625.01	612.84	-
Residential building construction .....	152	14.46	14.62	15.05	15.04	-	527.79	536.55	561.37	553.47	-
Operative builders .....	153	15.21	15.38	15.38	15.47	-	567.33	582.90	575.21	566.20	-
Nonresidential building construction .....	154	16.62	16.66	17.23	17.29	-	643.19	661.40	692.65	676.04	-
Heavy construction, except building .....	16	15.74	15.59	16.75	16.49	-	620.16	637.63	745.38	679.39	-
Highway and street construction .....	161	15.74	15.33	16.87	16.28	-	588.68	594.80	765.90	656.08	-
Heavy construction, except highway .....	162	15.73	15.67	16.69	16.58	-	632.35	651.87	736.03	689.73	-
Special trade contractors .....	17	16.65	16.78	17.12	17.09	-	626.04	639.32	671.10	651.13	-
Plumbing, heating, and air conditioning .....	171	16.80	17.06	17.37	17.24	-	658.56	677.28	691.33	677.53	-
Painting and paper hanging .....	172	15.00	15.01	15.64	15.57	-	547.50	552.37	588.06	568.31	-
Electrical work .....	173	18.08	18.21	18.70	18.64	-	715.97	733.86	749.87	740.01	-
Masonry, stonework, and plastering .....	174	16.44	16.48	16.83	16.89	-	575.40	583.39	622.71	604.66	-
Carpentry and floor work .....	175	16.35	16.67	16.56	16.75	-	583.70	603.45	614.38	619.75	-
Roofing, siding, and sheet metal work .....	176	14.57	14.61	14.94	14.91	-	476.44	486.51	546.80	508.43	-
<b>Manufacturing</b> .....		13.36	13.47	13.54	13.60	13.69	569.14	579.21	567.33	572.56	583.19
<b>Durable goods</b> .....		13.95	14.07	14.03	14.08	14.17	604.04	617.67	596.28	601.22	613.56
Lumber and wood products .....	24	10.91	10.93	11.23	11.26	11.34	451.67	450.32	466.05	467.29	474.01
Logging .....	241	12.38	12.24	12.85	12.84	-	498.91	498.17	540.99	520.02	-
Sawmills and planing mills .....	242	10.95	10.98	11.18	11.19	-	463.19	465.55	475.15	475.58	-
Sawmills and planing mills, general .....	2421	11.40	11.42	11.64	11.64	-	486.78	486.49	499.36	499.36	-
Hardwood dimension and flooring mills .....	2426	9.20	9.31	9.51	9.61	-	379.04	387.30	392.76	397.85	-
Millwork, plywood, and structural members .....	243	11.04	11.04	11.34	11.41	-	465.89	460.37	474.01	483.78	-
Millwork .....	2431	11.16	11.06	11.46	11.52	-	467.60	455.67	474.44	487.30	-
Wood kitchen cabinets .....	2434	10.80	10.91	11.13	11.22	-	451.44	452.77	454.10	463.39	-
Hardwood veneer and plywood .....	2435	9.62	9.80	10.09	10.16	-	406.93	421.40	430.84	436.88	-
Softwood veneer and plywood .....	2436	13.24	13.21	13.55	13.59	-	594.48	582.56	586.72	602.04	-
Wood containers .....	244	8.55	8.61	9.05	8.99	-	339.44	343.54	352.95	351.51	-
Wood buildings and mobile homes .....	245	11.11	11.30	11.47	11.49	-	439.96	436.18	461.09	452.71	-
Mobile homes .....	2451	11.31	11.53	11.63	11.67	-	447.88	443.91	469.85	459.80	-
Miscellaneous wood products .....	249	10.28	10.37	10.52	10.59	-	420.45	421.02	428.16	436.31	-
Furniture and fixtures .....	25	10.69	10.79	10.99	10.98	11.10	440.43	454.26	448.39	447.98	461.76
Household furniture .....	251	10.10	10.19	10.35	10.39	-	405.01	419.83	411.93	413.52	-
Wood household furniture .....	2511	9.60	9.65	9.98	10.01	-	387.84	398.55	402.19	405.41	-
Upholstered household furniture .....	2512	10.76	10.97	11.11	11.15	-	427.17	459.64	438.85	434.85	-
Metal household furniture .....	2514	9.82	9.75	9.80	9.76	-	410.48	397.80	389.06	389.42	-
Mattresses and bedsprings .....	2515	10.70	10.67	10.67	10.84	-	414.09	417.20	405.46	419.51	-
Office furniture .....	252	11.79	11.85	11.81	11.88	-	518.76	537.99	513.74	522.72	-
Public building and related furniture .....	253	11.83	11.75	12.27	12.22	-	474.50	482.93	515.34	497.35	-
Partitions and fixtures .....	254	11.39	11.55	11.79	11.61	-	488.63	497.81	503.43	489.94	-
Miscellaneous furniture and fixtures .....	259	10.76	10.80	11.04	11.06	-	460.53	467.64	433.87	454.57	-

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	43.1	43.7	44.0	43.6	43.7	5.8	5.8	6.9	6.3	—
Flat glass .....	321	45.9	46.0	42.8	42.6	—	7.2	7.2	7.2	6.9	—
Glass and glassware, pressed or blown .....	322	43.0	43.3	42.4	42.9	—	5.0	4.8	5.3	5.5	—
Glass containers .....	3221	44.9	45.8	44.3	44.6	—	6.4	6.4	6.7	6.7	—
Pressed and blown glass, nec .....	3229	41.9	41.8	41.2	41.9	—	4.1	3.8	4.4	4.8	—
Products of purchased glass .....	323	42.7	43.3	43.7	43.8	—	5.5	5.4	5.7	5.3	—
Cement, hydraulic .....	324	46.1	45.5	44.3	44.9	—	6.1	5.7	5.8	5.4	—
Structural clay products .....	325	42.5	42.7	41.7	42.2	—	4.8	4.7	5.2	5.0	—
Pottery and related products .....	326	42.2	42.4	41.4	41.8	—	5.7	5.2	5.0	4.9	—
Concrete, gypsum, and plaster products .....	327	43.1	43.9	46.5	45.0	—	6.3	6.5	9.2	7.9	—
Concrete block and brick .....	3271	45.3	44.7	48.5	47.3	—	7.7	7.3	10.4	9.8	—
Concrete products, nec .....	3272	43.1	44.5	45.3	45.2	—	6.0	6.4	8.1	7.7	—
Ready-mixed concrete .....	3273	41.8	42.5	46.6	43.9	—	5.9	6.0	9.6	7.4	—
Misc. nonmetallic mineral products .....	329	43.4	44.3	42.3	42.8	—	5.6	5.9	5.4	5.4	—
Abrasives products .....	3291	43.9	44.2	41.8	42.0	—	4.2	4.5	2.8	2.8	—
Asbestos products .....	3292	47.6	48.5	48.3	49.0	—	8.4	8.7	11.4	11.3	—
Primary metal industries .....	33	45.5	46.1	43.6	44.1	44.7	7.0	7.3	6.1	6.2	—
Blast furnaces and basic steel products .....	331	45.5	46.0	43.2	43.1	44.1	6.6	6.7	5.3	5.1	—
Blast furnaces and steel mills .....	3312	45.9	46.2	43.3	43.2	—	6.8	6.8	5.5	5.2	—
Steel pipe and tubes .....	3317	45.3	46.4	43.8	43.6	—	7.1	7.8	5.5	5.4	—
Iron and steel foundries .....	332	46.6	47.8	44.3	45.0	—	7.6	8.1	6.3	6.4	—
Gray and ductile iron foundries .....	3321	47.4	48.6	45.0	45.6	—	8.6	9.1	7.2	7.3	—
Malleable iron foundries .....	3322	54.6	53.6	46.2	46.5	—	10.7	9.8	7.8	7.7	—
Steel foundries, nec .....	3325	44.2	45.5	43.2	44.0	—	5.6	6.7	5.1	5.3	—
Primary nonferrous metals .....	333	45.0	45.1	42.3	43.7	—	6.7	6.2	6.4	7.3	—
Primary aluminum .....	3334	44.6	45.2	43.5	44.7	—	6.6	6.2	7.3	8.2	—
Nonferrous rolling and drawing .....	335	46.0	46.2	43.7	44.5	—	8.2	8.4	7.2	7.5	—
Copper rolling and drawing .....	3351	44.8	44.9	43.0	44.6	—	7.9	8.0	7.2	8.7	—
Aluminum sheet, plate, and foil .....	3353	47.3	47.5	42.8	43.2	—	10.8	10.4	9.6	9.4	—
Nonferrous wire drawing and insulating .....	3357	46.2	46.7	44.2	44.9	—	7.9	8.4	7.0	7.1	—
Nonferrous foundries (castings) .....	336	44.0	44.7	43.9	44.5	—	5.6	6.2	5.6	5.8	—
Aluminum foundries .....	3365	44.1	44.2	44.5	45.2	—	5.6	5.5	6.0	6.1	—
Fabricated metal products .....	34	43.3	44.0	42.6	42.8	43.6	5.5	5.8	5.0	4.9	—
Metal cans and shipping containers .....	341	43.3	43.9	43.8	43.8	—	5.8	5.7	6.7	6.5	—
Metal cans .....	3411	43.7	44.7	43.8	43.7	—	5.7	5.7	6.7	6.5	—
Cutlery, handtools, and hardware .....	342	44.1	44.7	42.8	42.9	—	5.3	5.6	4.6	4.5	—
Hand and edge tools, and blades and handsaws .....	3423,5	44.2	44.9	43.7	44.1	—	5.2	5.4	5.2	5.3	—
Hardware, nec .....	3429	44.1	44.8	42.4	42.2	—	5.4	5.8	4.2	4.1	—
Plumbing and heating, except electric .....	343	41.9	42.8	43.3	43.3	—	4.8	5.2	4.3	4.0	—
Plumbing fixture fittings and trim .....	3432	41.6	43.3	41.6	41.4	—	4.4	5.6	3.3	3.3	—
Heating equipment, except electric .....	3433	42.7	42.9	42.7	43.7	—	5.1	5.2	5.5	5.0	—
Fabricated structural metal products .....	344	42.8	43.4	42.5	42.8	—	5.2	5.3	5.2	5.2	—
Fabricated structural metal .....	3441	43.5	44.5	44.0	44.7	—	6.5	6.9	7.3	7.0	—
Metal doors, sash, and trim .....	3442	41.8	41.8	41.9	41.9	—	3.9	3.9	4.3	4.0	—
Fabricated plate work (boiler shops) .....	3443	44.3	45.1	42.6	43.3	—	6.0	6.1	5.2	5.3	—
Sheet metal work .....	3444	41.5	42.4	41.5	41.6	—	4.4	4.6	4.3	4.2	—
Architectural metal work .....	3446	42.3	42.7	42.2	42.7	—	4.5	4.6	4.9	5.2	—
Screw machine products, bolts, etc .....	345	44.6	45.7	43.0	43.3	—	6.4	7.1	5.3	5.1	—
Screw machine products .....	3451	43.3	43.9	41.7	41.6	—	5.8	6.2	4.6	4.3	—
Bolts, nuts, rivets, and washers .....	3452	46.1	47.8	44.6	45.4	—	7.2	8.1	6.2	6.0	—
Metal forgings and stampings .....	346	44.6	45.2	43.7	43.7	—	6.7	6.9	5.7	5.6	—
Iron and steel forgings .....	3462	46.4	47.1	43.5	44.3	—	7.7	7.8	5.7	5.9	—
Automotive stampings .....	3465	45.3	45.9	44.9	44.6	—	7.3	7.6	6.3	6.2	—
Metal stampings, nec .....	3469	42.6	42.9	41.4	41.6	—	5.1	5.3	4.3	4.3	—
Metal services, nec .....	347	41.8	42.7	41.8	41.7	—	5.1	5.6	5.2	4.9	—
Plating and polishing .....	3471	41.3	42.0	41.5	41.5	—	4.8	5.3	5.1	4.9	—
Metal coating and allied services .....	3479	42.7	43.8	42.3	42.0	—	5.6	6.0	5.3	4.9	—
Ordnance and accessories, nec .....	348	41.0	41.0	40.5	40.6	—	3.7	3.7	3.3	3.6	—
Ammunition, except for small arms, nec .....	3483	41.5	42.3	42.7	41.8	—	3.8	4.0	3.4	3.4	—
Misc. fabricated metal products .....	349	43.4	44.1	41.5	41.9	—	5.1	5.4	3.9	3.9	—
Valves and pipe fittings, nec .....	3494	43.3	43.5	41.6	41.8	—	5.1	4.5	4.2	4.0	—
Misc. fabricated wire products .....	3496	41.0	41.8	40.3	40.5	—	3.5	3.9	3.7	3.8	—

See footnotes at end of table.

ESTABLISHMENT DATA  
HOURS AND EARNINGS  
NOT SEASONALLY ADJUSTED

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products .....	32	\$13.36	\$13.39	\$13.68	\$13.67	\$13.72	\$575.82	\$585.14	\$601.92	\$596.01	\$599.56
Flat glass .....	321	18.90	19.16	17.95	18.05	—	867.51	881.36	768.26	768.93	—
Glass and glassware, pressed or blown .....	322	15.15	15.24	15.57	15.56	—	651.45	659.89	660.17	667.52	—
Glass containers .....	3221	15.82	15.86	16.53	16.41	—	710.32	726.39	732.28	731.89	—
Pressed and blown glass, nec .....	3229	14.70	14.82	14.93	15.00	—	615.93	619.48	615.12	628.50	—
Products of purchased glass .....	323	12.10	12.06	12.21	12.10	—	516.67	522.20	533.58	529.98	—
Cement, hydraulic .....	324	18.32	17.82	18.82	19.16	—	844.55	810.81	833.73	860.28	—
Structural clay products .....	325	11.48	11.59	12.14	12.05	—	487.90	494.89	506.24	508.51	—
Pottery and related products .....	326	11.63	11.67	11.78	11.87	—	490.79	494.81	487.69	496.17	—
Concrete, gypsum, and plaster products .....	327	12.74	12.80	13.37	13.26	—	549.09	561.92	621.71	596.70	—
Concrete block and brick .....	3271	12.34	12.35	12.65	12.51	—	559.00	552.05	613.53	591.72	—
Concrete products, nec .....	3272	11.39	11.49	11.98	11.85	—	490.91	511.31	542.69	535.62	—
Ready-mixed concrete .....	3273	13.52	13.61	14.23	14.13	—	565.14	578.43	663.12	620.31	—
Misc. nonmetallic mineral products .....	329	13.75	13.76	13.66	13.82	—	596.75	609.57	577.82	591.50	—
Abrasive products .....	3291	12.27	12.24	12.50	12.66	—	538.65	541.01	522.50	531.72	—
Asbestos products .....	3292	15.90	15.66	15.37	15.13	—	756.84	759.51	742.37	741.37	—
Primary metal industries .....	33	15.38	15.42	15.31	15.31	15.38	699.79	710.86	667.52	675.17	687.49
Blast furnaces and basic steel products .....	331	18.28	18.15	18.21	18.30	18.18	831.74	834.90	786.67	788.73	801.74
Blast furnaces and steel mills .....	3312	19.95	19.75	19.94	20.03	—	915.71	912.45	863.40	865.30	—
Steel pipe and tubes .....	3317	14.27	14.30	13.79	13.87	—	646.43	663.52	604.00	604.73	—
Iron and steel foundries .....	332	14.06	14.19	13.92	13.79	—	655.20	678.28	616.66	620.55	—
Gray and ductile iron foundries .....	3321	15.05	15.18	14.48	14.30	—	713.37	737.75	651.60	652.08	—
Malleable iron foundries .....	3322	15.13	15.96	14.79	14.13	—	826.10	855.46	683.30	657.05	—
Steel foundries, nec .....	3325	12.86	12.94	13.64	13.58	—	568.41	588.77	589.25	597.52	—
Primary nonferrous metals .....	333	16.89	16.91	17.18	17.21	—	760.05	762.64	726.71	752.08	—
Primary aluminum .....	3334	17.02	17.01	17.10	17.14	—	759.09	768.85	743.85	766.16	—
Nonferrous rolling and drawing .....	335	14.58	14.72	14.36	14.38	—	670.68	680.06	627.53	639.91	—
Copper rolling and drawing .....	3351	14.78	15.09	15.31	15.45	—	662.14	677.54	658.33	689.07	—
Aluminum sheet, plate, and foil .....	3353	16.90	16.73	16.55	16.54	—	799.37	794.68	708.34	714.53	—
Nonferrous wire drawing and insulating .....	3357	14.59	14.83	14.24	14.03	—	674.06	692.56	629.41	629.95	—
Nonferrous foundries (castings) .....	336	12.03	12.28	12.32	12.39	—	529.32	548.92	540.85	551.36	—
Aluminum foundries .....	3365	11.54	11.81	11.84	11.96	—	508.91	522.00	526.88	540.59	—
Fabricated metal products .....	34	12.93	13.03	13.19	13.23	13.36	559.87	573.32	561.89	566.24	582.50
Metal cans and shipping containers .....	341	16.24	16.49	16.65	16.69	—	703.19	723.91	729.27	731.02	—
Metal cans .....	3411	17.26	17.48	17.77	17.84	—	754.26	781.36	778.33	779.61	—
Cutlery, handtools, and hardware .....	342	12.34	12.45	12.18	12.32	—	544.19	556.52	521.30	528.53	—
Hand and edge tools, and blades and handsaws .....	3423.5	12.11	12.22	12.44	12.46	—	535.26	548.68	543.63	549.49	—
Hardware, nec .....	3429	12.51	12.69	12.16	12.35	—	551.69	568.51	515.58	521.17	—
Plumbing and heating, except electric .....	343	11.94	12.04	11.90	11.93	—	500.29	515.31	515.27	516.57	—
Plumbing fixture fittings and trim .....	3432	11.71	11.67	11.47	11.64	—	487.14	505.31	477.15	481.90	—
Heating equipment, except electric .....	3433	11.82	11.87	12.39	12.31	—	504.71	509.22	529.05	537.95	—
Fabricated structural metal products .....	344	12.31	12.36	12.64	12.65	—	526.87	536.42	537.20	541.42	—
Fabricated structural metal .....	3441	12.50	12.56	13.11	12.98	—	543.75	558.92	576.84	580.21	—
Metal doors, sash, and trim .....	3442	10.49	10.58	10.68	10.71	—	438.48	442.24	447.49	448.75	—
Fabricated plate work (boiler shops) .....	3443	13.66	13.60	13.96	14.07	—	605.14	613.36	594.70	609.23	—
Sheet metal work .....	3444	12.54	12.62	12.90	12.87	—	520.41	535.09	535.35	535.39	—
Architectural metal work .....	3446	11.69	11.73	11.89	12.09	—	494.49	500.87	501.76	516.24	—
Screw machine products, bolts, etc .....	345	13.05	13.13	13.43	13.48	—	582.03	600.04	577.49	583.68	—
Screw machine products .....	3451	12.46	12.49	12.72	12.71	—	539.52	548.31	530.42	528.74	—
Bolts, nuts, rivets, and washers .....	3452	13.70	13.83	14.22	14.31	—	631.57	661.07	634.21	649.67	—
Metal forgings and stampings .....	346	15.20	15.38	15.49	15.49	—	677.92	695.18	676.91	676.91	—
Iron and steel forgings .....	3462	14.52	14.64	14.71	14.71	—	673.73	689.54	639.89	651.65	—
Automotive stampings .....	3465	17.45	17.74	17.85	17.86	—	790.49	814.27	801.47	796.56	—
Metal stampings, nec .....	3469	12.41	12.49	12.66	12.72	—	528.67	535.82	524.12	529.15	—
Metal services, nec .....	347	10.84	10.98	11.26	11.23	—	453.11	468.85	470.67	468.29	—
Plating and polishing .....	3471	10.73	10.84	11.13	11.15	—	443.15	455.28	461.90	462.73	—
Metal coating and allied services .....	3479	11.02	11.19	11.47	11.35	—	470.55	490.12	485.18	476.70	—
Ordnance and accessories, nec .....	348	15.50	15.33	15.36	15.67	—	635.50	628.53	622.08	636.20	—
Ammunition, except for small arms, nec .....	3483	16.50	15.87	16.34	16.73	—	684.75	671.30	697.72	699.31	—
Misc. fabricated metal products .....	349	12.35	12.43	12.61	12.68	—	535.99	548.16	523.32	531.29	—
Valves and pipe fittings, nec .....	3494	12.53	12.55	12.91	12.91	—	542.55	545.93	537.06	539.64	—
Misc. fabricated wire products .....	3496	10.92	10.98	11.26	11.30	—	447.72	458.96	453.78	457.65	—

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	44.0	44.8	42.4	42.6	43.0	5.9	6.5	4.8	4.9	—
Engines and turbines .....	351	45.4	46.5	43.6	44.8	—	6.7	7.6	5.9	7.0	—
Turbines and turbine generator sets .....	3511	43.2	45.0	43.4	44.7	—	5.8	7.2	4.8	5.9	—
Internal combustion engines, nec .....	3519	46.2	47.0	43.6	44.8	—	7.1	7.8	6.3	7.3	—
Farm and garden machinery .....	352	42.9	44.3	40.9	40.9	—	5.0	5.7	2.9	2.7	—
Farm machinery and equipment .....	3523	43.6	44.5	41.5	41.4	—	5.5	6.0	3.0	2.7	—
Construction and related machinery .....	353	45.1	45.9	43.3	43.1	—	6.4	6.8	5.1	5.2	—
Construction machinery .....	3531	44.1	44.9	42.5	42.6	—	5.3	5.9	4.3	4.4	—
Mining machinery .....	3532	42.7	43.2	41.4	40.6	—	4.8	5.1	3.5	3.4	—
Oil and gas field machinery .....	3533	49.9	50.3	46.3	44.9	—	10.5	10.3	7.7	7.0	—
Conveyors and conveying equipment .....	3535	43.4	45.1	42.0	42.9	—	5.5	6.2	4.5	5.5	—
Industrial trucks and tractors .....	3537	42.2	42.6	42.6	41.3	—	4.5	4.6	4.5	4.3	—
Metalworking machinery .....	354	44.5	45.4	43.0	43.4	—	6.6	7.2	5.4	5.6	—
Machine tools, metal cutting types .....	3541	44.4	45.8	42.9	42.7	—	6.6	7.0	5.0	4.9	—
Machine tools, metal forming types .....	3542	45.9	47.4	43.9	44.2	—	7.0	8.1	5.7	5.9	—
Special dies, tools, jigs, and fixtures .....	3544	44.4	45.4	43.6	44.0	—	7.1	7.7	6.2	6.4	—
Machine tool accessories .....	3545	43.7	45.0	41.7	42.3	—	5.2	5.9	3.9	4.1	—
Power driven handtools .....	3546	43.8	44.1	41.6	43.3	—	5.3	5.7	3.7	4.7	—
Special industry machinery .....	355	43.7	44.3	41.8	42.1	—	5.7	6.1	4.6	4.6	—
Textile machinery .....	3552	41.7	42.4	39.5	40.2	—	4.2	4.8	3.3	3.8	—
Printing trades machinery .....	3555	43.0	42.6	41.3	42.5	—	5.4	5.5	4.5	4.9	—
Food products machinery .....	3556	42.2	44.0	42.4	42.7	—	4.8	5.4	5.0	5.0	—
General industrial machinery .....	356	43.8	44.7	41.8	42.0	—	5.6	6.3	4.4	4.3	—
Pumps and pumping equipment .....	3561	42.9	43.0	40.4	41.6	—	5.1	5.7	3.9	4.2	—
Ball and roller bearings .....	3562	43.9	44.9	42.6	42.0	—	6.8	7.6	5.3	4.9	—
Air and gas compressors .....	3563	44.1	44.6	42.6	43.2	—	5.5	6.3	4.8	4.8	—
Blowers and fans .....	3564	44.3	45.4	42.8	43.2	—	5.0	5.6	3.7	3.8	—
Speed changers, drives, and gears .....	3566	44.5	46.7	41.6	41.3	—	6.4	7.8	5.0	4.5	—
Power transmission equipment, nec .....	3568	43.1	43.8	41.2	41.1	—	5.8	6.0	3.8	3.4	—
Computer and office equipment .....	357	42.8	42.8	42.3	42.3	—	4.4	5.3	4.3	4.5	—
Electronic computers .....	3571	42.8	43.0	42.6	42.1	—	4.1	5.7	4.6	4.9	—
Computer terminals, calculators, and office machines, nec .....	3575,8,9	42.6	44.5	42.3	42.6	—	5.1	6.2	4.5	4.7	—
Refrigeration and service machinery .....	358	44.8	45.8	42.5	42.4	—	5.4	5.9	4.2	4.2	—
Refrigeration and heating equipment .....	3585	45.4	46.4	42.9	42.5	—	5.8	6.3	4.6	4.5	—
Misc. industrial and commercial machinery .....	359	43.5	44.4	42.1	42.6	—	6.2	6.7	5.0	5.0	—
Carburetors, pistons, rings, valves .....	3592	41.4	43.0	41.3	41.1	—	4.9	5.8	5.1	5.2	—
Scales, balances, and industrial machinery, nec ..	3596,9	43.3	44.2	42.1	42.6	—	6.3	6.7	5.1	5.1	—
Electronic and other electrical equipment .....	36	42.7	43.1	41.5	42.1	42.3	4.7	5.0	3.9	4.1	—
Electric distribution equipment .....	361	42.5	42.7	40.4	41.2	—	4.9	5.3	3.8	3.9	—
Transformers, except electronic .....	3612	43.4	43.9	41.8	42.3	—	4.5	4.7	3.5	3.8	—
Switchgear and switchboard apparatus .....	3613	41.6	41.6	39.2	40.2	—	5.2	5.8	4.0	4.0	—
Electrical industrial apparatus .....	362	42.5	44.1	41.4	42.0	—	4.1	4.8	3.5	3.5	—
Motors and generators .....	3621	42.1	44.6	41.8	42.0	—	3.7	4.8	3.6	3.4	—
Relays and industrial controls .....	3625	42.3	42.5	40.6	41.7	—	4.4	4.6	3.2	3.6	—
Household appliances .....	363	41.1	42.8	40.4	40.3	—	3.1	4.2	2.7	2.3	—
Household refrigerators and freezers .....	3632	39.9	43.7	42.5	42.8	—	2.1	3.1	2.7	2.6	—
Household laundry equipment .....	3633	41.3	42.7	39.1	39.9	—	2.2	3.4	2.6	2.3	—
Electric housewares and fans .....	3634	42.1	42.0	40.1	40.4	—	3.7	3.4	2.0	2.0	—
Electric lighting and wiring equipment .....	364	42.2	43.0	41.7	42.1	—	4.7	5.1	4.3	4.5	—
Electric lamps .....	3641	42.4	42.4	41.0	41.5	—	4.9	4.8	4.3	4.5	—
Current-carrying wiring devices .....	3643	41.9	42.1	41.9	41.2	—	4.8	4.6	4.4	4.4	—
Noncurrent-carrying wiring devices .....	3644	42.7	44.4	42.4	42.9	—	3.7	4.1	4.2	4.2	—
Residential lighting fixtures .....	3645	39.4	40.6	39.7	40.1	—	3.4	4.0	3.2	3.3	—
Household audio and video equipment .....	365	43.5	41.8	40.7	41.7	—	5.8	5.0	5.2	5.5	—
Household audio and video equipment .....	3651	41.8	41.3	40.6	40.3	—	3.9	4.1	3.9	3.8	—
Communications equipment .....	366	43.6	44.0	42.8	43.0	—	4.6	4.7	3.5	3.6	—
Telephone and telegraph apparatus .....	3661	45.6	45.2	44.3	45.2	—	4.8	4.7	3.8	4.2	—
Electronic components and accessories .....	367	42.7	42.9	41.2	42.4	—	4.9	5.0	3.9	4.3	—
Electron tubes .....	3671	41.0	41.7	42.3	43.0	—	4.6	4.4	2.6	3.0	—
Semiconductors and related devices .....	3674	43.5	42.8	42.0	43.3	—	5.1	5.0	4.8	5.1	—
Electronic components, nec .....	3679	42.4	42.7	41.2	42.2	—	4.7	4.8	3.4	3.9	—
Misc. electrical equipment and supplies .....	369	43.2	43.6	42.7	42.6	—	5.2	5.8	5.1	5.0	—
Storage batteries .....	3691	43.6	43.3	44.2	44.4	—	5.1	5.2	5.1	5.3	—
Engine electrical equipment .....	3694	43.2	44.5	43.3	42.6	—	5.7	7.0	6.1	5.6	—

See footnotes at end of table.

**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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Industrial machinery and equipment .....	35	\$14.30	\$14.41	\$14.55	\$14.63	\$14.69	\$629.20	\$645.57	\$616.92	\$623.24	\$631.67
Engines and turbines .....	351	16.96	17.14	17.47	17.68	-	769.98	797.01	761.69	792.06	-
Turbines and turbine generator sets .....	3511	20.02	20.17	19.37	19.91	-	864.86	907.65	840.66	889.98	-
Internal combustion engines, nec .....	3519	15.95	16.10	16.87	16.98	-	736.89	756.70	735.53	760.70	-
Farm and garden machinery .....	352	14.03	13.94	13.60	13.56	-	601.89	617.54	556.24	554.60	-
Farm machinery and equipment .....	3523	14.80	14.76	14.24	14.25	-	645.28	656.82	590.96	589.95	-
Construction and related machinery .....	353	13.60	13.57	13.74	13.80	-	613.36	622.86	594.94	594.78	-
Construction machinery .....	3531	14.04	13.89	13.89	13.95	-	619.16	623.66	590.33	594.27	-
Mining machinery .....	3532	14.36	14.63	14.69	14.75	-	613.17	632.02	608.17	598.85	-
Oil and gas field machinery .....	3533	13.42	13.30	13.86	13.68	-	669.66	668.99	641.72	614.23	-
Conveyors and conveying equipment .....	3535	13.66	13.81	13.95	14.31	-	592.84	622.83	585.90	613.90	-
Industrial trucks and tractors .....	3537	12.61	12.67	12.77	12.92	-	532.14	539.74	544.00	533.60	-
Metalworking machinery .....	354	15.06	15.24	15.43	15.55	-	670.17	691.90	663.49	674.87	-
Machine tools, metal cutting types .....	3541	14.78	14.75	14.99	15.13	-	656.23	675.55	643.07	646.05	-
Machine tools, metal forming types .....	3542	15.50	15.60	15.89	16.20	-	711.45	739.44	697.57	716.04	-
Special dies, tools, jigs, and fixtures .....	3544	15.80	16.00	16.15	16.27	-	701.52	726.40	704.14	715.88	-
Machine tool accessories .....	3545	13.20	13.37	13.51	13.60	-	576.84	601.65	563.37	575.28	-
Power driven handtools .....	3546	12.40	12.53	12.65	12.71	-	543.12	552.57	526.24	550.34	-
Special industry machinery .....	355	14.86	15.15	15.14	15.19	-	649.38	671.15	632.85	639.50	-
Textile machinery .....	3552	12.90	13.27	13.24	13.24	-	537.93	562.65	522.98	532.25	-
Printing trades machinery .....	3555	15.97	16.38	16.07	16.20	-	686.71	697.79	663.69	688.50	-
Food products machinery .....	3556	14.54	14.66	15.07	15.12	-	613.59	645.04	638.97	645.62	-
General industrial machinery .....	356	13.93	14.13	14.11	14.13	-	610.13	631.61	589.80	593.46	-
Pumps and pumping equipment .....	3561	14.63	14.94	15.04	15.07	-	627.63	642.42	607.62	626.91	-
Ball and roller bearings .....	3562	15.21	15.38	14.91	15.03	-	667.72	690.56	635.17	631.26	-
Air and gas compressors .....	3563	14.84	15.33	14.83	14.76	-	654.44	683.72	631.76	637.63	-
Blowers and fans .....	3564	11.67	11.80	11.56	11.59	-	516.98	535.72	494.77	500.69	-
Speed changers, drives, and gears .....	3566	14.92	15.06	15.18	15.09	-	663.94	703.30	631.49	623.22	-
Power transmission equipment, nec .....	3568	13.34	13.54	13.72	13.63	-	574.95	593.05	565.26	560.19	-
Computer and office equipment .....	357	14.74	14.73	15.73	15.64	-	630.87	630.44	665.38	674.26	-
Electronic computers .....	3571	16.27	15.99	17.45	17.68	-	696.36	687.57	743.37	744.33	-
Computer terminals, calculators, and office machines, nec .....	3575,8,9	13.55	13.58	13.94	14.36	-	577.23	604.31	589.66	611.74	-
Refrigeration and service machinery .....	358	13.30	13.34	12.95	13.10	-	595.84	610.97	550.38	555.44	-
Refrigeration and heating equipment .....	3585	13.74	13.80	13.25	13.42	-	623.80	640.32	568.43	570.35	-
Misc. industrial and commercial machinery .....	359	13.89	14.07	14.15	14.12	-	604.22	624.71	595.92	601.51	-
Carburetors, pistons, rings, valves .....	3592	14.56	14.61	14.40	14.67	-	602.78	628.23	594.72	602.94	-
Scales, balances, and industrial machinery, nec ..	3596,9	13.75	13.88	14.04	13.97	-	595.38	613.50	591.08	595.12	-
Electronic and other electrical equipment .....	36	13.00	13.13	13.14	13.19	13.31	555.10	565.90	545.31	555.30	563.01
Electric distribution equipment .....	361	12.90	13.05	13.17	13.30	-	548.25	557.24	532.07	547.96	-
Transformers, except electronic .....	3612	11.90	12.02	12.07	12.08	-	516.46	527.68	504.53	510.98	-
Switchgear and switchboard apparatus .....	3613	13.90	14.08	14.17	14.38	-	578.24	585.73	555.46	578.08	-
Electrical industrial apparatus .....	362	12.38	12.55	12.47	12.64	-	526.15	553.46	516.26	530.88	-
Motors and generators .....	3621	11.47	11.67	11.59	11.67	-	482.89	520.48	484.46	490.14	-
Relays and industrial controls .....	3625	14.10	14.34	14.21	14.47	-	596.43	609.45	576.93	603.40	-
Household appliances .....	363	12.28	12.39	12.58	12.58	-	504.71	530.29	508.23	506.97	-
Household refrigerators and freezers .....	3632	13.30	13.24	14.06	14.11	-	530.67	578.59	597.55	603.91	-
Household laundry equipment .....	3633	14.09	14.42	13.51	13.46	-	581.92	615.73	528.24	537.05	-
Electric housewares and fans .....	3634	10.57	10.56	11.14	10.96	-	445.00	443.52	446.71	442.78	-
Electric lighting and wiring equipment .....	364	12.80	12.84	12.60	12.68	-	540.16	552.12	525.42	533.83	-
Electric lamps .....	3641	16.02	16.26	17.17	17.20	-	679.25	689.42	703.97	713.80	-
Current-carrying wiring devices .....	3643	13.10	12.98	13.15	13.41	-	548.89	546.46	550.99	552.49	-
Noncurrent-carrying wiring devices .....	3644	11.43	11.50	11.74	11.98	-	488.06	510.60	497.78	513.94	-
Residential lighting fixtures .....	3645	8.99	9.00	9.12	9.29	-	354.21	365.40	362.06	372.53	-
Household audio and video equipment .....	365	11.68	11.47	12.10	12.10	-	508.08	479.45	492.47	504.57	-
Household audio and video equipment .....	3651	11.11	11.08	11.74	11.57	-	464.40	457.60	476.64	466.27	-
Communications equipment .....	366	13.97	13.88	14.30	14.15	-	609.09	610.72	612.04	608.45	-
Telephone and telegraph apparatus .....	3661	15.13	14.71	15.32	15.01	-	689.93	664.89	678.68	678.45	-
Electronic components and accessories .....	367	13.00	13.24	13.27	13.41	-	555.10	568.00	546.72	568.58	-
Electron tubes .....	3671	15.12	15.45	14.63	14.88	-	619.92	644.27	618.85	639.84	-
Semiconductors and related devices .....	3674	17.31	17.92	17.77	17.97	-	752.99	766.98	746.34	778.10	-
Electronic components, nec .....	3679	10.64	10.73	10.74	10.92	-	451.14	458.17	442.49	460.82	-
Misc. electrical equipment and supplies .....	369	13.88	14.09	13.55	13.41	-	599.62	614.32	578.59	571.27	-
Storage batteries .....	3691	15.06	15.21	15.22	15.33	-	656.62	658.59	672.72	680.65	-
Engine electrical equipment .....	3694	14.13	14.45	13.42	13.01	-	610.42	643.03	581.09	554.23	-

See footnotes at end of table.



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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	44.5	45.6	44.2	44.4	45.8	6.7	7.3	5.4	5.9	—
Motor vehicles and equipment .....	371	44.8	46.3	44.5	44.9	47.2	7.0	7.9	5.4	6.2	—
Motor vehicles and car bodies .....	3711	44.1	46.4	44.3	43.8	—	6.7	8.1	5.2	5.3	—
Truck and bus bodies .....	3713	44.2	43.4	43.2	44.1	—	6.6	6.4	4.3	6.2	—
Motor vehicle parts and accessories .....	3714	45.7	46.9	45.1	46.1	—	7.7	8.4	5.9	7.2	—
Truck trailers .....	3715	42.1	42.6	41.9	41.3	—	3.7	4.6	3.4	3.5	—
Aircraft and parts .....	372	45.6	46.4	44.5	44.6	—	7.6	7.6	6.1	6.1	—
Aircraft .....	3721	45.2	45.7	44.9	44.4	—	7.3	7.4	6.1	5.7	—
Aircraft engines and engine parts .....	3724	45.5	47.4	44.8	44.6	—	8.0	8.1	6.2	6.5	—
Aircraft parts and equipment, nec .....	3728	46.1	46.6	43.9	44.8	—	7.8	7.7	6.0	6.3	—
Ship and boat building and repairing .....	373	41.7	42.5	43.1	42.8	—	4.6	5.0	5.2	5.0	—
Ship building and repairing .....	3731	43.2	44.3	44.6	44.1	—	5.7	6.3	6.5	6.0	—
Boat building and repairing .....	3732	39.6	39.9	40.9	40.9	—	2.9	3.1	3.4	3.5	—
Railroad equipment .....	374	45.2	45.4	43.2	43.1	—	5.3	5.1	4.6	4.2	—
Guided missiles, space vehicles, and parts .....	376	42.6	43.8	41.8	42.5	—	4.4	5.0	3.7	3.9	—
Guided missiles and space vehicles .....	3761	41.8	43.9	41.1	42.2	—	3.8	4.8	3.3	3.4	—
Misc. transportation equipment .....	379	40.9	41.2	41.0	40.7	—	3.6	3.9	3.3	3.2	—
Travel trailers and campers .....	3792	39.6	39.4	40.0	39.6	—	2.5	2.5	2.5	2.1	—
Instruments and related products .....	38	42.6	42.9	41.1	41.5	42.0	4.2	4.4	3.1	3.3	—
Search and navigation equipment .....	381	44.0	43.9	41.9	42.1	—	4.6	4.5	3.6	3.7	—
Measuring and controlling devices .....	382	42.7	43.0	41.0	41.2	—	4.0	4.3	3.1	3.0	—
Environmental controls .....	3822	41.9	42.5	40.1	40.6	—	4.1	4.5	4.2	3.9	—
Process control instruments .....	3823	42.9	43.9	40.6	40.6	—	3.9	4.3	2.8	2.7	—
Instruments to measure electricity .....	3825	42.7	42.0	41.5	41.3	—	3.4	3.4	2.1	1.8	—
Medical instruments and supplies .....	384	42.3	42.9	40.8	41.5	—	4.0	4.4	3.1	3.4	—
Surgical and medical instrument .....	3841	42.2	42.4	40.8	41.2	—	3.6	3.9	3.1	3.2	—
Surgical appliances and supplies .....	3842	41.7	42.8	40.5	41.5	—	4.0	4.7	3.4	3.9	—
Ophthalmic goods .....	385	41.6	41.0	40.7	40.7	—	2.7	2.4	2.5	2.4	—
Photographic equipment and supplies .....	386	42.7	43.1	42.1	42.3	—	6.4	6.3	3.8	4.0	—
Watches, clocks, watchcases, and parts .....	387	39.7	40.5	41.3	42.7	—	2.2	2.1	2.3	2.4	—
Miscellaneous manufacturing industries .....	39	41.2	41.4	40.1	40.1	40.3	3.8	3.6	3.3	3.2	—
Jewelry, silverware, and plated ware .....	391	42.1	41.2	39.7	39.9	—	4.2	3.6	3.9	3.7	—
Jewelry, precious metal .....	3911	42.1	41.0	38.9	39.1	—	4.2	3.6	3.9	3.3	—
Musical instruments .....	393	41.7	41.3	40.7	40.6	—	3.2	3.1	2.6	2.7	—
Toys and sporting goods .....	394	40.8	41.0	39.7	40.0	—	2.8	2.9	2.2	2.5	—
Dolls, games, toys, and children's vehicles .....	3942.4	40.6	40.3	39.4	40.5	—	3.1	2.6	2.0	3.0	—
Sporting and athletic goods, nec .....	3949	40.9	41.4	39.9	39.8	—	2.7	3.1	2.3	2.3	—
Pens, pencils, office, and art supplies .....	395	40.8	40.7	38.0	38.3	—	3.5	3.1	3.1	2.7	—
Costume jewelry and notions .....	396	39.7	40.2	39.2	39.2	—	3.4	2.7	3.5	4.0	—
Costume jewelry .....	3961	38.8	39.9	39.1	39.6	—	3.2	2.0	4.2	5.4	—
Miscellaneous manufactures .....	399	41.5	41.9	40.9	40.6	—	4.4	4.4	3.8	3.5	—
Signs and advertising specialties .....	3993	42.7	42.7	41.5	40.9	—	4.6	4.6	4.6	4.1	—
<b>Nondurable goods .....</b>		<b>41.5</b>	<b>41.8</b>	<b>41.1</b>	<b>41.3</b>	<b>41.7</b>	<b>4.7</b>	<b>4.7</b>	<b>4.5</b>	<b>4.5</b>	<b>4.6</b>
Food and kindred products .....	20	42.2	42.4	42.0	42.4	43.0	5.5	5.3	5.6	5.7	—
Meat products .....	201	41.8	41.5	41.5	42.5	—	5.3	4.9	5.1	5.7	—
Meat packing plants .....	2011	44.6	44.2	44.4	45.0	—	6.6	6.2	6.6	7.3	—
Sausages and other prepared meats .....	2013	43.4	42.9	41.9	42.8	—	6.9	6.5	5.8	6.5	—
Poultry slaughtering and processing .....	2015	39.7	39.5	39.7	40.9	—	4.0	3.7	3.9	4.6	—
Dairy products .....	202	42.6	41.9	41.9	42.1	—	5.2	5.0	5.0	5.4	—
Cheese, natural and processed .....	2022	41.9	41.8	42.2	42.4	—	4.8	4.9	4.8	5.2	—
Fluid milk .....	2026	43.6	42.3	41.9	42.4	—	5.7	5.1	4.9	5.6	—
Preserved fruits and vegetables .....	203	41.7	42.5	42.0	41.8	—	5.3	5.4	6.2	5.6	—
Canned specialties .....	2032	45.2	46.4	45.9	43.5	—	8.2	9.9	11.1	7.1	—
Canned fruits and vegetables .....	2033	41.5	42.9	40.2	40.1	—	5.2	4.8	5.4	4.5	—
Frozen fruits and vegetables .....	2037	40.8	41.3	41.5	40.7	—	4.4	4.9	5.9	5.5	—
Grain mill products .....	204	46.0	46.9	46.6	46.6	—	7.7	7.6	8.3	8.4	—
Flour and other grain mill products .....	2041	48.6	48.9	46.9	48.0	—	9.3	8.5	8.4	8.9	—
Prepared feeds, nec .....	2048	43.5	43.9	45.2	43.9	—	6.3	6.3	7.3	7.0	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	\$17.94	\$18.09	\$17.49	\$17.56	\$17.57	\$798.33	\$824.90	\$773.06	\$779.66	\$804.71
Motor vehicles and equipment .....	371	18.53	18.66	17.70	17.75	17.74	830.14	863.96	787.65	796.98	837.33
Motor vehicles and car bodies .....	3711	22.26	22.58	21.25	21.03	—	981.67	1,047.71	941.38	921.11	—
Truck and bus bodies .....	3713	15.98	15.87	14.94	15.58	—	706.32	688.76	645.41	687.08	—
Motor vehicle parts and accessories .....	3714	17.07	17.08	16.41	16.62	—	780.10	801.05	740.09	766.18	—
Truck trailers .....	3715	11.09	11.43	11.57	11.59	—	466.89	486.92	484.78	478.67	—
Aircraft and parts .....	372	19.10	19.25	19.40	19.45	—	870.96	893.20	863.30	867.47	—
Aircraft .....	3721	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Aircraft engines and engine parts .....	3724	19.27	19.31	19.20	19.31	—	876.79	915.29	860.16	861.23	—
Aircraft parts and equipment, nec .....	3728	16.76	16.90	16.90	17.00	—	772.64	787.54	741.91	761.60	—
Ship and boat building and repairing .....	373	13.14	13.20	13.54	13.59	—	547.94	561.00	583.57	581.65	—
Ship building and repairing .....	3731	14.43	14.42	14.78	14.87	—	623.38	638.81	659.19	655.77	—
Boat building and repairing .....	3732	11.08	11.17	11.63	11.65	—	438.77	445.68	475.67	476.49	—
Railroad equipment .....	374	16.96	17.11	16.86	16.52	—	766.59	776.79	728.35	712.01	—
Guided missiles, space vehicles, and parts .....	376	19.76	19.88	20.22	20.23	—	841.78	870.74	845.20	859.78	—
Guided missiles and space vehicles .....	3761	(2)	(2)	(2)	(2)	—	—	—	—	—	—
Misc. transportation equipment .....	379	11.64	11.80	11.93	12.34	—	476.08	486.16	489.13	502.24	—
Travel trailers and campers .....	3792	11.57	11.91	11.93	12.57	—	458.17	469.25	477.20	497.77	—
Instruments and related products .....	38	13.66	13.68	13.83	13.87	13.99	581.92	586.87	568.41	575.61	587.58
Search and navigation equipment .....	381	17.04	17.27	17.38	17.56	—	749.76	758.15	728.22	739.28	—
Measuring and controlling devices .....	382	13.76	13.76	14.03	14.17	—	587.55	591.68	575.23	583.80	—
Environmental controls .....	3822	11.75	11.88	12.17	12.28	—	492.33	504.90	488.02	498.57	—
Process control instruments .....	3823	13.46	13.65	14.12	14.21	—	577.43	599.24	573.27	576.93	—
Instruments to measure electricity .....	3825	16.04	15.80	16.16	16.66	—	684.91	663.60	670.64	688.06	—
Medical instruments and supplies .....	384	12.72	12.72	12.76	12.70	—	538.06	545.69	520.61	527.05	—
Surgical and medical instrument .....	3841	11.99	12.04	11.85	11.81	—	505.98	510.50	483.48	486.57	—
Surgical appliances and supplies .....	3842	11.89	11.90	12.15	12.04	—	495.81	509.32	492.08	499.66	—
Ophthalmic goods .....	385	10.17	10.35	10.23	10.23	—	423.07	424.35	416.36	416.36	—
Photographic equipment and supplies .....	386	15.86	15.83	16.49	16.55	—	677.22	682.27	694.23	700.07	—
Watches, clocks, watchcases, and parts .....	387	10.02	10.03	10.40	10.28	—	397.79	406.22	429.52	438.96	—
Miscellaneous manufacturing industries .....	39	10.71	10.80	11.00	11.02	11.14	441.25	447.12	441.10	441.90	448.94
Jewelry, silverware, and plated ware .....	391	11.15	11.28	11.60	11.46	—	469.42	464.74	460.52	457.25	—
Jewelry, precious metal .....	3911	11.27	11.48	11.72	11.42	—	474.47	470.68	455.91	446.52	—
Musical instruments .....	393	10.70	10.88	11.23	11.38	—	446.19	449.34	457.06	462.03	—
Toys and sporting goods .....	394	10.16	10.24	10.55	10.57	—	414.53	419.84	418.84	422.80	—
Dolls, games, toys, and children's vehicles .....	3942,4	9.60	9.77	10.31	10.42	—	389.76	393.73	406.21	422.01	—
Sporting and athletic goods, nec .....	3949	10.43	10.46	10.66	10.65	—	426.59	433.04	425.33	423.87	—
Pens, pencils, office, and art supplies .....	395	11.09	11.09	11.44	11.19	—	452.47	451.36	434.72	428.58	—
Costume jewelry and notions .....	396	9.56	9.69	9.64	9.74	—	379.53	389.54	377.89	381.81	—
Costume jewelry .....	3961	8.69	8.78	8.68	8.87	—	337.17	350.32	339.39	351.25	—
Miscellaneous manufactures .....	399	11.03	11.11	11.16	11.24	—	457.75	465.51	456.44	456.34	—
Signs and advertising specialties .....	3993	11.69	11.71	11.98	12.23	—	499.16	500.02	497.17	500.21	—
<b>Nondurable goods .....</b>		<b>12.48</b>	<b>12.58</b>	<b>12.82</b>	<b>12.88</b>	<b>12.97</b>	<b>517.92</b>	<b>525.84</b>	<b>526.90</b>	<b>531.94</b>	<b>540.85</b>
Food and kindred products .....	20	11.60	11.71	11.82	11.95	12.01	489.52	496.50	496.44	506.68	516.43
Meat products .....	201	9.45	9.49	9.74	9.81	—	395.01	393.84	404.21	416.93	—
Meat packing plants .....	2011	10.08	10.18	10.51	10.64	—	449.57	449.96	466.64	478.80	—
Sausages and other prepared meats .....	2013	10.84	10.86	10.92	11.05	—	470.46	465.89	457.55	472.94	—
Poultry slaughtering and processing .....	2015	8.51	8.52	8.80	8.80	—	337.85	336.54	349.36	359.92	—
Dairy products .....	202	13.40	13.35	13.71	13.85	—	570.84	559.37	574.45	583.09	—
Cheese, natural and processed .....	2022	12.17	12.10	12.56	12.58	—	509.92	505.78	530.03	533.39	—
Fluid milk .....	2026	14.11	14.03	14.25	14.54	—	615.20	593.47	597.08	616.50	—
Preserved fruits and vegetables .....	203	11.09	11.44	11.30	11.47	—	462.45	486.20	474.60	479.45	—
Canned specialties .....	2032	14.87	15.38	15.38	15.19	—	672.12	713.63	705.94	660.77	—
Canned fruits and vegetables .....	2033	11.72	12.30	11.90	12.48	—	486.38	527.67	478.38	500.45	—
Frozen fruits and vegetables .....	2037	10.34	10.49	10.48	10.52	—	421.87	433.24	434.92	428.16	—
Grain mill products .....	204	14.62	14.94	14.87	15.11	—	672.52	700.69	692.94	704.13	—
Flour and other grain mill products .....	2041	13.11	13.10	13.18	13.40	—	637.15	640.59	618.14	643.20	—
Prepared feeds, nec .....	2048	11.61	11.56	11.70	11.82	—	505.04	507.48	528.84	518.90	—

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Nondurable goods—Continued</b>											
<b>Food and kindred products—Continued</b>											
Bakery products .....	205	41.3	41.6	40.8	41.1	—	5.2	5.0	5.0	5.0	—
Bread, cake, and related products .....	2051	41.0	40.7	40.8	41.4	—	5.2	4.8	4.9	5.2	—
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	42.0	43.3	40.8	40.5	—	5.1	5.5	5.0	4.5	—
Sugar and confectionery products .....	206	42.8	43.1	42.5	42.3	—	5.8	5.5	5.8	5.5	—
Raw cane sugar .....	2061	63.3	62.2	52.0	50.8	—	18.7	18.5	13.1	11.5	—
Cane sugar refining .....	2062	53.9	50.3	50.9	54.8	—	15.9	10.6	10.5	13.7	—
Beet sugar .....	2063	40.4	43.0	42.3	40.6	—	4.2	4.0	6.7	4.3	—
Candy and other confectionery products .....	2064	40.8	41.6	41.0	41.1	—	4.4	4.3	4.6	4.7	—
Fats and oils .....	207	44.0	44.1	43.0	44.7	—	7.3	7.2	6.5	7.2	—
Beverages .....	208	43.2	43.9	44.3	44.6	—	5.0	4.5	6.0	5.7	—
Malt beverages .....	2082	49.2	47.9	47.2	49.7	—	9.3	6.7	7.8	9.9	—
Bottled and canned soft drinks .....	2086	40.8	42.5	43.4	43.1	—	3.6	3.9	5.2	4.6	—
Misc. food and kindred products .....	209	40.3	41.2	39.9	39.7	—	5.0	5.0	5.2	4.4	—
Tobacco products .....	21	39.5	40.1	39.1	38.6	37.8	2.8	4.0	2.6	2.7	—
Cigarettes .....	211	37.9	40.3	37.7	37.6	—	2.4	3.9	3.0	3.3	—
Textile mill products .....	22	41.9	42.2	41.1	41.3	41.3	4.8	5.1	4.5	4.5	—
Broadwoven fabric mills, cotton .....	221	42.3	42.6	42.4	41.8	—	5.5	5.8	5.8	5.6	—
Broadwoven fabric mills, synthetics .....	222	42.8	42.4	41.9	41.9	—	5.8	5.7	5.2	4.9	—
Broadwoven fabric mills, wool .....	223	40.5	41.2	37.8	37.7	—	4.6	5.1	2.9	3.0	—
Narrow fabric mills .....	224	40.8	40.0	40.5	40.8	—	3.2	3.2	3.1	3.2	—
Knitting mills .....	225	40.5	40.2	39.7	40.2	—	3.6	3.9	3.5	3.6	—
Women's hosiery, except socks .....	2251	39.9	37.7	39.6	40.8	—	2.8	2.5	3.1	3.9	—
Hosiery, nec .....	2252	38.8	37.5	37.7	39.2	—	3.2	3.2	2.6	3.1	—
Knit outerwear mills .....	2253	41.0	41.1	40.7	40.2	—	3.5	3.7	3.6	3.4	—
Knit underwear mills .....	2254	41.3	39.5	38.4	40.1	—	2.7	2.4	1.6	2.4	—
Weft knit fabric mills .....	2257	39.4	39.5	39.0	38.6	—	4.4	4.9	4.0	3.9	—
Textile finishing, except wool .....	226	42.9	44.2	41.9	41.8	—	5.6	6.3	5.3	5.1	—
Finishing plants, cotton .....	2261	43.4	44.4	43.5	43.3	—	5.8	6.3	6.4	6.2	—
Finishing plants, synthetics .....	2262	43.4	44.0	42.0	41.4	—	5.8	6.4	4.6	4.3	—
Carpets and rugs .....	227	43.1	44.5	42.6	43.0	—	6.0	6.0	5.3	5.8	—
Yarn and thread mills .....	228	42.1	42.4	40.6	40.9	—	4.9	5.2	4.2	4.1	—
Yarn spinning mills .....	2281	42.8	43.4	41.3	41.6	—	5.3	5.6	4.4	4.5	—
Throwing and winding mills .....	2282	39.3	38.6	37.1	37.8	—	3.3	4.0	2.9	2.9	—
Miscellaneous textile goods .....	229	42.4	43.0	41.4	41.6	—	4.9	5.2	4.8	4.6	—
Apparel and other textile products .....	23	37.6	38.1	37.6	37.6	37.9	2.3	2.5	2.1	2.1	—
Men's and boys' suits and coats .....	231	37.6	38.6	37.0	37.1	—	1.4	1.6	1.0	0.8	—
Men's and boys' furnishings .....	232	37.3	37.1	36.5	36.5	—	1.7	1.5	1.3	1.3	—
Men's and boys' shirts .....	2321	36.9	36.5	34.9	34.9	—	2.1	1.7	1.1	0.8	—
Men's and boys' trousers and slacks .....	2325	36.7	36.7	34.9	35.5	—	1.4	1.3	1.0	1.3	—
Men's and boys' work clothing .....	2326	38.2	38.3	37.2	38.0	—	1.8	1.9	1.9	1.7	—
Women's and misses' outerwear .....	233	35.9	36.7	36.8	36.7	—	1.7	2.0	1.5	1.4	—
Women's and misses' blouses and shirts .....	2331	35.0	35.1	35.3	34.5	—	1.3	1.4	1.9	1.5	—
Women's, juniors', and misses' dresses .....	2335	37.5	37.5	36.3	36.1	—	1.9	2.0	1.9	1.3	—
Women's and misses' suits and coats .....	2337	36.8	37.3	38.0	37.8	—	1.8	2.2	1.8	2.0	—
Women's and misses' outerwear, nec .....	2339	35.6	36.6	37.0	37.0	—	1.7	2.0	1.4	1.4	—
Women's and children's undergarments .....	234	37.3	38.2	37.6	37.6	—	2.3	2.5	2.1	2.3	—
Women's and children's underwear .....	2341	38.2	38.2	37.6	37.8	—	2.3	2.3	1.9	2.0	—
Brassieres, girdles, and allied garments .....	2342	34.8	38.1	37.8	36.9	—	2.2	3.3	2.7	3.2	—
Girls' and children's outerwear .....	236	37.5	37.3	36.9	37.9	—	3.2	3.0	3.2	3.1	—
Girls' and children's dresses and blouses .....	2361	38.5	36.9	38.0	39.4	—	4.0	3.0	3.9	4.2	—
Misc. apparel and accessories .....	238	38.8	37.6	36.4	37.5	—	2.0	1.8	1.1	1.5	—
Misc. fabricated textile products .....	239	39.6	40.7	39.7	39.7	—	3.7	4.4	3.6	3.7	—
Curtains and draperies .....	2391	36.4	37.5	35.1	35.8	—	1.5	1.9	1.4	1.9	—
House furnishings, nec .....	2392	40.4	42.0	40.9	40.9	—	4.1	5.2	4.5	4.7	—
Automotive and apparel trimmings .....	2396	39.9	40.8	40.5	39.7	—	3.8	5.1	3.5	3.3	—
Paper and allied products .....	26	44.4	44.6	43.6	43.9	44.2	6.2	6.1	5.8	5.8	—
Paper mills .....	262	45.3	45.9	45.1	45.1	—	6.6	6.6	6.9	6.9	—
Paperboard mills .....	263	44.6	45.6	43.7	44.6	—	7.3	6.9	7.5	7.4	—

See footnotes at end of table.

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Bakery products .....	205	\$12.48	\$12.50	\$12.74	\$12.80	-	\$515.42	\$520.00	\$519.79	\$526.08	-
Bread, cake, and related products .....	2051	12.65	12.71	12.71	12.81	-	518.65	517.30	518.57	530.33	-
Cookies, crackers, and frozen bakery products, except bread .....	2052,3	12.19	12.14	12.79	12.78	-	511.98	525.66	521.83	517.59	-
Sugar and confectionery products .....	206	12.57	12.61	12.83	13.02	-	538.00	543.49	545.28	550.75	-
Raw cane sugar .....	2061	11.64	11.52	10.61	10.42	-	736.81	716.54	551.72	529.34	-
Cane sugar refining .....	2062	18.38	17.85	18.14	18.34	-	990.68	897.86	923.33	1,005.03	-
Beet sugar .....	2063	12.86	13.07	13.24	13.62	-	519.54	562.01	560.05	552.97	-
Candy and other confectionery products .....	2064	11.71	11.87	12.20	12.47	-	477.77	493.79	500.20	512.52	-
Fats and oils .....	207	12.80	12.80	12.94	12.93	-	563.20	564.48	556.42	577.97	-
Beverages .....	208	16.36	16.24	16.00	16.48	-	706.75	712.94	708.80	735.01	-
Malt beverages .....	2082	22.93	22.20	23.17	24.35	-	1,128.16	1,063.38	1,093.62	1,210.19	-
Bottled and canned soft drinks .....	2086	13.37	13.61	13.16	13.19	-	545.50	578.43	571.14	568.49	-
Misc. food and kindred products .....	209	10.42	10.63	10.76	10.92	-	419.93	437.96	429.32	433.52	-
Tobacco products .....	21	17.88	18.69	17.08	17.43	\$17.28	706.26	749.47	667.83	672.80	\$653.18
Cigarettes .....	211	24.66	24.97	24.01	24.29	-	934.61	1,006.29	905.18	913.30	-
Textile mill products .....	22	10.16	10.25	10.44	10.49	10.55	425.70	432.55	429.08	433.24	435.72
Broadwoven fabric mills, cotton .....	221	10.59	10.65	11.06	11.12	-	447.96	453.69	468.94	464.82	-
Broadwoven fabric mills, synthetics .....	222	11.10	11.11	11.27	11.24	-	475.08	471.06	472.21	470.96	-
Broadwoven fabric mills, wool .....	223	10.66	10.58	10.72	10.94	-	431.73	435.90	405.22	412.44	-
Narrow fabric mills .....	224	9.26	9.31	9.59	9.57	-	377.81	372.40	388.40	390.46	-
Knitting mills .....	225	9.20	9.34	9.52	9.52	-	372.60	375.47	377.94	382.70	-
Women's hosiery, except socks .....	2251	8.58	8.59	8.99	9.00	-	342.34	323.84	356.00	367.20	-
Hosiery, nec .....	2252	9.21	9.25	9.53	9.41	-	357.35	346.88	359.28	368.87	-
Knit outerwear mills .....	2253	8.59	8.76	8.82	8.93	-	352.19	360.04	358.97	358.99	-
Knit underwear mills .....	2254	9.35	9.53	9.64	9.73	-	386.16	376.44	370.18	390.17	-
Weft knit fabric mills .....	2257	10.03	10.21	10.34	10.27	-	395.18	403.30	403.26	396.42	-
Textile finishing, except wool .....	226	10.45	10.53	10.73	10.81	-	448.31	465.43	449.59	451.86	-
Finishing plants, cotton .....	2261	10.39	10.41	10.65	10.67	-	450.93	462.20	463.28	462.01	-
Finishing plants, synthetics .....	2262	10.95	11.08	11.16	11.28	-	475.23	487.52	468.72	466.99	-
Carpets and rugs .....	227	10.21	10.27	10.27	10.43	-	440.05	457.02	437.50	448.49	-
Yarn and thread mills .....	228	9.88	9.91	10.11	10.21	-	415.95	420.18	410.47	417.59	-
Yarn spinning mills .....	2281	9.91	9.92	10.16	10.26	-	424.15	430.53	419.61	426.82	-
Throwing and winding mills .....	2282	9.96	10.04	9.93	10.09	-	391.43	387.54	368.40	381.40	-
Miscellaneous textile goods .....	229	11.73	11.85	11.97	11.98	-	497.35	509.55	495.56	498.37	-
Apparel and other textile products .....	23	8.32	8.42	8.65	8.63	8.71	312.83	320.80	325.24	324.49	330.11
Men's and boys' suits and coats .....	231	8.56	8.63	8.88	8.86	-	321.86	333.12	328.56	328.71	-
Men's and boys' furnishings .....	232	7.85	7.84	8.02	8.01	-	292.81	290.86	292.73	292.37	-
Men's and boys' shirts .....	2321	7.70	7.74	7.88	7.83	-	284.13	282.51	275.01	273.27	-
Men's and boys' trousers and slacks .....	2325	8.03	7.99	8.28	8.25	-	294.70	293.23	288.97	292.88	-
Men's and boys' work clothing .....	2326	7.74	7.76	7.76	7.67	-	295.67	297.21	288.67	291.46	-
Women's and misses' outerwear .....	233	7.98	8.07	8.31	8.25	-	286.48	296.17	305.81	302.78	-
Women's and misses' blouses and shirts .....	2331	7.15	7.25	7.37	7.39	-	250.25	254.48	260.16	254.96	-
Women's, juniors', and misses' dresses .....	2335	9.01	9.17	9.56	9.53	-	337.88	343.88	347.03	344.03	-
Women's and misses' suits and coats .....	2337	7.86	8.07	8.30	8.13	-	289.25	301.01	315.40	307.31	-
Women's and misses' outerwear, nec .....	2339	7.86	7.91	8.13	8.07	-	279.82	289.51	300.81	298.59	-
Women's and children's undergarments .....	234	8.00	8.04	8.03	8.14	-	298.40	307.13	301.93	306.06	-
Women's and children's underwear .....	2341	7.76	7.87	7.96	8.03	-	296.43	300.63	299.30	303.53	-
Brassieres, girdles, and allied garments .....	2342	8.78	8.52	8.23	8.45	-	305.54	324.61	311.09	311.81	-
Girls' and children's outerwear .....	236	7.75	7.79	8.37	8.34	-	290.63	290.57	308.85	316.09	-
Girls' and children's dresses and blouses .....	2361	7.40	7.42	8.29	8.38	-	284.90	273.80	315.02	330.17	-
Misc. apparel and accessories .....	238	7.98	8.01	8.24	8.27	-	309.62	301.18	299.94	310.13	-
Misc. fabricated textile products .....	239	9.20	9.38	9.55	9.55	-	364.32	381.77	379.14	379.14	-
Curtains and draperies .....	2391	8.25	8.31	8.29	8.42	-	300.30	311.63	290.98	301.44	-
House furnishings, nec .....	2392	8.91	8.94	9.19	9.30	-	359.96	375.48	375.87	380.37	-
Automotive and apparel trimmings .....	2396	10.87	11.44	11.09	10.95	-	433.71	466.75	449.15	434.72	-
Paper and allied products .....	26	15.22	15.27	15.58	15.63	15.76	675.77	681.04	679.29	686.16	696.59
Paper mills .....	262	19.44	19.38	20.00	20.03	-	880.63	889.54	902.00	903.35	-
Paperboard mills .....	263	19.04	19.11	19.93	20.04	-	849.18	871.42	870.94	893.78	-

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Nondurable goods—Continued</b>											
<b>Paper and allied products—Continued</b>											
Paperboard containers and boxes .....	265	44.6	44.7	43.5	44.2	—	6.4	6.2	5.7	6.0	—
Corrugated and solid fiber boxes .....	2653	45.2	44.9	44.2	44.9	—	7.0	6.6	6.1	6.5	—
Sanitary food containers .....	2656	43.1	45.0	41.9	43.0	—	4.7	5.0	4.6	4.3	—
Folding paperboard boxes .....	2657	44.3	44.6	43.0	43.5	—	6.3	6.3	5.6	5.8	—
Misc. converted paper products .....	267	43.3	43.4	42.7	42.7	—	5.5	5.5	4.8	4.6	—
Paper, coated and laminated, nec .....	2672	44.2	44.1	41.1	41.1	—	4.7	5.1	3.3	3.4	—
Bags: plastics, laminated, and coated .....	2673	43.3	42.9	43.0	43.1	—	5.5	5.1	5.0	5.3	—
Envelopes .....	2677	42.7	42.8	42.1	41.9	—	4.7	4.8	4.3	4.0	—
Printing and publishing .....	27	39.3	39.2	38.4	38.6	38.7	3.8	3.7	3.5	3.4	—
Newspapers .....	271	33.8	33.9	33.1	33.7	—	1.8	1.9	1.6	1.9	—
Periodicals .....	272	38.0	36.5	36.4	36.7	—	3.1	2.7	2.8	2.6	—
Books .....	273	40.2	40.5	39.3	39.5	—	4.1	4.3	4.1	4.0	—
Book publishing .....	2731	38.7	38.1	37.0	38.3	—	2.6	3.1	2.3	2.4	—
Book printing .....	2732	42.0	43.2	41.5	40.6	—	5.9	5.8	5.8	5.6	—
Miscellaneous publishing .....	274	36.7	36.5	36.3	36.6	—	2.9	2.8	3.4	3.3	—
Commercial printing .....	275	41.0	40.8	40.1	40.4	—	4.7	4.4	4.2	4.0	—
Commercial printing, lithographic .....	2752	40.8	40.5	40.1	40.2	—	4.6	4.3	4.2	3.9	—
Commercial printing, nec .....	2759	40.9	41.1	40.2	40.7	—	4.5	4.3	4.1	4.2	—
Manifold business forms .....	276	43.7	44.0	41.7	42.7	—	4.8	5.8	4.0	4.7	—
Blankbooks and bookbinding .....	278	39.8	40.5	39.8	39.0	—	3.0	3.1	3.4	2.9	—
Printing trade services .....	279	40.2	40.1	39.7	39.8	—	4.8	4.5	3.8	3.7	—
Chemicals and allied products .....	28	43.7	44.0	43.2	43.3	43.6	5.5	5.5	5.1	5.2	—
Industrial inorganic chemicals .....	281	47.3	46.4	43.9	43.7	—	6.5	6.5	5.8	5.6	—
Industrial inorganic chemicals, nec .....	2819	46.8	44.9	44.1	44.3	—	6.3	6.2	5.8	5.9	—
Plastics materials and synthetics .....	282	44.0	44.5	42.7	42.9	—	5.6	5.6	4.8	5.2	—
Plastics materials and resins .....	2821	44.8	45.4	43.6	44.4	—	5.7	5.6	5.0	5.3	—
Organic fibers, noncellulosic .....	2824	43.4	43.6	41.4	40.8	—	5.3	4.9	3.8	4.4	—
Drugs .....	283	42.0	42.9	43.1	43.1	—	5.7	5.8	4.8	5.1	—
Pharmaceutical preparations .....	2834	42.2	43.3	43.3	43.8	—	5.4	5.8	4.4	5.0	—
Soap, cleaners, and toilet goods .....	284	42.0	42.0	41.3	41.9	—	3.9	4.0	4.3	4.0	—
Soap and other detergents .....	2841	43.8	44.0	44.6	45.3	—	5.0	5.3	6.2	5.7	—
Polishing, sanitation, and finishing preparations ..	2842.3	41.9	42.9	41.2	41.1	—	3.5	4.1	4.0	3.6	—
Toilet preparations .....	2844	41.2	40.8	39.8	40.8	—	3.5	3.3	3.5	3.3	—
Paints and allied products .....	285	42.7	44.4	42.2	42.3	—	4.5	4.9	4.1	3.9	—
Industrial organic chemicals .....	286	44.9	45.2	45.1	44.9	—	6.3	6.1	6.6	6.5	—
Cyclic crudes and intermediates .....	2865	43.4	45.3	45.8	45.1	—	4.6	5.7	5.6	6.0	—
Industrial organic chemicals, nec .....	2869	45.2	45.2	45.0	44.9	—	6.6	6.2	6.9	6.6	—
Agricultural chemicals .....	287	44.9	44.6	45.8	45.5	—	6.7	6.7	7.4	7.0	—
Miscellaneous chemical products .....	289	44.3	44.4	43.6	43.8	—	5.6	5.6	4.5	4.7	—
Petroleum and coal products .....	29	43.4	42.2	43.9	43.9	44.7	6.0	5.3	7.4	6.3	—
Petroleum refining .....	291	44.1	42.5	43.2	43.9	—	5.7	5.3	6.5	5.8	—
Asphalt paving and roofing materials .....	295	41.5	40.9	45.9	44.4	—	6.9	5.2	10.3	8.0	—
Rubber and misc. plastics products .....	30	42.5	43.0	41.8	42.1	42.9	4.9	5.1	4.4	4.5	—
Tires and inner tubes .....	301	44.6	45.0	42.7	42.9	—	6.7	6.8	5.5	5.9	—
Rubber and plastics footwear .....	302	41.6	41.6	40.5	40.5	—	3.3	4.6	5.6	5.6	—
Hose, belting, gaskets, and packing .....	305	43.0	44.3	42.5	42.6	—	5.2	5.7	4.0	4.1	—
Rubber and plastics hose and belting .....	3052	44.2	45.0	44.6	43.9	—	5.7	6.2	5.2	4.5	—
Fabricated rubber products, nec .....	306	43.7	44.5	42.2	42.6	—	5.4	5.7	4.5	4.5	—
Miscellaneous plastics products, nec .....	308	42.1	42.5	41.6	41.8	—	4.6	4.8	4.3	4.4	—
Leather and leather products .....	31	38.5	38.8	37.6	37.9	38.4	2.4	2.4	2.5	2.3	—
Leather tanning and finishing .....	311	42.1	44.1	39.8	39.8	—	4.5	5.4	4.2	4.0	—
Footwear, except rubber .....	314	36.5	36.8	36.8	37.2	—	1.5	1.8	2.1	1.6	—
Men's footwear, except athletic .....	3143	35.8	35.9	36.7	36.7	—	1.6	1.9	2.3	1.3	—
Women's footwear, except athletic .....	3144	38.2	37.5	36.8	37.4	—	1.0	0.7	1.9	2.2	—
Luggage .....	316	40.3	39.6	36.9	37.4	—	3.2	2.1	2.1	2.4	—
Handbags and personal leather goods .....	317	41.1	40.0	38.4	38.0	—	3.2	1.7	2.2	2.2	—
<b>Service-producing .....</b>		<b>33.0</b>	<b>32.9</b>	<b>32.8</b>	<b>33.0</b>	<b>32.9</b>	—	—	—	—	—
<b>Transportation and public utilities .....</b>		<b>40.4</b>	<b>39.8</b>	<b>39.3</b>	<b>39.7</b>	<b>39.0</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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Nondurable goods—Continued</b>											
<b>Paper and allied products—Continued</b>											
Paperboard containers and boxes .....	265	\$12.95	\$13.05	\$13.16	\$13.15	-	\$577.57	\$583.34	\$572.46	\$581.23	-
Corrugated and solid fiber boxes .....	2653	12.97	13.08	13.17	13.18	-	586.24	587.29	582.11	591.78	-
Sanitary food containers .....	2656	12.85	12.77	13.20	12.99	-	553.84	574.65	553.08	558.57	-
Folding paperboard boxes .....	2657	13.76	13.88	13.89	13.88	-	609.57	619.05	597.27	603.78	-
Misc. converted paper products .....	267	13.32	13.36	13.59	13.66	-	576.76	579.82	580.29	583.28	-
Paper, coated and laminated, nec .....	2672	15.41	15.34	15.63	15.76	-	681.12	676.49	642.39	647.74	-
Bags: plastics, laminated, and coated .....	2673	12.04	12.07	12.14	12.25	-	521.33	517.80	522.02	527.98	-
Envelopes .....	2677	12.05	12.15	12.53	12.59	-	514.54	520.02	527.51	527.52	-
Printing and publishing .....	27	13.24	13.30	13.60	13.54	\$13.65	520.33	521.36	522.24	522.64	\$528.26
Newspapers .....	271	13.01	13.10	13.27	13.28	-	439.74	444.09	439.24	447.54	-
Periodicals .....	272	14.81	14.66	14.86	14.91	-	562.78	535.09	540.90	547.20	-
Books .....	273	12.50	12.43	13.10	13.09	-	502.50	503.42	514.83	517.06	-
Book publishing .....	2731	11.92	11.81	12.29	12.11	-	461.30	449.96	454.73	463.81	-
Book printing .....	2732	13.11	13.05	13.79	13.94	-	550.62	563.76	572.29	565.96	-
Miscellaneous publishing .....	274	12.83	13.06	13.16	12.99	-	470.86	476.69	477.71	475.43	-
Commercial printing .....	275	13.49	13.57	13.86	13.76	-	553.09	553.66	555.79	555.90	-
Commercial printing, lithographic .....	2752	13.66	13.77	14.11	13.97	-	557.33	557.69	565.81	561.59	-
Commercial printing, nec .....	2759	12.92	12.95	13.13	13.08	-	528.43	532.25	527.83	532.36	-
Manifold business forms .....	276	14.32	14.49	14.59	14.46	-	625.78	637.56	608.40	617.44	-
Blankbooks and bookbinding .....	278	10.34	10.26	10.74	10.70	-	411.53	415.53	427.45	417.30	-
Printing trade services .....	279	16.33	16.59	16.86	16.72	-	656.47	665.26	669.34	665.46	-
Chemicals and allied products .....	28	16.85	16.92	17.22	17.28	17.33	736.35	744.48	743.90	748.22	755.59
Industrial inorganic chemicals .....	281	18.91	18.77	18.84	18.94	-	894.44	870.93	827.08	827.68	-
Industrial inorganic chemicals, nec .....	2819	19.12	18.97	19.41	19.53	-	894.82	851.75	855.98	865.18	-
Plastics materials and synthetics .....	282	17.78	17.88	17.91	18.14	-	782.32	795.66	764.76	778.21	-
Plastics materials and resins .....	2821	19.92	20.00	20.03	20.07	-	892.42	908.00	873.31	891.11	-
Organic fibers, noncellulosic .....	2824	15.12	15.08	15.01	15.39	-	656.21	657.49	621.41	627.91	-
Drugs .....	283	16.71	16.59	17.21	17.21	-	701.82	711.71	741.75	741.75	-
Pharmaceutical preparations .....	2834	16.50	16.34	16.95	17.01	-	696.30	707.52	733.94	745.04	-
Soap, cleaners, and toilet goods .....	284	13.45	13.95	14.06	14.13	-	564.90	585.90	580.80	592.05	-
Soap and other detergents .....	2841	17.34	18.36	17.45	17.51	-	759.49	807.84	778.27	793.20	-
Polishing, sanitation, and finishing preparations .....	2842,3	12.95	13.34	13.47	13.60	-	542.61	572.29	554.96	558.96	-
Toilet preparations .....	2844	11.89	12.19	12.61	12.66	-	489.87	497.35	501.88	516.53	-
Paints and allied products .....	285	14.18	14.39	14.50	14.49	-	605.49	638.92	611.90	612.93	-
Industrial organic chemicals .....	286	20.14	20.17	20.77	20.76	-	904.29	911.68	936.73	932.12	-
Cyclic crudes and intermediates .....	2865	20.03	20.07	20.59	20.57	-	869.30	909.17	943.02	927.71	-
Industrial organic chemicals, nec .....	2869	20.28	20.30	20.95	20.94	-	916.66	917.56	942.75	940.21	-
Agricultural chemicals .....	287	17.05	17.00	17.42	17.50	-	765.55	758.20	797.84	796.25	-
Miscellaneous chemical products .....	289	15.17	15.19	15.45	15.49	-	672.03	674.44	673.62	678.46	-
Petroleum and coal products .....	29	20.39	20.55	21.05	20.90	21.10	884.93	867.21	924.10	917.51	943.17
Petroleum refining .....	291	22.62	22.64	23.75	23.57	-	997.54	962.20	1,026.00	1,034.72	-
Asphalt paving and roofing materials .....	295	15.36	15.50	16.08	15.55	-	637.44	633.95	738.07	690.42	-
Rubber and misc. plastics products .....	30	11.64	11.76	11.89	11.97	12.06	494.70	505.68	497.00	503.94	517.37
Tires and inner tubes .....	301	18.61	18.42	18.38	18.56	-	830.01	828.90	784.83	796.22	-
Rubber and plastics footwear .....	302	9.90	9.98	10.09	10.24	-	411.84	415.17	408.65	414.72	-
Hose, belting, gaskets, and packing .....	305	11.66	11.89	11.77	11.83	-	501.38	526.73	500.23	503.96	-
Rubber and plastics hose and belting .....	3052	11.79	11.95	11.75	11.69	-	521.12	537.75	524.05	513.19	-
Fabricated rubber products, nec .....	306	11.39	11.55	11.71	11.72	-	497.74	513.98	494.16	499.27	-
Miscellaneous plastics products, nec .....	308	10.97	11.11	11.28	11.37	-	461.84	472.18	469.25	475.27	-
Leather and leather products .....	31	9.14	9.21	9.46	9.42	9.40	351.89	357.35	355.70	357.02	360.96
Leather tanning and finishing .....	311	12.05	12.02	12.34	12.24	-	507.31	530.08	491.13	487.15	-
Footwear, except rubber .....	314	8.61	8.68	9.03	9.07	-	314.27	319.42	332.30	337.40	-
Men's footwear, except athletic .....	3143	9.13	9.34	9.79	9.77	-	326.85	335.31	359.29	358.56	-
Women's footwear, except athletic .....	3144	7.59	7.52	7.84	7.92	-	289.94	282.00	288.51	296.21	-
Luggage .....	316	8.84	8.84	9.18	9.04	-	356.25	350.06	338.74	338.10	-
Handbags and personal leather goods .....	317	8.29	8.19	8.20	8.27	-	340.72	327.60	314.88	314.26	-
<b>Service-producing .....</b>		12.00	11.96	12.40	12.50	12.49	396.00	393.48	406.72	412.50	410.92
<b>Transportation and public utilities .....</b>		15.19	15.17	15.43	15.53	15.57	613.68	603.77	606.40	616.54	607.23

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	51.7	49.5	45.0	45.3	-	-	-	-	-	-
Local and interurban passenger transit .....	41	34.3	34.4	34.3	34.3	-	-	-	-	-	-
Local and suburban transportation .....	411	38.8	38.5	38.2	38.9	-	-	-	-	-	-
Intercity and rural bus transportation .....	413	38.7	38.3	39.7	39.0	-	-	-	-	-	-
Trucking and warehousing .....	42	40.4	40.3	40.7	40.3	-	-	-	-	-	-
Trucking and courier services, except air .....	421	40.3	40.1	40.6	40.2	-	-	-	-	-	-
Public warehousing and storage .....	422	41.5	41.3	41.6	41.5	-	-	-	-	-	-
Water transportation:											
Water transportation services .....	449	39.1	38.2	37.5	38.1	-	-	-	-	-	-
Pipelines, except natural gas .....	46	45.0	44.5	45.3	46.0	-	-	-	-	-	-
Transportation services .....	47	37.9	37.1	38.4	39.4	-	-	-	-	-	-
Passenger transportation arrangement .....	472	38.0	36.4	38.6	39.5	-	-	-	-	-	-
Travel agencies .....	4724	38.3	36.6	39.5	40.5	-	-	-	-	-	-
Freight transportation arrangement .....	473	37.1	37.2	37.7	39.1	-	-	-	-	-	-
Communications .....	48	40.6	40.4	40.6	40.8	-	-	-	-	-	-
Telephone communications .....	481	42.1	42.0	42.4	42.3	-	-	-	-	-	-
Telephone communications, except radio .....	4813	42.3	42.3	43.0	42.9	-	-	-	-	-	-
Radio and television broadcasting .....	483	36.0	35.5	35.2	35.6	-	-	-	-	-	-
Cable and other pay television services .....	484	39.9	39.6	39.8	40.6	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	42.7	41.8	42.6	43.3	-	-	-	-	-	-
Electric services .....	491	42.1	40.7	41.9	42.9	-	-	-	-	-	-
Gas production and distribution .....	492	44.1	42.7	43.4	44.1	-	-	-	-	-	-
Combination utility services .....	493	43.2	43.5	42.4	43.7	-	-	-	-	-	-
Sanitary services .....	495	42.5	42.4	44.0	43.8	-	-	-	-	-	-
<b>Wholesale trade .....</b>		<b>38.7</b>	<b>38.4</b>	<b>38.3</b>	<b>38.7</b>	<b>38.5</b>	-	-	-	-	-
Durable goods .....	50	39.5	39.1	38.9	39.4	-	-	-	-	-	-
Motor vehicles, parts, and supplies .....	501	38.0	37.9	37.3	37.7	-	-	-	-	-	-
Furniture and home furnishings .....	502	37.9	38.2	37.2	37.3	-	-	-	-	-	-
Lumber and other construction materials .....	503	39.9	39.5	40.5	40.1	-	-	-	-	-	-
Professional and commercial equipment .....	504	40.4	39.7	39.4	40.6	-	-	-	-	-	-
Medical and hospital equipment .....	5047	40.1	39.2	39.1	40.3	-	-	-	-	-	-
Metals and minerals, except petroleum .....	505	42.0	41.8	41.1	41.5	-	-	-	-	-	-
Electrical goods .....	506	39.6	39.3	39.3	39.8	-	-	-	-	-	-
Hardware, plumbing, and heating equipment .....	507	39.5	39.2	38.8	39.2	-	-	-	-	-	-
Machinery, equipment, and supplies .....	508	39.7	39.4	39.4	39.7	-	-	-	-	-	-
Misc. wholesale trade durable goods .....	509	38.0	37.7	36.7	36.9	-	-	-	-	-	-
Nondurable goods .....	51	37.7	37.4	37.6	37.7	-	-	-	-	-	-
Paper and paper products .....	511	37.1	36.5	37.1	37.9	-	-	-	-	-	-
Drugs, proprietaries, and sundries .....	512	36.6	36.1	36.2	37.2	-	-	-	-	-	-
Apparel, piece goods, and notions .....	513	38.3	37.3	36.9	37.1	-	-	-	-	-	-
Groceries and related products .....	514	38.6	38.5	38.6	38.6	-	-	-	-	-	-
Farm-product raw materials .....	515	35.4	33.7	37.8	34.9	-	-	-	-	-	-
Chemicals and allied products .....	516	40.1	40.1	40.0	40.6	-	-	-	-	-	-
Petroleum and petroleum products .....	517	38.1	37.8	37.8	38.3	-	-	-	-	-	-
Beer, wine, and distilled beverages .....	518	37.8	37.5	37.5	37.7	-	-	-	-	-	-
Misc. wholesale trade nondurable goods .....	519	36.2	36.3	36.1	36.2	-	-	-	-	-	-
<b>Retail trade .....</b>		<b>28.8</b>	<b>29.2</b>	<b>28.9</b>	<b>28.9</b>	<b>29.2</b>	-	-	-	-	-
Building materials and garden supplies .....	52	34.4	34.4	35.1	35.0	-	-	-	-	-	-
Lumber and other building materials .....	521	35.9	35.8	36.9	36.8	-	-	-	-	-	-
Paint, glass, and wallpaper stores .....	523	35.9	35.7	34.8	35.8	-	-	-	-	-	-
Hardware stores .....	525	31.0	31.1	30.4	30.2	-	-	-	-	-	-
Retail nurseries and garden stores .....	526	30.2	30.5	32.0	31.2	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Transportation and public utilities—Continued</b>											
Railroad transportation:											
Class I railroads plus Amtrak <sup>3</sup> .....	4011	\$18.12	\$18.02	\$17.90	\$17.98	-	\$936.80	\$891.99	\$805.50	\$814.49	-
Local and interurban passenger transit .....	41	10.98	11.00	11.20	11.31	-	376.61	378.40	384.16	387.93	-
Local and suburban transportation .....	411	11.47	11.52	11.77	11.89	-	445.04	443.52	449.61	462.52	-
Intercity and rural bus transportation .....	413	13.69	13.34	12.88	13.00	-	529.80	510.92	511.34	507.00	-
Trucking and warehousing .....	42	13.41	13.48	13.68	13.75	-	541.76	543.24	556.78	554.13	-
Trucking and courier services, except air .....	421	13.68	13.70	13.92	13.99	-	551.30	549.37	565.15	562.40	-
Public warehousing and storage .....	422	10.80	11.15	11.18	11.27	-	448.20	460.50	465.09	467.71	-
Water transportation:											
Water transportation services .....	449	21.22	20.25	20.58	21.17	-	829.70	773.55	771.75	806.58	-
Pipelines, except natural gas .....	46	20.94	20.70	20.92	20.99	-	942.30	921.15	947.68	965.54	-
Transportation services .....	47	13.56	13.39	13.82	14.11	-	513.92	496.77	530.69	555.93	-
Passenger transportation arrangement .....	472	13.89	13.57	14.22	14.75	-	527.82	493.95	548.89	582.63	-
Travel agencies .....	4724	14.12	13.77	14.53	15.09	-	540.80	503.98	573.94	611.15	-
Freight transportation arrangement .....	473	13.66	13.54	13.66	13.81	-	506.79	503.69	514.98	539.97	-
Communications .....	48	17.21	17.21	17.45	17.48	-	698.73	695.28	708.47	713.18	-
Telephone communications .....	481	17.76	17.74	17.90	18.00	-	747.70	745.08	758.96	761.40	-
Telephone communications, except radio .....	4813	18.27	18.29	18.45	18.49	-	772.82	773.67	793.35	793.22	-
Radio and television broadcasting .....	483	17.55	17.74	18.08	18.00	-	631.80	629.77	636.42	640.80	-
Cable and other pay television services .....	484	13.80	13.73	14.36	14.21	-	550.62	543.71	571.53	576.93	-
Electric, gas, and sanitary services .....	49	19.59	19.50	20.13	20.43	-	836.49	815.10	857.54	884.62	-
Electric services .....	491	20.73	20.54	21.23	21.77	-	872.73	835.98	889.54	933.93	-
Gas production and distribution .....	492	18.64	18.50	18.60	19.14	-	822.02	789.95	807.24	844.07	-
Combination utility services .....	493	23.38	23.22	24.70	24.13	-	1,010.02	1,010.07	1,047.28	1,054.48	-
Sanitary services .....	495	15.15	15.39	15.82	16.04	-	643.88	652.54	696.08	702.55	-
<b>Wholesale trade</b> .....		13.76	13.72	14.13	14.29	\$14.27	532.51	526.85	541.18	553.02	\$549.40
Durable goods .....	50	14.34	14.27	14.78	14.96	-	566.43	557.96	574.94	589.42	-
Motor vehicles, parts, and supplies .....	501	12.50	12.67	12.94	13.18	-	475.00	480.19	482.66	496.89	-
Furniture and home furnishings .....	502	12.69	12.71	13.26	13.35	-	480.95	485.52	493.27	497.96	-
Lumber and other construction materials .....	503	13.00	12.87	13.39	13.52	-	518.70	508.37	542.30	542.15	-
Professional and commercial equipment .....	504	16.89	16.73	17.48	17.60	-	682.36	664.18	688.71	714.56	-
Medical and hospital equipment .....	5047	16.40	16.58	17.51	17.71	-	657.64	649.94	684.64	713.71	-
Metals and minerals, except petroleum .....	505	13.74	13.76	13.92	14.08	-	577.08	575.17	572.11	584.32	-
Electrical goods .....	506	15.68	15.48	15.73	16.09	-	620.93	608.36	618.19	640.38	-
Hardware, plumbing, and heating equipment .....	507	13.64	13.51	13.88	14.02	-	538.78	529.59	538.54	549.58	-
Machinery, equipment, and supplies .....	508	14.42	14.32	14.99	15.10	-	572.47	564.21	590.61	599.47	-
Misc. wholesale trade durable goods .....	509	11.06	11.20	11.49	11.50	-	420.28	422.24	421.68	424.35	-
Nondurable goods .....	51	12.89	12.91	13.19	13.30	-	485.95	482.83	495.94	501.41	-
Paper and paper products .....	511	13.54	13.10	13.91	13.95	-	502.33	478.15	516.06	528.71	-
Drugs, proprietaries, and sundries .....	512	17.02	16.80	17.54	17.77	-	622.93	606.48	634.95	661.04	-
Apparel, piece goods, and notions .....	513	12.32	12.54	13.03	13.01	-	471.86	467.74	480.81	482.67	-
Groceries and related products .....	514	13.11	13.18	13.27	13.27	-	506.05	507.43	512.22	512.22	-
Farm-product raw materials .....	515	9.74	9.84	10.01	10.16	-	344.80	331.61	378.38	354.58	-
Chemicals and allied products .....	516	14.74	14.67	15.21	15.50	-	591.07	588.27	608.40	629.30	-
Petroleum and petroleum products .....	517	11.93	11.90	12.02	12.07	-	454.53	449.82	454.36	462.28	-
Beer, wine, and distilled beverages .....	518	15.00	15.31	15.28	15.54	-	567.00	574.13	573.00	585.86	-
Misc. wholesale trade nondurable goods .....	519	10.55	10.61	10.94	11.04	-	381.91	385.14	394.93	399.65	-
<b>Retail trade</b> .....		8.51	8.51	8.86	8.87	8.89	245.09	248.49	256.05	256.34	259.59
Building materials and garden supplies .....	52	10.06	10.00	10.50	10.62	-	346.06	344.00	368.55	371.70	-
Lumber and other building materials .....	521	10.44	10.36	10.95	11.11	-	374.80	370.89	404.06	408.05	-
Paint, glass, and wallpaper stores .....	523	10.80	10.62	10.78	10.87	-	387.72	379.13	375.14	389.15	-
Hardware stores .....	525	8.31	8.32	8.66	8.69	-	257.61	258.75	263.26	262.44	-
Retail nurseries and garden stores .....	526	9.12	9.13	9.42	9.59	-	275.42	278.47	301.44	299.21	-

See footnotes at end of table.



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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	29.8	31.2	29.4	29.5	-	-	-	-	-	-
Department stores .....	531	29.8	31.3	29.4	29.6	-	-	-	-	-	-
Variety stores .....	533	27.7	29.3	27.7	27.7	-	-	-	-	-	-
Misc. general merchandise stores .....	539	30.0	31.1	30.1	29.9	-	-	-	-	-	-
Food stores .....	54	29.7	29.6	29.7	29.7	-	-	-	-	-	-
Grocery stores .....	541	29.8	29.6	29.8	29.8	-	-	-	-	-	-
Retail bakeries .....	546	28.9	29.4	29.1	28.8	-	-	-	-	-	-
Automotive dealers and service stations .....	55	35.6	35.2	35.5	35.6	-	-	-	-	-	-
New and used car dealers .....	551	37.0	36.8	37.0	37.1	-	-	-	-	-	-
Auto and home supply stores .....	553	38.2	37.5	37.9	38.3	-	-	-	-	-	-
Gasoline service stations .....	554	31.9	31.4	31.8	31.9	-	-	-	-	-	-
Automotive dealers, nec .....	559	35.1	35.2	35.5	36.1	-	-	-	-	-	-
Apparel and accessory stores .....	56	26.6	27.3	26.5	26.3	-	-	-	-	-	-
Men's and boys' clothing stores .....	561	28.9	30.0	28.6	27.8	-	-	-	-	-	-
Women's clothing stores .....	562	24.9	25.1	24.0	23.4	-	-	-	-	-	-
Family clothing stores .....	565	27.4	28.2	27.3	27.5	-	-	-	-	-	-
Shoe stores .....	566	26.0	26.9	26.4	26.3	-	-	-	-	-	-
Furniture and home furnishings stores .....	57	33.2	33.5	32.9	33.0	-	-	-	-	-	-
Furniture and home furnishings stores .....	571	33.1	33.1	33.0	33.1	-	-	-	-	-	-
Household appliance stores .....	572	34.8	35.3	34.4	34.1	-	-	-	-	-	-
Radio, television, and computer stores .....	573	33.0	33.8	32.7	32.6	-	-	-	-	-	-
Radio, television, and electronic stores .....	5731	33.1	35.0	32.1	32.6	-	-	-	-	-	-
Record and prerecorded tape stores .....	5735	25.0	26.7	25.8	24.0	-	-	-	-	-	-
Eating and drinking places <sup>4</sup> .....	58	25.1	25.2	25.4	25.4	-	-	-	-	-	-
Miscellaneous retail establishments .....	59	29.3	30.5	29.4	29.4	-	-	-	-	-	-
Drug stores and proprietary stores .....	591	28.7	28.9	28.6	28.7	-	-	-	-	-	-
Used merchandise stores .....	593	30.8	30.6	30.4	30.3	-	-	-	-	-	-
Miscellaneous shopping goods stores .....	594	27.2	29.3	27.5	27.4	-	-	-	-	-	-
Nonstore retailers .....	596	33.0	34.5	32.4	33.1	-	-	-	-	-	-
Fuel dealers .....	598	39.0	39.3	37.6	38.6	-	-	-	-	-	-
Retail stores, nec .....	599	30.0	31.0	30.7	30.4	-	-	-	-	-	-
Optical goods stores .....	5995	33.0	33.0	34.1	34.0	-	-	-	-	-	-
Miscellaneous retail stores, nec .....	5999	30.2	30.7	30.8	30.4	-	-	-	-	-	-
<b>Finance, insurance, and real estate<sup>5</sup> .....</b>		<b>36.7</b>	<b>35.9</b>	<b>36.1</b>	<b>37.0</b>	<b>36.1</b>	-	-	-	-	-
Depository institutions .....	60	36.1	34.9	35.2	36.5	-	-	-	-	-	-
Commercial banks .....	602	36.0	34.6	35.1	36.7	-	-	-	-	-	-
State commercial banks .....	6022	36.1	35.0	35.1	36.1	-	-	-	-	-	-
National and commercial banks, nec .....	6021,9	35.8	34.3	35.0	37.1	-	-	-	-	-	-
Credit unions .....	606	36.3	35.7	35.6	35.9	-	-	-	-	-	-
Nondepository institutions .....	61	38.6	37.2	38.2	39.7	-	-	-	-	-	-
Personal credit institutions .....	614	39.4	37.8	38.3	40.4	-	-	-	-	-	-
Security and commodity brokers: Security and commodity services .....	628	38.9	37.3	38.2	39.6	-	-	-	-	-	-
Insurance carriers .....	63	39.1	38.5	38.6	39.1	-	-	-	-	-	-
Life insurance .....	631	38.4	37.7	38.6	39.2	-	-	-	-	-	-
Medical service and health insurance .....	632	39.0	39.3	38.7	38.8	-	-	-	-	-	-
Hospital and medical service plans .....	6324	39.3	39.7	39.2	39.2	-	-	-	-	-	-
Fire, marine, and casualty insurance .....	633	39.9	38.9	38.8	39.1	-	-	-	-	-	-
<b>Services .....</b>		<b>32.8</b>	<b>32.6</b>	<b>32.6</b>	<b>32.8</b>	<b>32.7</b>	-	-	-	-	-
Agricultural services .....	07	33.5	32.6	35.5	34.6	-	-	-	-	-	-

See footnotes at end of table.

ESTABLISHMENT DATA  
HOURS AND EARNINGS  
NOT SEASONALLY ADJUSTED

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Retail trade—Continued</b>											
General merchandise stores .....	53	\$8.27	\$8.29	\$8.62	\$8.55	—	\$246.45	\$258.65	\$253.43	\$252.23	—
Department stores .....	531	8.31	8.35	8.67	8.60	—	247.64	261.36	254.90	254.56	—
Variety stores .....	533	7.54	7.47	7.78	7.74	—	208.86	218.87	215.51	214.40	—
Misc. general merchandise stores .....	539	8.13	8.13	8.41	8.38	—	243.90	252.84	253.14	250.56	—
Food stores .....	54	8.80	8.81	9.17	9.19	—	261.36	260.78	272.35	272.94	—
Grocery stores .....	541	8.92	8.94	9.26	9.29	—	265.82	264.62	275.95	276.84	—
Retail bakeries .....	546	7.65	7.78	8.30	8.18	—	221.09	228.73	241.53	235.58	—
Automotive dealers and service stations .....	55	11.67	11.54	12.18	12.27	—	415.45	406.21	432.39	436.81	—
New and used car dealers .....	551	14.66	14.36	15.25	15.42	—	542.42	528.45	564.25	572.08	—
Auto and home supply stores .....	553	9.72	9.64	10.13	10.14	—	371.30	361.50	383.93	388.36	—
Gasoline service stations .....	554	7.63	7.71	7.95	7.95	—	243.40	242.09	252.81	253.61	—
Automotive dealers, nec .....	559	12.46	12.61	13.06	13.66	—	437.35	443.87	463.63	493.13	—
Apparel and accessory stores .....	56	8.20	8.17	8.57	8.54	—	218.12	223.04	227.11	224.60	—
Men's and boys' clothing stores .....	561	9.97	9.89	10.22	10.02	—	288.13	296.70	292.29	278.56	—
Women's clothing stores .....	562	8.10	8.08	8.49	8.51	—	201.69	202.81	203.76	199.13	—
Family clothing stores .....	565	7.93	7.85	8.39	8.35	—	217.28	221.37	229.05	229.63	—
Shoe stores .....	566	8.07	8.23	8.26	8.24	—	209.82	221.39	218.06	216.71	—
Furniture and home furnishings stores .....	57	11.57	11.56	12.00	12.06	—	384.12	387.26	394.80	397.98	—
Furniture and home furnishings stores .....	571	10.97	11.03	11.34	11.46	—	363.11	365.09	374.22	379.33	—
Household appliance stores .....	572	11.04	11.06	11.14	11.32	—	384.19	390.42	383.22	386.01	—
Radio, television, and computer stores .....	573	12.36	12.24	12.92	12.86	—	407.88	413.71	422.48	419.24	—
Radio, television, and electronic stores .....	5731	11.21	11.46	11.66	11.77	—	371.05	401.10	374.29	383.70	—
Record and prerecorded tape stores .....	5735	7.07	6.92	7.27	7.17	—	176.75	184.76	187.57	172.08	—
Eating and drinking places <sup>4</sup> .....	58	6.21	6.28	6.45	6.45	—	155.87	158.26	163.83	163.83	—
Miscellaneous retail establishments .....	59	9.16	9.12	9.53	9.52	—	268.39	278.16	280.18	279.89	—
Drug stores and proprietary stores .....	591	9.83	9.85	10.13	10.17	—	282.12	284.67	289.72	291.88	—
Used merchandise stores .....	593	7.72	7.76	7.98	7.99	—	237.78	237.46	242.59	242.10	—
Miscellaneous shopping goods stores .....	594	8.43	8.36	8.80	8.78	—	229.30	244.95	242.00	240.57	—
Nonstore retailers .....	596	9.53	9.60	9.96	9.90	—	314.49	331.20	322.70	327.69	—
Fuel dealers .....	598	12.75	12.87	12.88	13.08	—	497.25	505.79	484.29	504.89	—
Retail stores, nec .....	599	9.24	9.16	9.72	9.64	—	277.20	283.96	298.40	293.06	—
Optical goods stores .....	5995	11.17	11.18	11.43	11.36	—	368.61	368.94	389.76	386.24	—
Miscellaneous retail stores, nec .....	5999	9.55	9.45	10.01	9.95	—	288.41	290.12	308.31	302.48	—
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		13.72	13.64	14.20	14.41	\$14.33	503.52	489.68	512.62	533.17	\$517.31
Depository institutions .....	60	10.53	10.55	10.95	11.09	—	380.13	368.20	385.44	404.79	—
Commercial banks .....	602	10.04	10.13	10.56	10.72	—	361.44	350.50	370.66	393.42	—
State commercial banks .....	6022	9.86	9.94	10.29	10.38	—	355.95	347.90	361.18	374.72	—
National and commercial banks, nec .....	6021,9	10.16	10.26	10.76	10.96	—	363.73	351.92	376.60	406.62	—
Credit unions .....	606	10.36	10.32	10.66	10.80	—	376.07	368.42	379.50	387.72	—
Nondepository institutions .....	61	14.16	14.07	14.61	14.96	—	546.58	523.40	558.10	593.91	—
Personal credit institutions .....	614	11.96	11.85	12.12	12.42	—	471.22	447.93	464.20	501.77	—
Security and commodity brokers:											
Security and commodity services .....	628	20.02	20.07	21.10	21.40	—	778.78	748.61	806.02	847.44	—
Insurance carriers .....	63	16.43	16.16	16.81	16.93	—	642.41	622.16	648.87	661.96	—
Life insurance .....	631	14.98	14.91	15.28	15.32	—	575.23	562.11	589.81	600.54	—
Medical service and health insurance .....	632	15.20	15.18	16.14	16.27	—	592.80	596.57	624.62	631.28	—
Hospital and medical service plans .....	6324	15.54	15.60	16.56	16.67	—	610.72	619.32	649.15	653.46	—
Fire, marine, and casualty insurance .....	633	18.03	17.51	18.06	18.25	—	719.40	681.14	700.73	713.58	—
<b>Services</b> .....		12.57	12.61	13.01	13.14	13.18	412.30	411.09	424.13	430.99	430.99
Agricultural services .....	07	9.74	9.96	10.09	10.18	—	326.29	324.70	358.20	352.23	—

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average weekly hours					Average overtime hours				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	29.0	28.3	28.8	28.5	-	-	-	-	-	-
Landscape and horticultural services .....	078	35.4	34.6	38.3	37.0	-	-	-	-	-	-
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	31.2	30.2	31.5	31.3	-	-	-	-	-	-
Personal services:											
Laundry, cleaning, and garment services .....	721	34.4	34.4	34.5	34.3	-	-	-	-	-	-
Beauty shops <sup>4</sup> .....	723	28.2	28.5	28.0	28.0	-	-	-	-	-	-
Miscellaneous personal services .....	729	27.7	27.7	27.4	27.4	-	-	-	-	-	-
Business services											
Advertising .....	73	33.7	33.6	33.7	33.9	-	-	-	-	-	-
Advertising .....	731	37.2	36.3	36.6	37.6	-	-	-	-	-	-
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	37.5	37.2	35.6	36.2	-	-	-	-	-	-
Services to buildings .....	734	28.5	28.4	28.4	28.7	-	-	-	-	-	-
Disinfecting and pest control services .....	7342	36.9	35.4	37.8	38.9	-	-	-	-	-	-
Building maintenance services, nec .....	7349	27.7	27.8	27.4	27.7	-	-	-	-	-	-
Miscellaneous equipment rental and leasing .....	735	38.8	38.9	39.2	39.2	-	-	-	-	-	-
Medical equipment rental .....	7352	37.0	36.7	36.6	37.4	-	-	-	-	-	-
Heavy construction equipment rental .....	7353	40.3	40.5	41.2	40.9	-	-	-	-	-	-
Equipment rental and leasing, nec .....	7359	38.8	38.9	39.2	39.2	-	-	-	-	-	-
Personnel supply services:											
Help supply services .....	7363	32.5	32.6	32.7	32.5	-	-	-	-	-	-
Computer and data processing services .....	737	39.0	38.4	38.5	39.2	-	-	-	-	-	-
Computer programming services .....	7371	38.7	38.1	38.2	38.8	-	-	-	-	-	-
Computer integrated systems design .....	7373	39.8	38.6	39.6	40.8	-	-	-	-	-	-
Information retrieval services .....	7375	38.3	38.2	39.3	39.3	-	-	-	-	-	-
Computer maintenance and repair .....	7378	38.8	38.8	40.2	40.8	-	-	-	-	-	-
Miscellaneous business services .....	738	33.2	33.2	33.3	33.5	-	-	-	-	-	-
Detective and armored car services .....	7381	34.4	34.5	34.5	34.9	-	-	-	-	-	-
Security systems services .....	7382	35.5	35.3	36.8	36.9	-	-	-	-	-	-
Auto repair, services, and parking											
Automotive rentals, without drivers .....	75	35.9	35.8	36.0	35.6	-	-	-	-	-	-
Automotive rentals, without drivers .....	751	36.2	36.4	36.6	36.5	-	-	-	-	-	-
Passenger car rental .....	7514	36.4	36.5	36.4	36.3	-	-	-	-	-	-
Automobile parking .....	752	33.6	33.1	32.5	32.6	-	-	-	-	-	-
Automotive repair shops .....	753	38.2	38.1	38.1	38.0	-	-	-	-	-	-
Automotive and tire repair shops .....	7532,4	38.4	38.3	38.2	38.1	-	-	-	-	-	-
General automotive repair shops .....	7538	37.7	37.6	37.9	37.8	-	-	-	-	-	-
Automotive services, except repair .....	754	30.6	30.7	31.3	30.2	-	-	-	-	-	-
Carwashes .....	7542	26.4	27.5	28.8	26.5	-	-	-	-	-	-
Miscellaneous repair services .....	76	38.3	38.4	38.5	38.1	-	-	-	-	-	-
Motion pictures											
Motion picture production and services .....	78	30.3	30.0	29.9	30.3	-	-	-	-	-	-
Motion picture production and services .....	781	39.6	39.8	39.5	39.5	-	-	-	-	-	-
Video tape rental .....	784	24.5	23.8	22.6	23.5	-	-	-	-	-	-
Amusement and recreation services											
Bowling centers .....	79	26.8	26.6	26.1	26.5	-	-	-	-	-	-
Bowling centers .....	793	25.0	24.8	25.2	25.4	-	-	-	-	-	-
Misc. amusement and recreation services .....	799	26.0	26.1	25.7	26.0	-	-	-	-	-	-
Physical fitness facilities .....	7991	19.6	18.6	19.7	19.7	-	-	-	-	-	-
Membership sports and recreation clubs .....	7997	27.7	29.2	27.7	27.4	-	-	-	-	-	-
Health services											
Offices and clinics of medical doctors .....	80	33.3	33.1	32.9	33.2	-	-	-	-	-	-
Offices and clinics of medical doctors .....	801	33.6	33.1	32.7	33.1	-	-	-	-	-	-
Offices and clinics of dentists .....	802	28.7	28.5	27.9	28.4	-	-	-	-	-	-
Offices and clinics of other health practitioners .....	804	30.3	30.0	30.1	30.6	-	-	-	-	-	-
Nursing and personal care facilities .....	805	32.7	32.4	32.4	32.8	-	-	-	-	-	-
Intermediate care facilities .....	8052	32.2	32.0	31.6	32.0	-	-	-	-	-	-
Hospitals .....	806	35.2	35.1	34.8	34.9	-	-	-	-	-	-

See footnotes at end of table.

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

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

Industry	1987 SIC Code	Average hourly earnings					Average weekly earnings				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Services—Continued</b>											
Agricultural services—Continued											
Veterinary services .....	074	\$9.74	\$9.84	\$10.04	\$10.13	—	\$282.46	\$278.47	\$289.15	\$288.71	—
Landscape and horticultural services .....	078	9.81	10.08	10.15	10.24	—	347.27	348.77	388.75	378.88	—
Hotels and other lodging places:											
Hotels and motels <sup>4</sup> .....	701	8.81	8.95	9.05	9.13	—	274.87	270.29	285.08	285.77	—
Personal services:											
Laundry, cleaning, and garment services .....	721	8.18	8.23	8.50	8.55	—	281.39	283.11	293.25	293.27	—
Beauty shops <sup>4</sup> .....	723	9.15	9.45	9.27	9.39	—	258.03	269.33	259.56	262.92	—
Miscellaneous personal services .....	729	8.76	9.01	9.32	9.37	—	242.65	249.58	255.37	256.74	—
Business services .....	73	12.08	12.09	12.65	12.82	—	407.10	406.22	426.31	434.60	—
Advertising .....	731	17.18	17.11	17.64	17.95	—	639.10	621.09	645.62	674.92	—
Mailing, reproduction, and stenographic services:											
Photocopying and duplicating services .....	7334	11.24	11.08	11.48	11.44	—	421.50	412.18	408.69	414.13	—
Services to buildings .....	734	8.11	8.07	8.31	8.34	—	231.14	229.19	236.00	239.36	—
Disinfecting and pest control services .....	7342	11.18	11.00	11.42	11.59	—	412.54	389.40	431.68	450.85	—
Building maintenance services, nec .....	7349	7.73	7.73	7.89	7.90	—	214.12	214.89	216.19	218.83	—
Miscellaneous equipment rental and leasing .....	735	12.19	12.25	13.01	13.00	—	472.97	476.53	509.99	509.60	—
Medical equipment rental .....	7352	11.65	11.86	12.93	13.01	—	431.05	435.26	473.24	486.57	—
Heavy construction equipment rental .....	7353	15.87	15.98	16.75	16.70	—	639.56	647.19	690.10	683.03	—
Equipment rental and leasing, nec .....	7359	11.22	11.23	11.87	11.86	—	435.34	436.85	465.30	464.91	—
Personnel supply services:											
Help supply services .....	7363	9.77	9.87	10.20	10.28	—	317.53	321.76	333.54	334.10	—
Computer and data processing services .....	737	20.64	20.56	21.46	21.73	—	804.96	789.50	826.21	851.82	—
Computer programming services .....	7371	23.77	23.70	24.74	25.11	—	919.90	902.97	945.07	974.27	—
Computer integrated systems design .....	7373	20.75	20.61	20.91	21.10	—	825.85	795.55	828.04	860.88	—
Information retrieval services .....	7375	15.39	15.56	15.86	15.98	—	589.44	594.39	623.30	628.01	—
Computer maintenance and repair .....	7378	15.54	15.46	17.00	17.56	—	602.95	599.85	683.40	716.45	—
Miscellaneous business services .....	738	9.95	9.96	10.21	10.22	—	330.34	330.67	339.99	342.37	—
Detective and armored car services .....	7381	8.03	8.11	8.37	8.42	—	276.23	279.80	288.77	293.86	—
Security systems services .....	7382	12.65	12.75	13.79	13.76	—	449.08	450.08	507.47	507.74	—
Auto repair, services, and parking .....	75	10.85	10.86	11.18	11.24	—	389.52	388.79	402.48	400.14	—
Automotive rentals, without drivers .....	751	10.28	10.32	10.62	10.70	—	372.14	375.65	388.69	390.55	—
Passenger car rental .....	7514	9.30	9.29	9.54	9.60	—	338.52	339.09	347.26	348.48	—
Automobile parking .....	752	8.19	8.42	8.23	8.17	—	275.18	278.70	267.48	266.34	—
Automotive repair shops .....	753	12.10	12.16	12.59	12.64	—	462.22	463.30	479.68	480.32	—
Automotive and tire repair shops .....	7532.4	12.67	12.77	13.25	13.35	—	486.53	489.09	506.15	508.64	—
General automotive repair shops .....	7538	12.05	12.08	12.44	12.47	—	454.29	454.21	471.48	471.37	—
Automotive services, except repair .....	754	8.42	8.25	8.58	8.60	—	257.65	253.28	268.55	259.72	—
Carwashes .....	7542	7.28	7.26	7.54	7.53	—	192.19	199.65	217.15	199.55	—
Miscellaneous repair services .....	76	12.90	13.01	13.46	13.46	—	494.07	499.58	518.21	512.83	—
Motion pictures .....	78	14.71	14.97	15.08	15.27	—	445.71	449.10	450.89	462.68	—
Motion picture production and services .....	781	20.32	20.86	20.30	20.97	—	804.67	830.23	801.85	828.32	—
Video tape rental .....	784	6.79	6.86	7.23	7.23	—	166.36	163.27	163.40	169.91	—
Amusement and recreation services .....	79	9.85	9.87	9.89	10.14	—	263.98	262.54	258.13	268.71	—
Bowling centers .....	793	7.45	7.54	7.56	7.65	—	186.25	186.99	190.51	194.31	—
Misc. amusement and recreation services .....	799	9.06	9.14	9.05	9.26	—	235.56	238.55	232.59	240.76	—
Physical fitness facilities .....	7991	8.59	8.70	8.90	9.00	—	168.36	161.82	175.33	177.30	—
Membership sports and recreation clubs .....	7997	9.35	9.62	9.61	9.75	—	259.00	280.90	266.20	267.15	—
Health services .....	80	13.45	13.51	13.86	13.89	—	447.89	447.18	455.99	461.15	—
Offices and clinics of medical doctors .....	801	14.01	14.11	14.41	14.46	—	470.74	467.04	471.21	478.63	—
Offices and clinics of dentists .....	802	13.88	13.90	14.27	14.37	—	398.36	396.15	398.13	408.11	—
Offices and clinics of other health practitioners .....	804	12.88	12.96	13.08	13.07	—	390.26	388.80	393.71	399.94	—
Nursing and personal care facilities .....	805	9.50	9.53	9.88	9.87	—	310.65	308.77	320.11	323.74	—
Intermediate care facilities .....	8052	8.99	9.02	9.44	9.45	—	289.48	288.64	298.30	302.40	—
Hospitals .....	806	15.21	15.26	15.63	15.65	—	535.39	535.63	543.92	546.19	—

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	29.1	29.1	28.9	28.9	-	-	-	-	-	-
Legal services .....	81	35.6	34.7	34.7	35.5	-	-	-	-	-	-
Social services .....	83	31.6	31.2	31.3	31.6	-	-	-	-	-	-
Individual and family services .....	832	31.7	31.4	31.3	31.8	-	-	-	-	-	-
Job training and related services .....	833	31.2	30.7	30.8	31.1	-	-	-	-	-	-
Child day care services .....	835	30.4	29.8	29.9	29.9	-	-	-	-	-	-
Residential care .....	836	32.6	32.0	32.2	32.7	-	-	-	-	-	-
Social services, nec .....	839	32.8	32.2	32.4	33.0	-	-	-	-	-	-
Membership organizations:											
Professional organizations .....	862	35.7	35.1	35.3	36.0	-	-	-	-	-	-
Engineering and management services .....	87	37.5	37.0	37.0	37.6	-	-	-	-	-	-
Engineering and architectural services .....	871	39.6	39.4	39.3	39.5	-	-	-	-	-	-
Engineering services .....	8711	39.9	39.7	39.7	39.7	-	-	-	-	-	-
Architectural services .....	8712	38.7	38.4	38.1	38.8	-	-	-	-	-	-
Surveying services .....	8713	37.8	38.0	38.4	38.1	-	-	-	-	-	-
Accounting, auditing, and bookkeeping .....	872	36.5	35.8	36.1	36.8	-	-	-	-	-	-
Research and testing services .....	873	36.9	36.3	36.3	36.7	-	-	-	-	-	-
Commercial physical research .....	8731	40.5	39.6	39.5	39.7	-	-	-	-	-	-
Commercial nonphysical research .....	8732	30.6	30.4	30.7	31.3	-	-	-	-	-	-
Noncommercial research organizations .....	8733	36.5	35.8	35.6	36.3	-	-	-	-	-	-
Management and public relations .....	874	36.5	35.9	35.8	36.7	-	-	-	-	-	-
Management services .....	8741	35.3	34.7	34.5	35.4	-	-	-	-	-	-
Management consulting services .....	8742	36.9	36.3	36.2	37.2	-	-	-	-	-	-
Public relations services .....	8743	36.3	34.3	34.5	34.8	-	-	-	-	-	-
Services, nec .....	89	35.2	34.6	35.2	36.0	-	-	-	-	-	-

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				
		Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Dec. 1998 <sup>P</sup>
<b>Services—Continued</b>											
Health services—Continued											
Home health care services .....	808	\$11.39	\$11.45	\$11.55	\$11.66	—	\$331.45	\$333.20	\$333.80	\$336.97	—
Legal services .....	81	17.75	17.61	18.19	18.54	—	631.90	611.07	631.19	658.17	—
Social services .....	83	8.98	8.98	9.31	9.38	—	283.77	280.18	291.40	296.41	—
Individual and family services .....	832	9.51	9.46	9.81	9.88	—	301.47	297.04	307.05	314.18	—
Job training and related services .....	833	8.70	8.68	9.03	9.17	—	271.44	266.48	278.12	285.19	—
Child day care services .....	835	7.73	7.77	8.04	8.10	—	234.99	231.55	240.40	242.19	—
Residential care .....	836	9.06	9.10	9.42	9.44	—	295.36	291.20	303.32	308.69	—
Social services, nec .....	839	10.95	10.85	11.22	11.32	—	359.16	349.37	363.53	373.56	—
Membership organizations:											
Professional organizations .....	862	18.22	18.07	18.46	18.51	—	650.45	634.26	651.64	666.36	—
Engineering and management services .....	87	17.64	17.55	18.10	18.27	—	661.50	649.35	669.70	686.95	—
Engineering and architectural services .....	871	19.38	19.39	19.79	19.96	—	767.45	763.97	777.75	788.42	—
Engineering services .....	8711	20.24	20.30	20.68	20.89	—	807.58	805.91	821.00	829.33	—
Architectural services .....	8712	17.37	17.11	17.71	17.79	—	672.22	657.02	674.75	690.25	—
Surveying services .....	8713	13.46	13.44	14.05	14.02	—	508.79	510.72	539.52	534.16	—
Accounting, auditing, and bookkeeping .....	872	15.30	15.11	15.64	15.96	—	558.45	540.94	564.60	587.33	—
Research and testing services .....	873	18.23	18.03	18.40	18.51	—	672.69	654.49	667.92	679.32	—
Commercial physical research .....	8731	20.37	19.97	20.36	20.60	—	824.99	790.81	804.22	817.82	—
Commercial nonphysical research .....	8732	14.18	14.08	15.12	15.20	—	433.91	428.03	464.18	475.76	—
Noncommercial research organizations .....	8733	21.53	21.48	21.59	21.45	—	785.85	768.98	768.60	778.64	—
Management and public relations .....	874	16.74	16.65	17.56	17.71	—	611.01	597.74	628.65	649.96	—
Management services .....	8741	15.36	15.29	15.85	15.87	—	542.21	530.56	546.83	561.80	—
Management consulting services .....	8742	18.65	18.39	20.02	20.32	—	688.19	667.56	724.72	755.90	—
Public relations services .....	8743	15.43	15.29	16.09	16.25	—	560.11	524.45	555.11	565.50	—
Services, nec .....	89	17.03	16.86	17.48	17.49	—	599.46	583.36	615.30	629.64	—

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

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

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

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

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

— Data not available.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

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

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

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

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

Series	Aircraft (SIC 3721)				Guided missiles and space vehicles (SIC 3761)			
	Oct. 1997	Nov. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>	Oct. 1997	Nov. 1997	Oct. 1998	Nov. 1998 <sup>P</sup>
Average hourly earnings, excluding lump-sum payments .....	\$20.97	\$20.91	\$21.51	\$21.56	\$20.81	\$21.06	\$21.55	\$21.61
Average hourly earnings, including lump-sum payments .....	21.28	21.21	21.59	21.64	20.81	21.06	21.78	21.84

P = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

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

Industry	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Manufacturing</b> .....	\$12.60	\$12.68	\$12.82	\$12.87	\$12.94
<b>Durable goods</b> .....	13.12	13.19	13.28	13.32	13.38
Lumber and wood products .....	10.34	10.37	10.64	10.67	(2)
Furniture and fixtures .....	10.21	10.26	10.51	10.52	(2)
Stone, clay, and glass products .....	12.52	12.56	12.69	12.74	(2)
Primary metal industries .....	14.27	14.29	14.31	14.30	(2)
Fabricated metal products .....	12.16	12.23	12.46	12.51	(2)
Industrial machinery and equipment .....	13.40	13.44	13.77	13.84	(2)
Electronic and other electrical equipment .....	12.32	12.41	12.55	12.58	(2)
Transportation equipment .....	16.68	16.74	16.48	16.46	(2)
Instruments and related products .....	13.02	13.02	13.32	13.34	(2)
Miscellaneous manufacturing .....	10.25	10.35	10.57	10.59	(2)
<b>Nondurable goods</b> .....	11.81	11.90	12.15	12.21	\$12.29
Food and kindred products .....	10.89	11.03	11.08	11.20	(2)
Tobacco products .....	17.28	17.79	16.52	16.84	(2)
Textile mill products .....	9.61	9.67	9.90	9.95	(2)
Apparel and other textile products .....	8.08	8.14	8.41	8.39	(2)
Paper and allied products .....	14.23	14.29	14.62	14.66	(2)
Printing and publishing .....	12.63	12.69	13.01	12.96	(2)
Chemicals and allied products .....	15.85	15.92	16.25	16.30	(2)
Petroleum and coal products .....	19.07	19.34	19.41	19.50	(2)
Rubber and misc. plastics products .....	11.01	11.11	11.29	11.36	(2)
Leather and leather products .....	8.87	8.94	9.15	9.15	(2)

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

<sup>2</sup> Not available.

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.



**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**B-17. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry, in current and constant (1982) dollars**

Industry	Average hourly earnings					Average weekly earnings				
	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P	Nov. 1997	Dec. 1997	Oct. 1998	Nov. 1998P	Dec. 1998P
<b>Total private:</b>										
Current dollars .....	\$12.53	\$12.53	\$12.92	\$12.99	\$12.99	\$436.04	\$436.04	\$447.03	\$450.75	\$450.75
Constant (1982) dollars .....	7.66	7.67	7.80	7.83	(2)	266.53	267.02	269.78	271.86	(2)
<b>Mining:</b>										
Current dollars .....	16.41	16.52	17.13	17.32	\$17.41	748.30	746.70	752.01	760.35	\$757.34
Constant (1982) dollars .....	10.03	10.12	10.34	10.45	(2)	457.40	457.26	453.84	458.59	(2)
<b>Construction:</b>										
Current dollars .....	16.28	16.37	16.86	16.80	\$16.83	615.38	630.25	674.40	646.80	\$659.74
Constant (1982) dollars .....	9.95	10.02	10.18	10.13	(2)	376.15	385.95	407.00	390.11	(2)
<b>Manufacturing:</b>										
Current dollars .....	13.36	13.47	13.54	13.60	\$13.69	569.14	579.21	567.33	572.56	\$583.19
Constant (1982) dollars .....	8.17	8.25	8.17	8.20	(2)	347.89	354.69	342.38	345.33	(2)
<b>Transportation and public utilities:</b>										
Current dollars .....	15.19	15.17	15.43	15.53	\$15.57	613.68	603.77	606.40	616.54	\$607.23
Constant (1982) dollars .....	9.28	9.29	9.31	9.37	(2)	375.11	369.73	365.96	371.86	(2)
<b>Wholesale trade:</b>										
Current dollars .....	13.76	13.72	14.13	14.29	\$14.27	532.51	526.85	541.18	553.02	\$549.40
Constant (1982) dollars .....	8.41	8.40	8.53	8.62	(2)	325.50	322.63	326.60	333.55	(2)
<b>Retail trade</b>										
Current dollars .....	8.51	8.51	8.86	8.87	\$8.89	245.09	248.49	256.05	256.34	\$259.59
Constant (1982) dollars .....	5.20	5.21	5.35	5.35	(2)	149.81	152.17	154.53	154.61	(2)
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	13.72	13.64	14.20	14.41	\$14.33	503.52	489.68	512.62	533.17	\$517.31
Constant (1982) dollars .....	8.39	8.35	8.57	8.69	(2)	307.78	299.87	309.37	321.57	(2)
<b>Services:</b>										
Current dollars .....	12.57	12.61	13.01	13.14	\$13.18	412.30	411.09	424.13	430.99	\$430.99
Constant (1982) dollars .....	7.68	7.72	7.85	7.93	(2)	252.02	251.74	255.96	259.95	(2)

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

<sup>2</sup> Not available.  
P = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>Alabama</b> .....	42.6	42.0	42.3	\$12.03	\$12.13	\$12.36	\$512.48	\$509.46	\$522.83
Birmingham .....	44.8	41.4	42.0	12.76	12.76	12.94	571.65	528.26	543.48
Mobile .....	44.4	45.2	46.1	14.22	13.64	13.61	631.37	616.53	627.42
<b>Alaska</b> .....	43.9	51.5	37.8	13.35	11.31	12.91	586.07	582.47	485.42
<b>Arizona</b> .....	41.7	39.4	39.4	11.80	12.38	12.37	492.06	487.77	487.38
<b>Arkansas</b> .....	41.6	41.5	41.9	10.92	11.15	11.21	454.27	462.73	469.70
Fayetteville-Springdale-Rogers .....	41.1	41.3	43.1	10.59	10.88	10.75	435.25	449.34	463.33
Fort Smith .....	42.7	42.8	43.5	11.07	11.31	11.32	472.69	484.07	492.42
Little Rock-North Little Rock .....	42.5	41.6	41.7	11.75	11.78	11.83	499.38	490.05	493.31
Pine Bluff .....	41.2	39.9	40.3	13.11	13.55	13.38	540.13	540.65	539.21
<b>California</b> .....	42.6	41.8	42.0	13.35	13.68	13.74	568.71	571.82	577.08
Bakersfield .....	40.1	41.4	41.4	13.85	14.08	13.98	555.39	582.91	578.77
Fresno .....	40.8	41.0	40.8	11.93	11.96	12.11	486.74	490.36	494.09
Los Angeles-Long Beach .....	42.9	42.4	42.6	12.56	12.77	12.82	538.82	541.45	546.13
Modesto .....	42.0	41.0	41.7	13.16	13.68	13.75	552.72	560.88	573.98
Oakland .....	41.8	41.8	41.7	15.58	15.74	15.76	651.24	657.93	657.19
Orange County .....	43.8	43.4	43.5	12.81	13.11	13.21	561.08	568.97	574.64
Riverside-San Bernardino .....	41.7	42.6	42.0	11.88	12.16	12.27	495.40	518.02	515.34
Sacramento .....	40.8	40.6	40.9	14.45	14.79	14.78	589.56	600.47	604.50
Salinas .....	36.8	42.2	40.0	13.88	14.24	14.25	510.78	600.93	570.00
San Diego .....	40.8	40.0	40.2	13.39	13.70	13.77	546.31	548.00	553.55
San Francisco .....	41.2	41.3	41.3	14.52	14.74	14.92	598.22	608.76	616.20
San Jose .....	43.3	42.3	42.8	16.57	16.77	16.84	717.48	709.37	720.75
Santa Barbara-Santa Maria-Lompoc .....	41.0	41.2	41.1	13.86	14.22	14.21	568.26	585.86	584.03
Santa Rosa .....	39.7	40.3	39.9	14.85	15.28	15.40	589.55	615.78	614.46
Stockton-Lodi .....	42.5	42.9	42.4	13.44	13.56	13.52	571.20	581.72	573.25
Vallejo-Fairfield-Napa .....	42.8	43.7	43.2	15.33	15.71	15.69	656.12	686.53	677.81
Ventura .....	42.9	42.8	42.8	12.43	12.50	12.48	533.25	535.00	534.14
<b>Colorado</b> .....	42.2	41.2	41.5	13.57	13.99	13.64	572.65	576.39	566.06
Denver .....	41.7	42.6	43.9	13.21	13.12	11.72	550.86	558.91	514.51
<b>Connecticut</b> .....	43.1	43.1	43.4	14.66	14.84	14.94	631.85	639.60	648.40
Bridgeport .....	43.5	42.4	42.3	15.03	15.16	15.27	653.81	642.78	645.92
Danbury .....	44.3	41.9	44.4	14.80	14.50	14.57	655.64	607.55	646.91
Hartford .....	44.3	43.7	43.8	15.49	15.68	15.66	686.21	685.22	685.91
New Haven-Meriden .....	42.7	42.2	42.8	14.59	14.87	14.90	622.99	627.51	637.72
New London-Norwich .....	42.8	42.5	42.8	15.13	15.63	15.67	647.56	664.28	670.68
Stamford-Norwalk .....	40.3	39.7	38.9	14.07	13.76	13.53	567.02	546.27	526.32
Waterbury .....	43.3	43.6	43.9	13.61	14.08	14.28	589.31	613.89	626.89
<b>Delaware</b> .....	42.4	42.7	42.5	15.04	15.50	15.33	637.70	661.85	651.53
Dover .....	41.0	39.7	39.5	13.49	13.94	13.78	553.09	553.42	544.31
Wilmington-Newark .....	43.9	44.9	44.3	17.99	18.52	18.42	789.76	831.55	816.01
<b>District of Columbia:</b>									
Washington PMSA .....	40.2	39.6	40.0	14.24	14.51	14.77	572.45	574.60	590.80
<b>Florida</b> .....	42.3	42.1	42.2	11.13	11.50	11.49	470.80	484.15	484.88
<b>Georgia</b> .....	42.5	41.8	41.5	11.85	12.18	12.14	503.63	509.12	503.81
Atlanta .....	42.7	40.8	41.1	12.82	12.89	12.79	547.41	525.91	525.67
Savannah .....	50.2	49.0	48.8	14.46	15.23	15.04	725.89	746.27	733.95
<b>Hawaii</b> .....	38.9	38.2	39.6	13.40	12.65	12.75	521.26	483.23	504.90
Honolulu .....	40.0	38.7	40.8	13.15	12.77	12.78	526.00	494.20	521.42
<b>Idaho</b> .....	40.9	39.4	38.8	12.12	12.99	13.22	495.71	511.81	512.94
<b>Illinois</b> .....	42.3	42.1	42.0	13.50	13.83	13.85	571.05	582.24	581.70
Bloomington-Normal .....	40.8	39.5	39.4	17.40	17.69	17.68	709.92	698.76	696.59
Champaign-Urbana .....	41.6	41.0	40.7	11.12	11.50	11.60	462.59	471.50	472.12
Chicago .....	42.1	41.8	41.9	13.40	13.59	13.60	564.14	568.06	569.84
Davenport-Moline-Rock Island .....	43.0	43.2	43.1	15.52	15.61	15.65	667.36	674.35	674.52
Decatur .....	42.7	41.4	41.5	16.69	16.81	16.79	712.66	695.93	696.79
Kankakee .....	41.3	42.0	42.6	14.94	14.71	14.91	617.02	617.82	635.17
Peoria-Pekin .....	42.4	41.9	41.5	16.50	16.50	16.39	699.60	691.35	680.19
Rockford .....	42.8	43.7	43.7	15.16	16.23	15.77	648.85	709.25	689.15
Springfield .....	41.5	40.4	40.2	12.12	12.74	12.79	502.98	514.70	514.16

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		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>Indiana</b> .....	44.0	42.4	42.4	\$15.03	\$14.71	\$14.86	\$661.32	\$623.70	\$630.06
Bloomington .....	41.1	39.7	41.1	11.72	12.00	12.07	481.69	476.40	498.08
Elkhart-Goshen .....	39.8	39.4	39.7	12.21	12.64	12.66	485.96	498.02	502.60
Evansville-Henderson .....	43.7	43.6	43.6	15.18	13.93	14.17	663.37	607.35	617.81
Fort Wayne .....	41.9	41.5	41.7	14.78	14.44	14.56	619.28	599.26	607.15
Gary .....	42.9	41.0	41.3	18.74	18.49	18.43	803.95	758.09	761.16
Indianapolis .....	44.1	43.3	43.3	15.68	15.11	15.17	691.49	654.26	656.86
Kokomo .....	50.7	51.9	51.5	21.16	20.69	20.79	1,072.81	1,073.81	1,070.69
Lafayette .....	43.5	43.1	43.1	15.88	15.75	15.70	690.78	678.83	676.67
Muncie .....	46.4	45.0	44.9	14.89	14.47	14.38	690.90	651.15	645.66
South Bend .....	42.3	41.5	41.4	12.38	12.64	12.58	523.67	524.56	520.81
Terre Haute .....	44.8	46.8	46.7	14.86	14.26	14.20	665.73	667.37	663.14
<b>Iowa</b> .....	43.8	41.6	42.1	13.74	13.79	13.95	601.81	573.66	587.30
Cedar Rapids .....	44.3	40.2	41.9	16.95	17.21	17.72	750.89	691.84	742.47
Des Moines .....	45.1	41.8	43.5	13.54	14.14	13.86	610.65	591.05	602.91
Dubuque .....	42.5	40.1	40.5	15.33	15.52	15.37	651.53	622.35	622.49
Sioux City .....	39.5	39.6	40.1	11.46	11.92	12.19	452.67	472.03	488.82
<b>Kansas</b> .....	43.2	41.9	41.6	13.70	14.02	14.12	591.84	587.44	587.39
Topeka .....	41.9	43.3	43.3	15.36	17.07	16.81	643.58	739.13	727.87
Wichita .....	44.6	43.2	43.0	16.12	16.06	16.23	718.95	693.79	697.89
<b>Kentucky</b> .....	42.1	41.2	41.4	13.39	13.75	13.72	563.72	566.50	568.01
Lexington .....	43.4	41.8	41.9	14.10	13.96	13.96	611.94	583.53	584.92
Louisville .....	42.0	42.0	42.2	15.00	15.17	15.03	630.00	637.14	634.27
<b>Louisiana</b> .....	44.4	45.0	44.4	14.39	14.62	14.57	638.92	657.90	646.91
Baton Rouge .....	43.8	43.5	43.5	16.46	17.05	17.08	720.95	741.68	742.98
New Orleans .....	43.8	44.0	43.9	14.43	14.39	14.46	632.03	633.16	634.79
Shreveport-Bossier City .....	42.7	41.9	41.6	13.83	13.76	14.83	590.54	576.54	616.93
<b>Maine</b> .....	40.6	40.4	41.1	13.20	13.66	13.20	535.92	551.86	542.52
Lewiston-Auburn .....	42.8	40.9	42.6	11.62	12.25	11.88	497.34	501.03	506.09
Portland .....	37.9	42.7	44.4	11.27	11.67	11.23	427.13	498.31	498.61
<b>Maryland</b> .....	42.6	41.8	41.6	14.17	14.38	14.32	603.64	601.08	595.71
Baltimore PMSA .....	42.9	41.5	41.6	14.64	15.17	15.18	628.06	629.56	631.49
<b>Massachusetts</b> .....	42.3	41.7	42.5	13.60	13.82	13.84	575.28	576.29	588.20
Boston .....	41.6	41.1	41.6	14.73	15.07	15.06	612.77	619.38	626.50
Springfield .....	43.1	41.7	43.1	13.25	13.61	13.68	571.08	567.54	589.61
Worcester .....	43.0	41.7	42.8	13.75	14.10	14.09	591.25	587.97	603.05
<b>Michigan</b> .....	44.2	43.4	43.7	17.56	18.14	18.71	776.15	787.28	817.63
Ann Arbor .....	46.0	44.5	45.7	18.64	19.54	19.47	857.44	869.53	889.78
Detroit .....	45.5	44.5	44.5	19.09	20.25	20.21	868.59	901.13	899.35
Flint .....	45.4	44.3	46.0	24.03	25.93	25.87	1,090.96	1,148.70	1,190.02
Grand Rapids-Muskegon-Holland .....	42.7	42.1	41.7	14.47	14.91	14.91	617.87	627.71	621.75
Jackson .....	42.7	40.3	40.9	13.08	12.59	12.78	558.52	507.38	522.70
Kalamazoo-Battle Creek .....	46.0	44.0	43.2	15.53	15.88	15.70	714.38	698.72	678.24
Lansing East Lansing .....	42.3	43.0	43.5	19.20	19.59	19.56	812.16	842.37	850.86
Saginaw-Bay City-Midland .....	46.0	46.2	48.0	21.28	21.62	22.14	978.88	998.84	1,062.72
<b>Minnesota</b> .....	42.0	41.9	41.7	13.82	13.87	13.81	580.44	581.15	575.88
Duluth-Superior .....	41.9	40.5	40.7	12.52	12.53	12.73	524.59	507.47	518.11
Minneapolis-St. Paul .....	41.9	42.5	42.3	14.67	15.46	15.42	614.67	657.05	652.27
St. Cloud .....	43.5	44.6	44.4	12.93	13.35	13.44	562.46	595.41	596.74
<b>Mississippi</b> .....	42.1	41.9	41.7	10.49	10.75	10.82	441.63	450.43	451.19
Jackson .....	42.3	41.2	41.3	12.18	12.00	12.19	515.21	494.40	503.45
<b>Missouri</b> .....	42.1	41.6	41.4	13.19	13.34	13.46	555.30	554.94	557.24
Kansas City .....	44.8	43.3	43.8	14.39	14.46	14.38	644.67	626.12	629.84
St. Louis .....	43.8	42.1	42.0	15.56	15.84	15.90	681.53	666.86	667.80
Springfield .....	40.2	41.3	41.1	10.98	11.44	11.38	441.40	472.47	467.72
<b>Montana</b> .....	40.7	39.6	39.5	13.33	13.84	13.92	542.53	548.06	549.84
<b>Nebraska</b> .....	42.4	42.8	41.7	12.05	12.27	13.50	510.92	525.16	562.95
Lincoln .....	46.4	44.9	43.6	13.72	14.30	14.13	636.61	642.07	616.07
Omaha .....	42.6	44.7	45.2	13.41	14.13	13.62	571.27	631.61	615.62
<b>Nevada</b> .....	45.1	41.9	43.5	13.89	13.99	14.37	626.44	586.18	625.10
Las Vegas .....	42.7	39.0	40.8	14.55	15.32	16.31	621.29	597.48	665.45

See footnotes at end of table.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P	November 1997	October 1998	November 1998P
<b>New Hampshire</b> .....	42.3	41.2	41.6	\$12.57	\$12.75	\$12.91	\$531.71	\$525.30	\$537.06
Manchester .....	40.6	41.1	42.6	13.59	13.34	13.41	551.75	548.27	571.27
Nashua .....	41.4	41.5	42.3	15.05	14.73	15.14	623.07	611.30	640.42
Portsmouth-Rochester .....	41.7	38.8	39.5	11.76	12.29	12.26	490.39	476.85	484.27
<b>New Jersey</b> .....	42.6	42.2	42.3	14.36	14.60	14.63	611.74	616.12	618.85
<b>New Mexico</b> .....	39.2	38.3	38.6	12.46	12.03	12.49	488.43	460.75	482.11
Albuquerque .....	39.1	38.0	38.9	14.73	13.43	14.09	575.94	510.34	548.10
<b>New York</b> .....	41.8	41.2	41.5	13.44	13.62	13.70	561.79	561.14	568.55
Albany-Schenectady-Troy .....	42.8	43.1	43.1	14.79	14.50	14.54	633.01	624.95	626.67
Binghamton .....	40.0	40.8	41.2	10.57	10.81	10.81	422.80	441.05	445.37
Buffalo-Niagara Falls .....	44.1	43.0	42.7	17.28	16.98	17.07	762.05	730.14	728.89
Dutchess County .....	39.1	40.4	40.6	12.38	12.14	11.97	484.06	490.46	485.98
Elmira .....	42.2	42.3	41.9	12.45	12.81	12.68	525.39	541.86	531.29
Nassau-Suffolk .....	41.1	40.4	41.1	12.34	12.61	12.52	507.17	509.44	514.57
New York PMSA .....	39.4	38.9	39.2	12.21	12.26	12.41	481.07	476.91	486.47
New York City .....	39.2	38.7	38.9	11.95	11.99	12.16	468.44	464.01	473.02
Newburgh .....	40.3	39.5	40.4	11.31	11.34	11.14	455.79	447.93	450.06
Rochester .....	43.7	43.4	43.4	14.87	15.22	15.33	649.82	660.55	665.32
Rockland County .....	42.6	42.6	43.2	16.27	16.00	15.82	693.10	681.60	683.42
Syracuse .....	43.4	42.2	42.2	14.41	14.51	14.38	625.39	612.32	606.84
Utica-Rome .....	40.8	39.1	40.0	11.68	12.00	12.19	476.54	469.20	487.60
Westchester County .....	39.9	40.3	40.2	12.78	13.04	13.05	509.92	525.51	524.61
<b>North Carolina</b> .....	41.8	41.1	41.3	11.55	11.90	11.95	482.79	489.09	493.54
Asheville .....	43.2	41.3	41.7	11.38	11.49	11.41	491.62	474.54	475.80
Charlotte-Gastonia-Rock Hill .....	41.4	41.2	41.6	12.46	12.88	12.95	515.84	530.66	538.72
Greensboro-Winston-Salem-High Point .....	41.4	40.5	40.5	11.91	12.19	12.26	493.07	493.70	496.53
Raleigh-Durham-Chapel Hill .....	41.9	42.7	42.7	12.70	12.90	12.94	532.13	550.83	552.54
<b>North Dakota</b> .....	39.4	40.1	38.0	11.42	11.55	11.45	449.95	463.16	435.10
Fargo-Moorhead .....	40.2	39.5	38.7	11.40	11.15	11.14	458.28	440.43	431.12
<b>Ohio</b> .....	44.3	43.2	43.4	15.67	15.98	16.02	694.18	690.34	695.27
Akron .....	44.0	42.2	43.3	12.83	13.19	13.25	564.52	556.62	573.73
Canton-Massillon .....	43.4	40.9	40.9	13.84	14.04	13.95	600.66	574.24	570.56
Cincinnati .....	44.5	43.6	44.0	14.91	15.44	15.47	663.50	673.18	680.68
Cleveland-Lorain-Elyria .....	44.7	43.0	43.2	15.24	15.55	15.57	681.23	668.65	672.62
Columbus .....	43.1	42.1	42.4	14.62	15.20	15.00	630.12	639.92	636.00
Dayton-Springfield .....	45.0	43.5	44.0	16.87	17.35	17.54	759.15	754.73	771.76
Hamilton-Middletown .....	46.7	45.4	46.2	17.13	17.37	17.54	799.97	788.60	810.35
Lima .....	44.7	43.3	43.2	16.35	16.43	16.56	730.85	711.42	715.39
Mansfield .....	44.5	43.1	43.1	16.52	17.15	16.94	735.14	739.17	730.11
Steubenville-Weirton .....	41.9	40.5	40.2	16.61	18.09	17.82	695.96	732.65	716.36
Toledo .....	44.5	43.5	43.2	16.91	17.40	17.40	752.50	756.90	751.68
Youngstown-Warren .....	43.8	41.4	43.0	17.83	17.84	18.12	780.95	738.58	779.16
<b>Oklahoma</b> .....	43.4	41.4	41.3	12.61	12.57	12.76	547.27	520.40	526.99
Oklahoma City .....	44.9	43.0	41.8	14.03	13.69	14.14	629.95	588.67	591.05
Tulsa .....	44.0	41.5	42.3	13.02	13.38	13.33	572.88	555.27	563.86
<b>Oregon</b> .....	41.2	40.8	41.6	13.64	14.20	14.47	561.97	579.36	601.95
Eugene-Springfield .....	40.0	41.4	41.4	12.84	13.37	13.59	513.60	553.52	562.63
Medford-Ashland .....	40.6	39.3	40.2	12.54	13.08	13.12	509.12	514.04	527.42
Portland-Vancouver .....	41.9	41.2	41.9	13.84	14.55	14.74	579.90	599.46	617.61
Salem .....	40.0	40.6	41.1	11.68	12.07	12.42	467.20	490.04	510.46
<b>Pennsylvania</b> .....	42.7	41.9	42.3	13.93	14.08	14.14	594.81	589.95	598.12
Allentown-Bethlehem-Easton .....	43.3	42.4	43.0	14.25	14.64	14.81	617.03	620.74	636.83
Altoona .....	41.0	40.9	40.3	11.85	12.26	12.46	485.85	501.43	502.14
Erie .....	44.9	44.0	43.9	14.10	13.98	14.05	633.09	615.12	616.80
Harrisburg-Lebanon-Carlisle .....	40.5	39.8	40.0	13.27	14.01	14.07	537.44	557.60	562.80
Johnstown .....	39.0	39.4	39.9	10.46	10.54	10.60	407.94	415.28	422.94
Lancaster .....	41.7	40.6	41.0	13.03	12.99	13.01	543.35	527.39	533.41
Philadelphia PMSA .....	42.1	41.3	41.8	15.10	15.48	15.52	635.71	639.32	648.74
Pittsburgh .....	43.5	42.5	43.0	14.86	15.00	15.02	646.41	637.50	645.86
Reading .....	42.4	42.1	42.5	15.30	15.11	15.14	648.72	636.13	643.45
Scranton-Wilkes-Barre-Hazleton .....	41.8	40.8	41.2	12.64	12.85	12.84	528.35	524.28	529.01
Sharon .....	43.8	43.7	44.3	15.01	15.27	15.38	657.44	667.30	681.33
State College .....	44.1	41.3	42.9	12.35	12.09	12.48	544.64	499.32	535.39
Williamsport .....	42.3	40.6	41.3	10.94	11.52	11.57	462.76	467.71	477.84
York .....	43.1	42.9	44.5	14.21	14.70	14.98	612.45	630.63	666.61

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		
	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>	November 1997	October 1998	November 1998 <sup>P</sup>
<b>Rhode Island</b> .....	41.8	39.8	40.4	\$11.55	\$11.67	\$11.73	\$482.79	\$464.47	\$473.89
Providence-Fall River-Warwick .....	42.2	40.5	41.0	11.67	11.93	12.11	492.47	483.17	496.51
<b>South Carolina</b> .....	42.7	42.7	42.7	10.41	10.55	10.57	444.51	450.49	451.34
<b>South Dakota</b> .....	42.1	42.2	42.5	10.00	10.47	10.39	421.00	441.83	441.58
Rapid City .....	42.3	43.1	40.2	9.67	10.33	10.56	409.04	445.22	424.51
Sioux Falls .....	42.7	45.1	43.6	10.45	10.85	10.84	446.22	489.34	472.62
<b>Tennessee</b> .....	41.8	40.7	41.0	11.94	12.05	12.06	499.09	490.44	494.46
Chattanooga .....	41.9	41.5	42.3	10.80	11.26	11.30	452.52	467.29	477.99
Johnson City-Kingsport-Bristol .....	40.0	38.8	39.1	12.66	13.00	12.92	506.40	504.40	505.17
Knoxville .....	41.7	41.2	42.0	11.84	11.95	11.95	493.73	492.34	501.90
Memphis .....	42.0	40.0	40.5	12.44	13.07	12.88	522.48	522.80	521.64
Nashville .....	41.8	40.6	40.7	13.08	12.87	13.06	546.74	522.52	531.54
<b>Texas</b> .....	44.1	43.6	43.7	12.09	12.19	12.16	533.17	531.48	531.39
Dallas .....	43.6	43.0	42.9	12.18	12.36	12.38	531.05	531.48	531.10
Ft. Worth-Arlington .....	44.1	44.0	44.0	12.91	12.99	12.99	569.33	571.56	571.56
Houston .....	46.8	45.0	44.7	14.32	14.46	14.58	670.18	650.70	651.73
San Antonio .....	42.4	41.3	41.3	9.86	9.76	9.78	418.06	403.09	403.91
<b>Utah</b> .....	41.5	40.4	40.9	12.92	13.18	13.20	536.18	532.47	539.88
Salt Lake City-Ogden .....	40.9	40.0	40.8	12.67	13.03	13.00	518.20	521.20	530.40
<b>Vermont</b> .....	40.8	40.2	40.0	12.78	13.04	13.30	521.42	524.21	532.00
Burlington .....	45.4	43.5	43.7	13.48	13.90	14.85	611.99	604.65	648.95
<b>Virginia</b> .....	42.6	42.4	42.8	12.73	12.84	13.03	542.30	544.42	557.68
Bristol .....	43.0	42.8	42.4	10.66	10.86	10.81	458.38	464.81	458.34
Charlottesville .....	42.5	43.5	46.5	10.29	10.66	10.70	437.33	463.71	497.55
Danville .....	42.4	41.6	41.3	12.39	12.49	12.84	525.34	519.58	530.29
Lynchburg .....	44.6	44.1	51.3	12.74	12.80	12.83	568.20	564.48	658.18
Norfolk-Virginia Beach-Newport News .....	44.4	40.6	40.8	15.07	14.64	14.78	669.11	594.38	603.02
Northern Virginia .....	41.4	41.3	41.9	13.00	13.25	13.49	538.20	547.23	565.23
Richmond-Petersburg .....	42.9	42.1	42.3	15.97	16.22	16.08	685.11	682.86	680.18
Roanoke .....	41.9	40.9	42.7	14.77	13.89	14.48	618.86	568.10	618.30
<b>Washington</b> .....	41.5	41.4	41.3	15.40	15.93	16.03	639.10	659.50	662.04
<b>West Virginia</b> .....	42.4	41.7	42.3	13.40	13.83	14.15	568.16	576.71	598.55
Charleston .....	47.6	49.2	48.2	14.87	16.26	16.51	707.81	799.99	795.78
Huntington-Ashland .....	43.7	44.3	44.9	14.95	15.50	15.95	653.32	686.65	716.16
Parkersburg-Marietta .....	43.1	42.0	42.6	16.92	17.34	17.50	729.25	728.28	745.50
Wheeling .....	41.6	40.9	41.3	16.68	17.28	17.32	693.89	706.75	715.32
<b>Wisconsin</b> .....	43.0	42.0	42.6	13.93	14.14	14.25	598.99	593.88	607.05
Appleton-Oshkosh-Neenah .....	45.4	44.0	44.5	15.32	15.41	15.58	695.53	678.04	693.31
Eau Claire .....	41.6	41.7	42.8	12.58	12.76	12.76	523.33	532.09	546.13
Green Bay .....	43.5	42.7	42.6	15.04	15.47	15.87	654.24	660.57	676.06
Janesville-Beloit .....	47.3	44.0	46.0	17.52	19.10	18.55	828.70	840.40	853.30
Kenosha .....	42.0	38.6	39.2	15.61	16.04	16.68	655.62	619.14	653.86
La Crosse .....	43.9	41.4	43.3	11.72	12.33	12.45	514.51	510.46	539.09
Madison .....	42.4	40.4	41.3	12.54	13.33	13.11	531.70	538.53	541.44
Milwaukee-Waukesha .....	42.5	42.0	42.3	15.03	15.09	15.34	638.78	633.76	648.88
Racine .....	45.1	41.4	42.8	14.52	14.67	14.40	654.85	607.34	616.32
Sheboygan .....	42.6	44.1	44.5	13.11	14.10	14.01	558.49	621.81	623.45
Wausau .....	44.1	41.8	42.5	13.31	13.73	13.69	586.97	573.91	581.83
<b>Wyoming</b> .....	40.6	40.7	41.2	14.72	15.34	15.08	597.63	624.34	621.30
<b>Puerto Rico</b> .....	40.3	41.7	42.0	8.33	8.75	8.78	335.70	364.88	368.76
<b>Virgin Islands</b> .....	45.3	39.7	42.2	18.26	18.80	18.79	827.18	746.36	792.94

<sup>P</sup> = preliminary.

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

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

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

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

(Numbers in thousands)

Census region and division	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>NORTHEAST</b>													
Civilian labor force .....	26,114.2	26,078.5	26,077.0	26,097.5	26,105.9	26,045.2	26,062.1	26,044.0	26,044.0	26,028.2	26,057.1	26,056.5	26,085.0
Employed .....	24,769.1	24,758.5	24,799.0	24,806.3	24,797.5	24,826.0	24,832.4	24,848.1	24,851.0	24,860.5	24,853.6	24,854.1	24,898.2
Unemployed .....	1,345.1	1,320.0	1,278.0	1,291.1	1,308.4	1,219.2	1,229.7	1,196.0	1,192.9	1,167.7	1,203.5	1,202.4	1,186.8
Unemployment rate .....	5.2	5.1	4.9	4.9	5.0	4.7	4.7	4.6	4.6	4.5	4.6	4.6	4.5
<b>New England</b>													
Civilian labor force .....	7,137.9	7,132.8	7,130.7	7,123.0	7,139.0	7,103.1	7,125.0	7,106.9	7,103.2	7,101.8	7,119.4	7,142.5	7,153.1
Employed .....	6,839.4	6,840.1	6,861.1	6,864.6	6,862.8	6,860.0	6,860.7	6,854.4	6,863.4	6,868.9	6,865.7	6,882.6	6,908.4
Unemployed .....	298.5	292.7	269.7	258.4	276.2	243.1	264.3	252.4	239.8	232.9	253.7	259.9	244.7
Unemployment rate .....	4.2	4.1	3.8	3.6	3.9	3.4	3.7	3.6	3.4	3.3	3.6	3.6	3.4
<b>Middle Atlantic</b>													
Civilian labor force .....	18,976.3	18,945.7	18,946.3	18,974.5	18,966.9	18,942.1	18,937.2	18,937.2	18,940.8	18,926.4	18,937.8	18,914.0	18,931.9
Employed .....	17,929.8	17,918.4	17,937.9	17,941.7	17,934.7	17,966.0	17,971.7	17,993.6	17,987.6	17,991.6	17,987.9	17,971.5	17,989.8
Unemployed .....	1,046.5	1,027.3	1,008.3	1,032.7	1,032.2	976.1	965.5	943.5	953.1	934.8	949.9	942.5	942.1
Unemployment rate .....	5.5	5.4	5.3	5.4	5.4	5.2	5.1	5.0	5.0	4.9	5.0	5.0	5.0
<b>SOUTH</b>													
Civilian labor force .....	47,600.5	47,694.8	47,816.2	47,818.3	47,879.6	47,935.3	47,977.2	47,985.4	48,070.4	48,129.5	48,247.0	48,330.6	48,266.6
Employed .....	45,387.7	45,523.3	45,689.9	45,752.0	45,761.0	45,865.9	45,924.5	45,916.9	45,983.1	46,001.2	46,139.8	46,222.7	46,213.4
Unemployed .....	2,212.8	2,171.5	2,126.3	2,066.4	2,118.6	2,069.5	2,052.7	2,068.5	2,087.3	2,128.4	2,107.2	2,107.9	2,053.2
Unemployment rate .....	4.6	4.6	4.4	4.3	4.4	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.3
<b>South Atlantic</b>													
Civilian labor force .....	24,635.4	24,677.1	24,738.2	24,765.7	24,763.1	24,800.5	24,788.8	24,783.2	24,836.0	24,863.9	24,918.9	24,978.6	24,988.8
Employed .....	23,575.5	23,630.4	23,695.5	23,724.7	23,720.6	23,786.9	23,785.3	23,784.1	23,831.0	23,842.1	23,939.4	23,970.2	23,993.1
Unemployed .....	1,060.0	1,046.7	1,042.6	1,041.0	1,042.5	1,013.6	1,003.4	999.0	1,005.1	1,021.8	979.5	1,008.4	995.7
Unemployment rate .....	4.3	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	4.1	3.9	4.0	4.0
<b>East South Central</b>													
Civilian labor force .....	8,135.3	8,145.8	8,144.8	8,136.3	8,167.0	8,148.8	8,146.5	8,127.4	8,135.7	8,150.9	8,162.3	8,178.4	8,162.9
Employed .....	7,725.7	7,748.2	7,775.6	7,785.3	7,784.1	7,791.0	7,791.4	7,794.2	7,806.2	7,805.5	7,809.0	7,823.9	7,818.3
Unemployed .....	409.7	397.5	369.1	351.0	382.8	357.7	355.0	333.2	329.6	345.4	353.3	354.6	344.6
Unemployment rate .....	5.0	4.9	4.5	4.3	4.7	4.4	4.4	4.1	4.1	4.2	4.3	4.3	4.2
<b>West South Central</b>													
Civilian labor force .....	14,829.8	14,871.9	14,933.3	14,916.3	14,949.5	14,986.1	15,041.9	15,074.9	15,098.6	15,114.7	15,165.8	15,173.5	15,114.9
Employed .....	14,086.6	14,144.7	14,218.8	14,241.9	14,256.2	14,288.0	14,347.7	14,338.6	14,345.9	14,353.5	14,391.4	14,428.6	14,402.0
Unemployed .....	743.2	727.2	714.5	674.4	693.3	698.1	694.2	736.3	752.7	761.2	774.4	744.9	712.9
Unemployment rate .....	5.0	4.9	4.8	4.5	4.6	4.7	4.6	4.9	5.0	5.0	5.1	4.9	4.7

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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>MIDWEST</b>													
Civilian labor force .....	33,170.2	33,246.3	33,363.0	33,376.7	33,383.1	33,299.7	33,302.6	33,302.1	33,332.3	33,300.0	33,372.4	33,419.8	33,427.0
Employed .....	31,877.5	31,959.7	32,117.0	32,147.6	32,126.5	32,167.9	32,129.1	32,090.8	32,077.3	32,122.4	32,163.9	32,222.4	32,225.7
Unemployed .....	1,292.6	1,286.6	1,246.0	1,229.1	1,256.6	1,131.8	1,173.4	1,211.3	1,255.0	1,177.6	1,208.5	1,197.4	1,201.4
Unemployment rate .....	3.9	3.9	3.7	3.7	3.8	3.4	3.5	3.6	3.8	3.5	3.6	3.6	3.6
<b>East North Central</b>													
Civilian labor force .....	22,987.8	23,027.2	23,113.2	23,114.8	23,134.0	23,025.2	23,014.4	23,031.4	23,060.8	23,028.3	23,082.2	23,144.1	23,146.1
Employed .....	22,024.9	22,068.0	22,182.4	22,197.5	22,209.7	22,214.2	22,170.8	22,135.9	22,120.1	22,156.4	22,177.7	22,250.6	22,252.0
Unemployed .....	962.9	959.3	930.8	917.3	924.3	811.1	843.6	895.4	940.7	872.0	904.5	893.5	894.2
Unemployment rate .....	4.2	4.2	4.0	4.0	4.0	3.5	3.7	3.9	4.1	3.8	3.9	3.9	3.9
<b>West North Central</b>													
Civilian labor force .....	10,182.3	10,219.1	10,249.8	10,262.0	10,249.1	10,274.4	10,288.1	10,270.8	10,271.5	10,271.7	10,290.2	10,275.7	10,280.9
Employed .....	9,852.6	9,891.7	9,934.6	9,950.1	9,916.8	9,953.7	9,958.4	9,954.9	9,957.1	9,966.0	9,986.2	9,971.7	9,973.7
Unemployed .....	329.7	327.4	315.2	311.8	332.3	320.7	329.8	315.9	314.4	305.6	304.0	303.9	307.2
Unemployment rate .....	3.2	3.2	3.1	3.0	3.2	3.1	3.2	3.1	3.1	3.0	3.0	3.0	3.0
<b>WEST</b>													
Civilian labor force .....	30,323.8	30,425.5	30,478.9	30,513.8	30,617.8	30,604.4	30,693.6	30,674.8	30,772.6	30,786.6	30,935.6	30,953.1	30,945.6
Employed .....	28,713.7	28,819.0	28,893.5	28,944.5	29,004.2	29,000.4	29,091.3	29,072.9	29,192.7	29,172.0	29,261.3	29,315.2	29,353.1
Unemployed .....	1,610.2	1,606.5	1,585.4	1,569.3	1,613.7	1,604.0	1,602.3	1,601.9	1,579.9	1,614.7	1,674.3	1,637.9	1,592.6
Unemployment rate .....	5.3	5.3	5.2	5.1	5.3	5.2	5.2	5.2	5.1	5.2	5.4	5.3	5.1
<b>Mountain</b>													
Civilian labor force .....	8,550.2	8,599.7	8,633.8	8,672.2	8,685.1	8,711.3	8,714.1	8,717.9	8,747.2	8,770.9	8,809.9	8,830.8	8,834.5
Employed .....	8,201.2	8,250.1	8,298.2	8,323.7	8,317.0	8,336.5	8,351.7	8,350.0	8,386.7	8,404.8	8,437.5	8,468.9	8,474.3
Unemployed .....	349.0	349.7	335.6	348.5	368.1	374.8	362.3	367.9	360.5	366.2	372.5	361.9	360.2
Unemployment rate .....	4.1	4.1	3.9	4.0	4.2	4.3	4.2	4.2	4.1	4.2	4.2	4.1	4.1
<b>Pacific</b>													
Civilian labor force .....	21,773.6	21,825.8	21,845.1	21,841.6	21,932.8	21,893.1	21,979.6	21,956.9	22,025.4	22,015.7	22,125.7	22,122.3	22,111.2
Employed .....	20,512.5	20,569.0	20,595.3	20,620.8	20,687.2	20,663.9	20,739.6	20,722.9	20,806.0	20,767.2	20,823.8	20,846.3	20,878.8
Unemployed .....	1,261.1	1,256.8	1,249.8	1,220.8	1,245.6	1,229.2	1,240.0	1,234.0	1,219.4	1,248.5	1,301.9	1,276.0	1,232.4
Unemployment rate .....	5.8	5.8	5.7	5.6	5.7	5.6	5.6	5.6	5.5	5.7	5.9	5.8	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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>Alabama</b>													
Civilian labor force .....	2,164.6	2,154.1	2,146.3	2,141.6	2,149.9	2,137.4	2,144.7	2,142.5	2,146.1	2,145.6	2,152.1	2,158.6	2,153.2
Employed .....	2,061.9	2,055.0	2,057.3	2,059.8	2,060.0	2,058.8	2,057.9	2,060.7	2,067.8	2,065.5	2,061.6	2,064.4	2,062.1
Unemployed .....	102.7	99.1	89.1	81.8	89.9	78.7	86.7	81.8	78.3	80.1	90.5	94.2	91.0
Unemployment rate .....	4.7	4.6	4.1	3.8	4.2	3.7	4.0	3.8	3.7	3.7	4.2	4.4	4.2
<b>Alaska</b>													
Civilian labor force .....	317.4	318.5	317.6	318.0	317.4	316.3	318.5	319.6	317.8	318.9	318.9	321.0	317.7
Employed .....	294.4	295.9	297.8	297.9	298.5	298.3	299.6	299.3	298.0	300.1	300.1	301.5	301.1
Unemployed .....	23.1	22.6	19.8	20.1	19.0	18.1	18.9	20.3	19.8	18.9	18.8	19.5	16.6
Unemployment rate .....	7.3	7.1	6.2	6.3	6.0	5.7	5.9	6.4	6.2	5.9	5.9	6.1	5.2
<b>Arizona</b>													
Civilian labor force .....	2,211.5	2,237.7	2,243.0	2,252.4	2,263.3	2,269.5	2,262.2	2,254.4	2,268.3	2,284.6	2,297.7	2,282.4	2,293.0
Employed .....	2,116.8	2,144.7	2,159.2	2,163.0	2,164.4	2,169.8	2,169.8	2,164.1	2,181.9	2,189.9	2,201.7	2,201.4	2,202.0
Unemployed .....	94.7	93.0	83.8	89.3	99.0	99.6	92.5	90.3	86.4	94.8	96.1	80.9	91.0
Unemployment rate .....	4.3	4.2	3.7	4.0	4.4	4.4	4.1	4.0	3.8	4.1	4.2	3.5	4.0
<b>Arkansas</b>													
Civilian labor force .....	1,229.7	1,240.6	1,245.8	1,243.9	1,248.9	1,249.5	1,247.1	1,243.1	1,241.1	1,240.7	1,241.8	1,248.4	1,247.5
Employed .....	1,167.9	1,178.5	1,180.2	1,178.5	1,178.8	1,184.4	1,182.3	1,182.9	1,183.1	1,184.3	1,179.7	1,180.6	1,181.7
Unemployed .....	61.7	62.1	65.6	65.4	70.1	65.1	64.8	60.2	58.0	56.3	62.2	67.8	65.7
Unemployment rate .....	5.0	5.0	5.3	5.3	5.6	5.2	5.2	4.8	4.7	4.5	5.0	5.4	5.3
<b>California</b>													
Civilian labor force .....	16,086.1	16,122.8	16,114.0	16,147.0	16,218.2	16,215.1	16,247.1	16,262.2	16,321.6	16,310.3	16,351.0	16,310.5	16,311.5
Employed .....	15,112.5	15,151.8	15,145.7	15,189.0	15,238.2	15,251.1	15,286.6	15,319.7	15,395.2	15,358.1	15,363.9	15,341.6	15,378.5
Unemployed .....	973.6	971.0	968.3	958.0	980.0	964.0	960.4	942.5	926.4	952.2	987.1	968.9	933.1
Unemployment rate .....	6.1	6.0	6.0	5.9	6.0	5.9	5.9	5.8	5.7	5.8	6.0	5.9	5.7
<b>Colorado</b>													
Civilian labor force .....	2,196.4	2,199.7	2,216.2	2,232.9	2,231.4	2,240.5	2,245.3	2,246.9	2,250.8	2,252.6	2,263.4	2,279.3	2,267.4
Employed .....	2,129.0	2,132.8	2,153.1	2,165.7	2,161.5	2,165.1	2,173.9	2,170.4	2,175.6	2,178.0	2,182.8	2,194.9	2,190.0
Unemployed .....	67.4	66.9	63.1	67.2	69.9	75.3	71.4	76.5	75.1	74.6	80.6	84.4	77.4
Unemployment rate .....	3.1	3.0	2.8	3.0	3.1	3.4	3.2	3.4	3.3	3.3	3.6	3.7	3.4
<b>Connecticut</b>													
Civilian labor force .....	1,726.6	1,728.2	1,720.0	1,716.8	1,722.4	1,714.9	1,721.1	1,718.0	1,709.3	1,715.8	1,722.3	1,720.7	1,725.6
Employed .....	1,646.6	1,650.7	1,654.7	1,651.8	1,653.0	1,647.7	1,655.8	1,652.7	1,650.3	1,656.0	1,655.5	1,655.7	1,660.2
Unemployed .....	80.0	77.5	65.3	65.0	69.4	67.1	65.3	65.3	59.0	59.8	66.9	65.0	65.4
Unemployment rate .....	4.6	4.5	3.8	3.8	4.0	3.9	3.8	3.8	3.5	3.5	3.9	3.8	3.8
<b>Delaware</b>													
Civilian labor force .....	383.9	387.0	387.9	388.7	393.2	393.2	393.9	394.4	395.5	393.2	394.0	397.6	397.2
Employed .....	371.2	374.0	374.6	375.0	379.6	378.3	377.7	378.5	379.3	379.1	380.6	383.5	382.9
Unemployed .....	12.7	13.0	13.3	13.6	13.6	14.9	16.2	15.9	16.1	14.1	13.4	14.1	14.3
Unemployment rate .....	3.3	3.4	3.4	3.5	3.5	3.8	4.1	4.0	4.1	3.6	3.4	3.6	3.6
<b>District of Columbia</b>													
Civilian labor force .....	255.6	255.7	258.5	260.6	260.6	268.4	267.1	265.3	261.5	264.3	261.0	260.6	259.2
Employed .....	234.8	234.9	236.7	237.0	236.3	244.6	245.3	243.6	239.8	241.0	237.9	237.1	236.8
Unemployed .....	20.8	20.8	21.8	23.6	24.2	23.8	21.8	21.7	21.7	23.3	23.2	23.5	22.4
Unemployment rate .....	8.1	8.1	8.4	9.1	9.3	8.9	8.2	8.2	8.3	8.8	8.9	9.0	8.6
<b>Florida</b>													
Civilian labor force .....	7,221.2	7,253.6	7,265.1	7,258.3	7,269.7	7,302.6	7,299.6	7,316.7	7,327.3	7,340.2	7,345.5	7,359.0	7,347.8
Employed .....	6,884.3	6,916.0	6,927.2	6,922.1	6,923.3	6,959.8	6,970.9	6,985.5	7,010.9	7,020.5	7,038.4	7,036.7	7,029.8
Unemployed .....	337.0	337.7	337.8	336.1	346.4	342.9	328.7	331.1	316.3	319.6	307.1	322.3	318.0
Unemployment rate .....	4.7	4.7	4.7	4.6	4.8	4.7	4.5	4.5	4.3	4.4	4.2	4.4	4.3

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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>Georgia</b>													
Civilian labor force .....	3,928.5	3,918.0	3,928.7	3,950.0	3,931.6	3,960.4	3,951.7	3,963.4	3,967.1	3,972.7	4,003.6	4,001.6	4,021.0
Employed .....	3,764.4	3,759.1	3,771.7	3,786.3	3,772.5	3,802.7	3,791.2	3,801.1	3,807.0	3,811.0	3,848.2	3,846.1	3,859.9
Unemployed .....	164.2	158.9	157.0	163.6	159.1	157.7	160.5	162.2	160.1	161.7	155.4	155.4	161.1
Unemployment rate .....	4.2	4.1	4.0	4.1	4.0	4.0	4.1	4.1	4.0	4.1	3.9	3.9	4.0
<b>Hawaii</b>													
Civilian labor force .....	592.5	593.1	593.4	592.8	592.9	592.3	593.4	592.4	596.2	596.9	600.8	599.0	595.8
Employed .....	557.1	557.7	560.4	558.7	558.6	561.0	559.0	556.9	561.4	563.1	564.2	564.0	560.7
Unemployed .....	35.4	35.4	33.0	34.1	34.4	31.3	34.5	35.5	34.8	33.8	36.6	35.0	35.2
Unemployment rate .....	6.0	6.0	5.6	5.7	5.8	5.3	5.8	6.0	5.8	5.7	6.1	5.8	5.9
<b>Idaho</b>													
Civilian labor force .....	638.4	641.0	640.1	641.7	644.8	646.7	647.2	645.1	646.9	653.4	663.2	662.7	663.8
Employed .....	605.8	607.4	608.1	609.5	611.2	613.5	616.4	612.8	615.5	621.4	630.2	629.4	632.1
Unemployed .....	32.6	33.6	32.0	32.2	33.5	33.2	30.9	32.3	31.4	32.0	33.0	33.3	31.8
Unemployment rate .....	5.1	5.2	5.0	5.0	5.2	5.1	4.8	5.0	4.9	4.9	5.0	5.0	4.8
<b>Illinois</b>													
Civilian labor force .....	6,156.7	6,162.1	6,190.5	6,186.3	6,189.1	6,142.1	6,131.4	6,156.8	6,177.7	6,137.4	6,163.5	6,186.4	6,166.6
Employed .....	5,861.9	5,867.0	5,887.8	5,902.8	5,909.1	5,886.2	5,889.7	5,878.7	5,902.1	5,877.9	5,885.0	5,916.1	5,890.0
Unemployed .....	294.8	295.1	302.7	283.6	280.0	255.9	241.8	278.1	275.7	259.5	278.6	270.2	276.6
Unemployment rate .....	4.8	4.8	4.9	4.6	4.5	4.2	3.9	4.5	4.5	4.2	4.5	4.4	4.5
<b>Indiana</b>													
Civilian labor force .....	3,113.8	3,113.0	3,115.4	3,111.1	3,133.9	3,117.3	3,092.6	3,081.6	3,079.9	3,089.9	3,095.0	3,104.7	3,122.4
Employed .....	3,004.6	3,003.9	3,013.6	3,010.6	3,027.0	3,030.1	3,003.7	2,993.9	3,000.3	3,006.2	2,999.1	3,018.8	3,029.6
Unemployed .....	109.2	109.1	101.8	100.5	106.9	87.2	88.9	87.7	79.5	83.8	95.9	85.9	92.8
Unemployment rate .....	3.5	3.5	3.3	3.2	3.4	2.8	2.9	2.8	2.6	2.7	3.1	2.8	3.0
<b>Iowa</b>													
Civilian labor force .....	1,573.9	1,581.7	1,589.9	1,594.3	1,588.6	1,582.9	1,581.9	1,574.5	1,566.7	1,571.0	1,581.1	1,567.2	1,568.5
Employed .....	1,528.6	1,535.7	1,545.4	1,552.9	1,547.1	1,544.7	1,545.3	1,534.7	1,527.0	1,531.0	1,539.3	1,525.8	1,528.7
Unemployed .....	45.3	46.0	44.5	41.4	41.5	38.2	36.7	39.8	39.7	40.0	41.8	41.4	39.9
Unemployment rate .....	2.9	2.9	2.8	2.6	2.6	2.4	2.3	2.5	2.5	2.5	2.6	2.6	2.5
<b>Kansas</b>													
Civilian labor force .....	1,394.0	1,404.4	1,407.7	1,409.7	1,409.8	1,414.6	1,418.9	1,413.2	1,419.3	1,422.5	1,424.7	1,429.4	1,428.1
Employed .....	1,343.4	1,351.6	1,358.9	1,362.0	1,360.3	1,366.9	1,368.6	1,363.2	1,366.5	1,371.7	1,371.8	1,377.5	1,376.2
Unemployed .....	50.6	52.7	48.8	47.7	49.5	47.7	50.3	50.0	52.8	50.9	52.9	52.0	51.9
Unemployment rate .....	3.6	3.8	3.5	3.4	3.5	3.4	3.5	3.5	3.7	3.6	3.7	3.6	3.6
<b>Kentucky</b>													
Civilian labor force .....	1,938.7	1,937.2	1,931.3	1,936.3	1,945.8	1,938.9	1,938.9	1,944.6	1,936.9	1,950.9	1,943.5	1,946.1	1,945.9
Employed .....	1,843.8	1,844.9	1,842.9	1,856.5	1,858.9	1,861.0	1,857.3	1,858.7	1,855.4	1,864.5	1,863.5	1,863.2	1,864.1
Unemployed .....	94.9	92.3	88.4	79.9	86.9	77.8	81.6	85.8	81.5	86.3	80.0	83.0	81.8
Unemployment rate .....	4.9	4.8	4.6	4.1	4.5	4.0	4.2	4.4	4.2	4.4	4.1	4.3	4.2
<b>Louisiana</b>													
Civilian labor force .....	2,037.2	2,043.8	2,067.6	2,038.0	2,033.2	2,054.4	2,080.2	2,083.7	2,073.4	2,083.5	2,073.4	2,069.9	2,059.1
Employed .....	1,917.8	1,926.5	1,962.3	1,949.8	1,937.4	1,940.7	1,970.5	1,975.0	1,950.8	1,956.6	1,946.2	1,966.7	1,949.6
Unemployed .....	119.4	117.3	105.3	88.2	95.8	113.8	109.7	108.7	122.6	126.9	127.2	103.3	109.5
Unemployment rate .....	5.9	5.7	5.1	4.3	4.7	5.5	5.3	5.2	5.9	6.1	6.1	5.0	5.3
<b>Maine</b>													
Civilian labor force .....	659.0	661.1	660.9	657.9	655.0	653.3	654.1	650.6	652.2	654.1	649.6	661.0	666.4
Employed .....	624.0	626.3	627.7	627.6	626.6	627.1	629.0	624.4	622.1	625.3	621.5	631.2	637.8
Unemployed .....	35.0	34.9	33.1	30.3	28.4	26.2	25.1	26.1	30.2	28.8	28.1	29.7	28.6
Unemployment rate .....	5.3	5.3	5.0	4.6	4.3	4.0	3.8	4.0	4.6	4.4	4.3	4.5	4.3

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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P
<b>Maryland</b>													
Civilian labor force .....	2,789.1	2,790.8	2,803.7	2,802.1	2,796.9	2,793.0	2,783.7	2,776.5	2,789.0	2,788.3	2,779.1	2,793.2	2,797.7
Employed .....	2,651.8	2,657.1	2,668.8	2,667.2	2,666.5	2,668.0	2,657.0	2,652.8	2,656.3	2,654.3	2,659.1	2,677.9	2,678.1
Unemployed .....	137.4	133.7	134.9	134.9	130.4	125.0	126.7	123.7	132.7	134.0	119.9	115.3	119.5
Unemployment rate .....	4.9	4.8	4.8	4.8	4.7	4.5	4.6	4.5	4.8	4.8	4.3	4.1	4.3
<b>Massachusetts</b>													
Civilian labor force .....	3,263.2	3,254.5	3,258.8	3,258.3	3,268.4	3,244.7	3,263.7	3,255.7	3,255.0	3,251.6	3,265.2	3,273.4	3,269.4
Employed .....	3,136.8	3,130.3	3,141.8	3,149.4	3,146.5	3,148.8	3,144.1	3,144.5	3,153.7	3,154.8	3,157.3	3,163.7	3,173.6
Unemployed .....	126.4	124.3	116.9	108.9	121.9	95.8	119.6	111.2	101.3	96.7	107.9	109.8	95.7
Unemployment rate .....	3.9	3.8	3.6	3.3	3.7	3.0	3.7	3.4	3.1	3.0	3.3	3.4	2.9
<b>Michigan</b>													
Civilian labor force .....	5,003.4	5,013.0	5,047.2	5,051.1	5,047.6	5,033.7	5,038.8	5,033.4	5,016.7	5,032.8	5,055.4	5,079.3	5,084.6
Employed .....	4,804.4	4,815.7	4,849.4	4,846.1	4,848.8	4,857.2	4,850.9	4,852.3	4,807.0	4,852.1	4,871.7	4,892.8	4,903.1
Unemployed .....	199.0	197.3	197.7	205.0	198.8	176.6	187.9	181.2	209.7	180.7	183.7	186.5	181.5
Unemployment rate .....	4.0	3.9	3.9	4.1	3.9	3.5	3.7	3.6	4.2	3.6	3.6	3.7	3.6
<b>Minnesota</b>													
Civilian labor force .....	2,660.8	2,670.8	2,672.5	2,675.4	2,684.1	2,693.6	2,698.3	2,699.5	2,698.3	2,693.5	2,698.6	2,691.1	2,702.3
Employed .....	2,581.2	2,593.5	2,600.0	2,606.3	2,607.0	2,624.2	2,623.8	2,630.0	2,636.5	2,636.5	2,634.4	2,632.0	2,636.7
Unemployed .....	79.6	77.3	72.6	69.1	77.1	69.4	74.5	69.5	61.9	57.0	64.3	59.1	65.6
Unemployment rate .....	3.0	2.9	2.7	2.6	2.9	2.6	2.8	2.6	2.3	2.1	2.4	2.2	2.4
<b>Mississippi</b>													
Civilian labor force .....	1,278.4	1,279.3	1,284.8	1,281.5	1,289.9	1,282.4	1,283.5	1,273.6	1,280.3	1,279.1	1,284.6	1,286.3	1,283.2
Employed .....	1,208.8	1,213.7	1,214.9	1,212.4	1,214.5	1,214.1	1,217.4	1,215.0	1,217.5	1,214.4	1,216.4	1,221.6	1,220.1
Unemployed .....	69.6	65.6	69.8	69.1	75.4	68.3	66.0	58.7	62.9	64.7	68.2	64.7	63.1
Unemployment rate .....	5.4	5.1	5.4	5.4	5.8	5.3	5.1	4.6	4.9	5.1	5.3	5.0	4.9
<b>Missouri</b>													
Civilian labor force .....	2,892.5	2,895.0	2,911.3	2,911.7	2,894.8	2,911.4	2,915.7	2,908.5	2,906.6	2,907.7	2,909.7	2,908.1	2,900.3
Employed .....	2,775.6	2,779.2	2,796.3	2,793.0	2,770.2	2,781.9	2,783.9	2,786.0	2,785.5	2,788.6	2,802.3	2,797.2	2,792.8
Unemployed .....	116.9	115.7	115.0	118.7	124.7	129.6	131.8	122.5	121.2	119.1	107.4	110.9	107.5
Unemployment rate .....	4.0	4.0	4.0	4.1	4.3	4.4	4.5	4.2	4.2	4.1	3.7	3.8	3.7
<b>Montana</b>													
Civilian labor force .....	459.0	460.6	462.2	462.5	461.8	462.6	464.4	464.4	464.9	463.8	464.3	466.1	468.7
Employed .....	434.2	435.9	437.1	438.2	436.8	437.2	438.5	439.5	441.1	440.6	440.2	440.6	442.2
Unemployed .....	24.8	24.7	25.1	24.3	25.0	25.4	25.8	24.9	23.7	23.2	24.0	25.6	26.5
Unemployment rate .....	5.4	5.4	5.4	5.3	5.4	5.5	5.6	5.4	5.1	5.0	5.2	5.5	5.7
<b>Nebraska</b>													
Civilian labor force .....	919.0	923.6	924.2	926.2	926.8	928.7	927.2	927.2	932.3	931.6	930.0	931.0	932.8
Employed .....	899.9	905.9	907.6	908.4	906.3	910.5	908.8	911.6	912.3	910.3	910.7	909.9	910.0
Unemployed .....	19.1	17.7	16.6	17.9	20.5	18.2	18.4	15.6	20.0	21.3	19.3	21.1	22.8
Unemployment rate .....	2.1	1.9	1.8	1.9	2.2	2.0	2.0	1.7	2.1	2.3	2.1	2.3	2.4
<b>Nevada</b>													
Civilian labor force .....	897.1	900.6	905.7	911.4	909.6	914.5	915.8	920.6	924.9	926.6	931.4	942.7	948.0
Employed .....	861.7	864.8	866.7	869.7	867.2	870.4	872.9	880.4	885.7	887.4	896.1	907.4	912.9
Unemployed .....	35.4	35.8	39.0	41.8	42.4	44.1	42.9	40.2	39.3	39.2	35.3	35.3	35.1
Unemployment rate .....	3.9	4.0	4.3	4.6	4.7	4.8	4.7	4.4	4.2	4.2	3.8	3.7	3.7
<b>New Hampshire</b>													
Civilian labor force .....	653.2	651.2	653.3	652.7	652.0	653.5	655.2	653.8	653.3	647.8	648.7	654.4	657.2
Employed .....	633.7	632.1	635.4	634.6	632.7	634.9	635.5	636.0	638.0	634.1	633.0	635.8	636.7
Unemployed .....	19.5	19.1	17.9	18.1	19.3	18.6	19.6	17.8	15.4	13.7	15.7	18.7	20.4
Unemployment rate .....	3.0	2.9	2.7	2.8	3.0	2.8	3.0	2.7	2.4	2.1	2.4	2.9	3.1

See footnotes at end of table.

**STATE LABOR FORCE DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

State	1997		1998										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>New Jersey</b>													
Civilian labor force .....	4,186.2	4,178.1	4,181.8	4,185.9	4,192.5	4,188.9	4,185.0	4,193.9	4,187.6	4,184.2	4,190.0	4,183.0	4,177.7
Employed .....	3,979.3	3,971.6	3,977.1	3,975.3	3,978.5	3,974.9	3,975.7	3,991.8	3,983.9	3,982.1	3,993.1	3,992.3	3,991.1
Unemployed .....	206.9	206.6	204.7	210.6	214.0	214.1	209.3	202.1	203.7	202.1	196.9	190.6	186.5
Unemployment rate .....	4.9	4.9	4.9	5.0	5.1	5.1	5.0	4.8	4.9	4.8	4.7	4.6	4.5
<b>New Mexico</b>													
Civilian labor force .....	832.8	835.5	836.1	837.7	841.7	842.7	842.7	846.9	847.6	846.7	847.5	849.1	846.7
Employed .....	781.3	782.2	784.9	785.1	787.7	790.7	788.1	790.2	793.8	792.2	792.3	794.1	793.0
Unemployed .....	51.5	53.3	51.2	52.5	54.0	52.1	54.5	56.7	53.8	54.5	55.2	55.0	53.7
Unemployment rate .....	6.2	6.4	6.1	6.3	6.4	6.2	6.5	6.7	6.3	6.4	6.5	6.5	6.3
<b>New York</b>													
Civilian labor force .....	8,799.5	8,775.9	8,786.7	8,810.2	8,795.3	8,773.0	8,788.3	8,781.1	8,769.1	8,769.7	8,794.5	8,795.6	8,815.9
Employed .....	8,252.7	8,241.8	8,259.4	8,267.9	8,261.8	8,267.5	8,287.8	8,301.5	8,289.5	8,302.4	8,310.6	8,321.5	8,335.1
Unemployed .....	546.7	534.0	527.2	542.3	533.5	505.4	500.5	479.7	479.6	467.3	483.8	474.1	480.8
Unemployment rate .....	6.2	6.1	6.0	6.2	6.1	5.8	5.7	5.5	5.5	5.3	5.5	5.4	5.5
<b>North Carolina</b>													
Civilian labor force .....	3,843.3	3,828.0	3,842.0	3,847.8	3,846.9	3,823.1	3,807.1	3,776.3	3,792.0	3,803.9	3,819.9	3,827.2	3,822.3
Employed .....	3,704.0	3,688.2	3,703.7	3,706.5	3,698.0	3,683.1	3,680.8	3,661.0	3,668.1	3,668.1	3,685.9	3,689.4	3,695.7
Unemployed .....	139.4	139.8	138.4	141.3	148.8	140.1	126.3	115.3	123.9	135.9	133.9	137.9	126.6
Unemployment rate .....	3.6	3.7	3.6	3.7	3.9	3.7	3.3	3.1	3.3	3.6	3.5	3.6	3.3
<b>North Dakota</b>													
Civilian labor force .....	346.3	346.1	346.2	346.0	346.4	344.9	346.4	347.3	347.0	346.8	346.7	346.5	345.0
Employed .....	339.2	339.1	339.8	339.4	338.0	338.2	339.1	339.5	339.5	338.5	338.0	337.5	336.2
Unemployed .....	7.1	7.0	6.4	6.6	8.4	6.7	7.3	7.8	7.5	8.3	8.7	9.0	8.7
Unemployment rate .....	2.0	2.0	1.8	1.9	2.4	1.9	2.1	2.2	2.2	2.4	2.5	2.6	2.5
<b>Ohio</b>													
Civilian labor force .....	5,767.0	5,786.2	5,796.7	5,803.6	5,805.8	5,784.3	5,802.3	5,805.1	5,816.0	5,803.3	5,804.7	5,805.7	5,802.3
Employed .....	5,510.9	5,531.5	5,561.9	5,562.7	5,558.4	5,562.3	5,555.7	5,544.0	5,541.3	5,551.7	5,554.4	5,557.1	5,563.7
Unemployed .....	256.1	254.6	234.7	240.9	247.5	222.0	246.7	261.1	274.7	251.5	250.3	248.6	238.7
Unemployment rate .....	4.4	4.4	4.0	4.2	4.3	3.8	4.3	4.5	4.7	4.3	4.3	4.3	4.1
<b>Oklahoma</b>													
Civilian labor force .....	1,607.7	1,607.5	1,608.2	1,612.4	1,616.2	1,611.6	1,614.2	1,614.8	1,622.5	1,620.8	1,635.3	1,638.3	1,638.9
Employed .....	1,546.9	1,550.2	1,555.4	1,555.6	1,558.7	1,551.0	1,554.8	1,550.0	1,550.9	1,551.7	1,564.3	1,567.7	1,570.6
Unemployed .....	60.8	57.3	52.7	56.9	57.5	60.5	59.5	64.8	71.5	69.1	71.1	70.6	68.4
Unemployment rate .....	3.8	3.6	3.3	3.5	3.6	3.8	3.7	4.0	4.4	4.3	4.3	4.3	4.2
<b>Oregon</b>													
Civilian labor force .....	1,767.3	1,775.4	1,807.9	1,774.4	1,778.5	1,769.2	1,775.0	1,755.1	1,765.8	1,766.9	1,789.1	1,804.8	1,804.4
Employed .....	1,670.8	1,681.2	1,713.8	1,690.5	1,691.3	1,679.3	1,682.7	1,660.2	1,669.9	1,665.9	1,687.4	1,701.6	1,702.7
Unemployed .....	96.5	94.2	94.1	83.9	87.2	89.9	92.2	94.9	95.9	101.0	101.7	103.2	101.7
Unemployment rate .....	5.5	5.3	5.2	4.7	4.9	5.1	5.2	5.4	5.4	5.7	5.7	5.7	5.6
<b>Pennsylvania</b>													
Civilian labor force .....	5,990.7	5,991.7	5,977.8	5,978.3	5,979.1	5,980.2	5,963.8	5,962.1	5,984.1	5,972.5	5,953.3	5,935.5	5,938.4
Employed .....	5,697.7	5,705.0	5,701.4	5,698.5	5,694.3	5,723.6	5,708.3	5,700.4	5,714.2	5,707.1	5,684.2	5,657.7	5,663.5
Unemployed .....	292.9	286.7	276.4	279.8	284.8	256.6	255.6	261.7	269.9	265.4	269.1	277.8	274.9
Unemployment rate .....	4.9	4.8	4.6	4.7	4.8	4.3	4.3	4.4	4.5	4.4	4.5	4.7	4.6
<b>Rhode Island</b>													
Civilian labor force .....	506.7	507.5	508.6	506.5	509.5	506.6	501.8	498.4	500.1	499.6	502.6	502.2	503.0
Employed .....	481.4	482.9	484.1	481.9	483.7	481.9	478.4	477.9	477.8	475.5	478.0	476.0	478.1
Unemployed .....	25.2	24.6	24.5	24.6	25.8	24.7	23.4	20.5	22.2	24.0	24.6	26.2	24.9
Unemployment rate .....	5.0	4.9	4.8	4.9	5.1	4.9	4.7	4.1	4.4	4.8	4.9	5.2	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										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>
<b>South Carolina</b>													
Civilian labor force .....	1,907.7	1,902.9	1,908.4	1,910.4	1,902.6	1,913.3	1,919.4	1,929.2	1,941.5	1,930.3	1,932.6	1,949.8	1,959.3
Employed .....	1,836.9	1,832.9	1,834.5	1,844.5	1,856.3	1,856.8	1,854.3	1,867.3	1,868.0	1,863.5	1,869.2	1,875.6	1,883.5
Unemployed .....	70.8	70.0	73.8	65.8	46.2	56.6	65.0	61.9	73.4	66.9	63.3	74.2	75.8
Unemployment rate .....	3.7	3.7	3.9	3.4	2.4	3.0	3.4	3.2	3.8	3.5	3.3	3.8	3.9
<b>South Dakota</b>													
Civilian labor force .....	395.9	397.5	398.0	398.7	398.6	398.4	399.8	400.6	401.2	398.5	399.4	402.3	403.9
Employed .....	384.8	386.7	386.7	388.2	387.8	387.4	388.9	390.0	389.9	389.5	389.8	391.9	393.1
Unemployed .....	11.2	10.8	11.3	10.5	10.8	11.0	10.9	10.7	11.3	9.0	9.7	10.4	10.8
Unemployment rate .....	2.8	2.7	2.8	2.6	2.7	2.8	2.7	2.7	2.8	2.3	2.4	2.6	2.7
<b>Tennessee</b>													
Civilian labor force .....	2,753.6	2,775.2	2,782.4	2,776.9	2,781.4	2,790.0	2,779.4	2,766.6	2,772.3	2,775.4	2,782.1	2,787.4	2,780.5
Employed .....	2,611.2	2,634.7	2,660.5	2,656.6	2,650.8	2,657.2	2,658.8	2,659.7	2,665.5	2,661.1	2,667.4	2,674.7	2,671.9
Unemployed .....	142.5	140.6	121.9	120.3	130.7	132.9	120.7	106.9	106.9	114.2	114.7	112.7	108.6
Unemployment rate .....	5.2	5.1	4.4	4.3	4.7	4.8	4.3	3.9	3.9	4.1	4.1	4.0	3.9
<b>Texas</b>													
Civilian labor force .....	9,955.2	9,979.9	10,011.7	10,022.0	10,051.2	10,070.5	10,100.4	10,133.4	10,161.7	10,169.7	10,215.3	10,216.9	10,169.5
Employed .....	9,454.0	9,489.4	9,520.9	9,558.1	9,581.3	9,611.9	9,640.1	9,630.8	9,661.1	9,660.9	9,701.3	9,713.7	9,700.1
Unemployed .....	501.3	490.5	490.9	463.9	469.9	458.7	460.3	502.6	500.6	508.9	514.0	503.2	469.4
Unemployment rate .....	5.0	4.9	4.9	4.6	4.7	4.6	4.6	5.0	4.9	5.0	5.0	4.9	4.6
<b>Utah</b>													
Civilian labor force .....	1,061.9	1,069.7	1,076.5	1,079.5	1,077.5	1,080.1	1,080.2	1,081.4	1,085.1	1,084.6	1,084.5	1,090.4	1,089.0
Employed .....	1,030.9	1,038.8	1,045.6	1,048.4	1,043.9	1,045.5	1,047.2	1,046.6	1,046.1	1,048.7	1,048.2	1,055.3	1,056.7
Unemployed .....	31.1	30.9	30.9	31.1	33.6	34.6	33.0	34.8	39.0	35.9	36.3	35.1	32.3
Unemployment rate .....	2.9	2.9	2.9	2.9	3.1	3.2	3.1	3.2	3.6	3.3	3.3	3.2	3.0
<b>Vermont</b>													
Civilian labor force .....	329.3	330.3	329.2	330.8	331.8	330.2	329.1	330.4	333.3	332.9	330.9	330.8	331.6
Employed .....	316.9	318.0	317.2	319.3	320.4	319.6	317.9	318.9	321.5	323.2	320.5	320.3	321.9
Unemployed .....	12.4	12.3	12.0	11.5	11.4	10.6	11.2	11.5	11.8	9.8	10.4	10.5	9.7
Unemployment rate .....	3.8	3.7	3.6	3.5	3.4	3.2	3.4	3.5	3.5	2.9	3.2	3.2	2.9
<b>Virginia</b>													
Civilian labor force .....	3,500.9	3,538.4	3,541.0	3,547.6	3,554.8	3,540.2	3,555.0	3,554.9	3,554.6	3,567.5	3,580.5	3,579.1	3,577.0
Employed .....	3,376.1	3,417.2	3,424.7	3,431.8	3,436.2	3,440.8	3,448.8	3,443.8	3,449.1	3,456.0	3,468.7	3,466.8	3,470.2
Unemployed .....	124.8	121.2	116.4	115.8	118.6	99.4	106.2	111.2	105.5	111.5	111.8	112.3	106.8
Unemployment rate .....	3.6	3.4	3.3	3.3	3.3	2.8	3.0	3.1	3.0	3.1	3.1	3.1	3.0
<b>Washington</b>													
Civilian labor force .....	3,010.2	3,016.0	3,012.2	3,009.4	3,025.7	3,000.0	3,045.6	3,027.6	3,024.0	3,022.7	3,065.9	3,087.0	3,081.8
Employed .....	2,877.7	2,882.4	2,877.6	2,884.7	2,900.7	2,874.2	2,911.6	2,886.8	2,881.5	2,880.0	2,908.3	2,937.6	2,935.9
Unemployed .....	132.6	133.6	134.6	124.6	125.0	125.9	134.0	140.8	142.5	142.7	157.6	149.4	145.9
Unemployment rate .....	4.4	4.4	4.5	4.1	4.1	4.2	4.4	4.7	4.7	4.7	5.1	4.8	4.7
<b>West Virginia</b>													
Civilian labor force .....	805.0	802.7	802.9	800.4	807.0	806.2	811.3	806.4	807.6	803.5	802.8	810.4	807.3
Employed .....	752.1	751.0	753.7	754.2	752.0	752.9	759.3	750.5	752.3	748.7	751.4	757.0	756.2
Unemployed .....	52.9	51.6	49.2	46.2	55.1	53.4	52.0	55.9	55.3	54.8	51.5	53.4	51.1
Unemployment rate .....	6.6	6.4	6.1	5.8	6.8	6.6	6.4	6.9	6.8	6.8	6.4	6.6	6.3
<b>Wisconsin</b>													
Civilian labor force .....	2,947.0	2,953.0	2,963.4	2,962.7	2,957.6	2,947.9	2,949.3	2,954.5	2,970.5	2,964.9	2,963.6	2,968.0	2,970.2
Employed .....	2,843.1	2,849.8	2,869.6	2,875.3	2,866.5	2,878.4	2,870.9	2,867.2	2,869.4	2,868.4	2,867.5	2,865.7	2,865.6
Unemployed .....	103.8	103.2	93.8	87.3	91.1	69.4	78.4	87.3	101.1	96.4	96.1	102.3	104.6
Unemployment rate .....	3.5	3.5	3.2	2.9	3.1	2.4	2.7	3.0	3.4	3.3	3.2	3.4	3.5
<b>Wyoming</b>													
Civilian labor force .....	253.0	254.9	254.0	254.2	255.0	254.8	256.3	258.1	258.8	258.6	257.9	258.1	257.9
Employed .....	241.4	243.5	243.5	244.0	244.3	244.2	245.0	245.9	247.0	246.6	246.0	245.7	245.6
Unemployed .....	11.6	11.4	10.6	10.2	10.7	10.5	11.3	12.1	11.9	11.9	11.9	12.4	12.3
Unemployment rate .....	4.6	4.5	4.2	4.0	4.2	4.1	4.4	4.7	4.6	4.6	4.6	4.8	4.8

<sup>P</sup> = preliminary.

revised when new benchmark and population information becomes available.

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

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	October		November		October		November		October		November	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Alabama</b>	2,178.6	2,164.3	2,178.8	2,166.7	108.7	97.5	97.3	86.1	5.0	4.5	4.5	4.0
Anniston	55.6	54.1	55.3	54.4	3.5	2.7	3.1	2.5	6.3	5.0	5.5	4.6
Birmingham	474.3	477.2	474.6	479.4	16.5	15.1	14.5	12.8	3.5	3.2	3.0	2.7
Decatur	72.5	72.1	72.8	72.0	3.4	3.2	3.1	2.8	4.7	4.5	4.3	3.8
Dothan	67.6	67.0	67.9	67.1	3.2	2.4	2.8	2.2	4.8	3.6	4.1	3.3
Florence	71.9	71.7	72.3	71.9	4.6	4.5	4.3	4.4	6.3	6.3	6.0	6.1
Gadsden	50.9	51.9	51.1	51.6	2.5	3.5	2.2	2.8	4.8	6.8	4.4	5.5
Huntsville	171.9	171.1	172.6	171.9	4.6	5.4	4.6	4.6	2.7	3.1	2.7	2.7
Mobile	270.3	271.5	269.8	271.9	12.7	11.5	11.2	9.8	4.7	4.3	4.1	3.6
Montgomery	161.7	160.4	161.6	161.5	7.0	5.4	6.0	4.6	4.3	3.4	3.7	2.9
Tuscaloosa	84.5	86.0	85.6	87.1	2.7	2.3	2.4	2.1	3.2	2.7	2.8	2.4
<b>Alaska</b>	315.7	320.5	314.8	315.6	22.5	18.7	22.9	16.9	7.1	5.8	7.3	5.4
Anchorage	139.6	143.3	142.1	143.9	7.7	6.0	7.7	5.2	5.5	4.2	5.5	3.6
<b>Arizona</b>	2,207.5	2,300.1	2,224.9	2,305.8	100.6	87.7	88.5	84.0	4.6	3.8	4.0	3.6
Flagstaff	59.7	58.2	59.6	60.2	4.3	3.1	4.2	3.3	7.2	5.4	7.0	5.5
Phoenix-Mesa	1,453.5	1,528.0	1,469.3	1,535.6	43.6	40.9	38.8	39.4	3.0	2.7	2.6	2.6
Tucson	361.8	371.9	365.1	371.3	12.4	9.0	10.6	8.7	3.4	2.4	2.9	2.3
Yuma	64.9	66.4	64.5	65.7	18.1	16.6	15.8	14.9	27.9	25.0	24.4	22.7
<b>Arkansas</b>	1,216.8	1,244.8	1,226.1	1,244.7	52.3	57.5	54.3	57.4	4.3	4.6	4.4	4.6
Fayetteville-Springdale-Rogers	139.5	142.9	140.8	143.0	3.6	3.8	3.7	3.7	2.6	2.7	2.6	2.6
Fort Smith	95.6	96.8	96.0	96.6	4.9	4.4	4.8	4.4	5.1	4.6	5.0	4.5
Jonesboro	41.2	42.2	41.7	42.4	1.3	1.4	1.5	1.5	3.2	3.4	3.6	3.4
Little Rock-North Little Rock	296.0	301.2	299.1	302.3	10.2	10.1	10.2	9.6	3.4	3.4	3.4	3.2
Pine Bluff	35.9	36.7	35.9	36.7	2.4	2.5	2.3	2.6	6.6	6.9	6.4	7.0
<b>California</b>	16,141.9	16,377.2	16,092.0	16,318.5	951.7	928.9	943.9	901.2	5.9	5.7	5.9	5.5
Bakersfield	281.1	272.9	283.1	278.5	35.2	30.0	35.9	34.7	12.5	11.0	12.7	12.5
Chico-Paradise	86.8	87.4	87.5	87.5	5.8	5.6	6.7	5.7	6.7	6.4	7.6	6.5
Fresno	428.3	428.2	420.4	419.6	57.6	55.5	59.8	58.1	13.5	13.0	14.2	13.8
Los Angeles-Long Beach	4,548.7	4,651.5	4,521.8	4,670.1	285.0	302.0	283.5	292.8	6.3	6.5	6.3	6.3
Merced	83.0	82.6	84.0	82.2	11.0	9.9	13.0	11.6	13.3	12.0	15.5	14.1
Modesto	205.0	206.7	204.0	203.8	24.1	22.6	25.0	22.2	11.8	11.0	12.2	10.9
Oakland	1,189.4	1,204.0	1,189.4	1,197.9	48.3	45.8	44.3	40.5	4.1	3.8	3.7	3.4
Orange County	1,396.6	1,433.0	1,396.0	1,424.5	44.3	42.4	39.7	37.3	3.2	3.0	2.8	2.6
Redding	74.8	74.5	72.9	72.5	5.7	5.2	6.1	5.4	7.7	7.0	8.4	7.4
Riverside-San Bernardino	1,367.3	1,408.2	1,367.9	1,403.2	94.4	87.4	84.6	76.3	6.9	6.2	6.2	5.4
Sacramento	741.7	749.3	745.5	747.0	37.5	34.3	35.6	30.6	5.1	4.6	4.8	4.1
Salinas	184.6	183.9	186.3	184.5	12.8	12.2	19.1	17.1	7.0	6.7	10.2	9.3
San Diego	1,294.0	1,306.6	1,294.3	1,301.6	51.9	48.3	46.5	42.2	4.0	3.7	3.6	3.2
San Francisco	940.4	947.4	939.8	941.8	30.2	27.7	27.3	23.6	3.2	2.9	2.9	2.5
San Jose	954.0	966.5	952.5	956.4	26.6	35.4	24.4	31.2	2.8	3.7	2.6	3.3
San Luis Obispo-Atascadero-Paso Robles	109.5	110.2	109.8	109.8	4.7	4.3	4.9	4.0	4.3	3.9	4.5	3.6
Santa Barbara-Santa Maria-Lompoc	197.1	195.7	197.7	195.5	9.2	7.6	10.0	8.3	4.7	3.9	5.1	4.2
Santa Cruz-Watsonville	145.8	147.2	144.4	144.9	8.7	7.6	10.3	9.2	6.0	5.2	7.1	6.3
Santa Rosa	243.5	246.2	240.6	242.4	8.1	6.9	8.0	6.4	3.3	2.8	3.3	2.6
Stockton-Lodi	249.1	249.5	246.6	245.9	24.0	22.5	26.8	24.4	9.6	9.0	10.9	9.9
Vallejo-Fairfield-Napa	244.6	248.8	242.2	245.7	13.8	11.1	13.5	10.8	5.6	4.5	5.6	4.4
Ventura	387.6	390.8	385.4	389.2	26.2	22.7	22.8	22.8	6.8	5.8	6.8	5.8
Visalia-Tulare-Porterville	163.2	164.9	161.8	164.2	25.9	24.1	26.8	26.6	15.8	14.6	16.6	16.2
Yolo	87.2	87.5	87.1	87.4	4.4	3.7	5.2	4.2	5.0	4.3	5.9	4.8
Yuba City	55.6	56.3	56.4	56.8	6.7	6.2	8.2	7.5	12.0	10.9	14.6	13.1
<b>Colorado</b>	2,207.1	2,296.4	2,210.0	2,279.2	59.9	77.6	63.6	73.2	2.7	3.4	2.9	3.2
Boulder-Longmont	174.4	179.1	175.3	177.2	4.1	5.5	4.2	5.0	2.4	3.1	2.4	2.8
Colorado Springs	251.0	262.4	251.0	261.2	7.8	10.4	8.1	9.7	3.1	4.0	3.2	3.7
Denver	1,112.0	1,162.0	1,114.9	1,152.8	26.2	32.4	27.6	29.9	2.4	2.8	2.5	2.6
Fort Collins-Loveland	138.5	142.4	137.5	140.5	3.5	4.9	3.7	5.0	2.5	3.5	2.7	3.6
Grand Junction	57.9	60.1	57.6	59.1	2.2	2.4	2.3	2.3	3.7	4.1	3.9	3.9
Greeley	83.5	87.2	82.3	85.9	2.5	3.6	2.8	3.3	3.0	4.1	3.4	3.9
Pueblo	60.7	64.3	61.1	63.3	2.2	4.0	2.3	3.7	3.6	6.3	3.8	5.8
<b>Connecticut</b>	1,723.6	1,719.0	1,721.5	1,721.6	73.5	56.7	72.3	58.0	4.3	3.3	4.2	3.4
Bridgeport	218.9	217.3	218.9	217.4	11.1	9.0	11.0	9.1	5.1	4.2	5.0	4.2
Danbury	108.9	110.1	109.4	110.5	3.0	2.5	2.8	2.6	2.7	2.2	2.6	2.3
Hartford	585.6	581.9	584.1	582.5	25.8	19.8	25.5	19.8	4.4	3.4	4.4	3.4
New Haven-Middletown	273.3	270.4	271.8	271.2	11.7	8.8	11.3	9.4	4.3	3.3	4.2	3.5
New London-Norwich	154.2	154.6	154.1	154.0	7.8	5.8	7.7	5.7	5.1	3.8	5.0	3.7
Stamford-Norwalk	195.5	197.7	196.1	198.2	5.4	4.5	5.4	4.7	2.8	2.3	2.8	2.4
Waterbury	119.0	119.3	119.1	120.0	5.7	4.3	5.4	4.5	4.7	3.6	4.5	3.8
<b>Delaware</b>	379.4	395.0	386.6	400.1	12.2	13.1	11.5	13.0	3.2	3.3	3.0	3.2
Dover	66.6	71.6	68.7	72.4	2.3	3.3	2.2	2.4	3.5	4.6	3.2	3.3
Wilmington-Newark	286.0	293.0	291.4	296.6	10.4	9.5	9.9	9.6	3.6	3.2	3.4	3.2

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA  
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	October		November		October		November		October		November	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>District of Columbia</b> .....	255.4	260.1	255.2	258.1	20.4	22.6	20.3	21.5	8.0	8.7	7.9	8.3
Washington .....	2,529.4	2,595.3	2,549.3	2,602.3	90.5	79.5	87.5	76.1	3.6	3.1	3.4	2.9
<b>Florida</b> .....	7,216.3	7,388.5	7,240.8	7,372.8	336.0	323.6	334.4	314.9	4.7	4.4	4.6	4.3
Daytona Beach .....	190.2	192.5	189.8	191.0	7.1	6.6	7.4	6.5	3.7	3.4	3.9	3.4
Fort Lauderdale .....	762.1	774.9	764.1	772.2	36.8	34.7	37.6	34.8	4.8	4.5	4.9	4.5
Fort Myers-Cape Coral .....	170.2	172.0	171.5	171.3	5.8	5.4	5.7	5.0	3.4	3.1	3.3	2.9
Fort Pierce-Port St. Lucie .....	122.0	124.6	122.3	124.0	11.6	12.1	10.5	10.8	9.5	9.7	8.6	8.7
Fort Walton Beach .....	78.1	80.8	77.6	79.6	2.8	2.5	3.0	2.5	3.5	3.1	3.9	3.2
Gainesville .....	104.2	105.7	104.0	104.8	2.6	2.5	2.7	2.4	2.5	2.4	2.6	2.3
Jacksonville .....	544.2	555.8	539.9	551.7	18.1	16.0	18.8	16.1	3.3	2.9	3.5	2.9
Lakeland-Winter Haven .....	196.6	199.1	198.1	199.6	12.5	11.5	11.2	10.2	6.4	5.8	5.7	5.1
Melbourne-Titusville-Palm Bay .....	205.4	209.2	205.1	207.6	9.1	9.9	9.1	9.6	4.4	4.7	4.5	4.6
Miami .....	1,049.4	1,060.6	1,055.4	1,060.4	72.3	69.0	73.9	70.6	6.9	6.5	7.0	6.7
Naples .....	86.8	90.5	88.7	91.9	5.1	4.6	4.0	3.8	5.9	5.1	4.5	4.1
Ocala .....	95.9	97.7	95.9	97.3	4.1	4.2	4.1	4.0	4.2	4.3	4.3	4.1
Orlando .....	832.0	857.1	830.1	853.4	27.0	25.4	27.5	25.1	3.2	3.0	3.3	2.9
Panama City .....	65.0	67.4	64.8	66.3	4.2	5.4	5.4	5.3	6.4	8.0	8.4	8.0
Pensacola .....	173.1	176.7	172.0	174.7	6.4	6.6	6.6	6.4	3.7	3.7	3.8	3.7
Punta Gorda .....	45.9	46.0	46.3	46.1	1.7	1.7	1.8	1.5	3.7	3.6	3.8	3.3
Sarasota-Bradenton .....	271.1	287.7	275.6	289.2	7.5	7.1	7.0	6.2	2.8	2.5	2.5	2.2
Tallahassee .....	145.4	146.6	144.0	145.4	4.3	4.5	4.4	4.6	3.0	3.1	3.0	3.1
Tampa-St. Petersburg-Clearwater .....	1,150.6	1,187.8	1,156.4	1,185.1	38.8	35.3	39.5	34.6	3.4	3.0	3.4	2.9
West Palm Beach-Boca Raton .....	490.3	503.2	494.4	506.4	32.1	30.1	28.7	28.1	6.5	6.0	5.8	5.6
<b>Georgia</b> .....	3,949.2	4,017.8	3,950.1	4,043.2	175.9	164.0	156.1	152.4	4.5	4.1	4.0	3.8
Albany .....	58.7	59.0	58.1	58.9	4.1	4.9	3.6	4.5	6.9	8.3	6.3	7.7
Athens .....	73.5	75.1	73.5	75.5	2.2	2.0	2.0	1.8	3.0	2.7	2.7	2.3
Atlanta .....	2,089.1	2,125.4	2,094.1	2,143.9	76.3	68.2	66.2	63.7	3.7	3.2	3.2	3.0
Augusta-Aiken .....	203.4	205.0	202.6	205.0	12.3	11.0	10.7	9.5	6.0	5.3	5.3	4.6
Columbus .....	122.8	124.1	123.3	125.1	6.5	6.1	5.9	5.5	5.3	4.9	4.8	4.4
Macon .....	153.6	155.6	153.2	156.0	7.5	7.9	6.5	7.4	4.9	5.1	4.2	4.7
Savannah .....	133.2	135.4	133.9	136.9	6.1	7.0	5.4	6.4	4.6	5.2	4.0	4.7
<b>Hawaii</b> .....	589.0	595.8	594.2	597.6	35.0	34.0	34.2	34.2	5.9	5.7	5.8	5.7
Honolulu .....	424.7	429.1	428.8	430.2	21.4	21.9	21.0	21.9	5.0	5.1	4.9	5.1
<b>Idaho</b> .....	636.6	661.3	637.6	663.7	27.4	26.9	29.8	29.8	4.3	4.1	4.7	4.5
Boise City .....	210.8	223.9	218.2	230.1	7.3	7.2	7.6	7.6	3.4	3.2	3.5	3.3
Pocatello .....	39.4	41.1	40.8	42.6	2.0	1.7	2.1	1.9	5.0	4.1	5.1	4.5
<b>Illinois</b> .....	6,151.6	6,187.0	6,169.3	6,179.8	261.1	247.2	268.0	254.4	4.2	4.0	4.3	4.1
Bloomington-Normal .....	82.7	84.6	82.7	84.6	1.8	1.5	1.9	1.6	2.2	1.8	2.3	1.9
Champaign-Urbana .....	95.0	94.8	94.9	94.8	2.3	2.1	2.4	2.2	2.4	2.3	2.5	2.3
Chicago .....	4,102.6	4,137.4	4,115.4	4,132.7	170.9	163.1	173.3	165.3	4.2	3.9	4.2	4.0
Davenport-Moline-Rock Island .....	184.4	184.9	186.0	186.7	5.2	5.1	5.5	6.0	2.8	2.7	3.0	3.2
Decatur .....	58.1	57.5	58.1	57.4	3.6	2.8	3.7	2.8	6.2	4.8	6.3	4.8
Kankakee .....	52.0	51.9	52.0	51.9	2.5	3.0	2.6	2.9	4.8	5.8	5.0	5.6
Peoria-Pekin .....	183.0	182.4	184.7	181.7	7.0	6.0	7.2	6.2	3.8	3.3	3.9	3.4
Rockford .....	195.6	194.1	195.1	192.0	7.2	7.3	7.2	7.9	3.7	3.8	3.7	4.1
Springfield .....	106.7	105.6	106.5	105.5	4.0	3.8	4.2	3.8	3.8	3.6	4.0	3.6
<b>Indiana</b> .....	3,122.2	3,115.2	3,115.5	3,124.3	104.1	77.7	100.4	85.2	3.3	2.5	3.2	2.7
Bloomington .....	64.3	62.8	64.0	63.2	1.3	1.2	1.3	1.3	2.1	2.0	2.0	2.1
Elkhart-Goshen .....	94.6	93.3	94.0	93.8	3.4	1.9	3.1	2.0	3.6	2.0	3.3	2.2
Evansville-Henderson .....	158.8	156.0	158.7	156.3	6.2	4.4	5.8	4.9	3.9	2.8	3.7	3.1
Fort Wayne .....	268.4	265.0	267.8	265.3	7.3	6.0	6.7	6.4	2.7	2.3	2.5	2.4
Gary .....	304.4	302.3	303.7	303.6	12.0	9.9	11.7	10.8	3.9	3.3	3.8	3.6
Indianapolis .....	839.8	844.8	840.5	850.1	22.7	17.6	21.4	19.4	2.7	2.1	2.5	2.3
Kokomo .....	51.6	53.1	52.7	53.5	1.7	1.1	1.5	1.5	3.2	2.1	2.9	2.8
Lafayette .....	91.7	92.3	92.2	92.4	2.2	1.6	2.2	1.7	2.4	1.7	2.4	1.9
Muncie .....	63.8	62.9	64.4	63.8	2.2	1.9	2.1	2.0	3.4	3.1	3.3	3.1
South Bend .....	137.6	137.0	137.0	137.2	4.6	3.0	4.2	3.3	3.3	2.2	3.1	2.4
Terre Haute .....	73.8	71.3	73.6	71.3	4.1	2.5	4.0	2.8	5.5	3.5	5.4	3.9
<b>Iowa</b> .....	1,579.5	1,571.2	1,579.8	1,574.1	37.0	33.5	42.5	37.7	2.3	2.1	2.7	2.4
Cedar Rapids .....	108.9	108.3	110.1	109.9	2.0	1.6	2.2	1.7	1.8	1.5	2.0	1.5
Des Moines .....	249.8	249.5	250.3	252.3	4.9	4.5	5.4	4.6	2.0	1.8	2.1	1.8
Dubuque .....	49.6	49.1	49.7	49.5	1.3	1.2	1.4	1.3	2.7	2.4	2.9	2.6
Iowa City .....	65.6	64.5	66.2	65.6	1.4	1.3	1.5	1.3	2.1	2.1	2.2	2.1
Sioux City .....	65.2	64.9	65.5	65.2	1.7	1.5	1.8	1.6	2.5	2.2	2.8	2.4
Waterloo-Cedar Falls .....	68.9	69.5	69.4	70.5	2.0	2.0	2.3	2.3	2.9	2.9	3.4	3.3

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
	October		November		Number				Percent of labor force			
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
	<b>Kansas</b> .....	1,388.0	1,431.5	1,402.7	1,437.3	49.3	51.3	49.5	51.4	3.6	3.6	3.5
Lawrence .....	54.2	57.0	55.9	57.6	2.1	2.3	2.1	2.2	3.9	4.0	3.7	3.8
Topeka .....	89.7	90.9	90.5	90.7	4.7	4.3	4.3	3.9	5.2	4.7	4.7	4.3
Wichita .....	279.6	290.1	283.1	290.9	9.0	9.7	8.7	9.7	3.2	3.4	3.1	3.3
<b>Kentucky</b> .....	1,932.1	1,942.0	1,948.9	1,956.7	91.7	78.9	90.5	78.8	4.7	4.1	4.6	4.0
Lexington .....	258.1	262.5	260.4	263.9	6.1	5.0	5.6	5.0	2.4	1.9	2.1	1.9
Louisville .....	551.5	560.3	558.5	564.9	19.6	16.5	21.6	15.5	3.6	2.9	3.9	2.7
Owensboro .....	49.4	50.0	50.0	50.7	2.4	2.0	2.1	2.1	4.8	4.0	4.3	4.1
<b>Louisiana</b> .....	2,042.1	2,079.4	2,039.6	2,059.7	116.1	101.1	110.4	99.7	5.7	4.9	5.4	4.8
Alexandria .....	58.8	60.4	58.8	59.8	3.3	2.8	3.3	2.7	5.7	4.6	5.5	4.5
Baton Rouge .....	294.6	303.7	294.0	300.7	14.5	11.6	13.5	11.1	4.9	3.8	4.6	3.7
Houma .....	91.1	94.4	91.1	93.6	2.7	3.1	2.6	3.2	3.0	3.3	2.8	3.4
Lafayette .....	178.7	182.9	178.3	182.0	10.3	8.8	9.5	8.7	5.8	4.8	5.3	4.8
Lake Charles .....	91.3	91.6	91.2	90.8	5.2	4.6	5.2	4.8	5.7	5.0	5.7	5.2
Monroe .....	70.8	70.5	70.8	69.9	4.3	3.2	4.1	3.1	6.1	4.6	5.7	4.5
New Orleans .....	623.2	625.9	623.8	619.6	33.2	26.2	30.5	25.1	5.3	4.2	4.9	4.0
Shreveport-Bossier City .....	187.0	190.9	186.7	188.5	11.7	9.5	11.0	9.1	6.3	5.0	5.9	4.8
<b>Maine</b> .....	657.1	660.4	652.6	660.6	29.9	24.8	34.2	28.6	4.5	3.8	5.2	4.3
Bangor .....	50.7	51.3	50.4	53.0	1.8	1.2	2.0	1.5	3.6	2.4	3.9	2.8
Lewiston-Auburn .....	52.6	52.7	52.8	53.2	2.6	2.0	2.8	2.2	4.9	3.9	5.3	4.1
Portland .....	132.2	131.8	133.4	133.5	3.5	2.7	3.7	2.8	2.6	2.1	2.7	2.1
<b>Maryland</b> .....	2,784.1	2,792.7	2,791.5	2,800.2	137.6	113.0	134.7	116.8	4.9	4.0	4.8	4.2
Baltimore .....	1,316.7	1,318.7	1,322.4	1,318.7	72.8	61.1	69.2	62.4	5.5	4.6	5.2	4.7
Cumberland .....	45.8	46.5	46.2	47.0	3.4	3.5	3.5	3.6	7.3	7.5	7.6	7.6
Hagerstown .....	71.8	71.7	71.9	72.2	3.1	2.5	3.2	2.5	4.3	3.5	4.4	3.5
<b>Massachusetts</b> .....	3,263.1	3,267.9	3,265.8	3,270.9	111.3	94.7	113.6	84.5	3.4	2.9	3.5	2.6
Barnstable-Yarmouth .....	72.5	72.8	70.4	71.0	2.5	2.0	3.7	2.7	3.4	2.8	5.2	3.8
Boston .....	1,809.2	1,820.0	1,814.5	1,827.1	54.5	45.1	54.0	39.3	3.0	2.5	3.0	2.2
Brockton .....	132.7	132.5	133.5	133.3	5.2	4.2	5.1	3.6	3.9	3.1	3.8	2.7
Fitchburg-Leominster .....	70.4	69.6	70.7	69.4	3.0	2.6	3.0	2.2	4.3	3.7	4.3	3.2
Lawrence .....	198.1	196.7	198.7	197.6	9.3	9.4	9.3	8.8	4.7	4.8	4.7	4.5
Lowell .....	165.5	166.9	165.9	167.3	5.5	5.2	5.5	4.6	3.4	3.1	3.3	2.7
New Bedford .....	81.5	80.7	81.8	80.9	4.9	4.4	5.1	4.0	6.1	5.5	6.3	4.9
Pittsfield .....	40.2	40.1	40.0	40.1	1.7	1.3	1.8	1.3	4.2	3.4	4.4	3.3
Springfield .....	284.8	284.8	286.6	285.7	10.2	9.0	10.8	8.1	3.6	3.2	3.8	2.8
Worcester .....	250.7	249.4	251.5	250.2	7.8	7.3	8.0	6.5	3.1	2.9	3.2	2.6
<b>Michigan</b> .....	5,003.6	5,082.3	5,016.5	5,096.2	169.9	155.2	177.2	158.8	3.4	3.1	3.5	3.1
Ann Arbor .....	293.6	300.1	295.9	300.5	5.8	5.3	5.8	5.0	2.0	1.8	2.0	1.6
Benton Harbor .....	84.2	84.3	84.6	84.8	3.7	3.0	3.7	3.2	4.4	3.6	4.4	3.7
Detroit .....	2,234.8	2,275.2	2,243.4	2,287.0	73.3	68.7	71.7	64.7	3.3	3.0	3.2	2.8
Flint .....	204.3	204.3	205.1	205.0	9.5	8.8	9.4	8.3	4.7	4.3	4.6	4.1
Grand Rapids-Muskegon-Holland .....	589.4	605.2	590.1	607.2	16.6	14.9	17.0	15.2	2.8	2.5	2.9	2.5
Jackson .....	76.9	77.5	77.1	77.7	3.1	2.3	3.0	2.2	4.1	3.0	3.9	2.8
Kalamazoo-Battle Creek .....	232.7	233.8	233.2	234.1	7.5	6.4	7.9	6.3	3.2	2.7	3.4	2.7
Lansing-East Lansing .....	245.1	245.5	246.7	246.6	6.3	5.1	6.3	5.1	2.6	2.1	2.6	2.1
Saginaw-Bay City-Midland .....	201.9	204.8	202.2	204.9	7.0	6.5	7.4	7.1	3.5	3.2	3.6	3.5
<b>Minnesota</b> .....	2,670.8	2,712.3	2,671.9	2,714.8	72.4	50.4	67.3	53.5	2.7	1.9	2.5	2.0
Duluth-Superior .....	124.2	125.3	124.7	125.7	5.2	3.6	5.2	4.1	4.2	2.9	4.2	3.2
Minneapolis-St. Paul .....	1,663.4	1,700.7	1,671.6	1,709.9	38.4	26.9	32.6	26.2	2.3	1.6	2.0	1.5
Rochester .....	67.5	69.3	67.4	69.3	1.2	0.8	1.0	0.8	1.8	1.2	1.5	1.2
St. Cloud .....	94.0	93.8	94.1	94.3	2.8	1.9	2.7	2.0	2.9	2.0	2.8	2.1
<b>Mississippi</b> .....	1,274.7	1,283.0	1,279.1	1,284.0	69.6	60.6	60.6	53.2	5.5	4.7	4.7	4.1
Biloxi-Gulfport-Pascagoula .....	161.8	164.9	162.5	164.9	7.6	6.6	6.6	5.3	4.7	4.0	4.0	3.2
Hattiesburg .....	52.4	51.9	52.8	51.9	1.6	1.6	1.4	1.3	3.1	3.1	2.6	2.5
Jackson .....	225.8	232.2	227.9	232.1	8.0	7.6	6.8	6.4	3.6	3.3	3.0	2.8
<b>Missouri</b> .....	2,888.0	2,903.3	2,889.9	2,897.8	103.7	93.2	107.5	96.7	3.6	3.2	3.7	3.3
Columbia .....	80.3	78.6	79.9	78.1	1.0	1.0	1.1	1.1	1.3	1.2	1.3	1.4
Joplin .....	79.6	79.7	78.7	78.3	3.0	3.3	2.9	3.1	3.7	4.1	3.7	3.9
Kansas City .....	967.3	998.9	976.5	998.8	32.6	31.2	32.6	31.6	3.4	3.1	3.3	3.2
St. Joseph .....	48.9	49.6	49.1	49.7	2.4	1.9	2.3	1.9	4.8	3.9	4.6	3.9
St. Louis LMA .....	1,343.4	1,353.1	1,345.9	1,360.0	49.8	47.9	51.0	48.2	3.7	3.5	3.8	3.5
Springfield .....	169.0	171.6	170.1	171.7	4.6	3.9	5.1	4.2	2.7	2.3	3.0	2.5
<b>Montana</b> .....	455.4	463.6	455.2	464.9	21.8	22.6	24.1	25.8	4.8	4.9	5.3	5.6
Billings .....	68.6	70.2	69.2	70.4	2.7	2.5	2.8	2.7	4.0	3.5	4.1	3.8
Great Falls .....	37.8	37.3	38.1	37.5	1.8	1.9	2.1	2.2	4.7	5.1	5.4	5.7

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA  
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	October		November		October		November		October		November	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
Nebraska .....	916.1	933.7	920.6	935.2	19.1	19.5	15.5	19.0	2.1	2.1	1.7	2.0
Lincoln .....	142.2	145.2	145.0	145.4	2.6	2.2	2.1	2.1	1.8	1.5	1.4	1.4
Omaha .....	389.7	402.8	392.9	403.8	8.4	8.2	7.1	7.8	2.2	2.0	1.8	1.9
Nevada .....	897.2	944.9	897.6	948.5	33.7	33.0	32.6	31.4	3.8	3.5	3.6	3.3
Las Vegas .....	677.2	720.8	679.6	724.5	26.7	25.4	24.9	24.2	3.9	3.5	3.7	3.3
Reno .....	172.9	177.7	172.2	177.3	5.1	5.1	5.3	5.0	2.9	2.9	3.1	2.8
New Hampshire .....	650.0	651.8	654.2	658.0	16.3	15.5	19.2	20.1	2.5	2.4	2.9	3.0
Manchester .....	101.2	100.2	102.4	102.3	2.3	2.2	2.5	2.8	2.2	2.2	2.4	2.8
Nashua .....	103.6	104.6	104.6	106.3	2.5	2.6	2.7	3.2	2.4	2.5	2.6	3.0
Portsmouth-Rochester .....	122.5	121.9	123.1	122.7	2.6	2.4	3.0	2.9	2.1	2.0	2.5	2.4
New Jersey .....	4,192.1	4,179.6	4,187.7	4,176.7	198.5	178.5	195.2	174.0	4.7	4.3	4.7	4.2
Atlantic-Cape May .....	173.6	173.0	171.6	170.8	13.0	13.1	15.3	14.8	7.5	7.6	8.9	8.6
Bergen-Passaic .....	681.7	677.2	682.4	677.7	32.1	27.4	30.8	27.0	4.7	4.0	4.5	4.0
Jersey City .....	285.0	283.6	285.1	283.3	20.7	19.5	20.3	18.6	7.3	6.9	7.1	6.6
Middlesex-Somerset-Hunterdon .....	641.7	647.0	644.0	650.1	22.1	18.9	20.8	18.0	3.4	2.9	3.2	2.8
Monmouth-Ocean .....	516.9	513.5	513.3	513.2	22.7	20.4	22.9	20.4	4.4	4.0	4.5	4.0
Newark .....	1,023.1	1,019.8	1,020.1	1,018.6	49.9	43.5	46.9	41.3	4.9	4.3	4.6	4.1
Trenton .....	169.5	167.2	170.3	166.9	7.2	6.4	7.0	6.0	4.3	3.8	4.1	3.6
Vineland-Millville-Bridgeton .....	66.1	65.8	66.1	65.5	4.7	5.2	5.4	5.2	7.1	7.8	8.2	7.9
New Mexico .....	830.9	850.6	836.3	850.7	46.4	51.8	47.7	50.5	5.6	6.1	5.7	5.9
Albuquerque .....	361.3	372.1	365.4	373.6	15.1	18.5	14.7	17.0	4.2	5.0	4.0	4.5
Las Cruces .....	69.2	71.3	69.1	70.5	4.9	5.5	5.1	4.9	7.1	7.7	7.4	7.0
Santa Fe .....	74.4	76.2	74.7	76.1	2.6	2.6	2.6	2.4	3.5	3.4	3.4	3.2
New York .....	8,806.7	8,781.3	8,780.0	8,793.6	533.9	448.5	517.6	450.6	6.1	5.1	5.9	5.1
Albany-Schenectady-Troy .....	453.9	447.8	454.1	451.6	18.4	14.1	18.3	14.0	4.1	3.1	4.0	3.1
Binghamton .....	125.6	125.8	126.2	126.3	4.7	4.3	4.9	4.3	3.7	3.4	3.9	3.4
Buffalo-Niagara Falls .....	583.1	573.2	583.3	575.7	29.1	24.0	30.4	25.8	5.0	4.2	5.2	4.5
Dutchess County .....	118.7	120.0	118.7	119.8	4.6	3.6	4.2	3.5	3.9	3.0	3.5	2.9
Elmira .....	44.4	44.1	44.4	44.5	2.0	1.6	2.0	1.7	4.5	3.7	4.5	3.7
Glens Falls .....	61.5	60.5	60.9	59.5	3.4	2.6	4.2	3.4	5.5	4.3	7.0	5.7
Jamestown .....	68.2	67.3	68.0	67.1	3.7	3.1	4.0	3.4	5.4	4.5	5.8	5.1
Nassau-Suffolk .....	1,401.9	1,402.2	1,400.7	1,407.3	54.1	38.9	50.9	37.8	3.9	2.8	3.6	2.7
New York .....	4,006.5	4,018.2	3,984.6	4,026.0	323.7	281.8	302.8	276.0	8.1	7.0	7.6	6.9
New York City .....	3,364.9	3,372.4	3,344.6	3,378.6	299.8	262.8	280.9	258.3	8.9	7.8	8.4	7.6
Newburgh .....	173.0	170.9	171.9	170.7	6.8	5.2	6.5	5.1	3.9	3.0	3.8	3.0
Rochester .....	574.3	566.9	574.1	566.8	22.3	19.1	22.7	20.0	3.9	3.4	4.0	3.5
Syracuse .....	367.9	363.8	368.2	362.9	16.1	12.2	16.6	12.4	4.4	3.3	4.5	3.4
Utica-Rome .....	142.9	143.2	143.8	143.0	6.7	5.0	7.4	5.5	4.7	3.5	5.1	3.8
North Carolina .....	3,852.0	3,831.1	3,850.0	3,828.2	126.6	127.0	134.2	121.4	3.3	3.3	3.5	3.2
Asheville .....	112.5	111.2	113.8	112.9	2.6	2.7	2.7	2.5	2.3	2.4	2.4	2.2
Charlotte-Gastonia-Rock Hill .....	752.6	741.9	749.6	740.9	21.6	18.9	20.1	17.4	2.9	2.6	2.7	2.3
Fayetteville .....	115.2	114.8	117.1	115.0	4.6	4.8	4.7	4.3	4.0	4.2	4.0	3.8
Goldensboro .....	48.4	49.2	48.4	48.6	1.9	2.3	2.2	2.1	3.9	4.7	4.5	4.3
Greensboro—Winston-Salem—High Point .....	639.5	627.1	640.6	628.4	16.7	15.4	17.4	14.2	2.6	2.5	2.7	2.3
Greenville .....	65.3	65.7	65.0	66.2	2.9	2.7	2.9	2.5	4.4	4.1	4.5	3.8
Hickory-Morganton-Lenoir .....	174.1	172.4	175.5	172.7	6.3	4.4	6.4	4.0	3.6	2.6	3.7	2.3
Jacksonville .....	45.3	45.8	45.4	45.9	1.5	1.7	1.6	1.6	3.3	3.7	3.6	3.4
Raleigh-Durham-Chapel Hill .....	617.0	621.5	617.0	623.3	11.1	10.9	11.3	9.9	1.8	1.8	1.8	1.6
Rocky Mount .....	71.9	68.4	71.8	67.9	4.6	4.6	5.1	4.2	6.3	6.7	7.1	6.2
Wilmington .....	110.0	106.7	108.5	106.5	4.2	4.2	4.8	3.9	3.8	4.0	4.4	3.7
North Dakota .....	346.6	346.1	341.6	340.1	4.7	6.1	6.4	7.9	1.4	1.8	1.9	2.3
Bismarck .....	53.0	53.7	53.0	52.8	0.7	0.9	1.0	1.2	1.3	1.7	1.9	2.3
Fargo-Moorhead .....	103.6	103.7	103.2	102.1	1.0	1.0	1.2	1.2	1.0	0.9	1.1	1.2
Grand Forks .....	54.3	53.3	54.0	54.3	1.1	0.8	1.2	1.0	2.0	1.5	2.2	1.8
Ohio .....	5,772.2	5,831.5	5,800.0	5,837.7	239.0	229.9	250.3	235.1	4.1	3.9	4.3	4.0
Akron .....	367.4	371.6	368.3	371.5	14.2	13.3	14.7	13.9	3.9	3.6	4.0	3.7
Canton-Massillon .....	205.2	208.9	206.0	209.2	8.4	7.8	8.9	8.2	4.1	3.7	4.3	3.9
Cincinnati .....	849.0	866.5	853.0	870.3	30.4	29.0	29.6	28.0	3.6	3.3	3.5	3.2
Cleveland-Lorain-Elyria .....	1,126.5	1,144.2	1,133.4	1,145.8	49.3	47.7	52.5	48.0	4.4	4.2	4.6	4.2
Columbus .....	817.6	830.7	822.3	833.6	22.2	22.1	22.4	21.2	2.7	2.7	2.7	2.5
Dayton-Springfield .....	484.4	482.7	486.3	482.7	18.7	17.7	18.6	17.1	3.9	3.7	3.8	3.5
Hamilton-Middletown .....	176.6	176.5	178.4	177.7	5.8	5.8	6.2	6.0	3.3	3.3	3.5	3.4
Lima .....	76.1	77.2	76.3	77.6	3.4	3.6	3.4	3.8	4.4	4.7	4.4	4.9
Mansfield .....	84.7	83.3	85.2	83.5	5.0	4.5	5.2	4.4	5.9	5.4	6.1	5.3
Steubenville-Weirton .....	58.6	57.4	58.5	57.2	4.8	3.3	4.6	3.7	8.2	5.7	7.8	6.5
Toledo .....	321.4	320.7	322.2	321.3	14.6	14.6	14.6	14.7	4.5	4.5	4.5	4.6
Youngstown-Warren .....	289.6	292.2	290.4	292.5	15.1	14.4	15.9	15.2	5.2	4.9	5.5	5.2

See footnotes at end of table.



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

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	October		November		October		November		October		November	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Oklahoma</b>	1,614.9	1,648.8	1,611.6	1,643.6	62.0	70.1	56.0	63.6	3.8	4.3	3.5	3.9
Enid	28.5	28.9	28.4	28.7	0.9	1.0	0.8	0.9	3.1	3.5	2.8	3.2
Lawton	40.7	41.2	40.3	40.8	2.0	2.0	1.7	1.8	5.0	4.9	4.2	4.3
Oklahoma City	534.0	546.1	532.6	545.4	17.1	19.1	15.2	16.6	3.2	3.5	2.9	3.0
Tulsa	406.3	418.6	406.4	420.0	13.1	13.5	11.6	12.7	3.2	3.2	2.9	3.0
<b>Oregon</b>	1,764.7	1,804.4	1,767.8	1,805.4	85.3	89.8	92.1	97.6	4.8	5.0	5.2	5.4
Eugene-Springfield	161.4	163.0	162.0	163.4	7.9	8.0	8.3	8.4	4.9	4.9	5.1	5.1
Medford-Ashland	88.5	91.7	89.0	90.9	5.0	5.2	5.4	5.5	5.6	5.7	6.1	6.1
Portland-Vancouver	1,042.1	1,070.5	1,052.2	1,079.4	39.6	45.0	40.7	46.1	3.8	4.2	3.9	4.3
Salem	167.9	170.5	166.2	168.1	7.8	8.1	8.6	9.3	4.7	4.8	5.2	5.5
<b>Pennsylvania</b>	6,006.1	5,955.0	6,014.8	5,964.5	269.2	248.2	275.6	257.7	4.5	4.2	4.6	4.3
Allentown-Bethlehem-Easton	311.3	305.4	310.0	306.0	14.1	13.6	13.3	13.6	4.5	4.5	4.3	4.4
Altoona	63.3	63.3	63.6	63.2	3.1	2.7	3.2	2.8	4.8	4.2	5.0	4.4
Erie	140.9	139.1	141.0	139.6	6.7	6.0	7.2	6.5	4.8	4.3	5.1	4.7
Harrisburg-Lebanon-Carlisle	352.1	349.8	351.1	350.2	10.3	9.3	10.2	9.5	2.9	2.7	2.9	2.7
Johnstown	105.1	103.7	105.9	104.3	6.6	5.3	7.4	5.9	6.3	5.1	7.0	5.7
Lancaster	247.9	246.3	246.9	246.4	6.9	6.4	7.0	6.6	2.8	2.6	2.8	2.7
Philadelphia	2,502.8	2,496.3	2,510.0	2,495.3	112.9	102.2	110.8	99.5	4.5	4.1	4.4	4.0
Pittsburgh	1,155.5	1,141.5	1,160.0	1,145.8	46.6	46.1	49.4	49.5	4.0	4.0	4.3	4.3
Reading	187.5	184.3	187.0	183.3	7.0	7.3	7.0	7.4	3.7	3.9	3.7	4.0
Scranton—Wilkes-Barre—Hazleton	314.4	312.1	315.8	314.0	19.6	16.4	20.3	17.4	6.2	5.3	6.4	5.6
Sharon	56.7	56.5	57.1	56.6	2.0	2.0	2.1	2.0	3.6	3.6	3.6	3.6
State College	69.1	69.0	69.4	69.2	1.6	1.6	1.7	1.8	2.3	2.4	2.4	2.6
Williamsport	58.8	57.6	58.5	57.9	3.6	2.6	3.6	3.0	6.2	4.6	6.2	5.1
York	195.8	193.2	195.9	192.8	6.6	6.5	6.8	6.5	3.3	3.3	3.5	3.3
<b>Rhode Island</b>	511.5	506.2	510.5	506.6	25.9	25.9	22.8	22.3	5.1	5.1	4.5	4.4
Providence-Fall River-Warwick	583.3	576.2	582.9	577.9	29.8	28.3	26.6	24.5	5.1	4.9	4.6	4.6
<b>South Carolina</b>	1,908.2	1,945.1	1,893.7	1,944.1	73.0	74.4	61.6	66.6	3.8	3.8	3.3	3.4
Charleston-North Charleston	253.9	265.2	253.3	265.2	8.2	7.7	6.7	6.5	3.2	2.9	2.6	2.5
Columbia	270.6	279.1	270.3	280.0	6.2	5.7	5.2	5.1	2.3	2.1	1.9	1.8
Florence	63.0	62.9	62.3	62.5	2.9	2.9	2.4	2.5	4.6	4.6	3.9	4.0
Greenville-Spartanburg-Anderson	483.2	496.7	481.3	498.0	12.5	14.4	10.0	12.5	2.6	2.9	2.1	2.5
Myrtle Beach	97.3	100.3	94.4	98.6	3.4	3.3	3.9	3.9	3.5	3.3	4.2	4.0
Sumter	46.7	47.0	46.2	46.9	2.2	2.3	1.8	2.0	4.7	4.8	4.0	4.2
<b>South Dakota</b>	394.5	402.7	394.8	403.2	9.0	8.0	10.5	10.0	2.3	2.0	2.6	2.5
Rapid City	46.0	47.3	46.1	46.9	1.2	0.9	1.3	1.1	2.5	1.9	2.8	2.4
Sioux Falls	98.8	104.4	100.4	104.6	1.4	1.3	1.6	1.4	1.5	1.2	1.6	1.4
<b>Tennessee</b>	2,759.4	2,815.5	2,786.3	2,816.9	135.3	106.8	136.7	105.0	4.9	3.8	4.9	3.7
Chattanooga	226.6	229.6	229.3	229.9	10.5	7.9	10.9	7.4	4.6	3.4	4.8	3.2
Clarksville-Hopkinsville	82.2	84.2	83.1	84.6	4.0	3.1	3.7	2.6	4.9	3.6	4.5	3.1
Jackson	56.4	57.8	57.0	57.6	2.2	1.9	2.2	1.8	4.0	3.2	3.9	3.2
Johnson City-Kingsport-Bristol	231.3	233.4	233.8	233.5	10.7	9.0	10.7	8.6	4.6	3.9	4.6	3.7
Knoxville	342.1	349.0	346.4	347.8	12.3	11.5	13.9	11.7	3.6	3.3	4.0	3.4
Memphis	543.2	557.8	546.6	558.2	25.8	18.5	24.2	17.6	4.7	3.3	4.4	3.2
Nashville	634.0	652.7	641.3	654.6	21.6	17.9	20.7	16.6	3.4	2.7	3.2	2.5
<b>Texas</b>	9,960.4	10,241.5	9,997.9	10,218.3	479.9	469.5	489.6	460.0	4.8	4.6	4.9	4.5
Abiene	60.4	62.8	60.7	62.4	2.0	2.2	2.1	2.1	3.4	3.5	3.5	3.4
Amarillo	110.6	112.8	110.8	112.3	3.7	3.7	3.7	3.5	3.3	3.2	3.3	3.1
Austin-San Marcos	660.8	685.2	662.9	684.5	18.5	17.5	18.8	16.8	2.8	2.6	2.8	2.4
Beaumont-Port Arthur	181.4	184.1	182.1	184.1	13.4	13.0	13.7	13.0	7.4	7.1	7.5	7.0
Brazoria	105.8	106.7	106.1	106.6	6.7	5.9	6.9	6.0	6.4	5.6	6.5	5.6
Brownsville-Harlingen-San Benito	125.7	128.5	127.3	126.7	14.5	15.0	15.8	14.3	11.6	11.7	12.4	11.3
Bryan-College Station	73.0	74.3	73.0	74.1	1.3	1.3	1.3	1.2	1.7	1.7	1.8	1.7
Corpus Christi	176.4	178.4	176.0	176.9	11.6	12.0	11.4	11.4	6.6	6.7	6.5	6.4
Dallas	1,841.5	1,906.6	1,849.8	1,893.4	62.7	57.7	62.9	55.6	3.4	3.0	3.4	2.9
El Paso	294.7	301.2	292.0	299.4	32.0	30.1	29.2	29.2	10.9	10.0	10.0	9.8
Fort Worth-Arlington	853.4	881.7	858.6	882.0	27.6	27.3	28.1	26.0	3.2	3.1	3.3	3.0
Galveston-Texas City	125.2	125.8	124.5	125.3	9.0	7.7	9.0	7.5	7.2	6.1	7.2	6.0
Houston	2,069.9	2,123.5	2,075.4	2,120.0	91.5	81.8	91.7	80.5	4.4	3.9	4.4	3.8
Killeen-Temple	114.3	117.8	114.7	117.3	5.5	4.8	5.6	4.4	4.8	4.0	4.8	3.8
Laredo	70.1	71.9	70.8	72.0	6.1	6.6	6.5	6.5	8.8	9.2	9.2	9.0
Longview-Marshall	104.1	106.4	104.3	106.1	7.1	7.7	7.3	7.7	6.8	7.3	7.0	7.2
Lubbock	124.1	127.0	124.4	127.0	4.2	3.3	4.3	3.1	3.4	2.6	3.5	2.5
McAllen-Edinburg-Mission	187.7	192.7	196.6	195.3	30.2	32.0	35.4	33.5	16.1	16.6	18.0	17.2
Odessa-Midland	124.8	129.6	125.5	129.2	5.3	7.7	5.3	7.7	4.3	5.9	4.2	6.0
San Angelo	51.4	53.0	51.7	52.8	1.6	2.8	1.6	2.6	3.0	5.3	3.0	4.9
San Antonio	751.1	775.5	752.9	773.4	28.2	26.0	28.8	24.5	3.8	3.4	3.8	3.2
Sherman-Denison	50.2	52.0	50.1	51.2	1.9	2.8	1.9	2.6	3.8	5.4	3.7	5.1

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA  
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force				Unemployed							
					Number				Percent of labor force			
	October		November		October		November		October		November	
	1997	1998	1997	1998P	1997	1998	1997	1998P	1997	1998	1997	1998P
<b>Texas—Continued</b>												
Texarkana .....	56.7	58.2	57.6	58.3	3.6	3.7	4.2	3.5	6.3	6.4	7.3	6.0
Tyler .....	89.9	92.1	89.2	91.8	7.8	4.5	5.3	4.3	8.6	4.9	5.9	4.7
Victoria .....	43.4	45.1	43.2	45.0	1.8	1.9	1.7	1.9	4.0	4.2	4.0	4.3
Waco .....	101.6	103.6	101.3	102.5	4.3	3.8	4.3	3.4	4.2	3.6	4.3	3.3
Wichita Falls .....	65.4	66.8	65.6	67.0	2.6	2.8	2.8	3.1	3.9	4.2	4.3	4.6
<b>Utah</b>												
Provo-Orem .....	1,065.0	1,099.7	1,071.5	1,099.1	31.7	34.9	30.8	31.9	3.0	3.2	2.9	2.9
Salt Lake City-Ogden .....	159.4	164.2	160.6	166.2	3.9	4.6	3.6	4.3	2.4	2.8	2.3	2.6
<b>Vermont</b>												
Burlington .....	331.9	334.5	330.6	333.4	11.2	9.4	12.1	9.6	3.4	2.8	3.7	2.9
<b>Virginia</b>												
Charlottesville .....	73.4	78.5	73.9	78.7	1.3	1.1	1.2	1.0	1.8	1.4	1.7	1.2
Danville .....	56.8	58.9	57.2	59.0	3.1	3.1	2.8	3.3	5.4	5.3	4.9	5.6
Lynchburg .....	101.8	103.5	103.6	104.3	3.1	2.4	3.0	2.5	3.1	2.3	2.9	2.4
Norfolk-Virginia Beach-Newport News .....	729.4	748.2	736.5	748.0	30.7	26.5	29.2	24.9	4.2	3.5	4.0	3.3
Richmond-Petersburg .....	501.9	517.5	510.0	520.3	16.2	15.1	15.4	13.3	3.2	2.9	3.0	2.6
Roanoke .....	126.4	128.0	128.0	128.9	3.5	2.7	3.4	2.8	2.7	2.1	2.7	2.1
<b>Washington</b>												
Bellingham .....	79.7	81.6	79.5	81.0	4.2	4.4	4.4	4.5	5.3	5.4	5.5	5.5
Bremerton .....	92.8	92.4	92.7	92.5	5.1	4.9	4.9	4.8	5.5	5.3	5.3	5.2
Olympia .....	97.3	99.9	97.5	100.1	5.0	5.0	5.0	4.8	5.1	5.0	5.1	4.8
Richland-Kennewick-Pasco .....	93.3	95.9	88.9	91.8	5.5	6.2	6.9	7.8	5.9	6.5	7.7	8.5
Seattle-Bellevue-Everett .....	1,352.8	1,393.7	1,369.0	1,405.3	41.3	43.5	40.3	43.0	3.1	3.1	2.9	3.1
Spokane .....	209.1	209.9	208.4	210.2	7.9	11.4	8.4	11.2	3.8	5.4	4.1	5.3
Tacoma .....	325.7	338.8	328.6	338.5	14.4	15.6	14.4	15.1	4.4	4.6	4.4	4.5
Yakima .....	125.2	124.5	107.4	109.5	8.0	8.8	11.4	12.8	6.4	7.1	10.6	11.7
<b>West Virginia</b>												
Charleston .....	800.6	806.7	803.0	805.4	47.3	47.2	49.8	48.1	5.9	5.9	6.2	6.0
Huntington-Ashland .....	130.1	134.0	131.7	134.2	5.6	5.7	5.7	5.9	4.3	4.2	4.4	4.4
Parkersburg-Marietta .....	138.5	136.4	137.8	137.8	9.5	7.5	9.0	8.0	6.9	5.5	6.5	5.8
Wheeling .....	77.2	78.6	78.1	79.0	3.7	4.2	4.6	4.3	4.8	5.3	5.8	5.4
<b>Wisconsin</b>												
Appleton-Oshkosh-Neenah .....	73.7	74.5	74.5	74.0	3.4	3.1	3.8	3.2	4.7	4.1	5.0	4.4
Eau Claire .....	2,937.3	2,964.9	2,939.7	2,963.7	85.7	84.9	89.1	92.3	2.9	2.9	3.0	3.1
Green Bay .....	223.5	225.7	222.8	225.9	5.7	5.2	5.8	5.4	2.6	2.3	2.6	2.4
Janesville-Beloit .....	83.1	83.9	83.7	84.2	2.0	2.0	2.4	2.4	2.4	2.4	2.9	2.8
Kenosha .....	131.8	131.6	131.9	130.9	3.5	3.1	3.5	3.2	2.7	2.4	2.6	2.4
La Crosse .....	80.1	79.1	79.8	78.9	2.7	2.7	2.8	2.9	3.4	3.5	3.5	3.6
Madison .....	77.6	80.5	77.4	80.6	2.3	2.4	2.2	2.5	3.0	2.9	2.8	3.0
Milwaukee-Waukesha .....	71.7	71.6	71.6	71.7	1.6	1.7	1.8	1.8	2.2	2.3	2.5	2.5
Racine .....	258.8	263.8	260.7	265.7	3.6	3.5	3.7	3.6	1.4	1.3	1.4	1.4
Sheboygan .....	806.1	820.4	810.4	823.6	25.9	26.3	24.6	26.9	3.2	3.2	3.0	3.3
Wausau .....	94.5	95.5	95.1	95.3	3.3	3.4	3.2	3.6	3.5	3.6	3.4	3.8
<b>Wyoming</b>												
Casper .....	60.4	59.9	59.9	59.8	1.3	1.3	1.4	1.3	2.2	2.2	2.3	2.2
Cheyenne .....	72.8	73.0	72.9	73.5	2.0	1.9	2.2	2.1	2.7	2.6	3.0	2.9
<b>Puerto Rico</b>												
Aguadilla .....	253.1	259.4	252.4	257.7	10.0	10.4	10.8	11.5	4.0	4.0	4.3	4.4
Arecibo .....	32.4	34.2	32.9	34.1	1.6	1.7	1.6	1.7	4.9	5.0	4.9	5.0
Caguas .....	38.1	39.6	39.0	39.8	1.2	1.2	1.4	1.3	3.2	2.9	3.7	3.3
Mayaguez .....	1,314.7	1,268.6	1,325.4	1,314.3	179.1	179.3	176.8	163.7	13.6	14.1	13.3	12.5
Ponce .....	52.0	48.7	52.4	50.7	10.2	9.0	10.0	8.8	19.5	18.4	19.1	17.3
San Juan-Bayamon .....	53.5	50.8	54.1	52.6	8.1	8.0	7.9	7.1	15.1	15.8	14.6	13.5
	118.1	113.5	118.9	117.4	14.2	15.8	13.9	13.9	12.0	13.9	11.7	11.9
	93.7	88.9	94.2	92.2	17.6	14.1	15.6	12.4	18.8	15.8	16.6	13.4
	112.0	108.3	112.5	111.8	19.6	18.2	19.6	17.4	17.5	16.9	17.4	15.6
	711.2	694.9	716.5	720.0	77.4	83.0	77.5	73.6	10.9	12.0	10.8	10.2

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-1. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted**

(Numbers in thousands)

Employment status, sex, and age	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup>	199,352	199,776	200,280	200,850	201,457	202,396	202,835	203,367	203,936	204,395	204,905	205,483	206,098
Civilian labor force	132,606	132,958	133,612	134,244	134,951	135,704	136,136	136,494	136,807	137,337	137,366	137,656	138,285
Percent of population	66.5	66.6	66.7	66.8	67.0	67.0	67.1	67.1	67.1	67.2	67.0	67.0	67.1
Employed	125,208	125,593	126,296	127,169	127,783	128,612	129,355	129,855	130,413	130,957	131,288	131,419	132,166
Employment-population ratio <sup>2</sup>	62.8	62.9	63.1	63.3	63.4	63.5	63.8	63.9	63.9	64.1	64.1	64.0	64.1
Unemployed	7,399	7,366	7,316	7,075	7,168	7,092	6,781	6,639	6,394	6,380	6,079	6,237	6,120
Unemployment rate	5.6	5.5	5.5	5.3	5.3	5.2	5.0	4.9	4.7	4.6	4.4	4.5	4.4
<b>Men, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup>	95,578	95,787	96,048	96,337	96,651	97,324	97,560	97,839	98,139	98,326	98,595	98,894	99,216
Civilian labor force	71,332	71,672	72,020	72,228	72,407	73,013	73,178	73,300	73,520	73,704	73,794	73,982	74,324
Percent of population	74.6	74.8	75.0	75.0	74.9	75.0	74.9	74.9	74.9	75.0	74.8	74.8	74.9
Employed	67,343	67,665	68,044	68,457	68,676	69,237	69,599	69,814	70,097	70,364	70,630	70,658	71,104
Employment-population ratio <sup>2</sup>	70.5	70.6	70.8	71.1	71.1	71.3	71.4	71.4	71.4	71.6	71.6	71.4	71.7
Agriculture	2,496	2,608	2,541	2,559	2,587	2,582	2,624	2,523	2,479	2,446	2,548	2,621	2,575
Nonagricultural industries	64,848	65,057	65,503	65,898	66,089	66,655	66,975	67,291	67,618	67,918	68,082	68,036	68,528
Unemployed	3,988	4,007	3,976	3,771	3,732	3,775	3,579	3,486	3,423	3,339	3,164	3,324	3,220
Unemployment rate	5.6	5.6	5.5	5.2	5.2	5.2	4.9	4.8	4.7	4.5	4.3	4.5	4.3
Not in labor force	24,246	24,116	24,028	24,109	24,243	24,311	24,382	24,539	24,619	24,622	24,802	24,913	24,892
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup>	88,082	88,295	88,513	88,666	88,950	89,536	89,758	89,979	90,244	90,456	90,634	90,898	91,171
Civilian labor force	67,300	67,656	67,948	68,171	68,379	68,910	69,088	69,235	69,388	69,517	69,605	69,708	70,002
Percent of population	76.4	76.6	76.8	76.9	76.9	77.0	77.0	76.9	76.9	76.9	76.8	76.7	76.8
Employed	64,076	64,387	64,695	65,139	65,382	65,866	66,216	66,454	66,599	66,863	67,084	67,086	67,496
Employment-population ratio <sup>2</sup>	72.7	72.9	73.1	73.5	73.5	73.6	73.8	73.9	73.8	73.9	74.0	73.8	74.0
Agriculture	2,290	2,398	2,314	2,341	2,377	2,364	2,410	2,345	2,301	2,265	2,364	2,401	2,353
Nonagricultural industries	61,786	61,989	62,381	62,798	63,005	63,502	63,806	64,109	64,298	64,598	64,720	64,685	65,143
Unemployed	3,225	3,269	3,253	3,032	2,997	3,043	2,871	2,781	2,789	2,655	2,521	2,622	2,506
Unemployment rate	4.8	4.8	4.8	4.4	4.4	4.4	4.2	4.0	4.0	3.8	3.6	3.8	3.6
Not in labor force	20,781	20,639	20,565	20,495	20,572	20,626	20,670	20,744	20,855	20,939	21,029	21,189	21,169
<b>Women, 16 years and over</b>													
Civilian noninstitutional population <sup>1</sup>	103,774	103,988	104,232	104,512	104,807	105,072	105,275	105,528	105,797	106,069	106,310	106,588	106,882
Civilian labor force	61,275	61,286	61,592	62,016	62,544	62,691	62,958	63,194	63,287	63,634	63,573	63,675	63,962
Percent of population	59.0	58.9	59.1	59.3	59.7	59.7	59.8	59.9	59.8	60.0	59.8	59.7	59.8
Employed	57,864	57,927	58,253	58,712	59,107	59,374	59,756	60,041	60,316	60,593	60,658	60,762	61,062
Employment-population ratio <sup>2</sup>	55.8	55.7	55.9	56.2	56.4	56.5	56.8	56.9	57.0	57.1	57.1	57.0	57.1
Agriculture	877	899	899	866	823	826	823	865	870	839	817	840	801
Nonagricultural industries	56,987	57,029	57,354	57,846	58,284	58,548	58,933	59,176	59,445	59,754	59,841	59,921	60,261
Unemployed	3,410	3,359	3,340	3,304	3,437	3,317	3,202	3,153	2,971	3,041	2,915	2,913	2,900
Unemployment rate	5.6	5.5	5.4	5.3	5.5	5.3	5.1	5.0	4.7	4.8	4.6	4.6	4.5
Not in labor force	42,499	42,702	42,640	42,497	42,263	42,381	42,317	42,333	42,510	42,436	42,737	42,913	42,920
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup>	96,558	96,757	96,927	97,145	97,371	97,577	97,762	98,000	98,219	98,475	98,662	98,891	99,118
Civilian labor force	57,535	57,595	57,878	58,250	58,655	58,835	59,122	59,371	59,450	59,625	59,578	59,659	59,933
Percent of population	59.6	59.5	59.7	60.0	60.2	60.3	60.5	60.6	60.5	60.5	60.4	60.3	60.5
Employed	54,730	54,830	55,108	55,492	55,801	56,133	56,486	56,802	57,021	57,095	57,181	57,266	57,562
Employment-population ratio <sup>2</sup>	56.7	56.7	56.9	57.1	57.3	57.5	57.8	58.0	58.1	58.0	58.0	57.9	58.1
Agriculture	817	847	856	824	778	774	777	816	823	779	752	785	753
Nonagricultural industries	53,913	53,982	54,252	54,668	55,023	55,359	55,709	55,985	56,198	56,315	56,429	56,482	56,809
Unemployed	2,804	2,766	2,771	2,758	2,855	2,702	2,636	2,569	2,429	2,530	2,398	2,393	2,372
Unemployment rate	4.9	4.8	4.8	4.7	4.9	4.6	4.5	4.3	4.1	4.2	4.0	4.0	4.0
Not in labor force	39,024	39,162	39,049	38,896	38,716	38,741	38,640	38,630	38,768	38,850	39,084	39,232	39,184
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup>	14,712	14,723	14,839	15,038	15,136	15,283	15,315	15,387	15,473	15,464	15,609	15,694	15,809
Civilian labor force	7,771	7,707	7,785	7,823	7,917	7,959	7,927	7,888	7,968	8,195	8,183	8,289	8,350
Percent of population	52.8	52.3	52.5	52.0	52.3	52.1	51.8	51.3	51.5	53.0	52.4	52.8	52.8
Employed	6,402	6,376	6,493	6,538	6,601	6,612	6,652	6,600	6,793	7,000	7,023	7,067	7,108
Employment-population ratio <sup>2</sup>	43.5	43.3	43.8	43.5	43.6	43.3	43.4	42.9	43.9	45.3	45.0	45.0	45.0
Agriculture	266	262	270	260	255	271	260	227	226	241	249	276	270
Nonagricultural industries	6,135	6,115	6,223	6,279	6,346	6,342	6,392	6,373	6,567	6,759	6,774	6,791	6,838
Unemployed	1,370	1,331	1,292	1,285	1,317	1,346	1,274	1,289	1,176	1,195	1,160	1,222	1,242
Unemployment rate	17.6	17.3	16.6	16.4	16.6	16.9	16.1	16.3	14.8	14.6	14.2	14.7	14.9
Not in labor force	6,940	7,016	7,054	7,215	7,219	7,325	7,389	7,499	7,505	7,268	7,426	7,405	7,458

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

<sup>2</sup> Employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the seasonally adjusted data shown in tables D-1 through D-11 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. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA**  
**SEASONALLY ADJUSTED**  
**QUARTERLY AVERAGES**

**D-2. 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	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> .....	167,438	167,760	168,098	168,491	168,918	169,499	169,785	170,149	170,540	170,915	171,262	171,657	172,079
Civilian labor force .....	112,123	112,445	112,890	113,239	113,843	114,331	114,639	114,754	114,999	115,227	115,214	115,402	115,799
Percent of population .....	67.0	67.0	67.2	67.2	67.4	67.5	67.5	67.4	67.4	67.4	67.3	67.2	67.3
Employed .....	106,615	107,000	107,489	108,102	108,642	109,231	109,818	109,928	110,449	110,649	110,818	110,915	111,342
Employment-population ratio <sup>2</sup> .....	63.7	63.8	63.9	64.2	64.3	64.4	64.7	64.6	64.8	64.7	64.7	64.6	64.7
Unemployed .....	5,508	5,446	5,400	5,136	5,201	5,100	4,821	4,826	4,549	4,578	4,395	4,487	4,457
Unemployment rate .....	4.9	4.8	4.8	4.5	4.6	4.5	4.2	4.2	4.0	4.0	3.8	3.9	3.8
<b>Men, 20 years and over</b>													
Civilian labor force .....	57,781	58,056	58,265	58,423	58,591	58,991	59,084	59,127	59,263	59,257	59,320	59,459	59,642
Percent of population .....	76.9	77.2	77.3	77.4	77.4	77.5	77.5	77.4	77.4	77.2	77.2	77.2	77.2
Employed .....	55,329	55,605	55,820	56,144	56,345	56,716	56,987	57,042	57,206	57,300	57,446	57,504	57,755
Employment-population ratio <sup>2</sup> .....	73.7	73.9	74.1	74.3	74.4	74.6	74.8	74.7	74.7	74.7	74.7	74.6	74.8
Unemployed .....	2,453	2,450	2,445	2,279	2,246	2,275	2,097	2,084	2,057	1,957	1,874	1,955	1,887
Unemployment rate .....	4.2	4.2	4.2	3.9	3.8	3.9	3.5	3.5	3.5	3.3	3.2	3.3	3.2
<b>Women, 20 years and over</b>													
Civilian labor force .....	47,819	47,849	48,036	48,216	48,546	48,649	48,826	48,921	48,978	49,035	48,983	48,968	49,119
Percent of population .....	59.2	59.2	59.3	59.5	59.8	59.8	60.0	60.0	59.9	59.9	59.7	59.6	59.7
Employed .....	45,763	45,829	46,015	46,271	46,527	46,785	47,013	47,135	47,308	47,269	47,324	47,302	47,467
Employment-population ratio <sup>2</sup> .....	56.7	56.7	56.8	57.1	57.3	57.5	57.7	57.8	57.9	57.9	57.7	57.7	57.7
Unemployed .....	2,056	2,021	2,020	1,945	2,019	1,865	1,813	1,786	1,669	1,766	1,660	1,666	1,652
Unemployment rate .....	4.3	4.2	4.2	4.0	4.2	3.8	3.7	3.7	3.4	3.6	3.4	3.4	3.4
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,522	6,540	6,589	6,599	6,705	6,691	6,729	6,707	6,758	6,935	6,910	6,976	7,038
Percent of population .....	56.3	56.1	56.0	55.5	56.0	55.2	55.4	55.0	55.2	56.4	55.7	55.8	56.1
Employed .....	5,523	5,566	5,654	5,688	5,769	5,730	5,818	5,751	5,935	6,080	6,049	6,109	6,120
Employment-population ratio <sup>2</sup> .....	47.7	47.8	48.0	47.9	48.2	47.2	47.9	47.1	48.5	49.4	48.8	48.8	48.8
Unemployed .....	999	975	935	912	936	961	911	956	823	855	862	867	918
Unemployment rate .....	15.3	14.9	14.2	13.8	14.0	14.4	13.5	14.3	12.2	12.3	12.5	12.4	13.0
Men .....	16.5	15.9	15.2	15.3	15.4	14.9	14.4	14.9	13.0	14.4	13.8	14.0	14.2
Women .....	14.0	13.8	13.1	12.2	12.4	13.8	12.6	13.6	11.3	10.1	11.1	10.7	11.8
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> .....	23,388	23,454	23,549	23,650	23,761	23,871	23,950	24,043	24,149	24,227	24,319	24,419	24,529
Civilian labor force .....	14,955	14,935	15,064	15,221	15,315	15,383	15,418	15,670	15,641	15,845	15,895	16,003	16,174
Percent of population .....	63.9	63.7	64.0	64.4	64.5	64.4	64.4	65.2	64.8	65.4	65.4	65.5	65.9
Employed .....	13,462	13,383	13,500	13,604	13,682	13,739	13,832	14,182	14,122	14,364	14,497	14,537	14,821
Employment-population ratio <sup>2</sup> .....	57.6	57.1	57.3	57.5	57.6	57.6	57.8	59.0	58.5	59.3	59.6	59.5	60.4
Unemployed .....	1,493	1,552	1,564	1,617	1,634	1,644	1,586	1,488	1,519	1,481	1,399	1,466	1,352
Unemployment rate .....	10.0	10.4	10.4	10.6	10.7	10.7	10.3	9.5	9.7	9.3	8.8	9.2	8.4
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,675	6,764	6,768	6,838	6,851	6,816	6,864	6,997	6,954	7,009	7,054	7,044	7,098
Percent of population .....	71.7	72.2	72.0	72.6	72.3	71.7	71.9	72.9	72.1	72.5	72.7	72.3	72.5
Employed .....	6,092	6,111	6,123	6,208	6,226	6,208	6,263	6,441	6,384	6,464	6,548	6,492	6,610
Employment-population ratio <sup>2</sup> .....	65.4	65.3	65.1	65.9	65.7	65.3	65.6	67.1	66.2	66.9	67.5	66.6	67.5
Unemployed .....	583	653	645	630	625	608	601	556	570	545	506	551	487
Unemployment rate .....	8.7	9.7	9.5	9.2	9.1	8.9	8.8	7.9	8.2	7.8	7.2	7.8	6.9
<b>Women, 20 years and over</b>													
Civilian labor force .....	7,324	7,280	7,354	7,455	7,536	7,594	7,647	7,764	7,742	7,866	7,831	7,922	8,026
Percent of population .....	62.4	61.8	62.3	62.9	63.3	63.5	63.8	64.5	64.0	64.8	64.3	64.8	65.4
Employed .....	6,729	6,671	6,737	6,793	6,846	6,879	6,967	7,111	7,096	7,221	7,198	7,305	7,436
Employment-population ratio <sup>2</sup> .....	57.3	56.6	57.0	57.3	57.5	57.6	58.1	59.1	58.7	59.5	59.1	59.8	60.6
Unemployed .....	595	609	617	662	690	715	680	653	646	645	633	617	590
Unemployment rate .....	8.1	8.4	8.4	8.9	9.2	9.4	8.9	8.4	8.3	8.2	8.1	7.8	7.4

See footnotes at end of table.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-2. 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	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	956	891	942	929	928	973	907	909	946	969	1,011	1,037	1,050
Percent of population .....	41.0	38.5	40.3	39.0	38.9	40.4	37.6	37.7	39.1	40.0	41.4	42.3	42.7
Employed .....	641	601	640	604	610	651	602	630	642	678	751	740	775
Employment-population ratio <sup>2</sup> .....	27.5	26.0	27.3	25.3	25.5	27.1	24.9	26.1	26.6	28.0	30.8	30.2	31.5
Unemployed .....	315	290	303	325	318	321	305	279	303	291	260	297	275
Unemployment rate .....	33.0	32.6	32.1	35.0	34.3	33.0	33.6	30.7	32.1	30.0	25.7	28.7	26.2
Men .....	35.2	34.4	34.6	39.6	38.6	39.3	38.3	35.1	32.7	31.4	26.3	30.9	31.6
Women .....	30.8	30.8	29.6	30.2	30.2	27.3	28.9	26.9	31.5	28.8	25.2	26.5	21.1
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> .....	18,845	18,977	19,132	19,292	19,452	20,067	20,236	20,408	20,574	20,797	20,975	21,160	21,347
Civilian labor force .....	12,411	12,539	12,569	12,825	13,153	13,662	13,672	13,878	13,961	14,140	14,347	14,347	14,438
Percent of population .....	65.9	66.1	65.7	66.5	67.6	68.1	67.6	68.0	67.9	68.0	68.4	67.8	67.6
Employed .....	11,241	11,345	11,399	11,718	12,099	12,536	12,602	12,838	12,929	13,155	13,340	13,299	13,370
Employment-population ratio <sup>2</sup> .....	59.7	59.8	59.6	60.7	62.2	62.5	62.3	62.9	62.8	63.3	63.6	62.8	62.6
Unemployed .....	1,170	1,193	1,170	1,108	1,054	1,126	1,071	1,040	1,032	984	1,007	1,048	1,068
Unemployment rate .....	9.4	9.5	9.3	8.6	8.0	8.2	7.8	7.5	7.4	7.0	7.0	7.3	7.4

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

<sup>2</sup> Employment as a percent of the civilian noninstitutional population.

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. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-3. Employment status of the civilian noninstitutional population 25 years and over by educational attainment, seasonally adjusted**

(Numbers in thousands)

Educational attainment	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Less than a high school diploma</b>													
Civilian noninstitutional population <sup>1</sup> .....	29,952	30,482	30,538	29,787	29,859	30,269	30,069	29,318	29,372	29,487	29,878	29,174	28,964
Civilian labor force .....	12,151	12,344	12,374	12,400	12,470	12,629	12,533	12,554	12,540	12,569	12,679	12,540	12,457
Percent of population .....	40.6	40.5	40.5	41.6	41.8	41.7	41.7	42.8	42.7	42.6	42.4	43.0	43.0
Employed .....	11,033	11,236	11,243	11,349	11,453	11,526	11,497	11,576	11,596	11,669	11,788	11,656	11,585
Employment-population ratio .....	36.8	36.9	36.8	38.1	38.4	38.1	38.2	39.5	39.5	39.6	39.5	40.0	40.0
Unemployed .....	1,118	1,108	1,131	1,050	1,018	1,103	1,035	978	943	900	891	884	872
Unemployment rate .....	9.2	9.0	9.1	8.5	8.2	8.7	8.3	7.8	7.5	7.2	7.0	7.0	7.0
<b>High school graduates, no college<sup>2</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	55,973	56,167	56,344	56,322	56,834	57,247	57,424	57,557	57,467	57,636	57,545	57,564	57,351
Civilian labor force .....	36,668	36,785	36,907	37,067	37,356	37,746	37,768	37,866	37,698	37,775	37,357	37,315	37,415
Percent of population .....	65.5	65.5	65.5	65.8	65.7	65.9	65.8	65.8	65.6	65.5	64.9	64.8	65.2
Employed .....	34,958	35,042	35,167	35,381	35,630	36,067	36,147	36,275	36,181	36,245	35,896	35,815	35,959
Employment-population ratio .....	62.5	62.4	62.4	62.8	62.7	63.0	62.9	63.0	63.0	62.9	62.4	62.2	62.7
Unemployed .....	1,710	1,743	1,740	1,686	1,726	1,680	1,621	1,590	1,517	1,530	1,461	1,500	1,456
Unemployment rate .....	4.7	4.7	4.7	4.5	4.6	4.4	4.3	4.2	4.0	4.0	3.9	4.0	3.9
<b>Less than a bachelor's degree<sup>3</sup></b>													
Civilian noninstitutional population <sup>1</sup> .....	41,884	41,215	41,350	42,312	41,876	41,506	41,641	42,266	42,372	42,186	42,069	41,968	42,819
Civilian labor force .....	30,959	30,822	31,107	31,469	31,202	31,190	31,268	31,477	31,401	31,421	31,376	31,203	31,625
Percent of population .....	73.9	74.8	75.2	74.4	74.5	75.1	75.1	74.5	74.1	74.5	74.6	74.3	73.9
Employed .....	29,748	29,648	29,930	30,304	30,059	30,095	30,264	30,468	30,431	30,426	30,463	30,283	30,720
Employment-population ratio .....	71.0	71.9	72.4	71.6	71.8	72.5	72.7	72.1	71.8	72.1	72.4	72.2	71.7
Unemployed .....	1,211	1,173	1,177	1,165	1,143	1,095	1,005	1,010	970	994	913	920	906
Unemployment rate .....	3.9	3.8	3.8	3.7	3.7	3.5	3.2	3.2	3.1	3.2	2.9	2.9	2.9
<b>College graduates</b>													
Civilian noninstitutional population <sup>1</sup> .....	39,195	39,644	39,778	40,074	40,408	40,667	40,987	41,391	41,752	42,099	42,250	43,470	43,471
Civilian labor force .....	31,581	31,850	32,061	32,249	32,555	32,688	33,100	33,269	33,546	33,758	34,116	34,763	34,724
Percent of population .....	80.6	80.3	80.6	80.5	80.6	80.4	80.8	80.4	80.3	80.2	80.7	80.0	79.9
Employed .....	30,839	31,118	31,327	31,550	31,826	32,016	32,408	32,570	32,945	33,130	33,529	34,172	34,078
Employment-population ratio .....	78.7	78.5	78.8	78.7	78.8	78.7	79.1	78.7	78.9	78.7	79.4	78.6	78.4
Unemployed .....	742	733	734	699	729	672	692	699	602	627	587	592	645
Unemployment rate .....	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	1.8	1.9	1.7	1.7	1.9

<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. Seasonally adjusted data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-4. 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	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>EMPLOYED</b>													
Full-time workers .....	102,206	102,406	103,117	103,915	104,704	105,242	106,084	106,800	107,227	107,698	107,929	108,173	109,020
Men, 16 years and over .....	60,025	60,149	60,556	61,019	61,324	61,740	62,134	62,446	62,712	62,843	63,069	63,185	63,657
Men, 20 years and over .....	58,779	58,927	59,350	59,791	60,093	60,488	60,855	61,163	61,384	61,560	61,731	61,816	62,242
Women, 16 years and over .....	42,175	42,274	42,555	42,882	43,383	43,470	43,936	44,393	44,503	44,775	44,836	45,095	45,349
Women, 20 years and over .....	41,358	41,482	41,723	42,087	42,508	42,602	43,102	43,482	43,578	43,822	43,889	44,034	44,431
Both sexes, 16 to 19 years .....	2,069	1,998	2,043	2,037	2,103	2,153	2,127	2,155	2,265	2,317	2,310	2,322	2,347
Part-time workers .....	23,063	23,126	23,130	23,307	23,147	23,362	23,213	23,038	23,294	23,315	23,302	23,163	23,263
Men, 16 years and over .....	7,370	7,495	7,444	7,458	7,401	7,469	7,422	7,379	7,449	7,505	7,516	7,491	7,511
Men, 20 years and over .....	5,335	5,421	5,303	5,387	5,324	5,357	5,316	5,319	5,256	5,296	5,304	5,289	5,300
Women, 16 years and over .....	15,693	15,617	15,706	15,843	15,743	15,872	15,816	15,664	15,842	15,782	15,811	15,684	15,752
Women, 20 years and over .....	13,384	13,336	13,379	13,405	13,308	13,531	13,375	13,308	13,460	13,282	13,284	13,214	13,152
Both sexes, 16 to 19 years .....	4,345	4,369	4,448	4,514	4,515	4,474	4,522	4,411	4,577	4,737	4,714	4,660	4,811
<b>UNEMPLOYED</b>													
Looking for full-time work .....	5,925	5,917	5,880	5,622	5,764	5,689	5,439	5,287	5,113	5,073	4,852	4,926	4,796
Men, 16 years and over .....	3,361	3,366	3,358	3,176	3,183	3,177	3,027	2,926	2,904	2,710	2,665	2,783	2,661
Men, 20 years and over .....	2,979	3,009	2,990	2,785	2,775	2,787	2,642	2,541	2,563	2,435	2,318	2,403	2,293
Women, 16 years and over .....	2,567	2,548	2,529	2,457	2,576	2,500	2,429	2,373	2,233	2,302	2,215	2,148	2,175
Women, 20 years and over .....	2,280	2,254	2,277	2,206	2,304	2,206	2,153	2,108	1,946	2,059	1,953	1,934	1,918
Both sexes, 16 to 19 years .....	667	653	612	630	685	697	645	639	604	579	580	590	586
Looking for part-time work .....	1,473	1,463	1,441	1,438	1,404	1,421	1,343	1,328	1,279	1,329	1,225	1,293	1,322
Men, 16 years and over .....	639	624	635	602	557	578	580	569	532	562	538	554	584
Men, 20 years and over .....	253	257	267	245	230	257	232	231	230	219	204	213	217
Women, 16 years and over .....	833	831	820	832	834	840	785	757	733	760	719	734	723
Women, 20 years and over .....	511	522	498	545	535	512	486	455	469	491	445	455	439
Both sexes, 16 to 19 years .....	708	684	676	648	639	653	625	643	580	619	575	625	665
<b>UNEMPLOYMENT RATES<sup>1</sup></b>													
Full-time workers .....	5.5	5.5	5.4	5.1	5.2	5.1	4.9	4.7	4.6	4.5	4.3	4.4	4.2
Men, 16 years and over .....	5.3	5.3	5.3	4.9	4.9	4.9	4.6	4.5	4.4	4.1	4.1	4.2	4.0
Men, 20 years and over .....	4.8	4.9	4.8	4.5	4.4	4.4	4.2	4.0	4.0	3.8	3.6	3.7	3.6
Women, 16 years and over .....	5.7	5.7	5.6	5.4	5.6	5.4	5.2	5.1	4.8	4.9	4.7	4.5	4.6
Women, 20 years and over .....	5.2	5.2	5.2	5.0	5.1	4.9	4.8	4.6	4.3	4.5	4.3	4.2	4.1
Both sexes, 16 to 19 years .....	24.4	24.6	23.1	23.6	24.6	24.4	23.3	22.9	21.1	20.0	20.1	20.2	20.0
Part-time workers .....	6.0	5.9	5.9	5.8	5.7	5.7	5.5	5.5	5.2	5.4	5.0	5.3	5.4
Men, 16 years and over .....	8.0	7.7	7.9	7.5	7.0	7.2	7.2	7.2	6.7	7.0	6.7	6.9	7.2
Men, 20 years and over .....	4.5	4.5	4.8	4.4	4.1	4.6	4.2	4.2	4.2	4.0	3.7	3.9	3.9
Women, 16 years and over .....	5.0	5.1	5.0	5.0	5.0	5.0	4.7	4.6	4.4	4.6	4.3	4.5	4.4
Women, 20 years and over .....	3.7	3.8	3.6	3.9	3.9	3.6	3.5	3.3	3.4	3.6	3.2	3.3	3.2
Both sexes, 16 to 19 years .....	14.0	13.5	13.2	12.5	12.4	12.7	12.1	12.7	11.3	11.6	10.9	11.8	12.1

<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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-5. Employed persons by marital status, occupation, class of worker, and part-time status, seasonally adjusted**

(In thousands)

Category	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>MARITAL STATUS</b>													
Total .....	125,208	125,593	126,296	127,169	127,783	128,612	129,355	129,855	130,413	130,957	131,288	131,419	132,166
Married men, spouse present .....	42,097	42,172	42,446	42,518	42,522	42,569	42,481	42,659	42,843	42,851	42,689	42,965	43,175
Married women, spouse present .....	32,126	32,129	32,334	32,647	32,504	32,686	32,565	32,873	32,886	32,840	32,851	32,760	33,028
Women who maintain families .....	7,236	7,333	7,323	7,321	7,475	7,612	7,813	7,874	7,799	7,824	7,864	7,929	7,999
<b>OCCUPATION</b>													
Managerial and professional specialty ..	35,696	35,844	36,381	36,651	37,102	37,515	37,510	37,735	37,980	38,256	38,695	39,172	39,622
Technical, sales, and administrative support .....	37,284	37,393	37,630	37,790	37,902	38,111	38,232	38,352	38,533	38,537	38,545	38,611	38,389
Service occupations .....	16,878	16,855	17,221	17,339	17,273	17,232	17,410	17,697	17,791	17,928	17,720	17,793	17,897
Precision production, craft, and repair ...	13,549	13,592	13,421	13,671	13,703	13,981	14,196	14,112	14,231	14,406	14,599	14,179	14,476
Operators, fabricators, and laborers .....	18,146	18,170	18,174	18,181	18,270	18,232	18,486	18,474	18,407	18,436	18,270	18,081	18,238
Farming, forestry, and fishing .....	3,621	3,735	3,528	3,535	3,492	3,530	3,571	3,470	3,442	3,407	3,498	3,565	3,513
<b>CLASS OF WORKER</b>													
Agriculture:													
Wage and salary workers .....	1,821	1,899	1,892	1,830	1,868	1,927	1,947	1,858	1,834	1,923	1,922	2,089	2,055
Self-employed workers .....	1,515	1,568	1,496	1,521	1,485	1,438	1,435	1,474	1,475	1,331	1,394	1,335	1,297
Unpaid family workers .....	38	44	46	69	62	47	55	49	51	40	42	34	36
Nonagricultural industries:													
Wage and salary workers .....	112,831	112,983	113,773	114,726	115,209	115,767	116,647	117,454	118,066	118,664	118,763	118,878	119,791
Private industries .....	94,607	94,869	95,457	96,484	97,005	97,651	98,609	99,222	99,922	100,420	100,477	100,494	101,178
Private households .....	961	908	868	969	968	909	910	921	921	998	983	918	953
Other industries .....	93,646	93,961	94,589	95,515	96,036	96,742	97,699	98,302	99,001	99,421	99,493	99,575	100,225
Government .....	18,225	18,114	18,315	18,242	18,204	18,116	18,038	18,231	18,144	18,244	18,287	18,385	18,613
Self-employed workers .....	8,922	8,959	8,967	8,904	9,060	9,272	9,103	8,919	8,936	8,872	9,016	9,037	8,924
Unpaid family workers .....	106	101	115	130	145	132	131	117	99	111	104	89	110
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
All industries:													
Part time for economic reasons .....	4,448	4,304	4,372	4,365	4,237	4,207	4,146	4,003	3,920	3,915	3,767	3,560	3,387
Slack work or business conditions .....	2,550	2,424	2,372	2,493	2,265	2,364	2,348	2,189	2,233	2,194	2,132	2,077	1,956
Could only find part-time work .....	1,618	1,567	1,638	1,580	1,648	1,515	1,473	1,499	1,389	1,400	1,291	1,190	1,147
Part time for noneconomic reasons .....	17,540	17,563	17,701	18,012	17,931	18,114	18,177	17,999	18,266	18,423	18,486	18,643	18,658
Nonagricultural industries:													
Part time for economic reasons .....	4,287	4,089	4,176	4,171	4,068	4,017	3,936	3,828	3,733	3,747	3,611	3,379	3,234
Slack work or business conditions .....	2,446	2,282	2,259	2,364	2,149	2,249	2,211	2,078	2,120	2,081	2,048	1,973	1,864
Could only find part-time work .....	1,582	1,539	1,605	1,551	1,618	1,480	1,437	1,467	1,353	1,374	1,259	1,156	1,119
Part time for noneconomic reasons .....	16,926	16,907	17,084	17,402	17,306	17,495	17,616	17,445	17,659	17,819	17,867	18,058	18,124

<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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.



**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-6. Employed persons by age and sex, seasonally adjusted**

(In thousands)

Age and sex	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total, 16 years and over .....	125,208	125,593	126,296	127,169	127,783	128,612	129,355	129,855	130,413	130,957	131,288	131,419	132,166
16 to 24 years .....	18,587	18,525	18,650	18,617	18,776	18,935	19,030	19,010	19,208	19,528	19,584	19,546	19,774
16 to 19 years .....	6,402	6,376	6,493	6,538	6,601	6,612	6,652	6,600	6,793	7,000	7,023	7,067	7,108
16 to 17 years .....	2,551	2,574	2,651	2,663	2,700	2,630	2,649	2,622	2,695	2,796	2,751	2,757	2,746
18 to 19 years .....	3,845	3,793	3,856	3,875	3,898	3,972	4,010	3,968	4,103	4,203	4,282	4,309	4,364
20 to 24 years .....	12,186	12,148	12,157	12,079	12,175	12,323	12,378	12,410	12,415	12,528	12,561	12,479	12,666
25 years and over .....	106,618	107,052	107,667	108,553	109,008	109,666	110,342	110,844	111,206	111,419	111,720	111,871	112,396
25 to 54 years .....	91,375	91,809	92,317	93,012	93,425	93,848	94,328	94,828	94,844	95,066	95,161	95,226	95,585
55 years and over .....	15,235	15,259	15,314	15,565	15,573	15,853	15,970	16,046	16,350	16,386	16,511	16,679	16,808
Men, 16 years and over .....	67,343	67,665	68,044	68,457	68,676	69,237	69,599	69,814	70,097	70,364	70,630	70,658	71,104
16 to 24 years .....	9,767	9,739	9,752	9,729	9,745	9,910	9,976	9,933	9,994	10,137	10,185	10,155	10,308
16 to 19 years .....	3,268	3,279	3,348	3,318	3,294	3,371	3,383	3,360	3,498	3,502	3,546	3,572	3,608
16 to 17 years .....	1,290	1,298	1,332	1,307	1,338	1,335	1,343	1,350	1,395	1,428	1,398	1,389	1,378
18 to 19 years .....	1,976	1,978	2,034	2,006	1,951	2,032	2,050	1,995	2,105	2,082	2,160	2,176	2,225
20 to 24 years .....	6,499	6,461	6,404	6,410	6,451	6,539	6,593	6,573	6,496	6,635	6,638	6,583	6,701
25 years and over .....	57,571	57,909	58,299	58,748	58,924	59,318	59,627	59,901	60,093	60,218	60,450	60,523	60,788
25 to 54 years .....	49,097	49,382	49,664	50,035	50,237	50,480	50,680	50,918	51,015	51,175	51,255	51,201	51,469
55 years and over .....	8,497	8,533	8,620	8,699	8,706	8,856	8,923	8,974	9,097	9,066	9,164	9,317	9,342
Women, 16 years and over .....	57,864	57,927	58,253	58,712	59,107	59,374	59,756	60,041	60,316	60,593	60,658	60,762	61,062
16 to 24 years .....	8,821	8,785	8,898	8,888	9,030	9,025	9,054	9,077	9,214	9,392	9,399	9,391	9,465
16 to 19 years .....	3,134	3,098	3,145	3,220	3,307	3,241	3,269	3,239	3,295	3,498	3,477	3,495	3,500
16 to 17 years .....	1,262	1,276	1,319	1,356	1,362	1,295	1,306	1,272	1,300	1,369	1,353	1,368	1,368
18 to 19 years .....	1,869	1,815	1,822	1,868	1,947	1,940	1,960	1,973	1,999	2,121	2,122	2,133	2,139
20 to 24 years .....	5,687	5,688	5,753	5,668	5,724	5,784	5,785	5,837	5,920	5,893	5,922	5,895	5,965
25 years and over .....	49,047	49,143	49,367	49,805	50,084	50,348	50,715	50,943	51,113	51,201	51,270	51,348	51,609
25 to 54 years .....	42,278	42,428	42,653	42,978	43,188	43,368	43,647	43,910	43,829	43,890	43,906	44,025	44,116
55 years and over .....	6,737	6,726	6,694	6,866	6,867	6,997	7,047	7,072	7,253	7,321	7,347	7,362	7,466

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-7. Unemployed persons by age and sex, seasonally adjusted**

(In thousands)

Age and sex	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total, 16 years and over .....	7,399	7,366	7,316	7,075	7,168	7,092	6,781	6,639	6,394	6,380	6,079	6,237	6,120
16 to 24 years .....	2,601	2,625	2,545	2,478	2,526	2,555	2,436	2,370	2,338	2,349	2,222	2,344	2,215
16 to 19 years .....	1,370	1,331	1,292	1,285	1,317	1,346	1,274	1,289	1,176	1,195	1,160	1,222	1,242
16 to 17 years .....	656	628	630	618	595	605	590	591	569	593	550	558	592
18 to 19 years .....	718	697	668	666	725	733	690	696	610	594	617	665	654
20 to 24 years .....	1,232	1,294	1,253	1,193	1,209	1,209	1,161	1,081	1,163	1,153	1,062	1,122	972
25 years and over .....	4,790	4,742	4,776	4,603	4,629	4,542	4,348	4,280	4,043	4,042	3,854	3,896	3,891
25 to 54 years .....	4,219	4,191	4,198	4,054	4,125	4,053	3,826	3,774	3,579	3,599	3,402	3,424	3,397
55 years and over .....	571	576	552	541	511	511	500	501	468	461	430	465	500
Men, 16 years and over .....	3,988	4,007	3,976	3,771	3,732	3,775	3,579	3,486	3,423	3,339	3,164	3,324	3,220
16 to 24 years .....	1,435	1,448	1,440	1,368	1,365	1,388	1,314	1,316	1,300	1,294	1,225	1,316	1,231
16 to 19 years .....	764	738	723	739	735	732	708	704	634	685	643	702	714
16 to 17 years .....	358	350	351	362	327	336	328	310	310	335	311	326	350
18 to 19 years .....	409	383	381	372	410	392	387	389	324	347	341	370	363
20 to 24 years .....	672	710	717	629	630	656	606	611	667	609	582	615	516
25 years and over .....	2,550	2,544	2,547	2,412	2,361	2,376	2,276	2,180	2,114	2,038	1,946	2,015	1,982
25 to 54 years .....	2,240	2,257	2,232	2,099	2,078	2,093	1,980	1,902	1,828	1,776	1,688	1,742	1,693
55 years and over .....	307	303	297	312	284	295	280	278	289	274	242	274	291
Women, 16 years and over .....	3,410	3,359	3,340	3,304	3,437	3,317	3,202	3,153	2,971	3,041	2,915	2,913	2,900
16 to 24 years .....	1,166	1,177	1,105	1,109	1,161	1,167	1,122	1,054	1,038	1,055	997	1,028	984
16 to 19 years .....	606	593	569	546	582	614	567	584	542	511	517	520	528
16 to 17 years .....	298	278	279	257	268	269	261	281	259	258	238	232	242
18 to 19 years .....	309	314	287	294	316	342	303	307	286	247	276	294	291
20 to 24 years .....	560	584	536	563	579	552	555	470	496	544	480	508	456
25 years and over .....	2,239	2,197	2,229	2,191	2,269	2,166	2,072	2,100	1,929	2,004	1,908	1,881	1,910
25 to 54 years .....	1,979	1,934	1,966	1,955	2,047	1,959	1,846	1,872	1,750	1,823	1,713	1,682	1,704
55 years and over .....	264	274	255	229	227	216	220	223	179	187	188	192	209

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-8. Unemployment rates by age and sex, seasonally adjusted**

(Percent)

Age and sex	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total, 16 years and over .....	5.6	5.5	5.5	5.3	5.3	5.2	5.0	4.9	4.7	4.6	4.4	4.5	4.4
16 to 24 years .....	12.3	12.4	12.0	11.7	11.9	11.9	11.3	11.1	10.9	10.7	10.2	10.7	10.1
16 to 19 years .....	17.6	17.3	16.6	16.4	16.6	16.9	16.1	16.3	14.8	14.6	14.2	14.7	14.9
16 to 17 years .....	20.5	19.6	19.2	18.8	18.0	18.7	18.2	18.4	17.4	17.5	16.7	16.8	17.7
18 to 19 years .....	15.7	15.5	14.8	14.7	15.7	15.6	14.7	14.9	12.9	12.4	12.6	13.4	13.0
20 to 24 years .....	9.2	9.6	9.3	9.0	9.0	8.9	8.6	8.0	8.6	8.4	7.8	8.3	7.1
25 years and over .....	4.3	4.2	4.2	4.1	4.1	4.0	3.8	3.7	3.5	3.5	3.3	3.4	3.3
25 to 54 years .....	4.4	4.4	4.3	4.2	4.2	4.1	3.9	3.8	3.6	3.6	3.5	3.5	3.4
55 years and over .....	3.6	3.6	3.5	3.4	3.2	3.1	3.0	3.0	2.8	2.7	2.5	2.7	2.9
Men, 16 years and over .....	5.6	5.6	5.5	5.2	5.2	5.2	4.9	4.8	4.7	4.5	4.3	4.5	4.3
16 to 24 years .....	12.8	12.9	12.9	12.3	12.3	12.3	11.6	11.7	11.5	11.3	10.7	11.5	10.7
16 to 19 years .....	18.9	18.4	17.8	18.2	18.2	17.8	17.3	17.3	15.3	16.4	15.3	16.4	16.5
16 to 17 years .....	21.7	21.2	20.8	21.7	19.6	20.1	19.6	18.7	18.2	19.0	18.2	19.0	20.3
18 to 19 years .....	17.2	16.2	15.8	15.6	17.4	16.2	15.9	16.3	13.3	14.3	13.6	14.5	14.0
20 to 24 years .....	9.4	9.9	10.1	8.9	8.9	9.1	8.4	8.5	9.3	8.4	8.1	8.5	7.2
25 years and over .....	4.2	4.2	4.2	3.9	3.9	3.9	3.7	3.5	3.4	3.3	3.1	3.2	3.2
25 to 54 years .....	4.4	4.4	4.3	4.0	4.0	4.0	3.8	3.6	3.5	3.4	3.2	3.3	3.2
55 years and over .....	3.5	3.4	3.3	3.5	3.2	3.2	3.0	3.0	3.1	2.9	2.6	2.9	3.0
Women, 16 years and over .....	5.6	5.5	5.4	5.3	5.5	5.3	5.1	5.0	4.7	4.8	4.6	4.6	4.5
16 to 24 years .....	11.7	11.8	11.0	11.1	11.4	11.4	11.0	10.4	10.1	10.1	9.6	9.9	9.4
16 to 19 years .....	16.2	16.1	15.3	14.5	15.0	15.9	14.8	15.3	14.1	12.7	13.0	13.0	13.1
16 to 17 years .....	19.1	17.9	17.5	15.9	16.4	17.2	16.7	18.1	16.6	15.9	15.0	14.5	15.0
18 to 19 years .....	14.2	14.7	13.6	13.6	14.0	15.0	13.4	13.5	12.5	10.4	11.5	12.1	12.0
20 to 24 years .....	9.0	9.3	8.5	9.0	9.2	8.7	8.8	7.5	7.7	8.5	7.5	7.9	7.1
25 years and over .....	4.4	4.3	4.3	4.2	4.3	4.1	3.9	4.0	3.6	3.8	3.6	3.5	3.6
25 to 54 years .....	4.5	4.4	4.4	4.4	4.5	4.3	4.1	4.1	3.8	4.0	3.8	3.7	3.7
55 years and over .....	3.8	3.9	3.7	3.2	3.2	3.0	3.0	3.1	2.4	2.5	2.5	2.5	2.7

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-9. Unemployment rates by occupation, industry, and selected demographic characteristics, seasonally adjusted**

(Percent)

Category	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>CHARACTERISTIC</b>													
Total .....	5.6	5.5	5.5	5.3	5.3	5.2	5.0	4.9	4.7	4.6	4.4	4.5	4.4
Men, 20 years and over .....	4.8	4.8	4.8	4.4	4.4	4.4	4.2	4.0	4.0	3.8	3.6	3.8	3.6
Women, 20 years and over .....	4.9	4.8	4.8	4.7	4.9	4.6	4.5	4.3	4.1	4.2	4.0	4.0	4.0
Both sexes, 16 to 19 years .....	17.6	17.3	16.6	16.4	16.6	16.9	16.1	16.3	14.8	14.6	14.2	14.7	14.9
White .....	4.9	4.8	4.8	4.5	4.6	4.5	4.2	4.2	4.0	4.0	3.8	3.9	3.8
Black and other .....	9.3	9.3	9.3	9.2	9.3	9.3	9.1	8.3	8.4	8.2	7.6	7.8	7.4
Black .....	10.0	10.4	10.4	10.6	10.7	10.7	10.3	9.5	9.7	9.3	8.8	9.2	8.4
Hispanic origin .....	9.4	9.5	9.3	8.6	8.0	8.2	7.8	7.5	7.4	7.0	7.0	7.3	7.4
Married men, spouse present .....	3.2	3.1	3.0	3.0	3.0	2.8	2.7	2.6	2.5	2.5	2.3	2.3	2.3
Married women, spouse present .....	3.8	3.7	3.7	3.4	3.6	3.3	3.2	3.1	2.9	3.1	2.8	2.9	2.8
Women who maintain families .....	7.5	7.6	8.0	8.7	8.6	8.7	7.9	7.9	7.8	7.6	7.4	7.1	6.7
<b>OCCUPATION<sup>1</sup></b>													
Managerial and professional specialty .....	2.5	2.4	2.4	2.3	2.3	2.1	2.0	2.0	1.8	1.9	1.8	1.8	1.8
Technical, sales, and administrative support .....	4.4	4.5	4.4	4.5	4.6	4.3	4.1	4.1	4.0	4.0	3.8	3.8	3.8
Precision production, craft, and repair .....	5.9	5.7	5.5	5.3	5.4	5.0	4.9	4.7	4.8	4.4	4.2	4.4	3.7
Operators, fabricators, and laborers .....	8.3	8.3	8.2	7.6	7.7	8.0	7.4	7.5	7.0	6.5	6.6	6.8	6.7
Farming, forestry, and fishing .....	7.9	7.7	8.3	6.8	7.3	7.3	7.2	6.7	7.1	6.7	6.3	6.5	6.4
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers ...	5.8	5.7	5.6	5.4	5.4	5.3	5.1	5.0	4.7	4.7	4.5	4.7	4.5
Goods-producing industries .....	6.5	6.3	6.2	5.7	6.0	5.7	5.3	5.2	4.9	4.9	4.6	4.9	4.6
Mining .....	6.7	5.6	4.6	4.4	5.3	4.3	3.0	4.0	3.6	3.3	2.8	3.5	3.0
Construction .....	11.5	10.6	10.2	9.3	9.7	9.5	8.8	8.7	8.5	8.2	7.5	7.6	6.7
Manufacturing .....	5.0	5.0	4.9	4.5	4.8	4.5	4.3	4.1	3.8	3.8	3.7	4.1	3.9
Durable goods .....	4.5	4.8	4.7	4.0	4.6	4.0	3.6	3.3	3.2	3.3	3.1	3.8	3.2
Nondurable goods .....	5.7	5.3	5.3	5.2	5.1	5.2	5.3	5.3	4.6	4.6	4.6	4.6	4.9
Service-producing industries .....	5.5	5.5	5.4	5.3	5.2	5.2	4.9	4.9	4.7	4.6	4.5	4.6	4.5
Transportation and public utilities .....	4.4	3.9	4.4	4.0	4.1	4.0	3.2	3.6	3.2	3.4	3.3	3.4	3.3
Wholesale and retail trade .....	6.4	6.6	6.5	6.3	6.2	6.4	6.3	6.1	6.0	5.7	5.4	5.6	5.4
Finance, insurance, and real estate .....	3.0	2.5	2.6	2.8	2.9	3.2	3.1	3.1	2.6	2.5	2.2	2.4	2.7
Services .....	5.5	5.6	5.5	5.3	5.1	4.9	4.6	4.5	4.4	4.6	4.6	4.6	4.5
Government workers .....	2.9	2.8	3.0	2.9	3.0	2.9	2.6	2.6	2.3	2.5	2.2	2.3	2.1
Agricultural wage and salary workers .....	11.6	10.6	10.4	9.7	10.0	8.8	9.2	9.0	9.3	9.3	8.2	7.8	7.5

<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/or 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. Data have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-10. Unemployed persons by reason for unemployment, seasonally adjusted**

(Numbers in thousands)

Reason	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>NUMBER OF UNEMPLOYED</b>													
Job losers and persons who completed temporary jobs ..	3,517	3,526	3,502	3,204	3,211	3,172	3,069	2,956	2,916	2,868	2,787	2,855	2,775
On temporary layoff .....	1,034	1,056	1,079	961	967	967	953	864	916	888	797	926	849
Not on temporary layoff .....	2,483	2,470	2,423	2,243	2,244	2,205	2,116	2,092	2,000	1,980	1,990	1,929	1,926
Job leavers .....	832	785	710	759	843	812	806	843	711	770	715	744	705
Reentrants .....	2,488	2,463	2,572	2,498	2,525	2,503	2,392	2,238	2,214	2,203	2,103	2,119	2,101
New entrants .....	576	592	557	581	593	612	551	567	548	535	513	494	538
<b>PERCENT DISTRIBUTION</b>													
Job losers and persons who completed temporary jobs ..	47.4	47.9	47.7	45.5	44.8	44.7	45.0	44.8	45.6	45.0	45.6	46.0	45.3
On temporary layoff .....	13.9	14.3	14.7	13.6	13.5	13.6	14.0	13.1	14.3	13.9	13.0	14.9	13.9
Not on temporary layoff .....	33.5	33.5	33.0	31.9	31.3	31.1	31.0	31.7	31.3	31.1	32.5	31.1	31.5
Job leavers .....	11.2	10.7	9.7	10.8	11.7	11.4	11.8	12.8	11.1	12.1	11.7	12.0	11.5
Reentrants .....	33.6	33.4	35.0	35.5	35.2	35.3	35.1	33.9	34.7	34.5	34.4	34.1	34.3
New entrants .....	7.8	8.0	7.6	8.2	8.3	8.6	8.1	8.6	8.6	8.4	8.4	8.0	8.8
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers and persons who completed temporary jobs ..	2.7	2.7	2.6	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.0	2.1	2.0
Job leavers .....	.6	.6	.5	.6	.6	.6	.6	.6	.5	.6	.5	.5	.5
Reentrants .....	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.6	1.6	1.6	1.5	1.5	1.5
New entrants .....	.4	.4	.4	.4	.4	.5	.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. Data

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**D-11. Unemployed persons by duration of unemployment, seasonally adjusted**

(Numbers in thousands)

Duration	1995	1996				1997				1998			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>NUMBER OF UNEMPLOYED</b>													
Less than 5 weeks .....	2,729	2,669	2,616	2,580	2,673	2,617	2,517	2,491	2,518	2,637	2,596	2,639	2,638
5 to 14 weeks .....	2,381	2,313	2,287	2,238	2,314	2,314	2,135	2,093	1,977	1,959	1,973	1,966	1,906
15 weeks and over .....	2,319	2,363	2,402	2,270	2,200	2,121	2,119	2,074	1,914	1,781	1,537	1,629	1,596
15 to 26 weeks .....	1,086	1,120	1,047	997	1,032	1,005	1,048	997	917	827	703	775	746
27 weeks and over .....	1,233	1,243	1,355	1,273	1,169	1,116	1,071	1,077	997	954	834	854	850
Average (mean) duration, in weeks .....	16.2	16.6	17.4	17.0	16.0	15.7	15.5	16.1	15.9	15.2	14.4	14.1	14.2
Median duration, in weeks .....	8.1	8.2	8.5	8.4	7.9	8.0	8.1	8.0	7.6	7.1	6.5	6.7	6.4
<b>PERCENT DISTRIBUTION</b>													
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	36.7	36.3	35.8	36.4	37.2	37.1	37.2	37.4	39.3	41.3	42.5	42.3	43.0
5 to 14 weeks .....	32.0	31.5	31.3	31.6	32.2	32.8	31.5	31.4	30.8	30.7	32.3	31.5	31.0
15 weeks and over .....	31.2	32.2	32.9	32.0	30.6	30.1	31.3	31.2	29.9	27.9	25.2	26.1	26.0
15 to 26 weeks .....	14.6	15.3	14.3	14.1	14.4	14.2	15.5	15.0	14.3	13.0	11.5	12.4	12.2
27 weeks and over .....	16.6	16.9	18.6	18.0	16.3	15.8	15.8	16.2	15.6	15.0	13.7	13.7	13.8

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

have been revised based on the experience through December 1998. See the article in this issue for additional information.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-12. Employment status of the civilian noninstitutional population by sex, age, race, and Hispanic origin**

(Numbers in thousands)

Employment status, sex, and age	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	203,936	206,098	170,540	172,079	24,149	24,529	20,574	21,347
Civilian labor force .....	136,773	138,280	114,976	115,801	15,645	16,190	13,984	14,459
Percent of population .....	67.1	67.1	67.4	67.3	64.8	66.0	68.0	67.7
Employed .....	130,818	132,578	110,743	111,646	14,229	14,929	13,000	13,442
Agriculture .....	3,245	3,270	3,077	3,063	102	141	538	731
Nonagricultural industries .....	127,573	129,308	107,665	108,583	14,127	14,788	12,462	12,711
Unemployed .....	5,955	5,702	4,233	4,155	1,416	1,261	983	1,018
Unemployment rate .....	4.4	4.1	3.7	3.6	9.1	7.8	7.0	7.0
Not in labor force .....	67,162	67,818	55,564	56,278	8,503	8,338	6,591	6,887
<b>Men, 16 years and over</b>								
Civilian noninstitutional population .....	98,139	99,216	82,881	83,680	10,832	11,002	10,502	10,876
Civilian labor force .....	73,308	74,127	62,652	63,145	7,381	7,606	8,429	8,655
Percent of population .....	74.7	74.7	75.6	75.5	68.1	69.1	80.3	79.6
Employed .....	70,131	71,135	60,311	60,902	6,722	7,004	7,886	8,124
Agriculture .....	2,398	2,491	2,263	2,322	82	118	456	665
Nonagricultural industries .....	67,732	68,644	58,048	58,580	6,639	6,885	7,430	7,459
Unemployed .....	3,177	2,992	2,341	2,243	660	603	542	531
Unemployment rate .....	4.3	4.0	3.7	3.6	8.9	7.9	6.4	6.1
Not in labor force .....	24,831	25,088	20,229	20,536	3,451	3,395	2,073	2,221
<b>Men, 20 years and over</b>								
Civilian noninstitutional population .....	90,244	91,171	76,595	77,241	9,640	9,794	9,370	9,700
Civilian labor force .....	69,389	70,022	59,269	59,663	6,981	7,131	7,890	8,078
Percent of population .....	76.9	76.8	77.4	77.2	72.4	72.8	84.2	83.3
Employed .....	66,777	67,674	57,342	57,892	6,443	6,669	7,438	7,655
Agriculture .....	2,263	2,318	2,131	2,156	82	113	435	624
Nonagricultural industries .....	64,514	65,355	55,212	55,736	6,362	6,556	7,003	7,031
Unemployed .....	2,612	2,348	1,927	1,771	538	462	453	423
Unemployment rate .....	3.8	3.4	3.3	3.0	7.7	6.5	5.7	5.2
Not in labor force .....	20,855	21,149	17,326	17,578	2,659	2,663	1,480	1,622
<b>Women, 16 years and over</b>								
Civilian noninstitutional population .....	105,797	106,882	87,659	88,399	13,316	13,527	10,073	10,471
Civilian labor force .....	63,465	64,152	52,324	52,657	8,264	8,584	5,555	5,904
Percent of population .....	60.0	60.0	59.7	59.6	62.1	63.5	55.2	55.4
Employed .....	60,687	61,443	50,432	50,744	7,508	7,926	5,114	5,317
Agriculture .....	847	779	814	741	20	23	82	65
Nonagricultural industries .....	59,841	60,663	49,617	50,003	7,488	7,903	5,032	5,252
Unemployed .....	2,778	2,710	1,892	1,913	757	658	441	487
Unemployment rate .....	4.4	4.2	3.6	3.6	9.2	7.7	7.9	8.4
Not in labor force .....	42,331	42,729	35,335	35,742	5,052	4,943	4,518	4,667
<b>Women, 20 years and over</b>								
Civilian noninstitutional population .....	98,219	99,118	81,702	82,287	12,091	12,276	9,058	9,412
Civilian labor force .....	59,799	60,296	49,292	49,443	7,774	8,064	5,197	5,358
Percent of population .....	60.9	60.8	60.3	60.1	64.3	65.7	57.4	56.9
Employed .....	57,513	58,065	47,715	47,882	7,170	7,513	4,824	4,982
Agriculture .....	809	742	780	705	18	22	82	62
Nonagricultural industries .....	56,704	57,322	46,935	47,177	7,152	7,491	4,742	4,921
Unemployed .....	2,286	2,231	1,577	1,561	604	551	373	375
Unemployment rate .....	3.8	3.7	3.2	3.2	7.8	6.8	7.2	7.0
Not in labor force .....	38,419	38,822	32,410	32,844	4,317	4,212	3,861	4,054
<b>Both sexes, 16 to 19 years</b>								
Civilian noninstitutional population .....	15,473	15,809	12,243	12,551	2,418	2,459	2,146	2,235
Civilian labor force .....	7,585	7,962	6,415	6,695	891	996	896	1,023
Percent of population .....	49.0	50.4	52.4	53.3	36.8	40.5	41.8	45.8
Employed .....	6,528	6,839	5,686	5,871	616	748	739	804
Agriculture .....	172	209	167	202	2	6	22	45
Nonagricultural industries .....	6,356	6,630	5,519	5,670	614	741	717	758
Unemployed .....	1,057	1,123	729	824	275	248	157	220
Unemployment rate .....	13.9	14.1	11.4	12.3	30.8	24.9	17.6	21.5
Not in labor force .....	7,888	7,846	5,828	5,856	1,527	1,463	1,250	1,211

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  
QUARTERLY AVERAGES**

**D-13. Employment status of the Mexican, Puerto Rican, and Cuban origin population by sex and age**

(Numbers in thousands)

Employment status, sex, and age	Total Hispanic origin <sup>1</sup>		Mexican origin		Puerto Rican origin		Cuban origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	20,574	21,347	12,541	13,325	2,345	2,077	1,026	1,084
Civilian labor force .....	13,984	14,459	8,655	9,135	1,383	1,274	654	673
Percent of population .....	68.0	67.7	69.0	68.6	59.0	61.4	63.7	62.1
Employed .....	13,000	13,442	8,036	8,496	1,249	1,167	609	623
Agriculture .....	538	731	486	671	5	9	4	6
Nonagricultural industries .....	12,462	12,711	7,549	7,824	1,244	1,158	604	617
Unemployed .....	983	1,018	619	640	134	107	45	49
Unemployment rate .....	7.0	7.0	7.2	7.0	9.7	8.4	6.9	7.3
Not in labor force .....	6,591	6,887	3,886	4,189	961	802	372	411
<b>Men, 16 years and over</b>								
Civilian noninstitutional population .....	10,502	10,876	6,638	6,974	1,126	991	505	540
Civilian labor force .....	8,429	8,655	5,423	5,677	783	698	386	403
Percent of population .....	80.3	79.6	81.7	81.4	69.5	70.5	76.4	74.5
Employed .....	7,886	8,124	5,080	5,344	705	639	360	380
Agriculture .....	456	665	412	609	4	8	4	6
Nonagricultural industries .....	7,430	7,459	4,668	4,735	701	631	356	374
Unemployed .....	542	531	343	334	77	59	26	22
Unemployment rate .....	6.4	6.1	6.3	5.9	9.9	8.4	6.6	5.5
Not in labor force .....	2,073	2,221	1,215	1,296	344	293	119	138
<b>Men, 20 years and over</b>								
Civilian noninstitutional population .....	9,370	9,700	5,868	6,185	979	875	489	515
Civilian labor force .....	7,890	8,078	5,044	5,277	714	638	376	386
Percent of population .....	84.2	83.3	86.0	85.3	73.0	73.0	76.8	75.0
Employed .....	7,438	7,655	4,757	5,011	657	596	350	367
Agriculture .....	435	624	391	568	4	8	4	6
Nonagricultural industries .....	7,003	7,031	4,366	4,443	653	588	346	361
Unemployed .....	453	423	287	266	57	42	26	19
Unemployment rate .....	5.7	5.2	5.7	5.0	8.0	6.6	6.8	4.8
Not in labor force .....	1,480	1,622	824	907	264	236	114	129
<b>Women, 16 years and over</b>								
Civilian noninstitutional population .....	10,073	10,471	5,902	6,351	1,218	1,086	521	543
Civilian labor force .....	5,555	5,804	3,232	3,458	601	577	268	270
Percent of population .....	55.2	55.4	54.7	54.4	49.3	53.1	51.4	49.8
Employed .....	5,114	5,317	2,955	3,152	544	528	248	243
Agriculture .....	82	65	74	63	-	1	-	-
Nonagricultural industries .....	5,032	5,252	2,881	3,089	544	527	248	243
Unemployed .....	441	487	276	306	57	49	19	27
Unemployment rate .....	7.9	8.4	8.5	8.9	9.5	8.4	7.2	10.1
Not in labor force .....	4,518	4,667	2,671	2,893	618	510	253	273
<b>Women, 20 years and over</b>								
Civilian noninstitutional population .....	9,058	9,412	5,277	5,594	1,061	983	498	520
Civilian labor force .....	5,197	5,358	3,006	3,126	543	527	262	267
Percent of population .....	57.4	56.9	57.0	55.9	51.2	53.6	52.6	51.3
Employed .....	4,824	4,982	2,776	2,906	497	493	244	239
Agriculture .....	82	62	74	59	-	1	-	-
Nonagricultural industries .....	4,742	4,921	2,702	2,847	497	492	244	239
Unemployed .....	373	375	230	220	46	34	18	27
Unemployment rate .....	7.2	7.0	7.7	7.0	8.4	6.4	7.0	10.3
Not in labor force .....	3,861	4,054	2,271	2,469	518	456	236	253
<b>Both sexes, 16 to 19 years</b>								
Civilian noninstitutional population .....	2,146	2,235	1,396	1,546	305	220	38	49
Civilian labor force .....	896	1,023	605	733	126	109	16	20
Percent of population .....	41.8	45.8	43.3	47.4	41.4	49.7	( <sup>2</sup> )	( <sup>2</sup> )
Employed .....	739	804	503	579	95	77	15	17
Agriculture .....	22	45	22	45	-	-	-	-
Nonagricultural industries .....	717	758	481	534	95	77	15	17
Unemployed .....	157	220	102	154	31	32	1	3
Unemployment rate .....	17.6	21.5	16.8	21.0	24.7	29.2	( <sup>2</sup> )	( <sup>2</sup> )
Not in labor force .....	1,250	1,211	791	813	179	110	22	29

<sup>1</sup> Includes persons of Central or South American origin and of other Hispanic origin, not shown separately.

<sup>2</sup> Data not shown where base is less than 60,000.

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  
QUARTERLY AVERAGES**

**D-14. Employed white, black, and Hispanic-origin workers by sex, occupation, class of worker, and full- or part-time status**

(Numbers in thousands)

Category	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>SEX</b>								
Total (all civilian workers) .....	130,818	132,578	110,743	111,646	14,229	14,929	13,000	13,442
Men .....	70,131	71,135	60,311	60,902	6,722	7,004	7,886	8,124
Women .....	60,687	61,443	50,432	50,744	7,508	7,926	5,114	5,317
<b>OCCUPATION</b>								
Managerial and professional specialty .....	38,265	39,916	33,417	34,774	2,909	3,086	1,893	1,932
Executive, administrative, and managerial .....	18,663	19,496	16,517	17,228	1,361	1,471	975	1,076
Professional specialty .....	19,602	20,420	16,900	17,546	1,548	1,615	918	856
Technical, sales, and administrative support .....	38,694	38,547	33,024	32,431	4,073	4,420	3,117	3,141
Technicians and related support .....	4,256	4,163	3,626	3,455	404	465	263	282
Sales occupations .....	15,975	16,107	13,981	13,891	1,301	1,504	1,219	1,260
Administrative support, including clerical .....	18,462	18,276	15,416	15,086	2,369	2,451	1,635	1,600
Service occupations .....	17,725	17,838	13,716	13,723	3,126	3,258	2,681	2,706
Private household .....	830	861	672	700	133	134	224	272
Protective service .....	2,291	2,388	1,803	1,907	430	433	220	198
Service, except private household and protective .....	14,604	14,589	11,242	11,116	2,563	2,691	2,236	2,236
Precision production, craft, and repair .....	14,169	14,398	12,446	12,721	1,152	1,139	1,817	1,872
Mechanics and repairers .....	4,789	4,772	4,238	4,215	373	392	505	500
Construction trades .....	5,273	5,629	4,739	5,077	372	381	753	808
Other precision production, craft, and repair .....	4,107	3,996	3,468	3,428	408	365	560	564
Operators, fabricators, and laborers .....	18,638	18,475	15,035	14,856	2,825	2,852	2,870	2,995
Machine operators, assemblers, and inspectors .....	8,008	7,757	6,380	6,147	1,175	1,187	1,408	1,347
Transportation and material moving occupations .....	5,529	5,516	4,539	4,522	850	845	632	684
Handlers, equipment cleaners, helpers, and laborers .....	5,102	5,201	4,116	4,187	800	820	831	964
Construction laborers .....	819	851	679	739	115	91	153	212
Other handlers, equipment cleaners, helpers, and laborers .....	4,283	4,351	3,437	3,448	685	729	677	752
Farming, forestry, and fishing .....	3,326	3,405	3,105	3,141	144	174	623	795
<b>CLASS OF WORKER</b>								
Agriculture:								
Wage and salary workers .....	1,735	1,950	1,625	1,796	67	106	491	681
Self-employed workers .....	1,459	1,284	1,403	1,231	35	36	45	47
Unpaid family workers .....	51	35	49	35	-	-	2	3
Nonagricultural industries:								
Wage and salary workers .....	118,542	120,276	99,554	100,535	13,634	14,237	11,880	12,160
Government .....	18,301	18,783	14,727	15,037	2,816	2,935	1,381	1,320
Private industries .....	100,241	101,493	84,827	85,497	10,818	11,302	10,499	10,840
Private households .....	929	960	745	772	151	159	243	280
Other industries .....	99,312	100,533	84,081	84,725	10,667	11,143	10,256	10,560
Self-employed workers .....	8,939	8,929	8,032	7,964	491	545	581	547
Unpaid family workers .....	93	103	79	84	2	6	1	4
<b>FULL- OR PART-TIME STATUS</b>								
Full-time workers .....	106,972	108,760	89,984	90,960	12,103	12,731	10,987	11,490
Part-time workers .....	23,846	23,817	20,759	20,686	2,126	2,199	2,014	1,952

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 data.



**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-15. Employed Mexican, Puerto Rican, and Cuban-origin workers by sex, occupation, class of worker, and full- or part-time status**

(In thousands)

Category	Total Hispanic origin <sup>1</sup>		Mexican origin		Puerto Rican origin		Cuban origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>SEX</b>								
Total (all civilian workers) .....	13,000	13,442	8,036	8,496	1,249	1,167	609	623
Men .....	7,886	8,124	5,080	5,344	705	639	360	380
Women .....	5,114	5,317	2,955	3,152	544	528	248	243
<b>OCCUPATION</b>								
Managerial and professional specialty .....	1,893	1,932	974	945	202	212	157	166
Executive, administrative, and managerial .....	975	1,076	518	551	102	110	95	103
Professional specialty .....	918	856	456	394	101	102	63	63
Technical, sales, and administrative support .....	3,117	3,141	1,708	1,787	399	369	209	185
Technicians and related support .....	263	282	130	165	37	23	17	22
Sales occupations .....	1,219	1,260	660	709	158	143	88	88
Administrative support, including clerical .....	1,635	1,600	917	913	205	203	104	75
Service occupations .....	2,681	2,706	1,619	1,710	256	199	66	83
Private household .....	224	272	101	128	1	3	2	-
Protective service .....	220	198	115	108	61	47	4	11
Service, except private household and protective .....	2,236	2,236	1,403	1,474	195	149	60	73
Precision production, craft, and repair .....	1,817	1,872	1,272	1,232	131	147	67	67
Mechanics and repairers .....	505	500	311	326	48	42	38	22
Construction trades .....	753	808	560	541	36	48	17	22
Other precision production, craft, and repair .....	560	564	401	366	47	57	13	22
Operators, fabricators, and laborers .....	2,870	2,995	1,918	2,106	253	222	102	112
Machine operators, assemblers, and inspectors .....	1,408	1,347	951	967	121	118	31	30
Transportation and material moving occupations .....	632	684	401	448	63	50	41	51
Handlers, equipment cleaners, helpers, and laborers .....	831	964	566	691	69	54	30	32
Construction laborers .....	153	212	101	176	7	3	5	-
Other handlers, equipment cleaners, helpers, and laborers .....	677	752	464	515	61	51	25	32
Farming, forestry, and fishing .....	623	795	545	716	8	19	8	10
<b>CLASS OF WORKER</b>								
Agriculture:								
Wage and salary workers .....	491	681	449	630	4	8	4	6
Self-employed workers .....	45	47	35	39	-	2	-	-
Unpaid family workers .....	2	3	2	3	-	-	-	-
Nonagricultural industries:								
Wage and salary workers .....	11,880	12,160	7,227	7,536	1,205	1,115	562	597
Government .....	1,381	1,320	849	811	187	186	60	70
Private industries .....	10,499	10,840	6,378	6,725	1,019	929	503	527
Private households .....	243	280	111	135	3	3	2	-
Other industries .....	10,256	10,560	6,267	6,590	1,016	926	501	527
Self-employed workers .....	581	547	322	286	39	40	42	20
Unpaid family workers .....	1	4	1	2	-	2	-	-
<b>FULL- OR PART-TIME STATUS</b>								
Full-time workers .....	10,987	11,490	6,817	7,276	1,016	989	522	559
Part time workers .....	2,014	1,952	1,219	1,220	233	178	86	64

<sup>1</sup> Includes persons of Central or South American origin and of other Hispanic origin, 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  
QUARTERLY AVERAGES**

**D-16. Employed persons by age, sex, race, and Hispanic origin**

(In thousands)

Age and sex	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
Total, 16 years and over .....	130,818	132,578	110,743	111,646	14,229	14,929	13,000	13,442
16 to 19 years .....	6,528	6,839	5,686	5,871	616	748	739	804
16 to 17 years .....	2,607	2,657	2,313	2,330	216	249	214	206
18 to 19 years .....	3,922	4,182	3,373	3,542	400	499	525	598
20 to 24 years .....	12,412	12,664	10,369	10,549	1,475	1,574	1,781	1,927
25 years and over .....	111,877	113,074	94,688	95,226	12,138	12,608	10,481	10,711
25 to 54 years .....	95,338	96,067	80,082	80,275	10,771	11,164	9,449	9,725
55 years and over .....	16,539	17,007	14,605	14,951	1,367	1,445	1,031	986
Men, 16 years and over .....	70,131	71,135	60,311	60,902	6,722	7,004	7,886	8,124
16 to 19 years .....	3,354	3,462	2,969	3,010	279	335	448	469
16 to 17 years .....	1,336	1,319	1,188	1,159	103	117	128	107
18 to 19 years .....	2,018	2,142	1,781	1,851	175	218	321	362
20 to 24 years .....	6,467	6,667	5,488	5,679	691	698	1,087	1,204
25 years and over .....	60,310	61,007	51,854	52,213	5,752	5,971	6,350	6,451
25 to 54 years .....	51,119	51,569	43,650	43,843	5,114	5,283	5,744	5,842
55 years and over .....	9,190	9,437	8,204	8,370	638	688	606	609
Women, 16 years and over .....	60,687	61,443	50,432	50,744	7,508	7,926	5,114	5,317
16 to 19 years .....	3,174	3,378	2,717	2,862	337	413	290	335
16 to 17 years .....	1,271	1,338	1,125	1,171	113	132	86	100
18 to 19 years .....	1,904	2,040	1,592	1,691	224	281	204	235
20 to 24 years .....	5,945	5,997	4,881	4,869	785	876	693	722
25 years and over .....	51,568	52,067	42,834	43,013	6,386	6,637	4,130	4,260
25 to 54 years .....	44,219	44,497	36,433	36,432	5,657	5,880	3,705	3,883
55 years and over .....	7,349	7,570	6,401	6,581	728	756	425	377

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-17. Unemployment rates by age, sex, race, and Hispanic origin**

Age and sex	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
Total, 16 years and over .....	4.4	4.1	3.7	3.6	9.1	7.8	7.0	7.0
16 to 19 years .....	13.9	14.1	11.4	12.3	30.8	24.9	17.6	21.5
16 to 17 years .....	15.6	16.0	13.0	14.2	33.8	28.9	20.6	30.5
18 to 19 years .....	12.8	12.8	10.3	11.0	29.1	22.7	16.2	17.8
20 to 24 years .....	7.8	6.5	6.4	5.5	16.8	13.2	10.3	8.7
25 years and over .....	3.3	3.2	2.9	2.8	6.5	5.8	5.6	5.4
25 to 54 years .....	3.4	3.3	3.0	2.8	6.8	6.0	5.5	5.4
55 years and over .....	2.6	2.7	2.4	2.5	4.0	4.0	6.2	5.8
Men, 16 years and over .....	4.3	4.0	3.7	3.6	8.9	7.9	6.4	6.1
16 to 19 years .....	14.4	15.7	12.2	13.6	30.4	29.7	16.7	18.7
16 to 17 years .....	16.3	18.6	13.9	16.7	33.0	33.1	20.5	30.0
18 to 19 years .....	13.2	13.8	11.1	11.5	28.8	27.7	15.0	14.7
20 to 24 years .....	8.8	6.8	7.3	5.8	18.7	14.1	10.9	8.5
25 years and over .....	3.2	3.0	2.8	2.6	6.2	5.5	4.8	4.6
25 to 54 years .....	3.3	3.0	2.8	2.6	6.5	5.6	4.5	4.5
55 years and over .....	2.8	2.8	2.7	2.6	3.5	4.2	7.3	5.6
Women, 16 years and over .....	4.4	4.2	3.6	3.6	9.2	7.7	7.9	8.4
16 to 19 years .....	13.4	12.4	10.4	10.9	31.2	20.5	18.9	25.0
16 to 17 years .....	15.0	13.4	11.9	11.7	34.6	24.7	20.8	31.2
18 to 19 years .....	12.3	11.8	9.3	10.4	29.3	18.4	18.1	22.0
20 to 24 years .....	6.8	6.2	5.4	5.1	15.1	12.4	9.4	8.9
25 years and over .....	3.5	3.4	2.9	2.9	6.8	6.0	6.8	6.7
25 to 54 years .....	3.7	3.5	3.1	3.0	7.1	6.3	7.0	6.7
55 years and over .....	2.3	2.5	2.0	2.4	4.5	3.9	4.7	6.1

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

**D-18. Unemployed persons by reason for unemployment, race, and Hispanic origin**

(Numbers in thousands)

Reasons	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>NUMBER OF UNEMPLOYED</b>								
Total unemployed .....	5,955	5,702	4,233	4,155	1,416	1,261	983	1,018
Job losers and persons who completed temporary jobs .....	2,758	2,621	2,057	1,982	564	524	504	481
On temporary layoff .....	809	752	677	636	98	90	147	148
Not on temporary layoff .....	1,949	1,869	1,379	1,347	466	434	357	333
Permanent job losers .....	1,303	1,272	982	928	254	275	211	203
Persons who completed temporary jobs .....	645	596	398	419	212	159	146	130
Job leavers .....	688	679	531	524	125	125	78	77
Reentrants .....	2,058	1,957	1,379	1,368	573	480	304	337
New entrants .....	451	446	266	281	154	132	98	122
<b>PERCENT DISTRIBUTION</b>								
Job losers and persons who completed temporary jobs .....	46.3	46.0	48.6	47.7	39.8	41.6	51.3	47.3
On temporary layoff .....	13.6	13.2	16.0	15.3	6.9	7.2	14.9	14.6
Not on temporary layoff .....	32.7	32.8	32.6	32.4	32.9	34.4	36.3	32.7
Job leavers .....	11.6	11.9	12.5	12.6	8.8	9.9	7.9	7.6
Reentrants .....	34.6	34.3	32.6	32.9	40.5	38.1	30.9	33.1
New entrants .....	7.6	7.8	6.3	6.8	10.8	10.5	9.9	12.0
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>								
Job losers and persons who completed temporary jobs .....	2.0	1.9	1.8	1.7	3.6	3.2	3.6	3.3
Job leavers .....	.5	.5	.5	.5	.8	.8	.6	.5
Reentrants .....	1.5	1.4	1.2	1.2	3.7	3.0	2.2	2.3
New entrants .....	.3	.3	.2	.2	1.0	.8	.7	.8

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  
QUARTERLY AVERAGES**

**D-19. Unemployed persons by duration of unemployment, race, and Hispanic origin**

(Numbers in thousands)

Duration	Total		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>NUMBER OF UNEMPLOYED</b>								
Total, 16 years and over .....	5,955	5,702	4,233	4,155	1,416	1,261	983	1,018
Less than 5 weeks .....	2,300	2,413	1,732	1,918	454	370	390	460
5 to 14 weeks .....	1,898	1,825	1,348	1,291	453	432	326	315
15 weeks and over .....	1,757	1,463	1,154	946	510	458	267	243
15 to 26 weeks .....	818	660	547	446	233	192	124	110
27 weeks and over .....	939	803	607	500	276	267	143	133
Average (mean) duration, in weeks .....	16.0	14.4	14.9	12.7	18.6	19.7	15.3	13.1
Median duration, in weeks .....	7.4	6.2	6.7	5.3	9.3	10.2	7.0	5.6
<b>PERCENT DISTRIBUTION</b>								
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	38.6	42.3	40.9	46.2	32.1	29.4	39.7	45.2
5 to 14 weeks .....	31.9	32.0	31.8	31.1	32.0	34.3	33.1	30.9
15 weeks and over .....	29.5	25.7	27.3	22.8	36.0	36.3	27.2	23.9
15 to 26 weeks .....	13.7	11.6	12.9	10.7	16.5	15.2	12.6	10.8
27 weeks and over .....	15.8	14.1	14.3	12.0	19.5	21.1	14.6	13.1

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-20. Median weekly earnings of full-time wage and salary workers by selected characteristics**

Characteristic	Number of workers (in thousands)		Median weekly earnings	
	IV 1997	IV 1998	IV 1997	IV 1998
<b>SEX AND AGE</b>				
Total, 16 years and over .....	94,355	96,213	\$511	\$541
Men, 16 years and over .....	53,455	54,459	587	614
16 to 24 years .....	5,956	6,245	323	342
25 years and over .....	47,499	48,214	621	664
Women, 16 years and over .....	40,900	41,754	440	471
16 to 24 years .....	4,364	4,563	299	311
25 years and over .....	36,535	37,191	470	495
<b>RACE, HISPANIC ORIGIN, AND SEX</b>				
White .....	78,440	79,627	528	565
Men .....	45,462	46,128	602	635
Women .....	32,978	33,499	454	481
Black .....	11,516	12,015	410	439
Men .....	5,597	5,807	457	481
Women .....	5,918	6,208	371	405
Hispanic origin .....	10,293	10,812	354	372
Men .....	6,649	6,875	375	397
Women .....	3,644	3,937	317	337

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  
QUARTERLY AVERAGES**

**D-21. Median weekly earnings of part-time wage and salary workers by selected characteristics**

Characteristic	Number of workers (in thousands)		Median weekly earnings	
	IV 1997	IV 1998	IV 1997	IV 1998
<b>SEX AND AGE</b>				
Total, 16 years and over .....	21,205	21,324	\$150	\$158
Men, 16 years and over .....	6,635	6,739	137	143
16 to 24 years .....	3,629	3,622	111	115
25 years and over .....	3,006	3,117	187	195
Women, 16 years and over .....	14,570	14,585	155	165
16 to 24 years .....	4,586	4,615	111	117
25 years and over .....	9,984	9,970	185	199
<b>RACE, HISPANIC ORIGIN, AND SEX</b>				
White .....	18,298	18,310	151	159
Men .....	5,632	5,639	136	143
Women .....	12,666	12,671	157	167
Black .....	2,041	2,172	140	148
Men .....	686	735	141	138
Women .....	1,355	1,437	139	154
Hispanic origin .....	1,809	1,752	151	163
Men .....	657	587	148	171
Women .....	1,152	1,166	152	158

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  
QUARTERLY AVERAGES**

**D-22. Median weekly earnings of full-time wage and salary workers by occupation and sex**

Occupation and sex	Number of workers (in thousands)		Median weekly earnings	
	IV 1997	IV 1998	IV 1997	IV 1998
<b>TOTAL</b>				
Managerial and professional specialty .....	28,609	30,396	\$754	\$792
Executive, administrative, and managerial .....	14,162	15,034	741	788
Professional specialty .....	14,447	15,362	764	795
Technical, sales, and administrative support .....	27,306	27,225	466	482
Technicians and related support .....	3,554	3,349	601	611
Sales occupations .....	9,724	9,734	502	510
Administrative support, including clerical .....	14,028	14,143	419	443
Service occupations .....	10,342	10,469	320	325
Private household .....	389	413	244	236
Protective service .....	1,891	2,071	587	615
Service, except private household and protective .....	8,062	7,985	300	306
Precision production, craft, and repair .....	11,447	11,245	541	585
Mechanics and repairers .....	4,148	3,807	573	606
Construction trades .....	3,734	4,049	541	566
Other precision production, craft, and repair .....	3,565	3,389	515	580
Operators, fabricators, and laborers .....	15,337	15,158	405	423
Machine operators, assemblers, and inspectors .....	7,118	6,985	397	420
Transportation and material moving occupations .....	4,412	4,349	499	520
Handlers, equipment cleaners, helpers, and laborers .....	3,807	3,824	323	359
Farming, forestry, and fishing .....	1,314	1,721	292	303
<b>Men</b>				
Managerial and professional specialty .....	14,483	15,579	908	942
Executive, administrative, and managerial .....	7,446	8,111	901	947
Professional specialty .....	7,036	7,468	915	937
Technical, sales, and administrative support .....	10,427	10,349	595	612
Technicians and related support .....	1,857	1,698	691	738
Sales occupations .....	5,291	5,238	630	635
Administrative support, including clerical .....	3,279	3,414	493	526
Service occupations .....	5,254	5,239	381	396
Private household .....	48	30	( <sup>1</sup> )	( <sup>1</sup> )
Protective service .....	1,576	1,739	\$614	\$629
Service, except private household and protective .....	3,630	3,469	321	321
Precision production, craft, and repair .....	10,528	10,317	562	597
Mechanics and repairers .....	4,034	3,681	576	604
Construction trades .....	3,684	3,985	545	567
Other precision production, craft, and repair .....	2,810	2,651	564	617
Operators, fabricators, and laborers .....	11,621	11,501	447	467
Machine operators, assemblers, and inspectors .....	4,445	4,490	477	487
Transportation and material moving occupations .....	4,079	3,979	505	537
Handlers, equipment cleaners, helpers, and laborers .....	3,097	3,032	339	372
Farming, forestry, and fishing .....	1,143	1,475	296	313
<b>Women</b>				
Managerial and professional specialty .....	14,126	14,817	644	672
Executive, administrative, and managerial .....	6,715	6,923	614	642
Professional specialty .....	7,411	7,894	676	698
Technical, sales, and administrative support .....	16,879	16,876	408	422
Technicians and related support .....	1,697	1,651	524	519
Sales occupations .....	4,433	4,496	360	375
Administrative support, including clerical .....	10,749	10,729	406	421
Service occupations .....	5,088	5,230	286	298
Private household .....	341	382	238	227
Protective service .....	315	331	449	542
Service, except private household and protective .....	4,432	4,516	283	296
Precision production, craft, and repair .....	919	928	389	439
Mechanics and repairers .....	114	126	456	690
Construction trades .....	50	64	( <sup>1</sup> )	( <sup>1</sup> )
Other precision production, craft, and repair .....	755	737	\$384	\$414
Operators, fabricators, and laborers .....	3,716	3,657	313	342
Machine operators, assemblers, and inspectors .....	2,673	2,495	316	345
Transportation and material moving occupations .....	333	370	400	406
Handlers, equipment cleaners, helpers, and laborers .....	711	793	285	315
Farming, forestry, and fishing .....	171	246	271	253

<sup>1</sup> Data not shown where base is less than 100,000.

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  
QUARTERLY AVERAGES**

**D-23. Employment status of male Vietnam-era veterans and nonveterans by age**

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	IV 1997	IV 1998	Total		Employed		Unemployed			
			IV 1997	IV 1998	IV 1997	IV 1998	Number		Percent of labor force	
							IV 1997	IV 1998	IV 1997	IV 1998
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,779	7,779	6,590	6,478	6,420	6,324	170	154	2.6	2.4
40 to 54 years .....	6,156	5,796	5,538	5,149	5,395	5,025	143	124	2.6	2.4
40 to 44 years .....	867	630	772	561	753	540	19	21	2.5	3.7
45 to 49 years .....	2,492	2,084	2,252	1,881	2,198	1,835	54	46	2.4	2.4
50 to 54 years .....	2,797	3,083	2,514	2,707	2,444	2,649	70	58	2.8	2.1
55 years and over .....	1,623	1,983	1,052	1,329	1,025	1,300	27	30	2.6	2.2
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	19,858	20,615	17,966	18,674	17,439	18,210	527	465	2.9	2.5
40 to 44 years .....	9,143	9,317	8,460	8,602	8,218	8,386	242	216	2.9	2.5
45 to 49 years .....	6,471	6,994	5,857	6,363	5,687	6,197	170	166	2.9	2.6
50 to 54 years .....	4,244	4,304	3,649	3,710	3,534	3,626	115	83	3.2	2.3

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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**D-24. Employment status of male Vietnam-era veterans and nonveterans by age, race, and Hispanic origin**

(Numbers in thousands)

Employment status and age	Veterans						Nonveterans					
	White		Black		Hispanic origin		White		Black		Hispanic origin	
	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998	IV 1997	IV 1998
<b>Total, 40 to 54 years</b>												
Civilian noninstitutional population .....	5,518	5,111	520	567	251	231	16,737	17,464	2,101	2,102	2,051	2,186
Civilian labor force .....	5,008	4,573	427	483	219	207	15,343	16,064	1,712	1,675	1,849	1,931
Employed .....	4,891	4,459	404	474	215	198	14,936	15,696	1,633	1,599	1,768	1,853
Unemployed .....	117	114	23	9	4	9	406	368	79	76	81	77
Unemployment rate .....	2.3	2.5	5.4	1.9	2.0	4.4	2.6	2.3	4.6	4.5	4.4	4.0
<b>40 to 44 years</b>												
Civilian noninstitutional population .....	731	493	117	115	65	36	7,728	7,929	937	929	966	1,036
Civilian labor force .....	657	442	98	104	59	33	7,241	7,412	780	770	903	935
Employed .....	643	426	93	99	56	30	7,055	7,249	742	726	864	895
Unemployed .....	14	16	5	5	2	3	187	164	39	43	39	40
Unemployment rate .....	2.2	3.6	5.0	4.9	( <sup>1</sup> )	( <sup>1</sup> )	2.6	2.2	4.9	5.6	4.3	4.3
<b>45 to 49 years</b>												
Civilian noninstitutional population .....	2,208	1,808	237	224	89	86	5,450	5,937	702	740	660	681
Civilian labor force .....	2,012	1,648	199	190	73	80	4,978	5,488	599	594	577	610
Employed .....	1,972	1,606	187	186	72	77	4,843	5,353	578	572	551	586
Unemployed .....	40	42	12	4	1	3	135	135	21	22	26	24
Unemployment rate .....	2.0	2.5	5.9	2.0	1.8	4.3	2.7	2.5	3.6	3.7	4.5	4.0
<b>50 to 54 years</b>												
Civilian noninstitutional population .....	2,580	2,809	166	228	96	109	3,559	3,599	462	433	426	469
Civilian labor force .....	2,338	2,483	130	189	88	94	3,124	3,163	332	312	369	386
Employed .....	2,276	2,426	124	189	87	92	3,039	3,094	313	301	353	372
Unemployed .....	62	57	6	1	1	2	85	70	19	11	17	13
Unemployment rate .....	2.7	2.3	4.7	.3	.7	2.5	2.7	2.2	5.7	3.4	4.5	3.4

<sup>1</sup> Data not shown where base is less than 60,000.

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. 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.

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# Annual Averages

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**1. Employment status of the civilian noninstitutional population, 1935 to date**

(Numbers in thousands)

Year	Civilian noninstitutional population	Civilian labor force							Not in labor force
		Total	Percent of population	Employed			Unemployed		
				Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>Persons 14 years of age and over</b>									
1935	(1)	52,870	(1)	42,260	10,110	32,150	10,610	20.1	(1)
1936	(1)	53,440	(1)	44,410	10,000	34,410	9,030	16.9	(1)
1937	(1)	54,000	(1)	46,300	9,820	36,480	7,700	14.3	(1)
1938	(1)	54,610	(1)	44,220	9,690	34,530	10,390	19.0	(1)
1939	(1)	55,230	(1)	45,750	9,610	36,140	9,480	17.2	(1)
1940	(1)	55,640	(1)	47,520	9,540	37,980	8,120	14.6	(1)
1941	(1)	55,910	(1)	50,350	9,100	41,250	5,560	9.9	(1)
1942	98,640	56,410	57.2	53,750	9,250	44,500	2,660	4.7	42,230
1943	94,640	55,540	58.7	54,470	9,080	45,390	1,070	1.9	39,100
1944	93,220	54,630	58.6	53,960	8,950	45,010	670	1.2	38,590
1945	94,090	53,860	57.2	52,820	8,580	44,240	1,040	1.9	40,230
1946	103,070	57,520	55.8	55,250	8,320	46,930	2,270	3.9	45,550
1947	106,018	60,168	56.8	57,812	8,256	49,557	2,356	3.9	45,850
<b>Persons 16 years of age and over</b>									
1947	101,827	59,350	58.3	57,038	7,890	49,148	2,311	3.9	42,477
1948	103,058	60,621	58.8	58,343	7,629	50,714	2,276	3.8	42,447
1949	103,994	61,286	58.9	57,651	7,658	49,993	3,637	5.9	42,708
1950	104,995	62,208	59.2	58,918	7,160	51,758	3,288	5.3	42,787
1951	104,621	62,017	59.2	59,961	6,726	53,235	2,055	3.3	42,604
1952	105,231	62,138	59.0	60,250	6,500	53,749	1,883	3.0	43,093
1953 <sup>2</sup>	107,056	63,015	58.9	61,179	6,260	54,919	1,834	2.9	44,041
1954	108,321	63,643	58.8	60,109	6,205	53,904	3,532	5.5	44,678
1955	109,683	65,023	59.3	62,170	6,450	55,722	2,852	4.4	44,660
1956	110,954	66,552	60.0	63,799	6,283	57,514	2,750	4.1	44,402
1957	112,265	66,929	59.6	64,071	5,947	58,123	2,859	4.3	45,336
1958	113,727	67,639	59.5	63,036	5,586	57,450	4,602	6.8	46,088
1959	115,329	68,369	59.3	64,630	5,565	59,065	3,740	5.5	46,960
1960	117,245	69,628	59.4	65,778	5,458	60,318	3,852	5.5	47,617
1961	118,771	70,459	59.3	65,746	5,200	60,546	4,714	6.7	48,312
1962	120,153	70,614	58.8	66,702	4,944	61,759	3,911	5.5	49,539
1963	122,416	71,833	58.7	67,762	4,687	63,076	4,070	5.7	50,583
1964	124,485	73,091	58.7	69,305	4,523	64,782	3,786	5.2	51,394
1965	126,513	74,455	58.9	71,088	4,361	66,726	3,366	4.5	52,058
1966	128,058	75,770	59.2	72,895	3,979	68,915	2,875	3.8	52,288
1967	129,874	77,347	59.6	74,372	3,844	70,527	2,975	3.8	52,527
1968	132,028	78,737	59.6	75,920	3,817	72,103	2,817	3.6	53,291
1969	134,335	80,734	60.1	77,902	3,606	74,296	2,832	3.5	53,602
1970	137,085	82,771	60.4	78,678	3,463	75,215	4,093	4.9	54,315
1971	140,216	84,382	60.2	79,367	3,394	75,972	5,016	5.9	55,834
1972	144,126	87,034	60.4	82,153	3,484	78,669	4,882	5.6	57,091
1973 <sup>2</sup>	147,096	89,429	60.8	85,064	3,470	81,594	4,365	4.9	57,667
1974	150,120	91,949	61.3	86,794	3,515	83,279	5,156	5.6	58,171
1975	153,153	93,775	61.2	85,846	3,408	82,438	7,929	8.5	59,377
1976	156,150	96,158	61.6	88,752	3,331	85,421	7,406	7.7	59,991
1977	159,033	99,009	62.3	92,017	3,283	88,734	6,991	7.1	60,025
1978 <sup>2</sup>	161,910	102,251	62.9	96,048	3,387	92,661	6,202	6.1	59,659
1979	164,863	104,962	63.7	98,824	3,347	95,477	6,137	5.8	59,900
1980	167,745	106,940	63.8	99,303	3,364	95,938	7,637	7.1	60,806
1981	170,130	108,670	63.9	100,397	3,368	97,030	8,273	7.6	61,460
1982	172,271	110,204	64.0	99,526	3,401	96,125	10,678	9.7	62,067
1983	174,215	111,550	64.0	100,834	3,383	97,450	10,717	9.6	62,665
1984	176,383	113,544	64.4	105,005	3,321	101,685	8,539	7.5	62,839
1985	178,206	115,461	64.8	107,150	3,179	103,971	8,312	7.2	62,744
1986 <sup>2</sup>	180,587	117,834	65.3	109,597	3,163	106,434	8,237	7.0	62,752
1987	182,753	119,865	65.6	112,440	3,208	109,232	7,425	6.2	62,888
1988	184,613	121,669	65.9	114,968	3,169	111,800	6,701	5.5	62,944
1989	186,393	123,869	66.5	117,342	3,199	114,142	6,528	5.3	62,523
1990 <sup>2</sup>	189,164	125,840	66.5	118,793	3,223	115,570	7,047	5.6	63,324
1991	190,925	126,346	66.2	117,718	3,269	114,449	8,628	6.8	64,578
1992	192,805	128,105	66.4	118,492	3,247	115,245	9,613	7.5	64,700
1993	194,838	129,200	66.3	120,259	3,115	117,144	8,940	6.9	65,638
1994 <sup>2</sup>	196,814	131,056	66.6	123,060	3,409	119,651	7,996	6.1	65,758
1995	198,584	132,304	66.6	124,900	3,440	121,460	7,404	5.6	66,280
1996	200,591	133,943	66.8	126,708	3,443	123,264	7,236	5.4	66,647
1997 <sup>3</sup>	203,133	136,297	67.1	129,558	3,399	126,159	6,739	4.9	66,837
1998 <sup>3</sup>	205,220	137,673	67.1	131,463	3,378	128,085	6,210	4.5	67,547

<sup>1</sup> Not available.

<sup>2</sup> Not strictly comparable with data for prior years. For an explanation, see "Historical Comparability" under the Household Data section of the Explanatory Notes and Estimates of Error.

<sup>3</sup> Beginning in January 1996, data are not strictly comparable with data for 1997 and

earlier years because of the introduction of new composite estimation procedures and revised 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.

2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1966 to date

(Numbers in thousands)

Year	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
Men										
1966	60,262	48,471	80.4	46,919	77.9	3,243	43,675	1,551	3.2	11,792
1967	60,905	48,987	80.4	47,479	78.0	3,164	44,315	1,508	3.1	11,919
1968	61,847	49,533	80.1	48,114	77.8	3,157	44,957	1,419	2.9	12,315
1969	62,898	50,221	79.8	48,818	77.6	2,963	45,855	1,403	2.8	12,677
1970	64,304	51,228	79.7	48,990	76.2	2,862	46,128	2,238	4.4	13,076
1971	65,942	52,180	79.1	49,390	74.9	2,795	46,595	2,789	5.3	13,762
1972	67,835	53,555	78.9	50,896	75.0	2,849	48,047	2,659	5.0	14,280
1973	69,292	54,624	78.8	52,349	75.5	2,847	49,502	2,275	4.2	14,667
1974	70,808	55,739	78.7	53,024	74.9	2,919	50,105	2,714	4.9	15,069
1975	72,291	56,299	77.9	51,857	71.7	2,824	49,032	4,442	7.9	15,993
1976	73,759	57,174	77.5	53,138	72.0	2,744	50,394	4,036	7.1	16,585
1977	75,193	58,396	77.7	54,728	72.8	2,671	52,057	3,667	6.3	16,797
1978 <sup>1</sup>	76,576	59,620	77.9	56,479	73.8	2,718	53,761	3,142	5.3	16,956
1979	78,020	60,726	77.8	57,607	73.8	2,686	54,921	3,120	5.1	17,293
1980	79,398	61,453	77.4	57,186	72.0	2,709	54,477	4,267	6.9	17,945
1981	80,511	61,974	77.0	57,397	71.3	2,700	54,697	4,577	7.4	18,537
1982	81,523	62,450	76.6	56,271	69.0	2,736	53,534	6,179	9.9	19,073
1983	82,531	63,047	76.4	56,787	68.8	2,704	54,083	6,260	9.9	19,484
1984	83,605	63,835	76.4	59,091	70.7	2,668	56,423	4,744	7.4	19,771
1985	84,469	64,411	76.3	59,891	70.9	2,535	57,356	4,521	7.0	20,058
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	94,355	70,817	75.1	66,450	70.4	2,554	63,896	4,367	6.2	23,538
1995	95,178	71,360	75.0	67,377	70.8	2,559	64,818	3,983	5.6	23,818
1996	96,206	72,087	74.9	68,207	70.9	2,573	65,634	3,880	5.4	24,119
1997 <sup>1</sup>	97,715	73,261	75.0	69,685	71.3	2,552	67,133	3,577	4.9	24,454
1998 <sup>2</sup>	98,758	73,959	74.9	70,693	71.6	2,553	68,140	3,266	4.4	24,799
Women										
1966	67,795	27,299	40.3	25,976	38.3	736	25,240	1,324	4.8	40,496
1967	68,968	28,360	41.1	26,893	39.0	680	26,212	1,468	5.2	40,608
1968	70,179	29,204	41.6	27,807	39.6	660	27,147	1,397	4.8	40,976
1969	71,436	30,513	42.7	29,084	40.7	643	28,441	1,429	4.7	40,924
1970	72,782	31,543	43.3	29,688	40.8	601	29,087	1,855	5.9	41,239
1971	74,274	32,202	43.4	29,976	40.4	599	29,377	2,227	6.9	42,072
1972	76,290	33,479	43.9	31,257	41.0	635	30,622	2,222	6.6	42,811
1973	77,804	34,804	44.7	32,715	42.0	622	32,093	2,089	6.0	43,000
1974	79,312	36,211	45.7	33,769	42.6	596	33,173	2,441	6.7	43,101
1975	80,860	37,475	46.3	33,989	42.0	584	33,404	3,486	9.3	43,386
1976	82,390	38,983	47.3	35,615	43.2	588	35,027	3,369	8.6	43,406
1977	83,840	40,613	48.4	37,289	44.5	612	36,677	3,324	8.2	43,227
1978 <sup>1</sup>	85,334	42,631	50.0	39,569	46.4	669	38,900	3,061	7.2	42,703
1979	86,843	44,235	50.9	41,217	47.5	661	40,556	3,018	6.8	42,608
1980	88,348	45,487	51.5	42,117	47.7	656	41,461	3,370	7.4	42,861
1981	89,618	46,696	52.1	43,000	48.0	667	42,333	3,696	7.9	42,922
1982	90,748	47,755	52.6	43,256	47.7	665	42,591	4,499	9.4	42,993
1983	91,684	48,503	52.9	44,047	48.0	680	43,367	4,457	9.2	43,181
1984	92,778	49,709	53.6	45,915	49.5	653	45,262	3,794	7.6	43,068
1985	93,736	51,050	54.5	47,259	50.4	644	46,615	3,791	7.4	42,686
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	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	55.8	881	56,642	3,421	5.6	42,462
1996	104,385	61,857	59.3	58,501	56.0	871	57,630	3,356	5.4	42,528
1997 <sup>1</sup>	105,418	63,036	59.8	59,873	56.8	847	59,026	3,162	5.0	42,382
1998 <sup>2</sup>	106,462	63,714	59.8	60,771	57.1	825	59,945	2,944	4.6	42,748

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

<sup>2</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 revised 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  
ANNUAL AVERAGES**

**3. Employment status of the civilian noninstitutional population by age, sex, and race**

(Numbers in thousands)

Age, sex, and race	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>TOTAL</b>										
16 years and over .....	205,220	137,673	67.1	131,463	64.1	3,378	128,085	6,210	4.5	67,547
16 to 19 years .....	15,644	8,256	52.8	7,051	45.1	261	6,790	1,205	14.6	7,388
16 to 17 years .....	7,895	3,335	42.2	2,762	35.0	131	2,631	573	17.2	4,560
18 to 19 years .....	7,749	4,921	63.5	4,289	55.3	130	4,159	632	12.8	2,828
20 to 24 years .....	17,593	13,638	77.5	12,557	71.4	339	12,218	1,081	7.9	3,955
25 to 54 years .....	117,450	98,718	84.1	95,258	81.1	2,105	93,153	3,459	3.5	18,732
25 to 34 years .....	38,778	32,813	84.6	31,394	81.0	718	30,676	1,419	4.3	5,964
25 to 29 years .....	18,622	15,808	84.9	15,061	80.9	350	14,711	747	4.7	2,815
30 to 34 years .....	20,156	17,006	84.4	16,333	81.0	368	15,965	672	4.0	3,150
35 to 44 years .....	44,299	37,536	84.7	36,278	81.9	791	35,486	1,258	3.4	6,763
35 to 39 years .....	22,449	18,899	84.2	18,232	81.2	433	17,800	666	3.5	3,550
40 to 44 years .....	21,850	18,637	85.3	18,045	82.6	358	17,687	592	3.2	3,213
45 to 54 years .....	34,373	28,368	82.5	27,587	80.3	596	26,991	782	2.8	6,005
45 to 49 years .....	18,804	15,923	84.7	15,477	82.3	345	15,132	446	2.8	2,881
50 to 54 years .....	15,569	12,445	79.9	12,109	77.8	251	11,858	336	2.7	3,124
55 to 64 years .....	22,296	13,215	59.3	12,872	57.7	396	12,477	343	2.6	9,081
55 to 59 years .....	12,219	8,494	69.5	8,279	67.8	217	8,062	216	2.5	3,725
60 to 64 years .....	10,077	4,721	46.8	4,594	45.6	179	4,415	127	2.7	5,356
65 years and over .....	32,237	3,847	11.9	3,725	11.6	277	3,448	122	3.2	28,391
65 to 69 years .....	9,387	2,111	22.5	2,042	21.8	121	1,921	69	3.3	7,276
70 to 74 years .....	8,560	1,068	12.5	1,036	12.1	84	953	31	2.9	7,492
75 years and over .....	14,290	668	4.7	647	4.5	73	574	21	3.2	13,622
<b>Men</b>										
16 years and over .....	98,758	73,959	74.9	70,693	71.6	2,553	68,140	3,266	4.4	24,799
16 to 19 years .....	7,968	4,244	53.3	3,558	44.7	204	3,355	686	16.2	3,724
16 to 17 years .....	4,059	1,728	42.6	1,398	34.4	103	1,294	330	19.1	2,331
18 to 19 years .....	3,909	2,516	64.4	2,161	55.3	100	2,060	355	14.1	1,393
20 to 24 years .....	8,804	7,221	82.0	6,638	75.4	276	6,362	583	8.1	1,583
25 to 54 years .....	57,724	53,002	91.8	51,274	88.8	1,569	49,705	1,728	3.3	4,722
25 to 34 years .....	19,094	17,796	93.2	17,097	89.5	549	16,548	699	3.9	1,298
25 to 29 years .....	9,139	8,477	92.8	8,102	88.6	267	7,835	375	4.4	662
30 to 34 years .....	9,955	9,319	93.6	8,995	90.4	282	8,713	324	3.5	636
35 to 44 years .....	21,857	20,242	92.6	19,634	89.8	600	19,034	609	3.0	1,614
35 to 39 years .....	11,083	10,310	93.0	9,995	90.2	335	9,660	314	3.1	773
40 to 44 years .....	10,774	9,933	92.2	9,638	89.5	265	9,374	294	3.0	841
45 to 54 years .....	16,773	14,963	89.2	14,544	86.7	420	14,124	420	2.8	1,810
45 to 49 years .....	9,212	8,364	90.8	8,132	88.3	247	7,885	232	2.8	848
50 to 54 years .....	7,561	6,599	87.3	6,412	84.8	173	6,239	187	2.8	962
55 to 64 years .....	10,649	7,253	68.1	7,052	66.2	283	6,769	201	2.8	3,396
55 to 59 years .....	5,879	4,609	78.4	4,484	76.3	152	4,332	125	2.7	1,270
60 to 64 years .....	4,771	2,644	55.4	2,568	53.8	131	2,437	76	2.9	2,127
65 years and over .....	13,613	2,240	16.5	2,171	15.9	222	1,949	69	3.1	11,373
65 to 69 years .....	4,304	1,204	28.0	1,165	27.1	98	1,068	39	3.2	3,100
70 to 74 years .....	3,770	623	16.5	606	16.1	66	540	17	2.7	3,148
75 years and over .....	5,539	413	7.5	400	7.2	59	341	13	3.2	5,126
<b>Women</b>										
16 years and over .....	106,462	63,714	59.8	60,771	57.1	825	59,945	2,944	4.6	42,748
16 to 19 years .....	7,676	4,012	52.3	3,493	45.5	57	3,435	519	12.9	3,664
18 to 17 years .....	3,835	1,607	41.9	1,364	35.6	27	1,337	242	15.1	2,229
18 to 19 years .....	3,840	2,405	62.6	2,128	55.4	30	2,098	277	11.5	1,435
20 to 24 years .....	8,790	6,418	73.0	5,919	67.3	64	5,856	498	7.8	2,372
25 to 54 years .....	59,725	45,716	76.5	43,984	73.6	537	43,448	1,732	3.8	14,010
25 to 34 years .....	19,683	15,017	76.3	14,298	72.6	169	14,128	720	4.8	4,666
25 to 29 years .....	9,483	7,330	77.3	6,959	73.4	83	6,876	371	5.1	2,153
30 to 34 years .....	10,200	7,687	75.4	7,339	71.9	86	7,252	348	4.5	2,513
35 to 44 years .....	22,442	17,294	77.1	16,644	74.2	191	16,453	650	3.8	5,149
35 to 39 years .....	11,366	8,589	75.6	8,237	72.5	98	8,140	352	4.1	2,776
40 to 44 years .....	11,077	8,704	78.6	8,407	75.9	94	8,313	298	3.4	2,372
45 to 54 years .....	17,600	13,405	76.2	13,043	74.1	176	12,867	362	2.7	4,195
45 to 49 years .....	9,592	7,559	78.8	7,345	76.6	97	7,248	214	2.8	2,033
50 to 54 years .....	8,008	5,846	73.0	5,697	71.1	78	5,619	148	2.5	2,162
55 to 64 years .....	11,646	5,962	51.2	5,820	50.0	113	5,708	141	2.4	5,685
55 to 59 years .....	6,340	3,885	61.3	3,795	59.9	65	3,730	90	2.3	2,455
60 to 64 years .....	5,306	2,077	39.1	2,025	38.2	48	1,977	51	2.5	3,230
65 years and over .....	18,625	1,607	8.6	1,554	8.3	55	1,499	53	3.3	17,018
65 to 69 years .....	5,084	907	17.8	877	17.2	23	853	31	3.4	4,176
70 to 74 years .....	4,790	445	9.3	430	9.0	18	413	15	3.3	4,344
75 years and over .....	8,752	255	2.9	247	2.8	14	233	8	3.1	8,497

See footnotes at end of table.

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

(Numbers in thousands)

Age, sex, and race	1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>WHITE</b>										
16 years and over .....	171,478	115,415	67.3	110,931	64.7	3,160	107,770	4,484	3.9	56,064
16 to 19 years .....	12,439	6,965	56.0	6,089	48.9	250	5,839	878	12.6	5,475
16 to 17 years .....	6,264	2,860	45.7	2,436	38.9	125	2,311	424	14.8	3,404
18 to 19 years .....	6,176	4,105	66.5	3,653	59.2	125	3,529	451	11.0	2,071
20 to 24 years .....	14,138	11,244	79.5	10,512	74.4	319	10,193	731	6.5	2,895
25 to 54 years .....	97,028	82,210	84.7	79,710	82.2	1,953	77,757	2,500	3.0	14,818
25 to 34 years .....	31,286	26,707	85.4	25,729	82.2	674	25,055	978	3.7	4,578
25 to 29 years .....	14,998	12,894	86.0	12,369	82.5	328	12,041	525	4.1	2,104
30 to 34 years .....	16,288	13,813	84.8	13,360	82.0	346	13,014	453	3.3	2,475
35 to 44 years .....	36,610	31,221	85.3	30,320	82.8	730	29,590	901	2.9	5,389
35 to 39 years .....	18,517	15,690	84.7	15,221	82.2	394	14,827	469	3.0	2,828
40 to 44 years .....	18,093	15,532	85.8	15,099	83.5	336	14,763	433	2.8	2,561
45 to 54 years .....	29,132	24,282	83.4	23,662	81.2	549	23,113	620	2.6	4,850
45 to 49 years .....	15,794	13,489	85.4	13,146	83.2	319	12,827	343	2.5	2,305
50 to 54 years .....	13,338	10,793	80.9	10,516	78.8	230	10,286	277	2.6	2,545
55 to 64 years .....	19,231	11,548	60.1	11,272	58.6	370	10,902	276	2.4	7,682
55 to 59 years .....	10,532	7,428	70.5	7,258	68.9	201	7,057	170	2.3	3,103
60 to 64 years .....	8,699	4,120	47.4	4,014	46.1	169	3,845	106	2.6	4,579
65 years and over .....	28,642	3,448	12.0	3,347	11.7	269	3,079	101	2.9	25,194
65 to 69 years .....	8,162	1,879	23.0	1,822	22.3	117	1,705	57	3.0	6,282
70 to 74 years .....	7,599	971	12.8	945	12.4	81	864	26	2.6	6,628
75 years and over .....	12,882	598	4.6	580	4.5	70	510	18	3.0	12,284
<b>Men</b>										
16 years and over .....	83,352	63,034	75.6	60,604	72.7	2,376	58,228	2,431	3.9	20,317
16 to 19 years .....	6,386	3,614	56.6	3,103	48.6	194	2,909	510	14.1	2,773
16 to 17 years .....	3,233	1,487	46.0	1,233	38.1	99	1,134	254	17.1	1,747
18 to 19 years .....	3,153	2,127	67.5	1,870	59.3	95	1,775	257	12.1	1,026
20 to 24 years .....	7,170	6,063	84.6	5,659	78.9	259	5,400	405	6.7	1,106
25 to 54 years .....	48,354	44,930	92.9	43,635	90.2	1,444	42,191	1,295	2.9	3,424
25 to 34 years .....	15,644	14,770	94.4	14,259	91.1	514	13,745	512	3.5	874
25 to 29 years .....	7,495	7,059	94.2	6,781	90.5	251	6,531	278	3.9	436
30 to 34 years .....	8,149	7,711	94.6	7,477	91.8	263	7,214	234	3.0	438
35 to 44 years .....	18,310	17,157	93.7	16,715	91.3	550	16,166	441	2.6	1,153
35 to 39 years .....	9,269	8,719	94.1	8,492	91.6	303	8,189	227	2.6	550
40 to 44 years .....	9,041	8,438	93.3	8,223	91.0	247	7,976	215	2.5	603
45 to 54 years .....	14,400	13,003	90.3	12,661	87.9	381	12,281	342	2.6	1,397
45 to 49 years .....	7,840	7,198	91.8	7,013	89.5	227	6,786	185	2.6	642
50 to 54 years .....	6,561	5,805	88.5	5,649	86.1	154	5,495	157	2.7	756
55 to 64 years .....	9,286	6,415	69.1	6,251	67.3	263	5,988	164	2.6	2,872
55 to 59 years .....	5,120	4,078	79.7	3,976	77.7	140	3,837	102	2.5	1,042
60 to 64 years .....	4,167	2,337	56.1	2,275	54.6	124	2,151	62	2.7	1,830
65 years and over .....	12,155	2,013	16.6	1,955	16.1	216	1,740	58	2.9	10,143
65 to 69 years .....	3,785	1,072	28.3	1,039	27.4	94	945	33	3.1	2,714
70 to 74 years .....	3,374	568	16.8	554	16.4	64	490	14	2.5	2,806
75 years and over .....	4,996	373	7.5	362	7.2	57	305	11	2.9	4,624
<b>Women</b>										
16 years and over .....	88,126	52,380	59.4	50,327	57.1	784	49,543	2,053	3.9	35,746
16 to 19 years .....	6,053	3,351	55.4	2,986	49.3	55	2,930	365	10.9	2,702
16 to 17 years .....	3,031	1,373	45.3	1,203	39.7	26	1,177	171	12.4	1,657
18 to 19 years .....	3,023	1,977	65.4	1,783	59.0	30	1,753	195	9.8	1,045
20 to 24 years .....	6,969	5,180	74.3	4,853	69.6	60	4,793	327	6.3	1,789
25 to 54 years .....	48,674	37,281	76.6	36,075	74.1	509	35,566	1,205	3.2	11,393
25 to 34 years .....	15,642	11,937	76.3	11,470	73.3	160	11,310	467	3.9	3,705
25 to 29 years .....	7,503	5,835	77.8	5,588	74.5	78	5,510	247	4.2	1,668
30 to 34 years .....	8,139	6,102	75.0	5,883	72.3	83	5,800	220	3.6	2,036
35 to 44 years .....	18,300	14,064	76.9	13,604	74.3	180	13,424	460	3.3	4,236
35 to 39 years .....	9,248	6,970	75.4	6,728	72.8	91	6,638	242	3.5	2,278
40 to 44 years .....	9,052	7,094	78.4	6,876	76.0	89	6,787	218	3.1	1,958
45 to 54 years .....	14,732	11,279	76.6	11,001	74.7	168	10,832	279	2.5	3,453
45 to 49 years .....	7,955	6,291	79.1	6,133	77.1	92	6,041	158	2.5	1,663
50 to 54 years .....	6,777	4,988	73.6	4,867	71.8	76	4,791	120	2.4	1,790
55 to 64 years .....	9,944	5,133	51.6	5,021	50.5	107	4,914	112	2.2	4,811
55 to 59 years .....	5,412	3,350	61.9	3,282	60.6	62	3,220	69	2.1	2,062
60 to 64 years .....	4,532	1,783	39.3	1,739	38.4	46	1,694	44	2.4	2,749
65 years and over .....	16,486	1,435	8.7	1,392	8.4	53	1,339	43	3.0	15,051
65 to 69 years .....	4,377	808	18.5	783	17.9	23	761	24	3.0	3,569
70 to 74 years .....	4,225	403	9.5	391	9.3	17	374	12	2.9	3,822
75 years and over .....	7,885	225	2.9	218	2.8	13	205	7	3.1	7,660

See footnotes at end of table.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

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

(Numbers in thousands)

Age, sex, and race	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>BLACK</b>										
16 years and over .....	24,373	15,982	65.6	14,556	59.7	138	14,417	1,426	8.9	8,391
16 to 19 years .....	2,443	1,017	41.6	738	30.1	8	728	281	27.6	1,427
16 to 17 years .....	1,241	370	29.8	246	19.8	4	241	124	33.6	871
18 to 19 years .....	1,202	646	53.8	490	40.8	3	487	156	24.2	556
20 to 24 years .....	2,546	1,797	70.6	1,496	58.8	14	1,482	301	16.8	749
25 to 54 years .....	14,466	11,727	81.1	10,943	75.6	100	10,843	784	6.7	2,739
25 to 34 years .....	5,221	4,332	83.0	3,967	76.0	30	3,936	366	8.4	889
25 to 29 years .....	2,547	2,081	81.7	1,896	74.4	12	1,884	185	8.9	466
30 to 34 years .....	2,673	2,251	84.2	2,070	77.4	18	2,053	181	8.0	422
35 to 44 years .....	5,510	4,531	82.2	4,238	76.9	41	4,196	294	6.5	979
35 to 39 years .....	2,840	2,328	82.0	2,161	76.1	28	2,132	167	7.2	512
40 to 44 years .....	2,670	2,204	82.5	2,077	77.8	13	2,064	126	5.7	467
45 to 54 years .....	3,735	2,863	76.7	2,739	73.3	28	2,711	125	4.3	872
45 to 49 years .....	2,180	1,741	79.8	1,657	76.0	15	1,642	84	4.8	440
50 to 54 years .....	1,555	1,123	72.2	1,082	69.6	13	1,069	41	3.6	432
55 to 64 years .....	2,224	1,163	52.3	1,118	50.3	13	1,105	45	3.9	1,060
55 to 59 years .....	1,222	749	61.3	720	59.0	9	712	28	3.8	473
60 to 64 years .....	1,002	415	41.4	398	39.7	4	393	17	4.1	587
65 years and over .....	2,695	278	10.3	262	9.7	3	259	16	5.6	2,417
65 to 69 years .....	881	152	17.3	144	16.3	2	142	9	5.7	728
70 to 74 years .....	731	70	9.6	66	9.1	-	66	4	5.7	660
75 years and over .....	1,083	55	5.1	52	4.8	1	51	3	5.4	1,028
<b>Men</b>										
16 years and over .....	10,927	7,542	69.0	6,871	62.9	118	6,752	671	8.9	3,386
16 to 19 years .....	1,201	488	40.7	341	28.4	7	335	147	30.1	712
16 to 17 years .....	623	181	29.1	120	19.2	3	116	61	33.9	442
18 to 19 years .....	578	307	53.1	221	38.3	3	218	86	27.9	271
20 to 24 years .....	1,166	837	71.8	686	58.8	11	675	151	18.0	329
25 to 54 years .....	6,536	5,519	84.4	5,178	79.2	87	5,091	341	6.2	1,018
25 to 34 years .....	2,335	2,034	87.1	1,886	80.8	25	1,861	148	7.3	301
25 to 29 years .....	1,126	966	85.8	889	79.0	10	879	77	7.9	160
30 to 34 years .....	1,209	1,068	88.3	997	82.5	15	982	71	6.7	141
35 to 44 years .....	2,520	2,142	85.0	2,008	79.7	37	1,971	133	6.2	378
35 to 39 years .....	1,293	1,106	85.5	1,034	80.0	25	1,009	72	6.5	187
40 to 44 years .....	1,227	1,036	84.5	974	79.4	12	963	62	5.9	191
45 to 54 years .....	1,682	1,343	79.9	1,284	76.3	25	1,259	60	4.4	339
45 to 49 years .....	989	818	82.7	780	78.8	13	767	39	4.7	171
50 to 54 years .....	693	525	75.8	504	72.7	37	492	21	4.0	168
55 to 64 years .....	956	548	57.3	524	54.8	11	513	24	4.5	408
55 to 59 years .....	533	353	66.1	339	63.5	8	331	14	3.9	181
60 to 64 years .....	423	196	46.3	185	43.7	4	181	11	5.5	227
65 years and over .....	1,068	150	14.0	142	13.3	3	139	8	5.2	918
65 to 69 years .....	365	80	21.9	77	21.0	1	75	3	4.1	286
70 to 74 years .....	303	36	12.0	34	11.2	-	34	2	6.6	266
75 years and over .....	400	34	8.4	31	7.9	1	30	2	( <sup>1</sup> )	367
<b>Women</b>										
16 years and over .....	13,446	8,441	62.8	7,685	57.2	20	7,665	756	9.0	5,005
16 to 19 years .....	1,243	528	42.5	395	31.8	1	393	134	25.3	714
16 to 17 years .....	618	189	30.6	126	20.4	1	125	63	33.2	429
18 to 19 years .....	624	339	54.4	268	43.0	-	268	71	20.9	285
20 to 24 years .....	1,380	960	69.6	810	58.7	3	807	150	15.7	419
25 to 54 years .....	7,930	6,209	78.3	5,766	72.7	13	5,753	443	7.1	1,721
25 to 34 years .....	2,886	2,298	79.6	2,081	72.1	5	2,076	218	9.5	588
25 to 29 years .....	1,421	1,115	78.4	1,007	70.8	2	1,005	108	9.7	306
30 to 34 years .....	1,465	1,183	80.8	1,074	73.3	3	1,071	110	9.3	281
35 to 44 years .....	2,991	2,390	79.9	2,230	74.6	5	2,225	160	6.7	601
35 to 39 years .....	1,547	1,222	79.0	1,127	72.8	3	1,124	95	7.8	325
40 to 44 years .....	1,444	1,167	80.9	1,103	76.4	1	1,102	65	5.5	276
45 to 54 years .....	2,053	1,520	74.0	1,455	70.9	4	1,452	65	4.3	533
45 to 49 years .....	1,191	922	77.4	877	73.6	2	875	45	4.9	269
50 to 54 years .....	862	598	69.4	578	67.1	1	577	20	3.4	264
55 to 64 years .....	1,268	615	48.5	594	46.9	2	592	21	3.4	652
55 to 59 years .....	688	396	57.6	382	55.4	1	380	15	3.7	292
60 to 64 years .....	579	219	37.8	213	36.8	1	212	6	2.7	360
65 years and over .....	1,626	128	7.9	120	7.4	-	120	8	6.1	1,498
65 to 69 years .....	515	72	14.1	67	13.0	-	67	5	7.4	443
70 to 74 years .....	428	34	7.9	32	7.6	-	32	2	( <sup>1</sup> )	394
75 years and over .....	683	22	3.2	21	3.1	-	21	1	( <sup>1</sup> )	661

<sup>1</sup> Data not shown where base is less than 35,000.

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

procedures and revised population controls used in the household survey.

4. Employment status of the Hispanic-origin population by age and sex

(Numbers in thousands)

Age and sex	1998									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed				Unemployed		Not in labor force
				Total	Percent of population	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>TOTAL</b>										
16 years and over .....	21,070	14,317	67.9	13,291	63.1	742	12,549	1,026	7.2	6,753
16 to 19 years .....	2,204	1,007	45.7	793	36.0	36	757	214	21.3	1,197
16 to 17 years .....	1,070	320	29.9	230	21.5	8	222	89	28.0	750
18 to 19 years .....	1,135	688	60.6	563	49.6	28	535	125	18.1	447
20 to 24 years .....	2,731	2,077	76.1	1,883	68.9	124	1,759	194	9.4	654
25 years and over .....	16,134	11,232	69.6	10,615	65.8	583	10,033	617	5.5	4,902
25 to 54 years .....	12,857	10,170	79.1	9,611	74.8	528	9,083	559	5.5	2,688
25 to 34 years .....	5,447	4,372	80.3	4,113	75.5	240	3,873	260	5.9	1,074
35 to 44 years .....	4,636	3,707	80.0	3,504	75.6	175	3,329	203	5.5	929
45 to 54 years .....	2,775	2,090	75.3	1,994	71.9	113	1,882	96	4.6	684
55 years and over .....	3,277	1,063	32.4	1,004	30.7	55	950	58	5.5	2,214
55 to 64 years .....	1,615	894	55.4	846	52.4	46	801	48	5.3	721
65 years and over .....	1,662	169	10.1	158	9.5	9	149	11	6.4	1,493
<b>Men</b>										
16 years and over .....	10,734	8,571	79.8	8,018	74.7	651	7,367	552	6.4	2,164
16 to 19 years .....	1,161	565	48.7	449	38.6	30	418	117	20.6	596
16 to 17 years .....	586	188	32.0	133	22.7	8	126	54	29.0	398
18 to 19 years .....	575	377	65.7	315	54.9	23	293	62	16.4	197
20 to 24 years .....	1,462	1,288	88.1	1,173	80.2	112	1,061	115	8.9	174
25 years and over .....	8,111	6,718	82.8	6,397	78.9	509	5,888	321	4.8	1,394
25 to 54 years .....	6,627	6,071	91.6	5,783	87.3	457	5,327	287	4.7	556
25 to 34 years .....	2,907	2,733	94.0	2,592	89.1	212	2,380	142	5.2	174
35 to 44 years .....	2,377	2,173	91.4	2,077	87.4	152	1,925	97	4.5	204
45 to 54 years .....	1,342	1,164	86.7	1,115	83.1	93	1,022	49	4.2	178
55 years and over .....	1,485	647	43.6	613	41.3	52	561	34	5.2	838
55 to 64 years .....	771	541	70.2	512	66.4	44	468	29	5.3	230
65 years and over .....	714	106	14.9	101	14.2	8	93	5	5.0	608
<b>Women</b>										
16 years and over .....	10,335	5,746	55.6	5,273	51.0	91	5,182	473	8.2	4,589
16 to 19 years .....	1,044	442	42.4	345	33.0	6	339	98	22.1	602
16 to 17 years .....	483	132	27.3	97	20.1	-	97	35	26.4	352
18 to 19 years .....	560	310	55.4	247	44.2	5	242	63	20.2	250
20 to 24 years .....	1,269	789	62.2	710	55.9	12	698	80	10.1	480
25 years and over .....	8,023	4,515	56.3	4,219	52.6	74	4,145	296	6.6	3,508
25 to 54 years .....	6,231	4,099	65.8	3,828	61.4	72	3,756	271	6.6	2,132
25 to 34 years .....	2,539	1,639	64.5	1,521	59.9	29	1,493	118	7.2	900
35 to 44 years .....	2,259	1,533	67.9	1,428	63.2	24	1,404	106	6.9	725
45 to 54 years .....	1,433	927	64.7	879	61.4	19	860	48	5.1	506
55 years and over .....	1,792	416	23.2	391	21.8	2	389	24	5.9	1,376
55 to 64 years .....	844	353	41.9	334	39.6	2	333	19	5.4	491
65 years and over .....	948	62	6.6	57	6.0	1	56	5	8.8	886

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**5. Employment status of the civilian noninstitutional population by sex, age, race, and Hispanic origin**

(Numbers in thousands)

Employment status, sex, and age	Total		White		Black		Hispanic origin	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	203,133	205,220	169,993	171,478	24,003	24,373	20,321	21,070
Civilian labor force .....	136,297	137,673	114,693	115,415	15,529	15,982	13,796	14,317
Percent of population .....	67.1	67.1	67.5	67.3	64.7	65.6	67.9	67.9
Employed .....	129,558	131,463	109,856	110,931	13,969	14,556	12,726	13,291
Agriculture .....	3,399	3,378	3,208	3,160	117	138	660	742
Nonagricultural industries .....	126,159	128,085	106,648	107,770	13,852	14,417	12,067	12,549
Unemployed .....	6,739	6,210	4,836	4,484	1,560	1,426	1,069	1,026
Unemployment rate .....	4.9	4.5	4.2	3.9	10.0	8.9	7.7	7.2
Not in labor force .....	66,837	67,547	55,301	56,064	8,474	8,391	6,526	6,753
<b>Men, 16 years and over</b>								
Civilian noninstitutional population .....	97,715	98,758	82,577	83,352	10,763	10,927	10,368	10,734
Civilian labor force .....	73,261	73,959	62,639	63,034	7,354	7,542	8,309	8,571
Percent of population .....	75.0	74.9	75.9	75.6	68.3	69.0	80.1	79.8
Employed .....	69,685	70,693	59,998	60,604	6,607	6,871	7,728	8,018
Agriculture .....	2,552	2,553	2,389	2,376	103	118	571	651
Nonagricultural industries .....	67,133	68,140	57,608	58,228	6,504	6,752	7,157	7,367
Unemployed .....	3,577	3,266	2,641	2,431	747	671	582	552
Unemployment rate .....	4.9	4.4	4.2	3.9	10.2	8.9	7.0	6.4
Not in labor force .....	24,454	24,799	19,938	20,317	3,409	3,386	2,059	2,164
<b>Men, 20 years and over</b>								
Civilian noninstitutional population .....	89,879	90,790	76,320	76,966	9,575	9,727	9,250	9,573
Civilian labor force .....	69,166	69,715	59,126	59,421	6,910	7,053	7,779	8,005
Percent of population .....	77.0	76.8	77.5	77.2	72.2	72.5	84.1	83.6
Employed .....	66,284	67,135	56,986	57,500	6,325	6,530	7,307	7,570
Agriculture .....	2,356	2,350	2,201	2,182	101	112	544	621
Nonagricultural industries .....	63,927	64,785	54,785	55,319	6,224	6,418	6,763	6,949
Unemployed .....	2,882	2,580	2,140	1,920	585	524	471	436
Unemployment rate .....	4.2	3.7	3.6	3.2	8.5	7.4	6.1	5.4
Not in labor force .....	20,713	21,075	17,194	17,545	2,665	2,673	1,471	1,568
<b>Women, 16 years and over</b>								
Civilian noninstitutional population .....	105,418	106,462	87,417	88,126	13,241	13,446	9,953	10,335
Civilian labor force .....	63,036	63,714	52,054	52,380	8,175	8,441	5,486	5,746
Percent of population .....	59.8	59.8	59.5	59.4	61.7	62.8	55.1	55.6
Employed .....	59,873	60,771	49,859	50,327	7,362	7,685	4,999	5,273
Agriculture .....	847	825	819	784	14	20	89	91
Nonagricultural industries .....	59,026	59,945	49,040	49,543	7,348	7,665	4,910	5,182
Unemployed .....	3,162	2,944	2,195	2,053	813	756	488	473
Unemployment rate .....	5.0	4.6	4.2	3.9	9.9	9.0	8.9	8.2
Not in labor force .....	42,382	42,748	35,363	35,746	5,066	5,005	4,466	4,589
<b>Women, 20 years and over</b>								
Civilian noninstitutional population .....	97,889	98,786	81,492	82,073	12,016	12,203	8,950	9,292
Civilian labor force .....	59,198	59,702	48,847	49,029	7,686	7,912	5,106	5,304
Percent of population .....	60.5	60.4	59.9	59.7	64.0	64.8	57.0	57.1
Employed .....	56,613	57,278	47,063	47,342	7,013	7,290	4,705	4,928
Agriculture .....	798	768	771	729	13	19	83	85
Nonagricultural industries .....	55,815	56,510	46,292	46,612	7,000	7,272	4,622	4,843
Unemployed .....	2,585	2,424	1,784	1,688	673	622	401	376
Unemployment rate .....	4.4	4.1	3.7	3.4	8.8	7.9	7.9	7.1
Not in labor force .....	38,691	39,084	32,645	33,044	4,330	4,291	3,845	3,988
<b>Both sexes, 16 to 19 years</b>								
Civilian noninstitutional population .....	15,365	15,644	12,181	12,439	2,412	2,443	2,121	2,204
Civilian labor force .....	7,932	8,256	6,720	6,965	933	1,017	911	1,007
Percent of population .....	51.6	52.8	55.2	56.0	38.7	41.6	43.0	45.7
Employed .....	6,661	7,051	5,807	6,089	631	736	714	793
Agriculture .....	244	261	236	250	3	8	33	36
Nonagricultural industries .....	6,417	6,790	5,571	5,839	628	728	682	757
Unemployed .....	1,271	1,205	912	876	302	281	197	214
Unemployment rate .....	16.0	14.6	13.6	12.6	32.4	27.6	21.6	21.3
Not in labor force .....	7,433	7,388	5,462	5,475	1,479	1,427	1,210	1,197

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.

6. Employment status of the Mexican, Puerto Rican, and Cuban-origin population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Total Hispanic origin <sup>1</sup>		Mexican origin		Puerto Rican origin		Cuban origin	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>TOTAL</b>								
Civilian noninstitutional population .....	20,321	21,070	12,443	13,216	2,139	2,080	1,025	1,062
Civilian labor force .....	13,796	14,317	8,546	9,096	1,293	1,249	646	651
Percent of population .....	67.9	67.9	68.7	68.8	60.4	60.0	63.0	61.3
Employed .....	12,726	13,291	7,884	8,431	1,166	1,145	603	612
Agriculture .....	660	742	572	662	8	10	5	6
Nonagricultural industries .....	12,067	12,549	7,312	7,769	1,158	1,135	599	606
Unemployed .....	1,069	1,026	662	664	127	104	43	39
Unemployment rate .....	7.7	7.2	7.7	7.3	9.8	8.3	6.6	6.0
Not in labor force .....	6,526	6,753	3,897	4,121	846	832	379	411
<b>Men, 16 years and over</b>								
Civilian noninstitutional population .....	10,368	10,734	6,529	6,937	1,010	975	520	527
Civilian labor force .....	8,309	8,571	5,316	5,660	723	672	387	387
Percent of population .....	80.1	79.8	81.4	81.6	71.6	68.9	74.4	73.5
Employed .....	7,728	8,018	4,941	5,291	654	615	364	371
Agriculture .....	571	651	492	579	6	8	4	5
Nonagricultural industries .....	7,157	7,367	4,450	4,712	648	607	360	366
Unemployed .....	582	552	374	369	69	57	23	16
Unemployment rate .....	7.0	6.4	7.0	6.5	9.6	8.5	6.0	4.1
Not in labor force .....	2,059	2,164	1,214	1,276	287	303	133	140
<b>Men, 20 years and over</b>								
Civilian noninstitutional population .....	9,250	9,573	5,795	6,139	889	872	500	499
Civilian labor force .....	7,779	8,005	4,965	5,244	669	632	375	372
Percent of population .....	84.1	83.6	85.7	85.4	75.3	72.4	74.9	74.6
Employed .....	7,307	7,570	4,659	4,959	619	586	352	359
Agriculture .....	544	621	466	551	6	8	4	5
Nonagricultural industries .....	6,763	6,949	4,193	4,408	614	578	348	354
Unemployed .....	471	436	306	285	50	46	22	13
Unemployment rate .....	6.1	5.4	6.2	5.4	7.4	7.3	6.0	3.6
Not in labor force .....	1,471	1,568	831	895	220	241	125	127
<b>Women, 16 years and over</b>								
Civilian noninstitutional population .....	9,953	10,335	5,913	6,280	1,129	1,105	504	535
Civilian labor force .....	5,486	5,746	3,231	3,435	570	576	259	264
Percent of population .....	55.1	55.6	54.6	54.7	50.5	52.2	51.3	49.2
Employed .....	4,999	5,273	2,943	3,140	512	529	239	241
Agriculture .....	89	91	80	83	3	2	1	1
Nonagricultural industries .....	4,910	5,182	2,863	3,057	510	528	239	240
Unemployed .....	488	473	288	296	58	47	20	23
Unemployment rate .....	8.9	8.2	8.9	8.6	10.1	8.2	7.6	8.6
Not in labor force .....	4,466	4,589	2,683	2,844	559	529	246	272
<b>Women, 20 years and over</b>								
Civilian noninstitutional population .....	8,950	9,292	5,280	5,555	997	1,003	484	509
Civilian labor force .....	5,106	5,304	2,984	3,119	521	530	251	252
Percent of population .....	57.0	57.1	56.5	56.1	52.3	52.8	51.8	49.6
Employed .....	4,705	4,928	2,752	2,897	476	493	232	231
Agriculture .....	83	85	75	77	2	2	1	1
Nonagricultural industries .....	4,622	4,843	2,677	2,820	474	491	232	230
Unemployed .....	401	376	232	221	45	37	19	22
Unemployment rate .....	7.9	7.1	7.8	7.1	8.7	7.0	7.4	8.6
Not in labor force .....	3,845	3,988	2,296	2,436	475	473	233	257
<b>Both sexes, 16 to 19 years</b>								
Civilian noninstitutional population .....	2,121	2,204	1,368	1,523	254	205	40	54
Civilian labor force .....	911	1,007	598	733	103	87	20	26
Percent of population .....	43.0	45.7	43.7	48.1	40.4	42.5	49.7	48.1
Employed .....	714	793	473	575	71	66	18	22
Agriculture .....	33	36	31	34	-	1	-	-
Nonagricultural industries .....	682	757	442	541	70	65	18	22
Unemployed .....	197	214	125	158	32	21	2	4
Unemployment rate .....	21.6	21.3	20.9	21.5	31.2	24.1	( <sup>2</sup> )	( <sup>2</sup> )
Not in labor force .....	1,210	1,197	770	790	151	118	20	28

<sup>1</sup> Includes persons of Central or South American origin and of other Hispanic origin, not shown separately.

<sup>2</sup> Data not shown where base is less than 35,000.

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**7. 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	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
<b>TOTAL</b>												
Civilian noninstitutional population ...	170,327	171,983	81,173	81,986	89,153	89,997	143,829	144,900	19,076	19,384	15,577	16,134
Civilian labor force .....	114,833	115,779	61,982	62,494	52,851	53,285	96,846	97,206	12,813	13,168	10,880	11,232
Percent of population .....	67.4	67.3	76.4	76.2	59.3	59.2	67.3	67.1	67.2	67.9	69.8	69.6
Employed .....	110,518	111,855	59,736	60,497	50,782	51,359	93,687	94,330	11,882	12,324	10,214	10,615
Employment-population ratio .....	64.9	65.0	73.6	73.8	57.0	57.1	65.1	65.1	62.3	63.6	65.6	65.8
Unemployed .....	4,315	3,924	2,246	1,998	2,069	1,926	3,159	2,877	930	844	666	617
Unemployment rate .....	3.8	3.4	3.6	3.2	3.9	3.6	3.3	3.0	7.3	6.4	6.1	5.5
<b>Less than a high school diploma</b>												
Civilian noninstitutional population ...	29,757	29,375	14,119	13,975	15,638	15,400	23,785	23,557	4,611	4,459	6,968	7,138
Civilian labor force .....	12,564	12,561	7,766	7,711	4,798	4,850	10,144	10,146	1,816	1,785	4,084	4,191
Percent of population .....	42.2	42.8	55.0	55.2	30.7	31.5	42.6	43.1	39.4	40.0	58.6	58.7
Employed .....	11,546	11,673	7,210	7,238	4,336	4,435	9,414	9,510	1,578	1,579	3,738	3,889
Employment-population ratio .....	38.8	39.7	51.1	51.8	27.7	28.8	39.6	40.4	34.2	35.4	53.7	54.5
Unemployed .....	1,018	887	557	472	461	415	730	635	238	207	346	303
Unemployment rate .....	8.1	7.1	7.2	6.1	9.6	8.6	7.2	6.3	13.1	11.6	8.5	7.2
<b>High school graduates, no college</b>												
Civilian noninstitutional population ...	57,424	57,524	26,076	26,212	31,348	31,313	48,728	48,709	6,837	6,910	4,154	4,296
Civilian labor force .....	37,769	37,465	19,967	19,961	17,802	17,504	31,699	31,313	4,798	4,864	3,123	3,195
Percent of population .....	65.8	65.1	76.6	76.2	56.8	55.9	65.1	64.3	70.2	70.4	75.2	74.4
Employed .....	36,163	35,976	19,124	19,188	17,039	16,788	30,552	30,249	4,409	4,504	2,945	3,018
Employment-population ratio .....	63.0	62.5	73.3	73.2	54.4	53.6	62.7	62.1	64.5	65.2	70.9	70.2
Unemployed .....	1,606	1,489	844	773	763	717	1,147	1,064	389	360	178	177
Unemployment rate .....	4.3	4.0	4.2	3.9	4.3	4.1	3.6	3.4	8.1	7.4	5.7	5.5
<b>Less than a bachelor's degree<sup>1</sup></b>												
Civilian noninstitutional population ...	41,946	42,261	19,387	19,488	22,560	22,773	35,552	35,643	4,890	5,042	2,830	2,934
Civilian labor force .....	31,343	31,412	15,892	15,860	15,451	15,552	26,326	26,211	3,884	4,000	2,309	2,373
Percent of population .....	74.7	74.3	82.0	81.4	68.5	68.3	74.0	73.5	79.4	79.3	81.6	80.9
Employed .....	30,321	30,477	15,393	15,415	14,928	15,062	25,574	25,527	3,665	3,795	2,214	2,282
Employment-population ratio .....	72.3	72.1	79.4	79.1	66.2	66.1	71.9	71.6	74.9	75.3	78.2	77.8
Unemployed .....	1,022	935	499	445	523	489	752	685	219	204	95	91
Unemployment rate .....	3.3	3.0	3.1	2.8	3.4	3.1	2.9	2.6	5.6	5.1	4.1	3.8
<b>Some college, no degree</b>												
Civilian noninstitutional population ...	29,448	29,526	14,009	13,883	15,439	15,642	24,817	24,715	3,640	3,768	2,056	2,120
Civilian labor force .....	21,430	21,311	11,252	11,018	10,178	10,293	17,845	17,592	2,855	2,938	1,672	1,689
Percent of population .....	72.8	72.2	80.3	79.4	65.9	65.8	71.9	71.2	78.4	78.0	81.3	79.7
Employed .....	20,678	20,626	10,876	10,684	9,802	9,943	17,302	17,101	2,681	2,776	1,603	1,622
Employment-population ratio .....	70.2	69.9	77.6	77.0	63.5	63.6	69.7	69.2	73.6	73.7	77.9	76.5
Unemployed .....	752	684	377	335	376	350	543	491	175	162	69	68
Unemployment rate .....	3.5	3.2	3.3	3.0	3.7	3.4	3.0	2.8	6.1	5.5	4.1	4.0
<b>Associate degree</b>												
Civilian noninstitutional population ...	12,498	12,735	5,378	5,604	7,121	7,131	10,735	10,928	1,250	1,273	773	814
Civilian labor force .....	9,913	10,101	4,640	4,842	5,273	5,259	8,481	8,619	1,029	1,061	637	683
Percent of population .....	79.3	79.3	86.3	86.4	74.1	73.7	79.0	78.9	82.3	83.4	82.3	84.0
Employed .....	9,643	9,850	4,517	4,731	5,126	5,119	8,271	8,426	984	1,020	611	660
Employment-population ratio .....	77.2	77.3	84.0	84.4	72.0	71.8	77.1	77.1	78.7	80.1	79.0	81.1
Unemployed .....	270	251	123	111	147	140	210	193	45	42	26	23
Unemployment rate .....	2.7	2.5	2.6	2.3	2.8	2.7	2.5	2.2	4.3	3.9	4.0	3.4
<b>College graduates</b>												
Civilian noninstitutional population ...	41,200	42,822	21,592	22,312	19,608	20,510	35,764	36,991	2,738	2,973	1,625	1,766
Civilian labor force .....	33,157	34,342	18,357	18,963	14,800	15,379	28,677	29,537	2,314	2,520	1,364	1,474
Percent of population .....	80.5	80.2	85.0	85.0	75.5	75.0	80.2	79.8	84.5	84.7	83.9	83.4
Employed .....	32,488	33,730	18,010	18,656	14,478	15,074	28,148	29,044	2,230	2,446	1,316	1,427
Employment-population ratio .....	78.9	78.8	83.4	83.6	73.8	73.5	78.7	78.5	81.4	82.3	81.0	80.8
Unemployed .....	669	612	347	307	322	305	529	493	84	74	47	47
Unemployment rate .....	2.0	1.8	1.9	1.6	2.2	2.0	1.8	1.7	3.6	2.9	3.5	3.2

<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.

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

(Numbers in thousands)

Age, sex, and race	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 .....	108,202	91,880	12,260	4,062	23,261	2,497	19,239	1,524	4,916	1,293
16 to 19 years .....	2,320	1,914	344	61	4,731	300	4,233	198	584	621
16 to 17 years .....	353	271	70	12	2,409	60	2,242	107	164	409
18 to 19 years .....	1,967	1,643	275	49	2,322	240	1,990	91	420	212
20 years and over .....	105,882	89,966	11,915	4,001	18,530	2,197	15,007	1,326	4,332	672
20 to 24 years .....	9,273	7,926	1,106	240	3,285	466	2,667	151	910	171
25 years and over .....	96,609	82,040	10,810	3,760	15,246	1,731	12,339	1,175	3,423	501
25 to 54 years .....	84,274	71,912	9,240	3,121	10,985	1,513	8,665	806	3,097	362
55 years and over .....	12,336	10,127	1,570	639	4,261	218	3,674	369	325	139
<b>Men, 16 years and over .....</b>	<b>63,189</b>	<b>55,080</b>	<b>6,136</b>	<b>1,973</b>	<b>7,504</b>	<b>1,063</b>	<b>6,026</b>	<b>416</b>	<b>2,707</b>	<b>559</b>
16 to 19 years .....	1,351	1,133	186	32	2,207	137	1,976	94	340	345
16 to 17 years .....	61,837	53,947	5,950	1,940	5,297	925	4,050	322	2,366	214
20 to 24 years .....	5,294	4,627	557	110	1,344	218	1,074	51	509	73
25 years and over .....	56,543	49,320	5,393	1,830	3,953	708	2,975	271	1,857	141
25 to 54 years .....	49,092	43,061	4,555	1,476	2,182	612	1,440	130	1,648	80
55 years and over .....	7,451	6,259	838	355	1,772	96	1,535	141	209	61
<b>Women, 16 years and over .....</b>	<b>45,014</b>	<b>36,800</b>	<b>6,124</b>	<b>2,090</b>	<b>15,757</b>	<b>1,435</b>	<b>13,214</b>	<b>1,108</b>	<b>2,210</b>	<b>734</b>
16 to 19 years .....	969	781	158	29	2,524	163	2,257	104	244	276
20 years and over .....	44,045	36,019	5,955	2,061	13,233	1,272	10,957	1,004	1,966	458
20 to 24 years .....	3,979	3,299	549	131	1,941	248	1,593	100	400	98
25 years and over .....	40,066	32,720	5,416	1,930	11,292	1,024	9,364	905	1,566	360
25 to 54 years .....	35,181	28,851	4,685	1,646	8,803	901	7,225	677	1,449	282
55 years and over .....	4,885	3,868	732	284	2,490	122	2,139	228	116	78
<b>White</b>										
<b>Men, 16 years and over .....</b>	<b>54,206</b>	<b>47,239</b>	<b>5,257</b>	<b>1,709</b>	<b>6,398</b>	<b>829</b>	<b>5,209</b>	<b>360</b>	<b>1,999</b>	<b>432</b>
16 to 19 years .....	1,188	999	162	27	1,915	113	1,723	80	242	268
16 to 17 years .....	53,017	46,240	5,095	1,682	4,483	716	3,487	280	1,756	164
20 to 24 years .....	4,540	3,971	475	95	1,118	172	902	44	349	56
25 years and over .....	48,477	42,269	4,620	1,588	3,365	544	2,585	236	1,408	108
25 to 54 years .....	41,872	36,733	3,876	1,264	1,763	466	1,190	107	1,237	57
55 years and over .....	6,605	5,536	745	324	1,602	78	1,395	128	170	51
<b>Women, 16 years and over .....</b>	<b>36,553</b>	<b>29,792</b>	<b>5,039</b>	<b>1,722</b>	<b>13,774</b>	<b>1,089</b>	<b>11,695</b>	<b>990</b>	<b>1,481</b>	<b>572</b>
16 to 19 years .....	816	663	129	24	2,170	136	1,945	88	163	202
20 years and over .....	35,738	29,130	4,910	1,698	11,604	953	9,749	902	1,318	370
20 to 24 years .....	3,241	2,698	443	100	1,612	188	1,342	83	255	72
25 years and over .....	32,497	26,431	4,467	1,599	9,992	765	8,407	819	1,063	298
25 to 54 years .....	28,310	23,118	3,838	1,353	7,766	672	6,483	611	974	232
55 years and over .....	4,187	3,313	629	246	2,226	93	1,925	208	89	66
<b>Black</b>										
<b>Men, 16 years and over .....</b>	<b>6,148</b>	<b>5,322</b>	<b>637</b>	<b>189</b>	<b>723</b>	<b>168</b>	<b>520</b>	<b>34</b>	<b>572</b>	<b>99</b>
16 to 19 years .....	125	104	17	3	216	21	185	10	85	62
20 years and over .....	6,023	5,218	620	185	507	147	334	25	487	37
20 to 24 years .....	550	478	62	10	136	37	94	4	140	11
25 years and over .....	5,473	4,740	558	175	371	110	240	21	347	26
25 to 54 years .....	4,922	4,279	489	153	256	100	142	13	323	18
55 years and over .....	551	460	69	22	115	10	98	7	25	8
<b>Women, 16 years and over .....</b>	<b>6,281</b>	<b>5,166</b>	<b>828</b>	<b>288</b>	<b>1,404</b>	<b>278</b>	<b>1,045</b>	<b>81</b>	<b>624</b>	<b>131</b>
16 to 19 years .....	122	92	25	5	273	22	237	13	69	65
20 years and over .....	6,159	5,073	803	283	1,131	256	807	68	555	66
20 to 24 years .....	579	466	87	25	231	49	170	12	129	21
25 years and over .....	5,581	4,607	715	258	900	207	637	56	426	45
25 to 54 years .....	5,065	4,200	634	230	701	184	476	41	407	36
55 years and over .....	516	407	81	28	199	23	161	15	19	9

<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  
ANNUAL AVERAGES**

**9. Employed persons by occupation, sex, and age**

(Numbers in thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
Total .....	129,558	131,463	69,685	70,693	66,284	67,135	59,873	60,771	56,613	57,278
Managerial and professional specialty .....	37,686	38,937	19,249	19,867	19,131	19,738	18,437	19,070	18,299	18,890
Executive, administrative, and managerial .....	18,440	19,054	10,271	10,585	10,223	10,534	8,170	8,469	8,124	8,407
Officials and administrators, public administration .....	694	719	372	389	372	388	322	330	322	329
Other executive, administrative, and managerial .....	13,143	13,635	7,951	8,181	7,911	8,137	5,191	5,454	5,154	5,406
Management-related occupations .....	4,604	4,700	1,948	2,015	1,940	2,008	2,656	2,685	2,648	2,672
Professional specialty .....	19,245	19,883	8,978	9,282	8,907	9,204	10,267	10,602	10,176	10,483
Engineers .....	2,036	2,052	1,841	1,824	1,840	1,822	195	228	194	228
Mathematical and computer scientists .....	1,494	1,747	1,040	1,243	1,034	1,235	454	505	453	501
Natural scientists .....	529	519	365	359	365	359	164	161	164	160
Health diagnosing occupations .....	1,027	1,083	769	798	769	797	259	285	258	284
Health assessment and treating occupations .....	2,886	2,898	391	428	390	427	2,495	2,470	2,492	2,467
Teachers, college and university .....	869	919	498	530	492	524	371	389	364	384
Teachers, except college and university .....	4,798	4,962	1,166	1,225	1,149	1,208	3,632	3,737	3,594	3,683
Lawyers and judges .....	925	951	678	679	677	678	247	272	246	272
Other professional specialty occupations .....	4,681	4,750	2,231	2,196	2,192	2,154	2,450	2,555	2,409	2,502
Technical, sales, and administrative support .....	38,309	38,521	13,760	13,792	12,981	12,973	24,549	24,728	22,859	22,893
Technicians and related support .....	4,214	4,261	2,028	1,976	1,989	1,938	2,186	2,285	2,153	2,251
Health technologists and technicians .....	1,693	1,733	336	319	333	312	1,357	1,414	1,339	1,400
Engineering and science technicians .....	1,246	1,255	955	930	932	908	291	325	281	314
Technicians, except health, engineering, and science .....	1,275	1,273	737	728	725	718	538	545	532	537
Sales occupations .....	15,734	15,850	7,840	7,875	7,320	7,324	7,894	7,975	6,804	6,778
Supervisors and proprietors .....	4,635	4,719	2,855	2,829	2,833	2,809	1,780	1,890	1,754	1,855
Sales representatives, finance and business services .....	2,613	2,668	1,464	1,504	1,445	1,470	1,149	1,165	1,124	1,126
Sales representatives, commodities, except retail .....	1,507	1,584	1,132	1,173	1,126	1,166	375	411	369	402
Sales workers, retail and personal services .....	6,887	6,784	2,364	2,344	1,892	1,855	4,523	4,440	3,493	3,330
Sales-related occupations .....	91	94	24	26	23	24	67	68	64	66
Administrative support, including clerical .....	18,361	18,410	3,892	3,941	3,673	3,711	14,469	14,469	13,902	13,863
Supervisors .....	685	698	275	279	274	277	410	419	406	417
Computer equipment operators .....	392	375	162	170	158	166	229	205	223	202
Secretaries, stenographers, and typists .....	3,692	3,599	79	85	73	80	3,613	3,515	3,519	3,415
Financial records processing .....	2,196	2,214	172	175	165	166	2,024	2,039	1,998	2,008
Mail and message distributing .....	977	984	606	611	588	595	371	374	360	362
Other administrative support, including clerical .....	10,420	10,539	2,597	2,622	2,413	2,428	7,823	7,917	7,395	7,459
Service occupations .....	17,537	17,836	7,122	7,222	6,134	6,237	10,416	10,614	9,284	9,436
Private household .....	795	847	37	46	30	40	758	801	670	708
Protective service .....	2,300	2,417	1,890	1,986	1,837	1,948	411	431	373	385
Service, except private household and protective .....	14,442	14,572	5,195	5,190	4,267	4,249	9,247	9,382	8,241	8,343
Food service .....	5,999	6,071	2,590	2,639	1,876	1,919	3,409	3,432	2,705	2,726
Health service .....	2,447	2,480	289	285	278	266	2,158	2,194	2,075	2,097
Cleaning and building service .....	3,108	3,112	1,764	1,728	1,641	1,597	1,344	1,384	1,286	1,317
Personal service .....	2,888	2,909	552	537	473	467	2,335	2,371	2,174	2,203
Precision production, craft, and repair .....	14,124	14,411	12,868	13,208	12,575	12,878	1,256	1,203	1,229	1,181
Mechanics and repairers .....	4,675	4,786	4,494	4,592	4,400	4,475	181	194	178	191
Construction trades .....	5,378	5,594	5,251	5,485	5,113	5,319	127	109	122	104
Other precision production, craft, and repair .....	4,071	4,031	3,123	3,131	3,063	3,084	948	900	928	886
Operators, fabricators, and laborers .....	18,399	18,256	13,858	13,769	12,876	12,736	4,540	4,487	4,318	4,264
Machine operators, assemblers, and inspectors .....	7,962	7,791	4,962	4,882	4,794	4,695	3,000	2,909	2,916	2,826
Transportation and material moving occupations .....	5,389	5,363	4,872	4,818	4,774	4,703	518	545	500	531
Motor vehicle operators .....	4,089	4,069	3,629	3,601	3,548	3,517	461	468	445	455
Other transportation and material moving occupations .....	1,300	1,294	1,243	1,217	1,226	1,187	57	77	55	76
Handlers, equipment cleaners, helpers, and laborers .....	5,048	5,102	4,025	4,069	3,309	3,338	1,023	1,033	901	908
Construction laborers .....	811	821	773	784	703	706	37	37	36	35
Other handlers, equipment cleaners, helpers, and laborers .....	4,237	4,282	3,252	3,285	2,605	2,632	985	996	865	873
Farming, forestry, and fishing .....	3,503	3,502	2,828	2,835	2,587	2,572	675	668	625	614
Farm operators and managers .....	1,317	1,187	1,012	913	1,000	905	305	274	302	270
Other farming, forestry, and fishing occupations .....	2,186	2,315	1,816	1,921	1,587	1,666	371	394	323	343

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

10. Employed persons by occupation, race, and sex

(Percent distribution)

Occupation and race	Total		Men		Women	
	1997	1998	1997	1998	1997	1998
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	129,558	131,463	69,685	70,693	59,873	60,771
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	29.1	29.6	27.6	28.1	30.8	31.4
Executive, administrative, and managerial .....	14.2	14.5	14.7	15.0	13.6	13.9
Professional specialty .....	14.9	15.1	12.9	13.1	17.1	17.4
Technical, sales, and administrative support .....	29.6	29.3	19.7	19.5	41.0	40.7
Technicians and related support .....	3.3	3.2	2.9	2.8	3.7	3.8
Sales occupations .....	12.1	12.1	11.3	11.1	13.2	13.1
Administrative support, including clerical .....	14.2	14.0	5.6	5.6	24.2	23.8
Service occupations .....	13.5	13.6	10.2	10.2	17.4	17.5
Private household .....	.6	.6	.1	.1	1.3	1.3
Protective service .....	1.8	1.8	2.7	2.8	.7	.7
Service, except private household and protective .....	11.1	11.1	7.5	7.3	15.4	15.4
Precision production, craft, and repair .....	10.9	11.0	18.5	18.7	2.1	2.0
Operators, fabricators, and laborers .....	14.2	13.9	19.9	19.5	7.6	7.4
Machine operators, assemblers, and inspectors .....	6.1	5.9	7.1	6.9	5.0	4.8
Transportation and material moving occupations .....	4.2	4.1	7.0	6.8	.9	.9
Handlers, equipment cleaners, helpers, and laborers .....	3.9	3.9	5.8	5.8	1.7	1.7
Farming, forestry, and fishing .....	2.7	2.7	4.1	4.0	1.1	1.1
<b>White</b>						
Total, 16 years and over (thousands) .....	109,856	110,931	59,998	60,604	49,859	50,327
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	30.1	30.7	28.5	29.1	32.0	32.6
Executive, administrative, and managerial .....	14.9	15.2	15.5	15.8	14.3	14.6
Professional specialty .....	15.2	15.5	13.0	13.3	17.8	18.1
Technical, sales, and administrative support .....	29.7	29.3	19.8	19.5	41.6	41.1
Technicians and related support .....	3.3	3.2	2.9	2.7	3.7	3.8
Sales occupations .....	12.5	12.4	11.7	11.5	13.4	13.4
Administrative support, including clerical .....	13.9	13.7	5.2	5.2	24.5	24.0
Service occupations .....	12.4	12.4	9.2	9.2	16.2	16.3
Private household .....	.6	.6	( <sup>1</sup> )	( <sup>1</sup> )	1.2	1.3
Protective service .....	1.6	1.7	2.5	2.6	.6	.6
Service, except private household and protective .....	10.2	10.1	6.6	6.5	14.4	14.4
Precision production, craft, and repair .....	11.4	11.5	19.1	19.4	2.0	1.9
Operators, fabricators, and laborers .....	13.5	13.2	19.0	18.5	6.9	6.8
Machine operators, assemblers, and inspectors .....	5.8	5.5	6.9	6.6	4.4	4.3
Transportation and material moving occupations .....	4.0	3.9	6.7	6.5	.8	.8
Handlers, equipment cleaners, helpers, and laborers .....	3.7	3.7	5.4	5.4	1.6	1.6
Farming, forestry, and fishing .....	3.0	2.9	4.4	4.3	1.3	1.2
<b>Black</b>						
Total, 16 years and over (thousands) .....	13,969	14,556	6,607	6,871	7,362	7,685
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	19.8	20.2	16.8	17.0	22.4	23.2
Executive, administrative, and managerial .....	9.1	9.4	8.5	8.6	9.6	10.1
Professional specialty .....	10.7	10.8	8.4	8.4	12.8	13.0
Technical, sales, and administrative support .....	28.9	29.3	18.1	18.3	38.5	39.1
Technicians and related support .....	2.9	3.0	2.6	2.5	3.2	3.5
Sales occupations .....	9.1	9.7	6.8	7.8	11.2	11.4
Administrative support, including clerical .....	16.8	16.5	8.7	8.0	24.1	24.2
Service occupations .....	22.1	21.6	18.1	17.8	25.7	25.0
Private household .....	.9	.8	.1	.1	1.7	1.5
Protective service .....	3.1	3.2	4.8	4.8	1.5	1.7
Service, except private household and protective .....	18.1	17.6	13.2	12.9	22.5	21.9
Precision production, craft, and repair .....	8.2	8.0	14.9	14.6	2.2	2.0
Operators, fabricators, and laborers .....	19.9	19.7	29.9	30.1	10.9	10.4
Machine operators, assemblers, and inspectors .....	8.4	8.2	9.6	9.7	7.4	7.0
Transportation and material moving occupations .....	5.9	6.0	11.0	11.1	1.3	1.4
Handlers, equipment cleaners, helpers, and laborers .....	5.6	5.5	9.4	9.3	2.2	2.0
Farming, forestry, and fishing .....	1.1	1.2	2.1	2.2	.2	.3

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

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

procedures and revised population controls used in the household survey.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**11. Employed persons by detailed occupation, sex, race, and Hispanic origin**

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Total, 16 years and over .....	131,463	46.2	11.1	10.1
Managerial and professional specialty .....	38,937	49.0	7.6	5.0
Executive, administrative, and managerial .....	19,054	44.4	7.2	5.4
Officials and administrators, public administration .....	630	48.5	12.1	4.5
Administrators, protective services .....	60	25.2	15.7	3.6
Financial managers .....	705	53.3	6.8	4.4
Personnel and labor relations managers .....	162	65.9	7.7	4.3
Purchasing managers .....	136	39.4	5.0	5.5
Managers, marketing, advertising, and public relations .....	772	38.5	3.8	3.4
Administrators, education and related fields .....	752	62.2	10.6	4.2
Managers, medicine and health .....	725	79.2	6.8	5.3
Managers, food serving and lodging establishments .....	1,453	43.9	8.8	8.7
Managers, properties and real estate .....	517	52.2	7.1	9.4
Management-related occupations .....	4,700	57.1	9.7	5.4
Accountants and auditors .....	1,616	58.2	9.4	4.9
Underwriters .....	117	71.0	13.1	.6
Other financial officers .....	745	53.9	7.7	5.0
Management analysts .....	441	41.4	9.1	2.4
Personnel, training, and labor relations specialists .....	482	68.3	14.7	5.8
Buyers, wholesale and retail trade, except farm products .....	224	48.4	5.9	8.8
Construction inspectors .....	70	6.6	2.8	9.1
Inspectors and compliance officers, except construction .....	237	36.0	12.8	9.7
Professional specialty .....	19,883	53.3	7.9	4.6
Engineers, architects, and surveyors .....	2,224	11.5	4.0	3.9
Architects .....	158	17.5	2.0	5.2
Engineers .....	2,052	11.1	4.1	3.8
Aerospace engineers .....	86	8.4	3.3	2.6
Chemical engineers .....	69	16.5	4.6	1.0
Civil engineers .....	296	12.1	2.0	4.6
Electrical and electronic engineers .....	629	9.0	5.3	3.7
Industrial engineers .....	262	18.3	5.3	5.6
Mechanical engineers .....	335	7.0	3.3	2.0
Mathematical and computer scientists .....	1,747	28.9	7.2	4.2
Computer systems analysts and scientists .....	1,471	26.9	7.2	3.6
Operations and systems researchers and analysts .....	212	41.9	8.8	8.5
Natural scientists .....	519	30.9	3.9	3.0
Chemists, except biochemists .....	133	32.9	6.1	3.1
Geologists and geodesists .....	63	11.6	.3	2.0
Biological and life scientists .....	104	38.8	3.3	1.5
Medical scientists .....	83	45.2	5.6	5.2
Health diagnosing occupations .....	1,083	26.3	4.2	4.0
Physicians .....	740	26.6	4.9	4.8
Dentists .....	155	19.8	2.8	2.0
Veterinarians .....	58	32.5	1.9	4.9
Health assessment and treating occupations .....	2,898	85.2	8.9	3.4
Registered nurses .....	2,032	92.5	9.3	3.2
Pharmacists .....	180	44.0	4.1	5.1
Dietitians .....	90	86.0	18.2	4.3
Therapists .....	528	75.4	7.3	3.8
Respiratory therapists .....	103	60.8	11.7	2.0
Occupational therapists .....	71	83.0	6.5	.7
Physical therapists .....	134	72.9	4.2	5.4
Speech therapists .....	105	92.6	1.9	6.3
Physicians' assistants .....	68	52.6	10.6	2.8
Teachers, college and university .....	919	42.3	5.8	3.6
Teachers, except college and university .....	4,962	75.3	10.0	5.4
Prekindergarten and kindergarten .....	586	97.8	14.4	8.0
Elementary school .....	1,951	84.0	10.5	5.6
Secondary school .....	1,225	56.9	8.9	4.2
Special education .....	381	82.0	11.0	4.7
Counselors, educational and vocational .....	230	68.8	13.2	5.5
Librarians, archivists, and curators .....	236	80.8	5.9	5.4
Librarians .....	208	83.4	5.2	5.9
Social scientists and urban planners .....	430	54.7	6.7	5.2
Economists .....	137	46.3	3.6	6.5
Psychologists .....	232	62.1	10.2	4.0
Social, recreation, and religious workers .....	1,329	55.1	17.5	5.9

See footnotes at end of table.

11. Employed persons by detailed occupation, sex, race, and Hispanic origin — Continued

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Social workers .....	749	68.4	23.4	6.4
Recreation workers .....	132	75.1	15.9	4.8
Clergy .....	325	12.0	8.7	6.1
Lawyers and judges .....	951	28.6	4.3	3.0
Lawyers .....	912	28.5	4.0	3.0
Writers, artists, entertainers, and athletes .....	2,353	51.4	6.2	5.6
Authors .....	130	55.0	2.2	1.3
Technical writers .....	73	57.4	3.5	1.2
Designers .....	692	58.0	3.0	6.6
Musicians and composers .....	183	39.7	10.8	7.2
Actors and directors .....	130	38.7	8.2	4.5
Painters, sculptors, craft artists, and artist printmakers .....	241	53.9	4.7	5.0
Photographers .....	154	38.1	5.5	7.1
Editors and reporters .....	274	51.0	8.9	3.1
Public relations specialists .....	170	66.3	8.8	4.0
Announcers .....	60	17.1	10.7	5.0
Athletes .....	91	23.7	12.7	3.7
Technical, sales, and administrative support .....	38,521	64.2	11.1	8.3
Technicians and related support .....	4,261	53.6	10.4	6.6
Health technologists and technicians .....	1,733	81.6	13.9	7.0
Clinical laboratory technologists and technicians .....	359	78.5	15.0	6.4
Dental hygienists .....	112	99.1	3.9	3.9
Radiologic technicians .....	170	69.5	8.2	2.0
Licensed practical nurses .....	381	96.0	17.4	5.8
Engineering and related technologists and technicians .....	970	20.8	8.6	7.6
Electrical and electronic technicians .....	431	16.9	9.3	8.8
Drafting occupations .....	228	19.3	3.5	6.2
Surveying and mapping technicians .....	71	12.8	3.5	8.2
Science technicians .....	285	43.3	8.8	5.8
Biological technicians .....	108	68.2	4.0	4.9
Chemical technicians .....	75	21.2	12.9	5.3
Technicians, except health, engineering, and science .....	1,273	42.8	7.2	5.6
Airplane pilots and navigators .....	113	3.4	1.9	2.5
Computer programmers .....	613	28.5	6.4	4.9
Legal assistants .....	370	82.0	8.1	7.2
Sales occupations .....	15,850	50.3	8.9	7.9
Supervisors and proprietors .....	4,719	40.1	6.5	6.3
Sales representatives, finance and business services .....	2,668	43.6	7.6	4.8
Insurance sales .....	592	41.5	9.1	4.2
Real estate sales .....	749	53.0	3.9	4.1
Securities and financial services sales .....	477	29.1	6.4	3.7
Advertising and related sales .....	186	58.3	8.9	3.1
Sales occupations, other business services .....	664	41.3	11.1	7.4
Sales representatives, commodities, except retail .....	1,584	26.0	2.9	5.4
Sales representatives, mining, manufacturing, and wholesale .....	1,544	26.4	2.9	5.6
Sales workers, retail and personal services .....	6,784	65.4	12.5	10.7
Sales workers, motor vehicles and boats .....	309	11.1	8.8	7.4
Sales workers, apparel .....	447	80.2	14.5	9.7
Sales workers, shoes .....	107	65.2	16.7	13.4
Sales workers, furniture and home furnishings .....	152	49.2	4.0	7.7
Sales workers, radio, television, hi-fi, and appliances .....	280	25.8	10.0	10.4
Sales workers, hardware and building supplies .....	262	24.1	5.7	5.7
Sales workers, parts .....	165	10.6	4.5	10.4
Sales workers, other commodities .....	1,416	68.3	8.5	9.3
Sales counter clerks .....	205	67.7	10.1	14.6
Cashiers .....	3,025	78.2	16.8	12.7
Street and door-to-door sales workers .....	315	76.3	8.5	9.0
News vendors .....	100	36.8	9.2	2.9
Sales-related occupations .....	94	72.7	6.6	3.7
Demonstrators, promoters, and models .....	71	79.3	6.9	4.2
Administrative support occupations, including clerical .....	18,410	78.6	13.1	9.0
Supervisors, administrative support .....	698	60.1	15.1	5.9
Supervisors, general office .....	397	69.1	14.1	6.8
Supervisors, financial records processing .....	88	81.8	8.0	3.6
Supervisors, distribution, scheduling, and adjusting clerks .....	192	33.9	20.4	5.3
Computer equipment operators .....	375	54.7	14.1	7.1
Computer operators .....	371	54.8	14.2	6.8

See footnotes at end of table.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**11. Employed persons by detailed occupation, sex, race, and Hispanic origin — Continued**

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Secretaries, stenographers, and typists .....	3,599	97.6	9.6	7.0
Secretaries .....	2,914	98.4	8.5	7.0
Stenographers .....	106	94.2	3.2	6.5
Typists .....	580	94.3	16.5	7.1
Information clerks .....	1,965	89.0	11.5	10.7
Interviewers .....	166	81.3	16.2	7.4
Hotel clerks .....	126	79.2	13.9	6.2
Transportation ticket and reservation agents .....	273	77.1	9.5	9.3
Receptionists .....	1,006	95.5	10.5	12.5
Records processing, except financial .....	1,063	79.2	14.5	10.6
Order clerks .....	246	75.2	20.2	11.4
Personnel clerks, except payroll and timekeeping .....	74	87.1	14.0	15.9
Library clerks .....	173	75.5	10.3	6.1
File clerks .....	348	80.3	14.5	10.8
Records clerks .....	205	82.5	10.7	11.9
Financial records processing .....	2,214	92.1	7.7	6.5
Bookkeepers, accounting, and auditing clerks .....	1,726	93.0	6.8	6.0
Payroll and timekeeping clerks .....	146	89.7	10.6	8.8
Billing clerks .....	185	87.2	9.3	7.9
Cost and rate clerks .....	52	83.7	8.9	9.2
Billing, posting, and calculating machine operators .....	105	94.1	15.7	6.1
Duplicating, mail and other office machine operators .....	81	55.7	18.9	16.6
Communications equipment operators .....	175	81.7	25.9	14.3
Telephone operators .....	159	85.8	26.8	13.1
Mail and message distributing .....	984	38.0	21.1	10.3
Postal clerks, except mail carriers .....	319	47.2	28.2	8.5
Mail carriers, postal service .....	333	29.7	17.1	9.9
Mail clerks, except postal service .....	178	49.7	24.5	12.4
Messengers .....	155	23.1	11.4	12.3
Material recording, scheduling, and distributing clerks .....	1,945	45.1	14.1	12.7
Dispatchers .....	235	49.4	11.0	8.7
Production coordinators .....	255	56.7	5.3	7.0
Traffic, shipping, and receiving clerks .....	628	31.6	17.3	17.0
Stock and inventory clerks .....	452	42.9	15.5	14.8
Weighers, measurers, and checkers and samplers .....	51	52.4	22.8	9.4
Expeditors .....	272	67.9	12.7	10.4
Adjusters and investigators .....	1,813	74.7	16.3	8.0
Insurance adjusters, examiners, and investigators .....	476	72.1	12.2	6.6
Investigators and adjusters, except insurance .....	1,049	75.6	17.1	7.7
Eligibility clerks, social welfare .....	94	85.8	17.5	14.7
Bill and account collectors .....	195	70.5	21.5	9.3
Miscellaneous administrative support .....	3,496	83.1	14.7	9.7
General office clerks .....	735	81.1	15.3	10.8
Bank tellers .....	416	89.5	11.0	9.0
Data-entry keyers .....	711	81.8	17.4	8.4
Statistical clerks .....	100	80.5	19.4	7.1
Teachers' aides .....	633	93.0	15.1	13.5
Service occupations .....	17,836	59.5	17.6	15.0
Private household .....	847	94.6	13.7	30.9
Child care workers .....	278	96.5	9.4	19.5
Cleaners and servants .....	549	94.3	15.4	37.0
Protective service .....	2,417	17.8	19.1	8.5
Supervisors .....	214	9.3	14.2	7.5
Police and detectives .....	118	11.3	10.5	6.0
Guards .....	55	11.8	24.9	5.3
Firefighting and fire prevention .....	250	2.5	10.9	5.3
Firefighting .....	228	2.3	11.8	3.9
Police and detectives .....	1,062	16.3	19.4	8.8
Police and detectives, public service .....	602	11.5	15.2	10.0
Sheriffs, bailiffs, and other law enforcement officers .....	161	17.0	16.8	8.0
Correctional institution officers .....	299	25.4	29.2	6.8
Guards .....	891	26.0	22.4	9.2
Guards and police, except public services .....	753	19.0	25.1	9.9
Service occupations, except private household and protective service .....	14,572	64.4	17.6	15.1
Food preparation and service occupations .....	6,071	56.5	11.8	17.0
Supervisors, food preparation and service .....	417	67.4	13.8	12.4
Bartenders .....	324	54.6	4.3	6.7
Waiters and waitresses .....	1,379	78.3	5.4	11.3

See footnotes at end of table.

11. Employed persons by detailed occupation, sex, race, and Hispanic origin — Continued

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Cooks .....	2,135	40.9	16.6	21.9
Food counter, fountain and related occupations .....	339	69.1	10.3	10.8
Kitchen workers, food preparation .....	269	69.0	12.1	11.1
Waiters' and waitresses' assistants .....	559	53.4	10.7	18.8
Miscellaneous food preparation .....	650	46.8	14.0	25.6
Health service occupations .....	2,480	88.5	30.1	10.0
Dental assistants .....	230	98.1	6.1	12.1
Health aides, except nursing .....	337	78.9	24.4	9.3
Nursing aides, orderlies, and attendants .....	1,913	89.0	34.0	9.8
Cleaning and building service occupations .....	3,112	44.5	22.8	20.5
Supervisors .....	165	39.1	21.6	17.7
Maids and housemen .....	653	82.8	26.7	25.0
Janitors and cleaners .....	2,233	34.8	21.7	19.6
Pest control occupations .....	57	4.1	22.1	12.0
Personal service occupations .....	2,909	81.5	13.5	9.8
Supervisors .....	142	66.8	9.2	6.0
Barbers .....	66	18.5	39.4	11.8
Hairdressers and cosmetologists .....	763	90.8	11.3	8.2
Attendants, amusement and recreation facilities .....	215	43.2	9.3	5.6
Public transportation attendants .....	124	86.3	12.9	4.1
Welfare service aides .....	92	86.8	25.1	15.9
Family child care providers .....	486	97.1	11.2	10.7
Early childhood teachers' assistants .....	453	95.9	16.0	11.8
Precision production, craft, and repair .....	14,411	8.3	8.0	12.4
Mechanics and repairers .....	4,786	4.0	7.9	10.4
Supervisors .....	259	5.8	5.8	8.1
Mechanics and repairers, except supervisors .....	4,527	4.0	8.0	10.5
Vehicle and mobile equipment mechanics and repairers .....	1,845	1.0	7.6	12.6
Automobile mechanics .....	877	.8	8.3	13.7
Bus, truck, and stationary engine mechanics .....	334	.6	9.2	9.5
Aircraft engine mechanics .....	153	3.7	8.6	11.7
Small engine repairers .....	64	1.3	3.1	10.5
Automobile body and related repairers .....	188	.8	6.1	17.1
Heavy equipment mechanics .....	170	.2	4.7	10.5
Industrial machinery repairers .....	562	2.1	8.0	8.8
Electrical and electronic equipment repairers .....	866	11.1	10.8	9.0
Electronic repairers, communications and industrial equipment .....	187	6.7	13.2	8.4
Data processing equipment repairers .....	274	16.9	7.5	8.0
Telephone installers and repairers .....	232	12.0	11.9	9.2
Miscellaneous electrical and electronic equipment repairers .....	83	7.2	10.6	10.3
Heating, air conditioning, and refrigeration mechanics .....	323	1.5	5.8	9.0
Miscellaneous mechanics and repairers .....	916	5.0	7.2	9.2
Office machine repairers .....	62	2.1	7.6	7.0
Millwrights .....	83	1.5	7.1	5.2
Construction trades .....	5,594	2.0	7.1	14.0
Supervisors .....	755	1.3	4.7	8.2
Construction trades, except supervisors .....	4,839	2.0	7.5	14.9
Brickmasons and stonemasons .....	195	1.2	17.8	13.3
Tile setters, hard and soft .....	63	1.0	9.1	23.0
Carpet installers .....	135	1.6	4.7	18.0
Carpenters .....	1,346	1.2	5.3	13.7
Drywall installers .....	180	2.2	4.7	22.2
Electricians .....	806	1.9	6.9	7.9
Electrical power installers and repairers .....	141	.7	12.3	11.2
Painters, construction and maintenance .....	590	4.7	7.0	24.4
Plumbers, pipefitters, and steamfitters .....	531	.9	7.0	10.8
Concrete and terrazzo finishers .....	83	.4	25.2	20.4
Glaziers .....	54	4.4	4.2	11.0
Insulation workers .....	55	6.4	8.7	27.5
Roofers .....	241	.8	9.7	22.1
Structural metalworkers .....	63	1.5	5.4	6.8
Extractive occupations .....	125	1.4	7.0	11.8
Precision production occupations .....	3,907	23.0	9.5	12.7
Supervisors .....	1,221	18.2	10.9	9.8
Precision metalworking .....	948	6.6	5.6	8.9
Tool and die makers .....	138	.2	1.9	4.5
Machinists .....	535	5.7	6.2	8.6
Sheet-metal workers .....	127	4.1	5.9	8.0
Precision woodworking occupations .....	130	9.9	6.8	15.0

See footnotes at end of table.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**11. Employed persons by detailed occupation, sex, race, and Hispanic origin — Continued**

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Cabinet makers and bench carpenters .....	89	5.5	3.8	13.6
Precision textile, apparel, and furnishings machine workers .....	218	46.7	12.4	20.5
Dressmakers .....	67	88.5	10.4	14.4
Tailors .....	50	33.1	15.6	18.8
Upholsterers .....	71	21.8	10.7	24.9
Precision workers, assorted materials .....	552	55.7	10.5	15.8
Optical goods workers .....	79	55.4	7.8	5.2
Dental laboratory and medical appliance technicians .....	54	23.0	6.8	12.6
Electrical and electronic equipment assemblers .....	342	67.8	13.5	17.7
Precision food production occupations .....	435	34.7	11.2	25.8
Butchers and meat cutters .....	234	20.5	12.2	32.0
Bakers .....	152	44.9	12.7	17.6
Precision inspectors, testers, and related workers .....	143	23.1	10.4	7.5
Inspectors, testers, and graders .....	137	23.5	10.8	7.6
Plant and system operators .....	259	2.6	11.3	7.0
Water and sewage treatment plant operators .....	55	4.7	9.4	5.8
Stationary engineers .....	130	1.1	14.6	6.8
<b>Operators, fabricators, and laborers .....</b>	<b>18,256</b>	<b>24.6</b>	<b>15.7</b>	<b>16.0</b>
Machine operators, assemblers, and inspectors .....	7,791	37.3	15.4	17.2
Machine operators and tenders, except precision .....	4,931	37.5	16.0	18.5
Metalworking and plastic working machine operators .....	409	17.4	10.3	11.7
Lathe and turning machine operators .....	51	17.0	5.1	11.7
Punching and stamping press machine operators .....	107	31.1	10.2	9.8
Grinding, abrading, buffing, and polishing machine operators .....	128	10.1	8.6	17.9
Metal and plastic processing machine operators .....	164	21.5	11.4	10.7
Molding and casting machine operators .....	106	26.4	10.4	7.6
Woodworking machine operators .....	149	16.1	14.6	13.2
Sawing machine operators .....	90	12.6	15.8	11.3
Printing machine operators .....	395	26.8	9.5	12.8
Printing press operators .....	298	19.4	10.9	14.1
Textile, apparel, and furnishings machine operators .....	954	72.1	19.4	25.1
Winding and twisting machine operators .....	53	71.0	30.7	3.7
Textile sewing machine operators .....	511	82.1	16.4	30.2
Pressing machine operators .....	91	81.0	27.8	35.2
Laundry and dry cleaning machine operators .....	199	52.8	19.1	21.9
Machine operators, assorted materials .....	2,840	32.2	16.9	18.9
Packaging and filling machine operators .....	401	60.3	19.9	30.8
Mixing and blending machine operators .....	124	9.5	23.1	19.1
Separating, filtering, and clarifying machine operators .....	55	10.4	20.5	10.8
Painting and paint spraying machine operators .....	212	13.6	12.5	20.4
Furnace, kiln, and oven operators, except food .....	83	3.5	9.6	12.1
Slicing and cutting machine operators .....	184	24.4	11.9	24.2
Photographic process machine operators .....	102	59.2	12.0	10.0
Fabricators, assemblers, and hand working occupations .....	2,090	33.1	14.3	14.5
Welders and cutters .....	588	5.1	7.6	14.0
Assemblers .....	1,319	43.1	17.9	15.1
Miscellaneous hand working occupations .....	85	64.1	5.1	5.5
Production inspectors, testers, samplers, and weighers .....	770	48.0	14.8	16.3
Production inspectors, checkers, and examiners .....	522	49.5	12.9	13.6
Production testers .....	56	22.0	10.0	8.6
Graders and sorters, except agricultural .....	185	51.9	21.6	25.9
<b>Transportation and material moving occupations .....</b>	<b>5,363</b>	<b>10.2</b>	<b>16.3</b>	<b>11.9</b>
Motor vehicle operators .....	4,069	11.5	16.2	12.0
Supervisors .....	88	24.4	15.9	5.2
Truck drivers .....	3,012	5.3	14.9	12.0
Drivers-sales workers .....	159	9.4	10.8	9.7
Bus drivers .....	471	50.4	20.3	11.2
Taxicab drivers and chauffeurs .....	273	10.5	26.5	15.0
Parking lot attendants .....	62	10.8	22.2	23.8
Transportation occupations, except motor vehicles .....	167	4.1	17.3	3.8
Rail transportation .....	104	5.1	21.3	3.0
Railroad conductors and yardmasters .....	50	2.7	15.6	4.2
Water transportation .....	63	2.6	10.6	5.0
Material moving equipment operators .....	1,127	6.2	16.2	12.8
Operating engineers .....	245	2.2	7.4	6.8
Crane and tower operators .....	67	6.3	19.3	4.6
Excavating and loading machine operators .....	104	.4	4.8	7.9
Grader, dozer, and scraper operators .....	75	2.7	10.6	4.2

See footnotes at end of table.

11. Employed persons by detailed occupation, sex, race, and Hispanic origin — Continued

(Numbers in thousands)

Occupation	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Industrial truck and tractor equipment operators .....	534	8.9	22.7	18.3
Handlers, equipment cleaners, helpers, and laborers .....	5,102	20.3	15.6	18.4
Helpers, construction and extractive occupations .....	126	3.5	6.9	32.4
Helpers, construction trades .....	122	3.6	6.3	33.3
Construction laborers .....	821	4.5	11.8	23.5
Production helpers .....	54	25.0	12.7	29.3
Freight, stock, and material handlers .....	1,988	23.7	17.4	14.3
Stock handlers and baggers .....	1,183	29.7	13.1	14.4
Machine feeders and offbearers .....	77	39.2	23.3	10.7
Garage and service station related occupations .....	180	4.1	10.8	10.7
Vehicle washers and equipment cleaners .....	297	9.8	19.5	27.2
Hand packers and packagers .....	290	63.6	13.1	25.6
Laborers, except construction .....	1,298	21.8	16.6	16.6
Farming, forestry, and fishing .....	3,502	19.1	4.9	22.6
Farm operators and managers .....	1,187	23.1	1.3	2.4
Farmers, except horticultural .....	935	25.1	.7	.8
Horticultural specialty farmers .....	69	7.8	8.5	17.9
Managers, farms, except horticultural .....	170	18.9	2.2	5.1
Other agricultural and related occupations .....	2,171	17.7	6.8	34.8
Farm occupations, except managerial .....	903	17.9	4.2	44.3
Farm workers .....	835	17.2	4.2	44.9
Related agricultural occupations .....	1,268	17.6	8.6	28.0
Supervisors .....	142	9.6	1.6	22.9
Groundskeepers and gardeners, except farm .....	924	7.2	10.7	29.2
Animal caretakers, except farm .....	130	69.4	3.1	6.6
Graders and sorters, agricultural products .....	69	74.9	5.6	64.2
Forestry and logging occupations .....	91	6.7	8.1	6.9
Timber cutting and logging occupations .....	60	3.0	11.3	2.5
Fishers, hunters, and trappers .....	53	4.6	3.6	3.9

NOTE: Generally, data for occupations with fewer than 50,000 employed are not published separately but are included in the totals for the appropriate categories shown. Beginning in January 1998, data reflect new composite

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**12. Employed white, black, and Hispanic-origin workers by sex, occupation, class of worker, and full- or part-time status.**

(In thousands)

Category	Total		White		Black		Hispanic origin	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>SEX</b>								
Total (all civilian workers) .....	129,558	131,463	109,856	110,931	13,969	14,556	12,726	13,291
Men .....	69,685	70,693	59,998	60,604	6,607	6,871	7,728	8,018
Women .....	59,873	60,771	49,859	50,327	7,362	7,685	4,999	5,273
<b>OCCUPATION</b>								
Managerial and professional specialty .....	37,686	38,937	33,089	34,063	2,764	2,947	1,867	1,933
Executive, administrative, and managerial .....	18,440	19,054	16,420	16,903	1,267	1,368	1,001	1,028
Professional specialty .....	19,245	19,883	16,669	17,160	1,497	1,579	866	905
Technical, sales, and administrative support .....	38,309	38,521	32,624	32,490	4,032	4,264	3,026	3,186
Technicians and related support .....	4,214	4,261	3,571	3,557	410	441	256	283
Sales occupations .....	15,734	15,850	13,730	13,704	1,271	1,415	1,198	1,245
Administrative support, including clerical .....	18,361	18,410	15,323	15,229	2,352	2,408	1,572	1,657
Service occupations .....	17,537	17,836	13,604	13,807	3,092	3,148	2,560	2,670
Private household .....	795	847	642	704	129	116	212	262
Protective service .....	2,300	2,417	1,800	1,892	430	463	202	204
Service, except private household and protective .....	14,442	14,572	11,162	11,211	2,533	2,569	2,146	2,204
Precision production, craft, and repair .....	14,124	14,411	12,472	12,729	1,144	1,158	1,714	1,793
Mechanics and repairers .....	4,675	4,786	4,146	4,233	370	379	479	496
Construction trades .....	5,378	5,594	4,859	5,054	381	398	736	785
Other precision production, craft, and repair .....	4,071	4,031	3,467	3,441	393	381	499	512
Operators, fabricators, and laborers .....	18,399	18,256	14,813	14,609	2,781	2,866	2,839	2,917
Machine operators, assemblers, and inspectors .....	7,962	7,791	6,322	6,146	1,178	1,200	1,426	1,340
Transportation and material moving occupations .....	5,389	5,363	4,435	4,351	819	872	592	640
Handlers, equipment cleaners, helpers, and laborers .....	5,048	5,102	4,057	4,112	784	795	821	938
Construction laborers .....	811	821	681	705	105	97	166	193
Other handlers, equipment cleaners, helpers, and laborers .....	4,237	4,282	3,376	3,407	679	698	655	745
Farming, forestry, and fishing .....	3,503	3,502	3,254	3,233	156	172	721	792
<b>CLASS OF WORKER</b>								
Agriculture:								
Wage and salary workers .....	1,890	2,000	1,761	1,843	81	102	583	670
Self-employed workers .....	1,457	1,341	1,397	1,280	36	36	76	71
Unpaid family workers .....	51	38	50	37	-	-	1	2
Nonagricultural industries:								
Wage and salary workers .....	116,983	119,019	98,395	99,657	13,380	13,917	11,458	11,949
Government .....	18,131	18,383	14,514	14,686	2,860	2,877	1,331	1,355
Private industries .....	98,852	100,637	83,880	84,970	10,520	11,040	10,127	10,594
Private households .....	915	962	724	785	161	146	234	281
Other industries .....	97,937	99,674	83,156	84,185	10,359	10,894	9,893	10,312
Self-employed workers .....	9,056	8,962	8,153	8,030	471	497	598	590
Unpaid family workers .....	120	103	101	84	1	4	11	10
<b>FULL- OR PART-TIME STATUS</b>								
Full-time workers .....	106,334	108,202	89,605	90,759	11,920	12,429	10,741	11,303
Part-time workers .....	23,224	23,261	20,252	20,172	2,049	2,126	1,985	1,988

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  
ANNUAL AVERAGES**

**13. Employed Mexican, Puerto Rican, and Cuban-origin workers by sex, occupation, class of worker, and full- or part-time status**

(Numbers in thousands)

Category	Total Hispanic origin <sup>1</sup>		Mexican origin		Puerto Rican origin		Cuban origin	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>SEX</b>								
Total (all civilian workers) .....	12,726	13,291	7,884	8,431	1,166	1,145	603	612
Men .....	7,728	8,018	4,941	5,291	654	615	364	371
Women .....	4,999	5,273	2,943	3,140	512	529	239	241
<b>OCCUPATION</b>								
Managerial and professional specialty .....	1,867	1,933	946	985	206	208	171	159
Executive, administrative, and managerial .....	1,001	1,028	508	536	103	103	102	89
Professional specialty .....	866	905	438	449	103	105	69	70
Technical, sales, and administrative support .....	3,026	3,186	1,728	1,845	347	365	197	210
Technicians and related support .....	256	283	140	156	30	30	18	28
Sales occupations .....	1,198	1,245	680	729	112	118	88	94
Administrative support, including clerical .....	1,572	1,657	908	961	204	217	91	88
Service occupations .....	2,560	2,670	1,524	1,653	231	217	75	85
Private household .....	212	262	99	130	5	6	5	3
Protective service .....	202	204	106	106	47	39	9	13
Service, except private household and protective .....	2,146	2,204	1,319	1,417	179	172	62	69
Precision production, craft, and repair .....	1,714	1,793	1,185	1,199	127	119	55	66
Mechanics and repairers .....	479	496	303	311	50	38	30	28
Construction trades .....	736	785	542	554	42	33	16	23
Other precision production, craft, and repair .....	499	512	340	334	36	48	10	15
Operators, fabricators, and laborers .....	2,839	2,917	1,887	2,047	243	223	96	85
Machine operators, assemblers, and inspectors .....	1,426	1,340	957	955	119	105	33	24
Transportation and material moving occupations .....	592	640	370	422	64	53	36	38
Handlers, equipment cleaners, helpers, and laborers .....	821	938	561	671	61	64	28	24
Construction laborers .....	166	193	121	149	6	9	4	3
Other handlers, equipment cleaners, helpers, and laborers .....	655	745	439	521	55	55	23	21
Farming, forestry, and fishing .....	721	792	614	703	12	13	8	7
<b>CLASS OF WORKER</b>								
Agriculture:								
Wage and salary workers .....	583	670	519	605	6	9	2	5
Self-employed workers .....	76	71	52	56	-	1	2	2
Unpaid family workers .....	1	2	1	1	-	-	-	-
Nonagricultural industries:								
Wage and salary workers .....	11,458	11,949	6,949	7,410	1,121	1,100	558	574
Government .....	1,331	1,355	821	833	188	180	58	60
Private industries .....	10,127	10,594	6,128	6,577	933	920	500	515
Private households .....	234	281	109	139	6	7	5	3
Other industries .....	9,893	10,312	6,019	6,438	927	913	495	511
Self-employed workers .....	598	590	356	351	36	34	41	31
Unpaid family workers .....	11	10	8	8	-	-	-	-
<b>FULL- OR PART-TIME STATUS</b>								
Full-time workers .....	10,741	11,303	6,672	7,166	958	969	517	531
Part-time workers .....	1,985	1,988	1,212	1,265	208	176	86	81

<sup>1</sup> Includes persons of Central or South American origin and of other Hispanic origin, 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  
ANNUAL AVERAGES**

**14. Employed persons in nonagricultural industries by age, sex, and race**

(In thousands)

Age, sex, and race	1998									
	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services <sup>1</sup>	Public administration
			Total	Durable goods	Non-durable goods					
<b>Total</b>										
Total, 16 years and over .....	620	8,518	20,733	12,566	8,168	9,307	27,203	8,605	47,212	5,887
16 to 19 years .....	13	279	431	243	188	150	3,806	177	1,887	47
20 years and over .....	607	8,239	20,302	12,322	7,980	9,157	23,397	8,428	45,325	5,839
20 to 24 years .....	35	825	1,614	972	642	654	3,909	708	4,228	245
25 years and over .....	572	7,414	18,688	11,350	7,338	8,503	19,488	7,720	41,097	5,595
25 to 54 years .....	499	6,533	16,242	9,866	6,376	7,409	16,478	6,518	34,645	4,829
55 years and over .....	73	881	2,446	1,484	962	1,093	3,010	1,202	6,452	766
<b>Men, 16 years and over</b> .....	535	7,721	14,138	9,140	4,998	6,598	14,367	3,552	17,906	3,323
16 to 19 years .....	9	263	298	180	118	98	1,847	55	764	21
20 years and over .....	526	7,458	13,840	8,960	4,880	6,500	12,520	3,498	17,142	3,302
20 to 24 years .....	31	769	1,103	710	393	437	2,011	234	1,654	123
25 years and over .....	495	6,689	12,737	8,250	4,487	6,063	10,509	3,264	15,488	3,179
25 to 54 years .....	433	5,906	11,054	7,157	3,897	5,229	8,928	2,627	12,774	2,753
55 years and over .....	62	783	1,683	1,093	590	834	1,581	636	2,714	425
<b>Women, 16 years and over</b> .....	85	798	6,595	3,426	3,169	2,709	12,836	5,053	29,306	2,564
16 to 19 years .....	4	16	134	64	70	52	1,958	122	1,123	27
20 years and over .....	81	782	6,462	3,362	3,099	2,658	10,878	4,930	28,183	2,537
20 to 24 years .....	4	56	510	262	249	218	1,898	474	2,574	122
25 years and over .....	77	725	5,951	3,101	2,851	2,440	8,980	4,456	25,609	2,416
25 to 54 years .....	66	627	5,188	2,709	2,479	2,180	7,551	3,890	21,871	2,075
55 years and over .....	11	99	763	391	372	260	1,429	566	3,738	340
<b>White</b>										
<b>Men, 16 years and over</b> .....	501	7,028	12,136	7,941	4,195	5,389	12,276	3,105	15,023	2,768
16 to 19 years .....	9	249	263	160	103	75	1,594	45	659	16
20 years and over .....	493	6,779	11,874	7,781	4,093	5,314	10,682	3,060	14,365	2,752
20 to 24 years .....	28	711	925	597	328	363	1,731	193	1,343	105
25 years and over .....	465	6,068	10,949	7,184	3,765	4,951	8,951	2,867	13,022	2,647
25 to 54 years .....	404	5,356	9,468	6,215	3,252	4,234	7,541	2,274	10,638	2,276
55 years and over .....	61	712	1,481	969	513	716	1,410	593	2,384	371
<b>Women, 16 years and over</b> .....	78	734	5,360	2,847	2,513	2,127	10,912	4,241	24,177	1,915
16 to 19 years .....	3	16	120	58	63	41	1,668	98	963	21
20 years and over .....	75	718	5,239	2,790	2,450	2,086	9,244	4,143	23,214	1,894
20 to 24 years .....	4	53	415	218	196	173	1,572	371	2,112	95
25 years and over .....	71	665	4,824	2,571	2,253	1,913	7,672	3,772	21,102	1,799
25 to 54 years .....	60	575	4,168	2,226	1,943	1,685	6,365	3,249	17,953	1,511
55 years and over .....	11	90	656	345	311	228	1,307	523	3,148	289
<b>Black</b>										
<b>Men, 16 years and over</b> .....	24	498	1,374	779	595	949	1,326	294	1,854	434
16 to 19 years .....	-	11	28	15	13	18	194	6	74	4
20 years and over .....	24	487	1,346	764	582	930	1,132	289	1,780	430
20 to 24 years .....	3	40	132	82	50	61	200	26	197	15
25 years and over .....	20	448	1,214	681	532	869	931	263	1,583	415
25 to 54 years .....	20	392	1,086	600	486	780	839	236	1,362	377
55 years and over .....	1	55	128	82	46	89	93	27	221	38
<b>Women, 16 years and over</b> .....	4	48	811	360	451	457	1,290	605	3,914	536
16 to 19 years .....	-	1	11	4	6	10	225	15	128	5
20 years and over .....	4	48	801	356	444	447	1,065	590	3,786	531
20 to 24 years .....	-	1	72	29	42	35	254	79	344	21
25 years and over .....	4	46	729	327	402	412	810	511	3,441	510
25 to 54 years .....	4	39	658	293	365	387	743	484	2,968	470
55 years and over .....	-	7	71	34	37	25	68	28	473	41

<sup>1</sup> Includes private households.

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

procedures and revised population controls used in the household survey.

15. Employed persons in agriculture and nonagricultural industries by age, sex, and class of worker

(In thousands)

Age and sex	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 .....	2,000	1,341	38	119,019	100,637	962	99,674	18,383	8,962	103
16 to 19 years .....	219	30	13	6,726	6,400	116	6,285	325	57	8
16 to 17 years .....	104	21	5	2,602	2,500	70	2,431	102	25	4
18 to 19 years .....	114	8	8	4,124	3,900	46	3,854	223	32	3
20 to 24 years .....	300	34	6	11,968	10,962	91	10,872	1,005	242	8
25 to 34 years .....	531	179	8	29,146	25,458	166	25,292	3,688	1,513	18
35 to 44 years .....	473	314	5	32,750	27,470	221	27,249	5,280	2,710	26
45 to 54 years .....	275	319	2	24,565	19,095	190	18,905	5,470	2,403	23
55 to 64 years .....	149	245	2	11,066	8,878	104	8,774	2,187	1,399	12
65 years and over .....	53	221	3	2,800	2,373	74	2,298	427	639	9
Men, 16 years and over .....	1,526	1,005	23	62,630	54,452	86	54,366	8,178	5,480	29
16 to 19 years .....	170	24	10	3,319	3,176	18	3,158	143	30	5
16 to 17 years .....	82	18	4	1,278	1,227	10	1,217	51	13	3
18 to 19 years .....	88	6	7	2,041	1,949	8	1,941	92	17	3
20 to 24 years .....	246	25	4	6,224	5,789	8	5,781	435	134	4
25 to 34 years .....	409	135	5	15,673	13,987	15	13,971	1,686	872	3
35 to 44 years .....	356	242	1	17,416	15,131	16	15,115	2,285	1,612	6
45 to 54 years .....	190	230	-	12,616	10,222	12	10,210	2,394	1,504	4
55 to 64 years .....	110	172	1	5,868	4,838	7	4,831	1,030	898	3
65 years and over .....	44	176	1	1,514	1,309	9	1,300	205	432	3
Women, 16 years and over .....	474	336	15	56,389	46,185	876	45,308	10,205	3,482	74
16 to 19 years .....	49	6	3	3,406	3,224	97	3,127	182	26	2
16 to 17 years .....	22	4	2	1,324	1,273	59	1,214	51	12	2
18 to 19 years .....	27	2	-	2,083	1,951	38	1,913	131	15	1
20 to 24 years .....	54	9	2	5,743	5,173	82	5,091	570	108	4
25 to 34 years .....	123	44	3	13,473	11,471	151	11,320	2,002	641	14
35 to 44 years .....	116	71	3	15,334	12,339	205	12,134	2,995	1,098	20
45 to 54 years .....	85	89	2	11,949	8,873	178	8,695	3,076	899	19
55 to 64 years .....	38	73	1	5,198	4,040	97	3,944	1,158	501	9
65 years and over .....	9	44	2	1,286	1,064	66	998	222	208	5

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**16. Employed persons in nonagricultural industries by sex and class of worker**

(In thousands)

Industry and sex	1998					
	Total employed	Wage and salary workers			Self-employed workers	Unpaid family workers
		Total	Private industries	Government		
<b>TOTAL</b>						
Mining .....	620	599	597	2	21	-
Construction .....	8,518	6,986	6,512	474	1,519	14
Manufacturing .....	20,733	20,300	20,232	68	428	6
Durable goods .....	12,566	12,309	12,254	55	253	4
Nondurable goods .....	8,168	7,991	7,978	13	175	2
Transportation and public utilities .....	9,307	8,872	7,278	1,594	430	5
Wholesale and retail trade .....	27,203	25,526	25,411	116	1,640	36
Wholesale trade .....	5,090	4,789	4,776	13	298	3
Retail trade .....	22,113	20,737	20,634	103	1,342	34
Finance, insurance, and real estate .....	8,605	7,990	7,784	206	609	6
Services .....	47,212	42,859	32,823	10,036	4,317	36
Private households .....	967	962	962	-	5	-
Other service industries .....	46,244	41,897	31,861	10,036	4,311	36
Business, automobile, and repair .....	8,708	7,356	7,289	67	1,340	12
Personal, except private households .....	3,484	2,807	2,800	7	671	5
Entertainment and recreation .....	2,530	2,252	1,957	295	277	1
Professional .....	31,392	29,389	19,767	9,622	1,985	19
Hospitals .....	5,116	5,108	4,374	734	8	-
Health services, except hospitals .....	6,388	5,991	5,569	422	389	8
Educational .....	10,468	10,358	2,585	7,773	109	1
Social services .....	3,240	2,676	2,119	557	560	4
Other .....	6,181	5,256	5,120	137	919	5
Forestry and fisheries .....	131	92	48	45	38	-
Public administration .....	5,887	5,887	-	5,887	-	-
<b>Men</b>						
Mining .....	535	518	518	1	16	-
Construction .....	7,721	6,299	5,884	415	1,421	1
Manufacturing .....	14,138	13,850	13,801	49	285	3
Durable goods .....	9,140	8,941	8,899	42	196	2
Nondurable goods .....	4,998	4,909	4,902	7	89	1
Transportation and public utilities .....	6,598	6,241	5,150	1,090	356	1
Wholesale and retail trade .....	14,367	13,460	13,412	47	893	14
Wholesale trade .....	3,564	3,344	3,335	9	220	-
Retail trade .....	10,803	10,116	10,078	38	673	14
Finance, insurance, and real estate .....	3,552	3,171	3,065	106	382	-
Services .....	17,906	15,789	12,622	3,147	2,127	9
Private households .....	90	86	86	-	4	-
Other service industries .....	17,816	15,683	12,536	3,147	2,123	9
Business, automobile, and repair .....	5,520	4,628	4,589	39	890	3
Personal, except private households .....	1,232	1,023	1,020	3	208	1
Entertainment and recreation .....	1,391	1,230	1,050	180	160	1
Professional .....	9,568	8,733	5,838	2,895	830	5
Hospitals .....	1,213	1,210	971	239	2	-
Health services, except hospitals .....	1,344	1,123	1,034	89	220	2
Educational .....	3,271	3,238	896	2,342	32	1
Social services .....	589	563	422	141	24	2
Other .....	3,151	2,599	2,515	84	552	-
Forestry and fisheries .....	104	70	39	31	35	-
Public administration .....	3,323	3,323	-	3,323	-	-
<b>Women</b>						
Mining .....	85	80	79	1	4	-
Construction .....	798	687	628	59	98	13
Manufacturing .....	6,595	6,450	6,431	19	143	2
Durable goods .....	3,426	3,368	3,355	14	56	1
Nondurable goods .....	3,169	3,082	3,076	6	86	1
Transportation and public utilities .....	2,709	2,632	2,128	504	74	4
Wholesale and retail trade .....	12,836	12,066	11,998	68	748	22
Wholesale trade .....	1,526	1,445	1,442	3	78	3
Retail trade .....	11,310	10,621	10,556	65	669	19
Finance, insurance, and real estate .....	5,053	4,820	4,719	100	227	6
Services .....	29,306	27,090	20,201	6,889	2,189	27
Private households .....	877	876	876	-	1	-
Other service industries .....	28,428	26,213	19,325	6,889	2,188	27
Business, automobile, and repair .....	3,188	2,729	2,700	29	450	9
Personal, except private households .....	2,252	1,785	1,781	4	463	4
Entertainment and recreation .....	1,138	1,021	906	115	117	-
Professional .....	21,824	20,656	13,929	6,727	1,154	14
Hospitals .....	3,903	3,897	3,403	495	5	-
Health services, except hospitals .....	5,044	4,868	4,535	333	169	6
Educational .....	7,196	7,120	1,689	5,431	76	-
Social services .....	2,651	2,113	1,697	416	536	2
Other .....	3,029	2,657	2,605	52	367	5
Forestry and fisheries .....	27	23	9	14	4	-
Public administration .....	2,564	2,564	-	2,564	-	-

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

17. Employed persons by industry, sex, race, and occupation

(In thousands)

Industry and sex	1998												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service		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	
<b>TOTAL</b>													
Agriculture .....	3,378	110	105	51	23	136	-	21	39	20	42	19	2,814
Mining .....	620	101	63	19	11	53	-	8	208	31	105	18	1
Construction .....	8,518	1,380	144	47	56	415	-	28	4,889	94	535	910	21
Manufacturing .....	20,733	3,008	2,007	646	764	1,982	-	291	3,956	6,219	765	1,019	76
Durable goods .....	12,566	1,796	1,351	430	318	1,127	-	150	2,807	3,594	415	509	71
Nondurable goods .....	8,168	1,212	656	217	446	856	-	141	1,150	2,625	350	510	5
Transportation and public utilities .....	9,307	1,307	561	324	273	2,349	-	296	1,285	135	2,243	522	13
Wholesale and retail trade .....	27,203	2,538	590	231	1,136	2,194	-	5,182	1,522	367	1,068	2,049	101
Wholesale trade .....	5,090	622	131	43	2,054	756	-	57	346	137	493	380	71
Retail trade .....	22,113	1,916	459	188	9,306	1,438	-	5,125	1,177	230	575	1,670	30
Finance, insurance, and real estate .....	8,605	2,489	356	166	2,143	2,860	-	323	177	12	13	17	49
Services .....	47,212	6,793	15,090	2,541	1,197	7,118	847	9,117	2,154	887	551	516	399
Private households .....	967	6	6	1	1	9	847	56	3	1	4	7	26
Other service industries .....	46,244	6,787	15,084	2,540	1,196	7,109	-	9,061	2,151	887	548	509	374
Professional services .....	31,392	4,164	13,122	2,132	213	5,132	-	5,485	473	195	294	99	85
Public administration .....	5,887	1,329	968	234	25	1,302	-	1,722	182	27	40	30	27
<b>Men</b>													
Agriculture .....	2,553	62	71	10	15	7	-	12	38	17	40	16	2,266
Mining .....	535	76	59	16	6	14	-	6	205	30	103	18	1
Construction .....	7,721	1,131	124	39	47	46	-	19	4,809	91	522	871	21
Manufacturing .....	14,138	2,024	1,520	483	501	676	-	213	3,319	3,897	702	731	72
Durable goods .....	9,140	1,257	1,117	348	232	396	-	111	2,348	2,493	380	389	68
Nondurable goods .....	4,998	767	403	135	269	280	-	102	970	1,405	322	342	3
Transportation and public utilities .....	6,598	843	405	270	147	969	-	137	1,214	110	2,037	454	12
Wholesale and retail trade .....	14,367	1,459	276	94	5,452	522	-	2,460	1,323	215	990	1,529	47
Wholesale trade .....	3,564	402	86	35	1,546	212	-	43	327	100	474	309	29
Retail trade .....	10,803	1,057	190	59	3,906	309	-	2,417	996	115	517	1,220	18
Finance, insurance, and real estate .....	3,552	1,146	191	69	1,188	489	-	226	167	6	12	14	46
Services .....	17,906	3,167	6,085	856	507	948	46	2,700	1,963	495	377	411	351
Private households .....	90	3	-	-	-	1	46	3	3	-	3	7	24
Other service industries .....	17,816	3,164	6,084	856	507	947	-	2,697	1,960	495	375	404	327
Professional services .....	9,568	1,637	4,894	549	65	499	-	1,155	411	87	139	64	69
Public administration .....	3,323	677	551	139	12	271	-	1,402	170	20	36	25	20
<b>Women</b>													
Agriculture .....	825	47	34	41	8	129	-	9	-	3	2	3	548
Mining .....	85	25	4	4	5	40	-	2	2	-	3	-	-
Construction .....	798	249	19	8	8	369	-	9	80	2	13	39	1
Manufacturing .....	6,595	984	486	163	263	1,307	-	78	638	2,321	63	288	4
Durable goods .....	3,426	539	233	82	86	731	-	39	458	1,101	35	120	3
Nondurable goods .....	3,169	445	253	81	177	576	-	39	180	1,220	28	168	2
Transportation and public utilities .....	2,709	464	156	54	126	1,379	-	159	71	25	206	68	1
Wholesale and retail trade .....	12,836	1,079	314	137	5,908	1,672	-	2,722	199	151	78	520	55
Wholesale trade .....	1,526	220	45	8	508	544	-	14	18	37	19	71	43
Retail trade .....	11,310	859	269	130	5,400	1,129	-	2,708	181	114	59	450	12
Finance, insurance, and real estate .....	5,053	1,344	165	97	955	2,371	-	97	10	6	1	3	3
Services .....	29,306	3,626	9,006	1,685	689	6,170	801	6,417	191	393	174	105	48
Private households .....	877	3	6	1	1	8	801	54	-	-	1	1	1
Other service industries .....	28,428	3,623	9,000	1,683	688	6,162	-	6,364	191	392	173	105	47
Professional services .....	21,824	2,527	8,228	1,583	148	4,632	-	4,330	62	108	155	34	16
Public administration .....	2,564	652	417	96	13	1,032	-	320	12	7	4	6	7

See footnotes at end of table.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**17. Employed persons by industry, sex, race, and occupation — Continued**

(In thousands)

Industry and sex	1998												
	Total em- ployed	Managerial and professional specialty		Technical, sales, and administrative support			Service		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, adminis- trative, and mana- gerial	Profes- sional specialty	Techni- cians and related support	Sales	Adminis- trative support, including clerical	Private house- hold	Other service <sup>1</sup>		Machine oper- ators, assem- blers, and inspec- tors	Transpor- tation and material moving	Handlers, equipment cleaners, helpers, and laborers	
<b>White</b>													
Agriculture .....	3,160	101	102	51	23	132	-	14	35	19	37	17	2,629
Mining .....	579	96	60	19	11	50	-	8	194	29	96	15	1
Construction .....	7,761	1,305	129	41	52	387	-	23	4,462	83	470	793	17
Manufacturing .....	17,496	2,794	1,742	536	702	1,744	-	227	3,414	4,878	593	800	66
Durable goods .....	10,788	1,683	1,151	359	299	1,004	-	126	2,450	2,904	322	430	61
Nondurable goods .....	6,708	1,111	591	178	403	740	-	101	964	1,975	271	370	4
Transportation and public utilities .....	7,516	1,142	476	286	229	1,798	-	223	1,093	107	1,776	374	11
Wholesale and retail trade .....	23,189	2,189	541	191	9,734	1,888	-	4,312	1,362	306	896	1,682	88
Wholesale trade .....	4,501	546	122	34	1,895	658	-	43	311	110	412	312	60
Retail trade .....	18,687	1,644	419	157	7,839	1,230	-	4,269	1,051	196	484	1,370	28
Finance, insurance, and real estate .....	7,346	2,178	291	143	1,933	2,335	-	253	142	9	10	12	40
Services .....	39,200	6,021	13,025	2,097	1,002	5,895	704	6,685	1,876	697	447	392	359
Private households .....	790	4	5	1	1	7	704	34	3	-	4	6	22
Other service industries .....	38,410	6,016	13,020	2,096	1,001	5,888	-	6,651	1,873	697	443	387	338
Professional services .....	26,094	3,671	11,333	1,752	178	4,295	-	3,916	409	158	234	73	75
Public administration .....	4,683	1,077	795	193	18	1,000	-	1,357	151	17	28	25	21
<b>Black</b>													
Agriculture .....	138	4	2	-	-	1	-	5	-	-	3	2	122
Mining .....	28	2	2	1	-	3	-	-	10	1	7	2	-
Construction .....	546	46	4	2	2	21	-	5	303	7	55	98	4
Manufacturing .....	2,185	103	94	57	38	165	-	56	359	981	148	175	9
Durable goods .....	1,139	51	65	31	10	77	-	21	216	511	81	68	8
Nondurable goods .....	1,046	52	30	25	28	88	-	35	143	470	67	107	-
Transportation and public utilities .....	1,406	112	45	25	38	406	-	57	158	22	408	133	1
Wholesale and retail trade .....	2,616	193	21	21	1,053	217	-	535	103	44	145	279	5
Wholesale trade .....	379	46	2	6	79	68	-	11	23	21	70	48	4
Retail trade .....	2,237	147	18	15	974	149	-	524	81	22	75	231	-
Finance, insurance, and real estate .....	899	200	38	12	145	402	-	60	30	1	2	4	6
Services .....	5,767	520	1,242	295	134	953	116	1,991	170	135	91	98	22
Private households .....	146	2	-	-	-	1	116	20	-	-	-	1	4
Other service industries .....	5,621	518	1,241	295	134	952	-	1,971	170	135	91	97	18
Professional services .....	3,924	348	1,114	265	25	666	-	1,351	44	30	55	21	5
Public administration .....	970	189	132	29	6	239	-	324	24	8	12	4	5

<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.

18. Employed persons by detailed industry, sex, race, and Hispanic origin

(Numbers in thousands)

Industry	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Total, 16 years and over .....	131,463	46.2	11.1	10.1
Agriculture .....	3,378	24.4	4.1	22.0
Agricultural production, crops .....	1,014	22.9	3.2	33.2
Agricultural production, livestock .....	1,094	23.8	1.7	9.3
Veterinary services .....	206	70.7	2.5	4.0
Landscape and horticultural services .....	881	11.4	8.6	28.5
Mining .....	620	13.7	4.6	9.0
Coal mining .....	83	3.3	3.4	.1
Oil and gas extraction .....	373	17.7	5.3	10.5
Nonmetallic mining and quarrying, except fuel .....	115	8.7	4.9	9.2
Construction .....	8,518	9.4	6.4	12.7
Manufacturing .....	20,733	31.8	10.5	11.2
Durable goods .....	12,566	27.3	9.1	9.6
Lumber and wood products, except furniture .....	863	18.3	12.4	8.9
Logging .....	133	8.5	12.5	1.4
Sawmills, planing mills, and millwork .....	442	18.4	11.0	6.7
Wood buildings and mobile homes .....	102	18.4	15.3	14.9
Miscellaneous wood products .....	186	25.2	14.3	16.1
Furniture and fixtures .....	675	30.6	8.8	13.9
Stone, clay, glass, and concrete products .....	592	21.8	10.0	10.3
Glass and glass products .....	193	25.6	6.4	8.1
Cement, concrete, gypsum, and plaster products .....	215	13.5	13.6	7.7
Structural clay, pottery, and related products .....	84	32.5	11.9	15.0
Miscellaneous nonmetallic mineral and stone products .....	100	23.6	7.7	15.9
Metal industries .....	2,134	22.0	9.2	11.1
Primary metal industries .....	741	15.4	11.3	8.9
Blast furnaces, steelworks, rolling, and finishing mills .....	302	11.5	13.4	8.3
Iron and steel foundries .....	105	14.6	19.1	7.4
Primary aluminum industries .....	145	11.4	7.6	10.0
Other primary metal industries .....	189	25.1	6.7	9.9
Fabricated metal industries .....	1,393	25.6	8.1	12.3
Cutlery, hand tools, and general hardware .....	145	38.4	7.0	9.8
Fabricated structural metal products .....	550	20.3	6.4	12.2
Screw machine products .....	85	27.1	9.9	13.5
Metal forging and stampings .....	144	28.3	7.4	5.0
Ordnance .....	53	28.6	8.8	5.5
Miscellaneous and not specified fabricated metal products .....	416	26.6	10.4	16.5
Machinery and computing equipment .....	2,481	23.1	6.3	8.0
Engines and turbines .....	72	18.3	9.1	10.2
Farm machinery and equipment .....	117	16.2	9.8	5.2
Construction and material handling machines .....	257	19.3	6.2	4.9
Metal working machinery .....	323	20.0	3.0	6.3
Computers and related equipment .....	515	31.3	7.8	8.7
Electrical machinery, equipment, and supplies .....	1,954	38.1	9.1	9.7
Household appliances .....	107	35.9	9.6	5.7
Radio, T.V., and communication equipment .....	420	34.2	10.8	9.4
Transportation equipment .....	2,391	22.7	10.9	7.7
Motor vehicles and motor vehicle equipment .....	1,313	23.6	13.8	6.5
Aircraft and parts .....	511	22.1	7.0	9.8
Ship and boat building and repairing .....	186	14.7	12.5	8.2
Guided missiles, space vehicles, and parts .....	274	24.4	6.6	9.0
Cycles and miscellaneous transportation equipment .....	72	22.7	1.5	6.8
Professional and photographic equipment, and watches .....	793	40.3	7.1	7.9
Scientific and controlling instruments .....	248	34.4	4.1	5.9

See footnotes at end of table.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**18. Employed persons by detailed industry, sex, race, and Hispanic origin — Continued**

(Numbers in thousands)

Industry	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Medical, dental, and optical instruments and supplies .....	428	46.0	6.8	9.5
Photographic equipment and supplies .....	107	31.1	13.2	6.4
Toys, amusements, and sporting goods .....	165	49.4	8.3	11.4
Miscellaneous and not specified manufacturing industries .....	517	38.7	9.9	17.0
<b>Nondurable goods .....</b>	<b>8,168</b>	<b>38.8</b>	<b>12.8</b>	<b>13.7</b>
Food and kindred products .....	1,655	33.1	14.8	21.4
Meat products .....	439	35.4	21.5	34.2
Dairy products .....	124	27.4	9.2	9.7
Canned, frozen, and preserved fruits and vegetables .....	208	37.0	9.3	25.1
Grain mill products .....	161	28.3	6.9	14.4
Bakery products .....	230	31.2	13.5	21.5
Sugar and confectionary products .....	102	44.1	16.3	20.6
Beverage industries .....	192	18.7	16.8	8.9
Miscellaneous and not specified food and kindred products .....	199	41.7	14.0	14.6
Tobacco manufactures .....	52	26.0	29.6	6.0
Textile mill products .....	595	45.4	22.7	6.6
Knitting mills .....	97	61.9	16.5	11.7
Carpets and rugs .....	85	38.0	17.3	5.6
Yarn, thread, and fabric mills .....	329	43.2	26.7	6.4
Apparel and other finished textile products .....	825	66.4	14.7	25.9
Apparel and accessories, except knit .....	678	67.2	15.7	26.6
Miscellaneous fabricated textile products .....	147	63.0	9.9	22.3
Paper and allied products .....	683	27.2	11.5	9.1
Pulp, paper, and paperboard mills .....	251	20.4	10.8	6.5
Miscellaneous paper and pulp products .....	229	34.6	7.8	12.8
Paperboard containers and boxes .....	203	27.3	16.4	8.1
Printing, publishing, and allied products .....	1,795	43.3	7.7	7.9
Newspaper publishing and printing .....	514	47.6	10.4	5.3
Printing, publishing, and allied industries, except newspapers .....	1,281	41.6	6.6	9.0
Chemicals and allied products .....	1,318	33.1	13.1	9.9
Plastics, synthetics, and resins .....	158	25.9	13.9	15.0
Drugs .....	369	44.7	12.2	9.0
Soaps and cosmetics .....	174	51.9	13.4	18.9
Paints, varnishes, and related products .....	65	24.0	11.9	10.1
Industrial and miscellaneous chemicals .....	505	21.8	14.1	5.7
Petroleum and coal products .....	178	20.7	10.4	10.5
Petroleum refining .....	141	21.0	11.2	7.8
Rubber and miscellaneous plastics products .....	957	31.9	11.7	13.5
Tires and inner tubes .....	100	10.4	13.4	4.4
Other rubber products, and plastics footwear and belting .....	147	32.8	10.5	11.1
Miscellaneous plastics products .....	711	34.7	11.7	15.2
Leather and leather products .....	108	44.5	9.5	21.3
Footwear, except rubber and plastic .....	56	49.0	9.3	16.7
<b>Transportation, communications, and other public utilities .....</b>	<b>9,307</b>	<b>29.1</b>	<b>15.1</b>	<b>9.5</b>
Transportation .....	6,006	27.0	16.1	10.6
Railroads .....	302	11.8	17.4	5.7
Bus service and urban transit .....	580	36.3	22.4	12.1
Taxicab service .....	136	9.9	34.2	14.5
Trucking service .....	2,413	14.6	14.4	10.5
Warehousing and storage .....	169	30.6	17.7	15.0
U.S. Postal Service .....	893	37.6	22.2	8.0
Water transportation .....	218	21.6	11.7	11.5
Air transportation .....	868	37.9	12.7	9.5
Services incidental to transportation .....	416	59.7	6.1	17.4
Communications .....	1,806	41.6	15.0	8.5
Radio and television broadcasting and cable .....	479	39.7	12.9	7.8
Telephone communications .....	1,306	42.3	15.9	8.7

See footnotes at end of table.

18. Employed persons by detailed industry, sex, race, and Hispanic origin — Continued

(Numbers in thousands)

Industry	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Utilities and sanitary services .....	1,496	22.3	11.1	6.5
Electric light and power .....	611	19.9	9.7	4.1
Gas and steam supply systems .....	171	25.9	11.0	5.7
Electric and gas, and other combinations .....	155	30.9	7.1	7.2
Water supply and irrigation .....	247	24.7	11.4	8.3
Sanitary services .....	296	17.7	16.0	9.2
Wholesale and retail trade .....	27,203	47.2	9.6	11.4
Wholesale trade .....	5,090	30.0	7.4	10.8
Durable goods .....	2,773	28.5	6.1	7.8
Motor vehicles and equipment .....	239	23.1	6.5	6.7
Furniture and home furnishings .....	99	40.6	1.1	14.1
Lumber and construction materials .....	207	20.9	6.7	8.8
Professional and commercial equipment and supplies .....	484	36.7	7.9	7.7
Metals and minerals, except petroleum .....	82	27.7	7.9	8.7
Electrical goods .....	343	30.3	7.3	7.0
Hardware, plumbing and heating supplies .....	293	26.1	4.6	4.7
Machinery, equipment, and supplies .....	672	24.4	3.7	4.5
Scrap and waste materials .....	185	18.8	11.1	19.0
Miscellaneous wholesale trade, durable goods .....	169	43.2	5.6	11.5
Nondurable goods .....	2,317	31.7	9.1	14.5
Paper and paper products .....	139	39.7	9.5	10.7
Drugs, chemicals, and allied products .....	223	42.9	11.6	11.9
Apparel, fabrics, and notions .....	143	50.6	10.3	18.7
Groceries and related products .....	935	26.7	9.5	20.2
Farm products-raw materials .....	87	24.3	9.9	3.5
Petroleum products .....	150	27.6	6.1	4.3
Alcoholic beverages .....	115	14.2	10.9	7.8
Farm supplies .....	148	26.8	3.8	5.7
Miscellaneous nondurable goods and not specified wholesale trade .....	378	38.1	8.4	14.1
Retail trade .....	22,113	51.1	10.1	11.6
Lumber and building material retailing .....	587	29.3	8.9	7.0
Hardware stores .....	222	38.6	6.6	6.1
Retail nurseries and garden stores .....	120	42.1	3.5	9.5
Department stores .....	2,209	67.0	14.5	10.5
Variety stores .....	143	68.9	21.4	6.8
Miscellaneous general merchandise stores .....	178	62.1	19.9	7.9
Grocery stores .....	3,133	51.1	10.3	10.9
Retail bakeries .....	212	57.1	8.2	11.6
Motor vehicle dealers .....	1,228	19.3	6.9	9.2
Auto and home supply stores .....	473	16.0	8.2	12.0
Gasoline service stations .....	396	35.7	9.7	8.4
Miscellaneous vehicle dealers .....	128	28.3	.6	6.3
Apparel and accessory stores, except shoe .....	786	73.9	12.8	10.3
Shoe stores .....	140	54.1	19.7	11.2
Furniture and home furnishings stores .....	622	39.0	7.5	10.8
Household appliance stores .....	93	27.9	15.7	12.6
Radio, TV, and computer stores .....	524	29.0	7.2	6.8
Music stores .....	137	40.7	7.7	9.3
Eating and drinking places .....	6,743	52.2	10.8	16.1
Drug stores .....	627	66.2	12.4	7.7
Liquor stores .....	129	48.0	6.1	11.6
Sporting goods, bicycles, and hobby stores .....	405	45.1	6.8	8.1
Book and stationery stores .....	313	59.3	6.5	6.4
Jewelry stores .....	176	62.7	5.4	13.6
Gift, novelty, and souvenir shops .....	220	82.5	4.6	5.8
Catalog and mail order houses .....	148	63.8	7.2	9.1
Vending machine operators .....	69	29.9	5.9	8.8

See footnotes at end of table.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**18. Employed persons by detailed industry, sex, race, and Hispanic origin — Continued**

(Numbers in thousands)

Industry	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Direct selling establishments .....	369	75.1	6.9	9.7
Fuel dealers .....	115	27.0	7.4	3.6
Retail florists .....	176	74.7	5.7	8.6
<b>Finance, insurance, and real estate .....</b>	<b>8,605</b>	<b>58.7</b>	<b>10.5</b>	<b>7.1</b>
Banking .....	1,860	70.7	12.6	7.9
Savings institutions, including credit unions .....	258	83.2	10.8	7.0
Security, commodity brokerage, and investment companies .....	918	38.2	7.3	3.9
Insurance .....	2,563	61.8	10.6	5.3
Real estate, including real estate-insurance offices .....	2,269	49.9	9.3	9.8
<b>Services .....</b>	<b>47,212</b>	<b>62.1</b>	<b>12.2</b>	<b>8.7</b>
Private households .....	967	90.7	15.1	29.3
<b>Other service industries .....</b>	<b>46,244</b>	<b>61.5</b>	<b>12.2</b>	<b>8.2</b>
Business, automobile, and repair services .....	8,708	36.6	11.6	10.8
Advertising .....	308	51.2	6.1	6.8
Services to dwellings and other buildings .....	791	48.8	16.5	21.2
Personnel supply services .....	1,027	60.2	20.8	12.1
Computer and data processing services .....	1,780	29.7	6.8	4.1
Detective and protective services .....	573	21.0	26.0	11.1
Automotive rental and leasing, without drivers .....	167	31.6	11.4	12.5
Automobile parking and carwashes .....	218	16.9	19.6	17.7
Automotive repair and related services .....	1,151	10.1	7.7	14.7
Electrical repair shops .....	137	11.7	6.5	14.0
Miscellaneous repair services .....	572	15.2	3.9	9.4
<b>Personal services, except private household .....</b>	<b>3,484</b>	<b>64.6</b>	<b>13.0</b>	<b>13.9</b>
Hotels and motels .....	1,371	57.7	15.4	18.4
Lodging places, except hotels and motels .....	148	44.9	5.0	3.8
Laundry, cleaning, and garment services .....	478	57.1	14.8	23.0
Beauty shops .....	894	89.7	10.8	8.2
Barber shops .....	67	18.2	40.6	13.4
Funeral service and crematories .....	89	28.7	21.2	6.1
<b>Entertainment and recreation services .....</b>	<b>2,530</b>	<b>45.0</b>	<b>9.0</b>	<b>8.4</b>
Theaters and motion pictures .....	678	41.8	9.8	8.0
Video tape rental .....	141	58.5	6.2	11.8
Bowling centers .....	61	42.7	3.8	4.9
Miscellaneous entertainment and recreation services .....	1,650	45.3	9.1	8.4
<b>Professional and related services .....</b>	<b>31,392</b>	<b>69.5</b>	<b>12.5</b>	<b>6.9</b>
Hospitals .....	5,116	76.3	16.0	6.6
<b>Health services, except hospitals .....</b>	<b>6,388</b>	<b>79.0</b>	<b>14.7</b>	<b>7.9</b>
Offices and clinics of physicians .....	1,581	73.5	6.2	7.8
Offices and clinics of dentists .....	666	79.5	3.7	6.8
Offices and clinics of chiropractors .....	127	59.4	.9	3.9
Offices and clinics of optometrists .....	77	63.3	4.6	5.1
Nursing and personal care facilities .....	1,801	85.0	24.4	7.4
<b>Educational services .....</b>	<b>10,468</b>	<b>68.7</b>	<b>11.6</b>	<b>6.9</b>
Elementary and secondary schools .....	7,131	75.3	12.4	7.4
Colleges and universities .....	2,792	52.5	10.1	5.8
Vocational schools .....	86	49.8	8.6	4.2
Libraries .....	196	73.1	7.9	6.8
<b>Social services .....</b>	<b>3,240</b>	<b>81.8</b>	<b>17.5</b>	<b>8.8</b>
Job training and vocational rehabilitation services .....	217	58.8	16.1	5.5
Child day care services .....	943	95.4	16.5	9.2
Family child care homes .....	498	96.6	11.0	11.0
Residential care facilities, without nursing .....	486	70.9	21.8	9.1
Other professional services .....	6,181	49.0	6.2	5.1

See footnotes at end of table.

18. Employed persons by detailed industry, sex, race, and Hispanic origin — Continued

(Numbers in thousands)

Industry	1998			
	Total employed	Percent of total:		
		Women	Black	Hispanic origin
Legal services .....	1,356	56.0	6.0	6.2
Museums, art galleries, and zoos .....	121	58.8	8.5	6.7
Labor unions .....	51	55.0	12.9	4.5
Religious organizations .....	866	50.8	8.0	5.5
Engineering, architectural, and surveying services .....	910	24.0	3.7	5.1
Accounting, auditing, and bookkeeping services .....	706	56.0	5.3	3.8
Research, development, and testing services .....	591	48.4	6.5	5.6
Management and public relations services .....	950	45.3	6.6	3.8
Miscellaneous professional and related services .....	285	58.4	2.9	1.7
Forestry and fisheries .....	131	20.3	3.6	9.1
Forestry .....	67	26.0	4.0	12.1
Fishing, hunting, and trapping .....	64	14.3	3.1	6.0
Public administration .....	5,887	43.6	16.5	6.6
Executive and legislative offices .....	147	56.2	6.8	3.8
Justice, public order, and safety .....	2,442	31.1	16.8	7.6
Public finance, taxation, and monetary policy .....	360	66.0	17.7	6.8
Administration of human resources programs .....	805	69.2	21.3	6.1
Administration of environmental quality and housing programs .....	264	39.4	7.4	4.5
Administration of economic programs .....	585	42.5	13.4	4.3
National security and international affairs .....	591	37.7	14.6	6.8

NOTE: Generally, data for industries with fewer than 50,000 employed are not published separately but are included in the totals for the appropriate categories shown. Beginning in January 1998, data reflect

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**19. Persons at work in agriculture and nonagricultural industries by hours of work**

Hours of work	1998					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	125,877	3,217	122,660	100.0	100.0	100.0
1 to 34 hours .....	33,132	987	32,146	26.3	30.7	26.2
1 to 4 hours .....	1,336	71	1,265	1.1	2.2	1.0
5 to 14 hours .....	4,914	218	4,696	3.9	6.8	3.8
15 to 29 hours .....	15,545	465	15,081	12.3	14.4	12.3
30 to 34 hours .....	11,337	232	11,105	9.0	7.2	9.1
35 hours and over .....	92,745	2,231	90,514	73.7	69.3	73.8
35 to 39 hours .....	8,731	174	8,556	6.9	5.4	7.0
40 hours .....	44,224	760	43,464	35.1	23.6	35.4
41 hours and over .....	39,790	1,297	38,494	31.6	40.3	31.4
41 to 48 hours .....	14,608	268	14,340	11.6	8.3	11.7
49 to 59 hours .....	14,520	387	14,133	11.5	12.0	11.5
60 hours and over .....	10,663	642	10,020	8.5	20.0	8.2
Average hours, total at work .....	39.3	41.6	39.2	-	-	-
Average hours, persons who usually work full time .....	43.2	47.9	43.1	-	-	-

NOTE: Detail on persons at work in tables 19-23 may not sum to the totals shown because of minor editing problems associated with the redesigned

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

**20. 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	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 .....	33,132	12,260	20,872	32,146	11,929	20,217
Economic reasons .....	3,665	1,322	2,343	3,501	1,238	2,263
Slack work or business conditions .....	2,095	1,056	1,038	1,997	998	999
Could only find part-time work .....	1,258	-	1,258	1,228	-	1,228
Seasonal work .....	135	89	47	102	66	37
Job started or ended during week .....	177	177	-	174	174	-
Noneconomic reasons .....	29,467	10,938	18,530	28,645	10,691	17,954
Child-care problems .....	856	89	767	843	87	755
Other family or personal obligations .....	5,551	688	4,863	5,390	673	4,716
Health or medical limitations .....	717	-	717	683	-	683
In school or training .....	6,394	97	6,297	6,245	94	6,151
Retired or Social Security limit on earnings .....	1,889	-	1,889	1,775	-	1,775
Vacation or personal day .....	3,487	3,487	-	3,420	3,420	-
Holiday, legal or religious .....	3,399	3,399	-	3,357	3,357	-
Weather-related curtailment .....	489	489	-	426	426	-
All other reasons .....	6,685	2,689	3,997	6,508	2,634	3,874
Average hours:						
Economic reasons .....	22.9	23.9	22.4	23.0	24.0	22.4
Noneconomic reasons .....	22.1	26.6	19.5	22.2	26.7	19.6

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

procedures and revised population controls used in the household survey.

21. 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	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 .....	122,660	32,146	3,501	10,691	17,954	90,514	39.2	43.1
Wage and salary workers .....	114,157	29,314	3,123	10,049	16,142	84,843	39.2	42.9
Mining .....	575	55	7	35	14	519	47.6	48.3
Construction .....	6,748	1,339	289	715	335	5,409	40.8	42.3
Manufacturing .....	19,667	2,765	300	1,735	729	16,902	42.2	43.2
Durable goods .....	11,943	1,551	132	1,082	337	10,392	42.7	43.4
Nondurable goods .....	7,724	1,214	168	653	392	6,510	41.6	42.9
Transportation and public utilities .....	8,477	1,469	176	750	543	7,008	42.3	44.0
Wholesale and retail trade .....	24,679	8,493	1,051	1,405	6,038	16,186	37.1	43.5
Finance, insurance, and real estate .....	7,729	1,642	77	813	753	6,087	40.0	42.2
Service industries .....	40,616	12,378	1,183	3,735	7,460	28,238	37.7	42.4
Private households .....	924	530	85	47	398	395	29.5	42.8
All other industries .....	39,691	11,848	1,097	3,688	7,063	27,843	37.9	42.3
Public administration .....	5,666	1,172	40	862	271	4,494	40.5	41.7
Self-employed workers .....	8,400	2,774	374	637	1,763	5,626	39.6	46.4
Unpaid family workers .....	103	58	4	5	48	45	34.0	46.6

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**22. 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	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 .....	122,660	32,146	3,501	10,691	17,954	90,514	39.2	43.1
16 to 19 years .....	6,540	4,625	342	262	4,021	1,915	25.2	39.4
16 to 17 years .....	2,519	2,248	71	50	2,126	271	19.1	37.5
18 to 19 years .....	4,022	2,377	271	212	1,895	1,644	29.0	39.7
20 years and over .....	116,119	27,521	3,159	10,429	13,933	88,599	40.0	43.2
20 to 24 years .....	11,838	4,026	587	911	2,528	7,812	36.2	41.4
25 years and over .....	104,281	23,495	2,572	9,518	11,405	80,786	40.5	43.3
25 to 54 years .....	89,316	18,457	2,236	8,158	8,063	70,859	41.1	43.4
55 years and over .....	14,965	5,038	335	1,361	3,342	9,927	37.0	42.6
<b>Men, 16 years and over</b> .....	65,847	12,311	1,663	5,158	5,490	53,536	42.2	44.6
16 to 19 years .....	3,235	2,128	160	136	1,832	1,107	26.7	40.1
16 to 17 years .....	1,237	1,074	39	26	1,009	164	20.2	38.4
18 to 19 years .....	1,997	1,055	120	111	824	943	30.8	40.4
20 years and over .....	62,612	10,183	1,504	5,022	3,657	52,429	43.0	44.7
20 to 24 years .....	6,209	1,732	290	433	1,009	4,477	38.3	42.5
25 years and over .....	56,403	8,451	1,214	4,588	2,649	47,952	43.5	44.9
25 to 54 years .....	48,154	6,232	1,051	3,884	1,298	41,921	44.1	45.0
55 years and over .....	8,249	2,219	163	704	1,351	6,031	39.5	44.0
<b>Women, 16 years and over</b> .....	56,813	19,835	1,837	5,533	12,464	36,978	35.9	41.0
16 to 19 years .....	3,306	2,497	182	126	2,189	808	23.7	38.5
16 to 17 years .....	1,281	1,174	32	25	1,118	107	18.1	36.3
18 to 19 years .....	2,024	1,323	150	101	1,071	701	27.3	38.9
20 years and over .....	53,508	17,338	1,655	5,408	10,275	36,170	36.6	41.0
20 to 24 years .....	5,630	2,294	298	477	1,519	3,335	33.9	39.9
25 years and over .....	47,878	15,044	1,358	4,930	8,756	32,834	36.9	41.1
25 to 54 years .....	41,162	12,225	1,185	4,274	6,765	28,938	37.4	41.2
55 years and over .....	6,716	2,819	172	656	1,991	3,897	33.8	40.6
<b>Race</b>								
White, 16 years and over .....	103,140	27,449	2,748	8,967	15,734	75,692	39.3	43.3
Men .....	56,245	10,473	1,336	4,413	4,723	45,772	42.4	44.8
Women .....	46,895	16,976	1,412	4,553	11,011	29,919	35.6	41.1
Black, 16 years and over .....	13,830	3,353	580	1,287	1,487	10,477	38.7	41.5
Men .....	6,535	1,265	242	538	486	5,269	40.7	42.9
Women .....	7,296	2,088	338	749	1,000	5,208	36.8	40.2
<b>Marital status</b>								
Men, 16 years and over:								
Married, spouse present .....	39,972	5,639	662	3,251	1,726	34,333	44.0	45.3
Widowed, divorced, or separated .....	7,917	1,329	249	650	430	6,587	42.8	44.5
Single (never married) .....	17,958	5,343	753	1,257	3,333	12,615	37.8	42.8
Women, 16 years and over:								
Married, spouse present .....	30,317	10,569	719	3,070	6,779	19,749	35.8	40.8
Widowed, divorced, or separated .....	11,485	3,242	442	1,231	1,569	8,242	38.0	41.4
Single (never married) .....	15,011	6,024	676	1,233	4,115	8,987	34.2	40.9

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

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

(Numbers in thousands)

Occupation and sex	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>	122,536	32,110	3,484	10,671	17,955	90,427	39.2	43.1
Managerial and professional specialty	36,978	7,751	497	3,535	3,719	29,227	41.8	44.5
Executive, administrative, and managerial	18,373	3,013	172	1,626	1,215	15,360	43.6	45.5
Professional specialty	18,605	4,737	324	1,908	2,505	13,867	39.9	43.4
Technical, sales, and administrative support	37,029	11,290	920	3,284	7,086	25,739	37.4	42.1
Technicians and related support	4,095	981	66	403	512	3,114	39.2	41.9
Sales occupations	15,272	4,816	510	926	3,379	10,456	38.5	44.6
Administrative support, including clerical	17,662	5,493	343	1,955	3,194	12,169	36.1	40.1
Service occupations	17,059	6,881	945	1,105	4,831	10,178	34.7	42.0
Private household	815	478	75	40	363	337	29.0	42.6
Protective service	2,313	399	33	166	200	1,914	42.5	45.0
Service, except private household and protective	13,932	6,005	838	899	4,268	7,926	33.8	41.3
Precision production, craft, and repair	13,897	2,284	433	1,279	571	11,613	41.8	43.0
Operators, fabricators, and laborers	17,574	3,904	690	1,467	1,748	13,670	40.1	42.8
Machine operators, assemblers, and inspectors	7,537	1,298	228	681	389	6,240	40.6	41.9
Transportation and material moving occupations	5,123	985	166	372	447	4,138	43.2	45.8
Handlers, equipment cleaners, helpers, and laborers	4,913	1,622	296	414	912	3,292	36.2	40.9
Men, 16 years and over <sup>1</sup>	65,575	12,200	1,648	5,128	5,424	53,376	42.2	44.6
Managerial and professional specialty	19,158	2,800	215	1,552	1,033	16,359	44.8	46.5
Executive, administrative, and managerial	10,266	1,224	93	743	389	9,041	46.2	47.4
Professional specialty	8,893	1,575	122	809	644	7,317	43.2	45.4
Technical, sales, and administrative support	13,383	2,648	252	941	1,454	10,736	41.9	44.9
Technicians and related support	1,913	322	27	168	127	1,591	41.7	43.4
Sales occupations	7,655	1,477	144	421	913	6,177	43.2	46.7
Administrative support, including clerical	3,816	848	82	353	414	2,968	39.3	42.1
Service occupations	6,972	2,065	301	424	1,340	4,907	38.0	43.4
Private household	45	23	6	1	15	22	30.4	41.6
Protective service	1,903	278	22	135	120	1,625	43.8	45.6
Service, except private household and protective	5,023	1,764	272	287	1,205	3,259	35.9	42.3
Precision production, craft, and repair	12,758	2,016	403	1,162	451	10,742	42.1	43.2
Operators, fabricators, and laborers	13,304	2,672	477	1,049	1,146	10,632	41.1	43.5
Machine operators, assemblers, and inspectors	4,750	665	110	396	158	4,086	41.8	42.7
Transportation and material moving occupations	4,622	786	141	328	317	3,836	44.0	46.1
Handlers, equipment cleaners, helpers, and laborers	3,932	1,221	226	325	671	2,711	36.8	41.2
Women, 16 years and over <sup>1</sup>	56,961	19,910	1,837	5,543	12,531	37,051	35.8	41.0
Managerial and professional specialty	17,820	4,951	282	1,983	2,687	12,869	38.4	42.1
Executive, administrative, and managerial	8,108	1,789	79	884	826	6,319	40.4	42.8
Professional specialty	9,712	3,162	203	1,099	1,860	6,550	36.8	41.3
Technical, sales, and administrative support	23,645	8,642	667	2,343	5,632	15,003	34.9	40.2
Technicians and related support	2,183	659	40	235	385	1,524	37.0	40.4
Sales occupations	7,617	3,338	366	506	2,466	4,279	33.8	41.7
Administrative support, including clerical	13,845	4,644	261	1,603	2,781	9,201	35.3	39.5
Service occupations	10,087	4,817	644	681	3,491	5,271	32.4	40.8
Private household	770	455	68	38	348	315	29.0	42.7
Protective service	409	121	11	31	79	289	36.6	41.6
Service, except private household and protective	8,908	4,241	566	612	3,064	4,667	32.5	40.6
Precision production, craft, and repair	1,139	268	31	117	120	871	38.6	41.1
Operators, fabricators, and laborers	4,270	1,232	213	418	602	3,037	37.2	40.5
Machine operators, assemblers, and inspectors	2,787	633	118	285	230	2,154	38.5	40.4
Transportation and material moving occupations	502	199	25	43	131	302	36.0	42.6
Handlers, equipment cleaners, helpers, and laborers	981	400	70	90	241	581	34.0	39.6

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

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**24. 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	
	1997	1998	1997	1998	1997	1998	1997	1998
Total, 16 years and over .....	3,577	3,266	4.9	4.4	3,162	2,944	5.0	4.6
Married, spouse present .....	1,167	1,034	2.7	2.4	1,047	985	3.1	2.9
Widowed, divorced, or separated .....	504	435	5.8	4.8	660	628	5.2	4.9
Single (never married) .....	1,906	1,798	9.2	8.5	1,455	1,332	8.8	7.8
White, 16 years and over .....	2,641	2,431	4.2	3.9	2,195	2,053	4.2	3.9
Married, spouse present .....	957	836	2.5	2.2	855	808	2.9	2.7
Widowed, divorced, or separated .....	382	334	5.3	4.5	461	449	4.6	4.4
Single (never married) .....	1,303	1,261	7.8	7.4	879	797	7.1	6.3
Black, 16 years and over .....	747	671	10.2	8.9	813	756	9.9	9.0
Married, spouse present .....	141	133	4.3	3.9	131	120	5.2	4.5
Widowed, divorced, or separated .....	99	84	8.3	6.9	172	156	7.7	7.0
Single (never married) .....	506	455	17.7	15.4	510	480	15.0	13.5
Total, 25 years and over .....	2,246	1,998	3.6	3.2	2,069	1,926	3.9	3.6
Married, spouse present .....	1,095	980	2.6	2.3	943	878	2.9	2.7
Widowed, divorced, or separated .....	478	415	5.6	4.8	612	590	4.9	4.8
Single (never married) .....	674	602	6.2	5.5	514	458	6.3	5.4
White, 25 years and over .....	1,700	1,516	3.2	2.8	1,458	1,361	3.3	3.1
Married, spouse present .....	899	790	2.4	2.1	770	717	2.7	2.5
Widowed, divorced, or separated .....	359	318	5.1	4.4	426	418	4.4	4.3
Single (never married) .....	442	407	5.1	4.7	263	226	4.6	3.8
Black, 25 years and over .....	420	373	6.9	6.0	510	471	7.6	6.8
Married, spouse present .....	129	126	4.0	3.8	117	109	4.8	4.3
Widowed, divorced, or separated .....	97	81	8.2	6.8	162	151	7.4	6.9
Single (never married) .....	195	166	11.5	9.5	231	211	11.0	9.5

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

25. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	1997	1998	1997	1998	1997	1998	1997	1998
Total, 16 years and over <sup>1</sup> .....	6,739	6,210	4.9	4.5	4.9	4.4	5.0	4.6
Managerial and professional specialty .....	761	722	2.0	1.8	1.9	1.7	2.1	2.0
Executive, administrative, and managerial .....	359	343	1.9	1.8	1.8	1.6	2.0	2.0
Professional specialty .....	403	380	2.0	1.9	2.0	1.8	2.1	2.0
Technical, sales, and administrative support .....	1,646	1,550	4.1	3.9	3.6	3.3	4.4	4.2
Technicians and related support .....	104	96	2.4	2.2	2.2	2.3	2.6	2.1
Sales occupations .....	814	745	4.9	4.5	3.6	3.3	6.2	5.6
Administrative support, including clerical .....	728	710	3.8	3.7	4.2	4.0	3.7	3.6
Service occupations .....	1,255	1,216	6.7	6.4	6.5	6.3	6.8	6.4
Private household .....	73	74	8.4	8.0	12.6	8.7	8.2	8.0
Protective service .....	89	85	3.7	3.4	3.4	3.1	5.2	5.0
Service, except private household and protective .....	1,093	1,057	7.0	6.8	7.6	7.5	6.7	6.3
Precision production, craft, and repair .....	719	630	4.8	4.2	4.8	4.1	5.1	4.8
Mechanics and repairers .....	167	149	3.5	3.0	3.4	3.1	4.5	2.3
Construction trades .....	406	338	7.0	5.7	7.0	5.6	7.2	10.4
Other precision production, craft, and repair .....	145	143	3.4	3.4	3.0	3.1	5.0	4.6
Operators, fabricators, and laborers .....	1,490	1,304	7.5	6.7	7.1	6.3	8.8	7.7
Machine operators, assemblers, and inspectors .....	551	494	6.5	6.0	5.1	5.0	8.6	7.6
Transportation and material moving occupations .....	306	279	5.4	4.9	5.3	4.8	6.0	6.3
Handlers, equipment cleaners, helpers, and laborers .....	633	531	11.1	9.4	11.3	9.6	10.5	8.8
Construction laborers .....	167	136	17.1	14.2	16.9	14.2	20.8	16.0
Other handlers, equipment cleaners, helpers, and laborers .....	467	395	9.9	8.4	9.9	8.4	10.1	8.5
Farming, forestry, and fishing .....	267	244	7.1	6.5	6.9	6.1	7.8	8.0
No previous work experience .....	569	520	-	-	-	-	-	-
16 to 19 years .....	388	361	-	-	-	-	-	-
20 to 24 years .....	85	80	-	-	-	-	-	-
25 years and over .....	96	80	-	-	-	-	-	-

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

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



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**26. Unemployed persons by industry and sex**

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	1997	1998	1997	1998	1997	1998	1997	1998
Total, 16 years and over .....	6,739	6,210	4.9	4.5	4.9	4.4	5.0	4.6
Nonagricultural private wage and salary workers .....	5,225	4,873	5.0	4.6	4.9	4.5	5.1	4.8
Mining .....	24	20	3.8	3.2	3.7	3.4	4.1	1.8
Construction .....	623	532	9.0	7.5	9.2	7.7	6.9	5.9
Manufacturing .....	885	816	4.2	3.9	3.5	3.3	5.5	5.2
Durable goods .....	445	426	3.5	3.4	3.3	3.0	4.2	4.2
Lumber and wood products .....	47	43	5.9	5.2	5.7	5.3	7.0	4.8
Furniture and fixtures .....	31	26	4.7	3.8	4.5	3.5	5.1	4.6
Stone, clay, and glass products .....	26	18	4.2	3.1	4.4	2.4	3.4	5.4
Primary metal industries .....	29	27	3.8	3.6	3.6	3.4	5.1	4.8
Fabricated metal products .....	42	49	3.1	3.5	2.9	3.4	3.7	3.7
Machinery, except electrical .....	77	78	3.0	3.1	2.7	2.9	3.7	3.8
Electrical machinery, equipment, and supplies .....	58	54	2.9	2.7	2.5	2.4	3.6	3.3
Transportation equipment .....	77	72	3.3	3.0	3.1	2.6	3.8	4.4
Automobiles .....	49	47	3.7	3.4	3.6	3.0	4.0	4.9
Other transportation equipment .....	28	25	2.7	2.4	2.5	2.1	3.5	3.5
Professional and photographic equipment .....	19	20	2.6	2.5	2.4	2.0	2.8	3.4
Other durable goods industries .....	38	38	5.4	5.6	3.6	4.2	8.0	7.5
Nondurable goods .....	440	390	5.1	4.7	4.0	3.7	6.7	6.2
Food and kindred products .....	133	111	7.4	6.4	5.5	5.2	10.9	8.6
Textile mill products .....	31	29	4.6	4.7	3.0	3.7	6.8	5.9
Apparel and other textile products .....	92	76	9.1	8.8	7.0	6.0	10.0	10.1
Paper and allied products .....	23	18	3.2	2.6	3.3	2.4	3.2	3.3
Printing and publishing .....	69	67	3.8	3.8	3.9	3.5	3.7	4.2
Chemicals and allied products .....	38	34	2.8	2.5	2.6	2.1	3.1	3.3
Rubber and miscellaneous plastics products .....	40	38	4.3	3.8	3.6	3.1	5.9	5.5
Other nondurable goods industries .....	16	16	4.2	4.6	3.2	4.0	6.1	5.9
Transportation and public utilities .....	260	254	3.5	3.4	3.4	3.3	3.8	3.5
Transportation .....	194	185	4.2	4.0	4.2	4.0	4.3	4.0
Communications and other public utilities .....	66	69	2.3	2.4	1.9	2.1	3.1	2.9
Wholesale and retail trade .....	1,645	1,493	6.2	5.5	5.6	5.1	6.9	6.0
Wholesale trade .....	176	185	3.7	3.7	3.2	3.4	4.8	4.6
Retail trade .....	1,469	1,308	6.8	6.0	6.3	5.7	7.2	6.2
Finance, insurance, and real estate .....	229	197	3.0	2.5	3.0	2.3	3.0	2.6
Service industries .....	1,559	1,562	4.6	4.5	4.8	4.7	4.5	4.4
Professional services .....	589	593	2.9	2.9	2.7	2.5	3.1	3.1
Other service industries .....	970	968	7.1	6.9	6.6	6.5	7.6	7.3
Agricultural wage and salary workers .....	190	180	9.1	8.3	9.1	7.9	9.1	9.3
Government, self-employed, and unpaid family workers .....	755	636	2.6	2.2	2.7	2.0	2.4	2.3
No previous work experience .....	569	520	-	-	-	-	-	-

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

27. Unemployed persons by reason for unemployment, sex, and age

(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	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>NUMBER OF UNEMPLOYED</b>								
Total unemployed .....	6,739	6,210	2,882	2,580	2,585	2,424	1,271	1,205
Job losers and persons who completed temporary jobs .....	3,037	2,822	1,795	1,588	1,069	1,053	174	181
On temporary layoff .....	931	866	567	483	304	322	60	61
Not on temporary layoff .....	2,106	1,957	1,228	1,105	764	731	114	120
Permanent job losers .....	1,436	1,353	833	763	541	527	63	64
Persons who completed temporary jobs .....	670	603	395	343	224	204	51	56
Job leavers .....	795	734	358	318	333	330	104	86
Reentrants .....	2,338	2,132	675	611	1,057	944	606	577
New entrants .....	569	520	55	63	126	97	388	361
<b>PERCENT DISTRIBUTION</b>								
Job losers and persons who completed temporary jobs .....	45.1	45.5	62.3	61.5	41.3	43.4	13.7	15.0
On temporary layoff .....	13.8	13.9	19.7	18.7	11.8	13.3	4.7	5.1
Not on temporary layoff .....	31.3	31.5	42.6	42.8	29.6	30.2	9.0	10.0
Job leavers .....	11.8	11.8	12.4	12.3	12.9	13.6	8.2	7.2
Reentrants .....	34.7	34.3	23.4	23.7	40.9	39.0	47.6	47.9
New entrants .....	8.4	8.4	1.9	2.4	4.9	4.0	30.5	30.0
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>								
Job losers and persons who completed temporary jobs .....	2.2	2.1	2.6	2.3	1.8	1.8	2.2	2.2
Job leavers .....	.6	.5	.5	.5	.6	.6	1.3	1.0
Reentrants .....	1.7	1.5	1.0	.9	1.8	1.6	7.6	7.0
New entrants .....	.4	.4	.1	.1	.2	.2	4.9	4.4

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**28. Unemployed persons by reason for unemployment, race, and Hispanic origin**

(Numbers in thousands)

Reason for unemployment	Total		White		Black		Hispanic origin	
	1997	1998	1997	1998	1997	1998	1997	1998
<b>NUMBER OF UNEMPLOYED</b>								
Total, 16 years and over .....	6,739	6,210	4,836	4,484	1,560	1,426	1,069	1,026
Job losers and persons who completed temporary jobs .....	3,037	2,822	2,284	2,116	616	585	500	471
On temporary layoff .....	931	866	778	716	121	116	158	146
Not on temporary layoff .....	2,106	1,957	1,506	1,399	495	469	343	325
Permanent job losers .....	1,436	1,353	1,063	988	298	300	207	206
Persons who completed temporary jobs .....	670	603	443	412	197	170	135	119
Job leavers .....	795	734	623	568	138	133	96	95
Reentrants .....	2,338	2,132	1,576	1,467	634	558	350	346
New entrants .....	569	520	354	333	172	151	122	113
<b>PERCENT DISTRIBUTION</b>								
Job losers and persons who completed temporary jobs .....	45.1	45.5	47.2	47.2	39.5	41.0	46.8	46.0
On temporary layoff .....	13.8	13.9	16.1	16.0	7.8	8.1	14.8	14.3
Not on temporary layoff .....	31.3	31.5	31.1	31.2	31.7	32.9	32.0	31.7
Job leavers .....	11.8	11.8	12.9	12.7	8.8	9.3	9.0	9.3
Reentrants .....	34.7	34.3	32.6	32.7	40.7	39.1	32.7	33.7
New entrants .....	8.4	8.4	7.3	7.4	11.0	10.6	11.4	11.0
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>								
Job losers and persons who completed temporary jobs .....	2.2	2.1	2.0	1.8	4.0	3.7	3.6	3.3
Job leavers .....	.6	.5	.5	.5	.9	.8	.7	.7
Reentrants .....	1.7	1.5	1.4	1.3	4.1	3.5	2.5	2.4
New entrants .....	.4	.4	.3	.3	1.1	.9	.9	.8

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.

29. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment

(Percent distribution)

Reason, sex, and age	1998						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over .....	6,210	100.0	42.2	31.4	26.4	12.3	14.1
Job losers and persons who completed temporary jobs .....	2,822	100.0	42.4	31.9	25.7	13.3	12.4
On temporary layoff .....	866	100.0	58.3	28.5	13.2	8.7	4.5
Not on temporary layoff .....	1,957	100.0	35.4	33.4	31.2	15.3	15.9
Permanent job losers .....	1,353	100.0	33.0	33.3	33.7	16.7	17.0
Persons who completed temporary jobs .....	603	100.0	40.7	33.6	25.7	12.1	13.6
Job leavers .....	734	100.0	49.4	31.0	19.6	9.8	9.8
Reentrants .....	2,132	100.0	40.3	30.2	29.5	12.3	17.2
New entrants .....	520	100.0	39.0	34.2	26.8	10.5	16.3
Men, 20 years and over .....	2,580	100.0	38.8	30.8	30.5	13.2	17.3
Job losers and persons who completed temporary jobs .....	1,588	100.0	39.9	32.1	28.1	13.6	14.5
On temporary layoff .....	483	100.0	55.3	30.2	14.5	9.8	4.8
Not on temporary layoff .....	1,105	100.0	33.1	32.9	34.0	15.3	18.7
Permanent job losers .....	763	100.0	31.6	32.1	36.3	16.6	19.7
Persons who completed temporary jobs .....	343	100.0	36.6	34.5	28.9	12.5	16.4
Job leavers .....	318	100.0	44.7	31.5	23.8	10.9	12.9
Reentrants .....	611	100.0	34.7	26.9	38.5	13.4	25.0
New entrants .....	63	100.0	20.5	32.3	47.3	10.9	36.4
Women, 20 years and over .....	2,424	100.0	41.5	31.2	27.3	13.3	14.0
Job losers and persons who completed temporary jobs .....	1,053	100.0	42.5	32.2	25.3	14.2	11.1
On temporary layoff .....	322	100.0	58.6	28.4	13.0	8.2	4.8
Not on temporary layoff .....	731	100.0	35.3	33.9	30.8	16.9	13.9
Permanent job losers .....	527	100.0	32.1	34.9	33.0	18.4	14.7
Persons who completed temporary jobs .....	204	100.0	43.7	31.3	24.9	13.0	11.9
Job leavers .....	330	100.0	49.6	30.9	19.5	10.2	9.3
Reentrants .....	944	100.0	38.6	30.3	31.1	13.3	17.8
New entrants .....	97	100.0	31.1	30.6	38.2	13.6	24.6
Both sexes, 16 to 19 years .....	1,205	100.0	51.2	33.2	15.7	8.3	7.3
Job losers and persons who completed temporary jobs .....	181	100.0	64.0	29.0	7.0	4.8	2.2
On temporary layoff .....	61	100.0	80.1	15.5	4.4	3.6	.7
Not on temporary layoff .....	120	100.0	55.8	35.8	8.4	5.4	3.0
Permanent job losers .....	64	100.0	57.0	34.7	8.3	4.9	3.4
Persons who completed temporary jobs .....	56	100.0	54.5	37.1	8.4	5.9	2.5
Job leavers .....	86	100.0	66.0	29.7	4.2	3.6	.6
Reentrants .....	577	100.0	49.1	33.6	17.3	9.4	7.9
New entrants .....	361	100.0	44.4	35.4	20.2	9.5	10.6

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

30. 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	
	1997	1998	1997	1998	1997	1998	1997	1998
Total, 16 years and over .....	6,739	6,210	100.0	100.0	5,395	4,916	100.0	100.0
Less than 5 weeks .....	2,538	2,622	37.7	42.2	1,862	1,909	34.5	38.8
5 to 14 weeks .....	2,138	1,950	31.7	31.4	1,713	1,574	31.8	32.0
5 to 10 weeks .....	1,474	1,375	21.9	22.1	1,156	1,093	21.4	22.2
11 to 14 weeks .....	664	575	9.9	9.3	557	481	10.3	9.8
15 weeks and over .....	2,062	1,637	30.6	26.4	1,820	1,433	33.7	29.1
15 to 26 weeks .....	995	763	14.8	12.3	864	662	16.0	13.5
27 weeks and over .....	1,067	875	15.8	14.1	956	771	17.7	15.7
27 to 51 weeks .....	479	379	7.1	6.1	428	340	7.9	6.9
52 weeks and over .....	589	496	8.7	8.0	528	431	9.8	8.8
Average (mean) duration, in weeks .....	15.8	14.5	-	-	17.1	15.6	-	-
Median duration, in weeks .....	8.0	6.7	-	-	8.9	7.6	-	-

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**31. Unemployed persons by selected demographic characteristics and duration of unemployment**

Characteristic	1998							Weeks	
	Thousands of persons					Average (mean) duration			
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
<b>TOTAL</b>									
Total, 16 years and over .....	6,210	2,622	1,950	1,637	763	875	14.5	6.7	
16 to 19 years .....	1,205	616	400	189	100	88	9.5	4.4	
20 to 24 years .....	1,081	496	347	238	118	120	12.3	5.6	
25 to 34 years .....	1,419	578	458	383	184	199	14.4	7.1	
35 to 44 years .....	1,258	484	384	390	175	216	16.4	7.9	
45 to 54 years .....	782	278	239	265	120	146	17.9	8.7	
55 to 64 years .....	343	117	94	131	51	81	22.7	9.8	
65 years and over .....	122	53	29	40	15	25	19.2	6.7	
<b>Men, 16 years and over .....</b>									
16 to 19 years .....	686	342	236	108	58	50	9.6	4.5	
20 to 24 years .....	583	253	193	137	63	73	13.5	6.2	
25 to 34 years .....	699	284	224	192	86	106	15.0	7.3	
35 to 44 years .....	609	227	182	200	83	117	17.6	8.3	
45 to 54 years .....	420	138	126	156	69	87	19.4	9.6	
55 to 64 years .....	201	70	53	78	30	49	22.6	10.1	
65 years and over .....	69	29	16	23	9	15	19.2	7.1	
<b>Women, 16 years and over .....</b>									
16 to 19 years .....	519	275	164	81	42	39	9.3	4.2	
20 to 24 years .....	498	243	154	101	55	47	11.0	4.9	
25 to 34 years .....	720	294	234	191	98	93	13.8	7.0	
35 to 44 years .....	650	257	202	190	92	99	15.3	7.5	
45 to 54 years .....	362	140	113	109	51	59	16.2	7.7	
55 to 64 years .....	141	47	41	53	21	32	22.8	9.4	
65 years and over .....	53	23	13	17	7	10	19.2	6.3	
<b>Race and Hispanic origin</b>									
<b>White, 16 years and over .....</b>									
Men .....	2,431	1,057	757	616	290	326	13.9	6.3	
Women .....	2,053	964	637	451	236	216	12.1	5.3	
<b>Black, 16 years and over .....</b>									
Men .....	671	221	224	226	85	140	19.0	9.1	
Women .....	756	256	242	257	112	145	17.9	9.2	
<b>Hispanic origin, 16 years and over .....</b>									
Men .....	552	228	179	146	68	78	14.4	7.0	
Women .....	473	207	141	126	59	67	14.1	6.3	
<b>Marital status</b>									
<b>Men, 16 years and over:</b>									
Married, spouse present .....	1,034	386	323	324	146	178	16.7	8.2	
Widowed, divorced, or separated .....	435	175	119	141	61	80	18.0	7.9	
Single (never married) .....	1,798	781	587	429	192	238	13.7	6.2	
<b>Women, 16 years and over:</b>									
Married, spouse present .....	985	444	298	242	127	115	13.0	5.9	
Widowed, divorced, or separated .....	628	232	205	190	87	103	17.0	8.0	
Single (never married) .....	1,332	603	417	311	150	160	12.7	5.8	

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.

32. Unemployed persons by occupation, industry, and duration of unemployment

Occupation and industry	1998							Average (mean) duration	Median duration
	Thousands of persons					Weeks			
	Total	Less than 5 weeks	5 to 14 weeks	15 weeks and over					
				Total	15 to 26 weeks	27 weeks and over			
<b>OCCUPATION</b>									
Managerial and professional specialty .....	722	297	214	211	99	112	15.8	7.2	
Technical, sales, and administrative support .....	1,550	668	490	393	186	206	13.9	6.5	
Service occupations .....	1,216	527	370	320	143	177	14.6	6.3	
Precision production, craft, and repair .....	630	280	189	161	77	84	13.9	6.1	
Operators, fabricators, and laborers .....	1,304	536	427	341	164	177	14.3	7.0	
Farming, forestry, and fishing .....	244	103	78	63	36	27	13.1	6.7	
<b>INDUSTRY<sup>1</sup></b>									
Agriculture .....	180	75	61	44	24	20	13.0	7.0	
Construction .....	544	233	177	134	68	66	13.7	6.5	
Manufacturing .....	818	331	258	230	117	113	14.5	7.3	
Durable goods .....	427	180	132	115	57	58	14.3	6.9	
Nondurable goods .....	391	150	125	115	59	56	14.7	7.8	
Transportation and public utilities .....	281	114	86	80	31	49	16.1	7.0	
Wholesale and retail trade .....	1,500	666	475	359	168	191	13.3	6.1	
Finance, insurance, and real estate .....	204	72	69	63	28	34	16.3	8.2	
Services .....	1,802	779	553	470	222	248	14.4	6.5	
Public administration .....	107	39	25	44	16	27	21.3	10.0	
No previous work experience .....	520	203	178	140	54	85	15.7	7.2	

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

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

procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**33. Unemployed jobseekers by sex, age, race, and active jobsearch methods used**

(Numbers in thousands)

Sex, age, and race	1998									
	Thousands of persons		Methods used as a percent of total jobseekers							Average number of methods used
	Total unemployed	Total job-seekers	Employer directly	Sent out resumes or filled out applications	Placed or answered ads	Friends or relatives	Public employment agency	Private employment agency	Other	
Total, 16 years and over .....	6,210	5,344	64.6	48.6	15.9	14.8	19.2	6.9	8.8	1.79
16 to 19 years .....	1,205	1,144	62.7	54.2	9.8	10.8	8.9	2.4	5.6	1.55
20 to 24 years .....	1,081	989	65.9	48.0	15.3	13.9	18.8	7.3	8.0	1.78
25 to 34 years .....	1,419	1,204	65.8	47.8	18.0	16.5	22.7	7.8	9.6	1.89
35 to 44 years .....	1,258	1,035	65.9	47.1	18.5	15.6	24.2	8.7	9.1	1.90
45 to 54 years .....	782	619	64.5	48.2	18.6	17.8	23.8	10.4	11.1	1.95
55 to 64 years .....	343	264	62.2	42.0	19.6	17.5	21.0	7.7	13.7	1.84
65 years and over .....	122	89	53.8	32.4	13.4	14.4	11.0	2.9	15.3	1.44
Men, 16 years and over .....	3,266	2,748	65.6	46.7	15.8	16.3	19.2	6.9	9.4	1.80
16 to 19 years .....	686	650	62.6	52.9	9.3	12.0	8.5	2.5	5.1	1.53
20 to 24 years .....	583	522	66.5	44.7	15.0	15.5	18.4	7.2	7.9	1.76
25 to 34 years .....	699	559	67.7	45.5	18.1	18.6	23.3	7.3	10.2	1.91
35 to 44 years .....	609	481	69.2	45.3	18.7	17.6	25.6	8.9	10.0	1.96
45 to 54 years .....	420	325	64.7	45.8	19.9	20.2	25.5	12.1	13.5	2.03
55 to 64 years .....	201	159	62.7	42.2	19.9	16.9	22.6	7.8	15.4	1.88
65 years and over .....	69	52	53.0	34.3	12.8	13.8	9.3	2.4	21.0	1.49
Women, 16 years and over .....	2,944	2,596	63.6	50.6	16.1	13.2	19.1	6.9	8.2	1.78
16 to 19 years .....	519	494	62.8	55.9	10.5	9.2	9.5	2.3	6.1	1.57
20 to 24 years .....	498	467	65.2	51.8	15.7	12.0	19.3	7.4	8.1	1.80
25 to 34 years .....	720	645	64.1	49.8	17.9	14.7	22.2	8.2	9.1	1.86
35 to 44 years .....	650	554	63.1	48.7	18.3	13.8	22.9	8.5	8.3	1.84
45 to 54 years .....	362	294	64.2	50.8	17.1	15.2	21.8	8.5	8.4	1.86
55 to 64 years .....	141	106	61.4	41.6	19.1	18.3	18.5	7.6	11.2	1.78
65 years and over .....	53	36	55.0	29.7	14.3	15.2	13.4	3.6	7.0	1.38
White, 16 years and over .....	4,484	3,767	64.8	48.4	32.6	31.1	35.2	13.3	9.5	1.79
Men .....	2,431	1,997	65.8	47.0	16.2	14.0	17.9	6.7	10.3	1.82
Women .....	2,053	1,770	63.7	49.8	16.4	17.1	17.3	6.6	8.5	1.77
Black, 16 years and over .....	1,426	1,311	64.5	49.9	29.2	24.5	47.9	14.8	6.7	1.79
Men .....	671	604	65.6	46.6	14.1	13.5	24.5	7.3	6.5	1.78
Women .....	756	706	63.5	52.7	15.1	11.0	23.4	7.5	6.9	1.80

NOTE: The jobseekers total is less than the total unemployed because it does not include persons on temporary layoff. The percent using each method will always total more than 100 because many jobseekers use more than one

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

34. Unemployed jobseekers by sex, reason for unemployment, and active jobsearch methods used

Sex and reason	1998									Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers							
	Total unemployed	Total job-seekers	Employer directly	Sent out resumes or filled out applications	Placed or answered ads	Friends or relatives	Public employment agency	Private employment agency	Other	
Total, 16 years and over .....	6,210	5,344	64.6	48.6	15.9	14.8	19.2	6.9	8.8	1.79
Job losers and persons who completed temporary jobs <sup>1</sup> .....	2,822	1,957	68.0	47.1	19.7	17.5	25.2	9.5	10.0	1.98
Job leavers .....	734	734	67.9	51.2	18.8	13.4	20.2	7.7	7.8	1.87
Reentrants .....	2,132	2,132	61.1	48.2	13.1	13.0	15.6	5.4	8.8	1.65
New entrants .....	520	520	61.7	51.8	9.4	14.0	9.8	2.4	6.2	1.56
Men, 16 years and over .....	3,266	2,748	65.6	46.7	15.8	16.3	19.2	6.9	9.4	1.80
Job losers and persons who completed temporary jobs <sup>1</sup> .....	1,703	1,185	69.4	44.9	19.1	18.7	24.6	9.4	10.6	1.97
Job leavers .....	368	368	68.6	49.7	18.4	15.0	19.7	7.1	7.9	1.87
Reentrants .....	931	931	60.7	46.0	12.4	14.3	15.1	4.9	9.7	1.64
New entrants .....	264	264	61.6	53.0	8.9	14.2	8.7	2.7	5.7	1.55
Women, 16 years and over .....	2,944	2,596	63.6	50.6	16.1	13.2	19.1	6.9	8.2	1.78
Job losers and persons who completed temporary jobs <sup>1</sup> .....	1,119	772	65.9	50.6	20.6	15.7	26.0	9.7	9.1	1.98
Job leavers .....	366	366	67.2	52.7	19.1	11.8	20.7	8.4	7.6	1.88
Reentrants .....	1,201	1,201	61.4	49.9	13.6	11.9	15.9	5.8	8.1	1.67
New entrants .....	257	257	61.9	50.6	10.0	13.7	10.9	2.1	6.7	1.56

<sup>1</sup> Data on the number of jobseekers and the jobsearch methods used exclude persons on temporary layoff.

NOTE: The jobseeker total is less than the total unemployed because it does not include persons on temporary layoff. The percent using each method will

always total more than 100 because many jobseekers use more than one method. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

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

(In thousands)

Category	Total		Age						Sex			
	1997	1998	16 to 24 years		25 to 54 years		55 years and over		Men		Women	
			1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
Total not in the labor force .....	66,837	67,547	11,343	11,343	18,552	18,732	36,942	37,472	24,454	24,799	42,382	42,748
Do not want a job now <sup>1</sup> .....	61,895	62,735	9,434	9,491	16,311	16,580	36,151	36,664	22,420	22,790	39,475	39,945
Want a job <sup>1</sup> .....	4,941	4,812	1,909	1,852	2,241	2,152	791	807	2,034	2,008	2,907	2,803
Did not search for work in previous year .....	2,857	2,859	1,034	1,011	1,245	1,240	579	608	1,118	1,134	1,739	1,725
Searched for work in previous year <sup>2</sup> .....	2,084	1,953	875	841	997	912	212	200	917	875	1,168	1,078
Not available to work now .....	669	643	346	332	289	275	34	36	257	250	412	392
Available to work now .....	1,416	1,310	529	509	708	637	178	164	659	624	756	686
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	343	331	107	108	184	170	52	53	200	198	143	133
Reasons other than discouragement .....	1,073	979	423	401	524	467	126	111	460	427	613	552
Family responsibilities .....	139	143	26	37	97	93	16	13	21	23	117	120
In school or training .....	235	206	188	173	45	32	2	1	113	105	121	102
Ill health or disability .....	116	104	17	14	71	69	28	21	52	52	64	52
Other <sup>4</sup> .....	583	525	191	177	311	273	81	75	273	247	311	278

<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.

36. 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>	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
<b>AGE</b>												
Total, 16 years and over <sup>2</sup> .....	7,955	7,926	6.1	6.0	4,237	4,178	6.1	5.9	3,718	3,748	6.2	6.2
16 to 19 years .....	331	335	5.0	4.8	144	138	4.2	3.9	187	198	5.7	5.7
20 years and over .....	7,625	7,590	6.2	6.1	4,094	4,040	6.2	6.0	3,531	3,550	6.2	6.2
20 to 24 years .....	809	788	6.5	6.3	385	363	5.9	5.5	424	425	7.3	7.2
25 years and over .....	6,816	6,802	6.2	6.1	3,708	3,677	6.2	6.1	3,107	3,126	6.1	6.1
25 to 54 years .....	6,076	6,011	6.4	6.3	3,278	3,228	6.5	6.3	2,798	2,783	6.4	6.3
55 years and over .....	740	791	4.6	4.8	431	449	4.8	4.9	309	342	4.4	4.6
55 to 64 years .....	625	682	5.1	5.3	356	378	5.3	5.4	268	303	4.8	5.2
65 years and over .....	115	109	3.1	2.9	74	71	3.3	3.3	40	39	2.6	2.5
<b>RACE AND HISPANIC ORIGIN</b>												
White .....	6,909	6,832	6.3	6.2	3,693	3,622	6.2	6.0	3,216	3,210	6.4	6.4
Black .....	758	802	5.4	5.5	388	406	5.9	5.9	370	396	5.0	5.2
Hispanic origin .....	494	503	3.9	3.8	305	299	3.9	3.7	190	204	3.8	3.9
<b>MARITAL STATUS</b>												
Married, spouse present .....	4,434	4,414	5.9	5.8	2,675	2,664	6.3	6.2	1,758	1,750	5.4	5.3
Widowed, divorced, or separated .....	1,388	1,385	6.8	6.7	495	498	6.0	5.8	893	887	7.4	7.3
Single (never married) .....	2,133	2,127	6.3	6.1	1,067	1,016	5.7	5.3	1,067	1,110	7.1	7.0
<b>FULL- OR PART-TIME STATUS</b>												
Primary job full time, secondary job part time .....	4,488	4,478	-	-	2,661	2,608	-	-	1,827	1,870	-	-
Primary and secondary jobs both part time .....	1,689	1,635	-	-	521	512	-	-	1,168	1,124	-	-
Primary and secondary jobs both full time .....	237	266	-	-	169	188	-	-	68	78	-	-
Hours vary on primary or secondary job .....	1,509	1,504	-	-	869	848	-	-	640	656	-	-

<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.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**37. Median weekly earnings of full-time wage and salary workers by selected characteristics**

Characteristic	Number of workers (in thousands)		Median weekly earnings	
	1997	1998	1997	1998
<b>SEX AND AGE</b>				
Total, 16 years and over .....	93,578	95,595	\$503	\$523
Men, 16 years and over .....	53,220	54,313	579	598
16 to 24 years .....	6,174	6,325	317	334
25 years and over .....	47,046	47,988	615	639
Women, 16 years and over .....	40,358	41,282	431	456
16 to 24 years .....	4,522	4,721	292	305
25 years and over .....	35,836	36,561	462	485
<b>RACE, HISPANIC ORIGIN, AND SEX</b>				
White .....	77,973	79,403	519	545
Men .....	45,349	46,087	595	615
Women .....	32,624	33,316	444	468
Black .....	11,356	11,776	400	426
Men .....	5,517	5,751	432	468
Women .....	5,839	6,025	375	400
Hispanic origin .....	9,996	10,532	351	370
Men .....	6,456	6,716	371	390
Women .....	3,540	3,816	318	337

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.

**38. Median weekly earnings of part-time wage and salary workers by selected characteristics**

Characteristic	Number of workers (in thousands)		Median weekly earnings	
	1997	1998	1997	1998
<b>SEX AND AGE</b>				
Total, 16 years and over .....	20,710	20,862	\$149	\$156
Men, 16 years and over .....	6,454	6,501	139	146
16 to 24 years .....	3,479	3,582	114	119
25 years and over .....	2,975	2,919	183	197
Women, 16 years and over .....	14,256	14,361	153	161
16 to 24 years .....	4,373	4,500	112	118
25 years and over .....	9,883	9,861	179	191
<b>RACE, HISPANIC ORIGIN, AND SEX</b>				
White .....	17,915	17,886	150	157
Men .....	5,462	5,470	138	146
Women .....	12,454	12,416	155	163
Black .....	1,968	2,096	141	149
Men .....	669	688	142	145
Women .....	1,299	1,408	140	151
Hispanic origin .....	1,877	1,828	144	154
Men .....	692	632	150	162
Women .....	1,184	1,196	140	150

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.

39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Total, 16 years and over .....	95,595	\$523	54,313	\$598	41,282	\$456
Managerial and professional specialty .....	29,304	759	14,941	905	14,363	655
Executive, administrative, and managerial .....	14,451	755	7,746	915	6,705	626
Administrators and officials, public administration .....	588	823	302	957	286	663
Administrators, protective services .....	54	883	42	( <sup>1</sup> )	13	( <sup>1</sup> )
Financial managers .....	652	852	316	1,017	336	703
Personnel and labor relations managers .....	152	823	55	947	97	747
Purchasing managers .....	136	817	80	965	56	724
Managers, marketing, advertising, and public relations .....	741	960	458	1,128	283	759
Administrators, education and related fields .....	637	877	259	1,111	378	730
Managers, medicine and health .....	626	716	134	869	492	679
Managers, food serving and lodging establishments .....	962	509	538	591	424	434
Managers, properties and real estate .....	301	585	133	638	168	518
Management-related occupations .....	3,818	660	1,580	790	2,238	602
Accountants and auditors .....	1,303	674	523	821	780	618
Underwriters .....	107	658	31	( <sup>1</sup> )	76	625
Other financial officers .....	642	703	295	901	347	591
Management analysts .....	216	841	121	964	95	752
Personnel, training, and labor relations specialists .....	431	630	135	755	295	601
Buyers, wholesale and retail trade, except farm products .....	162	612	85	647	77	590
Construction inspectors .....	63	742	57	760	6	( <sup>1</sup> )
Inspectors and compliance officers, except construction .....	220	741	145	756	74	714
Professional specialty .....	14,853	763	7,195	895	7,658	682
Engineers, architects, and surveyors .....	2,043	988	1,828	1,007	215	827
Architects .....	102	872	87	893	15	( <sup>1</sup> )
Engineers .....	1,930	992	1,730	1,011	200	831
Aerospace engineers .....	75	1,139	68	1,150	6	( <sup>1</sup> )
Chemical engineers .....	68	1,023	56	1,041	12	( <sup>1</sup> )
Civil engineers .....	259	965	229	1,001	30	( <sup>1</sup> )
Electrical and electronic engineers .....	605	1,059	554	1,067	51	931
Industrial engineers .....	248	889	208	912	41	( <sup>1</sup> )
Mechanical engineers .....	313	998	296	1,007	18	( <sup>1</sup> )
Mathematical and computer scientists .....	1,544	938	1,105	986	438	859
Computer systems analysts and scientists .....	1,281	952	941	996	341	890
Operations and systems researchers and analysts .....	208	874	127	937	81	750
Natural scientists .....	470	828	318	908	152	732
Chemists, except biochemists .....	129	884	84	982	45	( <sup>1</sup> )
Biological and life scientists .....	91	739	56	781	34	( <sup>1</sup> )
Medical scientists .....	80	755	41	( <sup>1</sup> )	38	( <sup>1</sup> )
Health diagnosing occupations .....	549	1,134	367	1,227	181	948
Physicians .....	474	1,156	321	1,255	153	966
Health assessment and treating occupations .....	2,102	738	363	791	1,739	730
Registered nurses .....	1,490	739	139	774	1,351	734
Pharmacists .....	139	1,063	80	1,146	59	985
Dietitians .....	58	582	11	( <sup>1</sup> )	47	( <sup>1</sup> )
Therapists .....	362	710	104	713	258	709
Respiratory therapists .....	83	618	37	( <sup>1</sup> )	46	( <sup>1</sup> )
Physical therapists .....	87	906	26	( <sup>1</sup> )	61	887
Speech therapists .....	75	725	5	( <sup>1</sup> )	71	729
Physicians' assistants .....	53	611	30	( <sup>1</sup> )	24	( <sup>1</sup> )
Teachers, college and university .....	578	907	366	998	211	769
Teachers, except college and university .....	3,974	671	1,022	746	2,952	644
Teachers, prekindergarten and kindergarten .....	412	397	8	( <sup>1</sup> )	404	398
Teachers, elementary school .....	1,706	691	274	749	1,433	677
Teachers, secondary school .....	1,121	736	490	773	631	698
Teachers, special education .....	318	701	58	733	259	693
Counselors, educational and vocational .....	192	695	61	725	131	689
Librarians, archivists, and curators .....	177	656	31	( <sup>1</sup> )	146	640
Librarians .....	159	665	22	( <sup>1</sup> )	136	653
Social scientists and urban planners .....	286	758	145	878	141	661
Economists .....	99	900	57	991	42	( <sup>1</sup> )
Psychologists .....	143	679	65	740	78	621

See footnotes at end of table.

HOUSEHOLD DATA  
ANNUAL AVERAGES

39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex — Continued

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Social, recreation, and religious workers .....	1,113	557	542	593	571	531
Social workers .....	654	579	227	609	427	568
Recreation workers .....	105	353	31	( <sup>1</sup> )	74	351
Clergy .....	275	593	250	603	25	( <sup>1</sup> )
Lawyers and judges .....	562	1,218	370	1,348	193	956
Lawyers .....	527	1,209	346	1,350	181	951
Writers, artists, entertainers, and athletes .....	1,264	647	677	713	587	591
Technical writers .....	63	810	27	( <sup>1</sup> )	36	( <sup>1</sup> )
Designers .....	407	635	208	720	199	562
Actors and directors .....	88	733	53	801	35	( <sup>1</sup> )
Painters, sculptors, craft artists, and artist printmakers .....	99	562	52	680	47	( <sup>1</sup> )
Photographers .....	51	526	36	( <sup>1</sup> )	15	( <sup>1</sup> )
Editors and reporters .....	215	723	120	812	95	616
Public relations specialists .....	127	707	49	( <sup>1</sup> )	77	680
Technical, sales, and administrative support .....	27,372	477	10,439	606	16,933	419
Technicians and related support .....	3,507	599	1,773	701	1,734	511
Health technologists and technicians .....	1,296	502	279	588	1,017	486
Clinical laboratory technologists and technicians .....	281	566	65	585	216	549
Radiologic technicians .....	135	631	45	( <sup>1</sup> )	90	595
Licensed practical nurses .....	289	473	14	( <sup>1</sup> )	276	470
Engineering and related technologists and technicians .....	888	638	718	668	170	529
Electrical and electronic technicians .....	421	642	354	665	68	551
Drafting occupations .....	200	642	162	675	38	( <sup>1</sup> )
Surveying and mapping technicians .....	66	668	58	682	8	( <sup>1</sup> )
Science technicians .....	241	557	149	623	92	463
Biological technicians .....	86	482	27	( <sup>1</sup> )	59	449
Chemical technicians .....	76	614	61	688	14	( <sup>1</sup> )
Technicians, except health, engineering, and science .....	1,082	738	627	870	455	609
Airplane pilots and navigators .....	81	1,383	81	1,381	-	-
Computer programmers .....	554	843	397	884	157	715
Legal assistants .....	308	578	58	561	249	581
Sales occupations .....	9,636	502	5,299	622	4,338	372
Supervisors and proprietors .....	3,205	570	1,860	649	1,345	449
Sales representatives, finance and business services .....	1,774	659	982	772	792	566
Insurance sales .....	374	629	195	760	179	534
Real estate sales .....	353	663	157	763	196	575
Securities and financial services sales .....	377	758	262	930	115	598
Advertising and related sales .....	150	631	60	760	90	594
Sales occupations, other business services .....	520	626	308	715	212	516
Sales representatives, commodities, except retail .....	1,287	728	970	765	317	603
Sales workers, retail and personal services .....	3,347	312	1,483	412	1,865	272
Sales workers, motor vehicles and boats .....	285	587	256	609	30	( <sup>1</sup> )
Sales workers, apparel .....	153	296	37	( <sup>1</sup> )	116	283
Sales workers, furniture and home furnishings .....	110	458	63	509	47	( <sup>1</sup> )
Sales workers, radio, television, hi-fi, and appliances .....	189	410	144	431	45	( <sup>1</sup> )
Sales workers, hardware and building supplies .....	211	434	169	461	42	( <sup>1</sup> )
Sales workers, parts .....	144	390	130	403	15	( <sup>1</sup> )
Sales workers, other commodities .....	670	311	258	388	411	287
Sales counter clerks .....	86	296	27	( <sup>1</sup> )	59	266
Cashiers .....	1,350	267	335	302	1,015	259
Street and door-to-door sales workers .....	87	404	34	( <sup>1</sup> )	53	355
Administrative support, including clerical .....	14,229	438	3,368	518	10,862	418
Supervisors .....	689	599	276	679	413	556
General office .....	384	586	117	698	267	547
Financial records processing .....	87	616	15	( <sup>1</sup> )	72	590
Distribution, scheduling, and adjusting clerks .....	199	620	133	640	66	551
Computer equipment operators .....	346	511	153	591	192	477
Computer operators .....	343	513	151	595	192	478
Secretaries, stenographers, and typists .....	2,717	437	59	484	2,658	436
Secretaries .....	2,234	431	35	( <sup>1</sup> )	2,199	430
Stenographers .....	64	456	3	( <sup>1</sup> )	61	456
Typists .....	419	467	22	( <sup>1</sup> )	397	469

See footnotes at end of table.

39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex — Continued

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Information clerks .....	1,328	367	142	453	1,186	363
Interviewers .....	113	399	15	( <sup>1</sup> )	97	393
Hotel clerks .....	84	311	20	( <sup>1</sup> )	64	312
Transportation ticket and reservation agents .....	215	463	55	563	160	433
Receptionists .....	664	352	19	( <sup>1</sup> )	645	351
Records processing, except financial .....	742	417	150	419	592	416
Order clerks .....	217	451	57	455	160	450
Personnel clerks, except payroll and timekeeping .....	65	491	11	( <sup>1</sup> )	54	487
Library clerks .....	64	358	13	( <sup>1</sup> )	51	349
File clerks .....	209	368	40	( <sup>1</sup> )	169	367
Records clerks .....	174	440	27	( <sup>1</sup> )	147	436
Financial records processing .....	1,485	429	134	466	1,351	426
Bookkeepers, accounting, and auditing clerks .....	1,078	428	91	455	987	426
Payroll and timekeeping clerks .....	130	476	13	( <sup>1</sup> )	117	474
Billing clerks .....	153	413	22	( <sup>1</sup> )	131	409
Billing, posting, and calculating machine operators .....	84	415	3	( <sup>1</sup> )	81	409
Duplicating, mail and other office machine operators .....	66	346	29	( <sup>1</sup> )	36	( <sup>1</sup> )
Communications equipment operators .....	144	397	29	( <sup>1</sup> )	114	368
Telephone operators .....	128	399	19	( <sup>1</sup> )	109	372
Mail and message distributing .....	858	603	549	633	309	542
Postal clerks, except mail carriers .....	308	640	168	668	140	617
Mail carriers, postal service .....	316	681	230	699	87	613
Mail clerks, except postal service .....	138	372	75	443	63	332
Messengers .....	95	392	76	408	19	( <sup>1</sup> )
Material recording, scheduling, and distributing clerks .....	1,717	446	980	476	738	414
Dispatchers .....	218	479	113	516	105	403
Production coordinators .....	249	581	108	724	141	518
Traffic, shipping, and receiving clerks .....	562	408	398	416	164	385
Stock and inventory clerks .....	405	432	235	452	169	406
Expeditors .....	192	403	66	477	126	373
Adjusters and investigators .....	1,572	470	411	567	1,161	445
Insurance adjusters, examiners, and investigators .....	420	522	124	671	297	487
Investigators and adjusters, except insurance .....	881	455	220	522	661	431
Eligibility clerks, social welfare .....	87	459	13	( <sup>1</sup> )	74	449
Bill and account collectors .....	183	433	53	494	129	411
Miscellaneous administrative support occupations .....	2,568	401	457	482	2,111	389
General office clerks .....	526	400	104	453	422	392
Bank tellers .....	291	330	25	( <sup>1</sup> )	265	329
Data-entry keyers .....	572	418	106	470	467	409
Statistical clerks .....	87	409	15	( <sup>1</sup> )	72	386
Teachers' aides .....	353	307	27	( <sup>1</sup> )	326	304
Service occupations .....	10,592	327	5,291	389	5,301	296
Private household .....	381	223	19	( <sup>1</sup> )	362	220
Child care workers .....	136	204	4	( <sup>1</sup> )	132	208
Cleaners and servants .....	236	235	11	( <sup>1</sup> )	225	227
Protective services .....	2,140	598	1,817	613	323	481
Supervisors .....	215	771	198	786	18	( <sup>1</sup> )
Police and detectives .....	117	853	105	864	11	( <sup>1</sup> )
Guards .....	54	506	47	( <sup>1</sup> )	6	( <sup>1</sup> )
Firefighting and fire prevention .....	230	732	224	731	6	( <sup>1</sup> )
Firefighting .....	210	734	205	731	5	( <sup>1</sup> )
Police and detectives .....	1,050	646	882	662	168	583
Police and detectives, public service .....	602	723	530	738	72	633
Sheriffs, bailiffs, and other law enforcement officers .....	164	594	137	595	27	( <sup>1</sup> )
Correctional institution officers .....	284	557	215	571	69	509
Guards .....	645	369	513	378	132	330
Guards and police, except public service .....	611	375	495	382	116	347
Service occupations, except private household and protective .....	8,070	307	3,455	325	4,616	295
Food preparation and service occupations .....	3,032	288	1,581	303	1,451	271
Supervisors .....	233	352	103	427	131	304
Bartenders .....	178	336	83	379	96	293
Waiters and waitresses .....	575	300	159	343	416	282

See footnotes at end of table.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex — Continued**

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Cooks, except short order .....	1,250	289	831	305	419	259
Food counter, fountain, and related occupations .....	100	242	40	( <sup>1</sup> )	59	241
Kitchen workers, food preparation .....	135	274	42	( <sup>1</sup> )	93	275
Waiters' and waitresses' assistants .....	233	267	119	268	115	265
Miscellaneous food preparation occupations .....	327	265	204	263	124	269
Health service occupations .....	1,718	318	218	342	1,500	315
Dental assistants .....	153	369	3	( <sup>1</sup> )	151	369
Health aides, except nursing .....	234	346	45	( <sup>1</sup> )	189	335
Nursing aides, orderlies, and attendants .....	1,330	311	170	330	1,160	308
Cleaning and building service occupations .....	2,234	319	1,378	358	856	288
Supervisors .....	157	401	95	457	62	348
Maids and housemen .....	453	277	96	305	357	272
Janitors and cleaners .....	1,567	327	1,132	355	435	292
Pest control .....	54	358	52	356	2	( <sup>1</sup> )
Personal service occupations .....	1,086	311	278	368	809	301
Supervisors .....	65	503	32	( <sup>1</sup> )	33	( <sup>1</sup> )
Hairdressers and cosmetologists .....	289	313	31	( <sup>1</sup> )	259	313
Attendants, amusement and recreation facilities .....	111	321	63	382	48	( <sup>1</sup> )
Public transportation attendants .....	76	524	16	( <sup>1</sup> )	60	575
Early childhood teachers' assistants .....	239	265	8	( <sup>1</sup> )	231	264
Precision production, craft, and repair .....	11,691	572	10,741	587	949	408
Mechanics and repairers .....	4,081	597	3,926	599	155	519
Supervisors .....	247	743	232	748	15	( <sup>1</sup> )
Mechanics and repairers, except supervisors .....	3,834	590	3,694	592	140	516
Vehicle and mobile equipment mechanics and repairers .....	1,494	552	1,482	552	12	( <sup>1</sup> )
Automobile mechanics .....	653	493	652	494	2	( <sup>1</sup> )
Bus, truck, and stationary engine mechanics .....	312	563	309	561	3	( <sup>1</sup> )
Aircraft engine mechanics .....	140	780	136	782	4	( <sup>1</sup> )
Automobile body and related repairers .....	134	510	134	510	-	-
Heavy equipment mechanics .....	159	636	159	636	-	-
Industrial machinery repairers .....	532	608	520	611	12	( <sup>1</sup> )
Electrical and electronic equipment repairers .....	764	665	682	677	82	550
Electronic repairers, communications and industrial equipment .....	160	579	148	590	11	( <sup>1</sup> )
Data processing equipment repairers .....	224	641	189	657	36	( <sup>1</sup> )
Telephone installers and repairers .....	225	750	194	762	30	( <sup>1</sup> )
Miscellaneous electrical and electronic equipment repairers .....	81	644	77	629	3	( <sup>1</sup> )
Heating, air conditioning, and refrigeration mechanics .....	246	594	244	594	1	( <sup>1</sup> )
Miscellaneous mechanics and repairers .....	786	584	753	588	32	( <sup>1</sup> )
Office machine repairers .....	59	594	57	598	1	( <sup>1</sup> )
Millwrights .....	84	712	83	714	1	( <sup>1</sup> )
Construction trades .....	4,054	543	3,989	545	64	408
Supervisors .....	481	708	477	709	4	( <sup>1</sup> )
Construction trades, except supervisors .....	3,573	520	3,512	522	61	403
Brickmasons and stonemasons .....	125	573	123	573	2	( <sup>1</sup> )
Carpet installers .....	68	476	68	476	-	-
Carpenters .....	920	490	909	491	10	( <sup>1</sup> )
Drywall installers .....	136	493	134	496	3	( <sup>1</sup> )
Electricians .....	717	643	701	642	16	( <sup>1</sup> )
Electrical power installers and repairers .....	135	789	134	795	1	( <sup>1</sup> )
Painters, construction and maintenance .....	336	402	321	406	15	( <sup>1</sup> )
Plumbers, pipefitters, steamfitters, and apprentices .....	428	593	422	595	5	( <sup>1</sup> )
Concrete and terrazzo finishers .....	72	483	72	483	-	-
Roofers .....	172	441	171	443	1	( <sup>1</sup> )
Structural metalworkers .....	54	583	54	583	-	-
Extractive occupations .....	120	633	119	631	1	( <sup>1</sup> )
Precision production occupations .....	3,436	558	2,707	611	729	392
Supervisors .....	1,136	645	943	686	193	478
Precision metalworking occupations .....	873	610	816	621	57	444
Tool and die makers .....	130	784	129	786	1	( <sup>1</sup> )
Machinists .....	508	594	475	601	33	( <sup>1</sup> )
Sheet-metal workers .....	116	584	112	591	4	( <sup>1</sup> )

See footnotes at end of table.

39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex — Continued

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Precision woodworking occupations .....	88	475	77	507	11	( <sup>1</sup> )
Cabinet makers and bench carpenters .....	60	531	55	552	4	( <sup>1</sup> )
Precision textile, apparel, and furnishings machine workers .....	122	387	80	394	42	( <sup>1</sup> )
Precision workers, assorted materials .....	489	402	203	501	285	361
Optical goods workers .....	65	412	26	( <sup>1</sup> )	39	( <sup>1</sup> )
Electrical and electronic equipment assemblers .....	319	381	101	472	218	357
Precision food production occupations .....	333	401	238	422	95	344
Butchers and meat cutters .....	199	416	164	456	35	( <sup>1</sup> )
Bakers .....	97	352	60	375	37	( <sup>1</sup> )
Precision inspectors, testers, and related workers .....	139	623	103	676	37	( <sup>1</sup> )
Inspectors, testers, and graders .....	134	630	98	680	36	( <sup>1</sup> )
Plant and system operators .....	256	694	248	703	8	( <sup>1</sup> )
Water and sewage treatment plant operators .....	57	586	54	600	4	( <sup>1</sup> )
Stationary engineers .....	125	714	123	718	2	( <sup>1</sup> )
Operators, fabricators, and laborers .....	15,082	415	11,564	456	3,518	327
Machine operators, assemblers, and inspectors .....	6,987	406	4,482	472	2,505	328
Machine operators and tenders, except precision .....	4,452	399	2,866	461	1,586	320
Metalworking and plastic working machine operators .....	389	475	323	496	66	387
Punching and stamping press machine operators .....	108	406	77	440	32	( <sup>1</sup> )
Grinding, abrading, buffing, and polishing machine operators .....	120	441	108	453	12	( <sup>1</sup> )
Metal and plastic processing machine operators .....	160	446	127	468	33	( <sup>1</sup> )
Molding and casting machine operators .....	102	430	77	448	25	( <sup>1</sup> )
Woodworking machine operators .....	127	379	106	394	21	( <sup>1</sup> )
Sawing machine operators .....	81	366	70	375	11	( <sup>1</sup> )
Printing machine operators .....	357	495	273	533	83	384
Printing press operators .....	279	490	233	514	46	( <sup>1</sup> )
Textile, apparel, and furnishings machine operators .....	784	293	215	318	569	285
Textile sewing machine operators .....	435	280	74	300	361	278
Pressing machine operators .....	64	276	17	( <sup>1</sup> )	47	( <sup>1</sup> )
Laundering and dry cleaning machine operators .....	136	287	61	301	76	270
Machine operators, assorted materials .....	2,616	416	1,809	465	807	347
Packaging and filling machine operators .....	363	327	155	358	208	316
Mixing and blending machine operators .....	119	455	112	459	7	( <sup>1</sup> )
Painting and paint spraying machine operators .....	189	413	166	422	24	( <sup>1</sup> )
Furnace, kiln, and oven operators, exc. food .....	77	554	75	558	2	( <sup>1</sup> )
Slicing and cutting machine operators .....	164	389	121	445	43	( <sup>1</sup> )
Photographic process machine operators .....	77	321	33	( <sup>1</sup> )	43	( <sup>1</sup> )
Fabricators, assemblers, and hand working occupations .....	1,845	421	1,256	482	589	347
Welders and cutters .....	550	518	519	527	30	( <sup>1</sup> )
Assemblers .....	1,199	392	683	445	516	347
Production inspectors, testers, samplers, and weighers .....	690	412	360	517	330	336
Production inspectors, checkers, and examiners .....	487	448	254	544	233	358
Graders and sorters, except agricultural .....	150	306	65	351	85	289
Transportation and material moving occupations .....	4,322	510	3,977	519	345	373
Motor vehicle operators .....	3,144	503	2,870	514	273	362
Supervisors .....	79	595	61	625	18	( <sup>1</sup> )
Truck drivers .....	2,458	516	2,345	520	114	371
Drivers--sales workers .....	143	526	129	554	14	( <sup>1</sup> )
Bus drivers .....	273	428	160	476	112	352
Taxicab drivers and chauffeurs .....	162	379	150	386	12	( <sup>1</sup> )
Transportation occupations, except motor vehicles .....	150	834	141	862	10	( <sup>1</sup> )
Rail transportation .....	101	849	93	888	8	( <sup>1</sup> )
Material moving equipment operators .....	1,028	505	966	510	62	397
Operating engineers .....	223	570	217	568	6	( <sup>1</sup> )
Crane and tower operators .....	65	576	61	572	4	( <sup>1</sup> )
Excavating and loading machine operators .....	80	557	79	558	-	-
Grader, dozer, and scraper operators .....	59	572	58	578	2	( <sup>1</sup> )
Industrial truck and tractor equipment operators .....	501	452	463	455	39	( <sup>1</sup> )

See footnotes at end of table.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**39. Median weekly earnings of full-time wage and salary workers by detailed occupation and sex — Continued**

(Numbers in thousands)

Occupation	1998					
	Both sexes		Men		Women	
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings
Handlers, equipment cleaners, helpers, and laborers .....	3,773	351	3,105	362	669	311
Helpers, construction and extractive occupations .....	112	341	110	340	1	( <sup>1</sup> )
Helpers, construction trades .....	108	335	106	334	1	( <sup>1</sup> )
Construction laborers .....	729	390	706	393	23	( <sup>1</sup> )
Freight, stock, and material handlers .....	1,192	339	956	350	236	312
Stock handlers and baggers .....	563	300	406	304	157	291
Machine feeders and offbearers .....	66	363	46	( <sup>1</sup> )	20	( <sup>1</sup> )
Garage and service station related occupations .....	127	293	118	297	9	( <sup>1</sup> )
Vehicle washers and equipment cleaners .....	213	317	190	322	23	( <sup>1</sup> )
Hand packers and packagers .....	255	304	92	307	164	301
Laborers, except construction .....	1,055	373	853	384	202	331
Farming, forestry, and fishing .....	1,555	302	1,337	307	218	272
Farm operators and managers .....	69	424	59	475	10	( <sup>1</sup> )
Farm managers .....	63	459	53	486	9	( <sup>1</sup> )
Other agricultural and related occupations .....	1,425	298	1,221	303	204	270
Farm occupations, except managerial .....	650	285	563	288	88	264
Farm workers .....	602	281	525	285	77	262
Related agricultural occupations .....	775	308	658	314	117	274
Supervisors, related agricultural .....	63	469	59	479	4	( <sup>1</sup> )
Groundskeepers and gardeners, except farm .....	598	306	569	306	29	( <sup>1</sup> )
Animal caretakers, except farm .....	51	300	13	( <sup>1</sup> )	38	( <sup>1</sup> )
Graders and sorters, agricultural products .....	61	259	15	( <sup>1</sup> )	45	( <sup>1</sup> )

<sup>1</sup> Data not shown where base is less than 50,000.

procedures and revised population controls used in the household survey.

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

40. Union affiliation of employed wage and salary workers by selected characteristics

(Numbers in thousands)

Characteristic	1997					1998				
	Total employed	Members of unions <sup>1</sup>		Represented by unions <sup>2</sup>		Total employed	Members of unions <sup>1</sup>		Represented by unions <sup>2</sup>	
		Total	Percent of employed	Total	Percent of employed		Total	Percent of employed	Total	Percent of employed
<b>SEX AND AGE</b>										
Total, 16 years and over .....	114,533	16,110	14.1	17,923	15.6	116,730	16,211	13.9	17,918	15.4
16 to 24 years .....	18,571	968	5.2	1,140	6.1	19,164	1,014	5.3	1,151	6.0
25 years and over .....	95,962	15,142	15.8	16,783	17.5	97,566	15,198	15.6	16,767	17.2
25 to 34 years .....	29,408	3,434	11.7	3,870	13.2	29,121	3,332	11.4	3,711	12.7
35 to 44 years .....	31,461	4,987	15.9	5,571	17.7	31,865	5,013	15.7	5,511	17.3
45 to 54 years .....	22,714	4,645	20.5	5,092	22.4	23,579	4,737	20.1	5,220	22.1
55 to 64 years .....	9,871	1,894	19.2	2,045	20.7	10,427	1,923	18.4	2,110	20.2
65 years and over .....	2,509	182	7.3	205	8.2	2,574	193	7.5	214	8.3
<b>Men, 16 years and over .....</b>	<b>59,825</b>	<b>9,763</b>	<b>16.3</b>	<b>10,619</b>	<b>17.7</b>	<b>60,973</b>	<b>9,850</b>	<b>16.2</b>	<b>10,638</b>	<b>17.4</b>
16 to 24 years .....	9,666	612	6.3	691	7.1	9,927	637	6.4	719	7.2
25 years and over .....	50,159	9,150	18.2	9,928	19.8	51,046	9,213	18.0	9,919	19.4
25 to 34 years .....	15,832	2,132	13.5	2,359	14.9	15,656	2,112	13.5	2,301	14.7
35 to 44 years .....	16,430	3,068	18.7	3,346	20.4	16,768	3,055	18.2	3,264	19.5
45 to 54 years .....	11,471	2,718	23.7	2,908	25.4	11,874	2,771	23.3	2,982	25.1
55 to 64 years .....	5,101	1,130	22.1	1,198	23.5	5,404	1,177	21.8	1,265	23.4
65 years and over .....	1,324	103	7.8	118	8.9	1,343	98	7.3	108	8.0
<b>Women, 16 years and over .....</b>	<b>54,708</b>	<b>6,347</b>	<b>11.6</b>	<b>7,304</b>	<b>13.4</b>	<b>55,757</b>	<b>6,362</b>	<b>11.4</b>	<b>7,280</b>	<b>13.1</b>
16 to 24 years .....	8,906	355	4.0	449	5.0	9,237	377	4.1	432	4.7
25 years and over .....	45,802	5,992	13.1	6,855	15.0	46,520	5,985	12.9	6,848	14.7
25 to 34 years .....	13,575	1,302	9.6	1,512	11.1	13,464	1,219	9.1	1,410	10.5
35 to 44 years .....	15,030	1,919	12.8	2,225	14.8	15,097	1,958	13.0	2,248	14.9
45 to 54 years .....	11,242	1,927	17.1	2,184	19.4	11,705	1,967	16.8	2,238	19.1
55 to 64 years .....	4,770	764	16.0	847	17.8	5,023	746	14.9	845	16.8
65 years and over .....	1,184	80	6.7	87	7.3	1,231	95	7.7	106	8.6
<b>RACE, HISPANIC ORIGIN, AND SEX</b>										
White, 16 years and over .....	96,104	13,088	13.6	14,538	15.1	97,531	13,118	13.5	14,460	14.8
Men .....	50,941	8,171	16.0	8,859	17.4	51,700	8,166	15.8	8,788	17.0
Women .....	45,163	4,917	10.9	5,679	12.6	45,831	4,952	10.8	5,673	12.4
Black, 16 years and over .....	13,346	2,394	17.9	2,688	20.1	13,894	2,460	17.7	2,739	19.7
Men .....	6,201	1,251	20.2	1,378	22.2	6,452	1,337	20.7	1,458	22.6
Women .....	7,145	1,143	16.0	1,309	18.3	7,443	1,123	15.1	1,282	17.2
Hispanic origin, 16 years and over .....	11,881	1,407	11.8	1,602	13.5	12,374	1,471	11.9	1,634	13.2
Men .....	7,153	904	12.6	1,023	14.3	7,360	937	12.7	1,017	13.8
Women .....	4,728	503	10.6	579	12.2	5,015	534	10.6	617	12.3
<b>FULL- OR PART-TIME STATUS<sup>3</sup></b>										
Full-time workers .....	93,578	14,619	15.6	16,227	17.3	95,595	14,825	15.5	16,323	17.1
Part-time workers .....	20,710	1,449	7.0	1,653	8.0	20,862	1,354	6.5	1,559	7.5

<sup>1</sup> Data refer to members of a labor union or an employee association similar to a union.

<sup>2</sup> Data refer to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

<sup>3</sup> The distinction between full- and part-time workers is based on hours usually worked. Beginning in 1994, these data will not sum to totals because full- or part-time status on the principal job is not identifiable for a small number of multiple jobholders.

NOTE: Data refer to the sole or principal job of full- and part-time workers. Excluded are all self-employed workers regardless of whether or not their businesses are incorporated. 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  
ANNUAL AVERAGES**

**41. Median weekly earnings of full-time wage and salary workers by union affiliation and selected characteristics**

Characteristic	1997				1998			
	Total	Members of unions <sup>1</sup>	Repre- sented by unions <sup>2</sup>	Non- union	Total	Members of unions <sup>1</sup>	Repre- sented by unions <sup>2</sup>	Non- union
<b>SEX AND AGE</b>								
Total, 16 years and over .....	\$503	\$640	\$632	\$478	\$523	\$659	\$653	\$499
16 to 24 years .....	306	385	384	302	319	415	410	315
25 years and over .....	540	655	648	511	572	673	667	537
25 to 34 years .....	481	579	572	466	502	595	591	489
35 to 44 years .....	579	675	666	548	597	683	678	576
45 to 54 years .....	607	704	697	578	620	716	712	592
55 to 64 years .....	558	661	657	512	592	697	692	560
65 years and over .....	393	614	609	374	405	610	597	383
Men, 16 years and over .....	579	683	679	539	598	699	696	573
16 to 24 years .....	317	402	404	313	334	430	424	326
25 years and over .....	615	697	693	595	639	712	709	617
25 to 34 years .....	515	607	603	503	544	618	615	524
35 to 44 years .....	651	712	708	630	677	722	719	660
45 to 54 years .....	713	744	741	698	732	755	755	719
55 to 64 years .....	669	702	701	649	699	738	737	674
65 years and over .....	452	677	672	415	482	657	659	445
Women, 16 years and over .....	431	577	568	411	456	596	593	430
16 to 24 years .....	292	353	351	289	305	389	382	301
25 years and over .....	462	587	581	437	485	605	602	463
25 to 34 years .....	427	521	514	416	451	542	542	439
35 to 44 years .....	482	592	585	461	498	605	605	479
45 to 54 years .....	495	627	620	465	516	651	645	488
55 to 64 years .....	433	582	575	408	476	602	596	448
65 years and over .....	348	( <sup>3</sup> )	586	324	350	548	522	329
<b>RACE, HISPANIC ORIGIN, AND SEX</b>								
White, 16 years and over .....	519	\$663	654	494	545	683	678	513
Men .....	595	699	695	569	615	719	716	591
Women .....	444	595	587	421	468	610	607	443
Black, 16 years and over .....	400	533	523	371	426	578	572	398
Men .....	432	577	573	396	468	597	592	424
Women .....	375	504	496	349	400	537	533	376
Hispanic origin, 16 years and over .....	351	506	501	331	370	540	541	350
Men .....	371	538	526	348	390	585	584	367
Women .....	318	440	430	309	337	478	481	322

<sup>1</sup> Data refer to members of a labor union or an employee association similar to a union.

<sup>2</sup> Data refer to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

<sup>3</sup> Data not shown where base is less than 50,000.

NOTE: Data refer to the sole or principal job of full-time workers. Excluded

are all self-employed workers regardless of whether or not their businesses are incorporated. 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 population controls used in the household survey.

42. Union affiliation of employed wage and salary workers by occupation and industry

(Numbers in thousands)

Occupation and industry	1997					1998				
	Total employed	Members of unions <sup>1</sup>		Represented by unions <sup>2</sup>		Total employed	Members of unions <sup>1</sup>		Represented by unions <sup>2</sup>	
		Total	Percent of employed	Total	Percent of employed		Total	Percent of employed	Total	Percent of employed
<b>OCCUPATION</b>										
Managerial and professional specialty .....	31,946	4,208	13.2	4,951	15.5	33,102	4,252	12.8	5,015	15.2
Executive, administrative, and managerial .....	14,908	763	5.1	959	6.4	15,473	812	5.2	1,017	6.6
Professional specialty .....	17,037	3,445	20.2	3,992	23.4	17,629	3,440	19.5	3,998	22.7
Technical, sales, and administrative support .....	34,796	3,158	9.1	3,648	10.5	35,379	3,239	9.2	3,677	10.4
Technicians and related support .....	4,111	427	10.4	501	12.2	4,150	433	10.4	498	12.0
Sales occupations .....	13,055	559	4.3	659	5.0	13,378	544	4.1	620	4.6
Administrative support, including clerical .....	17,631	2,172	12.3	2,488	14.1	17,851	2,262	12.7	2,558	14.3
Service occupations .....	16,204	2,141	13.2	2,356	14.5	16,594	2,209	13.3	2,398	14.5
Protective service .....	2,248	897	39.9	965	42.9	2,399	991	41.3	1,048	43.7
Service, except protective service .....	13,956	1,244	8.9	1,391	10.0	14,195	1,218	8.6	1,350	9.5
Precision production, craft, and repair .....	12,069	2,723	22.6	2,864	23.7	12,274	2,708	22.1	2,834	23.1
Operators, fabricators, and laborers .....	17,629	3,791	21.5	4,008	22.7	17,443	3,713	21.3	3,894	22.3
Machine operators, assemblers, and inspectors .....	7,717	1,690	21.9	1,764	22.9	7,498	1,603	21.4	1,672	22.3
Transportation and material moving occupations .....	4,931	1,199	24.3	1,279	25.9	4,935	1,204	24.4	1,267	25.7
Handlers, equipment cleaners, helpers, and laborers .....	4,981	901	18.1	964	19.4	5,010	906	18.1	956	19.1
Farming, forestry, and fishing .....	1,890	88	4.6	97	5.1	1,938	90	4.6	100	5.2
<b>INDUSTRY</b>										
Private wage and salary workers .....	96,386	9,363	9.7	10,255	10.6	98,329	9,306	9.5	10,104	10.3
Agriculture <sup>3</sup> .....	1,681	36	2.2	40	2.4	1,739	26	1.5	31	1.8
Nonagricultural industries .....	94,705	9,327	9.8	10,215	10.8	96,590	9,280	9.6	10,073	10.4
Mining .....	607	84	13.9	87	14.3	589	72	12.2	79	13.4
Construction .....	5,739	1,067	18.6	1,118	19.5	5,946	1,056	17.8	1,093	18.4
Manufacturing .....	19,961	3,253	16.3	3,441	17.2	19,763	3,127	15.8	3,315	16.8
Durable goods .....	11,908	2,090	17.5	2,198	18.5	11,999	1,990	16.6	2,097	17.5
Nondurable goods .....	8,053	1,164	14.5	1,243	15.4	7,763	1,138	14.7	1,218	15.7
Transportation and public utilities .....	6,949	1,804	26.0	1,909	27.5	7,147	1,843	25.8	1,931	27.0
Transportation .....	4,212	1,118	26.5	1,177	27.9	4,316	1,108	25.7	1,156	26.8
Communications and public utilities .....	2,737	686	25.1	731	26.7	2,831	735	26.0	775	27.4
Wholesale and retail trade .....	23,676	1,315	5.6	1,469	6.2	24,230	1,283	5.3	1,387	5.7
Wholesale trade .....	4,296	251	5.8	284	6.6	4,425	259	5.9	275	6.2
Retail trade .....	19,379	1,065	5.5	1,186	6.1	19,805	1,024	5.2	1,113	5.6
Finance, insurance, and real estate .....	7,070	155	2.2	199	2.8	7,420	150	2.0	195	2.6
Services .....	30,704	1,647	5.4	1,993	6.5	31,493	1,750	5.6	2,073	6.6
Government workers .....	18,147	6,747	37.2	7,668	42.3	18,401	6,905	37.5	7,815	42.5
Federal .....	3,217	1,030	32.0	1,266	39.4	3,269	1,105	33.8	1,299	39.7
State .....	5,031	1,485	29.5	1,679	33.4	5,150	1,431	27.8	1,667	32.4
Local .....	9,899	4,232	42.7	4,723	47.7	9,982	4,370	43.8	4,849	48.6

<sup>1</sup> Data refer to members of a labor union or an employee association similar to a union.

<sup>2</sup> Data refer to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

<sup>3</sup> Data for 1997 have been corrected.

NOTE: Data refer to the sole or principal job of full- and part-time workers. Excluded are all self-employed workers regardless of whether or not their businesses are incorporated. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**43. Median weekly earnings of full-time wage and salary workers by union affiliation, occupation, and industry**

Occupation and industry	1997				1998			
	Total	Members of unions <sup>1</sup>	Repre- sented by unions <sup>2</sup>	Non- union	Total	Members of unions <sup>1</sup>	Repre- sented by unions <sup>2</sup>	Non- union
<b>OCCUPATION</b>								
Managerial and professional specialty .....	\$738	\$776	\$766	\$731	\$759	\$789	\$774	\$756
Executive, administrative, and managerial .....	725	757	752	721	755	801	789	753
Professional specialty .....	750	782	769	742	763	787	772	759
Technical, sales, and administrative support .....	456	550	541	441	477	575	569	463
Technicians and related support .....	582	677	675	566	599	708	688	590
Sales occupations .....	482	467	469	483	502	496	492	502
Administrative support, including clerical .....	419	545	534	404	438	563	558	418
Service occupations .....	313	516	505	293	327	557	542	305
Protective service .....	550	724	713	418	598	736	732	450
Service, except protective service .....	293	398	393	283	305	403	402	295
Precision production, craft, and repair .....	548	724	718	501	572	753	747	514
Operators, fabricators, and laborers .....	401	572	561	365	415	585	580	381
Machine operators, assemblers, and inspectors .....	390	533	524	356	406	559	556	375
Transportation and material moving occupations .....	498	658	642	451	510	655	644	468
Handlers, equipment cleaners, helpers, and laborers .....	329	509	506	310	351	514	514	326
Farming, forestry, and fishing .....	295	505	475	290	302	471	462	299
<b>INDUSTRY</b>								
Private wage and salary workers .....	486	609	602	471	505	625	619	493
Agriculture <sup>3</sup> .....	306	( <sup>4</sup> )	( <sup>4</sup> )	305	315	( <sup>4</sup> )	( <sup>4</sup> )	314
Nonagricultural industries .....	490	\$610	\$603	476	509	\$626	\$620	496
Mining .....	680	717	717	668	684	733	723	673
Construction .....	518	771	760	484	534	790	783	496
Manufacturing .....	517	595	592	503	551	606	603	532
Durable goods .....	548	619	616	523	581	629	625	566
Nondurable goods .....	484	536	529	470	507	565	562	495
Transportation and public utilities .....	617	718	714	580	624	731	724	586
Transportation .....	573	702	697	513	570	704	695	519
Communications and public utilities .....	709	746	743	690	727	763	760	699
Wholesale and retail trade .....	391	457	451	387	410	480	476	405
Wholesale trade .....	525	545	536	524	562	611	604	557
Retail trade .....	352	419	415	347	373	442	439	369
Finance, insurance, and real estate .....	546	487	501	548	577	545	554	578
Services .....	475	517	512	470	498	540	548	494
Government workers .....	605	681	671	530	620	694	688	558
Federal .....	684	689	687	678	694	690	693	696
State .....	584	628	621	540	596	646	638	563
Local .....	592	697	682	479	612	712	702	501

<sup>1</sup> Data refer to members of a labor union or an employee association similar to a union.

<sup>2</sup> Data refer to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

<sup>3</sup> Data for 1997 have been corrected.

<sup>4</sup> Data not shown where base is less than 50,000.

NOTE: Data refer to the sole or principal job of full-time workers. Excluded are all self-employed workers regardless of whether or not their businesses are incorporated. Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

44. Absences from work of employed full-time wage and salary workers by age and sex

(Numbers in thousands)

Age and sex	1998						
	Total employed	Absence rate <sup>1</sup>			Lost worktime rate <sup>2</sup>		
		Total	Illness or injury	Other reasons	Total	Illness or injury	Other reasons
Total, 16 years and over .....	95,579	3.7	2.7	1.1	2.0	1.4	0.6
16 to 19 years .....	2,192	4.0	3.1	.9	1.9	1.4	.5
20 to 24 years .....	8,856	3.9	2.5	1.4	2.0	1.1	.8
25 years and over .....	84,530	3.7	2.7	1.0	2.0	1.5	.6
25 to 54 years .....	74,715	3.7	2.6	1.1	2.0	1.4	.6
55 years and over .....	9,815	4.2	3.4	.8	2.5	2.1	.4
Men, 16 years and over .....	54,300	2.7	2.1	.6	1.5	1.2	.3
16 to 19 years .....	1,294	3.3	2.8	.5	1.6	1.4	.2
20 to 24 years .....	5,067	2.6	2.0	.6	1.2	1.0	.3
25 years and over .....	47,939	2.7	2.1	.6	1.5	1.2	.3
25 to 54 years .....	42,359	2.6	2.0	.6	1.4	1.1	.3
55 years and over .....	5,581	3.6	2.9	.6	2.2	1.9	.3
Women, 16 years and over .....	41,279	5.1	3.4	1.7	2.8	1.8	1.0
16 to 19 years .....	899	5.0	3.4	1.6	2.4	1.4	.9
20 to 24 years .....	3,790	5.6	3.2	2.4	2.9	1.4	1.6
25 years and over .....	36,591	5.1	3.5	1.6	2.8	1.8	1.0
25 to 54 years .....	32,357	5.1	3.4	1.7	2.8	1.7	1.0
55 years and over .....	4,234	5.0	4.0	1.0	2.8	2.3	.5

<sup>1</sup> Absences are defined as instances when persons who usually work 35 or more hours a week worked less than 35 hours during the reference week for one of the following reasons: Own illness, injury, or medical problems; child-care problems; other family or personal obligations; civic or military duty; and maternity or paternity leave. Excluded are situations in which work was missed due to vacation or personal days, holiday, labor dispute, and other reasons. For multiple jobholders, absence data refer only to work missed at their main jobs. The absence rate is the ratio of workers with absences to total full-time wage and salary employment. The

estimates of full-time wage and salary employment shown in this table do not match those in other tables because the estimates in this table are based on the full CPS sample and those in the other tables are based on a quarter of the sample only.

<sup>2</sup> Hours absent as a percent of hours usually worked.

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

**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**45. Absences from work of employed full-time wage and salary workers by occupation and industry**

(Numbers in thousands)

Occupation and industry	1998						
	Total employed	Absence rate <sup>1</sup>			Lost worktime rate <sup>2</sup>		
		Total	Illness or injury	Other reasons	Total	Illness or injury	Other reasons
<b>OCCUPATION</b>							
Managerial and professional specialty .....	29,399	3.1	2.0	1.1	1.7	1.0	0.7
Executive, administrative, and managerial .....	14,540	2.8	1.8	.9	1.4	.9	.6
Professional specialty .....	14,859	3.5	2.2	1.2	1.9	1.1	.8
Technical, sales, and administrative support .....	27,105	4.1	2.9	1.2	2.1	1.4	.7
Technicians and related support .....	3,492	4.1	2.9	1.2	2.2	1.4	.8
Sales occupations .....	9,495	3.1	2.2	.9	1.6	1.1	.5
Administrative support, including clerical .....	14,118	4.7	3.3	1.4	2.4	1.6	.8
Service occupations .....	10,530	4.5	3.2	1.2	2.5	1.8	.6
Precision production, craft, and repair .....	11,724	3.3	2.6	.8	1.9	1.5	.3
Operators, fabricators, and laborers .....	15,208	4.3	3.4	.9	2.5	2.1	.4
Farming, forestry, and fishing .....	1,613	2.4	1.9	.6	1.3	1.0	.3
<b>INDUSTRY</b>							
Agricultural wage and salary workers .....	1,462	2.0	1.5	.5	1.1	.8	.3
Private nonagricultural wage and salary workers .....	78,474	3.6	2.6	1.0	2.0	1.4	.6
Mining .....	566	2.2	1.7	.5	1.3	1.0	.3
Construction .....	5,443	3.2	2.4	.9	1.8	1.4	.4
Manufacturing .....	18,929	3.8	2.8	.9	2.1	1.6	.5
Durable goods .....	11,610	3.6	2.8	.8	2.1	1.6	.4
Nondurable goods .....	7,319	3.9	2.9	1.0	2.2	1.7	.5
Transportation and public utilities .....	6,391	3.4	2.6	.8	2.1	1.6	.5
Transportation .....	3,713	3.5	2.8	.8	2.3	1.8	.5
Communications and other public utilities .....	2,677	3.2	2.3	.9	1.9	1.4	.5
Wholesale and retail trade .....	16,699	3.4	2.4	.9	1.8	1.3	.5
Wholesale trade .....	4,051	2.7	2.0	.6	1.4	1.0	.4
Retail trade .....	12,648	3.6	2.6	1.0	1.9	1.4	.5
Finance, insurance, and real estate .....	6,561	3.4	2.3	1.2	1.7	1.0	.7
Services .....	23,885	3.9	2.7	1.2	2.1	1.3	.7
Government workers .....	15,642	4.5	3.3	1.2	2.4	1.6	.7

<sup>1</sup> Absences are defined as instances when persons who usually work 35 or more hours a week worked less than 35 hours during the reference week for one of the following reasons: Own illness, injury, or medical problems; child-care problems; other family or personal obligations; civic or military duty; and maternity or paternity leave. Excluded are situations in which work was missed due to vacation or personal days, holiday, labor dispute, and other reasons. For multiple jobholders, absence data refer only to work missed at their main jobs. The absence rate is the ratio of workers with absences to total full-time wage and salary employment. The

estimates of full-time wage and salary employment shown in this table do not match those in other tables because the estimates in this table are based on the full CPS sample and those in the other tables are based on a quarter of the sample only.

<sup>2</sup> Hours absent as a percent of hours usually worked.  
NOTE: Beginning in January 1998, data reflect new composite estimation procedures and revised population controls used in the household survey.

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	1997	1998	Total		Employed		Unemployed			
			1997	1998	1997	1998	Number		Percent of labor force	
							1997	1998	1997	1998
<b>VIETNAM-ERA VETERANS</b>										
Total, 40 years and over .....	7,790	7,773	6,644	6,526	6,439	6,348	206	179	3.1	2.7
40 to 54 years .....	6,284	5,950	5,676	5,313	5,496	5,163	180	150	3.2	2.8
40 to 44 years .....	1,002	741	901	662	864	637	37	24	4.1	3.7
45 to 49 years .....	2,683	2,237	2,436	2,011	2,366	1,955	71	56	2.9	2.8
50 to 54 years .....	2,599	2,972	2,338	2,641	2,266	2,571	72	70	3.1	2.6
55 years and over .....	1,506	1,822	969	1,213	943	1,184	26	29	2.7	2.4
<b>NONVETERANS</b>										
Total, 40 to 54 years .....	19,440	20,304	17,621	18,403	17,044	17,879	577	523	3.3	2.8
40 to 44 years .....	8,972	9,218	8,285	8,512	8,007	8,269	278	242	3.4	2.8
45 to 49 years .....	6,212	6,796	5,639	6,190	5,460	6,020	179	170	3.2	2.7
50 to 54 years .....	4,256	4,290	3,696	3,701	3,576	3,590	120	111	3.2	3.0

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.



**HOUSEHOLD DATA  
ANNUAL AVERAGES**

**47. Employment status of male Vietnam-era veterans and nonveterans by age, race, and Hispanic origin**

(Numbers in thousands)

Employment status and age	Veterans						Nonveterans					
	White		Black		Hispanic origin		White		Black		Hispanic origin	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
<b>Total, 40 to 54 years</b>												
Civilian noninstitutional population .....	5,603	5,272	560	552	262	251	16,403	17,134	2,050	2,136	1,969	2,085
Civilian labor force .....	5,102	4,741	469	463	229	219	15,081	15,748	1,653	1,719	1,772	1,850
Employed .....	4,951	4,614	444	444	218	215	14,648	15,346	1,547	1,628	1,684	1,763
Unemployed .....	151	127	25	20	11	4	433	403	106	91	88	87
Unemployment rate .....	3.0	2.7	5.3	4.2	4.8	1.9	2.9	2.6	6.4	5.3	4.9	4.7
<b>40 to 44 years</b>												
Civilian noninstitutional population .....	851	604	121	113	66	48	7,585	7,796	941	962	922	970
Civilian labor force .....	770	540	102	101	56	42	7,099	7,296	779	796	852	884
Employed .....	739	524	97	96	52	41	6,891	7,114	724	747	811	843
Unemployed .....	31	17	5	5	4	1	208	182	55	48	41	42
Unemployment rate .....	4.1	3.1	4.9	5.0	6.9	2.7	2.9	2.5	7.1	6.1	4.8	4.7
<b>45 to 49 years</b>												
Civilian noninstitutional population .....	2,375	1,951	264	237	97	87	5,251	5,749	664	718	600	674
Civilian labor force .....	2,178	1,767	222	201	84	74	4,826	5,301	545	590	525	596
Employed .....	2,120	1,722	210	190	81	72	4,689	5,166	515	563	500	571
Unemployed .....	58	45	11	11	3	1	137	135	29	27	25	24
Unemployment rate .....	2.6	2.5	5.1	5.4	3.0	1.9	2.8	2.5	5.4	4.5	4.7	4.1
<b>50 to 54 years</b>												
Civilian noninstitutional population .....	2,378	2,718	175	201	99	116	3,567	3,589	445	456	447	441
Civilian labor force .....	2,154	2,433	145	162	90	103	3,156	3,152	328	333	395	370
Employed .....	2,092	2,368	137	158	85	102	3,068	3,066	307	317	373	349
Unemployed .....	62	65	9	4	5	2	88	86	21	16	22	20
Unemployment rate .....	2.9	2.7	5.9	2.4	5.2	1.6	2.8	2.7	6.5	4.8	5.5	5.5

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. 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.

**ESTABLISHMENT DATA  
EMPLOYMENT  
ANNUAL AVERAGES**

**48. Employees on nonfarm payrolls by major industry and selected component groups**

(In thousands)

Industry	1995	1996	1997	1998P
<b>Total</b> .....	117,191	119,608	122,690	125,833
<b>Total private</b> .....	97,885	100,189	103,120	105,972
<b>Goods-producing</b> .....	24,265	24,493	24,934	25,256
<b>Mining</b> .....	581	580	592	575
Metal mining .....	51.3	53.8	53.7	50.7
Coal mining .....	104.4	97.7	95.8	91.0
Oil and gas extraction .....	320.1	322.0	334.6	326.0
Nonmetallic minerals, except fuels .....	105.3	106.2	107.5	107.7
<b>Construction</b> .....	5,160	5,418	5,686	5,965
General building contractors .....	1,207.0	1,257.2	1,316.3	1,398.7
Heavy construction, except building .....	752.2	776.8	795.2	823.9
Special trade contractors .....	3,201.1	3,383.6	3,574.7	3,742.8
<b>Manufacturing</b> .....	18,524	18,495	18,657	18,716
<b>Durable goods</b> .....	10,683	10,789	10,987	11,098
Lumber and wood products .....	769.2	778.4	793.1	803.4
Furniture and fixtures .....	509.7	504.3	510.1	523.5
Stone, clay, and glass products .....	539.6	543.8	552.3	562.8
Primary metal industries .....	712.0	710.5	710.7	711.3
Blast furnaces and basic steel products .....	241.6	240.2	235.4	232.8
Fabricated metal products .....	1,437.0	1,448.7	1,474.9	1,488.9
Industrial machinery and equipment .....	2,067.1	2,114.6	2,163.4	2,188.4
Computer and office equipment .....	352.2	361.8	374.6	374.8
Electronic and other electrical equipment .....	1,625.0	1,660.6	1,687.7	1,700.2
Electronic components and accessories .....	580.8	616.6	652.3	667.0
Transportation equipment .....	1,790.2	1,784.9	1,841.8	1,873.7
Motor vehicles and equipment .....	970.9	966.8	985.1	988.2
Aircraft and parts .....	450.5	458.1	500.3	522.8
Instruments and related products .....	843.4	855.4	863.3	859.3
Miscellaneous manufacturing .....	389.7	387.8	389.3	385.9
<b>Nondurable goods</b> .....	7,841	7,706	7,670	7,618
Food and kindred products .....	1,691.9	1,691.9	1,691.0	1,704.6
Tobacco products .....	42.1	41.4	41.2	40.2
Textile mill products .....	663.2	626.5	615.5	596.1
Apparel and other textile products .....	935.8	867.7	825.6	770.3
Paper and allied products .....	692.8	683.6	685.1	681.5
Printing and publishing .....	1,545.9	1,540.3	1,552.6	1,566.2
Chemicals and allied products .....	1,038.1	1,033.8	1,033.8	1,035.8
Petroleum and coal products .....	145.2	142.1	139.7	135.5
Rubber and misc. plastics products .....	979.9	982.7	995.1	1,005.9
Leather and leather products .....	105.6	95.7	90.2	82.0
<b>Service-producing</b> .....	92,925	95,115	97,756	100,577
<b>Transportation and public utilities</b> .....	6,132	6,253	6,395	6,551
Transportation .....	3,904	4,019	4,106	4,209
Railroad transportation .....	238.4	230.9	226.9	232.4
Local and interurban passenger transit .....	419.2	436.9	450.6	462.3
Trucking and warehousing .....	1,587.1	1,636.8	1,667.2	1,707.0
Water transportation .....	174.5	174.1	180.4	186.6
Transportation by air .....	1,068.3	1,107.4	1,127.9	1,158.1
Pipelines, except natural gas .....	15.1	14.5	14.3	14.2
Transportation services .....	401.2	418.2	438.6	448.6
Communications and public utilities .....	2,229	2,234	2,290	2,341
Communications .....	1,317.6	1,350.6	1,423.5	1,486.3
Electric, gas, and sanitary services .....	910.9	883.7	865.9	855.2
<b>Wholesale trade</b> .....	6,378	6,482	6,648	6,825
Durable goods .....	3,715	3,805	3,935	4,069
Nondurable goods .....	2,663	2,677	2,713	2,756

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
ANNUAL AVERAGES**

**48. Employees on nonfarm payrolls by major industry and selected component groups—Continued**

(In thousands)

Industry	1995	1996	1997	1998P
<b>Retail trade</b> .....	21,187	21,597	22,011	22,474
Building materials and garden supplies .....	867.5	893.7	936.7	975.7
General merchandise stores .....	2,680.5	2,701.8	2,717.9	2,792.0
Department stores .....	2,345.6	2,367.4	2,388.7	2,461.4
Food stores .....	3,366.0	3,435.5	3,495.7	3,544.8
Automotive dealers and service stations .....	2,189.6	2,266.7	2,313.9	2,351.2
New and used car dealers .....	996.0	1,030.5	1,050.8	1,062.8
Apparel and accessory stores .....	1,125.4	1,098.4	1,097.7	1,104.6
Furniture and home furnishings stores .....	945.5	975.2	1,009.0	1,062.0
Eating and drinking places .....	7,354.2	7,516.6	7,635.8	7,744.2
Miscellaneous retail establishments .....	2,658.3	2,708.5	2,804.1	2,898.9
<b>Finance, insurance, and real estate</b> .....	6,806	6,911	7,091	7,341
Finance .....	3,231	3,303	3,413	3,553
Depository institutions .....	2,025.1	2,018.6	2,027.0	2,041.4
Commercial banks .....	1,465.5	1,458.3	1,460.1	1,459.7
Savings institutions .....	275.8	265.8	261.5	263.6
Nondepository institutions .....	462.9	522.0	567.2	620.3
Mortgage bankers and brokers .....	204.9	233.0	252.5	288.8
Security and commodity brokers .....	525.4	553.0	596.8	648.6
Holding and other investment offices .....	217.2	209.9	221.8	242.9
Insurance .....	2,225	2,226	2,260	2,329
Insurance carriers .....	1,528.8	1,517.1	1,535.4	1,585.6
Insurance agents, brokers, and service .....	695.5	708.6	724.4	743.0
Real estate .....	1,351	1,382	1,419	1,459
<b>Services<sup>1</sup></b> .....	33,117	34,454	36,040	37,525
Agricultural services .....	581.8	627.2	679.1	713.5
Hotels and other lodging places .....	1,668.1	1,715.0	1,744.2	1,771.9
Personal services .....	1,162.9	1,180.2	1,181.9	1,181.2
Business services .....	6,812.4	7,293.0	7,982.7	8,546.9
Services to buildings .....	882.2	906.8	937.4	976.3
Personnel supply services .....	2,475.5	2,653.5	2,968.4	3,162.1
Help supply services .....	2,188.8	2,352.4	2,645.7	2,824.7
Computer and data processing services .....	1,089.9	1,227.7	1,410.6	1,602.9
Auto repair, services, and parking .....	1,020.1	1,080.0	1,124.3	1,159.0
Miscellaneous repair services .....	359.1	371.8	375.9	386.4
Motion pictures .....	487.6	524.7	548.1	564.5
Amusement and recreation services .....	1,417.4	1,476.1	1,572.9	1,687.7
Health services .....	9,230.4	9,477.9	9,719.5	9,903.8
Offices and clinics of medical doctors .....	1,608.9	1,678.3	1,742.9	1,817.3
Nursing and personal care facilities .....	1,691.4	1,730.4	1,754.5	1,757.3
Hospitals .....	3,772.1	3,811.5	3,868.7	3,952.6
Home health care services .....	628.7	674.6	712.5	680.1
Legal services .....	921.4	927.5	947.3	981.4
Educational services .....	1,965.2	2,029.9	2,114.2	2,206.8
Social services .....	2,335.6	2,412.6	2,513.8	2,628.0
Child day care services .....	562.6	564.7	569.5	580.7
Residential care .....	642.6	676.8	716.8	751.3
Museums and botanical and zoological gardens .....	80.4	85.4	89.9	92.0
Membership organizations .....	2,145.9	2,201.4	2,248.2	2,270.6
Engineering and management services .....	2,731.1	2,844.3	3,004.8	3,235.5
Engineering and architectural services .....	814.8	836.2	869.1	917.8
Management and public relations .....	805.2	869.5	943.7	1,045.3
Services, nec .....	44.6	47.1	49.6	52.4
<b>Government</b> .....	19,305	19,419	19,570	19,862
Federal .....	2,822	2,757	2,699	2,684
Federal, except Postal Service .....	1,978.3	1,900.9	1,841.5	1,818.5
State .....	4,635	4,606	4,594	4,649
Education .....	1,919.0	1,910.7	1,911.7	1,940.6
Other State government .....	2,715.4	2,695.0	2,682.2	2,708.5
Local .....	11,849	12,056	12,276	12,529
Education .....	6,605.6	6,748.1	6,913.0	7,071.0
Other local government .....	5,243.4	5,308.1	5,363.0	5,457.6

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

P = preliminary.

NOTE: Establishment survey estimates are currently projected from

March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA  
EMPLOYMENT  
ANNUAL AVERAGES**

**49. Production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group**

Industry	1995	1996	1997	1998 <sup>P</sup>
<b>Total private</b> .....	80,125	82,092	84,529	86,713
<b>Goods-producing</b> .....	17,243	17,405	17,751	17,949
<b>Mining</b> .....	424	430	446	436
<b>Construction</b> .....	3,993	4,199	4,409	4,617
<b>Manufacturing</b> .....	12,826	12,776	12,896	12,896
<b>Durable goods</b> .....	7,317	7,386	7,539	7,597
Lumber and wood products .....	632.1	639.6	652.8	660.6
Furniture and fixtures .....	403.1	398.4	405.1	417.0
Stone, clay, and glass products .....	417.9	423.1	430.9	440.0
Primary metal industries .....	552.8	553.4	555.5	557.2
Blast furnaces and basic steel products .....	184.5	184.5	181.3	180.0
Fabricated metal products .....	1,079.8	1,088.3	1,111.8	1,122.1
Industrial machinery and equipment .....	1,294.6	1,320.9	1,361.7	1,382.5
Electronic and other electrical equipment .....	1,044.9	1,056.0	1,067.9	1,066.3
Transportation equipment .....	1,200.3	1,209.6	1,254.0	1,252.1
Motor vehicles and equipment .....	761.4	763.6	778.8	758.8
Instruments and related products .....	416.5	423.1	426.3	430.0
Miscellaneous manufacturing .....	275.5	273.3	273.1	269.4
<b>Nondurable goods</b> .....	5,508	5,390	5,357	5,299
Food and kindred products .....	1,247.5	1,253.7	1,255.8	1,266.3
Tobacco products .....	32.0	32.0	31.8	31.2
Textile mill products .....	560.2	529.4	521.7	504.8
Apparel and other textile products .....	776.1	711.2	674.1	619.7
Paper and allied products .....	525.4	519.0	522.3	519.1
Printing and publishing .....	847.6	841.3	847.0	844.5
Chemicals and allied products .....	580.2	575.4	571.6	582.0
Petroleum and coal products .....	93.8	92.0	92.1	89.3
Rubber and misc. plastics products .....	762.7	762.0	771.6	779.9
Leather and leather products .....	82.7	73.9	68.6	61.6
<b>Service-producing</b> .....	62,882	64,687	66,778	68,763
<b>Transportation and public utilities</b> .....	5,140	5,260	5,355	5,427
<b>Wholesale trade</b> .....	5,163	5,238	5,355	5,470
<b>Retail trade</b> .....	18,639	19,002	19,375	19,737
<b>Finance, insurance, and real estate</b> .....	4,961	5,043	5,180	5,390
<b>Services</b> .....	28,979	30,144	31,513	32,740

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

P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS  
ANNUAL AVERAGES**

**50. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by major industry and manufacturing group**

Industry	Average weekly hours				Average hourly earnings				Average weekly earnings			
	1995	1996	1997	1998P	1995	1996	1997	1998P	1995	1996	1997	1998P
<b>Total private</b> .....	34.5	34.4	34.6	34.6	\$11.43	\$11.82	\$12.28	\$12.77	\$394.34	\$406.61	\$424.89	\$441.84
<b>Goods-producing</b> .....	41.0	41.1	41.3	41.0	13.04	13.47	13.92	14.33	534.64	553.62	574.90	587.53
<b>Mining</b> .....	44.7	45.3	45.4	43.9	15.30	15.62	16.17	16.95	683.91	707.59	734.12	744.11
<b>Construction</b> .....	36.9	39.0	36.9	38.8	15.09	15.47	16.03	16.56	587.00	603.33	623.57	642.53
<b>Manufacturing</b> .....	41.6	41.6	42.0	41.7	12.37	12.77	13.17	13.49	514.59	531.23	553.14	562.53
<i>Overtime</i> .....	4.4	4.5	4.8	4.6	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Durable goods</b> .....	42.4	42.4	42.8	42.3	12.94	13.33	13.73	13.99	548.66	565.19	587.64	591.78
<i>Overtime</i> .....	4.7	4.8	5.1	4.8	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Lumber and wood products .....	40.6	40.8	41.0	41.1	10.12	10.44	10.77	11.11	410.87	425.95	441.57	456.62
Furniture and fixtures .....	39.6	39.4	40.2	40.5	9.82	10.15	10.55	10.89	388.87	399.91	424.11	441.05
Stone, clay, and glass products .....	43.0	43.3	43.2	43.4	12.41	12.82	13.18	13.61	533.63	555.11	569.38	590.67
Primary metal industries .....	44.0	44.2	44.9	44.2	14.62	14.97	15.22	15.48	643.28	661.67	683.38	684.22
Blast furnaces and basic steel products .....	44.4	44.5	44.9	44.6	17.33	17.80	18.03	18.43	769.45	792.10	809.55	821.98
Fabricated metal products .....	42.4	42.4	42.6	42.3	12.13	12.50	12.79	13.07	514.31	530.00	544.85	552.86
Industrial machinery and equipment .....	43.4	43.1	43.6	42.8	13.24	13.59	14.07	14.45	574.62	585.73	613.45	618.46
Electronic and other electrical equipment .....	41.6	41.5	42.0	41.4	11.69	12.18	12.70	13.12	486.30	505.47	533.40	543.17
Transportation equipment .....	43.8	44.0	44.5	43.4	16.74	17.19	17.56	17.56	733.21	756.36	781.42	762.10
Motor vehicles and equipment .....	44.9	44.9	45.0	43.5	17.34	17.74	18.06	17.94	778.57	796.53	812.70	780.39
Instruments and related products .....	41.4	41.7	42.0	41.3	12.71	13.13	13.51	13.77	526.19	547.52	567.42	568.70
Miscellaneous manufacturing .....	39.9	39.7	40.4	39.9	10.05	10.38	10.59	10.88	401.00	412.09	427.84	434.11
<b>Nondurable goods</b> .....	40.5	40.5	40.9	40.9	11.58	11.97	12.33	12.75	468.99	484.79	504.30	521.48
<i>Overtime</i> .....	4.0	4.1	4.4	4.3	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Food and kindred products .....	41.1	41.0	41.3	41.7	10.93	11.20	11.49	11.80	449.22	459.20	474.54	492.06
Tobacco products .....	39.6	40.0	38.9	38.3	19.41	19.35	19.27	18.67	768.64	774.00	749.60	715.06
Textile mill products .....	40.8	40.6	41.4	41.0	9.41	9.69	10.03	10.38	383.93	393.41	415.24	425.58
Apparel and other textile products .....	37.0	37.0	37.3	37.3	7.64	7.96	8.25	8.52	282.68	294.52	307.73	317.80
Paper and allied products .....	43.1	43.3	43.7	43.4	14.23	14.67	15.04	15.50	613.31	635.21	657.25	672.70
Printing and publishing .....	38.2	38.2	38.5	38.3	12.33	12.65	13.05	13.44	471.01	483.23	502.43	514.75
Chemicals and allied products .....	43.2	43.2	43.2	43.2	15.62	16.17	16.58	17.13	674.78	698.54	716.26	740.02
Petroleum and coal products .....	43.7	43.6	43.1	43.6	19.36	19.32	20.18	20.88	846.03	842.35	869.76	910.37
Rubber and misc. plastics products .....	41.5	41.5	41.8	41.7	10.91	11.24	11.57	11.87	452.77	466.46	483.63	494.98
Leather and leather products .....	38.0	38.1	38.4	37.6	8.17	8.57	8.98	9.33	310.46	326.52	344.83	350.81
<b>Service-producing</b> .....	32.7	32.7	32.9	32.9	10.88	11.26	11.73	12.26	355.78	368.20	385.92	403.35
<b>Transportation and public utilities</b> .....	39.4	39.6	39.7	39.5	14.13	14.45	14.93	15.35	556.72	572.22	592.72	606.33
<b>Wholesale trade</b> .....	38.3	38.3	38.4	38.4	12.43	12.87	13.44	14.01	476.07	492.92	516.10	537.98
<b>Retail trade</b> .....	28.8	28.8	28.9	29.1	7.69	7.99	8.34	8.75	221.47	230.11	241.03	254.63
<b>Finance, insurance, and real estate</b> .....	35.9	35.9	36.1	36.4	12.32	12.80	13.33	14.05	442.29	459.52	481.21	511.42
<b>Services</b> .....	32.4	32.4	32.6	32.7	11.39	11.79	12.28	12.85	369.04	382.00	400.33	420.20

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

<sup>2</sup> Not available.  
P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1997 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1997 forward are subject to revision. Overtime hours for total, durable goods, and nondurable goods manufacturing for 1995-1997 have been corrected.

# 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. Bailer, *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 Bailer, Statistical Policy Working Paper 3, U.S. Department of Commerce, Office of Federal Statistical Policy and Standards; in "The Current Population Survey: An Overview," by Marvin Thompson and Gary Shapiro, *Annals of Economic and Social Measurement*, Vol. 2, April 1973; and in *The Current Population Survey, Design and Methodology*, Technical Paper No. 40, Bureau of the Census, U.S. Department of Commerce. This last document includes a comprehensive discussion of various sources of errors and describes attempts to measure them in the CPS.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
<b>Labor force and not-in-labor-force data other than agricultural employment and unemployment:</b>		
Total <sup>1</sup> .....	-0.00017682	2985.26
Men <sup>1</sup> .....	-.000032770	2764.05
Women .....	-.000029553	2529.99
Both sexes, 16 to 19 years .....	-.000171805	2544.62
<b>White<sup>1</sup> .....</b>		
Men .....	-.000020028	2984.72
Women .....	-.000036840	2766.67
Both sexes, 16 to 19 years .....	-.000033710	2526.82
Black .....	-.000204195	2549.88
Men .....	-.000125300	3139.26
Women .....	-.000302096	2930.79
Both sexes, 16 to 19 years .....	-.000182509	2637.41
Hispanic origin .....	-.001294516	2949.48
Not in labor force, total or white, excluding women and 16-to-19 year olds .....	-.000206380	3895.71
<b>Agricultural employment:</b>		
Total or white .....	.000005931	828.79
Men .....	.000782035	3048.57
Women or both sexes, 16 to 19 years .....	.000858136	2825.09
Black .....	-.000024885	2582.39
Hispanic origin:		
Total or women .....	-.000134884	3154.76
Men or both sexes, 16 to 19 years .....	.011857446	2894.85
Unemployment:		
Total or white .....	.015736341	1702.50
Black .....	-.000017962	2957.13
Hispanic origin .....	-.000212109	3149.77
	-.000101820	3576.47

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Characteristic	a	b
<b>Labor force and not-in-labor-force data other than agricultural employment and unemployment:</b>		
Total or white:		
Most characteristics .....	-0.000012482	2001.12
High correlation characteristics <sup>1</sup> .....	-.000009288	1564.84
Low correlation characteristics <sup>1</sup> .....	-.000016162	2550.56
Men:		
Most characteristics .....	-.000022599	1921.13
High correlation characteristics .....	-.000016814	1500.99
Low correlation characteristics .....	-.000058387	2668.56
Women:		
Most characteristics .....	-.000021229	1689.99
Low correlation characteristics .....	-.000059785	2690.59
Both sexes, 16 to 19 years .....	-.000186555	2616.54
Black:		
Most characteristics .....	-.000098960	2147.36
Low correlation characteristics .....	-.001928030	6513.82
Men:		
Most characteristics .....	-.000234427	2280.03
Low correlation characteristics .....	-.002881467	5829.60
Women:		
Most characteristics .....	-.000156363	1860.78
Low correlation characteristics .....	-.002311407	5420.13
Both sexes, 16 to 19 years .....	-.001288452	3131.77
Hispanic origin:		
Total .....	-.000157201	2774.53
Civilian labor force and not in labor force .....	-.000102898	1930.51
Low correlation characteristics .....	-.002624078	8620.43
Men, civilian labor force and not in labor force .....	-.000248038	2347.42
Men, 16 years and over; 20 years and over; and both sexes, 16 to 19 years .....	-.000398909	3615.62
Women, 16 years and over and 20 years and over .....	-.000338741	2569.69
<b>Agricultural employment:</b>		
Total or white:		
Total .....	-.000395757	3838.04
Men .....	-.000672985	3959.25
Women or both sexes, 16 to 19 years .....	.000130289	2367.00
Black:		
Total or women .....	-.000122355	2861.72
Men or both sexes, 16 to 19 years .....	-.019110769	5876.77
Hispanic origin:		
Total or women .....	.002872129	4640.81
Men or both sexes, 16 to 19 years .....	.002884390	4028.10
Self-employed .....	-.000245791	2091.57
<b>Unemployment:<sup>2</sup></b>		
Total or white:		
Total, men, women .....	-.000093662	4191.84
Both sexes, 16 to 19 years and low correlation characteristics .....	-.000071624	5121.75
Black:		
Total, men, women, and both sexes, 16 to 19 years .....	-.000414217	4361.16
High correlation characteristics .....	.000048170	3088.91
Hispanic origin:		
Total, men, women .....	-.000252897	5054.25
Both sexes, 16 to 19 years and low correlation characteristics .....	-.000996431	7037.75

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## THE SAMPLE

### Design

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

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

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

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

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

### Coverage

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

### Reliability

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

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

**Table 2-B. March employment benchmarks and bias adjustments for total private industries, March 1987-97**

(In thousands)

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

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

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

<sup>3</sup> The average amount of bias adjustment each month over the

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

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

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

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



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

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

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

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

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

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

If  $S_1 = S_2$ , then:

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

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

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

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

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

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

**Table 2-C. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1997**

Industry	Bench- marks (thou- sands)	Sample coverage <sup>1</sup>		
		Number of establish- ments	Employees	
			Number (thou- sands)	Percent of bench- marks
Total .....	120,903	316,992	44,036	36
Mining .....	580	3,057	225	39
Construction .....	5,260	25,915	1,010	19
Manufacturing .....	18,519	56,104	8,654	47
Transportation and public utilities .....	6,331	<sup>2</sup> 16,398	2,263	36
Wholesale trade ..	6,567	25,215	1,148	17
Retail trade .....	21,467	60,605	5,086	24
Finance, insurance, and real estate ...	6,988	21,824	2,005	29
Services .....	35,328	75,482	8,333	24
Government:				
Federal .....	2,700	<sup>3</sup> 5,145	2,700	100
State .....	4,692	6,880	3,848	82
Local .....	12,471	20,367	8,764	70

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

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

<sup>3</sup> Total Federal employment counts by agency for use in national estimates are provided to BLS by the Office of Personnel Management. Detailed industry estimates for the Executive Branch, as well as State and area estimates of Federal employment, are based on a sample of reports covering about 51 percent of employment in Federal establishments.

**Table 2-D. Current (March 1997) and historical benchmark revisions**  
(Numbers in thousands)

Industry	March 1997 benchmark revision		10-year average mean percent revision <sup>1</sup>	
	Level	Percent	Actual	Absolute
Total .....	431	0.4	0.1	0.3
Total private .....	518	.5	.1	.4
Goods-producing .....	196	.8	.1	.8
Mining .....	18	3.1	-.6	1.7
Metal mining .....	-1	-1.9	-1.7	3.3
Coal mining .....	4	4.2	-1.0	2.6
Oil and gas extraction .....	14	4.3	-.4	2.4
Nonmetallic minerals, except fuels .....	0	0	-.4	1.6
Construction .....	56	1.1	-.4	1.3
General building contractors .....	10	.8	-.6	2.3
Heavy construction, except building .....	24	3.4	.6	2.1
Special trade contractors .....	22	.7	-.6	1.2
Manufacturing .....	122	.7	.2	.7
Durable goods .....	73	.7	.3	.8
Lumber and wood products .....	-4	-.5	.2	1.7
Furniture and fixtures .....	2	.4	.3	1.1
Stone, clay, and glass products .....	10	1.9	.5	.9
Primary metal industries .....	0	0	-.1	.8
Blast furnaces and basic steel products .....	-1	-.4	.6	1.2
Fabricated metal products .....	3	.2	.2	.7
Industrial machinery and equipment .....	9	.4	(?)	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	(?)	.9
Petroleum and coal products .....	0	0	-.5	1.7
Rubber and miscellaneous plastics products .....	6	.6	.5	1.5
Leather and leather products .....	0	0	-.1	2.1
Service-producing .....	235	.2	.1	.3
Transportation and public utilities .....	-22	-.3	-.3	1
Transportation .....	-61	-1.5	-.6	1.4
Railroad transportation .....	-1	-.4	-1.1	1.1
Local and interurban passenger transit .....	-7	-1.5	-.5	2.1
Trucking and warehousing .....	-13	-.8	-1.7	2.9
Water transportation .....	3	1.7	.4	3.5
Transportation by air .....	-46	-4.1	2.0	5.3
Pipelines, except natural gas .....	0	0	.6	5.2
Transportation services .....	2	.5	-1.3	3.0
Communications and public utilities .....	39	1.7	.1	1.2
Communications .....	42	3.0	.2	1.9
Electric, gas, and sanitary services .....	-3	-.3	-.1	.7
Wholesale trade .....	-4	-.1	-.5	1.2
Durable goods .....	5	1	-.5	1.5
Nondurable goods .....	-9	-.3	-.5	1.0

See footnotes at end of table.

**Table 2-D. Current (March 1997) and historical benchmark revisions—Continued**  
(Numbers in thousands)

Industry	March 1997 benchmark revision		10-year average mean percent revision <sup>1</sup>	
	Level	Percent	Actual	Absolute
Retail trade .....	-27	-.1	.4	.6
Building materials and garden supplies .....	6	.7	.1	1.5
General merchandise stores .....	-76	-2.9	1.8	2.9
Department stores .....	-65	-2.8	2.4	3.7
Food stores .....	2	.1	-.2	.7
Automotive dealers and service stations .....	-9	-.4	-1.1	1.1
New and used car dealers .....	-6	-.6	-.7	1.0
Apparel and accessory stores .....	-7	-.7	1.1	1.6
Furniture and home furnishings stores .....	-32	-3.3	-.7	1.4
Eating and drinking places .....	118	1.6	.8	1.2
Miscellaneous retail establishments .....	-27	-1.0	.1	.9
Finance, insurance, and real estate .....	37	.5	-.3	1.2
Finance .....	9	.3	-.7	1.3
Depository institutions .....	-15	-.7	-1.1	1.4
Commercial banks .....	-24	-1.7	-.6	.9
Savings institutions <sup>3</sup> .....	8	3.1	-3.6	6.1
Nondepository institutions .....	20	3.6	1.2	2.5
Mortgage bankers and brokers .....	6	2.4	1.1	5.0
Security and commodity brokers .....	4	.7	-.1	1.2
Holding and other investment offices .....	1	.5	-3.7	5.0
Insurance .....	27	1.2	.4	1.3
Insurance carriers .....	23	1.5	.3	1.6
Insurance agents, brokers, and service .....	4	.6	.5	1.2
Real estate .....	1	.1	-.4	1.5
Services <sup>4</sup> .....	338	1.0	.2	.6
Agricultural services .....	8	1.4	2.0	2.2
Hotels and other lodging places .....	-4	-.2	.5	1.3
Personal services .....	-13	-1.0	.5	1.5
Business services .....	218	2.8	.7	2.0
Services to buildings .....	31	3.4	1.3	1.7
Personnel supply services .....	118	4.2	1.7	3.8
Help supply services <sup>3</sup> .....	130	5.2	2.0	3.1
Computer and data processing services .....	64	4.7	( <sup>2</sup> )	3.3
Auto repair, services, and parking .....	-12	-1.1	-1.2	1.5
Miscellaneous repair services .....	-9	-2.4	-.8	4.8
Motion pictures .....	7	1.3	-1.8	4.0
Amusement and recreation services .....	33	2.3	.8	2.8
Health services .....	29	.3	-.7	.8
Offices and clinics of medical doctors .....	-1	-1	-.9	1.6
Nursing and personal care facilities .....	-5	-.3	-.6	.8
Hospitals .....	-6	-.2	-.8	.8
Home health care services <sup>3</sup> .....	29	4.1	1.5	2.8
Legal services .....	-8	-.9	-.5	1.2
Educational services .....	31	1.4	1.2	2.8
Social services .....	31	1.2	-.3	1.6
Child day care services .....	-15	-2.6	-2.8	4.8
Residential care .....	16	2.3	.1	1.6
Museums and botanical and zoological gardens .....	3	3.6	1.9	2.5
Membership organizations .....	53	2.4	2.6	3.3
Engineering and management services <sup>3</sup> .....	-7	-.2	.1	1.4
Engineering and architectural services .....	-9	-1.1	-.8	1.3
Management and public relations <sup>3</sup> .....	-12	-1.3	.9	3.3
Services, nec .....	0	0	.3	.7
Government .....	-87	-.4	( <sup>2</sup> )	.2
Federal .....	0	0	0	0
Federal, except Postal Service .....	0	0	0	0
State .....	-56	-1.2	.2	.6
Education .....	-41	-2.0	.3	1.2
Other State government .....	-15	-.6	.2	.5
Local .....	-31	-.2	( <sup>2</sup> )	.3
Education .....	1	0	-.1	.3
Other local government .....	-33	-.6	0	.4

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

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

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

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

**Table 2-E. Relative standard errors<sup>1</sup> for estimates of employment, hours, and earnings**  
(In percent)

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

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

**Table 2-F. Relative standard errors<sup>1</sup> for estimates of employment, hours, and earnings by industry**  
(In percent)

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

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

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

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

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

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

## STATISTICS FOR STATES AND AREAS

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

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

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

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

**Table 2-G. Errors of preliminary employment estimates**

Industry	Root-mean-square error of monthly level <sup>1</sup>	Mean percent revision	
		Actual	Absolute
Total .....	57,900	0	0
Total private .....	49,000	0	0
Goods-producing .....	13,200	0	0
Mining .....	1,800	0	.2
Metal mining .....	300	-.1	.4
Coal mining .....	800	.1	.6
Oil and gas extraction .....	1,800	0	.4
Nonmetallic minerals, except fuels .....	300	0	.2
Construction .....	8,000	.1	.1
General building contractors .....	4,000	.1	.3
Heavy construction, except building .....	3,500	0	.4
Special trade contractors .....	4,800	.1	.1
Manufacturing .....	9,000	0	0
Durable goods .....	6,400	0	0
Lumber and wood products .....	1,300	.1	.1
Furniture and fixtures .....	1,200	0	.2
Stone, clay, and glass products .....	1,100	0	.2
Primary metal industries .....	1,700	0	.2
Blast furnaces and basic steel products .....	1,400	0	.4
Fabricated metal products .....	2,000	0	.1
Industrial machinery and equipment .....	2,500	0	.1
Computer and office equipment .....	1,500	.2	.3
Electronic and other electrical equipment .....	2,400	0	.1
Electronic components and accessories .....	1,400	0	.2
Transportation equipment .....	4,200	0	.2
Motor vehicles and equipment .....	3,700	.1	.3
Aircraft and parts .....	1,600	0	.2
Instruments and related products .....	1,600	0	.1
Miscellaneous manufacturing .....	1,100	.1	.2
Nondurable goods .....	4,700	0	.1
Food and kindred products .....	2,800	-.1	.1
Tobacco products .....	500	.5	.9
Textile mill products .....	1,100	0	.1
Apparel and other textile products .....	2,500	.1	.2
Paper and allied products .....	1,200	0	.1
Printing and publishing .....	1,600	.1	.1
Chemicals and allied products .....	1,700	-.1	.1
Petroleum and coal products .....	900	0	.4
Rubber and miscellaneous plastics products .....	1,500	0	.1
Leather and leather products .....	600	0	.4
Service-producing .....	53,500	0	0
Transportation and public utilities .....	10,000	-.1	.1
Transportation .....	9,000	-.1	.2
Railroad transportation .....	2,200	-.1	.7
Local and interurban passenger transit .....	3,700	-.2	.6
Trucking and warehousing .....	5,800	-.1	.2
Water transportation .....	1,500	-.3	.8
Transportation by air .....	4,700	-.1	.4
Pipelines, except natural gas .....	200	-.3	.7
Transportation services .....	1,200	-.1	.2
Communications and public utilities .....	4,300	0	.1
Communications .....	3,800	.1	.2
Electric, gas, and sanitary services .....	1,700	0	.1
Wholesale trade .....	7,300	.1	.1
Durable goods .....	4,200	.1	.1
Nondurable goods .....	4,800	.1	.1

See footnotes at end of table.

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

Industry	Root-mean-square error of monthly level <sup>1</sup>	Mean percent revision	
		Actual	Absolute
Retail trade .....	33,100	.1	.1
Building materials and garden supplies .....	2,500	0	.2
General merchandise stores .....	18,700	.1	.5
Department stores .....	17,300	.1	.5
Food stores .....	6,100	.1	.1
Automotive dealers and service stations .....	2,900	-.1	.1
New and used car dealers .....	1,200	-.1	.1
Apparel and accessory stores .....	5,900	.2	.4
Furniture and home furnishings stores .....	3,500	.1	.3
Eating and drinking places .....	11,700	.1	.1
Miscellaneous retail establishments .....	8,600	.2	.3
Finance, insurance, and real estate .....	5,900	0	.1
Finance .....	3,400	0	.1
Depository institutions .....	2,400	0	.1
Commercial banks .....	1,800	0	.1
Savings institutions .....	1,200	-.1	.3
Nondepository institutions .....	1,400	.1	.2
Mortgage bankers and brokers .....	1,000	0	.3
Security and commodity brokers .....	1,000	0	.2
Holding and other investment offices .....	1,600	0	.5
Insurance .....	2,800	0	.1
Insurance carriers .....	2,600	0	.1
Insurance agents, brokers, and service .....	1,100	.1	.1
Real estate .....	2,600	0	.2
Services <sup>2</sup> .....	29,600	0	.1
Agricultural services .....	2,800	.1	.4
Hotels and other lodging places .....	6,200	.1	.3
Personal services .....	7,900	-.1	.4
Business services .....	12,600	.1	.1
Services to buildings .....	2,600	0	.2
Personnel supply services .....	11,100	.1	.3
Help supply services .....	10,700	.1	.3
Computer and data processing services .....	2,500	.1	.2
Auto repair, services, and parking .....	2,100	0	.2
Miscellaneous repair services .....	1,100	0	.2
Motion pictures .....	5,700	0	.7
Amusement and recreation services .....	9,000	.2	.5
Health services .....	5,300	0	0
Offices and clinics of medical doctors .....	2,600	0	.1
Nursing and personal care facilities .....	1,700	0	.1
Hospitals .....	3,100	0	.1
Home health care services .....	2,000	.1	.3
Legal services .....	1,400	0	.1
Educational services .....	13,200	.1	.6
Social services .....	8,300	.1	.3
Child day care services .....	4,600	.2	.6
Residential care .....	1,400	0	.2
Museums and botanical and zoological gardens .....	700	.2	.6
Membership organizations .....	3,400	0	.1
Engineering and management services .....	4,900	0	.1
Engineering and architectural services .....	2,300	0	.2
Management and public relations .....	3,300	.1	.3
Services, nec .....	400	0	.7
Government .....	19,700	0	.1
Federal .....	9,400	0	.2
Federal, except Postal Service .....	8,500	0	.3
State .....	11,200	0	.2
Education .....	10,100	0	.4
Other State government .....	5,200	0	.2
Local .....	16,200	0	.1
Education .....	13,600	.1	.1
Other local government .....	11,000	0	.1

<sup>1</sup> The root-mean-square error is the square root of the mean squared error. The mean squared error is the square of the difference between the final and preliminary estimates averaged across a series of monthly observations.

<sup>2</sup> Includes other industries, not shown separately.

NOTE: Errors are based on differences from January 1993 through December 1997.

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

## FEDERAL-STATE COOPERATIVE PROGRAM

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

Annual average data for the States and 334 areas shown in table C-3 are published in *Employment and Earnings* (usually the May issue). For regions, States, selected metropolitan areas, and central cities, annual average data classified by selected demographic, social, and economic characteristics are published in the BLS bulletin, *Geographic Profile of Employment and Unemployment*.

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

## ESTIMATING METHODS

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

### Estimates for States

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

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

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

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

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

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

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

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

### **Estimates for sub-State areas**

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

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

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

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

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



## Seasonal Adjustment

Over the course of a year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical and other non-seasonal movements in the series. In evaluating changes in a seasonally adjusted series, it is important to note that seasonal adjustment is merely an approximation based on past experience. Seasonally adjusted estimates have a broader margin of possible error than the original data on which they are based, because they are subject not only to sampling and other errors but are also affected by the uncertainties of the seasonal adjustment process itself. Seasonally adjusted series for selected labor force and establishment-based data are published monthly in *Employment and Earnings*.

### Household data

Since January 1980, national labor force data have been seasonally adjusted with a procedure called *X-11 ARIMA* (Auto-Regressive Integrated Moving Average), which was developed at Statistics Canada as an extension of the standard X-11 method. A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method* by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, January 1983.

BLS uses an extension of X-11 ARIMA to allow it to adjust more adequately for the effects of the presence or absence of religious holidays in the April survey reference period and of Labor Day in the September reference period. This extension was applied for the first time at the end of 1989 to three persons-at-work labor force series which tested as having significant and well-defined effects in their April data associated with the timing of Easter.

At the beginning of each calendar year, projected seasonal adjustment factors are calculated for use during the January-June period. In July of each year, BLS calculates and publishes in *Employment and Earnings* projected seasonal adjustment factors for use in the second half, based on the experience through June. Revisions of historical data, usually for the most recent 5 years, are made only at the beginning of each calendar year. However, as a result of the revisions to the estimates for 1970-81 based on 1980 census population counts, revisions to seasonally adjusted series in early 1982 were carried back to 1970. In 1994, data were revised only for that year because of the major redesign and

1990 census-based population controls, adjusted for the estimated undercount, introduced into the Current Population Survey. In 1996, 1990-93 data also were revised to incorporate these 1990 census-based population controls and seasonally adjusted series were revised back to 1990. Subsequent revisions are only carried back to 1994.

All labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, for each of the three major labor force components—agricultural employment, nonagricultural employment, and unemployment—data for four sex-age groups (men and women under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. The seasonally adjusted figure for the labor force is a sum of eight seasonally adjusted civilian employment components and four seasonally adjusted unemployment components. The total for unemployment is the sum of the four unemployment components, and the unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force. Because of the independent seasonal adjustment of various series, components will not necessarily add to totals.

In each January issue (March issue in 1996), *Employment and Earnings* publishes revised seasonally adjusted data for selected labor force series based on the experience through December, new seasonal adjustment factors to be used to calculate the civilian unemployment estimate for the first 6 months of the following year, and a description of the current seasonal adjustment procedure.

### Establishment data

Effective in June 1997, with the release of the March 1996 benchmark revisions, BLS began using an updated version of the X-12 ARIMA software developed by the Bureau of the Census to seasonally adjust national establishment-based employment, hours, and earnings series. The X-12 ARIMA (first introduced in June 1996) replaces the X-11 ARIMA, which had been used to adjust these series since the early 1980's. All national establishment-based series were revised back to 1988.

The conversion to X-12 ARIMA allows BLS to refine its seasonal adjustment procedures to control for survey interval variations, sometime referred to as the 4-vs. 5-week effect. While the CES survey is referenced to a consistent concept, the pay period including the 12th day of the month, inconsistencies arise because there are variations of 4 or 5 weeks between the week of the 12th in any given pair of months. In highly seasonal months and industries, this varia-

tion can be an important determinant of the magnitude of seasonal hires or layoffs that have occurred at the time the survey is taken, thereby complicating seasonal adjustment. The interval effect adjustment is accomplished through the REGARIMA (regression with auto-correlated errors) option in the X-12 software. This process combines standard regression analysis, which measures correlations between two or more variables, with ARIMA modeling, which describes and predicts the behavior of a data series based on its own past history. In this application, the correlations of interest are those between employment levels in individual calendar months and the length of the survey intervals for those months. The REGARIMA models estimate and remove the variation in employment levels attributable to 11 separate survey intervals, one specified for each month, except March. March is excluded because there are always 4 weeks between the February and March surveys.

Projected seasonal factors for the establishment-based series are calculated and published twice a year, paralleling the procedure used for the household series. Revisions to historical data are made once a year, coincident with benchmark revisions. All series are seasonally adjusted using multiplicative models in X-12; additive models are not considered. Seasonal adjustment factors are computed and applied at component levels. For employment series, these are generally the 2-digit SIC levels. Seasonally adjusted totals are arithmetic aggregations for employment series and weighted averages of the seasonally adjusted data for hours and earnings series.

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing the average weekly earnings series by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours by production or nonsupervisory workers and dividing by the 1982 annual average base. For total private, total goods-producing, total private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours for the appropriate component industries and dividing by the 1982 annual average base.

Seasonally adjusted data are not published for a number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These series, however, are used in the aggregation to broader level seasonally adjusted series.

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

BLS also makes special adjustments for floating holidays for the establishment-based series on average weekly hours and manufacturing overtime hours. From 1988 forward, these adjustments are now accomplished as part of the X-12 ARIMA/REGARIMA modeling process rather than through the previously used moving-holiday extension of X-11 ARIMA. The special adjustment made in November each year to adjust for the effect of poll workers in the local government employment series also is incorporated into the X-12 process from 1988 forward; this replaces the X-11 ARIMA-based procedure previously used to account for this effect.

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

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

### **Region and State labor force data**

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

# INDEX TO STATISTICAL TABLES

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

Topic	Monthly		Quarterly averages		Annual averages
	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	
Absences from work .....					44-45
Aggregate weekly hours (Index) .....	B-9				
Agricultural industries .....	A-1-3, 7, 11	A-15, 21-22, 30, 35	D-1, 5, 9	D-12-15	A-1-2; 1-2, 5-6, 12-13, 15, 17-18, 26, 32 19-23 12-13, 15-16
At work .....	A-7	A-23-27	D-5		35
Class of worker .....	A-7	A-22	D-5	D-14-15	B-2, 15-17; 50; 2
Diffusion index .....	B-6				B-2, 15, 17; 37-39, 50; 2
Discouraged workers .....		A-36			7
Earnings, hourly .....	B-11	B-2, 15-18			
Earnings, weekly .....	B-11	B-2, 15, 17-18		D-20-22	
Educational attainment .....	A-5	A-16-17	D-3		
Employment by:					
Age .....	A-3-4, 6, 8	A-14-16, 18-19, 22	D-1-2, 4, 6	D-12-13, 16	3-6, 8-9, 14-15
Hispanic origin .....	A-4	A-16-17	D-2	D-12-16	4-7, 11-13, 18
Industry .....	B-3-5, 7	A-21; B-12-14			B-1, 12-13; 16-18, 48; 1
Occupation .....	A-7	A-19-21	D-5	D-14-15	9-13, 17
Race .....	A-4	A-14-18, 20	D-2	D-12, 14, 16	3, 5, 7-8, 10-12, 14, 17-18
Sex .....	A-2-4, 6-8; B-4	A-14-20, 22; B-13	D-1-2, 4-6	D-12-16	B-13; 2-18
Full-time workers .....	A-6	A-18, 33	D-4	D-14-15	8, 12-13, 30
Historical data .....					A-1-2; B-1-2; 1-2
Hours of work .....	B-8-10	A-23-27; B-2, 15, 18			B-15; 19-23, 50; 2
Jobsearch methods .....					33-34
Marital status .....	A-7, 11	A-26, 28, 34	D-5, 9		24, 31
Multiple jobholders .....		A-37			36
Nonagricultural industries .....	A-1-3, 7	A-15, 22	D-1, 5		A-1-2; 1-2, 5-6, 12-13, 15
Not in the labor force .....		A-36			35
Part-time workers .....	A-6	A-18	D-4	D-14-15	8, 12-13
Production or nonsupervisory workers .....	B-5, 8-9, 11	B-12, 15-18			B-12, 15-17; 49-50
School enrollment .....		A-16			
State, region, and area data .....	B-7; C-1-2	B-14, 18; C-3			1-3
Unemployment by:					
Age .....	A-3-4, 6, 9-10	A-14-16, 18, 28, 31-32, 34	D-1-2, 7-8	D-12-13, 17	3-6, 8, 24, 27, 29, 33
Duration .....	A-13	A-32-35	D-11	D-19	29-32
Hispanic origin .....	A-4	A-16-17	D-2	D-12-13, 17-19	4-7, 28
Industry of last job .....	A-11	A-30, 35	D-9		26, 32
Occupation of last job .....	A-11	A-29, 35	D-9		25, 32
Race .....	A-4	A-14-18, 28, 31, 34	D-2	D-12, 17-21	3, 5, 7-8, 24, 28, 31, 33
Reason .....	A-12	A-31-32	D-10	D-18	27-29
Sex .....	A-2-4, 6, 9-10	A-14-18, 28-32, 34	D-1-2, 7-8	D-12-13, 17	2-8, 24, 25-27, 29, 31, 33-35
Union affiliation .....					40-43
Veterans, Vietnam-era .....		A-38		D-23-24	46-47

**U.S. DEPARTMENT OF LABOR  
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REGION V—CHICAGO 9th Floor 230 South Dearborn Street Chicago, IL 60604 Phone: (312) 353-1880	IX CALIFORNIA Employment Development Department, Employ- ment 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
REGION VI—DALLAS Room 221 Federal Building 525 Griffin Street Dallas, TX 75202 Phone: (214) 767-6970	VIII COLORADO Department of Labor and Employment, Suite 801, 1120 Lincoln Street, Denver 80203	VI NEW MEXICO Employment Security Commission, 401 Broad- way, TIWA Bldg., Albuquerque 87103
REGIONS VII and VIII— KANSAS CITY City Center Square 1100 Main, Suite 600 Kansas City, MO 64105-2112 Phone: (816) 426-2481	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
REGIONS IX and X— SAN FRANCISCO 71 Stevenson Street P.O. Box 193766 San Francisco, CA 94119 Phone: (415) 975-4384	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
	III DIST OF COL. Department of Employment Services, Division of Labor Market Information and Analysis, Room 201, 500 C St., NW., Washington, DC 20001	VIII 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
	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
	IX HAWAII 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
	X IDAHO Department of Employment, 317 Main St., Boise 83735	III PENNSYLVANIA Bureau of Research and Statistics 300 Capitol Associates Building Harrisburg, PA 17120-0034
	V ILLINOIS 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)
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	VII IOWA Department of Employment Services, 1000 East Grand Avenue, Des Moines 50319	IV SOUTH CAROLINA Employment Security Commission, Labor Market Information Division, P.O. Box 995, Columbia 29202
	VII KANSAS Department of Human Resources, 401 Topeka Avenue, Topeka 66603	VIII SOUTH DAKOTA Department of Labor, Labor Market Information Center, P.O. Box 4730, Aberdeen 57401
	IV KENTUCKY Department for Employment Services, Labor Market Research and Analysis Branch, 275 East Main St., Frankfort 40621	IV TENNESSEE Department of Employment Security, Research and Statistics Division, 519 Cordell Hull Office Bldg., Nashville 37219
	VI LOUISIANA Department of Labor, Research and Statistics Section, 1001 North 23rd St., Baton Rouge 70804-9094	VI TEXAS Employment Commission, Room 208-T, 1117 Trinity St., Austin 78778
	I MAINE Department of Labor, Division of Economic Analysis and Research, 20 Union St., Augusta 04330	VIII UTAH Department of Employment Security, Labor Market Information Services, P.O. Box 11249, Salt Lake City 84147
	III MARYLAND Department of Employment and Training, Research and Analysis Division, 1100 North Eutaw St., Baltimore 21201	I VERMONT Department of Employment and Training, Office of Policy and Public Information, P.O. Box 488, Montpelier 05602
	I MASSACHUSETTS Department of Employment and Training, Government Center, Charles F. Hurley Bldg., Boston 02114	III VIRGINIA Employment Commission, Economic Information Services, P.O. Box 1358, Richmond 23211
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	IV MISSISSIPPI Employment Security Commission, Labor Market Information Division, P.O. Box 1699, Jackson 39215-1699	III WEST VIRGINIA Department of Employment Security, Division of Labor and Economic Security, 112 California Avenue, Charleston 25305
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