



EMPLOYMENT AND EARNINGS

June 1988

U.S. Department of Labor  
Bureau of Labor Statistics





## U.S. DEPARTMENT OF LABOR

Ann McLaughlin, Secretary

### BUREAU OF LABOR STATISTICS

Janet L. Norwood, *Commissioner*

*Employment and Earnings* is prepared in the Office of Employment and Unemployment Statistics in collaboration with the Office of Publications. The data are collected by the Bureau of the Census (Department of Commerce) and State employment security agencies, in cooperation with the Bureau of Labor Statistics. A brief description of the cooperative statistical programs of the BLS with these agencies is presented in the Explanatory Notes. The State agencies are listed on the inside back cover.

*Employment and Earnings* may be ordered through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Subscription price per year \$22 domestic and \$27.50 foreign. Single copy \$8.50 domestic and \$10.63 foreign. Annual supplement \$14 domestic and \$17.50 foreign. Prices are subject to change by the U.S. Government Printing Office. For ordering information call (202) 783-3238.

Communications on material in this publication should be addressed to: Editors, *Employment and Earnings*, Bureau of Labor Statistics, Washington, DC 20212, or phone: Gloria P. Green (202) 523-1959. Send correspondence on circulation and subscription matters (including address changes) to the Superintendent of Documents.

Second class postage paid at Washington, DC, and at additional mailing addresses.

Material in this publication is in the public domain and, with appropriate credit, may be reproduced without permission.

ISSN 0013-6840

## Calendar of Features

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

### Household data

Annual averages Jan.  
Union affiliation Jan.

Revised seasonally adjusted series Jan., Feb.

Quarterly averages: Seasonally adjusted data, persons not in labor force, persons of Hispanic origin, Vietnam-era veterans and nonveterans, family relationship data, weekly earnings data, and metropolitan-nonmetropolitan and poverty-nonpoverty area data Jan., Apr., July, Oct.

### Establishment data

National annual averages:  
Industry divisions (preliminary) Jan.

Industry detail (final) Mar.

Women employees (final) Mar.

National data revised to reflect new benchmarks and new seasonal adjustment factors June

Revised historical national data Supplement<sup>1</sup>

State and area annual averages May

Area definitions May

### State and area labor force data

Annual averages May

<sup>1</sup> The latest supplement was published in July 1987.

# Employment and Earnings

Vol. 35 No. 6 June 1988

---

Editors: Gloria Peterson Green, Rosalie K. Epstein

## Editors' Note

With this issue, national estimates of employment, hours, and earnings from the monthly survey of establishments have been revised to reflect March 1987 benchmarks (comprehensive counts of employment) and updated seasonal adjustment factors based on the experience through March 1988. As a result, unadjusted series beginning April 1986 and seasonally adjusted series beginning January 1983 are not comparable to those previously published.

The article beginning on page 6 discusses the effects of the revisions, the seasonal adjustment methodology, and new seasonal adjustment factors to be used in the ensuing 12-month period. Revised current data appear in tables B-1 through B-7 and C-1 through C-7. Revised historical data will be published in a forthcoming supplement to *Employment and Earnings*.

## Contents

	<i>Page</i>
List of statistical tables . . . . .	2
Employment and unemployment developments, May 1988 . .	4
BLS establishment estimates revised to March 1987 benchmarks .	6
Statistical tables:	
<b>Historical—</b>	
Household data	24
Establishment data:	
Employment . . . .	61
Hours and earnings .	97
<b>Not seasonally adjusted—</b>	
Household data	27
Establishment data:	
Employment:	
National . .	62
State and area .	78
Hours and earnings:	
National . .	100
State and area . . . . .	122
State and area labor force data	131
<b>Seasonally adjusted—</b>	
Household data	54
Establishment data:	
Employment . . . .	74
Hours and earnings .	119
Productivity data .	127
Explanatory notes .	137

# MONTHLY HOUSEHOLD DATA

Page

## Employment Status

A- 1.	Employment status of the noninstitutional population 16 years and over, 1954 to date . . . .	24
A- 2.	Employment status of the noninstitutional population 16 years and over by sex, 1977 to date .	25
A- 3.	Employment status of the civilian noninstitutional population 16 years and over, 1954 to date .	26
A- 4.	Employment status of the civilian noninstitutional population by age, sex, and race .	27
A- 5.	Employment status of the black-and-other civilian noninstitutional population by sex and age .	30
A- 6.	Employment status of the civilian noninstitutional population by race, sex, and age .	31
A- 7.	Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin .	32
A- 8.	Employment status of male Vietnam-era veterans and nonveterans by age .	34
A- 9.	Employed and unemployed full-and part-time workers by sex, age, and race	35
A-10.	Employment status of persons in families by family relationship .	36

## Characteristics of the Unemployed

A-11.	Unemployed persons by marital status, race, age, and sex .	37
A-12.	Unemployed persons by occupation and sex .	38
A-13.	Unemployed persons by industry and sex . . . . .	39
A-14.	Unemployed persons by reason for unemployment, sex, and race . . . . .	40
A-15.	Unemployed persons by reason for unemployment, sex, age, and duration of unemployment .	41
A-16.	Unemployed persons by duration of unemployment . . . . .	41
A-17.	Unemployed persons by sex, age, race, marital status, and duration of unemployment	42
A-18.	Unemployed persons by occupation, industry, and duration of unemployment .	43
A-19.	Unemployed jobseekers by sex, age, race, and jobsearch methods used . . . . .	44
A-20.	Unemployed jobseekers by sex, reason for unemployment, and jobsearch methods used .	44

## Characteristics of the Employed

A-21.	Employed civilians in agriculture and nonagricultural industries by age and sex . .	45
A-22.	Employed civilians by occupation, sex, and age .	46
A-23.	Employed civilians by occupation, race, and sex . . . . .	47
A-24.	Employed civilians by age, sex, and class of worker .	48
A-25.	Employed civilians by industry and occupation . . . . .	49
A-26.	Employed civilians with a job but not at work by reason, sex, and pay status .	49
A-27.	Persons at work by hours of work and type of industry . . . . .	50
A-28.	Persons at work 1 to 34 hours by reason for working less than 35 hours, type of industry, and usual status . . . . .	50
A-29.	Persons at work in nonagricultural industries by class of worker and full- or part-time status . . . . .	51
A-30.	Persons at work in nonagricultural industries by sex, age, race, marital status, and full- or part-time status . . . . .	52
A-31.	Persons at work in nonfarm occupations by sex and full- or part-time status . . . . .	53

## Seasonally Adjusted Employment and Unemployment Data

A-32.	Employment status of the noninstitutional population, including Armed Forces stationed in the United States, by sex, seasonally adjusted . . . . .	54
A-33.	Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted . . . . .	55
A-34.	Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin, seasonally adjusted . . . . .	56
A-35.	Employed civilians by selected social and economic categories, seasonally adjusted .	57
A-36.	Employed civilians by sex and age, seasonally adjusted . . .	58
A-37.	Unemployed persons by sex and age, seasonally adjusted .	58
A-38.	Unemployment rates by sex and age, seasonally adjusted .	59
A-39.	Selected unemployment indicators, seasonally adjusted . . . . .	59
A-40.	Unemployed persons by duration of unemployment, seasonally adjusted .	60
A-41.	Unemployed persons by reason for unemployment, seasonally adjusted .	60

# MONTHLY ESTABLISHMENT DATA

Page

## Employment—National

B- 1.	Employees on nonagricultural payrolls by major industry, 1936 to date . . . . .	61
B- 2.	Employees on nonagricultural payrolls by detailed industry . . . . .	62
B- 3.	Women employees on nonagricultural payrolls by major industry and manufacturing group . . . . .	73
B- 4.	Employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted . . . . .	74
B- 5.	Women employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted . . . . .	75
B- 6.	Production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted . . . . .	76
B- 7.	Indexes of diffusion: Percent of industries in which employment increased, seasonally adjusted . . . . .	77

## Employment—States and Areas

B- 8.	Employees on nonagricultural payrolls in States and selected areas by major industry . . . . .	78
-------	--	----

## Hours and Earnings—National

C- 1.	Average hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls by major industry, 1964 to date . . . . .	97
C- 2.	Average hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls by detailed industry . . . . .	100
C- 2a.	Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) . . . . .	116
C- 2b.	Corrected average hourly and weekly earnings in guided missiles, space vehicles, and parts manufacturing (SIC 376) . . . . .	117
C- 3.	Average hourly earnings, excluding overtime, of production workers on manufacturing payrolls . . . . .	117
C- 4.	Average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls by major industry, in current and constant (1977) dollars . . . . .	118
C- 5.	Average weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted . . . . .	119
C- 6.	Indexes of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted . . . . .	120
C- 7.	The Hourly Earnings Index and average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls, seasonally adjusted . . . . .	121

## Hours and Earnings—States and Areas

C- 8.	Average hours and earnings of production workers on manufacturing payrolls in States and selected areas . . . . .	122
-------	---	-----

# PRODUCTIVITY DATA

C- 9.	Hours of wage and salary workers in nonagricultural establishments by major industry, seasonally adjusted . . . . .	127
C-10.	Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted . . . . .	128
C-11.	Percent changes from the preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted annual rates . . . . .	129

# MONTHLY STATE AND AREA LABOR FORCE DATA

D- 1.	Labor force status by State and selected metropolitan areas . . . . .	131
-------	---	-----

# Employment and Unemployment Developments, May 1988

Nonagricultural payroll employment continued to increase in May. Both the overall and the civilian worker jobless rates, which had dipped slightly in April, returned to their March levels of 5.5 and 5.6 percent, respectively.

Payroll employment, as measured by the monthly survey of business establishments, rose by 210,000 in May. In contrast, total civilian employment, as estimated through the monthly survey of households, showed a drop of 520,000 following a 600,000 increase in April. Recent over-the-month movements in the household employment series have been somewhat erratic.

## Unemployment

Both the number of unemployed persons and the unemployment rate, which had been drifting downward since last fall, edged up in May, returning to their March levels. About 6.8 million persons were unemployed in May, and the civilian worker unemployment rate was 5.6 percent, seasonally adjusted. Since May 1987, the unemployment level has decreased by about 800,000, and the jobless rate has declined by 0.7 percentage point. (See table A-33.)

Most of the over-the-month change in joblessness occurred among adult men, whose unemployment rate rose 0.3 percentage point to 4.9 percent, following a drop of the same magnitude in April. The rates for adult women (4.9 percent), teenagers (15.6 percent), whites (4.7 percent), blacks (12.4 percent), and Hispanics (9.0 percent) all were little changed over the month. (See tables A-33 and A-34.)

At 5.9 weeks, the median duration of unemployment was about unchanged in May, remaining at one of its lowest levels during the 1980's. (See table A-40.)

## Civilian employment and the labor force

The estimate of total civilian employment—114.2 million—showed a drop of about 520,000 on a seasonally adjusted basis in May, nearly offsetting April's large increase. Consequently, the employment-population ratio fell to 61.9 percent. (See table A-33.)

The civilian labor force also declined in May, to 121.0 million, about the same level as in March. As a result, the labor force participation rate decreased, to 65.6 percent. (See table A-33.)

## Industry payroll employment

Employment growth in nonagricultural establishments moderated in May, as payroll jobs increased by 210,000 to 105.5 million, seasonally adjusted. Employment gains were essentially confined to the service-producing sector. (See table B-4.) The payroll employment estimates have been adjusted to reflect annual benchmark revisions and the incorporation of new seasonal adjustment factors.

Following 3 months of growth, payroll employment in the goods-producing sector showed little movement in May. Construction employment, which had posted strong gains over the prior 3 months, was unchanged. There was also no change in mining and manufacturing jobs. Within manufacturing, however, there were small gains in several industries—fabricated metals, machinery, and rubber and plastics products—where employment has been boosted by rising exports. These increases were largely offset by small declines in several other industries.

In the service-producing sector, the services industry led over-the-month increases with an employment gain of 80,000, slightly less than average. Within services, business services has had slower than usual growth in recent months, while health services has been particularly strong. Wholesale trade added 25,000 jobs, mostly in its durable goods component. Over the year, wholesale trade employment has risen by 275,000, three-fourths of which was in durable-goods distribution. Employment in the finance, insurance, and real estate industry was down slightly in May. The finance component, which had been one of the best performers throughout much of the expansion, has lost about 10,000 jobs since January.

## Weekly hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls declined by 0.2 hour in May to 34.7 hours, seasonally adjusted, while the factory workweek edged down 0.1 hour to 41.1 hours. These declines followed sharp increases in the previous month. Manufacturing overtime was unchanged at 4.0 hours, after seasonal adjustment. (See table C-5.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls, at 124.5 (1977 = 100), fell 0.4 percent, seasonally adjusted. The

index for manufacturing also declined, 0.3 percent, to 95.8. Both series were up slightly from March. (See table C-6.)

### Hourly and weekly earnings

Average hourly earnings of private production or non-supervisory workers rose 0.7 percent in May, seasonally adjusted, while average weekly earnings were unchanged. Prior to seasonal adjustment, average hourly earnings rose by 4 cents to \$9.26, and average weekly earnings increased 47 cents to \$320.40. (See tables C-1 and C-7.)

### The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 178.8 (1977=100) in May, seasonally adjusted, an increase of 0.5 percent from April. For the 12 months ended in May, the increase was 3.4 percent. In dollars of constant purchasing power, the HEI decreased 0.7 percent during the 12-month period ending in April. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements—fluctuations in manufacturing overtime and interindustry employment shifts. (See table C-7.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
June	July 8	September	October 7
July	August 5	October	November 4
August	September 2	November	December 2

# BLS Establishment Estimates Revised to March 1987 Benchmarks

\*Fred R. Cronkhite

With the release of data for May 1988, the Bureau of Labor Statistics introduced its annual revision of national estimates of employment, hours, and earnings from the monthly sample survey of nonagricultural establishments. Each year, the sample estimates are adjusted to new benchmarks—comprehensive figures of employment based primarily on unemployment insurance reports filed by employers with the State employment security agencies. The current revisions are based on March 1987 benchmarks and affect unadjusted series from April 1986 forward. As is the usual practice with the introduction of new benchmarks, the Bureau has also revised the seasonally adjusted series for the previous 5-year period and has introduced new seasonal adjustment factors to be used for the coming year.

## Effect of the current benchmark adjustment

The March 1987 benchmark level for total nonagricultural employment—100.4 million—was 35,000, or 0.04 percent below the corresponding sample-based estimate, resulting in one of the smallest benchmark revisions since 1979. The pattern of revisions was mixed across industry divisions, with downward revisions in the goods-producing industries (-0.7 percent) offsetting upward revisions in the service-producing industries (0.2 percent). Table 1 provides the revisions for March 1987 by industry.

The sample-based employment estimates in the goods-producing sector have exceeded the respective benchmark levels in all but one year during the 1980's, primarily reflecting the persistent pattern of overestimation among the manufacturing industries. By contrast, the employment estimates in the service-producing sector exceeded the respective benchmark levels only one-half of the time, indicating a more balanced error profile. Nevertheless, within the service-producing sector, employment in the services industry division was underestimated in all but one year. Table 2 provides a comparison of the 1987 revisions on a percentage basis with those of recent years.

---

\*Fred R. Cronkhite is a supervisory statistician in the Division of Monthly Industry Employment Statistics, Bureau of Labor Statistics.

New estimates were computed for each month since March 1987, based on the new benchmark levels. On a seasonally adjusted basis, the monthly revision grew from -69,000 in March 1987 to 364,000 by February 1988, reflecting, in addition to the benchmark adjustment, a resizing of the sample, a recomputation of bias adjustment factors, and recomputation of seasonal factors. The nature of these adjustments in postbenchmark estimation is described in the section on benchmark adjustment procedure. Table 3 shows the extent of the revisions by month for 1987 and 1988, in both level and change, through a comparison of seasonally adjusted data as previously published and as revised.

Monthly estimates of employment, hours, and earnings are published in considerable industry detail. Based upon the Standard Industrial Classification (SIC) system, estimates are prepared either at the industry level (4-digit SIC) or at the industry group level (3-digit SIC) for most industries. Within the 247 3-digit industry groups for which employment estimates are published, less than one-fifth were revised as a result of the benchmark revision by 4 percent or more, and only one-third by 3 to 4 percent. Of the 68 published major private industry groups (2-digit SIC), less than one-fourth were revised by 2 to 3 percent, and one-half by 1 to 2 percent. As has generally been the case in the past, the smallest industries in terms of employment tended to have the largest percentage revisions (table 4).

Manufacturing industries were revised downward by an average of 0.5 percent, about half of the revision for 1986 and about the same as for 1985. Fifteen of the 20 major groups in manufacturing were revised downward, a slight decrease from last year. The largest upward revision occurred in transportation equipment (32,000, or 1.6 percent). Retail trade was revised upward 0.9 percent (165,000); most of the revision occurred in eating and drinking places (120,000).

## Effect of revisions on other series

There are no benchmark employment levels for the series on women workers or production or nonsupervisory workers. These series are revised by applying the ratios of these groups of workers to total nonagricultural employment in the sample—using the resized sample and including reports



**Table 1. Differences between nonagricultural employment benchmarks and estimates by industry, March 1987**

(In thousands)

Industry	Benchmark	Estimate	Difference	
			Amount	Percent
Total . . . . .	100,427	100,462	-35	(1)
Total private . . . . .	83,173	83,152	21	(1)
Goods-producing . . . . .	24,037	24,214	-177	-0.7
Mining <sup>2</sup> . . . . .	696	718	-22	-3.2
Oil and gas extraction . . . . .	386	409	-23	-6.0
Construction <sup>2</sup> . . . . .	4,531	4,599	-68	-1.5
General building contractors . . . . .	1,231	1,196	35	2.8
Manufacturing . . . . .	18,810	18,897	-87	-5
Durable goods . . . . .	11,102	11,145	-43	-4
Lumber and wood products . . . . .	713	714	-1	.1
Furniture and fixtures . . . . .	507	503	4	.8
Stone, clay, and glass products . . . . .	568	570	-2	-.4
Primary metal industries . . . . .	739	742	-3	-.4
Blast furnaces and basic steel products . . . . .	262	267	-5	-1.9
Fabricated metal products . . . . .	1,390	1,415	-25	-1.8
Machinery, except electrical . . . . .	2,003	2,025	-22	-1.1
Electrical and electronic equipment . . . . .	2,071	2,093	-22	-1.1
Transportation equipment . . . . .	2,058	2,026	32	1.6
Motor vehicles and equipment . . . . .	881	857	24	2.7
Instruments and related products . . . . .	693	694	-1	-.1
Miscellaneous manufacturing . . . . .	362	364	-2	-.6
Nondurable goods . . . . .	7,708	7,752	-44	-6
Food and kindred products . . . . .	1,560	1,576	-16	-1.0
Tobacco manufactures . . . . .	53	56	-3	-5.7
Textile mill products . . . . .	716	722	-6	.8
Apparel and other textile products . . . . .	1,090	1,105	-15	-1.4
Paper and allied products . . . . .	673	675	-2	-.3
Printing and publishing . . . . .	1,491	1,487	4	.3
Chemicals and allied products . . . . .	1,013	1,016	-3	-.3
Petroleum and coal products . . . . .	162	162	0	.0
Rubber and miscellaneous plastics products . . . . .	810	808	2	.2
Leather and leather products . . . . .	140	146	-6	-4.3
Service-producing . . . . .	76,390	76,248	142	.2
Transportation and public utilities . . . . .	5,274	5,275	-1	(1)
Transportation . . . . .	3,081	3,065	16	.5
Communication and public utilities . . . . .	2,193	2,210	-17	-.8
Wholesale trade . . . . .	5,763	5,725	38	.7
Durable goods . . . . .	3,382	3,380	2	.1
Nondurable goods . . . . .	2,381	2,345	36	1.5
Retail trade <sup>2</sup> . . . . .	17,902	17,737	165	.9
General merchandise stores . . . . .	2,288	2,279	9	.4
Food stores . . . . .	2,904	2,906	-2	-.1
Automotive dealers and service stations . . . . .	1,962	1,959	3	.2
Eating and drinking places . . . . .	5,909	5,789	120	2.0
Finance, insurance, and real estate . . . . .	6,443	6,478	-35	-.5
Finance . . . . .	3,241	3,246	-5	-.2
Insurance . . . . .	2,002	2,020	-18	-.9
Real estate . . . . .	1,189	1,199	-10	-.8
Services <sup>2</sup> . . . . .	23,754	23,723	31	.1
Business services . . . . .	5,021	4,964	57	1.1
Health services . . . . .	6,714	6,762	-48	-.7
Government . . . . .	17,254	17,310	-56	-.3
Federal . . . . .	2,916	2,916	0	.0
State . . . . .	4,050	4,036	14	.3
Local . . . . .	10,288	10,358	-70	-.7

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

<sup>2</sup> Includes other industries not shown separately.

**Table 2. Percent differences between nonagricultural employment benchmarks and estimates by industry division, March 1980-87**

Industry division	1980	1981	1982	1983	1984	1985	1986	1987
Total	-0.1	-0.4	-0.1	( <sup>1</sup> )	0.4	( <sup>1</sup> )	-0.5	( <sup>1</sup> )
Mining	-6	2.1	2.2	-5.4	-1.6	-3.1	-1.2	-3.2
Construction	-1.5	-2.9	.2	.5	3.1	1.4	-6	-1.5
Manufacturing	-3	-4	( <sup>1</sup> )	-1.2	-9	-5	-1.1	-5
Transportation and public utilities	-3	.1	.4	.2	.2	-1.0	-3	( <sup>1</sup> )
Trade	-8	-1.0	-1.2	.9	1.3	-3	-9	.9
Finance, insurance, and real estate	.1	-5	-2	( <sup>1</sup> )	.4	.5	-1	-5
Services	.9	.3	.3	-1	.4	.1	.3	.1
Government	.5	-2	.1	.7	.1	.8	-4	-3

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

received after the initial estimates were made—to the revised all-employee figures. Revisions at the basic cell level are then added to become the summary level revisions.

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

Generally, new employment benchmarks have little impact on hours and earnings estimates for major groupings (table 5). To influence the hours and earnings estimates of a broader group, employment revisions have to be relatively large and must affect industries which have substantially different hours or earnings averages than the other industries in their group. Occasionally, corrections of errors in the reported payroll data for individual establishments may also change the averages of selected industries. More substantial revisions may occur from the use of reports received from sample members after the initial estimates were published.

### Benchmark adjustment procedure

The benchmark adjustment procedure serves both as an annual measure of the quality of the sample estimates and as a base for producing more accurate measures of current employment from the sample. The benchmark levels are derived primarily from summations of the employment figures on the mandatory unemployment insurance (UI) contribution reports filed with the State employment security agencies by all employers covered by the UI laws. The figures compiled from these reports are adjusted where necessary to reflect discrepancies in industry coding between the establishments in the survey and the corresponding establishments in the population. The final benchmark levels are

determined by adding to the adjusted UI-based figures estimates of employment in those industries that are not fully covered by UI laws. For the private sector, these are primarily in transportation and services.

Normally, new benchmarks are determined for March of each year for the most detailed industrial classification levels at which estimates are made. The time required to complete the benchmark process—from collection of the data to publication of the results—is usually about 15 months. Revised employment estimates for the “interbenchmark” period—the period between the prior benchmark and the current benchmark—are usually derived by adding to each of the monthly estimates a fraction of the difference between the actual March benchmark level and the previously published estimate for that month. In the present instance, working backwards in time, approximately 11/12 of the March 1987

**Table 3. Differences in seasonally adjusted levels and over-the-month changes, total nonagricultural employment, January 1987-February 1988**

(In thousands)

Month	Levels			Over-the-month changes	
	As revised	As previously published	Difference	As revised	As previously published
1987:					
January	100,795	100,919	-124	224	352
February	101,016	101,150	-134	221	231
<b>March</b>	101,260	101,329	-69	244	179
April	101,615	101,598	17	355	269
May	101,829	101,708	121	214	110
June	102,078	101,818	260	249	110
July	102,430	102,126	304	352	308
August	102,672	102,275	397	242	149
September	102,906	102,434	472	234	159
October	103,371	102,983	388	465	549
November	103,678	103,285	393	307	302
December	104,001	103,612	389	323	327
1988:					
January	104,262	103,827	435	261	215
<b>February</b>	104,729	104,365	364	467	538

difference was added to the February 1987 estimates, 10/12 to the January 1987 estimate, and so forth, so that the March difference was “wedged” over the 12-month interbenchmark period.

Occasionally, in some industries, the monthly sample-based estimates deviate significantly from the expected seasonal patterns of the underlying population. Since application of the normal linear wedge technique will not correct for this error, the monthly sample-based estimates in the interbenchmark period for these industries are replaced with monthly figures derived from the population of establishments.

Revised estimates for the postbenchmark period were derived using the following procedure. First, the sample reporters were reassigned, where necessary, into size groups based on their March 1987 employment levels. Next, new monthly links, the sample-based employment change ratios, were computed using the resized sample, including late reporters for that period. Then, the bias adjustment factors were recomputed to incorporate the March 1987 benchmark error patterns. Finally, the revised bias factors were applied to the new links and used to extrapolate new benchmark levels from April 1987 to March 1988.

### Why estimates differ from benchmarks

Differences between benchmarks and estimates result from both sampling and nonsampling error. Sampling error occurs any time a sample is used to make inferences about a population. As with any sample-based estimates, a certain amount of error is to be expected in the estimation of employment, hours, and earnings from the establishment survey. A complete monthly count of all establishments would provide the most accurate levels of employment by detailed industry. However, given the more than 5 million employers in the population, such monthly figures would be prohibitively expensive and too time consuming to compile. The current sample of approximately 300,000 establishments provides estimates at a moderate cost within a month following the reference period. Additionally, sources of nonsampling error can be more easily controlled in a sample.

Both the benchmark levels and the sample-based estimates are subject to several sources of nonsampling error. Major

sources of these nonsampling errors are: (1) an inability to measure employment in new firms from the time of their inception, due to the time lag between the creation of new firms and their inclusion in the sample; (2) procedures for handling changes in industrial classification; (3) the quality of the various source data used to derive the benchmark; (4) an inability to completely cover all firms in the target population; and (5) other errors in coverage, response, processing, and collection.

*Bias adjustment factors.* In order to compensate for the inability of the survey to capture the entry of new firms, and for other biases, the Bureau calculates monthly bias adjustment factors. To do so, first, 3-year to 5-year averages of the relative differences between the benchmark levels and sample-based estimates for March are computed for most 3-digit industries. Second, the average bias factors are updated during the year to reflect current rates of employment change for the same industries. Finally, the updated factors are applied to the sample-based estimates to produce the monthly published estimates.

A single-equation, cross-section statistical model is specified for estimating industry-specific parameters that are used to update the average bias factors. The model relates average relative bias to average employment change, over a 3- to 5-year period, and to the percent of total employment in the sample for the same group of 3-digit industries. The estimated parameters are then used to derive the updated factors for each designated 3-digit industry. The updated factors are applied to all estimating cells—usually size groups—within that industry. New industry-specific parameters are estimated each year when the new benchmark levels become available.

*Changes in industrial classification.* Establishments are classified by industry according to major product or activity. Differences in the classification of establishments between the population and the sample can be an important source of nonsampling error. As part of a continuing quality maintenance program, approximately one-third of all employers are requested to refile industry classification information each year. This information can result in changes in industry classification. In addition, industry codes of establishments in the sample are reviewed each year and are reconciled to the corresponding codes of the establishment in the population file. Since these changes are introduced once a year, at the time of the revision to new benchmarks, they contribute to benchmark adjustment. At the more detailed industry levels, changes in classification can be an important cause of benchmark adjustments. As the estimates are aggregated to higher level industry groupings, these classification changes cancel out so that the net difference is zero for total nonagricultural employment.

*Benchmark source material.* The principal source of benchmark data for private industries is the ES-202 report, which

**Table 4. Distribution of published 3-digit SIC industries by size of industry and percent difference between employment benchmarks and estimates, March 1987**

Percent difference	Total number of industries	Size of industry (number of employees)			
		Under 50,000	50,000 to 99,999	100,000 to 199,999	200,000 and over
Total	247	36	52	66	93
0-0.9	77	7	12	21	37
1.0-2.9	99	12	22	28	37
3.0-4.9	42	7	10	10	15
5.0 and over	29	10	8	7	4

**Table 5. Hours and earnings estimates based on revised (March 1987) benchmarks and previous (March 1986) benchmarks, selected industries, March 1987**

Industry	Average weekly hours			Average hourly earnings		
	Revised estimate	Previous estimate	Difference	Revised estimate	Previous estimate	Difference
Total private . . . . .	34.6	34.6	0	\$8.91	\$8.92	-\$0.01
Mining . . . . .	41.8	41.8	0	12.58	12.51	.07
Construction . . . . .	37.4	37.4	0	12.64	12.59	.05
Manufacturing . . . . .	40.9	40.9	0	9.86	9.85	.01
Durable goods . . . . .	41.6	41.6	0	10.38	10.39	-.01
Lumber and wood products . . . . .	40.7	40.7	0	8.29	8.28	.01
Furniture and fixtures . . . . .	39.8	39.8	0	7.58	7.58	0
Stone, clay, and glass products . . . . .	42.0	42.0	0	10.13	10.13	0
Primary metal industries . . . . .	42.8	42.8	0	11.80	11.82	-.02
Fabricated metal products . . . . .	41.5	41.5	0	9.96	9.99	-.03
Machinery, except electrical . . . . .	42.2	42.2	0	10.66	10.72	-.06
Electrical and electronic equipment . . . . .	40.9	40.9	0	9.82	9.84	-.02
Transportation equipment . . . . .	42.6	42.6	0	12.86	12.86	0
Instruments and related products . . . . .	41.5	41.5	0	9.66	9.67	-.01
Miscellaneous manufacturing . . . . .	39.3	39.3	0	7.69	7.66	.03
Nondurable goods . . . . .	40.0	40.0	0	9.11	9.09	.02
Food and kindred products . . . . .	39.6	39.5	0.1	8.94	8.93	.01
Tobacco manufactures . . . . .	38.2	38.1	.1	13.87	13.80	.07
Textile mill products . . . . .	42.0	42.0	0	7.11	7.12	-.01
Apparel and other textile products . . . . .	37.1	37.0	.1	5.93	5.93	0
Paper and allied products . . . . .	42.9	42.9	0	11.28	11.27	.01
Printing and publishing . . . . .	38.0	38.0	0	10.19	10.17	.02
Chemicals and allied products . . . . .	42.1	42.1	0	12.24	12.24	0
Petroleum and coal products . . . . .	43.9	43.9	0	14.52	14.50	.02
Rubber and miscellaneous plastics products . . . . .	41.5	41.5	0	8.81	8.80	.01
Leather and leather products . . . . .	37.5	37.5	0	6.07	6.06	.01
Transportation and public utilities . . . . .	38.9	38.9	0	11.90	11.90	0
Wholesale trade . . . . .	37.9	37.9	0	9.53	9.53	0
Retail trade . . . . .	28.9	28.9	0	6.07	6.08	-.01
Finance, insurance, and real estate . . . . .	36.3	36.3	0	8.72	8.72	0
Services . . . . .	32.4	32.4	0	8.42	8.41	.01

contains employment data reported to State employment security agencies by employers covered by State UI laws. UI coverage is now extended to approximately 98 percent of employees in the total nonagricultural sector and 99 percent of those in the private nonagricultural sector. Employment counts for the executive, legislative, and judicial branches of the Federal Government are derived from official summaries prepared by the U.S. Office of Personnel Management (OPM). These summaries are complete counts of Federal workers and are not usually subject to revision.<sup>1</sup> The official OPM summaries do not provide detail on Federal employment by industry, such as hospitals, on a current monthly basis. These are estimated by BLS from a sample of Federal establishments.

BLS uses several sources to obtain employment counts for the remaining industries partially covered or exempt from mandatory UI coverage. Data on employees covered under Social Security laws, published by the Bureau of the Census

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

in *County Business Patterns*, are used to augment UI data for nonoffice insurance sales workers, or to derive benchmark figures for religious organizations, private schools, and hospitals. Benchmarks for State and local government hospitals and educational institutions are based on the Annual Survey of Governments conducted by the Bureau of the Census. Benchmark data for employees of church-sponsored schools are obtained through State agency surveys. Data for interstate railroads are obtained from the Interstate Commerce Commission.

The Bureau's reporting sample is an important source of information for correcting errors in summary benchmark data derived from employers' UI records. Since sample reports are current and are reviewed monthly, reporting errors that are detected and corrected in the sample reports can also be used to correct the corresponding summary UI-based reports.

### Revision of seasonally adjusted data

Most economic time series display a regular seasonal movement, which can be estimated on the basis of past experience. By eliminating that part of the change which can

be ascribed to usual seasonal variation, it is possible to observe the underlying cyclical and other systematic movements in the series.

Each year, employment, hours, and earnings data reflecting the new benchmark are used to calculate updated seasonal adjustment factors. The Bureau uses the X-11 ARIMA (Auto-Regressive Integrated Moving Average) seasonal adjustment methodology, developed by Statistics Canada.<sup>2</sup> X-11 ARIMA is an adaptation of the standard ratio-to-moving average method, which provides for "moving" adjustment factors to take account of changing seasonal patterns.

The ARIMA option is used to project the unadjusted data forward for 1 year prior to seasonally adjusting the series. The use of ARIMA projections lessens the need for revisions of historical data in future seasonal adjustments. ARIMA projections are not used in series where the projections do not meet test requirements.<sup>3</sup>

Seasonal adjustment factors are derived from a decomposition of historical unadjusted time series into trend/cycle, seasonal, and irregular components. Unusual events reflected in these historical data will distort normal seasonal patterns and thus produce less reliable seasonal factors. The X-11 ARIMA methodology allows for the removal of these unusual variations prior to the calculation of the seasonal adjustment factors. Since major strikes tend to distort normal seasonal patterns, the effects of strikes are eliminated from employment series prior to seasonal adjustment. The Federal Government series have also been adjusted to remove the effect of the temporary hiring of census takers during the

<sup>2</sup> A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method* by Estella Bee Dagum, Statistics Canada Catalogue No. 12-564E, January 1983.

<sup>3</sup> The series so affected are identified in tables 7 through 12.

1980 census. The hours series in the textile and apparel industries were also adjusted to eliminate the effects of weather-related plant shutdowns in January 1982. The calculated seasonal factors are applied to the revised unadjusted series to produce a seasonally adjusted time series.

The seasonal adjustment factors that will be used for the period April 1988 through March 1989 for all published series are shown in tables 7 through 13. Seasonally adjusted data are not published for a small number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These series are identified in tables 10, 12, and 13; they are used, however, in aggregating to broader seasonally adjusted levels.

### Publication of revised data

Data for detailed industry categories of employment, hours, and earnings will be presented in a supplement to *Employment and Earnings*. It will contain all of the historical data revised as a result of this benchmark and updated seasonal adjustment factors, that is, unadjusted data for April 1986 through February 1988 and seasonally adjusted data for January 1983 through February 1988. In addition, seasonally adjusted data from 1980, and unadjusted data from 1983, which were published in last year's supplement, will be republished in the 1988 supplement. Data for earlier time periods can be found in *Employment, Hours, and Earnings, United States, 1909-84* (BLS Bulletin 1312-12), issued in 1985. Employment estimates are published monthly in this publication for most of the significant nonagricultural industries. Those industries for which monthly data are not published are either too small or are not represented by a sufficient sample. Table 6 contains the March 1987 benchmark figures for many of these industries.

**Table 6. Employment benchmarks for industries not published monthly, March 1980-87**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b> .....		90,253	90,371	89,566	88,232	92,587	96,042	98,150	100,427
<b>Total private</b> .....		73,720	73,903	73,370	72,043	76,371	79,446	81,204	83,173
<b>Goods-producing</b> .....		25,799	25,126	24,056	22,370	24,017	24,469	24,192	24,037
<b>Mining</b> .....		990	1,107	1,205	945	952	933	832	696
Lead and zinc ores .....	103	6.9	7.2	5.9	4.0	4.0	3.3	2.9	2.4
Gold and silver ores .....	104	( <sup>1</sup> )	( <sup>1</sup> )	8.9	8.6	10.5	9.8	10.4	12.1
Other metal ores and mining services .....	105,6,8,9	( <sup>1</sup> )	( <sup>1</sup> )	25.5	14.0	13.3	11.4	9.1	8.3
Anthracite mining .....	11	3.3	3.5	3.5	2.9	2.9	2.7	2.6	2.3
Crude petroleum and natural gas .....	131	205.7	242.7	265.7	257.0	254.5	248.4	232.3	198.2
Natural gas liquids .....	132	5.5	6.8	8.4	6.7	6.6	6.6	6.1	5.7
Clay and related minerals .....	145	( <sup>1</sup> )	( <sup>1</sup> )	9.4	8.1	8.4	8.6	8.4	7.9
Other nonmetallic minerals and services .....	141,8,9	( <sup>1</sup> )	( <sup>1</sup> )	9.8	9.2	9.9	9.5	10.0	10.8
<b>Construction</b> .....		4,087	3,934	3,638	3,469	3,914	4,241	4,415	4,531
Concrete work .....	177	100.2	98.2	84.5	90.5	113.6	132.6	138.9	146.5
Waterwell drilling .....	178	18.7	19.1	16.9	14.6	15.7	16.1	16.2	16.8
Miscellaneous special trade contractors .....	179	351.1	359.4	336.8	314.2	353.1	393.0	416.4	429.6
<b>Manufacturing</b> .....		20,722	20,085	19,213	17,956	19,151	19,295	18,945	18,810
<b>Durable goods</b> .....		12,609	12,105	11,446	10,417	11,346	11,561	11,277	11,102
Lumber and wood products:									
Special product sawmills, nec .....	2429	6.0	4.8	3.5	3.6	4.1	3.1	2.7	3.7
Structural wood members, nec .....	2439	15.9	15.0	11.6	14.0	19.0	19.1	22.6	26.3
Nailed wood boxes and shooks .....	2441	8.0	6.9	5.9	5.3	5.6	5.5	5.4	5.8
Wood pallets and skids .....	2448	26.6	24.6	23.0	21.6	25.8	26.9	26.3	27.5
Wood containers, nec .....	2449	10.3	10.3	9.2	8.8	8.7	8.3	8.2	8.0
Prefabricated wood buildings .....	2452	20.4	18.9	16.0	15.8	19.0	18.6	19.7	22.0
Wood preserving .....	2491	13.8	13.2	11.8	11.8	12.3	13.0	12.5	12.6
Particleboard .....	2492	( <sup>1</sup> )	( <sup>1</sup> )	5.1	6.0	7.4	8.3	9.4	10.5
Wood products, nec .....	2499	( <sup>1</sup> )	( <sup>1</sup> )	56.9	55.3	58.1	55.5	56.2	58.0
Furniture and fixtures:									
Wood TV and radio cabinets and household furniture .....	2517,9	14.0	13.8	12.1	11.1	13.4	13.9	14.0	13.8
Wood office furniture .....	2521	18.8	21.7	24.6	23.9	28.4	32.0	31.4	32.2
Metal office furniture .....	2522	32.1	31.2	29.9	27.7	32.7	33.1	33.6	32.9
Wood partitions and fixtures .....	2541	33.3	31.4	29.8	28.3	33.9	36.7	38.8	39.8
Metal partitions and fixtures .....	2542	31.5	27.8	27.8	25.8	29.3	31.4	31.5	32.4
Drapery hardware and blinds and shades .....	2591	16.8	16.5	16.4	16.9	20.4	20.5	22.3	21.7
Furniture and fixtures, nec .....	2599	11.2	12.3	12.5	13.0	13.4	15.4	16.4	16.5
Stone, clay, and glass products:									
Brick and structural clay tile .....	3251	20.1	16.4	13.0	13.9	16.7	16.5	17.1	17.3
Clay refractories .....	3255	14.1	11.3	9.7	7.0	8.1	7.4	7.0	6.4
Other structural clay products .....	3253,9	14.5	12.9	11.0	11.3	12.4	12.4	12.3	13.0
Vitreous plumbing fixtures .....	3261	12.7	9.9	8.5	8.8	10.0	9.5	10.3	9.8
Vitreous china and fine earthenware food utensils .....	3262,3	10.5	9.7	9.1	7.7	7.4	6.7	7.1	7.1
Porcelain electrical supplies .....	3264	13.0	11.4	10.8	9.6	9.7	10.4	9.0	8.9
Pottery products, nec .....	3269	13.0	12.3	11.3	10.5	11.8	10.7	10.3	10.7
Lime .....	3274	( <sup>1</sup> )	( <sup>1</sup> )	6.4	5.3	5.7	5.4	5.3	5.5
Gypsum products .....	3275	( <sup>1</sup> )	( <sup>1</sup> )	11.4	11.2	13.5	14.3	14.2	13.8
Cut stone and stone products .....	328	11.7	11.0	10.3	10.7	11.2	12.0	12.4	12.6
Gaskets, packing and sealing devices .....	3293	27.9	27.4	26.8	23.5	26.7	27.7	28.6	28.1
Minerals, ground or treated .....	3295	16.2	15.6	14.6	12.8	13.4	13.5	12.5	12.0
Nonclay refractories .....	3297	( <sup>1</sup> )	( <sup>1</sup> )	9.9	7.3	8.0	8.2	8.1	7.1
Nonmetallic mineral products, nec .....	3299	( <sup>1</sup> )	( <sup>1</sup> )	6.5	6.3	7.2	7.1	7.1	7.2
Primary metal industries:									
Electrometallurgical products .....	3313	14.6	13.1	11.2	8.2	10.2	9.6	9.0	7.6
Steel wire and related products .....	3315	22.7	22.5	19.3	16.7	18.6	18.6	18.7	19.0
Cold finishing of steel shapes .....	3316	19.0	17.2	15.5	13.5	15.4	15.8	15.6	15.6
Steel investment foundries .....	3324	12.3	14.0	12.3	10.9	11.6	13.3	13.1	13.6
Primary copper .....	3331	15.6	14.1	12.7	10.6	9.2	7.0	5.4	5.5
Primary lead and zinc .....	3332,3	8.1	7.9	6.1	5.0	4.7	4.4	3.6	3.2
Primary nonferrous metals, nec .....	3339	11.8	11.7	10.1	8.8	10.3	10.8	9.5	9.2
Secondary nonferrous metals .....	334	25.4	24.0	21.3	18.0	19.6	19.7	18.1	16.9
Aluminum extruded products .....	3354	33.6	31.5	29.2	28.2	30.8	33.0	32.6	33.6
Aluminum and nonferrous rolling and drawing, nec .....	3355,6	26.0	23.8	24.5	19.7	20.4	19.8	19.5	18.6
Brass, bronze, and copper foundries .....	3362	20.6	18.1	17.2	13.8	14.7	14.7	14.4	13.9
Nonferrous foundries, nec .....	3369	21.1	19.4	17.7	17.0	18.3	18.2	19.3	18.8
Miscellaneous primary metal products .....	339	26.8	25.6	24.9	21.6	24.5	25.4	24.9	24.9
Metal heat treating .....	3398	14.2	13.7	14.1	11.3	12.7	14.1	13.8	14.0
Primary metal products, nec .....	3399	12.6	11.9	10.8	10.3	11.8	11.3	11.1	10.9

See footnotes at end of table.

**Table 6. Employment benchmarks for industries not published monthly, March 1980-87—Continued**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Durable goods-Continued</b>									
Fabricated metal products:									
Metal barrels, drums, and pails .....	3412	13.2	13.3	12.1	11.9	11.4	11.8	11.1	10.5
Cutlery .....	3421	16.3	15.7	13.4	13.2	13.0	12.7	12.1	11.1
Metal sanitary ware .....	3431	10.8	10.9	9.6	8.7	9.8	10.6	11.2	10.8
Prefabricated metal buildings .....	3448	28.8	28.3	25.0	20.6	22.7	24.9	24.8	23.8
Miscellaneous metal work .....	3449	10.2	9.1	8.0	7.5	7.7	7.2	7.0	6.7
Nonferrous forgings and crowns and closures .....	3463,6	13.0	12.8	11.7	10.6	10.5	10.9	11.1	10.9
Steel springs, except wire .....	3493	7.6	6.1	5.8	4.9	5.6	6.6	5.9	5.9
Wire springs .....	3495	15.4	14.9	13.1	11.9	13.7	14.7	13.5	13.2
Fabricated pipe and fittings .....	3498	27.2	27.9	31.0	21.7	22.9	22.5	21.2	19.0
Metal foil and leaf, and fabricated metal products, nec .....	3497,9	49.7	44.5	43.2	39.5	44.6	45.5	45.2	43.6
Machinery, except electrical:									
Lawn and garden equipment .....	3524	25.7	22.7	19.5	21.7	24.0	25.1	25.9	27.3
Elevators and moving stairways .....	3534	13.4	12.9	12.4	11.6	11.7	11.5	11.1	11.9
Hoists, cranes, and monorails .....	3536	23.3	16.7	15.5	11.2	12.2	13.6	12.7	11.3
Rolling mill machinery .....	3547	11.4	9.2	8.5	5.9	5.5	5.6	5.1	4.9
Metalworking machinery, nec .....	3549	14.9	13.7	13.3	11.0	11.7	12.2	12.9	12.4
Woodworking machinery .....	3553	14.3	12.0	10.3	8.8	9.8	10.2	9.2	10.3
Paper industries machinery .....	3554	18.9	20.0	19.0	15.4	15.7	16.9	16.5	15.9
Special industry machinery, nec .....	3559	63.8	59.6	55.0	45.0	50.5	56.6	52.5	49.8
Industrial patterns .....	3565	10.4	10.0	9.7	8.0	8.3	8.0	9.1	8.6
Industrial furnaces and ovens .....	3567	21.6	20.5	19.2	15.1	16.3	17.3	16.8	16.6
General industrial machinery, nec .....	3569	48.3	49.6	48.9	46.2	50.0	54.1	52.5	51.3
Scales and balances, except laboratory .....	3576	( <sup>1</sup> )	( <sup>1</sup> )	7.6	6.9	7.3	7.0	6.3	6.1
Automatic merchandising machines .....	3581	10.4	10.9	9.5	8.7	9.1	9.0	8.5	7.8
Commercial laundry equipment .....	3582	5.6	5.3	4.7	4.4	4.8	4.8	5.6	6.0
Measuring and dispensing pumps and service industry machinery, nec .....	3586,9	41.6	38.4	37.7	35.0	35.1	36.3	36.1	36.9
Electrical and electronic equipment:									
Welding apparatus, electric .....	3623	18.9	18.1	18.3	15.2	15.1	15.5	14.5	13.6
Carbon and graphite products .....	3624	14.1	14.0	13.6	10.6	11.3	11.5	10.2	9.9
Electrical industrial apparatus, nec .....	3629	13.9	12.2	11.9	10.5	11.5	11.1	11.1	10.5
Household cooking equipment .....	3631	27.6	24.0	22.9	23.9	28.7	22.9	21.6	21.9
Other household appliances .....	3635,6,9	34.6	32.3	26.6	26.1	28.9	28.6	27.4	27.8
Commercial lighting fixtures .....	3646	17.1	17.2	17.2	15.4	17.4	19.2	19.9	19.6
Vehicular lighting equipment .....	3647	( <sup>1</sup> )	( <sup>1</sup> )	13.4	13.4	15.6	15.6	17.1	18.1
Lighting equipment, nec .....	3648	( <sup>1</sup> )	( <sup>1</sup> )	8.6	9.1	9.4	8.4	9.3	9.9
Phonograph records .....	3652	24.2	24.6	21.7	19.2	18.5	17.7	17.4	20.6
Electronic capacitors .....	3675	28.4	25.8	27.2	25.2	33.4	30.1	25.2	24.6
Electronic resistors .....	3676	( <sup>1</sup> )	( <sup>1</sup> )	13.2	11.5	12.2	12.3	11.8	11.2
Electronic coils and transformers .....	3677	27.7	24.7	24.5	21.6	26.5	24.1	21.4	21.8
Electronic connectors .....	3678	( <sup>1</sup> )	( <sup>1</sup> )	7.8	8.9	10.8	12.0	11.9	12.9
Primary batteries, dry and wet .....	3692	15.5	16.5	15.2	13.7	13.8	14.3	13.4	12.3
X-ray apparatus and tubes .....	3693	25.2	26.5	30.0	32.7	34.6	33.9	32.3	31.5
Electrical equipment and supplies, nec .....	3699	14.4	13.7	13.4	13.7	15.3	15.0	13.3	12.6
Transportation equipment:									
Self-contained motor homes .....	3716	5.6	4.9	6.5	9.8	15.0	15.7	16.3	17.6
Motorcycles, bicycles, and parts .....	375	21.8	17.4	17.1	14.5	16.4	13.5	12.4	11.9
Space propulsion units and other space vehicle equipment .....	3764,9	22.1	26.1	26.4	30.1	33.9	37.4	47.8	49.0
Tanks and tank components .....	3795	( <sup>1</sup> )	( <sup>1</sup> )	16.3	18.5	18.4	20.0	20.0	19.5
Transportation equipment, nec .....	3799	( <sup>1</sup> )	( <sup>1</sup> )	9.2	8.8	10.8	12.2	11.2	13.0
Instruments and related products:									
Fluid meters and counting devices .....	3824	18.1	18.5	17.1	14.3	14.5	15.0	14.2	11.7
Measuring and controlling devices, nec .....	3829	22.4	25.4	25.9	25.4	25.3	28.5	29.0	29.0
Dental equipment and supplies .....	3843	17.4	17.1	15.7	14.2	14.0	14.1	14.3	13.6
Miscellaneous manufacturing:									
Silverware and plated ware .....	3914	11.3	11.5	11.1	9.8	10.1	9.0	8.2	7.4
Jewelers' materials and lapidary work .....	3915	8.0	7.6	7.8	7.6	8.3	8.4	8.2	8.1
Pens and mechanical pencils .....	3951	12.1	11.6	9.9	9.1	9.3	9.0	8.9	9.0
Lead pencils and art goods .....	3952	9.5	9.4	8.2	7.4	7.0	7.2	7.0	6.7
Marking devices and carbon paper and inked ribbons .....	3953,5	16.9	15.5	15.7	15.1	15.8	16.2	17.0	16.8
Artificial flowers and buttons .....	3962,3	8.4	8.3	7.1	6.4	7.4	7.6	8.1	8.5
Needles, pins, and fasteners .....	3964	19.0	14.5	12.1	9.9	10.1	10.0	8.9	9.3
Brooms and brushes .....	3991	18.0	15.2	15.2	13.6	14.2	13.5	13.2	12.4
Burial caskets .....	3995	12.0	11.3	11.0	10.2	9.9	9.8	9.5	9.6
Manufacturing industries, nec .....	3996,9	61.8	56.3	54.9	51.0	53.6	53.5	50.0	50.7

See footnotes at end of table.

**Table 6. Employment benchmarks for industries not published monthly, March 1980-87—Continued**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Nondurable goods</b>		8,113	7,980	7,767	7,539	7,805	7,734	7,668	7,708
Food and kindred products:									
Poultry and egg processing	2017	15.2	14.7	15.1	16.3	18.8	19.6	17.5	20.6
Creamery butter	2021	( <sup>1</sup> )	( <sup>1</sup> )	2.3	2.3	2.0	2.0	2.0	2.4
Condensed and evaporated milk	2023	( <sup>1</sup> )	( <sup>1</sup> )	15.6	15.4	16.0	15.0	15.1	15.6
Ice cream and frozen desserts	2024	19.1	18.8	18.1	17.8	18.2	18.6	20.5	21.1
Dehydrated fruits, vegetables, and soups	2034	16.7	15.7	16.0	16.6	16.1	16.5	16.8	16.8
Pickles, sauces, and salad dressings	2035	24.1	23.3	22.0	18.8	18.7	18.7	19.4	19.7
Frozen specialties	2038	34.7	34.2	34.2	33.1	35.4	38.4	40.8	45.6
Cereal breakfast foods	2043	16.6	16.3	17.2	17.7	17.8	17.9	17.8	19.0
Rice milling	2044	( <sup>1</sup> )	( <sup>1</sup> )	6.2	5.8	5.5	5.1	4.9	5.4
Blended and prepared flour	2045	( <sup>1</sup> )	( <sup>1</sup> )	6.3	7.3	6.9	7.1	7.7	9.1
Wet corn milling	2046	12.7	13.5	11.7	10.3	10.3	10.1	9.0	8.7
Dog, cat, and other pet food	2047	16.7	17.0	16.7	16.5	17.0	16.2	16.3	17.2
Cane sugar, except refining only	2061	( <sup>1</sup> )	8.5	8.4	8.9	7.7	7.8	7.1	7.2
Cane sugar, refining	2062	( <sup>1</sup> )	10.2	9.3	8.0	7.6	6.0	6.0	5.7
Beet sugar	2063	( <sup>1</sup> )	10.2	10.6	7.2	7.5	6.6	6.5	6.8
Chocolate and cocoa products and chewing gum	2066,7	19.5	19.4	18.7	18.5	19.8	18.8	18.4	18.8
Oil mills	2074,5,6	20.3	19.4	18.1	19.0	15.4	15.9	15.6	14.5
Animal and marine fats and oils	2077	10.8	10.3	9.9	9.3	9.2	8.7	8.2	8.1
Shortening and cooking oils	2079	13.4	12.5	12.3	11.9	11.7	11.3	11.0	11.1
Malt and flavoring extracts and syrups, nec	2083,7	14.4	14.9	15.6	15.5	16.2	16.6	16.1	16.1
Wines, brandy, and brandy spirits	2084	12.6	14.0	13.4	14.9	13.8	14.4	15.0	15.0
Distilled liquor, except brandy	2085	18.4	17.0	15.6	14.6	14.3	13.4	12.3	11.8
Canned and cured seafoods	2091	15.9	16.5	18.0	14.5	13.4	9.4	10.2	9.9
Fresh or frozen packaged fish	2092	33.5	32.9	32.1	34.6	33.8	33.1	35.6	35.8
Roasted coffee	2095	13.0	12.9	12.4	12.4	12.1	12.3	12.3	12.4
Manufactured ice	2097	( <sup>1</sup> )	( <sup>1</sup> )	4.9	4.8	5.0	5.0	5.7	5.2
Macaroni and spaghetti	2098	( <sup>1</sup> )	( <sup>1</sup> )	8.3	8.2	8.0	8.2	8.3	8.7
Food preparation, nec	2099	( <sup>1</sup> )	( <sup>1</sup> )	81.1	82.3	90.5	86.2	89.7	89.8
Tobacco manufactures:									
Cigars	212	7.5	7.1	6.7	5.5	5.7	5.4	4.6	3.6
Other tobacco manufactures	213,4	12.1	12.7	11.8	13.6	11.4	12.9	12.0	10.1
Textile mill products:									
Warpknit fabric and knitting mills, nec	2258,9	24.5	21.4	20.7	18.2	18.0	18.0	17.7	18.3
Finishing plants, nec	2269	17.1	14.5	14.0	14.1	18.7	14.2	14.2	13.7
Wool yarn mills	2283	10.2	8.6	8.3	8.3	7.5	6.1	6.2	5.9
Thread mills	2284	11.6	10.2	9.5	9.2	9.2	7.5	6.8	7.7
Other textile goods	2291-3,7,9	( <sup>1</sup> )	( <sup>1</sup> )	27.1	26.5	23.9	24.9	25.7	24.2
Processed textile waste	2294	( <sup>1</sup> )	( <sup>1</sup> )	6.4	6.5	6.5	6.2	6.0	6.0
Coated fabrics, not rubberized	2295	12.4	11.6	10.9	9.7	10.8	11.0	10.1	9.4
Tire cord and fabric	2296	10.8	9.5	8.3	7.1	6.9	6.5	5.6	5.5
Cordage and twine	2298	9.7	9.1	8.8	8.1	8.2	8.1	7.5	7.6
Apparel and other textile products:									
Men's and boys' underwear	2322	16.1	14.8	13.5	13.7	15.7	15.9	16.8	18.8
Men's and boys' neckwear	2323	6.7	6.7	6.4	6.8	7.2	6.9	7.3	7.8
Men's and boys' clothing, nec	2329	62.1	57.6	55.3	48.7	53.7	52.3	49.6	48.3
Hats, caps, and millinery	235	18.3	18.6	15.9	14.7	16.2	16.4	15.6	14.5
Children's coats and suits	2363	7.0	6.3	5.3	3.6	4.2	3.0	2.2	2.3
Children's outerwear, nec	2369	31.0	30.4	31.1	29.4	32.1	31.9	32.2	31.6
Fur goods	237	3.8	3.9	3.7	3.2	2.3	2.9	2.7	2.7
Fabric dress and work gloves	2381	13.2	11.4	9.9	8.7	8.7	9.4	8.6	7.2
Robes and dressing gowns	2384	10.6	9.9	9.0	8.5	8.4	8.0	7.7	7.2
Waterproof outer garments	2385	12.3	12.2	10.2	9.5	8.0	8.0	6.8	6.2
Leather and sheep lined clothing	2386	( <sup>1</sup> )	( <sup>1</sup> )	4.5	3.8	3.8	3.1	2.3	2.8
Apparel belts	2387	( <sup>1</sup> )	( <sup>1</sup> )	10.7	10.3	10.7	9.5	8.8	10.6
Apparel and accessories, nec	2389	( <sup>1</sup> )	( <sup>1</sup> )	6.5	5.8	6.3	6.7	6.7	7.4
Textile bags	2393	9.8	8.7	8.3	7.9	8.1	8.0	7.6	7.7
Canvas and related products	2394	15.0	15.2	14.9	15.0	16.5	16.9	16.4	17.3
Pleating and stitching	2395	16.2	17.4	15.6	14.4	14.8	13.5	14.3	14.9
Other fabricated textile products	2397,9	30.8	28.8	26.0	26.8	29.3	30.0	31.3	33.5
Paper and allied products:									
Pulp mills	261	16.5	16.9	15.7	14.4	13.7	13.4	14.2	15.3
Die-cut paper and board	2645	17.5	16.5	16.1	15.5	17.9	18.4	15.7	16.1
Sanitary paper products	2647	26.6	26.4	27.1	27.7	28.5	30.1	31.4	30.6
Other converted paper products	2646,8,9	45.6	44.9	41.8	41.3	44.4	44.2	45.7	46.1
Set-up paperboard boxes	2652	11.9	11.9	10.7	10.3	10.5	10.4	10.1	9.2
Fiber cans, drums, and similar products	2655	18.9	18.0	16.9	17.2	17.3	16.6	15.8	15.4
Building paper and board mills	266	12.4	11.0	9.7	10.4	11.1	9.9	9.7	8.6

See footnotes at end of table.



**Table 6. Employment benchmarks for industries not published monthly, March 1980-87—Continued**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Nondurable goods-Continued</b>									
Printing and publishing:									
Engraving and plate printing .....	2753	11.2	11.3	10.9	11.3	11.4	11.5	11.8	12.2
Commercial printing, gravure .....	2754	11.3	11.8	12.8	12.8	13.5	15.0	14.9	15.9
Greeting card publishing .....	277	24.0	23.8	24.4	23.4	23.3	24.0	22.3	23.4
Blankbooks and looseleaf binders .....	2782	38.5	39.0	38.5	39.4	40.8	43.1	44.3	44.7
Bookbinding and related work .....	2789	24.0	23.8	23.1	23.9	26.4	27.9	27.4	27.4
Typesetting .....	2791	27.5	28.1	28.8	28.2	30.6	32.8	33.1	33.8
Other publishing and printing .....	2793-5	16.9	16.8	17.1	16.2	17.2	17.6	17.6	18.7
Chemicals and allied products:									
Alkalies and chlorine .....	2812	23.0	20.8	20.5	17.6	15.6	15.3	12.4	10.8
Industrial gases .....	2813	21.0	22.0	24.3	23.6	23.1	23.2	23.5	21.3
Inorganic pigments .....	2816	11.6	11.2	10.8	9.7	9.8	10.3	10.6	10.6
Synthetic rubber .....	2822	13.9	15.3	14.5	13.4	13.2	13.4	13.3	13.3
Cellulosic man-made fibers .....	2823	14.6	19.8	18.5	15.7	19.1	18.0	16.3	13.6
Biological products .....	2831	22.9	22.6	23.8	23.3	22.3	22.3	23.2	26.2
Medicinals and botanicals .....	2833	18.1	18.2	18.6	18.3	18.4	17.8	18.2	17.2
Nitrogenous fertilizers .....	2873	14.8	15.4	14.9	13.0	12.8	12.7	11.7	10.5
Phosphatic fertilizers .....	2874	17.7	16.8	16.5	13.6	13.2	13.6	11.9	10.7
Fertilizers, mixing only .....	2875	15.0	14.3	12.7	13.1	13.0	12.9	11.8	11.5
Agricultural chemicals, nec .....	2879	26.2	25.3	24.8	23.1	22.7	22.5	21.2	19.4
Adhesives and sealants .....	2891	20.5	20.9	20.4	19.7	21.3	22.2	22.3	22.2
Explosives .....	2892	13.1	15.7	15.3	15.6	15.2	16.3	16.9	16.7
Printing ink .....	2893	12.8	12.3	11.8	11.6	11.9	12.0	11.7	13.1
Other chemical preparations .....	2895,9	47.0	45.1	44.6	41.5	41.5	44.0	42.2	42.0
Petroleum and coal products:									
Paving mixtures and blocks .....	2951	10.0	10.0	9.4	9.2	9.4	9.9	10.4	10.6
Asphalt felts and coatings .....	2952	20.4	17.4	12.7	14.1	15.3	14.1	14.0	13.7
Miscellaneous petroleum and coal products .....	299	12.3	12.3	11.9	11.1	11.1	11.4	11.6	12.0
Rubber and miscellaneous plastics products:									
Fabricated rubber products .....	303,4,6	135.4	127.5	123.4	115.5	131.1	130.7	125.8	125.6
Leather and leather products:									
Boot and shoe cut stock and findings .....	313	11.0	10.7	10.4	9.4	9.4	6.9	6.3	5.8
House slippers .....	3142	8.7	9.1	9.3	7.6	7.0	5.9	5.1	3.9
Footwear, except rubber, nec .....	3149	23.5	23.5	20.6	20.3	18.7	15.1	14.0	12.1
Leather gloves and mittens .....	315	( <sup>1</sup> )	( <sup>1</sup> )	4.2	3.4	3.4	3.3	3.2	3.1
Women's handbags and purses .....	3171	17.2	17.5	17.2	14.6	14.2	11.7	10.4	8.5
Personal leather goods, nec .....	3172	14.1	12.1	11.6	10.8	11.0	9.6	9.2	8.3
Leather goods, nec .....	319	( <sup>1</sup> )	( <sup>1</sup> )	9.1	8.3	8.2	8.1	7.9	8.4
<b>Service-producing</b> .....		<b>64,454</b>	<b>65,245</b>	<b>65,510</b>	<b>65,862</b>	<b>68,570</b>	<b>71,573</b>	<b>73,958</b>	<b>76,390</b>
<b>Transportation and public utilities</b> .....									
Transportation:									
Other railroads and switching and terminal companies .....	4012	54.1	40.0	32.9	27.9	27.4	36.3	36.1	37.1
Other passenger transit services .....	414,7	15.3	16.6	18.0	18.6	20.7	22.0	21.0	21.4
Trucking, local and long distance .....	421	1,186.7	1,140.1	1,109.1	1,067.9	1,177.3	1,227.9	1,247.0	1,301.4
Trucking terminal facilities .....	423	7.6	7.2	6.9	5.8	5.9	5.6	5.2	5.2
Deep sea transportation .....	441,2	42.6	46.3	45.8	46.0	41.4	40.0	38.3	37.4
Transportation on great lakes, rivers, and canals .....	443,4	( <sup>1</sup> )	( <sup>1</sup> )	19.1	16.8	18.3	16.7	15.3	14.8
Certified air transportation .....	451	( <sup>1</sup> )	( <sup>1</sup> )	365.1	365.0	389.3	398.7	445.3	481.0
Noncertified air transportation .....	452	( <sup>1</sup> )	( <sup>1</sup> )	27.6	24.1	28.8	30.5	35.4	36.9
Arrangement of transportation .....	472	125.7	128.2	139.5	149.1	167.7	189.5	200.2	206.6
Rental of railroad cars .....	474	( <sup>1</sup> )	( <sup>1</sup> )	8.7	7.4	6.9	7.0	6.4	6.8
Miscellaneous transportation services .....	478	( <sup>1</sup> )	( <sup>1</sup> )	13.0	11.7	13.0	15.0	13.6	15.2
Communication and public utilities:									
Telegraph communication .....	482	19.2	19.3	19.6	18.9	18.0	16.1	15.0	12.0
Communication services, nec .....	489	62.2	78.1	102.4	120.0	133.0	143.3	143.5	136.7
Water supply .....	494	20.4	20.6	20.7	20.8	21.1	21.8	22.3	22.8
Steam supply and irrigation systems .....	498,7	2.5	2.7	3.3	2.7	3.3	3.4	3.4	3.2
<b>Wholesale trade</b> .....									
Tires and tubes .....	5014	( <sup>1</sup> )	( <sup>1</sup> )	31.9	31.4	32.5	31.1	30.1	29.3
Warm air heating, air conditioning, and refrigeration .....	5075,8	( <sup>1</sup> )	( <sup>1</sup> )	57.1	56.8	81.4	62.8	61.8	62.0
Service establishment equipment .....	5087	( <sup>1</sup> )	( <sup>1</sup> )	81.5	83.4	87.1	71.0	73.2	76.0
Transportation equipment and supplies .....	5088	( <sup>1</sup> )	( <sup>1</sup> )	34.6	30.1	31.2	32.6	32.7	33.6
Jewelry, watches, and precious stones .....	5094	( <sup>1</sup> )	( <sup>1</sup> )	36.2	35.9	38.0	40.4	42.9	43.8
Durable goods, nec .....	5099	( <sup>1</sup> )	( <sup>1</sup> )	63.3	59.0	60.5	62.0	60.0	63.9
Frozen foods .....	5142	( <sup>1</sup> )	( <sup>1</sup> )	23.1	24.3	25.8	27.0	27.6	28.6
Dairy products .....	5143	( <sup>1</sup> )	( <sup>1</sup> )	39.9	40.7	41.4	43.7	44.1	47.3
Poultry and poultry products .....	5144	( <sup>1</sup> )	( <sup>1</sup> )	26.9	27.8	24.8	24.0	23.3	23.6
Confectionery .....	5145	( <sup>1</sup> )	( <sup>1</sup> )	34.2	37.0	40.1	40.5	41.8	44.1

See footnotes at end of table.

**Table 6. Employment benchmarks for industries not published monthly, March 1980-87—Continued**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Wholesale trade—Continued</b>									
Fish and seafoods .....	5146	( <sup>1</sup> )	( <sup>1</sup> )	23.4	24.3	25.7	27.1	27.9	29.1
Groceries and related products, nec .....	5149	( <sup>1</sup> )	( <sup>1</sup> )	150.9	153.7	163.8	174.1	184.4	193.0
Farm-product raw materials .....	515	147.0	145.4	145.9	139.0	137.0	133.8	127.5	124.4
Tobacco and tobacco products .....	5194	( <sup>1</sup> )	( <sup>1</sup> )	38.6	38.3	40.1	39.1	40.5	40.1
Paints, varnishes, and supplies .....	5198	( <sup>1</sup> )	( <sup>1</sup> )	25.6	25.4	26.9	27.8	28.0	29.6
Nondurable goods, nec .....	5199	( <sup>1</sup> )	( <sup>1</sup> )	173.5	175.5	192.2	207.8	216.4	237.0
<b>Retail trade</b>									
Paint, glass, and wallpaper stores .....	523	61.7	61.6	60.4	58.8	63.2	66.1	67.2	66.9
Retail nurseries and garden stores .....	526	53.7	54.1	54.0	53.3	56.6	64.2	68.5	71.0
Mobile home dealers .....	527	28.3	25.3	24.1	24.0	28.3	29.1	27.5	27.3
Fruit stores and vegetable markets .....	543	( <sup>1</sup> )	( <sup>1</sup> )	18.2	20.0	21.0	21.2	21.6	21.9
Candy, nut, and confectionery stores .....	544	( <sup>1</sup> )	( <sup>1</sup> )	24.2	25.3	27.6	29.6	31.5	30.4
Miscellaneous food stores .....	549	( <sup>1</sup> )	( <sup>1</sup> )	33.6	34.5	37.8	39.5	38.9	39.0
New and used car dealers .....	551	778.8	710.0	687.7	699.0	774.3	839.1	885.0	912.4
Used car dealers .....	552	43.0	40.4	40.3	41.8	47.5	51.1	52.5	55.4
Boat dealers .....	555	( <sup>1</sup> )	( <sup>1</sup> )	22.4	23.0	25.2	27.2	30.2	33.7
Motorcycle dealers .....	557	( <sup>1</sup> )	( <sup>1</sup> )	27.8	26.1	27.7	29.8	29.0	27.0
Trailer and automotive dealers, nec .....	556,9	( <sup>1</sup> )	( <sup>1</sup> )	23.9	23.7	27.1	27.5	28.0	29.5
Women's accessory and specialty stores .....	563	23.2	23.0	21.4	21.7	23.3	26.2	29.1	33.0
Children's and infant's wear stores .....	564	28.2	29.8	31.4	32.3	32.6	33.8	35.0	35.9
Furriers and fur shops .....	568	( <sup>1</sup> )	( <sup>1</sup> )	5.8	6.0	6.2	6.5	7.1	7.7
Miscellaneous apparel and accessories .....	569	( <sup>1</sup> )	( <sup>1</sup> )	45.8	45.6	49.3	51.5	54.5	57.0
Floor covering stores .....	5713	( <sup>1</sup> )	( <sup>1</sup> )	52.4	52.3	59.6	64.3	68.3	72.5
Drapery, upholstery, and miscellaneous home furnishings stores ...	5714,9	( <sup>1</sup> )	( <sup>1</sup> )	67.7	68.7	77.2	82.3	86.8	89.6
Used merchandise stores .....	593	58.7	59.7	61.3	64.1	70.4	74.3	78.1	81.8
Hobby, toy, and game shops .....	5945	( <sup>1</sup> )	( <sup>1</sup> )	43.0	44.1	52.2	56.5	63.8	69.9
Camera, luggage, and leather goods stores .....	5946,8	( <sup>1</sup> )	( <sup>1</sup> )	40.1	39.7	39.7	39.9	40.4	42.2
Direct selling organizations .....	5963	( <sup>1</sup> )	( <sup>1</sup> )	51.1	52.5	52.3	56.2	61.5	59.4
<b>Finance, insurance, and real estate</b>									
Federal Reserve banks .....	601	( <sup>1</sup> )	( <sup>1</sup> )	23.8	23.5	23.5	23.2	24.1	23.6
National banks and nonincorporated private banks .....	6025,6,7,8	( <sup>1</sup> )	( <sup>1</sup> )	800.0	794.7	803.2	827.8	850.5	849.1
Trust companies and other banking .....	604,5	( <sup>1</sup> )	( <sup>1</sup> )	49.3	54.7	54.5	57.2	61.3	65.1
Credit agencies other than banks, nec .....	611,3	18.4	20.4	21.8	22.7	23.4	24.5	24.3	25.6
State associations, noninsured .....	6124,5	( <sup>1</sup> )	( <sup>1</sup> )	8.0	8.4	8.3	9.9	7.6	4.9
Other security, commodity brokers, and services .....	622,3,8	41.5	46.6	49.6	55.9	64.6	69.7	77.5	91.4
Holding offices .....	671	50.9	53.6	63.2	67.6	74.8	80.8	91.1	104.4
Investment offices and miscellaneous investing .....	672,9	( <sup>1</sup> )	( <sup>1</sup> )	27.1	27.5	31.5	36.3	39.1	39.2
Trusts .....	673	( <sup>1</sup> )	( <sup>1</sup> )	40.7	38.7	34.4	40.4	55.2	55.5
Insurance and insurance carriers, nec .....	635,9	( <sup>1</sup> )	( <sup>1</sup> )	7.6	8.3	8.4	9.4	9.8	12.0
Pension, health, and welfare funds .....	637	( <sup>1</sup> )	( <sup>1</sup> )	23.2	25.2	24.6	26.8	27.8	33.5
Title abstract offices .....	654	22.2	20.6	19.2	19.6	23.7	24.8	27.7	32.7
<b>Services</b>									
Hotels and other lodging places:		17,636	18,340	18,888	19,262	20,365	21,561	22,650	23,754
Camps and trailering parks .....	703	14.4	15.0	14.3	15.2	16.8	18.3	18.0	19.2
Other lodging places .....	702,4	16.1	15.5	15.2	14.6	15.3	15.3	15.5	16.2
Personal services:									
Barber shops .....	724	27.6	25.7	23.9	23.8	23.4	21.2	20.1	19.3
Shoe repair and miscellaneous personal services .....	725,9	139.9	168.4	183.2	190.4	206.6	222.6	242.0	260.7
Business services:									
Outdoor, radio, TV, advertising, nec .....	7312,3,9	( <sup>1</sup> )	( <sup>1</sup> )	40.3	41.8	46.2	48.1	51.9	55.1
News syndicates .....	735	( <sup>1</sup> )	( <sup>1</sup> )	7.2	7.7	8.2	8.3	8.5	9.0
Personnel supply services, nec .....	7369	( <sup>1</sup> )	( <sup>1</sup> )	30.2	30.0	35.7	46.5	53.9	70.5
Computer related services, nec .....	7379	( <sup>1</sup> )	( <sup>1</sup> )	51.2	58.6	76.6	85.0	96.2	104.1
Trading stamp services .....	7396	( <sup>1</sup> )	( <sup>1</sup> )	7.2	7.5	6.4	6.1	4.1	3.0
Commercial testing laboratories .....	7397	( <sup>1</sup> )	( <sup>1</sup> )	39.0	36.7	40.5	44.9	46.5	47.1
Business services, nec .....	7399	( <sup>1</sup> )	( <sup>1</sup> )	325.2	341.7	387.6	428.3	453.2	472.6
Auto repair, services, and garages:									
Automobile parking .....	752	37.2	37.5	38.8	39.9	41.9	43.8	46.9	48.6
Top and body repair shops .....	7531	( <sup>1</sup> )	( <sup>1</sup> )	104.9	108.2	117.9	126.2	131.2	138.1
Tire retreading, painting, and automotive repair shops, nec .....	7534,5,9	( <sup>1</sup> )	( <sup>1</sup> )	110.6	113.5	123.7	131.0	133.9	136.8
General automotive repair shops .....	7538	( <sup>1</sup> )	( <sup>1</sup> )	143.4	149.3	166.7	179.2	183.9	186.6
Automotive services, except repairs .....	754	68.7	64.1	62.8	65.2	76.4	88.0	97.6	115.5

See footnotes at end of table.

**Table 6. Employment benchmarks for industries not published monthly, March 1980-87—Continued**

(In thousands)

Industry	1972 SIC Code	1980	1981	1982	1983	1984	1985	1986	1987
<b>Services-Continued</b>									
Miscellaneous repair services:									
Reupholstery and furniture repair .....	764	22.5	22.1	21.1	21.9	23.2	23.3	22.9	23.4
Miscellaneous repair services, nec .....	763,9	181.0	183.3	181.6	167.9	184.5	191.8	192.5	189.8
Motion pictures:									
Motion picture distribution and services .....	782	10.6	11.1	10.9	10.7	11.8	11.2	12.1	13.0
Amusement and recreation services:									
Producers, orchestras, entertainers .....	792	86.2	86.7	86.3	91.3	92.4	98.4	102.1	107.1
Bowling and billiard establishments .....	793	117.2	114.8	111.3	107.4	107.6	106.7	104.8	105.0
Commercial sports .....	794	64.2	62.1	64.0	65.2	69.3	68.6	74.0	73.0
Amusement and recreation services, nec .....	791,9	432.6	443.5	472.5	479.4	480.7	484.0	501.4	523.3
Health services:									
Offices of osteopathic physicians .....	803	23.9	25.1	26.3	27.5	28.7	29.4	30.7	32.3
Offices of other health practitioners .....	804	95.2	104.5	116.2	129.9	145.6	162.4	176.6	191.9
Health and allied services, nec .....	809	( <sup>1</sup> )	( <sup>1</sup> )	94.9	122.0	145.9	177.4	213.3	236.8
Educational services:									
Educational services, nec .....	823,9	70.9	69.9	69.0	65.4	71.3	72.6	77.9	83.9
Social services:									
Child day care services .....	835	303.2	294.6	298.2	302.7	314.7	338.7	360.7	381.0
Social services, nec .....	839	241.5	247.9	218.2	216.0	226.0	237.4	240.2	245.3
Membership organizations:									
Professional organizations .....	862	35.5	35.6	35.9	36.6	37.7	39.6	41.8	43.7
Religious organizations .....	866	892.3	885.2	898.5	880.6	855.6	843.9	823.9	851.0
Political and membership organizations, nec .....	865,9	68.2	66.0	64.4	64.5	67.3	71.7	87.9	90.2
Miscellaneous services:									
Services, nec .....	899	( <sup>1</sup> )	( <sup>1</sup> )	21.0	21.1	22.7	24.5	25.8	25.8
Agricultural services:									
Veterinary services .....	074	( <sup>1</sup> )	( <sup>1</sup> )	72.9	77.2	81.9	87.0	94.1	100.4
Animal services, except veterinary .....	075	( <sup>1</sup> )	( <sup>1</sup> )	34.1	35.4	38.2	39.7	41.4	42.2
Landscape and horticultural services .....	078	( <sup>1</sup> )	( <sup>1</sup> )	122.4	131.4	154.2	181.0	199.2	220.4
<b>Government</b>									
Federal .....		16,533	16,468	16,196	16,189	16,216	16,596	16,946	17,254
Small arms ammunition and ordnance .....		2,869	2,769	2,725	2,755	2,779	2,839	2,908	2,916
Other manufacturing .....		19.8	20.4	21.2	22.1	22.2	19.1	19.1	17.8
Trade .....		31.8	31.2	30.2	30.3	31.5	31.7	31.9	31.0
Finance .....		79.1	78.8	80.6	79.3	78.2	79.7	77.3	80.0
Other services .....		21.9	22.8	21.5	20.7	20.6	20.6	22.2	24.2
State .....		172.1	157.7	153.6	164.3	159.6	158.9	159.2	158.0
State government, excluding education .....		3,688	3,731	3,744	3,746	3,793	3,914	3,976	4,050
Construction .....		2,193.8	2,219.1	2,198.8	2,197.7	2,217.4	2,263.2	2,300.9	2,341.0
Transportation and public utilities .....		293.6	290.0	259.8	248.1	237.4	228.3	207.6	189.1
Services .....		34.3	34.4	41.3	44.0	46.2	45.4	45.6	45.0
Social services .....		( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	.0	2,415.0	2,438.0
Services, except hospitals, education, and social services .....		182.2	179.9	191.2	178.0	180.8	183.6	175.3	173.9
All other State government .....		124.3	144.3	124.4	123.7	122.9	124.2	125.8	119.4
Local .....		1,028.2	1,048.4	1,083.6	1,122.0	1,168.7	1,229.3	1,308.4	1,378.1
Local government, excluding education .....		9,976	9,968	9,728	9,688	9,644	9,843	10,062	10,288
Services .....		4,481.8	4,424.9	4,215.1	4,218.3	4,189.6	4,231.4	4,295.8	4,381.3
Social services .....		( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	.0	6,668.0	6,871.2
Services, except hospitals, education, and social services .....		200.7	200.5	136.4	125.8	114.1	117.9	114.7	114.9
Nonclassifiable establishments .....		174.4	164.7	158.7	166.2	166.9	177.9	187.9	198.3
Nonclassifiable establishments .....		107.7	169.4	203.4	144.8	110.3	199.5	187.3	245.7

<sup>1</sup> Not available.  
N.e.c. is an abbreviation for "not elsewhere classified" and designates broad categories of industries which cannot be more specifically identified.

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

**Table 7. Seasonal adjustment factors for employees on nonagricultural payrolls by industry**

Industry	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total<sup>1</sup></b>												
<b>Mining</b> .....	98.9	99.5	100.3	100.6	100.9	100.8	100.9	101.3	100.7	99.1	98.5	98.7
Oil and gas extraction .....	98.5	98.3	99.1	99.9	100.2	100.0	100.7	101.6	102.1	101.0	99.7	99.0
<b>Construction</b> .....	97.0	101.0	103.8	105.8	106.8	105.5	105.2	102.7	99.0	91.3	89.9	92.2
General building contractors .....	96.3	99.6	102.9	105.4	105.8	104.0	104.5	102.8	100.1	93.6	91.7	93.4
<b>Manufacturing<sup>1</sup></b>												
<b>Durable goods<sup>1</sup></b>												
Lumber and wood products .....	98.1	99.9	102.4	102.6	103.3	102.8	101.5	100.1	98.6	96.7	96.8	97.3
Furniture and fixtures .....	99.9	99.5	99.7	97.4	99.7	100.4	100.8	101.1	101.0	100.4	100.1	99.9
Stone, clay, and glass products .....	99.5	101.0	102.2	101.7	102.2	102.2	101.5	100.7	98.9	96.5	96.0	97.6
Primary metal industries .....	100.3	100.3	100.6	98.7	99.6	100.3	99.6	99.8	100.1	100.1	100.2	100.4
Blast furnaces and basic steel products .....	99.9	100.1	100.5	100.2	100.1	100.3	99.3	99.5	100.3	100.1	99.9	100.0
Fabricated metal products <sup>2</sup> .....	99.7	100.0	100.4	98.9	99.9	100.7	100.6	100.6	100.4	99.6	99.5	99.6
Machinery, except electrical <sup>2</sup> .....	100.2	100.2	100.5	99.6	99.5	99.9	99.8	99.8	100.2	100.0	100.1	100.3
Electrical and electronic equipment .....	99.6	99.6	100.3	99.5	100.0	100.3	100.4	100.4	100.4	100.1	99.8	99.7
Transportation equipment .....	100.0	100.0	100.2	98.7	98.2	100.5	100.2	100.7	101.0	99.8	100.3	100.3
Motor vehicles and equipment .....	100.1	100.3	100.9	98.0	96.6	101.0	100.4	101.1	101.7	99.0	100.2	100.6
Instruments and related products .....	99.9	99.8	100.4	99.9	100.1	100.0	99.9	100.1	100.3	99.9	99.9	99.9
Miscellaneous manufacturing .....	99.6	100.0	100.8	97.6	100.7	101.6	102.4	102.2	99.7	97.6	98.4	99.4
<b>Nondurable goods<sup>1</sup></b>												
Food and kindred products .....	96.5	97.6	100.2	102.4	105.4	105.0	102.5	100.9	99.4	97.0	96.7	96.5
Tobacco manufactures .....	93.8	93.8	94.3	93.6	100.8	107.2	107.3	102.7	105.0	104.5	100.3	96.7
Textile mill products <sup>2</sup> .....	99.9	100.1	100.5	98.3	100.5	100.7	100.5	100.4	100.1	99.5	99.7	99.8
Apparel and other textile products .....	100.2	100.3	101.0	96.9	96.9	100.1	100.8	101.1	100.7	100.0	99.3	99.9
Paper and allied products .....	99.5	99.7	100.9	100.1	100.4	100.4	100.2	100.2	100.2	99.5	99.4	99.5
Printing and publishing .....	100.1	99.9	100.1	99.8	99.7	99.7	99.9	100.5	100.4	99.9	100.0	100.0
Chemicals and allied products .....	99.7	99.8	100.6	100.6	100.6	100.3	100.0	99.9	99.8	99.4	99.5	99.8
Petroleum and coal products .....	99.6	100.7	101.8	102.0	101.9	100.9	100.3	99.8	98.7	98.1	97.8	98.5
Rubber and miscellaneous plastics products .....	100.2	100.0	100.7	96.6	99.6	100.3	100.3	100.2	100.1	99.9	100.0	100.1
Leather and leather products .....	99.5	100.1	101.5	95.2	101.8	101.2	101.5	101.8	100.4	98.9	99.0	99.1
<b>Transportation and public utilities<sup>1</sup></b>												
Transportation .....	99.3	100.2	100.6	99.4	99.6	101.4	101.6	101.1	101.4	98.5	98.3	98.6
Communication and public utilities .....	99.6	99.8	100.6	100.9	100.8	100.0	99.9	99.9	99.9	99.5	99.5	99.5
<b>Wholesale trade<sup>1</sup></b>												
Durable goods .....	99.8	100.0	100.5	100.5	100.5	100.1	100.2	100.1	100.1	99.5	99.4	99.4
Nondurable goods <sup>2</sup> .....	99.3	99.8	100.6	100.7	100.7	100.7	100.9	100.5	100.3	98.9	98.7	98.9
<b>Retail trade</b> .....	98.9	100.0	100.8	100.5	100.7	100.5	100.4	101.5	103.3	98.5	97.3	97.7
General merchandise stores .....	96.2	96.9	97.5	97.6	97.9	98.3	101.2	106.9	112.3	102.5	96.8	95.8
Food stores .....	98.9	99.6	100.3	100.4	100.3	100.2	101.2	102.1	102.1	99.4	98.9	98.6
Automotive dealers and service stations .....	99.6	100.3	101.1	101.2	101.2	100.7	100.2	99.7	99.5	98.9	98.6	99.0
Eating and drinking places .....	99.8	101.8	103.3	102.7	103.1	102.7	100.1	99.1	99.1	95.4	95.7	97.3
<b>Finance, insurance, and real estate<sup>1</sup></b>												
Finance .....	99.7	99.8	100.6	101.0	100.8	99.9	99.6	99.7	99.8	99.8	99.5	99.6
Insurance .....	99.9	100.0	100.3	100.5	100.3	99.8	99.8	99.9	99.9	99.9	99.9	99.9
Real estate .....	99.2	100.6	102.9	103.8	103.8	101.6	100.0	99.0	99.1	96.6	96.3	97.1
<b>Services</b> .....	100.3	100.5	100.8	100.9	100.6	100.3	100.4	99.9	99.6	98.3	99.0	99.6
Business services .....	99.3	99.8	100.5	100.7	101.1	100.9	101.0	100.7	100.4	98.5	98.2	98.9
Health services .....	99.8	99.9	100.4	100.5	100.4	100.0	100.0	99.9	99.8	99.8	99.7	99.8
<b>Government<sup>1</sup></b>												
Federal .....	100.0	100.4	101.2	101.4	100.8	99.3	99.3	99.4	99.7	99.3	99.4	99.8
State .....	102.7	101.4	97.1	94.6	94.4	98.0	102.4	102.9	102.1	99.3	102.4	102.7
Local .....	102.3	102.6	101.4	93.2	91.8	97.8	101.5	102.5	102.1	100.4	101.9	102.4

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

<sup>2</sup> No ARIMA models were identified to extend the unadjusted

series for one year. Factors shown are projected using X-11 without the ARIMA option.

**Table 8. Seasonal adjustment factors for women employees on nonagricultural payrolls by industry**

Industry	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total<sup>1</sup></b>												
<b>Mining</b> .....	100.0	99.8	99.9	101.6	100.2	99.7	99.6	99.7	99.7	99.7	99.9	100.2
<b>Construction</b> .....	99.1	99.7	101.2	101.9	101.9	101.2	101.3	100.8	99.7	97.7	97.3	98.2
<b>Manufacturing<sup>1</sup></b>												
<b>Durable goods<sup>1</sup></b>												
Lumber and wood products .....	98.8	100.4	102.3	101.4	102.4	102.0	101.3	99.7	98.9	97.3	97.3	98.3
Furniture and fixtures .....	100.4	99.8	99.7	97.0	99.2	99.8	100.7	101.1	101.1	100.7	100.3	100.3
Stone, clay, and glass products .....	99.4	99.9	101.5	100.1	100.9	101.3	101.0	100.4	99.6	98.4	98.5	99.1
Primary metal industries .....	100.3	100.2	100.4	98.4	99.9	100.0	100.2	100.4	100.1	99.6	100.1	100.3
Fabricated metal products .....	100.0	100.2	100.6	98.3	99.6	100.5	100.7	100.7	100.4	99.7	99.6	99.7
Machinery, except electrical .....	100.4	100.5	100.7	99.8	99.3	99.4	99.6	99.7	100.1	100.0	100.2	100.3
Electrical and electronic equipment .....	99.5	99.7	100.1	99.1	99.9	100.5	100.6	100.7	100.7	100.0	99.7	99.6
Transportation equipment .....	99.9	99.8	100.2	99.2	98.9	100.6	100.4	100.8	100.6	99.9	99.8	100.0
Instruments and related products .....	100.1	100.0	100.5	99.4	99.9	99.9	100.0	100.3	100.3	99.9	99.9	100.0
Miscellaneous manufacturing .....	99.5	99.6	100.8	96.6	101.1	102.3	104.1	103.4	99.9	96.4	97.5	99.0
<b>Nondurable goods<sup>1</sup></b>												
Food and kindred products <sup>2</sup> .....	94.5	95.8	99.4	102.7	108.8	108.3	104.6	101.7	99.4	95.3	94.9	94.7
Tobacco manufactures .....	92.3	91.5	92.2	87.9	99.0	110.5	110.7	106.6	106.8	105.2	101.6	96.1
Textile mill products .....	99.9	100.0	100.6	98.3	100.5	100.9	100.7	100.6	100.2	99.3	99.3	99.6
Apparel and other textile products .....	100.5	100.4	100.9	96.4	99.9	100.7	101.1	100.7	100.0	99.2	100.1	100.1
Paper and allied products .....	99.3	99.9	101.3	100.5	101.0	100.7	100.6	100.6	100.1	98.7	98.5	99.0
Printing and publishing .....	100.3	100.0	100.1	99.8	99.7	99.7	99.9	100.5	100.4	99.8	99.9	100.0
Chemicals and allied products .....	99.5	99.6	100.9	100.8	100.8	100.6	99.9	99.8	99.8	99.1	99.5	99.7
Petroleum and coal products .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Rubber and miscellaneous plastics products .....	100.1	99.9	100.8	97.9	99.3	100.3	100.8	100.5	100.2	99.9	100.1	100.3
Leather and leather products .....	99.5	100.2	101.3	95.5	102.1	101.7	101.7	102.0	100.1	98.5	98.6	98.8
<b>Transportation and public utilities</b> .....	100.1	100.3	100.3	98.9	98.7	100.6	100.9	100.6	100.6	99.7	99.6	99.7
<b>Wholesale trade</b> .....	99.6	99.6	100.1	99.9	100.0	100.3	100.9	100.8	100.6	99.3	99.4	99.4
<b>Retail trade</b> .....	98.4	99.6	100.4	100.1	100.3	100.4	100.7	102.5	104.8	98.6	96.9	97.2
<b>Finance, insurance, and real estate</b> .....	99.9	100.0	100.7	100.9	100.8	99.9	99.7	99.7	99.9	99.5	99.4	99.6
<b>Services</b> .....	100.4	100.4	100.2	100.0	99.7	100.0	100.5	100.2	100.0	99.0	99.6	100.1
<b>Government<sup>1</sup></b>												
Federal .....	100.0	100.5	101.5	101.8	100.8	99.4	99.2	99.3	99.6	99.1	99.3	99.6
State .....	103.1	101.5	96.6	93.6	93.6	97.8	102.5	103.1	102.4	99.8	102.9	103.2
Local .....	103.5	103.7	100.9	88.7	87.3	97.4	102.5	103.9	103.3	101.7	103.3	103.8

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

<sup>2</sup> No ARIMA models were identified to extend the unadjusted series for one year. Factors shown are projected using X-11 without the ARIMA option.

<sup>3</sup> Seasonal adjustment factors are not computed because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

**Table 9. Seasonal adjustment factors for production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry**

Industry	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total private<sup>2</sup></b>												
<b>Mining</b> .....	98.5	99.3	100.3	100.7	101.0	101.2	101.2	102.0	101.0	98.9	97.9	98.0
<b>Construction</b> .....	96.3	101.2	104.6	107.0	108.3	106.9	106.5	103.4	98.6	89.3	87.6	90.3
<b>Manufacturing<sup>2</sup></b>												
<b>Durable goods<sup>2</sup></b>												
Lumber and wood products .....	97.9	99.8	102.4	103.0	103.7	103.2	101.8	100.2	98.5	96.3	96.4	96.9
Furniture and fixtures .....	99.9	99.2	99.6	96.8	99.6	100.5	101.0	101.3	101.3	100.5	100.2	100.0
Stone, clay, and glass products .....	99.4	101.3	102.6	101.8	102.6	102.6	101.9	101.0	98.7	95.8	95.3	97.2
Primary metal industries .....	100.3	100.3	100.5	98.2	99.6	100.5	99.6	99.9	100.2	100.2	100.2	100.6
Blast furnaces and basic steel products .....	99.6	100.0	100.4	100.0	100.3	100.7	99.3	99.6	100.4	100.1	99.7	99.8
Fabricated metal products <sup>3</sup> .....	99.8	100.0	100.6	98.6	99.8	100.9	100.8	100.7	100.4	99.5	99.4	99.6
Machinery, except electrical .....	100.4	100.3	100.6	99.1	99.0	100.0	99.8	99.8	100.2	100.1	100.1	100.5
Electrical and electronic equipment .....	99.6	99.6	100.1	98.6	99.6	100.5	100.6	100.7	100.7	100.3	99.9	99.8
Transportation equipment .....	100.3	100.4	100.4	97.5	96.5	100.5	100.3	101.1	101.6	100.0	100.8	100.7
Motor vehicles and equipment .....	100.4	100.7	101.2	97.0	95.0	101.0	100.5	101.5	102.2	99.1	100.4	101.0
Instruments and related products .....	100.0	99.9	100.6	99.4	99.9	99.9	99.7	100.2	100.4	99.8	100.0	100.1
Miscellaneous manufacturing .....	99.5	99.9	100.9	97.2	101.2	102.2	103.3	103.0	99.4	96.5	97.8	99.0
<b>Nondurable goods<sup>2</sup></b>												
Food and kindred products .....	95.4	96.7	99.9	103.0	107.1	106.8	103.4	101.3	99.3	96.1	95.7	95.4
Tobacco manufactures .....	92.4	91.8	92.2	91.5	100.8	109.8	109.5	103.7	106.6	105.7	100.5	95.5
Textile mill products <sup>3</sup> .....	99.8	100.0	100.6	98.0	100.6	100.8	100.5	100.5	100.2	99.5	99.6	99.8
Apparel and other textile products .....	100.2	100.3	101.0	96.5	100.1	100.9	101.2	100.9	99.9	99.0	99.9	99.9
Paper and allied products .....	99.5	99.7	101.1	100.0	100.3	100.4	100.2	100.3	100.2	99.5	99.5	99.5
Printing and publishing .....	100.4	100.2	100.1	99.5	99.5	99.6	99.9	100.5	100.7	99.8	99.8	99.9
Chemicals and allied products .....	99.9	99.9	100.9	100.5	100.6	100.5	99.8	99.7	99.7	99.1	99.6	99.9
Petroleum and coal products .....	99.3	101.0	102.2	102.6	102.4	101.6	100.9	100.0	98.2	97.3	96.8	97.7
Rubber and miscellaneous plastics products .....	100.3	100.1	100.8	98.2	99.3	100.2	100.4	100.4	100.2	99.8	100.1	100.2
Leather and leather products .....	99.5	100.3	101.8	94.9	102.2	101.5	101.7	101.9	100.2	98.7	98.8	98.8
<b>Transportation and public utilities</b> .....	99.4	100.0	100.7	99.9	99.9	101.0	101.1	100.7	100.9	98.8	98.7	98.9
<b>Wholesale trade</b> .....	99.5	99.9	100.6	100.7	100.7	100.4	100.6	100.3	100.2	99.1	98.9	99.1
<b>Retail trade</b> .....	98.7	100.0	100.8	100.5	100.7	100.5	100.4	101.7	103.7	98.4	97.1	97.5
<b>Finance, insurance, and real estate</b> .....	99.6	100.0	101.2	101.8	101.6	100.2	99.7	99.5	99.8	98.9	98.7	99.1
<b>Services</b> .....	100.3	100.5	100.8	100.9	100.6	100.3	100.5	100.0	99.6	98.1	98.9	99.5

<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> Seasonally adjusted data are derived by aggregation of the

component series.

<sup>3</sup> No ARIMA models were identified to extend the unadjusted series for one year. Factors shown are projected using X-11 without the ARIMA option.

**Table 10. Seasonal adjustment factors for average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry**

Industry	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total private<sup>2</sup></b>												
<b>Mining</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Construction</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Manufacturing<sup>2</sup></b>												
<b>Durable goods<sup>2</sup></b>												
Lumber and wood products .....	99.9	101.1	101.7	99.6	100.7	100.8	100.4	99.2	100.2	98.2	98.8	99.6
Furniture and fixtures .....	98.9	98.9	100.1	98.1	100.7	101.3	101.9	101.1	103.2	98.1	98.5	99.2
Stone, clay, and glass products .....	100.1	101.1	101.0	100.7	101.0	101.1	101.1	100.0	99.6	97.4	97.7	99.2
Primary metal industries .....	99.9	99.7	100.2	99.0	99.1	100.1	99.5	100.4	101.5	100.2	100.2	100.3
Blast furnaces and basic steel products .....	100.5	99.9	100.4	100.0	99.0	100.2	99.1	100.1	101.1	99.9	100.1	99.8
Fabricated metal products .....	99.3	99.6	100.3	98.3	99.4	100.1	100.3	100.7	102.4	100.1	99.3	100.1
Machinery, except electrical .....	99.5	99.6	100.2	98.4	99.0	99.9	99.7	100.6	102.7	100.3	99.8	100.4
Electrical and electronic equipment .....	99.0	99.3	100.1	98.5	99.5	100.0	100.0	101.0	102.7	100.5	99.3	100.0
Transportation equipment .....	99.8	100.0	99.9	98.0	98.0	99.2	99.6	100.6	102.9	100.8	100.1	101.0
Motor vehicles and equipment .....	99.9	100.6	99.9	97.9	97.1	99.0	99.5	100.0	103.4	100.9	100.3	101.7
Instruments and related products .....	99.3	99.4	100.2	98.4	99.3	100.0	99.6	100.9	102.4	100.1	99.8	100.6
Miscellaneous manufacturing .....	99.3	99.5	100.0	98.2	99.5	100.3	101.4	101.3	102.0	99.5	99.1	99.9
<b>Nondurable goods<sup>2</sup></b>												
Food and kindred products .....	98.6	100.1	99.9	99.8	100.9	101.4	100.5	100.7	101.5	99.8	98.3	98.7
Tobacco manufactures .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Textile mill products .....	98.5	99.7	100.7	98.3	100.5	100.8	100.6	100.9	101.4	99.5	99.4	99.6
Apparel and other textile products .....	98.3	100.0	100.8	99.3	100.3	99.7	100.6	100.9	101.4	99.3	99.2	100.1
Paper and allied products .....	99.2	99.6	99.8	99.3	99.4	100.9	100.2	100.6	102.0	100.3	99.4	99.3
Printing and publishing .....	99.6	99.4	99.0	99.4	100.4	101.0	100.3	100.7	101.9	99.2	99.1	100.1
Chemicals and allied products .....	99.9	100.0	100.0	99.2	99.4	100.4	99.6	100.5	101.3	100.1	99.8	99.9
Petroleum and coal products .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Rubber and miscellaneous plastics products .....	99.5	99.8	100.2	98.6	99.5	100.0	100.2	100.6	101.9	100.2	99.5	100.0
Leather and leather products .....	99.2	100.7	102.6	100.8	100.3	99.9	100.0	100.2	101.5	99.0	97.3	98.6
<b>Transportation and public utilities</b> .....	99.3	99.6	100.4	100.8	101.0	100.3	100.2	100.3	100.3	98.9	99.5	99.4
<b>Wholesale trade</b> .....	99.7	100.1	100.4	100.3	100.4	100.1	100.2	100.1	100.5	99.6	99.2	99.4
<b>Retail trade</b> .....	99.1	99.8	101.2	102.4	102.8	100.2	99.6	99.4	101.5	97.5	98.0	98.7
<b>Finance, insurance, and real estate</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Services</b> .....	99.7	99.8	100.6	100.9	101.1	99.7	99.8	99.8	99.7	99.5	99.7	99.7

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

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

component series.

<sup>3</sup> Seasonal adjustment factors are not computed because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

**Table 11. Seasonal adjustment factors for average weekly overtime hours of production workers on manufacturing payrolls**

Industry group	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Manufacturing<sup>1</sup></b>												
Durable goods .....	94.6	94.6	99.5	93.9	98.6	106.2	101.8	105.3	111.1	98.1	97.2	99.1
Nondurable goods .....	93.2	95.4	98.8	98.1	106.1	109.6	104.0	104.4	104.5	97.2	93.7	95.1

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

**Table 12. Seasonal adjustment factors for average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls by industry**

Industry division	1988									1989		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total private<sup>2</sup></b>												
Mining .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Construction .....	99.6	99.7	99.4	99.1	99.7	100.7	100.8	100.2	100.5	100.6	99.9	99.8
Manufacturing .....	100.1	99.9	99.8	99.9	99.2	99.9	99.6	100.1	100.6	100.5	100.2	100.2
Transportation and public utilities .....	99.8	99.4	99.5	99.7	99.7	100.3	100.0	100.7	100.6	100.1	100.4	99.8
Wholesale trade <sup>4</sup> .....	100.0	99.9	99.9	99.6	99.5	100.0	99.5	100.1	100.4	100.3	100.6	100.2
Retail trade .....	100.2	100.0	99.6	99.2	99.0	100.4	100.1	100.2	100.0	100.6	100.5	100.3
Finance, insurance, and real estate .....	100.5	100.1	99.8	99.2	99.4	99.6	99.3	100.1	99.5	100.5	101.3	100.8
Services .....	100.1	99.6	99.1	98.5	98.4	99.9	100.1	100.7	100.7	101.1	101.0	100.6

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

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

<sup>3</sup> Seasonal adjustment factors are not computed because the

seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

<sup>4</sup> No ARIMA models were identified to extend the unadjusted series for one year. Factors shown are projected using X-11 without the ARIMA option.



**Table 13. Seasonal adjustment factors for the Hourly Earnings Index for production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry**

Industry division	1988										1989	
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>Total private<sup>2</sup></b>												
<b>Mining</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Construction</b> .....	99.7	100.0	99.7	99.4	99.9	100.8	101.0	100.1	100.3	100.1	99.4	99.5
<b>Manufacturing<sup>2</sup></b>												
Durable goods .....	100.1	100.1	100.0	100.1	99.5	99.9	99.7	99.9	100.2	100.3	100.2	100.1
Nondurable goods .....	100.4	100.1	99.8	100.0	99.5	99.7	99.5	99.9	100.2	100.3	100.2	100.3
<b>Transportation and public utilities</b> .....	99.8	99.4	99.5	99.3	99.5	100.3	100.0	100.7	100.9	100.1	100.5	99.9
<b>Wholesale trade</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Retail trade</b> .....	100.2	100.2	99.9	99.6	99.4	100.6	99.9	100.0	100.0	100.0	100.1	100.0
<b>Finance, insurance, and real estate</b> .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Services</b> .....	100.1	99.8	99.5	99.0	98.9	100.2	99.9	100.4	100.5	100.6	100.7	100.4

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

<sup>3</sup> Seasonal adjustment factors are not computed because the

seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

NOTE: The Hourly Earnings Index excludes the effects of two types of changes that are unrelated to underlying wage rate movements--fluctuations in overtime in manufacturing and interindustry employment shifts.

**HOUSEHOLD DATA  
HISTORICAL**

**A-1. Employment status of the noninstitutional population 16 years and over, 1954 to date**

(Numbers in thousands)

Year and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
<b>Annual averages</b>												
1954 .....	110,463	65,785	59.6	62,251	2,142	60,109	6,205	53,904	3,532	5.4	44,678	
1955 .....	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660	
1956 .....	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402	
1957 .....	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336	
1958 .....	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088	
1959 .....	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960	
1960 <sup>1</sup> .....	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617	
1961 .....	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312	
1962 <sup>1</sup> .....	122,214	72,675	59.5	68,763	2,061	66,702	4,944	61,759	3,911	5.4	49,539	
1963 .....	124,422	73,839	59.3	69,768	2,006	67,762	4,687	63,076	4,070	5.5	50,583	
1964 .....	126,503	75,109	59.4	71,323	2,018	69,305	4,523	64,782	3,786	5.0	51,394	
1965 .....	128,459	76,401	59.5	73,034	1,946	71,088	4,361	66,726	3,366	4.4	52,058	
1966 .....	130,180	77,892	59.8	75,017	2,122	72,895	3,979	68,915	2,875	3.7	52,288	
1967 .....	132,092	79,565	60.2	76,590	2,218	74,372	3,844	70,527	2,975	3.7	52,527	
1968 .....	134,281	80,990	60.3	78,173	2,253	75,920	3,817	72,103	2,817	3.5	53,291	
1969 .....	136,573	82,972	60.8	80,140	2,238	77,902	3,606	74,296	2,832	3.4	53,602	
1970 .....	139,203	84,889	61.0	80,796	2,118	78,678	3,463	75,215	4,093	4.8	54,315	
1971 .....	142,189	86,355	60.7	81,340	1,973	79,367	3,394	75,972	5,016	5.8	55,834	
1972 <sup>1</sup> .....	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091	
1973 <sup>1</sup> .....	148,870	91,203	61.3	86,838	1,774	85,064	3,470	81,594	4,365	4.8	57,667	
1974 .....	151,841	93,670	61.7	88,515	1,721	86,794	3,515	83,279	5,156	5.5	58,171	
1975 .....	154,831	95,453	61.6	87,524	1,678	85,846	3,408	82,438	7,929	8.3	59,377	
1976 .....	157,818	97,826	62.0	90,420	1,668	88,752	3,331	85,421	7,406	7.6	59,991	
1977 .....	160,689	100,665	62.6	93,673	1,656	92,017	3,283	88,734	6,991	6.9	60,025	
1978 <sup>1</sup> .....	163,541	103,882	63.5	97,679	1,631	96,048	3,387	92,661	6,202	6.0	59,659	
1979 .....	166,460	106,559	64.0	100,421	1,597	98,824	3,347	95,477	6,137	5.8	59,900	
1980 .....	169,349	108,544	64.1	100,907	1,604	99,303	3,364	95,938	7,637	7.0	60,806	
1981 .....	171,775	110,315	64.2	102,042	1,645	100,397	3,368	97,030	8,273	7.5	61,460	
1982 .....	173,939	111,872	64.3	101,194	1,668	99,526	3,401	96,125	10,678	9.5	62,067	
1983 .....	175,891	113,226	64.4	102,510	1,676	100,834	3,383	97,450	10,717	9.5	62,665	
1984 .....	178,080	115,241	64.7	106,702	1,697	105,005	3,321	101,685	8,539	7.4	62,839	
1985 .....	179,912	117,167	65.1	108,856	1,706	107,150	3,179	103,971	8,312	7.1	62,744	
1986 <sup>1</sup> .....	182,293	119,540	65.6	111,303	1,706	109,597	3,163	106,434	8,237	6.9	62,752	
1987 .....	184,490	121,602	65.9	114,177	1,737	112,440	3,208	109,232	7,425	6.1	62,888	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1987:</b>												
May .....	184,259	121,633	66.0	114,060	1,726	112,334	3,269	109,065	7,573	6.2	62,626	
June .....	184,421	121,326	65.8	114,018	1,718	112,300	3,192	109,108	7,308	6.0	63,095	
July .....	184,605	121,610	65.9	114,359	1,720	112,639	3,212	109,427	7,251	6.0	62,995	
August .....	184,738	122,042	66.1	114,786	1,736	113,050	3,143	109,907	7,256	5.9	62,696	
September .....	184,904	121,706	65.8	114,615	1,743	112,872	3,184	109,688	7,091	5.8	63,198	
October .....	185,052	122,128	66.0	114,951	1,741	113,210	3,249	109,961	7,177	5.9	62,924	
November .....	185,225	122,349	66.1	115,259	1,755	113,504	3,172	110,332	7,090	5.8	62,876	
December .....	185,370	122,472	66.1	115,494	1,750	113,744	3,215	110,529	6,978	5.7	62,898	
<b>1988:</b>												
January .....	185,571	122,924	66.2	115,878	1,749	114,129	3,293	110,836	7,046	5.7	62,647	
February .....	185,705	123,084	66.3	116,145	1,736	114,409	3,228	111,182	6,938	5.6	62,621	
March .....	185,847	122,639	66.0	115,839	1,736	114,103	3,204	110,899	6,801	5.5	63,208	
April .....	185,964	123,055	66.2	116,445	1,732	114,713	3,228	111,485	6,610	5.4	62,909	
May .....	186,088	122,692	65.9	115,909	1,714	114,195	3,035	111,160	6,783	5.5	63,396	

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

<sup>2</sup> The population and Armed Forces figures are not adjusted for

seasonal variation.

NOTE: Revisions of seasonally adjusted monthly and quarterly data (shown in tables A-1 through A-3 and A-32 through A-53) for the most recent 5-year period are made at the end of each calendar year.

A-2. Employment status of the noninstitutional population 16 years and over by sex, 1977 to date

(Numbers in thousands)

Sex, year, and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
<b>Annual averages</b>												
<b>MEN</b>												
1977	76,756	59,959	78.1	56,291	1,563	54,728	2,671	52,057	3,667	6.1	16,797	
1978 <sup>1</sup>	78,107	61,151	78.3	58,010	1,531	56,479	2,718	53,761	3,142	5.1	16,956	
1979	79,509	62,215	78.2	59,096	1,489	57,607	2,686	54,921	3,120	5.0	17,293	
1980	80,877	62,932	77.8	58,665	1,479	57,186	2,709	54,477	4,267	6.8	17,945	
1981	82,023	63,486	77.4	58,909	1,512	57,397	2,700	54,697	4,577	7.2	18,537	
1982	83,052	63,979	77.0	57,800	1,529	56,271	2,736	53,534	6,179	9.7	19,073	
1983	84,064	64,580	76.8	58,320	1,533	56,787	2,704	54,083	6,260	9.7	19,484	
1984	85,156	65,386	76.8	60,642	1,551	59,091	2,668	56,423	4,744	7.3	19,771	
1985	86,025	65,967	76.7	61,447	1,556	59,891	2,535	57,356	4,521	6.9	20,058	
1986 <sup>1</sup>	87,349	66,973	76.7	62,443	1,551	60,892	2,511	58,381	4,530	6.8	20,376	
1987	88,476	67,784	76.6	63,684	1,577	62,107	2,543	59,564	4,101	6.1	20,692	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1987:</b>												
May	88,361	67,802	76.7	63,543	1,566	61,977	2,594	59,383	4,259	6.3	20,559	
June	88,442	67,623	76.5	63,543	1,559	61,984	2,530	59,454	4,080	6.0	20,819	
July	88,534	67,671	76.4	63,711	1,561	62,150	2,547	59,603	3,960	5.9	20,863	
August	88,598	67,937	76.7	63,916	1,575	62,341	2,489	59,852	4,021	5.9	20,661	
September	88,683	67,776	76.4	63,949	1,581	62,368	2,547	59,821	3,827	5.6	20,907	
October	88,756	67,947	76.6	64,048	1,580	62,468	2,569	59,899	3,899	5.7	20,809	
November	88,849	68,019	76.6	64,174	1,593	62,581	2,491	60,090	3,845	5.7	20,830	
December	88,924	68,030	76.5	64,245	1,589	62,656	2,523	60,133	3,785	5.6	20,894	
<b>1988:</b>												
January	89,033	68,243	76.6	64,396	1,588	62,808	2,593	60,216	3,847	5.6	20,790	
February	89,099	68,343	76.7	64,636	1,577	63,059	2,510	60,548	3,707	5.4	20,756	
March	89,168	68,148	76.4	64,332	1,573	62,759	2,474	60,285	3,816	5.6	21,020	
April	89,225	68,445	76.7	64,892	1,569	63,323	2,467	60,856	3,553	5.2	20,780	
May	89,287	68,318	76.5	64,583	1,553	63,030	2,391	60,639	3,736	5.5	20,969	
<b>Annual averages</b>												
<b>WOMEN</b>												
1977	83,932	40,705	48.5	37,381	92	37,289	612	36,677	3,324	8.2	43,227	
1978 <sup>1</sup>	85,434	42,731	50.0	39,669	100	39,569	669	38,900	3,061	7.2	42,703	
1979	86,951	44,343	51.0	41,325	108	41,217	661	40,556	3,018	6.8	42,608	
1980	88,472	45,611	51.6	42,241	124	42,117	656	41,461	3,370	7.4	42,861	
1981	89,751	46,829	52.2	43,133	133	43,000	667	42,333	3,696	7.9	42,922	
1982	90,887	47,894	52.7	43,995	139	43,256	665	42,591	4,499	9.4	42,993	
1983	91,827	48,646	53.0	44,190	143	44,047	680	43,367	4,457	9.2	43,181	
1984	92,924	49,855	53.7	46,061	146	45,915	653	45,262	3,794	7.6	43,068	
1985	93,886	51,200	54.5	47,409	150	47,259	644	46,615	3,791	7.4	42,686	
1986 <sup>1</sup>	94,944	52,568	55.4	48,861	155	48,706	652	48,054	3,707	7.1	42,376	
1987	96,013	53,818	56.1	50,494	160	50,334	666	49,668	3,324	6.2	42,195	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1987:</b>												
May	95,898	53,831	56.1	50,517	160	50,357	675	49,682	3,314	6.2	42,067	
June	95,979	53,703	56.0	50,475	159	50,316	662	49,654	3,228	6.0	42,276	
July	96,071	53,939	56.1	50,648	159	50,489	665	49,824	3,291	6.1	42,132	
August	96,140	54,105	56.3	50,870	161	50,709	654	50,055	3,235	6.0	42,035	
September	96,221	53,930	56.0	50,666	162	50,504	637	49,867	3,264	6.1	42,291	
October	96,295	54,181	56.3	50,903	161	50,742	680	50,062	3,278	6.1	42,114	
November	96,376	54,330	56.4	51,085	162	50,923	681	50,242	3,245	6.0	42,046	
December	96,446	54,442	56.4	51,249	161	51,088	692	50,396	3,193	5.9	42,004	
<b>1988:</b>												
January	96,538	54,681	56.6	51,482	161	51,321	700	50,621	3,200	5.9	41,857	
February	96,606	54,740	56.7	51,509	159	51,350	717	50,633	3,231	5.9	41,866	
March	96,679	54,491	56.4	51,507	163	51,344	730	50,614	2,985	5.5	42,188	
April	96,739	54,610	56.5	51,553	163	51,390	761	50,629	3,057	5.6	42,129	
May	96,801	54,374	56.2	51,327	161	51,166	645	50,521	3,047	5.6	42,427	

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

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

**HOUSEHOLD DATA  
HISTORICAL**

**A-3. Employment status of the civilian noninstitutional population 16 years and over, 1954 to date**

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force				Unemployment rates		
		Total	Percent of population	Employed	Unemployed	Total	Men	Women
<b>Annual averages</b>								
1954 .....	108,321	63,643	58.8	60,109	3,532	5.5	5.3	6.0
1955 .....	109,683	65,023	59.3	62,170	2,852	4.4	4.2	4.9
1956 .....	110,954	66,552	60.0	63,799	2,750	4.1	3.8	4.8
1957 .....	112,265	66,929	59.6	64,071	2,859	4.3	4.1	4.7
1958 .....	113,727	67,639	59.5	63,036	4,602	6.8	6.8	6.8
1959 .....	115,329	68,369	59.3	64,630	3,740	5.5	5.2	5.9
1960 <sup>1</sup> .....	117,245	69,628	59.4	65,778	3,852	5.5	5.4	5.9
1961 .....	118,771	70,459	59.3	65,746	4,714	6.7	6.4	7.2
1962 <sup>1</sup> .....	120,153	70,614	58.8	66,702	3,911	5.5	5.2	6.2
1963 .....	122,416	71,833	58.7	67,762	4,070	5.7	5.2	6.5
1964 .....	124,485	73,091	58.7	69,305	3,786	5.2	4.6	6.2
1965 .....	126,513	74,455	58.9	71,088	3,366	4.5	4.0	5.5
1966 .....	128,058	75,770	59.2	72,895	2,875	3.8	3.2	4.8
1967 .....	129,874	77,347	59.6	74,372	2,975	3.8	3.1	5.2
1968 .....	132,028	78,737	59.6	75,920	2,817	3.6	2.9	4.8
1969 .....	134,335	80,734	60.1	77,902	2,832	3.5	2.8	4.7
1970 .....	137,085	82,771	60.4	78,678	4,093	4.9	4.4	5.9
1971 .....	140,216	84,382	60.2	79,367	5,016	5.9	5.3	6.9
1972 <sup>1</sup> .....	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 <sup>1</sup> .....	147,096	89,429	60.8	85,064	4,365	4.9	4.2	6.0
1974 .....	150,120	91,949	61.3	86,794	5,156	5.6	4.9	6.7
1975 .....	153,153	93,775	61.2	85,846	7,929	8.5	7.9	9.3
1976 .....	156,150	96,158	61.6	88,752	7,406	7.7	7.1	8.6
1977 .....	159,033	99,009	62.3	92,017	6,991	7.1	6.3	8.2
1978 <sup>1</sup> .....	161,910	102,251	63.2	96,048	6,202	6.1	5.3	7.2
1979 .....	164,863	104,962	63.7	98,824	6,137	5.8	5.1	6.8
1980 .....	167,745	106,940	63.8	99,303	7,637	7.1	6.9	7.4
1981 .....	170,130	108,670	63.9	100,397	8,273	7.6	7.4	7.9
1982 .....	172,271	110,204	64.0	99,526	10,678	9.7	9.9	9.4
1983 .....	174,215	111,550	64.0	100,834	10,717	9.6	9.9	9.2
1984 .....	176,383	113,544	64.4	105,005	8,539	7.5	7.4	7.6
1985 .....	178,206	115,461	64.8	107,150	8,312	7.2	7.0	7.4
1986 <sup>1</sup> .....	180,587	117,834	65.3	109,597	8,237	7.0	6.9	7.1
1987 .....	182,753	119,865	65.6	112,440	7,425	6.2	6.2	6.2
<b>Monthly data, seasonally adjusted<sup>2</sup></b>								
<b>1987:</b>								
May .....	182,533	119,907	65.7	112,334	7,573	6.3	6.4	6.2
June .....	182,703	119,808	65.5	112,300	7,308	6.1	6.2	6.0
July .....	182,885	119,890	65.6	112,639	7,251	6.0	6.0	6.1
August .....	183,002	120,306	65.7	113,050	7,256	6.0	6.1	6.0
September .....	183,161	119,963	65.5	112,872	7,091	5.9	5.8	6.1
October .....	183,311	120,387	65.7	113,210	7,177	6.0	5.9	6.1
November .....	183,470	120,594	65.7	113,504	7,090	5.9	5.8	6.0
December .....	183,620	120,722	65.7	113,744	6,978	5.8	5.7	5.9
<b>1988:</b>								
January .....	183,822	121,175	65.9	114,129	7,046	5.8	5.8	5.9
February .....	183,969	121,348	66.0	114,409	6,938	5.7	5.6	5.9
March .....	184,111	120,903	65.7	114,103	6,801	5.6	5.7	5.5
April .....	184,232	121,323	65.9	114,713	6,610	5.4	5.3	5.6
May .....	184,374	120,978	65.6	114,195	6,783	5.6	5.6	5.6

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

Explanatory Notes.

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

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

(Numbers in thousands)

Age, sex, and race	May 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
<b>TOTAL</b>											
16 years and over .....	184,374	120,775	65.5	114,222	6,553	5.4	63,599	28,308	8,841	3,256	23,195
16 to 19 years .....	14,590	7,652	52.4	6,459	1,193	15.6	6,937	364	6,070	30	474
16 to 17 years .....	7,367	3,058	41.5	2,556	502	16.4	4,309	89	4,072	8	140
18 to 19 years .....	7,223	4,595	63.6	3,903	691	15.0	2,628	275	1,998	22	334
20 to 24 years .....	18,478	14,303	77.4	12,975	1,328	9.3	4,175	1,612	1,727	96	740
25 to 54 years .....	101,127	83,794	82.9	80,252	3,541	4.2	17,333	12,094	990	1,242	3,007
25 to 34 years .....	42,544	35,444	83.3	33,646	1,798	5.1	7,100	5,015	658	343	1,085
25 to 29 years .....	21,293	17,821	83.7	16,847	974	5.5	3,472	2,390	379	172	530
30 to 34 years .....	21,251	17,622	82.9	16,799	823	4.7	3,629	2,626	279	171	555
35 to 44 years .....	34,660	29,242	84.4	28,092	1,150	3.9	5,418	3,839	265	414	900
35 to 39 years .....	18,791	15,815	84.2	15,157	658	4.2	2,976	2,164	148	188	480
40 to 44 years .....	15,870	13,427	84.6	12,935	492	3.7	2,442	1,680	117	226	420
45 to 54 years .....	23,922	19,108	79.9	18,515	593	3.1	4,814	3,241	67	484	1,022
45 to 49 years .....	12,875	10,645	82.7	10,281	365	3.4	2,231	1,575	40	220	397
50 to 54 years .....	11,046	8,462	76.6	8,234	228	2.7	2,584	1,666	27	266	626
55 to 64 years .....	21,635	11,771	54.4	11,378	393	3.3	9,865	4,875	39	734	4,216
55 to 59 years .....	10,844	7,129	65.7	6,904	226	3.2	3,714	2,155	28	331	1,200
60 to 64 years .....	10,792	4,641	43.0	4,474	167	3.6	6,150	2,721	11	403	3,016
65 years and over .....	28,544	3,255	11.4	3,157	98	3.0	25,289	9,361	16	1,154	14,758
65 to 69 years .....	9,814	1,952	19.9	1,887	64	3.3	7,863	3,002	10	270	4,582
70 to 74 years .....	7,696	822	10.7	807	15	1.8	6,874	2,550	6	225	4,091
75 years and over .....	11,034	482	4.4	464	18	3.7	10,552	3,809		659	6,085
<b>Men</b>											
16 years and over .....	87,734	66,719	76.0	63,143	3,575	5.4	21,016	526	4,374	1,794	14,322
16 to 19 years .....	7,332	4,022	54.9	3,398	624	15.5	3,310	7	3,071	18	214
16 to 17 years .....	3,758	1,631	43.4	1,371	260	15.9	2,127	4	2,055	3	66
18 to 19 years .....	3,574	2,391	66.9	2,027	364	15.2	1,183	4	1,016	15	148
20 to 24 years .....	8,951	7,588	84.8	6,877	711	9.4	1,364	23	904	71	366
25 to 54 years .....	49,425	46,275	93.6	44,338	1,937	4.2	3,150	182	379	816	1,773
25 to 34 years .....	20,903	19,645	94.0	18,653	992	5.1	1,258	58	288	241	671
25 to 29 years .....	10,451	9,774	93.5	9,252	522	5.3	677	30	201	118	328
30 to 34 years .....	10,452	9,871	94.4	9,401	470	4.8	581	29	87	123	343
35 to 44 years .....	16,947	16,025	94.6	15,397	629	3.9	921	60	75	292	495
35 to 39 years .....	9,205	8,734	94.9	8,386	348	4.0	471	25	38	145	263
40 to 44 years .....	7,742	7,291	94.2	7,011	280	3.8	450	35	37	147	232
45 to 54 years .....	11,575	10,605	91.6	10,289	316	3.0	971	65	16	283	606
45 to 49 years .....	6,235	5,842	93.7	5,650	193	3.3	393	23	8	128	235
50 to 54 years .....	5,340	4,762	89.2	4,639	123	2.6	578	41	9	156	372
55 to 64 years .....	10,189	6,856	67.3	6,599	257	3.8	3,333	90	20	465	2,758
55 to 59 years .....	5,160	4,131	80.1	3,993	138	3.3	1,029	45	19	221	744
60 to 64 years .....	5,029	2,725	54.2	2,606	119	4.4	2,304	46	1	244	2,014
65 years and over .....	11,836	1,977	16.7	1,931	46	2.3	9,859	223		425	9,211
65 to 69 years .....	4,460	1,126	25.2	1,094	32	2.9	3,334	70		138	3,127
70 to 74 years .....	3,316	520	15.7	516	4	.8	2,796	43		97	2,655
75 years and over .....	4,060	331	8.2	321	10	2.9	3,729	110		190	3,429
<b>Women</b>											
16 years and over .....	96,640	54,057	55.9	51,079	2,978	5.5	42,583	27,781	4,467	1,462	8,873
16 to 19 years .....	7,258	3,630	50.0	3,061	570	15.7	3,627	357	2,999	12	259
16 to 17 years .....	3,609	1,427	39.5	1,185	242	17.0	2,182	86	2,017	5	74
18 to 19 years .....	3,649	2,203	60.4	1,876	327	14.9	1,445	271	982	7	186
20 to 24 years .....	9,527	6,715	70.5	6,099	616	9.2	2,812	1,589	823	26	374
25 to 54 years .....	51,702	37,518	72.6	35,914	1,604	4.3	14,183	11,912	611	426	1,234
25 to 34 years .....	21,641	15,798	73.0	14,993	806	5.1	5,843	4,957	370	102	414
25 to 29 years .....	10,842	8,047	74.2	7,595	452	5.6	2,795	2,360	178	54	202
30 to 34 years .....	10,799	7,751	71.8	7,398	353	4.6	3,048	2,597	192	48	212
35 to 44 years .....	17,714	13,217	74.6	12,695	522	3.9	4,497	3,779	190	122	405
35 to 39 years .....	9,586	7,081	73.9	6,771	310	4.4	2,505	2,135	110	43	217
40 to 44 years .....	8,128	6,136	75.5	5,924	212	3.5	1,992	1,645	80	79	188
45 to 54 years .....	12,347	8,503	68.9	8,226	277	3.3	3,844	3,176	51	201	416
45 to 49 years .....	6,640	4,803	72.3	4,631	172	3.6	1,838	1,552	32	92	162
50 to 54 years .....	5,706	3,700	64.8	3,595	105	2.8	2,006	1,625	18	110	254
55 to 64 years .....	11,446	4,915	42.9	4,779	136	2.8	6,532	4,785	19	270	1,458
55 to 59 years .....	5,684	2,999	52.8	2,911	88	2.9	2,685	2,110	9	110	456
60 to 64 years .....	5,762	1,916	33.3	1,868	48	2.5	3,846	2,675	10	159	1,002
65 years and over .....	16,708	1,278	7.7	1,227	52	4.0	15,430	9,138	15	729	5,547
65 to 69 years .....	5,354	826	15.4	793	32	3.9	4,529	2,932	10	132	1,455
70 to 74 years .....	4,380	302	6.9	291	11	3.6	4,078	2,507	6	128	1,436
75 years and over .....	6,974	151	2.2	143	8	5.2	6,823	3,699		469	2,656

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	May 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
<b>WHITE</b>											
16 years and over .....	158,034	104,125	65.9	99,414	4,711	4.5	53,909	24,574	6,650	2,468	20,217
16 to 19 years .....	11,876	6,614	55.7	5,746	868	13.1	5,262	265	4,596	25	375
16 to 17 years .....	5,945	2,643	44.5	2,282	362	13.7	3,302	65	3,111	6	120
18 to 19 years .....	5,931	3,971	67.0	3,464	507	12.8	1,960	201	1,485	19	255
20 to 24 years .....	15,331	12,260	80.0	11,358	902	7.4	3,070	1,236	1,313	58	462
25 to 54 years .....	86,132	71,894	83.5	69,335	2,558	3.6	14,239	10,263	700	935	2,340
25 to 34 years .....	35,860	30,173	84.1	28,905	1,268	4.2	5,687	4,143	477	248	818
25 to 29 years .....	17,885	15,141	84.7	14,462	679	4.5	2,744	1,955	285	132	372
30 to 34 years .....	17,975	15,032	83.6	14,442	589	3.9	2,942	2,189	191	116	446
35 to 44 years .....	29,702	25,182	84.8	24,354	829	3.3	4,519	3,325	176	333	684
35 to 39 years .....	15,983	13,502	84.5	13,030	471	5.6	2,482	1,904	90	151	371
40 to 44 years .....	13,718	11,681	85.2	11,324	356	3.0	2,038	1,471	86	182	314
45 to 54 years .....	20,571	16,538	80.4	16,076	462	2.8	4,033	2,794	47	354	837
45 to 49 years .....	11,057	9,195	83.2	8,911	283	3.1	1,863	1,355	28	157	324
50 to 54 years .....	9,513	7,343	77.2	7,164	179	3.9	2,170	1,479	19	197	512
55 to 64 years .....	19,028	10,454	54.9	10,146	307	2.9	8,574	4,282	24	560	3,709
55 to 59 years .....	9,464	6,305	66.6	6,130	175	2.8	3,159	1,875	14	246	1,024
60 to 64 years .....	9,564	4,149	43.4	4,016	133	3.2	5,416	2,407	10	314	2,685
65 years and over .....	25,667	2,904	11.3	2,829	74	2.6	22,764	8,528	15	889	13,331
65 to 69 years .....	8,756	1,743	19.9	1,694	50	2.9	7,013	2,668	10	208	4,128
70 to 74 years .....	6,912	719	10.4	709	11	1.5	6,193	2,333	6	173	3,681
75 years and over .....	9,999	442	4.4	427	14	3.2	9,557	3,527		509	5,522
<b>Men</b>											
16 years and over .....	75,769	58,136	76.7	55,508	2,627	4.5	17,633	398	3,305	1,404	12,526
16 to 19 years .....	5,988	3,433	57.3	2,985	448	13.0	2,554	9	2,352	17	177
16 to 17 years .....	3,042	1,394	45.8	1,214	180	12.9	1,648	4	1,586	3	55
18 to 19 years .....	2,946	2,039	69.2	1,772	268	13.1	906	5	765	14	122
20 to 24 years .....	7,499	6,541	87.2	6,048	494	7.6	958	19	693	39	206
25 to 54 years .....	42,614	40,255	94.5	38,811	1,444	3.6	2,359	106	255	644	1,354
25 to 34 years .....	17,856	16,947	94.9	16,214	733	4.3	909	35	206	171	497
25 to 29 years .....	8,878	8,403	94.7	8,022	381	4.5	475	12	149	91	223
30 to 34 years .....	8,978	8,544	95.2	8,191	352	4.1	434	23	57	80	274
35 to 44 years .....	14,684	14,011	95.4	13,551	461	3.3	672	31	39	242	361
35 to 39 years .....	7,929	7,591	95.7	7,335	255	3.4	339	12	19	118	190
40 to 44 years .....	6,754	6,421	95.1	6,215	205	3.2	334	19	20	124	171
45 to 54 years .....	10,074	9,297	92.3	9,047	250	2.7	777	40	10	232	496
45 to 49 years .....	5,431	5,115	94.2	4,964	150	2.9	317	19	4	103	190
50 to 54 years .....	4,643	4,182	90.1	4,082	100	2.4	461	21	6	129	305
55 to 64 years .....	9,014	6,124	67.9	5,922	202	3.3	2,891	77	5	370	2,439
55 to 59 years .....	4,540	3,694	81.4	3,582	112	3.0	846	38	4	167	636
60 to 64 years .....	4,475	2,430	54.3	2,340	90	3.7	2,045	39	1	203	1,802
65 years and over .....	10,654	1,782	16.7	1,743	39	2.2	8,871	187	1	333	8,351
65 to 69 years .....	3,995	1,023	25.6	996	27	2.6	2,972	49		103	2,820
70 to 74 years .....	2,985	461	15.4	458	4	.9	2,524	42		85	2,397
75 years and over .....	3,674	299	8.1	289	9	3.2	3,375	96		145	3,134
<b>Women</b>											
16 years and over .....	82,265	45,989	55.9	43,906	2,083	4.5	36,276	24,176	3,344	1,064	7,691
16 to 19 years .....	5,888	3,181	54.0	2,760	420	13.2	2,707	256	2,245	8	199
16 to 17 years .....	2,903	1,249	43.0	1,068	181	14.5	1,654	60	1,525	3	65
18 to 19 years .....	2,985	1,931	64.7	1,693	239	12.4	1,054	196	720	4	133
20 to 24 years .....	7,831	5,719	73.0	5,310	409	7.1	2,113	1,217	620	19	256
25 to 54 years .....	43,518	31,639	72.7	30,524	1,114	3.5	11,880	10,157	445	291	986
25 to 34 years .....	18,004	13,226	73.5	12,692	535	4.0	4,778	4,108	270	77	322
25 to 29 years .....	9,007	6,738	74.8	6,440	298	4.4	2,269	1,943	136	41	149
30 to 34 years .....	8,997	6,488	72.1	6,251	237	3.7	2,508	2,166	134	36	172
35 to 44 years .....	15,018	11,171	74.4	10,803	368	3.3	3,847	3,294	138	92	324
35 to 39 years .....	8,054	5,911	73.4	5,695	216	3.7	2,143	1,858	71	33	181
40 to 44 years .....	6,964	5,260	75.5	5,109	151	2.9	1,704	1,436	66	58	143
45 to 54 years .....	10,496	7,241	69.0	7,029	212	2.9	3,255	2,754	37	123	341
45 to 49 years .....	5,626	4,080	72.5	3,947	133	3.3	1,546	1,334	24	54	134
50 to 54 years .....	4,870	3,161	64.9	3,082	79	2.5	1,709	1,421	13	68	207
55 to 64 years .....	10,014	4,330	43.2	4,225	105	2.4	5,684	4,205	19	190	1,271
55 to 59 years .....	4,924	2,611	53.0	2,548	63	2.4	2,313	1,837	10	79	388
60 to 64 years .....	5,090	1,719	33.8	1,676	42	2.5	3,371	2,368	9	111	883
65 years and over .....	15,014	1,121	7.5	1,086	35	3.1	13,892	8,341	15	556	4,980
65 to 69 years .....	4,761	720	15.1	698	23	3.1	4,041	2,619	10	105	1,308
70 to 74 years .....	3,927	258	6.6	251	7	2.7	3,669	2,291	6	88	1,284
75 years and over .....	6,325	143	2.3	138	5	3.6	6,182	3,431		364	2,388

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	May 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
<b>BLACK</b>											
16 years and over .....	20,650	13,042	63.2	11,440	1,602	12.3	7,608	2,866	1,532	709	2,499
16 to 19 years .....	2,180	857	39.3	560	297	34.6	1,323	85	1,146	5	87
16 to 17 years .....	1,136	329	29.0	207	122	37.1	806	17	768	2	20
18 to 19 years .....	1,044	528	50.5	353	175	33.1	517	68	378	3	68
20 to 24 years .....	2,535	1,671	65.9	1,284	386	23.1	864	320	265	36	242
25 to 54 years .....	11,433	9,171	80.2	8,336	835	9.1	2,262	1,336	111	256	557
25 to 34 years .....	5,224	4,220	80.8	3,753	467	11.1	1,004	614	72	87	230
25 to 29 years .....	2,669	2,149	80.5	1,891	258	12.0	519	306	38	40	135
30 to 34 years .....	2,554	2,070	81.0	1,861	209	10.1	484	307	33	48	96
35 to 44 years .....	3,693	3,038	82.2	2,767	270	8.9	656	376	35	68	176
35 to 39 years .....	2,112	1,737	82.2	1,576	162	9.3	375	222	28	29	95
40 to 44 years .....	1,581	1,301	82.3	1,192	109	8.4	281	153	7	40	81
45 to 54 years .....	2,516	1,914	76.1	1,816	98	5.1	603	346	4	101	151
45 to 49 years .....	1,339	1,059	79.1	1,002	56	5.3	280	175	4	47	54
50 to 54 years .....	1,178	855	72.6	814	41	4.8	323	171	-	54	97
55 to 64 years .....	2,108	1,067	50.6	1,006	61	5.7	1,042	455	10	160	417
55 to 59 years .....	1,100	656	59.6	620	36	5.5	444	220	10	72	142
60 to 64 years .....	1,008	410	40.7	386	25	6.0	598	236	-	88	274
65 years and over .....	2,394	276	11.5	253	23	8.2	2,117	670	-	252	1,196
65 to 69 years .....	876	159	18.2	145	14	8.8	717	266	-	61	390
70 years and over .....	1,518	116	7.6	109	9	7.8	1,400	404	-	191	806
<b>Men</b>											
16 years and over .....	9,271	6,613	71.3	5,792	820	12.4	2,658	98	714	347	1,498
16 to 19 years .....	1,075	489	45.5	327	162	33.1	586	-	550	1	35
16 to 17 years .....	573	190	33.1	120	69	36.6	383	-	371	-	12
18 to 19 years .....	502	299	59.6	207	93	30.9	203	-1	179	1	23
20 to 24 years .....	1,155	862	74.6	660	202	23.5	293	3	121	29	139
25 to 54 years .....	5,125	4,531	88.4	4,118	413	9.1	594	63	33	146	351
25 to 34 years .....	2,362	2,105	89.1	1,879	225	10.7	258	22	22	63	150
25 to 29 years .....	1,207	1,058	87.7	944	114	10.8	148	16	13	27	92
30 to 34 years .....	1,155	1,046	90.6	935	111	10.6	109	5	9	36	59
35 to 44 years .....	1,645	1,460	88.7	1,327	133	9.1	185	23	11	39	112
35 to 39 years .....	942	840	89.2	762	78	9.3	102	9	8	19	65
40 to 44 years .....	703	620	88.1	565	55	8.9	84	13	3	20	47
45 to 54 years .....	1,118	967	86.5	912	55	5.7	151	18	-	44	89
45 to 49 years .....	595	536	90.1	500	36	6.6	59	2	-	24	34
50 to 54 years .....	523	431	82.5	412	19	4.5	92	16	-	20	55
55 to 64 years .....	950	586	61.7	549	37	6.3	364	11	10	82	261
55 to 59 years .....	498	347	69.8	329	18	5.2	150	7	10	43	90
60 to 64 years .....	452	238	52.7	220	19	7.8	214	4	-	40	171
65 years and over .....	966	145	15.0	139	6	4.2	821	21	-	89	712
65 to 69 years .....	382	71	18.7	67	4	( <sup>1</sup> )	311	10	-	35	266
70 years and over .....	584	73	12.6	72	2	( <sup>1</sup> )	510	11	-	54	446
<b>Women</b>											
16 years and over .....	11,379	6,429	56.5	5,648	782	12.2	4,950	2,769	817	362	1,002
16 to 19 years .....	1,105	368	33.3	233	135	36.7	737	85	596	4	52
16 to 17 years .....	563	140	24.8	87	53	37.8	423	17	397	2	8
18 to 19 years .....	542	228	42.1	146	82	36.0	314	69	199	2	45
20 to 24 years .....	1,380	809	58.6	625	184	22.8	570	317	144	7	103
25 to 54 years .....	6,308	4,640	73.6	4,218	422	9.1	1,668	1,273	78	110	206
25 to 34 years .....	2,862	2,115	73.9	1,873	242	11.4	747	592	50	24	80
25 to 29 years .....	1,462	1,091	74.6	947	144	13.2	371	290	25	13	43
30 to 34 years .....	1,399	1,024	73.2	926	98	9.6	375	302	24	12	37
35 to 44 years .....	2,048	1,578	77.0	1,440	137	8.7	470	353	24	29	64
35 to 39 years .....	1,170	897	76.7	814	84	9.3	273	213	20	10	30
40 to 44 years .....	878	681	77.5	627	54	7.9	197	140	4	20	34
45 to 54 years .....	1,398	947	67.7	904	43	4.5	452	328	4	57	62
45 to 49 years .....	744	523	70.3	502	20	3.9	221	173	4	23	20
50 to 54 years .....	655	424	64.7	402	22	5.2	231	155	-	34	42
55 to 64 years .....	1,158	481	41.5	457	24	5.1	678	444	-	78	156
55 to 59 years .....	602	309	51.3	291	18	5.9	294	212	-	29	53
60 to 64 years .....	556	172	30.9	166	6	3.6	384	232	-	48	103
65 years and over .....	1,428	131	9.2	115	17	12.6	1,296	649	-	163	484
65 to 69 years .....	494	88	17.9	78	10	11.3	406	256	-	26	124
70 years and over .....	934	43	4.6	37	7	( <sup>1</sup> )	890	393	-	137	360

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-5. Employment status of the black-and-other civilian noninstitutional population by age and sex**

(Numbers in thousands)

Age and sex	May 1988								Not in labor force
	Civilian noninstitutional population	Civilian labor force							
		Total	Percent of population	Employed			Unemployed		
				Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>TOTAL</b>									
16 years and over .....	26,340	16,650	63.2	14,807	256	14,552	1,843	11.1	9,690
16 to 19 years .....	2,714	1,038	38.3	713	18	695	325	31.3	1,676
16 to 17 years .....	1,422	414	29.1	274	2	272	140	33.9	1,007
18 to 19 years .....	1,292	624	48.3	439	17	423	185	29.6	668
20 to 24 years .....	3,147	2,043	64.9	1,617	27	1,590	425	26.8	1,105
25 to 54 years .....	14,994	11,900	79.4	10,917	152	10,766	983	8.3	3,094
25 to 34 years .....	6,684	5,270	78.8	4,740	87	4,654	530	10.1	1,414
25 to 29 years .....	3,408	2,681	78.7	2,384	38	2,346	296	11.0	727
30 to 34 years .....	3,276	1,397	42.6	2,356	48	2,308	234	16.7	686
35 to 44 years .....	4,959	4,060	81.9	3,738	39	3,699	322	7.9	899
35 to 39 years .....	2,808	2,313	82.4	2,126	24	2,103	186	8.0	494
40 to 44 years .....	2,151	1,747	81.2	1,612	16	1,596	135	7.7	405
45 to 54 years .....	3,352	2,570	76.7	2,439	26	2,413	131	5.1	782
45 to 49 years .....	1,818	1,450	79.8	1,369	17	1,353	81	5.6	368
50 to 54 years .....	1,533	1,120	73.1	1,070	10	1,060	49	4.4	414
55 to 64 years .....	2,607	1,317	50.5	1,231	35	1,196	86	6.5	1,290
55 to 59 years .....	1,380	824	59.7	773	13	761	51	6.2	556
60 to 64 years .....	1,227	493	40.1	458	22	436	35	7.0	735
65 years and over .....	2,877	352	12.2	328	24	304	24	6.8	2,525
65 to 69 years .....	1,058	209	19.8	194	6	188	15	7.2	850
70 to 74 years .....	784	102	13.0	97	9	88	6	5.9	681
75 years and over .....	1,035	41	4.0	38	9	29	3	( <sup>1</sup> )	995
<b>Men</b>									
16 years and over .....	11,966	8,583	71.7	7,635	230	7,404	948	11.0	3,383
16 to 19 years .....	1,345	589	43.8	413	13	399	176	29.9	756
16 to 17 years .....	716	237	33.1	157	2	155	80	33.7	479
18 to 19 years .....	629	352	56.0	256	12	244	96	27.3	277
20 to 24 years .....	1,452	1,046	72.1	829	25	804	217	20.8	406
25 to 54 years .....	6,811	6,020	88.4	5,528	139	5,389	493	8.2	791
25 to 34 years .....	3,047	2,698	88.5	2,439	81	2,358	259	9.6	349
25 to 29 years .....	1,573	1,371	87.2	1,229	37	1,192	142	10.3	202
30 to 34 years .....	1,474	1,327	90.0	1,210	44	1,166	117	8.9	147
35 to 44 years .....	2,263	2,014	89.0	1,846	35	1,811	168	8.3	249
35 to 39 years .....	1,276	1,143	89.6	1,050	22	1,028	93	8.1	132
40 to 44 years .....	987	871	88.2	796	13	783	75	8.6	117
45 to 54 years .....	1,501	1,308	87.1	1,243	23	1,220	65	5.0	193
45 to 49 years .....	804	727	90.5	685	13	673	42	5.8	76
50 to 54 years .....	697	581	83.2	557	10	547	23	4.0	117
55 to 64 years .....	1,175	732	62.3	677	31	646	55	7.5	442
55 to 59 years .....	620	437	70.5	411	12	399	26	6.0	183
60 to 64 years .....	555	295	53.2	267	20	247	29	9.8	259
65 years and over .....	1,182	195	16.5	188	22	166	7	3.5	988
65 to 69 years .....	465	103	22.2	98	5	93	5	5.0	362
70 to 74 years .....	331	59	17.8	58	8	50	2	( <sup>1</sup> )	272
75 years and over .....	386	32	8.3	32	9	23	-	( <sup>1</sup> )	354
<b>Women</b>									
16 years and over .....	14,374	8,067	56.1	7,173	25	7,147	895	11.1	6,307
16 to 19 years .....	1,369	450	32.8	300	5	296	149	33.2	920
16 to 17 years .....	706	178	25.2	117	-	117	61	34.2	528
18 to 19 years .....	664	272	41.0	183	5	179	89	32.6	392
20 to 24 years .....	1,695	996	58.8	788	2	786	208	20.9	699
25 to 54 years .....	8,183	5,880	71.9	5,389	13	5,377	490	8.3	2,303
25 to 34 years .....	3,637	2,572	70.7	2,301	6	2,296	271	10.5	1,065
25 to 29 years .....	1,835	1,310	71.4	1,155	1	1,154	154	11.8	525
30 to 34 years .....	1,802	1,263	70.1	1,146	4	1,142	117	9.2	539
35 to 44 years .....	2,696	2,046	75.9	1,892	4	1,888	154	7.5	650
35 to 39 years .....	1,532	1,170	76.4	1,076	2	1,075	93	8.0	362
40 to 44 years .....	1,164	876	75.2	816	3	813	60	6.9	288
45 to 54 years .....	1,850	1,262	68.2	1,197	3	1,193	65	5.2	589
45 to 49 years .....	1,014	723	71.2	684	4	680	39	5.3	292
50 to 54 years .....	836	539	64.5	513	-	513	26	4.9	297
55 to 64 years .....	1,432	585	40.8	554	4	550	31	5.3	848
55 to 59 years .....	760	387	51.0	363	1	361	25	6.4	373
60 to 64 years .....	672	197	29.3	191	2	189	6	3.0	475
65 years and over .....	1,695	157	9.3	140	2	138	17	10.9	1,537
65 to 69 years .....	593	106	17.8	96	1	95	10	9.4	488
70 to 74 years .....	453	43	9.5	39	1	38	4	( <sup>1</sup> )	409
75 years and over .....	649	9	1.4	6		6	3	( <sup>1</sup> )	641

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



A-6. Employment status of the civilian noninstitutional population by race, sex, and age

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
<b>TOTAL</b>								
Civilian noninstitutional population .....	182,533	184,374	79,474	80,402	88,464	89,382	14,595	14,590
Civilian labor force .....	119,695	120,775	62,147	62,696	49,725	50,426	7,823	7,652
Percent of population .....	65.6	65.5	78.2	78.0	56.2	56.4	53.6	52.4
Employed .....	112,377	114,222	58,828	59,745	47,104	48,018	6,445	6,459
Agriculture .....	3,541	3,292	2,548	2,336	690	644	303	312
Nonagricultural industries .....	108,836	110,930	56,280	57,409	46,414	47,373	6,142	6,147
Unemployed .....	7,318	6,553	3,319	2,952	2,621	2,409	1,378	1,193
Unemployment rate .....	6.1	5.4	5.3	4.7	5.3	4.8	17.6	15.6
Not in labor force .....	62,838	63,599	17,327	17,706	38,739	38,956	6,772	6,937
<b>White</b>								
Civilian noninstitutional population .....	156,811	158,034	69,095	69,781	75,764	76,377	11,951	11,876
Civilian labor force .....	103,271	104,125	54,282	54,703	42,151	42,808	6,838	6,614
Percent of population .....	65.9	65.9	78.6	78.4	55.6	56.0	57.2	55.7
Employed .....	97,908	99,414	51,807	52,523	40,303	41,145	5,798	5,746
Agriculture .....	3,299	3,037	2,343	2,119	662	624	294	294
Nonagricultural industries .....	94,610	96,378	49,464	50,404	39,642	40,522	5,504	5,452
Unemployed .....	5,363	4,711	2,474	2,180	1,848	1,663	1,041	868
Unemployment rate .....	5.2	4.5	4.6	4.0	4.4	3.9	15.2	13.1
Not in labor force .....	53,539	53,909	14,814	15,078	33,613	33,569	5,113	5,262
<b>Black</b>								
Civilian noninstitutional population .....	20,312	20,650	8,047	8,196	10,104	10,274	2,161	2,180
Civilian labor force .....	12,861	13,042	6,051	6,123	5,991	6,061	819	857
Percent of population .....	63.3	63.2	75.2	74.7	59.3	59.0	37.9	39.3
Employed .....	11,119	11,440	5,311	5,465	5,294	5,414	514	560
Agriculture .....	177	192	153	165	18	13	6	14
Nonagricultural industries .....	10,942	11,248	5,158	5,301	5,276	5,401	508	546
Unemployed .....	1,742	1,602	740	658	697	647	305	297
Unemployment rate .....	13.5	12.3	12.2	10.7	11.6	10.7	37.3	34.6
Not in labor force .....	7,451	7,608	1,996	2,073	4,113	4,213	1,342	1,323

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-7. Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin**

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	May 1988									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time <sup>1</sup>	Part time <sup>1</sup>	Total	Looking for full-time work	Looking for part-time work	
<b>TOTAL ENROLLED</b>										
Total, 16 to 24 years .....	15,219	7,417	48.7	6,540	1,117	5,423	877	304	573	11.8
16 to 19 years .....	11,018	4,964	45.1	4,302	379	3,923	662	182	481	13.3
20 to 24 years .....	4,200	2,453	58.4	2,238	738	1,500	215	122	93	8.7
High school .....	9,257	4,022	43.4	3,464	231	3,233	559	123	435	13.9
College .....	5,961	3,395	56.9	3,076	886	2,190	318	180	138	9.4
Full-time students .....	5,131	2,669	52.0	2,397	450	1,947	272	148	124	10.2
Part-time students .....	830	725	87.4	680	436	244	46	32	14	6.3
<b>Men, 16 to 24 years .....</b>	<b>7,791</b>	<b>3,833</b>	<b>49.2</b>	<b>3,380</b>	<b>624</b>	<b>2,755</b>	<b>454</b>	<b>166</b>	<b>288</b>	<b>11.8</b>
16 to 19 years .....	5,599	2,554	45.6	2,206	199	2,007	348	93	255	13.6
20 to 24 years .....	2,192	1,280	58.4	1,174	425	749	106	73	33	8.3
High school .....	4,828	2,159	44.7	1,850	151	1,699	309	72	237	14.3
College .....	2,963	1,674	56.5	1,529	473	1,056	145	94	51	8.7
Full-time students .....	2,591	1,326	51.2	1,210	276	934	116	77	39	8.8
Part-time students .....	372	348	93.4	319	197	122	29	16	12	8.2
<b>Women, 16 to 24 years .....</b>	<b>7,428</b>	<b>3,583</b>	<b>48.2</b>	<b>3,160</b>	<b>493</b>	<b>2,668</b>	<b>423</b>	<b>138</b>	<b>285</b>	<b>11.8</b>
16 to 19 years .....	5,419	2,410	44.5	2,096	180	1,916	314	88	226	13.0
20 to 24 years .....	2,008	1,173	58.4	1,064	313	751	109	49	59	9.3
High school .....	4,430	1,863	42.1	1,613	80	1,533	250	51	199	13.4
College .....	2,998	1,721	57.4	1,547	413	1,134	173	87	87	10.1
Full-time students .....	2,540	1,343	52.9	1,187	174	1,013	156	71	85	11.6
Part-time students .....	458	378	82.4	360	238	122	17	16	2	4.6
<b>White</b>										
Total, 16 to 24 years .....	12,338	6,393	51.8	5,770	981	4,789	623	223	399	9.7
16 to 19 years .....	8,914	4,311	48.4	3,837	342	3,495	474	131	342	11.0
20 to 24 years .....	3,425	2,082	60.8	1,933	640	1,294	149	92	57	7.2
Men .....	6,316	3,262	51.7	2,939	540	2,399	323	122	201	9.9
Women .....	6,023	3,131	52.0	2,831	441	2,389	300	102	198	9.6
High school .....	7,388	3,475	47.0	3,078	196	2,882	397	96	302	11.4
College .....	4,951	2,918	58.9	2,692	785	1,907	226	128	98	7.7
Full-time students .....	4,260	2,302	54.0	2,108	398	1,709	194	111	83	8.4
Part-time students .....	691	616	89.2	584	387	197	31	17	15	5.1
<b>Black</b>										
Total, 16 to 24 years .....	2,163	783	36.2	557	107	450	226	74	152	28.9
16 to 19 years .....	1,656	523	31.6	352	29	323	171	49	122	32.7
20 to 24 years .....	507	260	51.4	205	78	127	55	25	30	21.1
Men .....	1,090	441	40.5	319	69	250	122	41	81	27.6
Women .....	1,072	342	31.9	238	38	200	104	32	72	30.5
High school .....	1,509	450	29.8	307	30	276	143	26	117	31.8
College .....	654	333	51.0	251	77	174	83	48	35	24.8
Full-time students .....	554	260	47.0	190	40	151	70	34	36	26.9
Part-time students .....	99	73	73.3	60	37	23	13	14	-	( <sup>2</sup> )
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	1,192	523	43.9	426	99	327	98	24	73	18.6
16 to 19 years .....	901	340	37.8	263	36	226	77	13	64	22.8
20 to 24 years .....	292	183	62.8	163	62	101	20	11	9	11.0
Men .....	585	265	45.3	216	54	162	49	10	39	18.4
Women .....	607	258	42.5	210	44	165	49	14	34	18.9
High school .....	828	304	36.7	238	33	204	67	10	57	21.9
College .....	364	219	60.2	188	65	123	31	15	16	14.1
Full-time students .....	269	140	52.2	128	14	114	12	8	4	8.8
Part-time students .....	95	79	82.7	60	51	9	19	6	12	23.7

See footnotes at end of table.

**A-7. Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin—Continued**

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	May 1988									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time <sup>1</sup>	Part time <sup>1</sup>	Total	Looking for full-time work	Looking for part-time work	
<b>TOTAL NOT ENROLLED</b>										
Total, 16 to 24 years .....	17,850	14,539	81.5	12,894	11,059	1,836	1,644	1,433	212	11.3
16 to 19 years .....	3,572	2,688	75.3	2,157	1,606	551	531	451	80	19.8
20 to 24 years .....	14,278	11,850	83.0	10,737	9,452	1,285	1,113	982	131	9.4
Less than 4 years of high school .....	4,187	2,769	66.1	2,193	1,730	463	575	502	73	20.8
4 years of high school .....	8,780	7,408	84.4	6,655	5,761	894	753	669	84	10.2
1 to 3 years of college .....	3,378	2,951	87.4	2,710	2,328	382	241	189	52	8.2
4 years of college or more .....	1,504	1,411	93.8	1,336	1,238	97	75	72	3	5.3
<b>Men, 16 to 24 years .....</b>	<b>8,493</b>	<b>7,777</b>	<b>91.6</b>	<b>6,895</b>	<b>6,234</b>	<b>661</b>	<b>881</b>	<b>793</b>	<b>88</b>	<b>11.3</b>
16 to 19 years .....	1,733	1,468	84.7	1,192	970	222	276	252	24	18.8
20 to 24 years .....	6,760	6,308	93.3	5,703	5,264	438	605	541	64	9.6
Less than 4 years of high school .....	2,195	1,838	83.7	1,492	1,258	233	347	320	26	18.9
4 years of high school .....	4,195	3,975	94.8	3,593	3,306	287	382	355	26	9.6
1 to 3 years of college .....	1,429	1,321	92.4	1,208	1,098	110	113	79	34	8.5
4 years of college or more .....	674	643	95.3	602	572	30	40	39	1	6.3
<b>Women, 16 to 24 years .....</b>	<b>9,357</b>	<b>6,762</b>	<b>72.3</b>	<b>5,999</b>	<b>4,824</b>	<b>1,175</b>	<b>763</b>	<b>639</b>	<b>124</b>	<b>11.3</b>
16 to 19 years .....	1,838	1,220	66.4	965	636	329	255	199	56	20.9
20 to 24 years .....	7,518	5,542	73.7	5,034	4,188	846	508	441	67	9.2
Less than 4 years of high school .....	1,992	930	46.7	702	472	230	229	182	46	24.6
4 years of high school .....	4,586	3,433	74.9	3,062	2,455	606	371	313	58	10.8
1 to 3 years of college .....	1,949	1,630	83.7	1,502	1,230	272	128	111	18	7.9
4 years of college or more .....	830	768	92.6	734	666	67	35	33	1	4.5
<b>White</b>										
Total, 16 to 24 years .....	14,868	12,481	83.9	11,334	9,763	1,571	1,148	1,004	143	9.2
16 to 19 years .....	2,962	2,303	77.8	1,909	1,420	489	394	337	57	17.1
20 to 24 years .....	11,906	10,178	85.5	9,425	8,343	1,082	754	667	86	7.4
<b>Men .....</b>	<b>7,171</b>	<b>6,712</b>	<b>93.6</b>	<b>6,094</b>	<b>5,543</b>	<b>550</b>	<b>619</b>	<b>561</b>	<b>58</b>	<b>9.2</b>
<b>Women .....</b>	<b>7,697</b>	<b>5,769</b>	<b>75.0</b>	<b>5,240</b>	<b>4,219</b>	<b>1,021</b>	<b>529</b>	<b>444</b>	<b>85</b>	<b>9.2</b>
Less than 4 years of high school .....	3,314	2,319	70.0	1,897	1,514	382	422	371	51	18.2
4 years of high school .....	7,352	6,369	86.6	5,858	5,094	764	511	464	47	8.0
1 to 3 years of college .....	2,819	2,498	88.6	2,335	2,004	330	163	120	43	6.5
4 years of college or more .....	1,383	1,296	93.7	1,244	1,150	94	52	49	3	4.0
<b>Black</b>										
Total, 16 to 24 years .....	2,552	1,744	68.4	1,287	1,079	208	457	393	64	26.2
16 to 19 years .....	524	334	63.7	208	166	42	126	105	20	37.6
20 to 24 years .....	2,028	1,410	69.6	1,079	913	166	331	287	44	23.5
<b>Men .....</b>	<b>1,139</b>	<b>909</b>	<b>79.8</b>	<b>667</b>	<b>579</b>	<b>88</b>	<b>242</b>	<b>215</b>	<b>27</b>	<b>26.6</b>
<b>Women .....</b>	<b>1,413</b>	<b>835</b>	<b>59.1</b>	<b>620</b>	<b>500</b>	<b>120</b>	<b>215</b>	<b>178</b>	<b>37</b>	<b>25.7</b>
Less than 4 years of high school .....	749	377	50.3	234	179	56	142	123	20	37.8
4 years of high school .....	1,248	911	73.0	681	568	113	230	194	36	25.3
1 to 3 years of college .....	477	378	79.3	314	277	37	64	56	9	16.9
4 years of college or more .....	78	78	100.2	58	55	3	20	20	-	25.8
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,189	1,658	75.7	1,439	1,253	186	220	199	20	13.2
16 to 19 years .....	453	303	66.8	231	172	59	72	57	15	23.9
20 to 24 years .....	1,736	1,356	78.1	1,208	1,081	128	147	142	5	10.9
<b>Men .....</b>	<b>1,134</b>	<b>1,044</b>	<b>92.1</b>	<b>902</b>	<b>808</b>	<b>94</b>	<b>142</b>	<b>135</b>	<b>6</b>	<b>13.6</b>
<b>Women .....</b>	<b>1,056</b>	<b>615</b>	<b>58.2</b>	<b>537</b>	<b>445</b>	<b>92</b>	<b>78</b>	<b>64</b>	<b>14</b>	<b>12.7</b>
Less than 4 years of high school .....	1,046	723	69.1	599	506	93	124	116	7	17.1
4 years of high school .....	847	690	81.5	600	524	76	90	80	10	13.0
1 to 3 years of college .....	232	196	84.5	191	179	12	5	2	3	2.7
4 years of college or more .....	65	50	( <sup>2</sup> )	49	44	6	1	1	-	( <sup>2</sup> )

<sup>1</sup> Employed persons with a job but not at work and persons at work part time are distributed according to whether they usually work full or part time.

<sup>2</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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-8. Employment status of male Vietnam-era veterans and nonveterans by age**

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	May 1987	May 1988	Total		Employed		Unemployed			
			May 1987	May 1988	May 1987	May 1988	Number		Percent of labor force	
							May 1987	May 1988	May 1987	May 1988
<b>VIETNAM-ERA VETERANS</b>										
Total, 30 years and over .....	7,836	7,900	7,250	7,290	6,937	6,984	313	306	4.3	4.2
30 to 44 years .....	6,260	5,975	5,974	5,696	5,723	5,440	251	256	4.2	4.5
30 to 34 years .....	956	718	912	677	841	618	71	59	7.8	8.7
35 to 39 years .....	2,663	2,214	2,538	2,095	2,433	2,005	105	90	4.1	4.3
40 to 44 years .....	2,641	3,043	2,524	2,924	2,449	2,817	75	107	3.0	3.7
45 years and over .....	1,576	1,925	1,276	1,594	1,214	1,544	62	50	4.9	3.1
<b>NONVETERANS</b>										
Total, 30 to 44 years .....	19,321	20,284	18,244	19,115	17,405	18,334	839	781	4.6	4.1
30 to 34 years .....	8,812	9,048	8,403	8,539	8,009	8,167	394	372	4.7	4.4
35 to 39 years .....	6,137	6,751	5,787	6,409	5,526	6,167	261	242	4.5	3.8
40 to 44 years .....	4,372	4,485	4,054	4,167	3,870	4,000	184	167	4.5	4.0

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; published data

are limited to those 30 to 44 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

A-9. Employed and unemployed full- and part-time workers by sex, age, and race

(In thousands)

Sex, age, and race	May 1988							
	Employed						Unemployed	
	Full time			Part time			Looking for full-time work	Looking for part-time work
	Total	Full-time schedules <sup>1</sup>	Part time for economic reasons, usually work full time	Total	Voluntary <sup>1</sup>	Part time for economic reasons, usually work part time		
<b>TOTAL</b>								
Total, 16 years and over .....	94,535	92,927	1,608	19,687	16,621	3,066	5,364	1,189
16 to 19 years .....	1,985	1,891	94	4,474	4,120	354	633	561
16 to 17 years .....	247	234	13	2,309	2,236	73	156	345
18 to 19 years .....	1,738	1,657	81	2,166	1,885	281	476	215
20 years and over .....	92,550	91,036	1,514	15,213	12,501	2,712	4,731	629
20 to 24 years .....	10,191	9,921	270	2,784	2,196	588	1,104	224
25 years and over .....	82,360	81,115	1,245	12,428	10,304	2,124	3,628	404
25 to 54 years .....	71,303	70,219	1,084	8,949	7,176	1,773	3,245	296
55 years and over .....	11,056	10,895	161	3,479	3,128	351	383	108
<b>Men, 16 years and over</b> .....	<b>56,662</b>	<b>55,659</b>	<b>1,003</b>	<b>6,482</b>	<b>5,255</b>	<b>1,227</b>	<b>3,103</b>	<b>473</b>
16 to 19 years .....	1,169	1,101	68	2,229	2,069	160	345	278
20 years and over .....	55,492	54,558	934	4,252	3,186	1,066	2,757	194
20 to 24 years .....	5,690	5,513	177	1,187	913	274	614	97
25 years and over .....	49,802	49,044	758	3,066	2,273	793	2,144	98
25 to 54 years .....	42,704	42,049	655	1,635	1,006	629	1,893	43
55 years and over .....	7,099	6,996	103	1,430	1,266	164	250	54
<b>Women, 16 years and over</b> .....	<b>37,874</b>	<b>37,268</b>	<b>606</b>	<b>13,205</b>	<b>11,366</b>	<b>1,839</b>	<b>2,261</b>	<b>717</b>
16 to 19 years .....	816	790	26	2,244	2,051	193	287	282
20 years and over .....	37,058	36,478	580	10,960	9,315	1,645	1,974	434
20 to 24 years .....	4,501	4,408	93	1,597	1,283	314	490	127
25 years and over .....	32,557	32,071	486	9,362	8,031	1,331	1,484	308
25 to 54 years .....	28,599	28,171	428	7,314	6,170	1,144	1,351	253
55 years and over .....	3,958	3,900	58	2,049	1,862	187	133	54
<b>White</b>								
<b>Men, 16 years and over</b> .....	<b>49,960</b>	<b>49,128</b>	<b>832</b>	<b>5,549</b>	<b>4,619</b>	<b>930</b>	<b>2,294</b>	<b>334</b>
16 to 19 years .....	1,030	970	60	1,955	1,826	129	257	191
20 years and over .....	48,929	48,157	772	3,594	2,793	801	2,037	143
20 to 24 years .....	5,053	4,903	150	995	792	203	426	68
25 years and over .....	43,877	43,255	622	2,599	2,001	598	1,611	74
25 to 54 years .....	37,478	36,941	537	1,333	859	474	1,415	29
55 years and over .....	6,399	6,314	85	1,266	1,142	124	197	45
<b>Women, 16 years and over</b> .....	<b>32,042</b>	<b>31,538</b>	<b>504</b>	<b>11,863</b>	<b>10,398</b>	<b>1,465</b>	<b>1,558</b>	<b>525</b>
16 to 19 years .....	731	709	22	2,029	1,846	183	212	208
20 years and over .....	31,312	30,830	482	9,834	8,552	1,282	1,346	317
20 to 24 years .....	3,930	3,861	69	1,381	1,143	238	333	75
25 years and over .....	27,381	26,968	413	8,453	7,409	1,044	1,012	242
25 to 54 years .....	23,914	23,558	356	6,609	5,719	890	911	203
55 years and over .....	3,467	3,410	57	1,843	1,690	153	101	39
<b>Black</b>								
<b>Men, 16 years and over</b> .....	<b>5,102</b>	<b>4,947</b>	<b>155</b>	<b>691</b>	<b>447</b>	<b>244</b>	<b>691</b>	<b>129</b>
16 to 19 years .....	122	114	8	205	177	28	82	80
20 years and over .....	4,980	4,833	147	485	269	216	609	49
20 to 24 years .....	527	504	23	133	79	54	174	28
25 years and over .....	4,453	4,330	123	353	190	163	434	22
25 to 54 years .....	3,892	3,786	106	226	94	132	401	12
55 years and over .....	562	544	18	126	96	30	33	10
<b>Women, 16 years and over</b> .....	<b>4,641</b>	<b>4,550</b>	<b>91</b>	<b>1,006</b>	<b>690</b>	<b>316</b>	<b>618</b>	<b>164</b>
16 to 19 years .....	73	69	4	160	150	10	72	63
20 years and over .....	4,567	4,480	87	847	540	307	546	101
20 to 24 years .....	465	441	24	160	92	68	138	46
25 years and over .....	4,104	4,039	65	685	447	238	408	55
25 to 54 years .....	3,704	3,640	64	514	304	210	383	39
55 years and over .....	400	399	1	171	143	28	25	16

<sup>1</sup> Employed persons with a job but not at work are distributed according to whether they usually work full or part time.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-10. Employment status of persons in families by family relationship**

(Numbers in thousands)

Family relationship	May 1988									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over <sup>1</sup> .....	97,805	65.9	92,438	5,367	5.5	50,572	22,953	8,131	2,284	17,204
Husbands .....	39,763	78.4	38,598	1,165	2.9	10,985	182	183	842	9,778
With employed wife .....	25,560	92.3	24,903	656	2.6	2,134	59	100	306	1,668
With unemployed wife .....	844	87.2	745	99	11.7	123	6	2	13	103
With wife not in labor force .....	13,360	60.5	12,950	410	3.1	8,728	116	81	523	8,008
Wives .....	28,661	56.5	27,693	967	3.4	22,088	17,983	319	350	3,436
With employed husband .....	25,648	66.4	24,903	745	2.9	12,950	11,606	244	138	963
With unemployed husband .....	755	64.8	656	99	13.1	410	346	16	7	40
With husband not in labor force .....	2,257	20.5	2,134	123	5.5	8,728	6,030	59	206	2,433
Relatives in married-couple families .....	13,549	63.4	12,038	1,511	11.2	7,832	724	5,384	375	1,348
16 to 19 years .....	5,178	53.4	4,486	692	13.4	4,524	69	4,178	19	258
20 to 24 years .....	4,927	76.1	4,409	517	10.5	1,544	120	1,111	36	277
25 years and over .....	3,445	66.1	3,143	302	8.8	1,764	535	95	320	813
Women who maintain families .....	6,431	61.4	5,901	530	8.2	4,039	2,818	201	205	815
Relatives in families maintained by women .....	5,311	57.9	4,468	842	15.9	3,868	786	1,679	332	1,072
16 to 19 years .....	1,342	45.0	1,026	316	23.6	1,642	96	1,404	4	138
20 to 24 years .....	1,529	73.6	1,288	240	15.7	549	116	207	23	203
25 years and over .....	2,440	59.3	2,154	286	11.7	1,677	574	68	305	731
Men who maintain families .....	2,247	77.4	2,100	146	6.5	656	48	21	84	503
Relatives in families maintained by men .....	1,843	62.5	1,638	205	11.1	1,104	412	344	96	252
16 to 19 years .....	324	53.1	255	69	21.3	286	14	254		18
20 to 24 years .....	493	76.5	434	59	12.0	151	49	72	4	27
25 years and over .....	1,026	60.6	949	77	7.5	667	349	18	92	207

<sup>1</sup> Excludes persons living alone or with nonrelatives, persons in families where the husband, wife, or other person maintaining the family is in the Armed Forces, and persons in unrelated subfamilies.

NOTE: Estimates shown in this table for husbands, wives, and women

who maintain families are somewhat different from marital status estimates shown in other tables in this publication because of differences in definitions and weighting patterns used in aggregating the data.

A-11. Unemployed persons by marital status, race, age, and sex

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
Total, 16 years and over .....	4,078	3,575	6.2	5.4	3,240	2,978	6.1	5.5
Married, spouse present .....	1,559	1,273	3.7	3.1	1,161	1,076	3.9	3.6
Widowed, divorced, or separated .....	507	503	7.5	7.3	714	651	7.0	6.3
Single (never married) .....	2,013	1,799	11.4	9.9	1,365	1,251	9.9	9.0
White, 16 years and over .....	3,046	2,627	5.3	4.5	2,317	2,083	5.1	4.5
Married, spouse present .....	1,286	1,041	3.4	2.8	952	856	3.6	3.2
Widowed, divorced, or separated .....	357	351	6.4	6.2	484	463	6.0	5.5
Single (never married) .....	1,403	1,235	9.5	8.2	881	764	7.9	6.8
Black, 16 years and over .....	904	820	13.9	12.4	838	782	13.1	12.2
Married, spouse present .....	217	182	6.9	5.8	174	163	7.3	6.9
Widowed, divorced, or separated .....	141	135	14.4	13.4	212	167	11.8	9.4
Single (never married) .....	546	503	23.1	20.4	452	452	20.5	19.6
Total, 25 years and over .....	2,512	2,240	4.6	4.1	1,908	1,792	4.5	4.1
Married, spouse present .....	1,437	1,176	3.6	2.9	941	900	3.5	3.3
Widowed, divorced, or separated .....	474	477	7.3	7.2	635	598	6.5	6.0
Single (never married) .....	601	587	7.7	7.0	331	293	5.8	4.8
White, 25 years and over .....	1,885	1,686	4.0	3.5	1,367	1,254	3.8	3.4
Married, spouse present .....	1,177	976	3.3	2.7	780	718	3.2	2.9
Widowed, divorced, or separated .....	333	324	6.3	5.9	425	417	5.5	5.2
Single (never married) .....	374	385	5.9	5.6	162	119	3.7	2.6
Black, 25 years and over .....	543	456	10.6	8.7	479	463	9.4	8.8
Married, spouse present .....	205	152	6.8	5.0	130	132	5.9	6.1
Widowed, divorced, or separated .....	133	133	13.8	13.5	195	162	11.1	9.3
Single (never married) .....	205	169	17.5	13.6	155	170	13.5	12.8

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-12. Unemployed persons by occupation and sex**

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
Total, 16 years and over .....	7,318	6,553	6.1	5.4	6.2	5.4	6.1	5.5
Managerial and professional specialty .....	627	499	2.2	1.7	2.3	1.8	2.1	1.6
Executive, administrative, and managerial .....	362	299	2.7	2.0	2.6	2.0	2.9	2.1
Professional specialty .....	265	200	1.8	1.3	2.1	1.4	1.6	1.2
Technical, sales, and administrative support .....	1,539	1,477	4.2	4.1	3.8	3.2	4.4	4.6
Technicians and related support .....	109	105	3.3	3.0	3.7	2.8	2.8	3.3
Sales occupations .....	729	637	5.1	4.5	3.6	2.6	6.8	6.5
Administrative support, including clerical .....	700	734	3.7	3.9	4.3	4.4	3.6	3.8
Service occupations .....	1,197	1,116	7.3	6.8	7.5	7.2	7.2	6.6
Private household .....	52	51	5.5	5.4	( <sup>1</sup> )	( <sup>1</sup> )	5.4	5.4
Protective service .....	104	94	5.2	4.8	4.9	3.8	7.6	11.2
Service, except private household and protective .....	1,041	970	7.8	7.2	8.5	8.4	7.4	6.6
Precision production, craft, and repair .....	881	749	6.1	5.1	6.1	5.0	6.3	6.2
Mechanics and repairers .....	198	163	4.4	3.4	4.3	3.3	5.8	6.1
Construction trades .....	453	364	8.3	6.6	8.2	6.6	15.0	3.2
Other precision production, craft, and repair .....	230	223	5.3	5.1	5.3	4.7	5.4	6.5
Operators, fabricators, and laborers .....	1,806	1,596	9.4	8.3	9.0	8.2	10.7	8.7
Machine operators, assemblers, and inspectors .....	820	642	9.4	7.4	8.0	6.7	11.3	8.5
Transportation and material moving occupations .....	315	283	6.3	5.5	6.5	5.6	3.4	5.4
Handlers, equipment cleaners, helpers, and laborers .....	671	671	12.4	12.4	12.6	12.7	11.8	11.3
Construction laborers .....	178	186	18.0	20.6	17.5	20.5	( <sup>1</sup> )	( <sup>1</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	493	485	11.2	10.8	11.2	10.8	11.2	10.8
Farming, forestry, and fishing .....	185	242	4.4	6.1	4.0	5.6	6.6	8.4
No previous work experience .....	1,033	845						
16 to 19 years .....	674	531						
20 to 24 years .....	230	175						
25 years and over .....	129	138						

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



A-13. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
Total, 16 years and over .....	7,318	6,553	6.1	5.4	6.2	5.4	6.1	5.5
Nonagricultural private wage and salary workers .....	5,436	4,920	6.1	5.5	6.3	5.5	5.9	5.4
Mining .....	104	80	13.1	10.5	14.3	11.2	5.6	6.7
Construction .....	696	612	11.2	9.7	11.6	10.2	6.8	5.2
Manufacturing .....	1,341	1,157	6.2	5.3	5.3	4.6	7.9	6.5
Durable goods .....	771	619	6.0	4.8	5.8	4.6	6.5	5.5
Lumber and wood products .....	30	73	4.3	9.7	3.1	9.7	11.0	9.5
Furniture and fixtures .....	39	47	6.2	6.5	6.6	4.8	5.1	10.5
Stone, clay, and glass products .....	34	19	5.9	3.0	5.9	3.7	5.7	-
Primary metal industries .....	71	54	8.1	6.0	7.5	6.4	11.4	4.0
Fabricated metal products .....	105	64	7.6	4.7	7.4	4.2	8.1	6.4
Machinery, except electrical .....	133	79	5.4	3.2	5.6	2.5	4.9	5.1
Electrical machinery, equipment, and supplies .....	121	122	5.4	5.9	5.3	5.3	5.5	6.7
Transportation equipment .....	165	108	6.1	4.1	5.6	4.1	8.0	4.1
Automobiles .....	117	50	9.0	4.1	8.1	3.8	12.7	5.3
Other transportation equipment .....	48	58	3.4	4.1	3.1	4.5	4.3	3.2
Professional and photographic equipment .....	39	20	5.6	2.7	5.5	3.5	5.7	1.7
Other durable goods industries .....	34	34	6.7	6.4	6.8	5.8	6.6	6.8
Nondurable goods .....	570	538	6.4	5.9	4.3	4.7	9.2	7.4
Food and kindred products .....	179	171	9.7	9.6	6.9	7.9	14.7	13.3
Textile mill products .....	33	43	4.2	5.6	2.5	4.4	6.1	6.8
Apparel and other textile products .....	150	95	11.2	7.3	6.3	5.4	12.7	7.8
Paper and allied products .....	27	32	3.4	4.1	3.2	2.9	3.7	7.4
Printing and publishing .....	82	64	4.4	3.4	3.4	2.0	5.8	5.3
Chemicals and allied products .....	46	44	3.9	3.5	3.2	2.9	5.6	4.5
Rubber and miscellaneous plastics products .....	23	62	3.3	6.9	2.1	7.3	5.2	6.2
Other nondurable goods industries .....	31	26	7.5	5.8	6.6	4.9	9.8	7.9
Transportation and public utilities .....	262	267	4.2	4.2	4.4	3.8	3.8	5.3
Transportation .....	204	207	5.7	5.7	5.9	4.9	4.9	8.2
Communications and other public utilities .....	59	60	2.3	2.2	1.9	2.0	2.9	2.6
Wholesale and retail trade .....	1,561	1,400	6.8	6.2	6.3	5.5	7.4	7.0
Wholesale trade .....	182	205	4.1	4.8	3.7	4.4	5.1	5.8
Retail trade .....	1,379	1,196	7.5	6.5	7.2	5.9	7.7	7.1
Finance, insurance, and real estate .....	210	197	3.0	2.8	3.1	2.5	2.9	2.9
Service industries .....	1,260	1,207	5.2	4.9	5.9	5.5	4.8	4.6
Professional services .....	426	386	3.2	2.8	3.4	2.9	3.1	2.8
Other service industries .....	834	821	7.8	7.5	7.9	7.5	7.8	7.5
Agricultural wage and salary workers .....	128	179	6.5	9.6	5.8	8.9	9.2	11.9
Government, self-employed, and unpaid family workers .....	722	609	2.6	2.1	2.8	2.2	2.4	2.1
No previous work experience .....	1,033	845	-	-	-	-	-	-

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-14. Unemployed persons by reason for unemployment, sex, and race**

(Numbers in thousands)

Reason for unemployment	Total unemployed		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	7,318	6,553	3,319	2,952	2,621	2,409	1,378	1,193	5,363	4,711	1,742	1,602
Job losers .....	3,412	3,058	2,155	1,898	1,069	971	187	189	2,490	2,232	820	714
On layoff .....	815	698	505	416	277	233	32	49	649	565	152	107
Other job losers .....	2,597	2,360	1,650	1,482	792	738	155	140	1,841	1,667	669	607
Job leavers .....	830	820	399	335	332	359	99	126	699	638	114	159
Reentrants .....	2,044	1,835	616	603	1,009	883	418	348	1,464	1,298	515	475
New entrants .....	1,033	841	148	116	210	195	674	530	710	543	294	254
<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
Job losers .....	46.6	46.7	64.9	64.3	40.8	40.4	13.5	15.8	46.4	47.4	47.1	44.6
On layoff .....	11.1	10.7	15.2	14.1	10.6	9.7	2.3	4.1	12.1	12.0	8.7	6.7
Other job losers .....	35.5	36.0	49.7	50.2	30.2	30.7	11.2	11.7	34.3	35.4	38.4	37.9
Job leavers .....	11.3	12.5	12.0	11.4	12.7	14.9	7.2	10.6	13.0	13.5	6.5	9.9
Reentrants .....	27.9	28.0	18.6	20.4	38.5	36.7	30.4	29.2	27.3	27.6	29.5	29.6
New entrants .....	14.1	12.8	4.5	3.9	8.0	8.1	48.9	44.4	13.2	11.5	16.8	15.9
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers .....	2.9	2.6	3.5	3.1	2.2	2.0	2.4	2.4	2.4	2.1	6.4	5.5
Job leavers .....	.7	.7	.6	.5	.7	.7	1.3	1.6	.7	.6	.9	1.2
Reentrants .....	1.7	1.5	1.0	1.0	2.0	1.8	5.3	4.6	1.4	1.2	4.0	3.6
New entrants .....	.9	.7	.2	.2	.4	.4	8.6	6.9	.7	.5	2.3	2.0

**A-15. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment**

(Percent distribution)

Reason, sex, and age	May 1988						
	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 .....	6,553	100.0	46.3	26.8	26.9	13.6	13.3
Job losers .....	3,058	100.0	35.4	27.2	37.4	18.8	18.6
On layoff .....	698	100.0	47.9	28.2	23.8	15.1	8.7
Other job losers .....	2,360	100.0	31.7	26.9	41.4	19.8	21.6
Job leavers .....	820	100.0	51.6	30.6	17.8	9.2	8.6
Reentrants .....	1,835	100.0	57.4	24.5	18.1	8.9	9.2
New entrants .....	841	100.0	56.6	26.3	17.0	9.3	7.7
Men, 20 years and over .....	2,952	100.0	38.2	25.1	36.6	16.7	20.0
Job losers .....	1,898	100.0	33.2	24.4	42.4	19.7	22.7
On layoff .....	416	100.0	44.5	26.1	29.4	18.6	10.8
Other job losers .....	1,482	100.0	30.1	23.9	46.1	20.0	26.1
Job leavers .....	335	100.0	42.4	34.2	23.4	10.1	13.3
Reentrants .....	603	100.0	52.6	20.7	26.6	10.9	15.8
New entrants .....	116	100.0	33.7	34.2	32.1	16.5	15.6
Women, 20 years and over .....	2,409	100.0	48.1	28.9	22.9	12.8	10.1
Job losers .....	971	100.0	36.8	31.5	31.7	18.0	13.7
On layoff .....	233	100.0	51.0	32.0	17.0	10.2	6.9
Other job losers .....	738	100.0	32.4	31.3	36.3	20.5	15.8
Job leavers .....	359	100.0	57.6	25.3	17.1	10.5	6.5
Reentrants .....	883	100.0	55.8	28.3	15.9	8.7	7.2
New entrants .....	195	100.0	52.4	25.7	21.8	9.1	12.7
Both sexes, 16 to 19 years .....	1,193	100.0	62.6	26.3	11.1	7.6	3.4
Job losers .....	189	100.0	50.2	33.3	16.6	13.2	3.4
On layoff .....	49	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Other job losers .....	140	100.0	45.6	35.1	19.3	14.8	4.5
Job leavers .....	126	100.0	58.9	35.8	5.3	3.4	2.0
Reentrants .....	348	100.0	69.8	21.3	8.9	6.0	2.9
New entrants .....	530	100.0	63.2	24.8	12.0	7.8	4.2

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

**A-16. Unemployed persons by duration of unemployment**

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
Total, 16 years and over .....	7,318	6,553	100.0	100.0	5,980	5,364	100.0	100.0
Less than 5 weeks .....	3,255	3,035	44.5	46.3	2,380	2,244	39.8	41.8
5 to 14 weeks .....	1,798	1,753	24.6	26.8	1,541	1,499	25.8	27.9
5 to 10 weeks .....	1,320	1,399	18.0	21.3	1,114	1,184	18.6	22.1
11 to 14 weeks .....	478	354	6.5	5.4	427	316	7.1	5.9
15 weeks and over .....	2,265	1,765	31.0	26.9	2,059	1,621	34.4	30.2
15 to 26 weeks .....	1,105	891	15.1	13.6	982	809	16.4	15.1
27 weeks and over .....	1,160	874	15.9	13.3	1,077	812	18.0	15.1
27 to 51 weeks .....	502	339	6.9	5.2	463	322	7.7	6.0
52 weeks and over .....	658	535	9.0	8.2	614	490	10.3	9.1
Average (mean) duration, in weeks .....	15.5	14.4			17.2	15.7		
Median duration, in weeks .....	6.6	5.9			8.2	6.9		

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-17. Unemployed persons by sex, age, race, marital status, and duration of unemployment**

Sex, age, race, and marital status	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
								May 1987	May 1988	May 1987	May 1988
	May 1988										
Total, 16 years and over .....	6,553	3,035	1,753	891	874	14.4	5.9	44.5	46.3	31.0	26.9
16 to 19 years .....	1,193	747	314	91	41	6.8	4.0	63.3	62.6	15.5	11.1
20 to 24 years .....	1,328	735	327	161	105	10.6	4.5	50.5	55.4	23.5	20.0
25 to 34 years .....	1,798	719	512	279	288	16.3	7.9	40.5	40.0	33.3	31.5
35 to 44 years .....	1,150	439	346	189	176	16.4	7.2	34.1	38.2	41.0	31.8
45 to 54 years .....	593	203	150	108	132	20.1	9.5	33.1	34.2	42.7	40.5
55 to 64 years .....	393	148	69	58	119	25.5	11.5	29.4	37.5	47.0	45.0
65 years and over .....	98	44	35	5	13	17.7	6.4	( <sup>1</sup> )	45.1	( <sup>1</sup> )	19.0
Men, 16 years and over .....	3,575	1,503	905	557	611	17.0	7.0	39.4	42.0	36.2	32.7
16 to 19 years .....	624	374	163	64	22	7.1	4.2	61.3	60.0	16.5	13.9
20 to 24 years .....	711	361	173	101	77	12.5	4.9	45.3	50.7	29.7	25.0
25 to 34 years .....	992	348	252	180	213	19.6	9.7	34.7	35.0	38.2	39.6
35 to 44 years .....	629	232	178	108	113	19.1	7.9	30.2	36.9	47.8	34.8
45 to 54 years .....	316	77	81	67	89	23.5	14.7	25.3	24.5	49.8	49.7
55 to 64 years .....	257	95	41	35	86	28.2	12.3	26.0	36.9	52.2	47.2
65 years and over .....	46	16	17	3	10	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 16 years and over .....	2,978	1,532	848	335	263	11.2	4.9	50.8	51.5	24.3	20.1
16 to 19 years .....	570	373	151	27	19	6.4	3.8	65.9	65.5	14.3	8.0
20 to 24 years .....	616	375	155	60	27	8.3	4.1	56.5	60.8	16.5	14.1
25 to 34 years .....	806	371	260	98	75	12.3	6.1	47.5	46.1	27.4	21.6
35 to 44 years .....	522	207	168	83	63	13.2	6.7	38.9	39.7	32.5	28.1
45 to 54 years .....	277	125	88	41	43	16.2	6.3	45.1	45.2	31.9	30.1
55 to 64 years .....	136	53	28	23	33	20.4	10.7	36.0	38.7	37.4	40.8
65 years and over .....	52	28	18	3	3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
White, 16 years and over .....	4,711	2,261	1,243	611	596	13.7	5.5	46.0	48.0	28.7	25.6
Men .....	2,627	1,128	662	409	429	16.6	6.7	41.0	42.9	34.3	31.9
Women .....	2,083	1,133	581	202	167	10.1	4.6	52.4	54.4	21.4	17.7
Black, 16 years and over .....	1,802	661	449	250	243	16.2	7.0	40.0	41.2	37.6	30.7
Men .....	820	317	211	133	158	18.4	7.7	33.3	38.7	43.4	35.6
Women .....	782	344	237	117	84	13.9	6.3	47.2	44.0	31.3	25.7
Men, 16 years and over:											
Married, spouse present .....	1,273	443	324	251	254	19.6	9.3	31.3	34.8	45.5	39.7
Widowed, divorced, or separated .....	503	175	126	65	138	23.7	9.9	28.1	34.7	41.0	40.3
Single (never married) .....	1,799	885	454	241	219	13.2	5.2	48.6	49.2	27.9	25.6
Women, 16 years and over:											
Married, spouse present .....	1,076	529	298	145	104	11.6	5.2	49.1	49.2	25.9	23.1
Widowed, divorced, or separated .....	651	293	201	78	79	13.6	6.1	39.2	45.0	30.8	24.2
Single (never married) .....	1,251	710	350	112	80	9.7	4.4	58.4	56.7	19.5	15.3

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-18. Unemployed persons by occupation, industry, and duration of unemployment**

Occupation and industry	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
	May 1988							May 1987	May 1988	May 1987	May 1988
<b>OCCUPATION</b>											
Managerial and professional specialty .....	499	233	122	87	56	13.9	5.9	40.5	46.7	29.7	28.7
Technical, sales, and administrative support .....	1,477	689	439	172	177	13.0	5.6	45.8	46.7	29.9	23.6
Service occupations .....	1,116	581	314	122	100	11.1	4.8	46.8	52.0	26.8	19.8
Precision production, craft, and repair .....	749	295	188	134	133	18.5	7.7	36.1	39.4	38.2	35.5
Operators, fabricators, and laborers .....	1,596	618	409	273	295	18.0	8.5	38.5	38.7	36.7	35.6
Farming, forestry, and fishing .....	242	132	43	24	43	17.4	4.6	49.9	54.4	38.3	27.8
<b>INDUSTRY<sup>1</sup></b>											
Agriculture .....	179	108	40	16	16	10.6	4.1	55.3	60.3	29.1	17.5
Construction .....	635	271	158	110	96	14.7	7.3	37.7	42.7	38.8	32.4
Manufacturing .....	1,157	422	305	211	219	18.7	8.5	36.7	36.5	36.0	37.2
Durable goods .....	620	218	152	122	127	19.9	9.1	30.9	35.1	39.3	40.3
Nondurable goods .....	538	205	153	89	91	17.4	7.9	44.6	38.0	31.4	33.5
Transportation and public utilities .....	309	124	95	42	48	16.7	6.7	32.9	40.1	40.4	29.1
Wholesale and retail trade .....	1,414	682	382	185	165	13.2	5.4	43.9	48.2	27.4	24.8
Finance and service industries .....	1,620	778	443	205	196	13.8	5.7	47.6	48.0	29.5	24.6
Public administration .....	172	68	56	16	31	16.4	7.7	38.1	39.8	38.5	27.3
No previous work experience .....	845	480	221	78	65	10.0	4.4	59.6	56.8	19.9	16.9

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-19. Unemployed jobseekers by sex, age, race, and jobsearch methods used**

Sex, age, and race	May 1988								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over .....	6,553	5,712	22.2	7.4	74.4	32.9	19.2	5.4	1.62
16 to 19 years .....	1,193	1,124	11.5	2.3	77.7	24.3	13.8	4.4	1.34
20 to 24 years .....	1,328	1,181	23.1	8.4	74.3	33.0	20.4	3.7	1.63
25 to 34 years .....	1,798	1,549	24.8	6.5	76.3	35.6	19.8	5.5	1.68
35 to 44 years .....	1,150	975	28.0	11.6	70.5	39.2	22.9	7.0	1.79
45 to 54 years .....	593	477	26.2	11.3	69.4	32.9	18.2	9.2	1.67
55 to 64 years .....	393	321	22.1	8.7	75.1	31.5	19.0	4.4	1.61
65 years and over .....	98	85	12.9	5.9	67.1	27.1	28.2	8.2	1.49
Men, 16 years and over .....	3,575	3,049	24.2	7.6	74.2	31.1	21.0	6.8	1.65
16 to 19 years .....	624	576	12.8	2.6	79.5	20.0	15.1	4.9	1.35
20 to 24 years .....	711	625	24.5	10.4	74.7	30.7	24.3	5.6	1.70
25 to 34 years .....	992	820	27.6	6.7	75.2	34.5	19.8	6.7	1.70
35 to 44 years .....	629	526	32.3	11.0	67.3	37.3	25.1	9.3	1.82
45 to 54 years .....	316	254	25.2	7.5	69.7	32.3	18.5	12.6	1.66
55 to 64 years .....	257	208	22.6	8.7	76.9	33.7	21.6	4.3	1.68
65 years and over .....	46	40	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 16 years and over .....	2,978	2,663	19.8	7.3	74.5	34.9	17.2	3.9	1.58
16 to 19 years .....	570	548	10.0	2.0	75.7	28.8	12.4	4.0	1.33
20 to 24 years .....	616	556	21.6	6.1	73.7	35.6	16.0	1.6	1.55
25 to 34 years .....	806	729	21.7	6.3	77.4	36.8	19.9	4.1	1.66
35 to 44 years .....	522	449	23.2	12.0	74.2	41.4	20.3	4.2	1.75
45 to 54 years .....	277	222	27.5	15.3	69.4	33.8	17.6	5.4	1.69
55 to 64 years .....	136	113	21.2	8.8	71.7	27.4	14.2	4.4	1.48
65 years and over .....	52	46	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
White, 16 years and over .....	4,711	4,021	20.1	7.2	75.0	34.9	18.7	5.8	1.62
Men .....	2,627	2,203	21.4	7.2	76.0	33.1	19.9	7.2	1.65
Women .....	2,083	1,818	18.4	7.3	73.7	36.9	17.2	4.2	1.58
Black, 16 years and over .....	1,602	1,486	27.3	8.0	72.7	27.7	20.7	4.8	1.61
Men .....	820	737	30.8	7.9	68.8	25.4	22.8	6.8	1.62
Women .....	782	749	23.9	8.1	76.5	29.9	18.6	2.8	1.60

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

NOTE: The jobseeker total is less than the total unemployed because it does not include persons on layoff or waiting to begin a new job within

30 days, groups for whom jobseeking information is not collected. The percent using each method will always total more than 100 because many jobseekers use more than one method.

**A-20. Unemployed jobseekers by sex, reason for unemployment, and jobsearch methods used**

Sex and reason	May 1988								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over .....	6,553	5,712	22.2	7.4	74.4	32.9	19.2	5.4	1.62
Job losers <sup>1</sup> .....	3,058	2,355	26.2	7.8	76.0	35.2	21.9	6.0	1.73
Job leavers .....	820	837	26.6	9.7	75.3	41.1	15.7	3.6	1.72
Reentrants .....	1,835	1,691	19.1	7.6	69.0	30.7	19.8	5.7	1.52
New entrants .....	841	829	12.3	4.0	79.7	22.2	14.1	5.3	1.38
Men, 16 years and over .....	3,575	3,049	24.2	7.6	74.2	31.1	21.0	6.8	1.65
Job losers <sup>1</sup> .....	2,026	1,574	26.5	6.0	76.1	33.9	21.9	7.2	1.72
Job leavers .....	393	411	31.6	9.7	77.4	39.4	17.3	5.1	1.81
Reentrants .....	784	699	20.2	11.4	64.4	25.5	22.9	7.9	1.52
New entrants .....	372	365	14.0	4.4	81.4	20.3	17.5	5.5	1.43
Women, 16 years and over .....	2,978	2,663	19.8	7.3	74.5	34.9	17.2	3.9	1.58
Job losers <sup>1</sup> .....	1,033	781	25.7	11.4	75.8	37.9	21.9	3.6	1.76
Job leavers .....	427	427	21.8	9.4	73.1	42.6	14.1	2.1	1.63
Reentrants .....	1,051	992	18.4	4.8	72.2	34.4	17.5	4.3	1.52
New entrants .....	468	464	11.0	3.7	78.4	23.7	11.4	5.2	1.33

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

NOTE: The jobseeker total is less than the total unemployed because it does not include persons on layoff or waiting to begin a new job within

30 days, groups for whom jobseeking information is not collected. The percent using each method will always total more than 100 because many jobseekers use more than one method.

A-21. Employed civilians in agriculture and nonagricultural industries by age and sex

(In thousands)

Industry and age	Total		Men		Women	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
All industries .....	112,377	114,222	62,094	63,143	50,283	51,079
16 to 19 years .....	6,445	6,459	3,266	3,398	3,179	3,061
16 to 17 years .....	2,610	2,556	1,365	1,371	1,245	1,185
18 to 19 years .....	3,835	3,903	1,901	2,027	1,934	1,876
20 to 24 years .....	13,427	12,975	7,063	6,877	6,364	6,099
25 to 54 years .....	77,950	80,252	43,160	44,338	34,791	35,914
25 to 34 years .....	33,160	33,646	18,550	18,653	14,610	14,993
35 to 44 years .....	27,190	28,092	14,805	15,397	12,385	12,695
45 to 54 years .....	17,600	18,515	9,804	10,289	7,796	8,226
55 to 64 years .....	11,532	11,378	6,720	6,599	4,812	4,779
55 to 59 years .....	6,987	6,904	4,049	3,993	2,937	2,911
60 to 64 years .....	4,545	4,474	2,671	2,606	1,874	1,868
65 years and over .....	3,023	3,157	1,885	1,931	1,138	1,227
Agriculture .....	3,541	3,292	2,807	2,593	734	699
16 to 19 years .....	303	312	259	257	44	55
16 to 17 years .....	131	152	109	122	22	30
18 to 19 years .....	172	160	150	135	22	24
20 to 24 years .....	453	403	389	338	64	65
25 to 54 years .....	1,972	1,850	1,508	1,404	464	446
25 to 34 years .....	896	798	720	637	177	161
35 to 44 years .....	585	617	434	458	152	159
45 to 54 years .....	490	435	355	309	135	126
55 to 64 years .....	483	425	368	336	115	88
55 to 59 years .....	260	214	190	161	70	53
60 to 64 years .....	223	210	178	175	45	35
65 years and over .....	330	302	283	257	47	45
Nonagricultural industries .....	108,836	110,930	59,287	60,550	49,549	50,380
16 to 19 years .....	6,142	6,147	3,007	3,141	3,135	3,006
16 to 17 years .....	2,478	2,403	1,256	1,249	1,223	1,155
18 to 19 years .....	3,664	3,744	1,752	1,892	1,912	1,852
20 to 24 years .....	12,974	12,572	6,674	6,539	6,300	6,034
25 to 54 years .....	75,979	78,403	41,652	42,934	34,327	35,467
25 to 34 years .....	32,263	32,848	17,830	18,016	14,433	14,832
35 to 44 years .....	26,605	27,475	14,372	14,939	12,233	12,537
45 to 54 years .....	17,110	18,079	9,450	9,980	7,660	8,100
55 to 64 years .....	11,049	10,953	6,352	6,262	4,697	4,690
55 to 59 years .....	6,726	6,689	3,859	3,832	2,867	2,858
60 to 64 years .....	4,322	4,264	2,493	2,431	1,830	1,833
65 years and over .....	2,693	2,855	1,602	1,673	1,091	1,182

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-22. Employed civilians by occupation, sex, and age**

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
Total .....	112,377	114,222	62,094	63,143	58,828	59,745	50,283	51,079	47,104	48,018
Managerial and professional specialty .....	27,536	29,113	15,255	16,087	15,172	15,989	12,281	13,026	12,169	12,912
Executive, administrative, and managerial .....	13,117	14,289	8,129	8,665	8,090	8,623	4,988	5,624	4,946	5,581
Officials and administrators, public administration .....	519	574	303	335	303	334	216	240	216	238
Other executive, administrative, and managerial .....	9,099	10,011	5,995	6,462	5,959	6,431	3,104	3,549	3,070	3,517
Management-related occupations .....	3,499	3,704	1,831	1,868	1,828	1,858	1,668	1,836	1,659	1,826
Professional specialty .....	14,418	14,824	7,126	7,422	7,082	7,366	7,292	7,402	7,223	7,331
Engineers .....	1,658	1,807	1,529	1,654	1,530	1,654	128	153	128	153
Mathematical and computer scientists .....	673	692	461	494	461	494	213	198	213	193
Natural scientists .....	365	373	278	274	278	274	87	99	87	97
Health diagnosing occupations .....	739	752	628	615	628	615	111	137	109	137
Health assessment and treating occupations .....	2,134	2,113	286	326	285	324	1,849	1,787	1,845	1,784
Teachers, college and university .....	680	653	450	410	447	407	230	243	226	243
Teachers, except college and university .....	3,827	3,833	1,066	1,065	1,058	1,058	2,761	2,768	2,735	2,739
Lawyers and judges .....	723	748	571	583	571	583	152	166	153	166
Other professional specialty occupations .....	3,620	3,852	1,857	2,002	1,826	1,959	1,762	1,850	1,728	1,819
Technical, sales, and administrative support .....	34,868	34,740	12,316	12,160	11,720	11,487	22,552	22,580	20,884	20,952
Technicians and related support .....	3,234	3,363	1,646	1,790	1,626	1,758	1,588	1,573	1,568	1,556
Health technologists and technicians .....	1,112	1,136	171	192	170	190	941	944	935	940
Engineering and science technicians .....	1,094	1,167	871	910	861	891	223	257	220	255
Technicians, except health, engineering, and science .....	1,028	1,060	604	688	595	677	424	372	414	361
Sales occupations .....	13,463	13,463	7,085	6,923	6,707	6,469	6,378	6,540	5,432	5,525
Supervisors and proprietors .....	3,501	3,612	2,441	2,384	2,422	2,345	1,060	1,228	1,038	1,210
Sales representatives, finance and business services .....	2,341	2,301	1,349	1,353	1,340	1,346	992	948	954	923
Sales representatives, commodities, except retail .....	1,583	1,468	1,316	1,203	1,304	1,199	268	265	259	261
Sales workers, retail and personal services .....	5,981	6,032	1,955	1,962	1,617	1,557	4,026	4,070	3,149	3,105
Sales-related occupations .....	57	50	25	21	24	21	32	29	32	26
Administrative support, including clerical .....	18,171	17,914	3,585	3,447	3,388	3,261	14,587	14,467	13,884	13,871
Supervisors .....	659	799	275	313	273	312	384	486	383	485
Computer equipment operators .....	930	825	304	267	288	260	626	558	594	545
Secretaries, stenographers, and typists .....	5,033	4,784	90	74	88	70	4,942	4,710	4,725	4,543
Financial records processing .....	2,506	2,354	225	206	223	201	2,281	2,148	2,227	2,117
Mail and message distributing .....	937	901	621	588	593	565	315	313	302	299
Other administrative support, including clerical .....	8,107	8,251	2,069	1,999	1,922	1,853	6,038	6,252	5,653	5,882
Service occupations .....	15,125	15,250	5,909	6,064	4,983	5,124	9,216	9,186	8,066	8,134
Private household .....	899	905	29	37	20	29	870	868	694	731
Protective service .....	1,887	1,884	1,638	1,649	1,609	1,602	248	235	228	223
Service, except private household and protective .....	12,339	12,461	4,242	4,378	3,354	3,493	8,097	8,083	7,143	7,181
Food service .....	5,404	5,110	1,991	1,953	1,345	1,272	3,413	3,157	2,714	2,516
Health service .....	1,859	2,043	198	252	178	235	1,660	1,791	1,595	1,706
Cleaning and building service .....	2,849	2,995	1,639	1,742	1,464	1,601	1,209	1,253	1,137	1,182
Personal service .....	2,228	2,312	414	430	367	386	1,815	1,881	1,698	1,776
Precision production, craft, and repair .....	13,456	13,859	12,305	12,620	12,066	12,370	1,151	1,239	1,125	1,214
Mechanics and repairers .....	4,341	4,553	4,190	4,356	4,113	4,272	151	197	151	194
Construction trades .....	4,990	5,180	4,898	5,084	4,770	4,954	92	97	90	90
Other precision production, craft, and repair .....	4,125	4,126	3,217	3,180	3,183	3,144	907	945	884	930
Operators, fabricators, and laborers .....	17,381	17,540	12,938	13,117	11,907	12,024	4,443	4,422	4,262	4,241
Machine operators, assemblers, and inspectors .....	7,943	7,988	4,692	4,762	4,523	4,602	3,251	3,226	3,163	3,151
Manufacturing industries .....	6,646	6,707	3,870	3,928	3,745	3,820	2,776	2,779	2,708	2,720
Durable goods .....	3,628	3,711	2,469	2,564	2,412	2,511	1,159	1,147	1,134	1,124
Nondurable goods .....	3,018	2,996	1,401	1,364	1,333	1,309	1,617	1,631	1,574	1,597
Nonmanufacturing industries .....	1,297	1,281	822	834	778	781	475	447	455	431
Transportation and material moving occupations .....	4,714	4,823	4,310	4,416	4,180	4,273	404	407	399	389
Motor vehicle operators .....	3,508	3,569	3,155	3,199	3,039	3,081	353	370	348	357
Other transportation and material moving occupations .....	1,206	1,254	1,155	1,218	1,140	1,192	51	37	51	33
Handlers, equipment cleaners, helpers, and laborers .....	4,724	4,729	3,936	3,939	3,204	3,149	788	789	701	700
Construction laborers .....	810	717	799	696	732	644	11	21	11	16
Other handlers, equipment cleaners, helpers, and laborers .....	3,914	4,011	3,137	3,243	2,473	2,506	777	768	689	683
Farming, forestry, and fishing .....	4,012	3,720	3,371	3,095	2,980	2,751	641	625	598	565
Farm operators and managers .....	1,399	1,261	1,193	1,086	1,185	1,067	206	175	206	173
Other farming, forestry, and fishing occupations .....	2,612	2,459	2,178	2,009	1,796	1,684	435	451	392	392



**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-23. Employed civilians by occupation, race, and sex**

(Percent distribution)

Occupation and race	Total		Men		Women	
	May 1987	May 1988	May 1987	May 1988	May 1987	May 1988
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	112,377	114,222	62,094	63,143	50,283	51,079
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	24.5	25.5	24.6	25.5	24.4	25.5
Executive, administrative, and managerial .....	11.7	12.5	13.1	13.7	9.9	11.0
Professional specialty .....	12.8	13.0	11.5	11.8	14.5	14.5
Technical, sales, and administrative support .....	31.0	30.4	19.8	19.3	44.8	44.2
Technicians and related support .....	2.9	2.9	2.7	2.8	3.2	3.1
Sales occupations .....	12.0	11.8	11.4	11.0	12.7	12.8
Administrative support, including clerical .....	16.2	15.7	5.8	5.5	29.0	28.3
Service occupations .....	13.5	13.4	9.5	9.6	18.3	18.0
Private household .....	.8	.8	( <sup>1</sup> )	.1	1.7	1.7
Protective service .....	1.7	1.6	2.6	2.6	.5	.5
Service, except private household and protective .....	11.0	10.9	6.8	6.9	16.1	15.8
Precision production, craft, and repair .....	12.0	12.1	19.8	20.0	2.3	2.4
Operators, fabricators, and laborers .....	15.5	15.4	20.8	20.8	8.8	8.7
Machine operators, assemblers, and inspectors .....	7.1	7.0	7.6	7.5	6.5	6.3
Transportation and material moving occupations .....	4.2	4.2	6.9	7.0	.8	.8
Handlers, equipment cleaners, helpers, and laborers .....	4.2	4.1	6.3	6.2	1.6	1.5
Farming, forestry, and fishing .....	3.6	3.3	5.4	4.9	1.3	1.2
<b>White</b>						
Total, 16 years and over (thousands) .....	97,908	99,414	54,753	55,508	43,156	43,906
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	25.5	26.5	25.6	26.5	25.4	26.4
Executive, administrative, and managerial .....	12.3	13.2	13.8	14.5	10.5	11.5
Professional specialty .....	13.2	13.3	11.8	12.0	14.9	14.9
Technical, sales, and administrative support .....	31.5	30.8	20.2	19.4	45.9	45.2
Technicians and related support .....	2.9	2.9	2.7	2.9	3.2	3.0
Sales occupations .....	12.6	12.4	12.1	11.5	13.3	13.4
Administrative support, including clerical .....	16.0	15.5	5.4	5.0	29.5	28.7
Service occupations .....	12.2	12.1	8.4	8.4	17.0	16.6
Private household .....	.7	.7	( <sup>1</sup> )	.1	1.5	1.5
Protective service .....	1.5	1.5	2.4	2.4	.4	.4
Service, except private household and protective .....	10.0	9.9	6.0	6.0	15.0	14.8
Precision production, craft, and repair .....	12.4	12.6	20.5	20.7	2.2	2.4
Operators, fabricators, and laborers .....	14.6	14.7	19.8	20.0	8.1	8.0
Machine operators, assemblers, and inspectors .....	6.6	6.6	7.2	7.3	5.8	5.7
Transportation and material moving occupations .....	4.1	4.1	6.7	6.7	.8	.8
Handlers, equipment cleaners, helpers, and laborers .....	3.9	4.0	5.9	5.9	1.5	1.5
Farming, forestry, and fishing .....	3.8	3.4	5.6	5.0	1.4	1.3
<b>Black</b>						
Total, 16 years and over (thousands) .....	11,119	11,440	5,580	5,792	5,539	5,648
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	15.1	16.1	13.3	14.1	16.9	18.1
Executive, administrative, and managerial .....	6.4	6.5	6.9	6.3	5.8	6.7
Professional specialty .....	8.7	9.6	6.4	7.8	11.0	11.4
Technical, sales, and administrative support .....	26.9	26.9	15.5	16.5	38.3	37.5
Technicians and related support .....	2.2	2.7	1.6	2.1	2.8	3.3
Sales occupations .....	6.6	6.7	4.6	5.4	8.6	8.1
Administrative support, including clerical .....	18.0	17.4	9.3	9.0	26.8	26.1
Service occupations .....	23.6	23.9	19.2	19.5	28.1	28.4
Private household .....	1.8	1.8	.2	.1	3.4	3.6
Protective service .....	3.2	3.0	5.5	4.9	1.0	1.1
Service, except private household and protective .....	18.6	19.1	13.5	14.6	23.7	23.8
Precision production, craft, and repair .....	8.8	8.8	15.2	15.1	2.4	2.2
Operators, fabricators, and laborers .....	23.3	21.8	32.4	30.0	14.1	13.4
Machine operators, assemblers, and inspectors .....	10.5	10.1	10.7	9.6	10.3	10.6
Transportation and material moving occupations .....	5.8	5.8	10.4	10.5	1.2	1.0
Handlers, equipment cleaners, helpers, and laborers .....	6.9	5.8	11.3	9.8	2.5	1.7
Farming, forestry, and fishing .....	2.4	2.6	4.4	4.7	.4	.4

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-24. Employed civilians by age, sex, and class of worker**

(In thousands)

Age and sex	May 1988								
	Nonagricultural industries						Agriculture		
	Wage and salary workers				Self-employed workers	Unpaid family workers	Wage and salary workers	Self-employed workers	Unpaid family workers
	Total	Private household workers	Government	Other					
Total, 16 years and over .....	101,786	1,180	17,090	83,516	8,846	297	1,685	1,419	188
16 to 19 years .....	6,091	206	290	5,595	54	2	214	61	38
16 to 17 years .....	2,381	163	63	2,155	21	2	100	38	15
18 to 19 years .....	3,711	43	228	3,440	33	-	114	23	23
20 to 24 years .....	12,215	134	993	11,088	344	13	317	73	13
25 to 34 years .....	30,700	225	4,372	26,103	2,092	56	491	275	31
35 to 44 years .....	24,838	182	5,335	19,321	2,558	79	302	279	36
45 to 54 years .....	16,124	156	3,610	12,357	1,861	74	179	234	22
55 to 64 years .....	9,532	150	2,097	7,285	1,374	47	127	265	34
55 to 59 years .....	5,863	83	1,306	4,474	796	30	58	135	21
60 to 64 years .....	3,669	67	791	2,811	578	17	68	129	13
65 years and over .....	2,285	126	393	1,767	544	27	56	232	14
Men, 16 years and over .....	54,737	198	8,094	46,445	5,770	42	1,312	1,217	64
16 to 19 years .....	3,111	64	125	2,922	28	1	171	58	28
16 to 17 years .....	1,237	53	35	1,150	10	1	74	38	9
18 to 19 years .....	1,874	11	90	1,773	18	1	97	20	19
20 to 24 years .....	6,296	28	456	5,812	235	7	261	66	11
25 to 34 years .....	16,695	29	2,060	14,606	1,321	1	379	244	13
35 to 44 years .....	13,318	36	2,469	10,813	1,619	2	220	232	6
45 to 54 years .....	8,733	9	1,715	7,008	1,239	8	123	187	-
55 to 64 years .....	5,312	15	1,062	4,234	948	3	106	226	4
55 to 59 years .....	3,285	7	648	2,631	544	2	48	112	1
60 to 64 years .....	2,026	8	415	1,604	403	1	58	114	3
65 years and over .....	1,272	18	206	1,049	380	20	52	204	2
Women, 16 years and over .....	47,049	982	8,996	37,071	3,075	255	373	201	125
16 to 19 years .....	2,980	143	165	2,672	25	-	42	3	9
16 to 17 years .....	1,143	111	28	1,005	11	1	25	-	5
18 to 19 years .....	1,837	32	138	1,668	15	-	17	3	4
20 to 24 years .....	5,919	106	537	5,276	109	6	56	7	2
25 to 34 years .....	14,006	196	2,312	11,497	771	55	112	31	18
35 to 44 years .....	11,520	146	2,866	8,508	939	77	81	47	30
45 to 54 years .....	7,391	147	1,895	5,349	642	66	56	47	22
55 to 64 years .....	4,220	135	1,034	3,051	426	43	20	38	30
55 to 59 years .....	2,577	76	658	1,844	252	28	10	23	20
60 to 64 years .....	1,643	60	376	1,207	174	15	10	15	10
65 years and over .....	1,012	108	187	717	163	6	5	28	12

**A-25. Employed civilians by industry and occupation**

(In thousands)

Industry	May 1988												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service <sup>1</sup>		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture .....	3,292	54	58	17	17	103		12	38	6	41	24	2,921
Mining .....	707	100	58	39	5	97		1	229	27	117	35	-
Construction .....	7,715	1,009	132	53	87	468		32	4,479	90	514	838	13
Manufacturing .....	21,296	2,526	1,715	716	717	2,427		322	4,106	6,707	797	1,159	106
Durable goods .....	12,493	1,535	1,153	495	305	1,293		184	2,792	3,711	400	527	96
Nondurable goods .....	8,803	991	561	221	411	1,133		137	1,313	2,996	397	632	10
Transportation and public utilities .....	7,929	872	445	227	338	2,054		301	1,301	110	1,818	441	22
Wholesale and retail trade .....	23,289	2,053	430	102	9,695	2,309		4,215	1,417	311	952	1,756	49
Wholesale trade .....	4,411	503	59	37	1,684	755		39	325	149	513	337	12
Retail trade .....	18,878	1,551	372	65	8,012	1,554		4,176	1,091	162	440	1,419	38
Finance, insurance, and real estate .....	7,888	2,039	206	145	1,826	3,150	-	253	152	10	17	23	66
Services .....	36,722	4,504	11,009	1,790	759	5,884	905	7,911	1,871	696	505	405	481
Private households .....	1,193	3	7	6	-	10	905	98	12	2	10	11	129
Other service industries .....	35,529	4,501	11,002	1,785	759	5,874	-	7,812	1,860	694	496	394	352
Professional services .....	23,627	2,525	9,782	1,426	140	4,325	-	4,389	341	201	317	80	101
Public administration .....	5,384	1,131	771	274	19	1,423	-	1,299	267	30	61	47	61

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

**A-26. Employed civilians with a job but not at work by reason, sex, and pay status**

(In thousands)

Reason not working and sex	All industries		Nonagricultural industries					
	May 1987	May 1988	Total		Wage and salary workers <sup>1</sup>			
			May 1987	May 1988	Paid absences		Unpaid absences	
					May 1987	May 1988	May 1987	May 1988
Total, 16 years and over .....	4,403	4,193	4,334	4,125	2,082	1,994	1,789	1,656
Vacation .....	1,981	1,767	1,945	1,756	1,345	1,189	449	389
Illness .....	1,296	1,291	1,276	1,274	515	561	665	602
Bad weather .....	28	28	24	26	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Industrial dispute .....	32	35	32	31	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
All other reasons .....	1,067	1,071	1,057	1,037	222	245	675	665
Men, 16 years and over .....	2,239	2,117	2,200	2,064	1,133	1,069	789	686
Vacation .....	1,054	1,015	1,032	1,006	777	730	162	163
Illness .....	671	633	665	623	268	273	342	268
All other reasons <sup>3</sup> .....	513	470	503	436	88	66	285	256
Women, 16 years and over .....	2,165	2,076	2,134	2,060	948	925	1,002	970
Vacation .....	927	752	913	750	566	460	287	226
Illness .....	625	658	611	652	247	287	323	334
All other reasons <sup>3</sup> .....	613	665	610	658	134	178	391	409

<sup>1</sup> Excludes private household workers.

<sup>2</sup> Pay status not available separately for bad weather and industrial dispute; these categories are included in all other reasons.

<sup>3</sup> Includes bad weather and industrial dispute, not shown separately.

NOTE: Estimates for "all other reasons" by pay status may be biased because of high response variance; data should be used with caution.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-27. Persons at work by hours of work and type of industry**

Hours of work	May 1988					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	110,029	3,224	106,805	100.0	100.0	100.0
1 to 34 hours .....	24,806	821	23,985	22.5	25.5	22.5
1 to 4 hours .....	759	41	718	.7	1.3	.7
5 to 14 hours .....	4,416	203	4,213	4.0	6.3	3.9
15 to 29 hours .....	12,771	412	12,359	11.6	12.8	11.6
30 to 34 hours .....	6,860	165	6,695	6.2	5.1	6.3
35 hours and over .....	85,223	2,403	82,820	77.5	74.5	77.5
35 to 39 hours .....	7,311	135	7,176	6.6	4.2	6.7
40 hours .....	44,245	662	43,583	40.2	20.5	40.8
41 hours and over .....	33,667	1,606	32,061	30.6	49.8	30.0
41 to 48 hours .....	11,877	248	11,629	10.8	7.7	10.9
49 to 59 hours .....	12,427	405	12,022	11.3	12.6	11.3
60 hours and over .....	9,363	953	8,410	8.5	29.6	7.9
Average hours, total at work .....	39.7	45.8	39.5			
Average hours, workers on full-time schedules .....	44.1	53.8	43.8			

**A-28. Persons at work 1 to 34 hours by reason for working less than 35 hours, type of industry, and usual status**

(Numbers in thousands)

Reason for working less than 35 hours	May 1988					
	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 .....	24,806	6,198	18,609	23,985	6,035	17,951
Economic reasons .....	4,674	1,608	3,066	4,484	1,545	2,939
Slack work .....	2,096	1,246	850	2,008	1,196	812
Material shortages or repairs to plant and equipment .....	39	39	-	39	39	-
New job started during week .....	240	240	-	228	228	-
Job terminated during week .....	83	83	-	83	83	-
Could find only part-time work .....	2,215	-	2,215	2,126	-	2,126
Other reasons .....	20,133	4,589	15,544	19,501	4,489	15,012
Does not want, or unavailable for, full-time work .....	13,238	-	13,238	12,800	-	12,800
Vacation .....	1,282	1,282	-	1,271	1,271	-
Illness .....	1,533	1,354	179	1,515	1,341	174
Bad weather .....	203	203	-	173	173	-
Industrial dispute .....	3	3	-	3	3	-
Legal or religious holiday .....	80	80	-	79	79	-
Full time for this job .....	1,547	-	1,547	1,516	-	1,516
All other reasons .....	2,247	1,667	580	2,145	1,622	523
Average hours:						
Economic reasons .....	22.3	25.0	20.9	22.4	25.0	21.1
Other reasons .....	20.9	26.2	19.3	20.9	26.2	19.3
Worked 30 to 34 hours:						
Economic reasons .....	1,539	783	756	1,491	758	733
Other reasons .....	5,321	2,441	2,880	5,204	2,401	2,803

**A-29. Persons at work in nonagricultural industries by class of worker and full- or part-time status**

(Numbers in thousands)

Industry	May 1988								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over .....	106,805	4,484	15,012	87,309	55,248	11,629	20,432	39.5	43.8
Wage and salary workers .....	98,095	3,926	13,435	80,734	52,391	11,000	17,343	39.3	43.4
Mining .....	643	23	12	608	324	108	176	44.9	46.4
Construction .....	5,975	397	225	5,353	3,532	683	1,138	41.1	43.2
Manufacturing .....	20,171	511	649	19,011	11,978	3,211	3,822	42.2	43.4
Durable goods .....	11,910	186	294	11,430	7,090	1,967	2,373	42.8	43.6
Nondurable goods .....	8,261	325	355	7,581	4,888	1,244	1,449	41.4	43.1
Transportation and public utilities .....	7,155	205	381	6,569	4,173	810	1,586	42.5	44.3
Wholesale and retail trade .....	20,593	1,134	5,190	14,269	8,295	2,333	3,641	37.0	44.3
Finance, insurance, and real estate .....	6,935	129	633	6,173	4,212	782	1,179	40.1	42.5
Service industries .....	31,473	1,481	6,070	23,922	16,272	2,551	5,099	37.4	43.1
Private households .....	1,148	175	561	412	268	52	92	25.1	44.9
All other industries .....	30,325	1,306	5,509	23,510	16,004	2,499	5,007	37.9	43.1
Public administration .....	5,151	46	275	4,830	3,605	522	703	40.9	42.3
Self-employed workers .....	8,412	545	1,457	6,410	2,759	619	3,032	41.6	48.9
Unpaid family workers .....	297	13	120	164	96	10	58	35.3	45.7

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-30. Persons at work in nonagricultural industries by sex, age, race, marital status, and full- or part-time status**

(Numbers in thousands)

Sex, age, race, and marital status	May 1988							
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
<b>TOTAL</b>								
Total, 16 years and over .....	106,805	4,484	15,012	87,309	55,248	32,061	39.5	43.8
16 to 19 years .....	5,968	416	3,779	1,773	1,390	383	24.0	40.1
16 to 17 years .....	2,333	77	2,042	214	180	34	17.5	36.7
18 to 19 years .....	3,635	338	1,737	1,560	1,211	349	28.1	40.6
20 years and over .....	100,837	4,069	11,233	85,535	53,857	31,678	40.4	43.9
20 to 24 years .....	12,184	814	2,017	9,353	6,401	2,952	37.6	42.7
25 years and over .....	88,654	3,255	9,216	76,183	47,458	28,725	40.8	44.1
25 to 44 years .....	58,281	2,143	5,029	51,109	31,225	19,884	41.4	44.2
45 to 64 years .....	27,732	1,014	2,980	23,738	15,263	8,475	40.7	43.9
65 years and over .....	2,641	96	1,207	1,338	973	365	29.5	41.8
<b>Men, 16 years and over .....</b>	<b>58,486</b>	<b>2,077</b>	<b>4,556</b>	<b>51,853</b>	<b>29,015</b>	<b>22,838</b>	<b>42.5</b>	<b>45.4</b>
16 to 19 years .....	3,049	200	1,854	995	736	259	25.1	41.2
16 to 17 years .....	1,212	49	1,027	136	111	25	18.5	38.1
18 to 19 years .....	1,837	152	828	857	623	234	29.5	41.7
20 years and over .....	55,437	1,877	2,701	50,859	28,280	22,579	43.5	45.5
20 to 24 years .....	6,386	416	820	5,150	3,205	1,945	39.5	43.9
25 years and over .....	49,051	1,462	1,881	45,708	25,076	20,632	44.0	45.7
25 to 44 years .....	31,986	977	682	30,327	16,053	14,274	44.7	45.9
45 to 64 years .....	15,530	436	587	14,507	8,402	6,105	43.7	45.3
65 years and over .....	1,535	48	612	875	623	252	31.2	42.0
<b>Women, 16 years and over .....</b>	<b>48,319</b>	<b>2,407</b>	<b>10,456</b>	<b>35,456</b>	<b>26,234</b>	<b>9,222</b>	<b>35.9</b>	<b>41.6</b>
16 to 19 years .....	2,919	215	1,925	779	656	123	22.8	38.7
16 to 17 years .....	1,121	28	1,015	78	69	9	16.5	( <sup>1</sup> )
18 to 19 years .....	1,798	187	910	701	587	114	26.8	39.1
20 years and over .....	45,400	2,192	8,532	34,676	25,577	9,099	36.7	41.6
20 to 24 years .....	5,798	398	1,197	4,203	3,196	1,007	35.5	41.1
25 years and over .....	39,603	1,794	7,335	30,474	22,382	8,092	36.9	41.8
25 to 44 years .....	26,295	1,167	4,347	20,781	15,171	5,610	37.3	41.7
45 to 64 years .....	12,201	578	2,393	9,230	6,860	2,370	36.8	41.8
65 years and over .....	1,106	49	595	462	349	113	27.1	41.2
<b>RACE</b>								
White, 16 years and over .....	92,831	3,578	13,589	75,664	46,469	29,195	39.6	44.1
Men .....	51,361	1,644	4,022	45,695	24,770	20,925	42.8	45.7
Women .....	41,470	1,935	9,567	29,968	21,698	8,270	35.7	41.7
Black, 16 years and over .....	10,793	775	1,003	9,015	6,995	2,020	38.4	41.8
Men .....	5,406	368	380	4,658	3,315	1,343	39.9	42.9
Women .....	5,387	407	623	4,357	3,679	678	36.9	40.6
<b>MARITAL STATUS</b>								
Men, 16 years and over:								
Married, spouse present .....	37,372	944	1,236	35,192	18,717	16,475	44.5	45.9
Widowed, divorced, or separated .....	5,864	259	285	5,320	2,986	2,334	43.4	45.7
Single (never married) .....	15,250	874	3,035	11,341	7,313	4,028	37.4	43.6
Women, 16 years and over:								
Married, spouse present .....	26,926	1,159	6,164	19,603	14,783	4,820	35.7	41.3
Widowed, divorced, or separated .....	9,253	494	1,132	7,627	5,386	2,241	38.5	42.2
Single (never married) .....	12,140	756	3,160	8,224	6,063	2,161	34.2	41.6

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

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-31. Persons at work in nonfarm occupations by sex and full- or part-time status**

(Numbers in thousands)

Occupation and sex	May 1988								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over <sup>1</sup> .....	106,383	4,431	14,903	87,049	55,049	11,590	20,410	39.5	43.9
Managerial and professional specialty .....	28,127	424	2,489	25,214	13,831	3,254	8,130	42.7	45.4
Executive, administrative, and managerial .....	13,822	138	673	13,011	6,586	1,744	4,681	44.6	46.1
Professional specialty .....	14,305	285	1,816	12,203	7,245	1,510	3,449	40.8	44.5
Technical, sales, and administrative support .....	33,495	1,159	6,084	26,253	17,932	3,236	5,085	37.9	42.8
Technicians and related support .....	3,240	35	358	2,847	2,009	371	467	39.9	42.5
Sales occupations .....	12,977	591	2,839	9,547	4,892	1,347	3,308	39.1	46.0
Administrative support, including clerical .....	17,279	533	2,887	13,859	11,032	1,517	1,310	36.6	40.7
Service occupations .....	14,625	1,217	4,349	9,059	6,542	965	1,552	33.9	42.8
Private household .....	882	127	441	314	210	33	70	25.7	44.8
Protective service .....	1,763	49	156	1,558	895	258	405	43.1	46.0
Service, except private household and protective .....	11,980	1,040	3,753	7,187	5,436	673	1,078	33.2	42.0
Precision production, craft, and repair .....	13,337	651	465	12,222	7,644	1,794	2,784	42.1	44.0
Operators, fabricators, and laborers .....	16,799	981	1,517	14,301	9,101	2,341	2,859	40.4	43.7
Machine operators, assemblers, and inspectors .....	7,686	386	338	6,963	4,827	1,186	950	40.6	42.4
Transportation and material moving occupations .....	4,596	238	350	4,009	1,914	654	1,442	43.9	47.2
Handlers, equipment cleaners, helpers, and laborers .....	4,516	358	830	3,329	2,360	502	467	36.4	42.1
Men, 16 years and over <sup>1</sup> .....	57,994	2,020	4,427	51,547	28,792	7,363	15,392	42.6	45.4
Managerial and professional specialty .....	15,628	190	646	14,792	6,978	1,786	6,028	45.6	47.1
Executive, administrative, and managerial .....	8,402	74	222	8,105	3,470	1,014	3,621	46.9	47.9
Professional specialty .....	7,227	116	424	6,686	3,508	771	2,407	44.1	46.3
Technical, sales, and administrative support .....	11,794	259	1,126	10,409	5,586	1,511	3,311	42.7	45.8
Technicians and related support .....	1,734	19	86	1,630	1,010	246	374	42.5	44.1
Sales occupations .....	6,720	145	753	5,823	2,456	857	2,510	44.2	48.0
Administrative support, including clerical .....	3,339	95	288	2,956	2,121	408	427	39.6	42.2
Service occupations .....	5,844	336	1,251	4,258	2,861	524	873	37.3	44.1
Private household .....	38	10	14	14	10	2	2	( <sup>2</sup> )	( <sup>2</sup> )
Protective service .....	1,540	36	108	1,396	771	242	383	44.1	46.4
Service, except private household and protective .....	4,266	290	1,129	2,848	2,080	280	488	34.9	42.9
Precision production, craft, and repair .....	12,143	596	348	11,199	6,871	1,683	2,644	42.5	44.2
Operators, fabricators, and laborers .....	12,586	639	1,056	10,890	6,495	1,860	2,535	41.3	44.5
Machine operators, assemblers, and inspectors .....	4,604	157	151	4,296	2,775	817	704	41.9	43.2
Transportation and material moving occupations .....	4,202	193	243	3,766	1,767	603	1,396	44.7	47.5
Handlers, equipment cleaners, helpers, and laborers .....	3,780	290	662	2,828	1,953	440	435	36.8	42.4
Women, 16 years and over <sup>1</sup> .....	48,389	2,411	10,476	35,502	26,258	4,226	5,018	35.9	41.6
Managerial and professional specialty .....	12,498	233	1,843	10,422	6,853	1,468	2,102	39.0	42.8
Executive, administrative, and managerial .....	5,421	64	451	4,906	3,116	729	1,060	41.1	43.2
Professional specialty .....	7,078	169	1,392	5,517	3,737	738	1,042	37.3	42.5
Technical, sales, and administrative support .....	21,702	900	4,957	15,844	12,346	1,725	1,773	35.3	40.9
Technicians and related support .....	1,506	16	273	1,217	999	126	93	36.9	40.5
Sales occupations .....	6,257	446	2,086	3,724	2,436	490	798	33.6	42.8
Administrative support, including clerical .....	13,940	439	2,599	10,902	8,911	1,109	883	35.9	40.2
Service occupations .....	8,781	881	3,098	4,802	3,681	441	679	31.7	41.7
Private household .....	844	118	427	300	201	31	68	25.9	45.2
Protective service .....	223	13	48	162	124	16	22	35.7	42.3
Service, except private household and protective .....	7,714	751	2,624	4,340	3,356	394	589	32.2	41.4
Precision production, craft, and repair .....	1,195	55	116	1,023	773	111	140	38.7	41.5
Operators, fabricators, and laborers .....	4,213	341	461	3,411	2,605	482	323	37.5	41.1
Machine operators, assemblers, and inspectors .....	3,083	229	187	2,667	2,053	369	246	38.7	41.0
Transportation and material moving occupations .....	394	45	107	242	146	51	45	35.2	43.8
Handlers, equipment cleaners, helpers, and laborers .....	737	68	167	501	406	62	33	34.0	40.2

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

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

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-32. Employment status of the noninstitutional population, including Armed forces stationed in the United States, by sex, seasonally adjusted**

(Numbers in thousands)

Employment status and sex	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>TOTAL</b>													
Noninstitutional population <sup>1</sup> .....	184,259	184,421	184,605	184,738	184,904	185,052	185,225	185,370	185,571	185,705	185,847	185,964	186,088
Labor force <sup>1</sup> .....	121,633	121,326	121,610	122,042	121,706	122,128	122,349	122,472	122,924	123,084	122,639	123,055	122,692
Percent of population <sup>2</sup> .....	66.0	65.8	65.9	66.1	65.8	66.0	66.1	66.1	66.2	66.3	66.0	66.2	65.9
Total employed <sup>1</sup> .....	114,060	114,018	114,359	114,786	114,615	114,951	115,259	115,494	115,878	116,145	115,839	116,445	115,909
Employment-population ratio <sup>3</sup> .....	61.9	61.8	61.9	62.1	62.0	62.1	62.2	62.3	62.4	62.5	62.3	62.6	62.3
Resident Armed Forces .....	1,726	1,718	1,720	1,736	1,743	1,741	1,755	1,750	1,749	1,736	1,736	1,732	1,714
Civilian employed .....	112,334	112,300	112,639	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195
Agriculture .....	3,269	3,192	3,212	3,143	3,184	3,249	3,172	3,215	3,293	3,228	3,204	3,228	3,035
Nonagricultural industries .....	109,065	109,108	109,427	109,907	109,688	109,961	110,332	110,529	110,836	111,182	110,899	111,485	111,160
Unemployed .....	7,573	7,308	7,251	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783
Unemployment rate <sup>4</sup> .....	6.2	6.0	6.0	5.9	5.8	5.9	5.8	5.7	5.7	5.6	5.5	5.4	5.5
Not in labor force .....	62,626	63,095	62,995	62,696	63,198	62,924	62,876	62,898	62,647	62,621	63,208	62,909	63,396
<b>Men</b>													
Noninstitutional population <sup>1</sup> .....	88,361	88,442	88,534	88,598	88,683	88,756	88,849	88,924	89,033	89,099	89,168	89,225	89,287
Labor force <sup>1</sup> .....	67,802	67,623	67,671	67,937	67,776	67,947	68,019	68,030	68,243	68,343	68,148	68,445	68,318
Percent of population <sup>2</sup> .....	76.7	76.5	76.4	76.7	76.4	76.6	76.6	76.5	76.6	76.7	76.4	76.7	76.5
Total employed <sup>1</sup> .....	63,543	63,543	63,711	63,916	63,949	64,048	64,174	64,245	64,396	64,636	64,332	64,892	64,583
Employment-population ratio <sup>3</sup> .....	71.9	71.8	72.0	72.1	72.1	72.2	72.2	72.3	72.5	72.1	72.1	72.7	72.3
Resident Armed Forces .....	1,566	1,559	1,561	1,575	1,581	1,580	1,593	1,589	1,588	1,577	1,573	1,569	1,553
Civilian employed .....	61,977	61,984	62,150	62,341	62,368	62,468	62,581	62,656	62,808	63,059	62,759	63,323	63,030
Unemployed .....	4,259	4,080	3,960	4,021	3,827	3,899	3,845	3,785	3,847	3,707	3,816	3,553	3,736
Unemployment rate <sup>4</sup> .....	6.3	6.0	5.9	5.9	5.6	5.7	5.7	5.6	5.6	5.4	5.6	5.2	5.5
Not in labor force .....	20,559	20,819	20,863	20,661	20,907	20,809	20,830	20,894	20,790	20,756	21,020	20,780	20,969
<b>Women</b>													
Noninstitutional population <sup>1</sup> .....	95,898	95,979	96,071	96,140	96,221	96,295	96,376	96,446	96,538	96,606	96,679	96,739	96,801
Labor force <sup>1</sup> .....	53,831	53,703	53,939	54,105	53,930	54,181	54,330	54,442	54,681	54,740	54,491	54,610	54,374
Percent of population <sup>2</sup> .....	56.1	56.0	56.1	56.3	56.0	56.3	56.4	56.4	56.6	56.7	56.4	56.5	56.2
Total employed <sup>1</sup> .....	50,517	50,475	50,648	50,870	50,666	50,903	51,085	51,249	51,482	51,509	51,507	51,553	51,327
Employment-population ratio <sup>3</sup> .....	52.7	52.6	52.7	52.9	52.7	52.9	53.0	53.1	53.3	53.3	53.3	53.3	53.0
Resident Armed Forces .....	160	159	159	161	162	161	162	161	161	159	163	163	161
Civilian employed .....	50,357	50,316	50,489	50,709	50,504	50,742	50,923	51,088	51,321	51,350	51,344	51,390	51,166
Unemployed .....	3,314	3,228	3,291	3,235	3,264	3,278	3,245	3,193	3,200	3,231	2,985	3,057	3,047
Unemployment rate <sup>4</sup> .....	6.2	6.0	6.1	6.0	6.1	6.1	6.0	5.9	5.9	5.9	5.5	5.6	5.6
Not in labor force .....	42,067	42,276	42,132	42,035	42,291	42,114	42,046	42,004	41,857	41,866	42,188	42,129	42,427

<sup>1</sup> Includes members of the Armed Forces stationed in the United States.

<sup>2</sup> Labor force as a percent of the noninstitutional population.

<sup>3</sup> Total employment as a percent of the noninstitutional population.

<sup>4</sup> Unemployment as a percent of the labor force (including the resident

Armed Forces).

NOTE: The population and Armed Forces figures are not adjusted for seasonal variation. Detail for the seasonally adjusted data shown in tables A-32 through A-41 will not necessarily add to totals because of the independent seasonal adjustment of the various series.



A-33. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted

(Numbers in thousands)

Employment status, sex, and age	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup> .....	182,533	182,703	182,885	183,002	183,161	183,311	183,470	183,620	183,822	183,969	184,111	184,232	184,374
Civilian labor force .....	119,907	119,608	119,890	120,306	119,963	120,387	120,594	120,722	121,175	121,348	120,903	121,323	120,978
Percent of population .....	65.7	65.5	65.6	65.7	65.5	65.7	65.7	65.7	65.9	66.0	65.7	65.9	65.6
Employed .....	112,334	112,300	112,639	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195
Employment-population ratio <sup>2</sup> .....	61.5	61.5	61.6	61.8	61.6	61.8	61.9	61.9	62.1	62.2	62.0	62.3	61.9
Unemployed .....	7,573	7,308	7,251	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783
Unemployment rate .....	6.3	6.1	6.0	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> .....	79,474	79,536	79,625	79,668	79,740	79,807	79,885	80,002	80,120	80,203	80,260	80,326	80,402
Civilian labor force .....	62,129	62,054	62,106	62,083	62,085	62,211	62,299	62,248	62,440	62,696	62,497	62,791	62,662
Percent of population .....	78.2	78.0	78.0	77.9	77.9	78.0	78.0	77.8	77.9	78.2	77.9	78.2	77.9
Employed .....	58,673	58,632	58,783	58,825	58,967	59,037	59,164	59,185	59,287	59,625	59,407	59,883	59,590
Employment-population ratio <sup>2</sup> .....	73.8	73.7	73.8	73.8	73.9	74.0	74.1	74.0	74.0	74.3	74.0	74.5	74.1
Agriculture .....	2,383	2,316	2,333	2,289	2,345	2,343	2,297	2,298	2,323	2,280	2,253	2,255	2,181
Nonagricultural industries .....	56,290	56,316	56,450	56,536	56,622	56,694	56,867	56,887	56,964	57,344	57,154	57,627	57,409
Unemployed .....	3,456	3,422	3,323	3,258	3,118	3,174	3,135	3,063	3,154	3,071	3,089	2,909	3,072
Unemployment rate .....	5.6	5.5	5.4	5.2	5.0	5.1	5.0	4.9	5.1	4.9	4.9	4.6	4.9
Not in labor force .....	17,345	17,482	17,519	17,585	17,655	17,596	17,586	17,754	17,680	17,507	17,763	17,535	17,740
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> .....	88,464	88,546	88,632	88,685	88,785	88,843	88,923	89,010	89,110	89,178	89,261	89,307	89,382
Civilian labor force .....	49,728	49,722	49,886	49,969	49,922	50,095	50,254	50,361	50,558	50,640	50,542	50,612	50,441
Percent of population .....	56.2	56.2	56.3	56.3	56.2	56.4	56.5	56.6	56.7	56.8	56.6	56.7	56.4
Employed .....	47,028	47,088	47,206	47,308	47,251	47,480	47,634	47,750	47,977	48,005	48,132	48,170	47,960
Employment-population ratio <sup>2</sup> .....	53.2	53.2	53.3	53.3	53.2	53.4	53.6	53.6	53.8	53.8	53.9	53.9	53.7
Agriculture .....	629	619	620	609	600	636	636	643	646	654	656	692	587
Nonagricultural industries .....	46,399	46,469	46,586	46,699	46,651	46,844	46,998	47,107	47,331	47,351	47,476	47,478	47,373
Unemployed .....	2,700	2,634	2,680	2,661	2,671	2,615	2,620	2,611	2,581	2,635	2,411	2,442	2,481
Unemployment rate .....	5.4	5.3	5.4	5.3	5.4	5.2	5.2	5.2	5.1	5.2	4.8	4.8	4.9
Not in labor force .....	38,736	38,824	38,746	38,716	38,863	38,748	38,669	38,649	38,552	38,538	38,719	38,695	38,941
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup> .....	14,595	14,621	14,628	14,649	14,637	14,661	14,663	14,609	14,592	14,588	14,591	14,598	14,590
Civilian labor force .....	8,050	7,832	7,898	8,254	7,956	8,081	8,041	8,113	8,177	8,011	7,865	7,919	7,875
Percent of population .....	55.2	53.6	54.0	56.3	54.4	55.1	54.8	55.5	56.0	54.9	53.9	54.2	54.0
Employed .....	6,633	6,580	6,650	6,917	6,654	6,693	6,706	6,809	6,865	6,779	6,564	6,660	6,645
Employment-population ratio <sup>2</sup> .....	45.4	45.0	45.5	47.2	45.5	45.7	45.7	46.6	47.0	46.5	45.0	45.6	45.5
Agriculture .....	257	257	259	245	239	270	239	274	323	293	295	280	267
Nonagricultural industries .....	6,376	6,323	6,391	6,672	6,415	6,423	6,467	6,535	6,542	6,486	6,269	6,380	6,378
Unemployed .....	1,417	1,252	1,248	1,337	1,302	1,388	1,335	1,304	1,312	1,232	1,301	1,259	1,230
Unemployment rate .....	17.6	16.0	15.8	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6
Not in labor force .....	6,545	6,789	6,730	6,395	6,681	6,580	6,622	6,496	6,415	6,577	6,726	6,679	6,715

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

population.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-34. 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	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> .....	156,811	156,930	157,058	157,134	157,242	157,342	157,449	157,552	157,676	157,773	157,868	157,943	158,034
Civilian labor force .....	103,416	103,150	103,248	103,516	103,357	103,669	103,731	103,907	104,252	104,530	104,171	104,574	104,209
Percent of population .....	65.9	65.7	65.7	65.9	65.7	65.9	65.9	66.0	66.1	66.3	66.0	66.2	65.9
Employed .....	97,829	97,698	97,917	98,181	98,069	98,317	98,492	98,779	99,044	99,474	99,274	99,751	99,297
Employment-population ratio <sup>2</sup> .....	62.4	62.3	62.3	62.5	62.4	62.5	62.6	62.7	62.8	63.0	62.9	63.2	62.8
Unemployed .....	5,587	5,452	5,331	5,335	5,288	5,352	5,239	5,128	5,208	5,056	4,897	4,824	4,913
Unemployment rate .....	5.4	5.3	5.2	5.2	5.1	5.2	5.1	4.9	5.0	4.8	4.7	4.6	4.7
<b>Men, 20 years and over</b>													
Civilian labor force .....	54,238	54,227	54,198	54,183	54,213	54,375	54,381	54,368	54,455	54,650	54,522	54,699	54,618
Percent of population .....	78.5	78.4	78.3	78.2	78.2	78.4	78.3	78.2	78.3	78.5	78.2	78.5	78.3
Employed .....	51,626	51,591	51,670	51,715	51,803	51,864	51,969	52,046	52,053	52,389	52,245	52,538	52,314
Employment-population ratio <sup>2</sup> .....	74.7	74.6	74.7	74.7	74.7	74.8	74.9	74.9	74.8	75.2	75.0	75.4	75.0
Unemployed .....	2,612	2,636	2,528	2,468	2,410	2,511	2,412	2,322	2,402	2,260	2,277	2,161	2,304
Unemployment rate .....	4.8	4.9	4.7	4.6	4.4	4.6	4.4	4.3	4.4	4.1	4.2	4.0	4.2
<b>Women, 20 years and over</b>													
Civilian labor force .....	42,182	42,137	42,241	42,332	42,308	42,379	42,464	42,569	42,710	42,915	42,841	42,986	42,827
Percent of population .....	55.7	55.6	55.7	55.8	55.7	55.7	55.8	55.9	56.1	56.3	56.2	56.3	56.1
Employed .....	40,268	40,265	40,343	40,449	40,409	40,538	40,606	40,712	40,896	40,985	41,183	41,297	41,104
Employment-population ratio <sup>2</sup> .....	53.1	53.1	53.2	53.3	53.2	53.3	53.4	53.5	53.7	53.8	54.0	54.1	53.8
Unemployed .....	1,914	1,872	1,898	1,883	1,899	1,841	1,858	1,857	1,813	1,930	1,658	1,689	1,723
Unemployment rate .....	4.5	4.4	4.5	4.4	4.5	4.3	4.4	4.4	4.2	4.5	3.9	3.9	4.0
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,996	6,786	6,809	7,001	6,836	6,915	6,886	6,970	7,087	6,965	6,807	6,889	6,764
Percent of population .....	58.5	56.7	56.9	58.5	57.2	57.9	57.7	58.6	59.6	58.6	57.2	58.0	57.0
Employed .....	5,935	5,842	5,904	6,017	5,857	5,915	5,917	6,021	6,095	6,100	5,845	5,916	5,879
Employment-population ratio <sup>2</sup> .....	49.7	48.8	49.3	50.3	49.0	49.5	49.6	50.6	51.2	51.3	49.1	49.8	49.5
Unemployed .....	1,061	944	905	984	979	1,000	969	949	992	865	962	973	885
Unemployment rate .....	15.2	13.9	13.3	14.1	14.3	14.5	14.1	13.6	14.0	12.4	14.1	14.1	13.1
Men .....	17.0	14.8	13.5	15.2	15.1	15.1	14.8	14.9	14.4	12.2	15.7	14.5	13.8
Women .....	13.3	13.0	13.1	12.9	13.4	13.8	13.3	12.3	13.6	12.7	12.4	13.7	12.4
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> .....	20,312	20,341	20,373	20,396	20,426	20,453	20,482	20,508	20,539	20,569	20,596	20,622	20,650
Civilian labor force .....	12,889	12,892	13,039	13,150	13,028	13,152	13,193	13,215	13,222	13,168	13,098	13,078	13,069
Percent of population .....	63.5	63.4	64.0	64.5	63.8	64.3	64.4	64.4	64.4	64.0	63.6	63.4	63.3
Employed .....	11,129	11,238	11,381	11,513	11,421	11,556	11,589	11,605	11,608	11,504	11,420	11,482	11,452
Employment-population ratio <sup>2</sup> .....	54.8	55.2	55.9	56.4	55.9	56.5	56.6	56.6	56.5	55.9	55.4	55.7	55.5
Unemployed .....	1,760	1,654	1,658	1,637	1,607	1,596	1,604	1,610	1,614	1,663	1,678	1,597	1,617
Unemployment rate .....	13.7	12.8	12.7	12.4	12.3	12.1	12.2	12.2	12.2	12.6	12.8	12.2	12.4
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,037	6,003	6,061	6,054	6,032	6,023	6,045	6,043	6,115	6,166	6,127	6,163	6,107
Percent of population .....	75.0	74.5	75.1	74.9	74.5	74.3	74.5	74.3	75.0	75.6	75.0	75.3	74.5
Employed .....	5,296	5,319	5,384	5,407	5,421	5,431	5,430	5,497	5,472	5,472	5,429	5,511	5,449
Employment-population ratio <sup>2</sup> .....	65.8	66.0	66.7	66.9	67.0	67.0	66.9	66.8	67.5	67.1	66.4	67.3	66.5
Unemployed .....	741	684	677	647	611	592	615	613	618	694	699	652	658
Unemployment rate .....	12.3	11.4	11.2	10.7	10.1	9.8	10.2	10.1	10.1	11.3	11.4	10.6	10.8
<b>Women, 20 years and over</b>													
Civilian labor force .....	5,987	6,033	6,116	6,122	6,067	6,177	6,207	6,224	6,244	6,131	6,136	6,093	6,059
Percent of population .....	59.3	59.6	60.4	60.3	59.7	60.7	60.9	61.0	61.1	59.9	59.9	59.4	59.0
Employed .....	5,292	5,349	5,417	5,430	5,357	5,495	5,537	5,544	5,550	5,495	5,465	5,407	5,414
Employment-population ratio <sup>2</sup> .....	52.4	52.9	53.5	53.5	52.7	54.0	54.3	54.3	54.3	53.7	53.3	52.7	52.7
Unemployed .....	695	684	699	692	710	682	670	680	694	636	671	686	645
Unemployment rate .....	11.6	11.3	11.4	11.3	11.7	11.0	10.8	10.9	11.1	10.4	10.9	11.3	10.6

See footnotes at end of table.

**A-34. 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	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	865	856	862	974	929	952	941	948	863	870	834	822	903
Percent of population .....	40.0	39.5	39.8	44.9	42.8	43.8	43.3	43.7	39.8	40.0	38.3	37.7	41.4
Employed .....	541	570	580	676	643	630	622	631	561	537	526	564	589
Employment-population ratio <sup>2</sup> .....	25.0	26.3	26.8	31.2	29.6	29.0	28.6	29.1	25.8	24.7	24.2	25.9	27.0
Unemployed .....	324	286	282	298	286	322	319	317	302	333	308	258	314
Unemployment rate .....	37.5	33.4	32.7	30.6	30.8	33.8	33.9	33.4	35.0	38.3	36.9	31.4	34.8
Men .....	38.3	31.4	32.4	33.7	31.5	32.5	32.2	33.5	35.1	42.0	39.0	27.6	33.3
Women .....	36.6	35.4	33.1	27.1	30.0	35.2	35.8	33.4	34.9	34.7	35.0	35.5	36.6
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> .....	12,809	12,848	12,887	12,925	12,965	13,003	13,043	13,082	13,115	13,153	13,192	13,230	13,268
Civilian labor force .....	8,549	8,468	8,447	8,549	8,581	8,654	8,763	8,772	8,879	9,017	8,803	8,828	8,859
Percent of population .....	66.7	65.9	65.5	66.1	66.2	66.6	67.2	67.1	67.7	68.6	66.7	66.7	66.8
Employed .....	7,797	7,738	7,762	7,856	7,877	7,935	7,978	8,058	8,238	8,268	8,079	8,010	8,058
Employment-population ratio <sup>2</sup> .....	60.9	60.2	60.2	60.8	60.8	61.0	61.2	61.6	62.8	62.9	61.2	60.5	60.7
Unemployed .....	752	730	685	693	704	719	785	714	642	749	724	818	801
Unemployment rate .....	8.8	8.6	8.1	8.1	8.2	8.3	9.0	8.1	7.2	8.3	8.2	9.3	9.0

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

<sup>2</sup> Civilian 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.

**A-35. Employed civilians by selected social and economic categories, seasonally adjusted**

(In thousands)

Category	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>CHARACTERISTIC</b>													
Total .....	112,334	112,300	112,639	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195
Married men, spouse present .....	40,075	40,120	40,262	40,308	40,404	40,556	40,645	40,711	40,404	40,475	40,481	40,459	40,267
Married women, spouse present .....	28,314	28,282	28,283	28,189	28,069	28,099	28,175	28,249	28,441	28,707	28,805	28,859	28,567
Women who maintain families .....	5,963	6,011	6,033	6,107	6,151	6,178	6,237	6,227	6,168	6,157	6,160	6,055	5,957
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>													
<b>Agriculture:</b>													
Wage and salary workers .....	1,672	1,622	1,625	1,591	1,624	1,705	1,595	1,599	1,666	1,677	1,648	1,678	1,526
Self-employed workers .....	1,429	1,403	1,424	1,393	1,415	1,430	1,407	1,450	1,454	1,414	1,423	1,385	1,346
Unpaid family workers .....	165	162	153	155	139	140	155	156	138	114	142	155	159
<b>Nonagricultural industries:</b>													
Wage and salary workers .....	100,634	100,510	100,825	101,241	101,282	101,522	101,943	101,997	102,507	102,683	102,279	102,538	101,927
Government .....	16,708	16,920	16,876	16,794	16,928	17,033	17,118	17,064	17,197	16,948	16,908	17,015	16,887
Private industries .....	83,926	83,590	83,949	84,447	84,354	84,489	84,825	84,933	85,310	85,735	85,371	85,523	85,040
Private households .....	1,240	1,163	1,212	1,175	1,100	1,222	1,286	1,200	1,147	1,170	1,175	1,092	1,156
Other industries .....	82,686	82,427	82,737	83,272	83,254	83,267	83,539	83,733	84,163	84,565	84,196	84,431	83,884
Self-employed workers .....	8,157	8,293	8,216	8,214	8,204	8,274	8,222	8,280	8,150	8,312	8,366	8,637	8,917
Unpaid family workers .....	276	274	266	248	297	242	235	248	237	228	248	281	307
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
<b>All industries:</b>													
Part time for economic reasons .....	5,333	5,254	5,428	5,283	5,261	5,353	5,534	5,262	5,367	5,566	5,343	5,194	4,844
Slack work .....	2,292	2,345	2,429	2,468	2,213	2,377	2,408	2,284	2,396	2,478	2,520	2,236	2,227
Could only find part-time work .....	2,677	2,623	2,683	2,526	2,683	2,655	2,696	2,638	2,640	2,598	2,535	2,502	2,315
Voluntary part time .....	14,498	14,836	14,437	14,573	14,415	14,488	14,523	14,711	14,571	14,572	14,603	15,016	14,790
<b>Nonagricultural industries:</b>													
Part time for economic reasons .....	5,058	4,979	5,154	5,016	4,986	5,067	5,241	5,004	5,145	5,254	5,106	4,924	4,623
Slack work .....	2,126	2,176	2,261	2,265	2,034	2,196	2,209	2,111	2,260	2,327	2,325	2,121	2,120
Could only find part-time work .....	2,603	2,530	2,599	2,463	2,603	2,557	2,597	2,552	2,566	2,457	2,475	2,397	2,236
Voluntary part time .....	13,995	14,334	13,953	14,099	13,987	14,011	14,064	14,222	14,096	14,123	14,141	14,592	14,338

<sup>1</sup> Excludes persons "with a job but not at work" during the survey

period for such reasons as vacation, illness, or industrial dispute.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-36. Employed civilians by sex and age, seasonally adjusted**

(In thousands)

Sex and age	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	112,334	112,300	112,639	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195
16 to 24 years .....	20,208	20,069	20,184	20,475	20,116	20,096	20,065	20,112	20,312	20,271	19,916	19,990	19,773
16 to 19 years .....	6,633	6,580	6,650	6,917	6,654	6,693	6,706	6,809	6,865	6,779	6,564	6,660	6,645
16 to 17 years .....	2,702	2,694	2,780	2,849	2,754	2,768	2,734	2,826	2,776	2,752	2,657	2,682	2,649
18 to 19 years .....	3,930	3,871	3,875	3,996	3,911	3,936	3,985	3,994	4,061	4,045	3,906	3,967	3,995
20 to 24 years .....	13,575	13,489	13,534	13,558	13,462	13,403	13,359	13,303	13,447	13,491	13,353	13,330	13,128
25 years and over .....	92,087	92,234	92,551	92,606	92,735	93,071	93,424	93,625	93,778	94,118	94,239	94,686	94,359
25 to 54 years .....	77,621	77,726	78,015	78,202	78,307	78,477	78,731	78,916	79,170	79,351	79,588	79,946	79,920
55 years and over .....	14,452	14,537	14,497	14,498	14,491	14,641	14,663	14,716	14,581	14,673	14,566	14,712	14,438
Men, 16 years and over .....	61,977	61,984	62,150	62,341	62,368	62,468	62,581	62,656	62,808	63,059	62,759	63,323	63,030
16 to 24 years .....	10,392	10,366	10,441	10,586	10,448	10,403	10,370	10,369	10,456	10,444	10,349	10,427	10,351
16 to 19 years .....	3,304	3,352	3,367	3,516	3,401	3,431	3,417	3,471	3,521	3,434	3,352	3,440	3,439
16 to 17 years .....	1,362	1,373	1,417	1,410	1,391	1,409	1,390	1,451	1,444	1,406	1,376	1,397	1,369
18 to 19 years .....	1,940	1,960	1,938	2,046	2,021	2,034	2,040	2,035	2,053	2,046	1,982	2,042	2,068
20 to 24 years .....	7,088	7,014	7,074	7,070	7,047	6,972	6,953	6,898	6,935	7,010	6,998	6,987	6,912
25 years and over .....	51,554	51,601	51,733	51,781	51,900	52,047	52,210	52,299	52,338	52,623	52,469	52,862	52,654
25 to 54 years .....	43,002	43,071	43,203	43,289	43,408	43,488	43,592	43,690	43,848	43,992	43,975	44,336	44,175
55 years and over .....	8,544	8,561	8,524	8,503	8,514	8,580	8,605	8,629	8,470	8,567	8,467	8,530	8,466
Women, 16 years and over .....	50,357	50,316	50,489	50,709	50,504	50,742	50,923	51,088	51,321	51,350	51,344	51,390	51,166
16 to 24 years .....	9,816	9,703	9,743	9,889	9,668	9,693	9,695	9,743	9,857	9,826	9,567	9,563	9,422
16 to 19 years .....	3,329	3,228	3,283	3,401	3,253	3,262	3,289	3,338	3,344	3,345	3,212	3,220	3,206
16 to 17 years .....	1,340	1,321	1,343	1,439	1,363	1,359	1,344	1,375	1,332	1,346	1,281	1,285	1,280
18 to 19 years .....	1,990	1,911	1,937	1,950	1,890	1,902	1,945	1,959	2,008	1,999	1,924	1,925	1,927
20 to 24 years .....	6,487	6,475	6,460	6,488	6,415	6,431	6,406	6,405	6,513	6,481	6,355	6,343	6,216
25 years and over .....	40,533	40,633	40,818	40,825	40,835	41,024	41,214	41,326	41,440	41,495	41,770	41,824	41,705
25 to 54 years .....	34,619	34,655	34,812	34,913	34,899	34,989	35,139	35,226	35,322	35,359	35,613	35,610	35,745
55 years and over .....	5,908	5,976	5,973	5,995	5,977	6,061	6,058	6,087	6,111	6,106	6,099	6,182	5,972

**A-37. Unemployed persons by sex and age, seasonally adjusted**

(In thousands)

Sex and age	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	7,573	7,308	7,251	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783
16 to 24 years .....	2,895	2,756	2,701	2,736	2,692	2,689	2,641	2,547	2,659	2,525	2,637	2,532	2,519
16 to 19 years .....	1,417	1,252	1,248	1,337	1,302	1,388	1,335	1,304	1,312	1,232	1,301	1,259	1,230
16 to 17 years .....	717	623	586	638	618	710	649	613	638	580	588	580	509
18 to 19 years .....	702	657	624	688	701	679	691	688	689	655	732	658	720
20 to 24 years .....	1,478	1,504	1,453	1,399	1,390	1,301	1,306	1,243	1,347	1,293	1,336	1,273	1,289
25 years and over .....	4,657	4,502	4,538	4,544	4,445	4,482	4,442	4,412	4,393	4,416	4,161	4,082	4,251
25 to 54 years .....	4,134	4,042	4,078	4,050	3,931	3,993	3,909	3,939	3,896	3,926	3,730	3,625	3,744
55 years and over .....	532	475	462	483	499	474	513	488	527	499	441	446	520
Men, 16 years and over .....	4,259	4,080	3,960	4,021	3,827	3,899	3,845	3,785	3,847	3,707	3,816	3,553	3,736
16 to 24 years .....	1,586	1,474	1,415	1,518	1,435	1,432	1,414	1,378	1,456	1,333	1,423	1,315	1,354
16 to 19 years .....	803	658	637	763	709	725	710	722	693	636	727	644	664
16 to 17 years .....	401	325	292	363	341	372	356	347	348	285	313	291	275
18 to 19 years .....	402	357	307	387	382	354	355	367	360	354	414	352	388
20 to 24 years .....	783	816	778	755	726	707	704	656	763	697	696	671	690
25 years and over .....	2,648	2,585	2,535	2,528	2,427	2,462	2,419	2,390	2,391	2,390	2,385	2,243	2,363
25 to 54 years .....	2,310	2,271	2,238	2,215	2,139	2,182	2,109	2,112	2,070	2,095	2,089	1,951	2,051
55 years and over .....	348	301	300	302	283	277	313	282	351	305	299	276	323
Women, 16 years and over .....	3,314	3,228	3,291	3,235	3,264	3,278	3,245	3,193	3,200	3,231	2,985	3,057	3,047
16 to 24 years .....	1,309	1,282	1,286	1,218	1,257	1,257	1,227	1,169	1,203	1,192	1,214	1,217	1,166
16 to 19 years .....	614	594	611	574	593	663	625	582	619	596	574	615	566
16 to 17 years .....	316	298	294	275	277	338	293	266	290	295	255	289	234
18 to 19 years .....	300	300	317	301	319	325	336	321	329	301	318	306	332
20 to 24 years .....	695	688	675	644	664	594	602	587	584	596	640	602	600
25 years and over .....	2,009	1,917	2,003	2,016	2,018	2,020	2,023	2,022	2,002	2,026	1,776	1,838	1,888
25 to 54 years .....	1,824	1,771	1,840	1,835	1,792	1,811	1,800	1,827	1,826	1,831	1,641	1,674	1,693
55 years and over .....	184	174	162	181	216	197	200	206	175	194	142	170	197

**A-38. Unemployment rates by sex and age, seasonally adjusted**

(Civilian workers)

Sex and age	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total, 16 years and over .....	6.3	6.1	6.0	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6
16 to 24 years .....	12.5	12.1	11.8	11.8	11.8	11.8	11.6	11.2	11.6	11.1	11.7	11.2	11.3
16 to 19 years .....	17.6	16.0	15.8	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6
16 to 17 years .....	21.0	18.8	17.5	18.3	18.3	20.4	19.2	17.8	18.7	17.4	17.6	17.8	16.1
18 to 19 years .....	15.2	14.5	13.9	14.7	15.2	14.7	14.8	14.7	14.5	13.9	15.8	14.2	15.3
20 to 24 years .....	9.8	10.0	9.7	9.4	9.4	8.8	8.9	8.5	9.1	8.7	9.1	8.7	8.9
25 years and over .....	4.8	4.7	4.7	4.7	4.6	4.6	4.5	4.5	4.5	4.5	4.2	4.1	4.3
25 to 54 years .....	5.1	4.9	5.0	4.9	4.8	4.8	4.7	4.8	4.7	4.7	4.5	4.3	4.5
55 years and over .....	3.6	3.2	3.1	3.2	3.3	3.1	3.4	3.2	3.5	3.3	2.9	2.9	3.5
Men, 16 years and over .....	6.4	6.2	6.0	6.1	5.8	5.9	5.8	5.7	5.8	5.6	5.7	5.3	5.6
16 to 24 years .....	13.2	12.4	11.9	12.5	12.1	12.1	12.0	11.7	12.2	11.3	12.1	11.2	11.6
16 to 19 years .....	19.6	16.4	15.9	17.8	17.3	17.4	17.2	17.2	16.4	15.6	17.8	15.8	16.2
16 to 17 years .....	22.7	19.1	17.1	20.5	19.7	20.9	20.4	19.3	19.4	16.9	18.5	17.2	16.7
18 to 19 years .....	17.2	15.4	13.7	15.9	15.9	14.8	14.8	15.3	14.9	14.7	17.3	14.7	15.8
20 to 24 years .....	9.9	10.4	9.9	9.6	9.3	9.2	9.2	8.7	9.9	9.0	9.1	8.8	9.1
25 years and over .....	4.9	4.8	4.7	4.7	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.1	4.3
25 to 54 years .....	5.1	5.0	4.9	4.9	4.7	4.8	4.6	4.6	4.5	4.5	4.5	4.2	4.4
55 years and over .....	3.9	3.4	3.4	3.4	3.2	3.1	3.5	3.2	4.0	3.4	3.4	3.1	3.7
Women, 16 years and over .....	6.2	6.0	6.1	6.0	6.1	6.1	6.0	5.9	5.9	5.9	5.5	5.6	5.6
16 to 24 years .....	11.8	11.7	11.7	11.0	11.5	11.5	11.2	10.7	10.9	10.8	11.3	11.3	11.0
16 to 19 years .....	15.6	15.5	15.7	14.4	15.4	16.9	16.0	14.8	15.6	15.1	15.2	16.0	15.0
16 to 17 years .....	19.1	18.4	18.0	16.0	16.9	19.9	17.9	16.2	17.9	18.0	16.6	18.4	15.5
18 to 19 years .....	13.1	13.6	14.1	13.4	14.4	14.6	14.7	14.1	14.1	13.1	14.2	13.7	14.7
20 to 24 years .....	9.7	9.6	9.5	9.0	9.4	8.5	8.6	8.4	8.2	8.4	9.1	8.7	8.8
25 years and over .....	4.7	4.5	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.7	4.1	4.2	4.3
25 to 54 years .....	5.0	4.9	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.4	4.5	4.5
55 years and over .....	3.0	2.8	2.6	2.9	3.5	3.1	3.2	3.3	2.8	3.1	2.3	2.7	3.2

**A-39. Selected unemployment indicators, seasonally adjusted**

(Unemployment rates)

Category	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>CHARACTERISTIC</b>													
Total (all civilian workers) .....	6.3	6.1	6.0	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6
Men, 20 years and over .....	5.6	5.5	5.4	5.2	5.0	5.1	5.0	4.9	5.1	4.9	4.9	4.6	4.9
Women, 20 years and over .....	5.4	5.3	5.4	5.3	5.4	5.2	5.2	5.2	5.2	5.1	5.2	4.8	4.8
Both sexes, 16 to 19 years .....	17.6	16.0	15.8	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6
White .....	5.4	5.3	5.2	5.2	5.1	5.2	5.1	4.9	5.0	4.8	4.7	4.6	4.7
Black and other .....	12.1	11.5	11.4	11.3	10.9	10.8	11.0	10.9	10.9	11.3	11.5	10.7	11.3
Black .....	13.7	12.8	12.7	12.4	12.3	12.1	12.2	12.2	12.2	12.6	12.8	12.2	12.4
Hispanic origin .....	8.8	8.6	8.1	8.1	8.2	8.3	9.0	8.1	7.2	8.3	8.2	9.3	9.0
Married men, spouse present .....	4.0	4.0	3.8	3.7	3.7	3.7	3.5	3.4	3.6	3.4	3.4	3.0	3.3
Married women, spouse present .....	4.2	4.0	4.2	4.3	4.2	4.2	4.2	4.3	4.2	4.1	4.0	3.8	3.9
Women who maintain families .....	9.5	9.5	9.3	9.0	8.8	8.9	8.5	8.4	8.9	8.3	7.5	8.7	8.4
Full-time workers .....	5.9	5.9	5.7	5.6	5.5	5.6	5.5	5.4	5.4	5.3	5.3	5.1	5.2
Part-time workers .....	8.7	7.3	8.1	8.2	8.4	8.3	8.2	8.0	8.3	7.9	7.7	7.4	7.7
Unemployed 15 weeks and over <sup>1</sup> .....	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3
Labor force time lost <sup>2</sup> .....	7.2	7.1	6.9	6.9	6.8	6.8	6.8	6.6	6.6	6.6	6.5	6.2	6.4
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers .....	6.3	6.1	6.1	6.0	5.9	5.9	5.8	5.7	5.8	5.7	5.6	5.3	5.7
Goods-producing industries .....	7.7	7.1	7.1	6.9	7.0	7.0	6.5	6.4	7.1	6.9	6.5	6.5	6.6
Mining .....	13.0	9.5	7.9	8.6	7.4	8.3	7.0	8.0	7.7	7.8	7.9	8.4	10.4
Construction .....	12.1	11.7	10.8	11.3	11.9	11.2	10.6	10.6	12.2	11.0	10.7	10.6	10.5
Manufacturing .....	6.3	5.7	6.0	5.6	5.6	5.7	5.3	5.1	5.6	5.6	5.2	5.3	5.4
Durable goods .....	6.2	5.4	6.0	5.5	5.4	5.2	4.8	4.8	5.5	5.9	5.2	4.8	4.9
Nondurable goods .....	6.5	6.1	5.9	5.8	5.9	6.5	5.9	5.6	5.8	5.3	5.3	6.0	6.0
Service-producing industries .....	5.6	5.7	5.6	5.6	5.3	5.4	5.5	5.3	5.3	5.1	5.2	4.7	5.2
Transportation and public utilities .....	4.4	4.8	4.4	4.4	4.1	4.4	4.5	4.6	3.6	3.6	4.2	3.8	4.4
Wholesale and retail trade .....	7.0	7.1	6.8	7.0	6.4	6.5	6.8	6.2	6.1	6.4	6.8	5.9	6.3
Finance and service industries .....	4.9	4.9	5.1	4.7	4.8	4.7	4.8	4.8	4.9	4.5	4.2	4.1	4.6
Government workers .....	3.4	3.4	3.4	3.7	3.4	3.3	3.4	3.2	3.0	2.8	2.8	3.0	2.9
Agricultural wage and salary workers .....	9.4	9.3	10.9	10.6	8.6	10.6	11.1	10.9	11.5	10.2	11.0	10.6	13.9

<sup>1</sup> Unemployment as a percent of the civilian labor force.

<sup>2</sup> Aggregate hours lost by the unemployed and persons on part time

for economic reasons as a percent of potentially available labor force hours.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-40. Unemployed persons by duration of unemployment, seasonally adjusted**

(Numbers in thousands)

Weeks of unemployment	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>DURATION</b>													
Less than 5 weeks .....	3,308	3,138	3,186	3,203	3,220	3,223	3,218	3,229	3,089	3,084	3,009	3,125	3,075
5 to 14 weeks .....	2,165	2,151	2,144	2,142	1,949	2,093	2,029	1,968	2,263	2,145	2,101	1,956	2,110
15 weeks and over .....	2,067	2,029	1,920	1,896	1,904	1,801	1,834	1,791	1,733	1,740	1,722	1,540	1,609
15 to 26 weeks .....	974	973	945	834	917	844	899	892	839	841	887	725	784
27 weeks and over .....	1,093	1,056	975	1,062	987	957	935	899	894	899	835	816	825
Average (mean) duration, in weeks .....	14.8	14.7	14.2	14.3	14.2	14.1	14.0	14.2	14.4	14.4	13.7	13.4	13.8
Median duration, in weeks .....	6.6	6.6	6.6	6.4	5.8	6.2	6.1	6.0	6.4	6.4	6.6	5.6	5.9
<b>PERCENT DISTRIBUTION</b>													
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	43.9	42.9	43.9	44.2	45.5	45.3	45.4	46.2	43.6	44.3	44.0	47.2	45.3
5 to 14 weeks .....	28.7	29.4	29.6	29.6	27.6	29.4	28.7	28.2	31.9	30.8	30.8	29.5	31.1
15 weeks and over .....	27.4	27.7	26.5	26.2	26.9	25.3	25.9	25.6	24.5	25.0	25.2	23.3	23.7
15 to 26 weeks .....	12.9	13.3	13.0	11.5	13.0	11.9	12.7	12.8	11.8	12.1	13.0	10.9	11.5
27 weeks and over .....	14.5	14.4	13.4	14.7	14.0	13.4	13.2	12.9	12.6	12.9	12.2	12.3	12.1

**A-41. Unemployed persons by reason for unemployment, seasonally adjusted**

(Numbers in thousands)

Reasons for unemployment	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>NUMBER OF UNEMPLOYED</b>													
Job losers .....	3,612	3,554	3,529	3,389	3,313	3,388	3,307	3,200	3,209	3,207	3,139	2,916	3,236
On layoff .....	924	919	916	874	820	944	878	856	888	884	899	821	793
Other job losers .....	2,688	2,635	2,613	2,515	2,493	2,444	2,429	2,344	2,320	2,323	2,240	2,095	2,443
Job leavers .....	931	959	989	992	981	960	926	946	1,082	961	1,075	993	926
Reentrants .....	1,995	1,980	1,930	1,969	1,908	1,845	1,974	1,945	1,917	1,951	1,756	1,784	1,789
New entrants .....	999	854	844	855	882	914	855	909	885	864	887	915	807
<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
Job losers .....	47.9	48.4	48.4	47.0	46.8	47.7	46.8	45.7	45.2	45.9	45.8	44.1	47.9
On layoff .....	12.3	12.5	12.6	12.1	11.6	13.3	12.4	12.2	12.5	12.7	13.1	12.4	11.7
Other job losers .....	35.7	35.9	35.8	34.9	35.2	34.4	34.4	33.5	32.7	33.3	32.7	31.7	36.2
Job leavers .....	12.4	13.1	13.6	13.8	13.8	13.5	13.1	13.5	15.3	13.8	15.7	15.0	13.7
Reentrants .....	26.5	26.9	26.5	27.3	26.9	26.0	28.0	27.8	27.0	27.9	25.6	27.0	26.5
New entrants .....	13.3	11.6	11.6	11.9	12.5	12.9	12.1	13.0	12.5	12.4	12.9	13.8	11.9
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers .....	3.0	3.0	2.9	2.8	2.8	2.8	2.7	2.7	2.6	2.6	2.6	2.4	2.7
Job leavers .....	.8	.8	.8	.8	.8	.8	.8	.8	.9	.8	.9	.8	.8
Reentrants .....	1.7	1.7	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.5
New entrants .....	.8	.7	.7	.7	.7	.8	.7	.8	.7	.7	.7	.8	.7

**ESTABLISHMENT DATA  
HISTORICAL EMPLOYMENT**

**B-1. Employees on nonagricultural payrolls by major industry, 1936 to date**

(In thousands)

Year and month	Total	Total private	Goods-producing				Service-producing						Government		
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Federal	State	Local
<b>Annual averages</b>															
1936	29,068	25,400	11,933	946	1,160	9,827	17,135	2,973	(1)	(1)	1,373	3,312	(1)	(1)	(1)
1937	31,011	27,255	12,936	1,015	1,127	10,794	18,075	3,134	(1)	(1)	1,417	3,503	(1)	(1)	(1)
1938	29,194	25,311	11,401	891	1,070	9,440	17,793	2,863	(1)	(1)	1,410	3,458	(1)	(1)	(1)
1939	30,603	26,608	12,297	854	1,165	10,278	18,306	2,936	1,762	4,664	1,447	3,502	905	(1)	(1)
1940	32,361	28,159	13,221	925	1,311	10,985	19,140	3,038	1,835	4,914	1,485	3,665	996	(1)	(1)
1941	36,539	31,877	15,963	957	1,814	13,192	20,574	3,274	1,960	5,251	1,525	3,905	1,340	(1)	(1)
1942	40,106	34,624	18,470	992	2,198	15,280	21,636	3,460	1,906	5,212	1,509	4,066	2,213	(1)	(1)
1943	42,434	36,356	20,114	925	1,587	17,602	22,320	3,647	1,822	5,160	1,481	4,130	2,905	(1)	(1)
1944	41,864	35,822	19,328	892	1,108	17,328	22,536	3,829	1,845	5,214	1,461	4,145	2,928	(1)	(1)
1945	40,374	34,431	17,507	836	1,147	15,524	22,867	3,906	1,949	5,365	1,481	4,222	2,808	(1)	(1)
1946	41,652	36,056	17,248	862	1,683	14,703	24,404	4,061	2,291	6,084	1,675	4,697	2,254	(1)	(1)
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,471	6,485	1,728	5,025	1,892	(1)	(1)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,605	6,667	1,800	5,181	1,863	(1)	(1)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,602	6,662	1,828	5,240	1,908	(1)	(1)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,635	6,751	1,888	5,357	1,928	(1)	(1)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,727	7,015	1,956	5,547	2,302	(1)	(1)
1952	48,793	42,185	20,198	898	2,668	16,632	28,595	4,248	2,812	7,192	2,035	5,699	2,420	(1)	(1)
1953	50,202	43,556	21,074	866	2,659	17,549	29,128	4,290	2,854	7,393	2,111	5,835	2,305	(1)	(1)
1954	48,990	42,238	19,751	791	2,646	16,314	29,239	4,084	2,867	7,368	2,200	5,969	2,188	(1)	(1)
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	2,926	7,610	2,298	6,240	2,187	1,168	3,558
1956	52,369	45,091	21,104	822	3,039	17,243	31,266	4,244	3,018	7,840	2,389	6,497	2,209	1,250	3,819
1957	52,853	45,239	20,964	828	2,962	17,174	31,889	4,241	3,028	7,858	2,438	6,708	2,217	1,328	4,071
1958	51,324	43,483	19,513	751	2,817	15,945	31,811	3,976	2,980	7,770	2,481	6,765	2,191	1,415	4,232
1959 <sup>2</sup>	53,268	45,186	20,411	732	3,004	16,675	32,857	4,011	3,082	8,045	2,549	7,087	2,233	1,484	4,366
1960	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	3,143	8,248	2,629	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,133	8,204	2,688	7,620	2,279	1,607	4,708
1962	55,549	46,660	20,451	650	2,948	16,853	35,098	3,906	3,198	8,368	2,754	7,982	2,340	1,668	4,881
1963	56,653	47,429	20,640	635	3,010	16,995	36,013	3,903	3,248	8,530	2,830	8,277	2,358	1,747	5,121
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	3,337	8,823	2,911	8,660	2,348	1,856	5,392
1965	60,765	50,689	21,926	632	3,232	18,062	38,839	4,036	3,466	9,250	2,977	9,036	2,378	1,996	5,700
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	3,597	9,648	3,058	9,498	2,564	2,141	6,080
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	3,689	9,917	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,160	4,318	3,779	10,320	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	3,907	10,798	3,512	11,169	2,758	2,533	6,904
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	3,993	11,047	3,645	11,548	2,731	2,664	7,158
1971	71,214	58,331	22,935	609	3,704	18,623	48,278	4,476	4,001	11,351	3,772	11,797	2,696	2,747	7,437
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	4,113	11,836	3,908	12,276	2,684	2,859	7,790
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	4,277	12,329	4,046	12,857	2,663	2,923	8,146
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	4,433	12,554	4,148	13,441	2,724	3,039	8,407
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	4,415	12,645	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,582	4,546	13,209	4,271	14,551	2,733	3,273	8,865
1977	82,471	67,344	24,346	813	3,851	19,682	58,125	4,713	4,708	13,808	4,467	15,303	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,969	14,573	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	5,204	14,989	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,275	15,035	5,160	17,890	2,866	3,610	9,765
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	5,358	15,189	5,298	18,819	2,772	3,640	9,619
1982	89,566	73,729	23,813	1,128	3,905	18,781	65,753	5,082	5,278	15,179	5,341	19,036	2,739	3,640	9,458
1983	90,200	74,330	23,334	952	3,948	18,434	66,866	4,954	5,268	15,613	5,468	19,694	2,774	3,662	9,434
1984	94,496	78,472	24,727	966	4,383	19,378	69,769	5,159	5,555	16,545	5,689	20,797	2,807	3,734	9,482
1985	97,519	81,125	24,859	927	4,673	19,260	72,660	5,238	5,717	17,356	5,955	22,000	2,875	3,832	9,687
1986	99,525	82,832	24,558	777	4,816	18,965	74,967	5,255	5,753	17,930	6,283	23,053	2,899	3,893	9,901
1987	102,310	85,295	24,784	721	4,998	19,065	77,525	5,385	5,872	18,509	6,549	24,196	2,943	3,963	10,109
<b>Monthly data, seasonally adjusted</b>															
<b>1987:</b>															
May	101,829	84,859	24,653	716	4,967	18,970	77,176	5,356	5,841	18,417	6,539	24,053	2,936	3,954	10,080
June	102,078	85,094	24,684	719	4,983	18,982	77,394	5,363	5,860	18,481	6,553	24,153	2,939	3,946	10,099
July	102,430	85,421	24,788	722	4,997	19,069	77,642	5,373	5,874	18,543	6,570	24,273	2,941	3,965	10,103
August	102,672	85,656	24,851	728	5,012	19,111	77,821	5,394	5,892	18,569	6,581	24,369	2,943	3,971	10,102
September	102,906	85,851	24,902	734	5,012	19,156	78,004	5,427	5,914	18,605	6,588	24,415	2,962	3,973	10,120
October	103,371	86,241	25,025	740	5,060	19,225	78,346	5,448	5,935	18,705	6,604	24,524	2,966	3,985	10,179
November	103,678	86,520	25,123	736	5,090	19,297	78,555	5,466	5,958	18,761	6,608	24,604	2,974	3,988	10,196
December	104,001	86,794	25,201	735	5,118	19,348	78,800	5,481	5,984	18,784	6,619	24,725	2,980	4,001	10,226
<b>1988:</b>															
January	104,262	87,044	25,180	728	5,083	19,369	79,082	5,499	6,010	18,927	6,633	24,795	2,973	4,006	10,239
February	104,729	87,475	25,271	731	5,150	19,390	79,458	5,513	6,035	19,045	6,636	24,975	2,972	4,014	10,268
March	105,020	87,700	25,330	733	5,192	19,405	79,690	5,530	6,061	19,050	6,651	25,078	2,970	4,031	10,319
April <sup>p</sup>	105,269	87,957	25,438	739	5,240	19,459	79,831	5,542	6,089	19,083	6,649	25,156	2,968	4,04	

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>o</sup>	May 1988 <sup>o</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>o</sup>	May 1988 <sup>o</sup>
<b>Total</b> .....		101,478	102,268	104,161	105,144	105,946					
<b>Total private</b> .....		84,182	84,965	86,490	87,486	88,252	68,086	68,819	69,797	70,697	71,356
<b>Mining</b> .....		703	712	723	731	733	497	506	519	526	527
Metal mining .....	10	42.5	43.0	47.1	47.8		32.1	32.8	36.3	36.6	
Iron ores .....	101	6.6	6.7	6.9	7.1		5.0	5.1	5.5	5.6	
Copper ores .....	102	13.1	13.0	14.4	14.5		10.4	10.5	11.3	11.4	
Coal mining .....	11,12	161.7	162.8	155.4	154.3		132.0	132.5	127.1	125.9	
Bituminous coal and lignite mining .....	12	159.4	160.6	153.5	152.3		130.0	130.6	125.4	124.2	
Oil and gas extraction .....	13	389.5	393.8	414.7	416.2	416.3	248.5	254.0	276.3	277.9	
Crude petroleum, natural gas, and natural gas liquids .....	131,2	203.0	202.9	201.0	200.1	-	100.3	99.9	100.8	100.2	
Oil and gas field services .....	138	186.5	190.9	213.7	216.1		148.2	154.1	175.5	177.7	
Nonmetallic minerals, except fuels .....	14	108.8	112.5	105.5	112.5		83.9	87.0	79.4	86.0	
Crushed and broken stone .....	142	39.7	41.0	38.1	41.7		32.0	33.0	29.3	32.9	
Sand and gravel .....	144	33.7	35.4	31.5	34.4		-	-	-	-	
Chemical and fertilizer minerals .....	147	16.7	16.9	17.1	17.1		-	-	-	-	
<b>Construction</b> .....		4,789	5,012	4,787	5,083	5,286	3,710	3,919	3,665	3,944	4,130
General building contractors .....	15	1,266.4	1,311.3	1,290.6	1,348.8	1,390.2	913.4	954.8	921.8	976.7	
Residential building construction .....	152	668.6	694.5	689.4	723.1	-	468.7	491.8	480.1	511.5	
Operative builders .....	153	54.9	55.7	51.8	53.4		27.9	28.7	23.6	24.9	
Nonresidential building construction .....	154	542.9	561.1	549.4	572.3		416.8	434.3	418.1	440.3	
Heavy construction contractors .....	16	742.4	803.2	683.1	760.4		617.2	676.5	559.2	634.6	
Highway and street construction .....	161	258.9	297.3	223.4	273.0		214.2	251.4	176.9	224.4	
Heavy construction, except highway .....	162	483.5	505.9	459.7	487.4		403.0	425.1	382.3	410.2	
Special trade contractors .....	17	2,780.3	2,897.5	2,812.8	2,973.5		2,178.9	2,287.4	2,184.3	2,332.8	
Plumbing, heating, and air conditioning .....	171	608.8	625.6	630.3	640.3		445.3	461.5	461.4	470.7	
Painting, paper hanging, and decorating .....	172	164.9	175.6	159.0	167.6		137.7	147.8	130.4	138.9	
Electrical work .....	173	505.2	511.4	540.8	546.4		387.0	393.2	416.6	422.1	
Masonry, stonework, and plastering .....	174	453.4	475.9	457.1	491.1		385.3	406.8	390.1	421.2	
Carpentering and flooring .....	175	181.0	184.8	174.3	181.1		140.2	143.8	131.8	137.6	
Roofing and sheet metal work .....	176	197.3	203.0	191.0	203.7		156.6	162.2	148.2	160.7	
<b>Manufacturing</b> .....		18,857	18,926	19,302	19,366	19,432	12,832	12,890	13,165	13,210	13,268
<b>Durable goods</b> .....		11,123	11,159	11,377	11,431	11,469	7,381	7,414	7,575	7,617	7,653
Lumber and wood products .....	24	721.8	737.3	734.9	742.3	756.4	603.5	616.6	611.1	619.2	632.3
Logging camps and logging contractors .....	241	77.0	82.1	80.3	78.9	-	63.6	68.3	66.6	65.4	-
Sawmills and planing mills .....	242	197.0	200.1	203.0	203.3		173.9	176.6	178.6	179.4	
Sawmills and planing mills, general .....	2421	160.2	163.0	164.8	165.3		141.5	143.9	144.9	145.8	
Hardwood dimension and flooring .....	2426	33.0	33.3	34.9	34.7		29.0	29.3	30.8	30.7	
Millwork, plywood, and structural members .....	243	256.4	261.1	256.3	261.0		211.8	215.8	210.1	214.8	
Millwork .....	2431	97.9	100.0	97.7	100.4		79.4	81.3	78.0	80.8	
Wood kitchen cabinets .....	2434	69.9	71.0	68.9	69.9		56.2	57.1	55.1	56.1	
Hardwood veneer and plywood .....	2435	23.5	23.8	24.4	24.4		20.7	20.9	21.4	21.3	
Softwood veneer and plywood .....	2436	37.5	37.7	38.2	38.1		34.1	34.3	34.6	34.6	
Wood containers .....	244	41.9	42.6	42.9	43.7		35.6	36.2	36.4	37.3	
Wood buildings and mobile homes .....	245	68.2	69.7	67.6	70.2		51.7	52.7	50.0	52.7	
Mobile homes .....	2451	45.4	46.3	45.4	47.1		36.7	37.4	36.3	38.0	
Miscellaneous wood products .....	249	81.3	81.7	84.8	85.2		66.9	67.0	69.4	69.6	

See footnotes at end of table.



**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Furniture and fixtures .....	25	508.6	511.4	534.4	535.1	534.7	407.4	408.1	426.3	426.7	426.2
Household furniture .....	251	305.0	305.0	320.8	320.4	-	257.9	257.8	271.6	271.4	-
Wood household furniture .....	2511	137.6	137.4	145.7	145.1	-	120.6	120.3	127.4	126.7	-
Upholstered household furniture .....	2512	97.7	97.8	103.3	102.5	-	81.4	81.5	86.6	86.0	-
Metal household furniture .....	2514	27.7	27.1	28.9	28.5	-	22.8	22.3	23.8	23.4	-
Mattresses and bedsprings .....	2515	27.9	28.0	29.3	29.6	-	21.1	21.2	22.4	22.6	-
Office furniture .....	252	65.4	66.4	68.1	67.4	-	49.9	49.7	51.2	50.6	-
Public building and related furniture .....	253	27.8	28.1	29.1	29.6	-	21.2	21.5	22.4	22.7	-
Partitions and fixtures .....	254	72.2	73.1	75.7	76.4	-	51.7	52.1	54.4	55.0	-
Miscellaneous furniture and fixtures .....	259	38.2	38.8	40.7	41.3	-	26.7	27.0	26.7	27.0	-
Stone, clay, and glass products .....	32	578.8	586.0	571.0	584.1	588.5	447.1	454.2	441.7	454.1	458.0
Flat glass .....	321	15.1	14.9	14.4	14.4	-	11.8	11.7	11.2	11.2	-
Glass and glassware, pressed or blown .....	322	87.0	88.0	85.0	85.8	-	74.3	75.4	73.4	74.2	-
Glass containers .....	3221	44.5	45.3	42.6	43.7	-	39.9	40.7	38.4	39.6	-
Pressed and blown glass, nec .....	3229	42.5	42.7	42.4	42.1	-	34.4	34.7	35.0	34.6	-
Products of purchased glass .....	323	50.1	50.2	51.4	51.4	-	35.1	35.3	37.8	37.8	-
Cement, hydraulic .....	324	20.8	20.9	20.0	20.2	-	16.1	16.2	15.3	15.5	-
Structural clay products .....	325	37.3	37.6	38.1	38.4	-	29.3	29.6	29.8	30.1	-
Pottery and related products .....	326	36.5	36.3	37.6	37.4	-	29.1	28.9	30.1	30.1	-
Concrete, gypsum, and plaster products .....	327	209.1	214.9	200.6	211.9	-	162.4	167.8	152.6	163.3	-
Concrete block and brick .....	3271	19.8	20.3	19.8	20.3	-	13.4	13.8	12.8	13.3	-
Concrete products, nec .....	3272	69.5	70.7	69.2	71.9	-	52.8	54.0	52.0	54.5	-
Ready-mixed concrete .....	3273	100.4	104.5	92.6	100.8	-	81.3	85.1	73.2	80.9	-
Misc. nonmetallic mineral products .....	329	110.0	110.3	111.1	111.5	-	78.9	79.2	81.5	81.6	-
Abrasive products .....	3291	21.6	21.5	21.8	22.0	-	14.6	14.5	15.1	15.2	-
Asbestos products .....	3292	8.6	8.6	8.6	8.5	-	6.6	6.6	6.5	6.4	-
Mineral wool .....	3296	25.1	25.0	24.1	24.1	-	-	-	-	-	-
Primary metal industries .....	33	745.3	746.1	774.6	775.7	777.7	560.3	560.7	591.3	592.9	594.6
Blast furnaces and basic steel products .....	331	268.2	269.3	280.5	280.7	281.5	202.2	203.2	216.8	217.4	217.6
Blast furnaces and steel mills .....	3312	202.8	203.8	212.2	212.1	-	154.0	154.8	165.3	165.8	-
Steel pipe and tubes .....	3317	23.0	23.2	24.6	24.7	-	16.6	16.9	18.6	18.7	-
Iron and steel foundries .....	332	129.3	129.5	136.4	136.8	-	101.8	102.1	109.1	109.6	-
Gray iron foundries .....	3321	80.9	80.7	84.0	83.8	-	65.7	65.6	68.6	68.4	-
Malleable iron foundries .....	3322	8.7	8.8	9.0	9.1	-	6.3	6.4	6.8	6.9	-
Steel foundries, nec .....	3325	26.0	26.3	29.3	29.7	-	19.4	19.6	22.6	23.1	-
Primary nonferrous metals .....	333	38.4	39.1	41.2	41.2	-	27.0	27.5	30.2	30.2	-
Primary aluminum .....	3334	20.4	20.8	21.9	21.9	-	14.3	14.6	16.3	16.3	-
Nonferrous rolling and drawing .....	335	181.3	180.5	183.8	184.0	-	129.5	128.6	131.7	131.8	-
Copper rolling and drawing .....	3351	23.3	23.2	24.2	24.3	-	18.3	18.1	18.6	18.7	-
Aluminum sheet, plate, and foil .....	3353	28.2	28.1	27.9	27.7	-	20.7	20.7	19.4	19.3	-
Nonferrous wire drawing and insulating .....	3357	77.9	77.3	79.8	80.2	-	54.6	53.9	57.3	57.7	-
Nonferrous foundries .....	336	86.3	85.8	88.7	88.5	-	69.2	68.8	71.1	71.1	-
Aluminum foundries .....	3361	53.7	53.3	54.7	54.5	-	43.7	43.4	44.6	44.6	-
Fabricated metal products .....	34	1,393.4	1,396.8	1,432.9	1,439.2	1,448.9	1,031.8	1,034.3	1,066.7	1,072.0	1,081.3
Metal cans and shipping containers .....	341	55.8	56.2	54.6	54.8	-	47.9	48.2	46.5	46.7	-
Metal cans .....	3411	45.2	45.4	43.8	43.9	-	39.5	39.6	37.7	37.9	-
Cutlery, hand tools, and hardware .....	342	133.2	132.7	134.9	135.0	-	98.1	97.6	100.2	100.4	-
Hand and edge tools, and hand saws and blades .....	3423.5	44.5	44.7	47.0	46.9	-	32.5	32.7	34.7	34.5	-
Hardware, nec .....	3429	77.7	77.0	76.8	76.9	-	58.3	57.6	57.8	58.2	-
Plumbing and heating, except electric .....	343	59.2	59.7	62.1	62.1	-	42.4	42.3	44.6	44.6	-
Plumbing fittings and brass goods .....	3432	24.5	24.7	26.1	26.0	-	17.9	17.8	19.2	19.1	-
Heating equipment, except electric .....	3433	23.8	24.0	24.1	24.2	-	16.1	16.1	16.2	16.3	-
Fabricated structural metal products .....	344	418.4	422.3	427.5	431.4	-	294.3	298.2	305.0	308.4	-
Fabricated structural metal .....	3441	75.7	76.4	77.4	77.7	-	53.5	54.2	55.4	55.6	-
Metal doors, sash, and trim .....	3442	87.8	90.4	89.0	91.2	-	64.7	67.1	64.8	66.4	-
Fabricated plate work (boiler shops) .....	3443	86.9	86.4	89.6	90.1	-	54.4	54.4	59.5	60.2	-
Sheet metal work .....	3444	107.3	107.8	110.3	110.8	-	79.8	80.0	82.6	83.2	-
Architectural metal work .....	3446	29.8	29.6	30.2	30.3	-	21.6	21.5	22.5	22.6	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Screw machine products, bolts, etc .....	345	91.8	92.0	96.0	96.8		70.2	70.2	74.0	74.2	
Screw machine products .....	3451	45.8	45.9	49.2	49.8		37.3	37.4	40.6	40.9	
Bolts, nuts, rivets, and washers .....	3452	46.0	46.1	46.8	47.0		32.9	32.8	33.4	33.3	
Metal forgings and stampings .....	346	235.0	233.4	234.0	234.8		187.4	185.8	186.6	186.9	
Iron and steel forgings .....	3462	30.0	29.8	29.9	30.1		23.0	22.9	22.9	23.1	
Automotive stampings .....	3465	98.7	97.7	94.6	95.5		84.1	83.1	80.7	81.2	
Metal stampings, nec .....	3469	95.2	94.8	98.1	97.7		72.3	71.8	74.6	74.1	
Metal services, nec .....	347	111.0	111.4	117.4	117.0		88.7	89.0	94.7	94.0	
Plating and polishing .....	3471	72.1	72.3	76.0	75.9		58.2	58.2	61.6	61.4	
Metal coating and allied services .....	3479	38.9	39.1	41.4	41.1		30.5	30.8	33.1	32.6	
Ordnance and accessories, nec .....	348	76.6	77.0	78.6	78.2		48.8	49.0	48.6	49.3	
Ammunition, except for small arms, nec .....	3483	43.4	43.5	43.6	43.1		26.5	26.3	24.2	24.8	
Misc. fabricated metal products .....	349	212.4	212.1	227.8	229.1		154.0	154.0	166.5	167.5	
Valves and pipe fittings .....	3494	78.5	78.1	84.9	85.4		52.4	52.4	58.0	58.2	
Misc. fabricated wire products .....	3496	51.5	51.8	55.1	55.5		39.2	39.4	42.2	42.5	
Machinery, except electrical .....	35	2,006.8	2,010.1	2,105.4	2,114.4	2,121.0	1,186.1	1,189.8	1,262.5	1,267.6	1,272.4
Engines and turbines .....	351	89.3	89.0	87.2	87.4	-	56.5	56.4	58.1	58.1	-
Turbines and turbine generator sets .....	3511	26.2	26.0	22.3	22.3		14.0	14.0	12.7	12.6	
Internal combustion engines, nec .....	3519	63.1	63.0	64.9	65.1		42.5	42.4	45.4	45.5	
Farm and garden machinery .....	352	94.7	94.4	105.5	106.3		63.8	63.6	74.7	75.5	
Farm machinery and equipment .....	3523	67.8	67.8	74.0	74.7		42.9	43.0	50.0	50.8	
Construction and related machinery .....	353	208.0	209.2	228.0	229.5		122.7	123.9	138.9	140.5	
Construction machinery .....	3531	77.0	77.2	82.7	82.8		45.8	45.9	51.7	51.7	
Mining machinery .....	3532	17.2	17.1	18.0	18.2		10.3	10.3	11.0	11.2	
Oil field machinery .....	3533	34.3	35.5	42.9	43.8		19.7	20.8	25.9	26.8	
Conveyors and conveying equipment .....	3535	31.8	31.9	32.7	32.9		16.1	16.4	17.1	17.4	
Industrial trucks and tractors .....	3537	24.4	24.3	26.1	26.2		17.1	16.9	18.1	18.1	
Metalworking machinery .....	354	287.6	287.5	295.3	295.7		205.5	205.8	211.7	211.4	
Machine tools, metal cutting types .....	3541	45.5	45.1	45.6	45.8		28.5	28.3	28.7	28.9	
Machine tools, metal forming types .....	3542	16.9	16.9	17.2	17.3		10.5	10.5	11.1	11.1	
Special dies, tools, jigs, and fixtures .....	3544	136.5	136.5	140.8	140.3		104.6	104.8	108.0	107.1	
Machine tool accessories .....	3545	51.1	51.4	54.0	54.3		36.1	36.4	38.5	38.5	
Power driven hand tools .....	3546	20.3	20.3	20.2	20.3		15.0	15.0	14.8	14.9	
Special industry machinery .....	355	159.9	160.3	168.5	169.7		94.9	95.3	101.0	101.7	
Food products machinery .....	3551	37.4	37.4	39.9	40.3		22.7	22.5	24.2	24.3	
Textile machinery .....	3552	19.4	19.6	20.9	20.8		12.9	13.2	13.9	13.9	
Printing trades machinery .....	3555	26.8	26.8	28.0	28.4		15.6	15.6	16.7	17.0	
General industrial machinery .....	356	245.6	245.9	253.9	254.7		156.2	156.5	163.8	164.5	
Pumps and pumping equipment .....	3561	42.9	43.1	44.7	45.1		24.6	24.7	25.9	26.3	
Ball and roller bearings .....	3562	41.3	41.4	42.2	42.3		31.5	31.6	32.8	32.9	
Air and gas compressors .....	3563	20.7	20.8	20.5	21.0		11.6	11.7	12.0	12.5	
Blowers and fans .....	3564	29.3	29.3	30.3	30.2		18.7	18.8	19.5	19.4	
Speed changers, drives, and gears .....	3566	19.4	19.3	19.8	19.9		13.2	13.1	13.7	13.8	
Power transmission equipment, nec .....	3568	16.2	16.2	17.2	17.5		10.7	10.5	11.7	11.8	
Office and computing machines .....	357	478.5	479.4	502.1	503.9		158.5	159.3	168.5	168.4	
Electronic computing equipment .....	3573	426.3	427.3	447.4	449.1		133.2	134.1	141.3	140.5	
Refrigeration and service machinery .....	358	174.7	175.9	180.6	181.1		124.8	125.8	130.1	130.5	
Refrigeration and heating equipment .....	3585	123.8	125.1	129.3	129.9		90.5	91.7	95.8	96.3	
Misc. machinery, except electrical .....	359	268.5	268.5	284.3	286.1		203.2	203.2	215.7	217.0	
Carburetors, pistons, rings, and valves .....	3592	31.0	31.0	31.5	31.7		25.4	25.4	25.2	25.2	
Machinery, except electrical, nec .....	3599	237.5	237.5	252.8	254.4		177.8	177.8	190.5	191.8	
Electrical and electronic equipment .....	36	2,065.1	2,064.7	2,108.5	2,109.1	2,107.3	1,206.9	1,208.7	1,239.9	1,239.7	1,239.2
Electric distributing equipment .....	361	107.1	107.3	108.6	108.4	-	77.9	77.7	77.9	77.5	-
Transformers .....	3612	48.5	48.6	49.6	49.5		35.9	35.7	35.6	35.5	
Switchgear and switchboard apparatus .....	3613	58.6	58.7	59.0	58.9		42.0	42.0	42.3	42.0	
Electrical industrial apparatus .....	362	180.9	181.2	185.1	185.2		123.9	124.1	128.0	128.5	
Motors and generators .....	3621	86.3	86.7	88.6	88.9		65.8	66.2	68.8	69.1	
Industrial controls .....	3622	60.6	60.4	61.4	61.2		34.9	34.6	35.6	35.7	
Household appliances .....	363	133.8	135.9	133.4	134.8		105.5	107.8	106.6	107.4	
Household refrigerators and freezers .....	3632	28.6	29.0	29.0	29.5		23.2	23.6	23.5	23.9	
Household laundry equipment .....	3633	22.4	22.2	22.2	22.2		17.5	17.5	17.9	17.9	
Electric housewares and fans .....	3634	33.8	34.8	35.0	35.3		25.6	26.7	27.4	27.7	

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
<b>Electrical and electronic equipment—Continued</b>											
Electric lighting and wiring equipment .....	364	192.9	190.5	193.0	192.2		139.1	138.2	140.2	139.7	
Electric lamps .....	3641	25.5	25.5	25.6	25.5		21.9	21.9	21.8	21.9	
Current-carrying wiring devices .....	3643	77.5	76.3	75.7	75.5		50.6	50.3	50.1	49.8	
Noncurrent-carrying wiring devices .....	3644	15.2	15.2	15.5	15.4		11.0	11.1	11.4	11.3	
Residential lighting fixtures .....	3645	26.9	26.3	27.4	26.9		20.3	20.0	20.5	20.2	
Radio and TV receiving equipment .....	365	80.3	80.5	80.3	80.3		53.9	54.2	54.8	54.6	
Radio and TV receiving sets .....	3651	60.7	60.4	60.6	60.9		39.9	39.7	40.3	40.4	
Communication equipment .....	366	605.9	604.1	605.0	603.2		255.2	253.7	254.1	254.1	
Telephone and telegraph apparatus .....	3661	118.9	117.5	117.6	117.5		68.6	68.1	69.0	69.4	
Radio and TV communication equipment .....	3662	487.0	486.6	487.4	485.7		186.6	185.6	185.1	184.7	
Electronic components and accessories .....	367	616.1	617.1	652.4	653.9		349.2	350.3	372.3	371.8	
Electronic tubes .....	3671-3	38.9	39.0	38.2	38.4		24.5	24.8	24.5	24.7	
Semiconductors and related devices .....	3674	243.2	243.3	257.9	260.0		93.9	93.9	101.4	102.4	
Electronic components, nec .....	3679	263.2	264.2	280.5	279.2		177.5	178.7	190.0	188.1	
Misc. electrical equipment and supplies .....	369	148.1	148.1	150.7	151.1		102.2	102.7	106.0	106.1	
Storage batteries .....	3691	25.9	26.3	28.3	28.6		19.9	20.3	21.6	21.6	
Engine electrical equipment .....	3694	66.3	65.9	66.8	66.8		50.3	50.0	50.8	50.8	
<b>Transportation equipment .....</b>	<b>37</b>	<b>2,048.4</b>	<b>2,049.2</b>	<b>2,030.9</b>	<b>2,043.9</b>	<b>2,050.2</b>	<b>1,298.0</b>	<b>1,299.6</b>	<b>1,269.6</b>	<b>1,276.5</b>	<b>1,282.3</b>
Motor vehicles and equipment .....	371	874.0	872.6	840.3	848.4	854.3	679.7	680.6	654.3	661.0	666.0
Motor vehicles and car bodies .....	3711	392.0	389.0	356.6	359.3	-	294.5	294.4	267.8	270.0	-
Truck and bus bodies .....	3713	41.5	42.7	42.6	43.9		32.7	33.7	33.3	34.3	
Motor vehicle parts and accessories .....	3714	393.2	392.3	390.9	394.0		315.8	314.7	313.9	316.2	
Truck trailers .....	3715	29.4	30.3	31.2	31.7		22.6	23.4	24.4	25.1	
Aircraft and parts .....	372	696.3	695.9	693.8	697.3		349.7	349.3	336.3	334.9	
Aircraft .....	3721	349.2	349.7	367.5	366.5		156.5	157.0	161.9	160.0	
Aircraft engines and engine parts .....	3724	157.1	157.0	145.3	151.2		80.8	80.6	68.3	69.9	
Aircraft equipment, nec .....	3728	190.0	189.2	181.0	179.6		112.4	111.7	106.1	105.0	
Ship and boat building and repairing .....	373	185.3	187.6	198.0	198.9		138.8	140.4	151.5	152.0	
Ship building and repairing .....	3731	123.0	124.3	131.3	131.0		88.0	88.8	97.4	96.6	
Boat building and repairing .....	3732	62.3	63.3	66.7	67.9		50.8	51.6	54.1	55.4	
Railroad equipment .....	374	26.5	25.7	29.5	29.9		17.5	17.6	21.4	21.8	
Guided missiles, space vehicles, and parts .....	376	200.7	202.0	205.2	204.7		67.3	67.2	62.7	62.6	
Guided missiles and space vehicles .....	3761	151.4	152.4	153.5	153.0		48.5	48.5	45.3	45.1	
Miscellaneous transportation equipment .....	379	53.5	53.1	51.5	52.0		36.6	36.0	34.4	35.2	
Travel trailers and campers .....	3792	20.7	20.6	20.0	20.5		16.3	16.2	15.6	16.1	
<b>Instruments and related products .....</b>	<b>38</b>	<b>692.0</b>	<b>692.2</b>	<b>704.7</b>	<b>704.7</b>	<b>705.8</b>	<b>375.5</b>	<b>375.8</b>	<b>389.0</b>	<b>388.6</b>	<b>390.4</b>
Engineering and scientific instruments .....	381	83.1	82.7	84.5	84.9	-	37.5	37.4	39.1	39.4	-
Measuring and controlling devices .....	382	237.5	237.5	235.3	235.5		132.3	132.2	133.9	133.3	
Environmental controls .....	3822	41.2	41.3	41.9	41.3		26.1	26.3	27.4	27.1	
Process control instruments .....	3823	52.7	52.6	52.7	52.7		27.2	27.1	28.6	28.1	
Instruments to measure electricity .....	3825	103.0	102.9	100.6	101.2		52.0	51.6	50.3	50.7	
Optical instruments and lenses .....	383	33.3	33.5	34.1	34.4		16.2	16.4	17.1	17.3	
Medical instruments and supplies .....	384	183.8	184.2	195.9	195.8		110.0	110.2	119.5	119.9	
Surgical and medical instruments .....	3841	91.7	91.9	95.7	95.3		52.6	52.7	55.6	55.6	
Surgical appliances and supplies .....	3842	78.6	78.7	85.8	86.1		49.8	49.9	55.7	56.1	
Ophthalmic goods .....	385	36.8	37.1	38.1	38.0		25.2	25.3	26.1	26.2	
Photographic equipment and supplies .....	386	106.1	105.8	105.7	105.4		46.2	46.2	45.1	44.6	
Watches, clocks, and watchcases .....	387	11.4	11.4	11.1	10.7		8.1	8.1	8.2	7.9	
<b>Miscellaneous manufacturing .....</b>	<b>39</b>	<b>362.8</b>	<b>365.6</b>	<b>379.9</b>	<b>382.2</b>	<b>378.9</b>	<b>264.3</b>	<b>266.2</b>	<b>276.9</b>	<b>279.3</b>	<b>276.5</b>
Jewelry, silverware, and plated ware .....	391	53.2	53.3	54.4	54.8	-	36.8	36.9	37.9	38.3	-
Jewelry, precious metal .....	3911	37.5	37.6	38.0	38.6		25.8	25.8	26.3	26.9	
Musical instruments .....	393	12.2	12.2	12.4	12.5		10.0	10.0	10.3	10.5	
Toys and sporting goods .....	394	93.7	94.8	105.0	105.0		70.1	70.9	79.2	79.3	
Dolls, games, toys, and children's vehicles .....	3942,4	41.8	42.7	47.8	47.2		30.0	30.8	34.9	34.6	
Sporting and athletic goods, nec .....	3949	51.9	52.1	57.2	57.8		40.1	40.1	44.3	44.7	
Pens, pencils, office, and art supplies .....	395	32.7	32.8	33.6	33.8		22.7	22.7	23.7	23.8	
Costume jewelry and notions .....	396	40.6	41.0	39.0	39.3		31.9	32.2	29.6	30.1	
Costume jewelry .....	3961	22.2	22.2	20.7	20.6		17.5	17.4	15.8	15.8	
Miscellaneous manufactures .....	399	130.4	131.5	135.5	136.8		92.8	93.5	96.2	97.3	
Signs and advertising displays .....	3993	57.2	57.3	59.6	59.9		39.8	39.6	41.0	41.4	

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Nondurable goods</b> .....		7,734	7,767	7,925	7,935	7,963	5,451	5,476	5,590	5,593	5,615
Food and kindred products .....	20	1,564.7	1,578.3	1,589.6	1,590.4	1,601.0	1,094.9	1,106.5	1,114.2	1,113.7	1,122.5
Meat products .....	201	375.0	375.2	389.2	390.1	-	316.4	316.8	329.0	329.2	-
Meat packing plants .....	2011	133.5	131.7	139.3	140.1	-	111.2	109.4	116.7	117.0	-
Sausages and other prepared meats .....	2013	78.2	78.3	78.4	78.7	-	57.3	57.6	57.5	57.5	-
Poultry dressing plants .....	2016	142.9	144.6	151.1	151.1	-	129.1	130.9	136.6	136.8	-
Dairy products .....	202	160.9	163.0	162.1	163.3	-	98.0	99.6	97.6	98.4	-
Cheese, natural and processed .....	2022	40.8	41.4	42.0	42.1	-	31.1	31.6	32.0	32.1	-
Fluid milk .....	2026	80.0	80.8	80.5	80.8	-	40.2	40.6	39.8	40.0	-
Preserved fruits and vegetables .....	203	213.8	219.3	214.7	218.3	-	172.2	177.1	170.8	174.4	-
Canned specialties .....	2032	22.7	22.9	23.8	23.0	-	15.8	16.0	16.5	15.9	-
Canned fruits and vegetables .....	2033	64.1	66.5	62.9	66.4	-	51.4	53.4	49.4	52.5	-
Frozen fruits and vegetables .....	2037	44.6	46.6	41.0	43.0	-	38.6	40.4	34.7	37.0	-
Grain mill products .....	204	122.9	123.5	129.6	128.8	-	83.8	84.3	89.5	89.2	-
Flour and other grain mill products .....	2041	22.3	22.2	23.6	23.1	-	14.7	14.7	16.3	16.0	-
Prepared feeds, nec .....	2048	41.5	41.7	43.6	43.4	-	26.2	26.3	27.4	27.3	-
Bakery products .....	205	206.3	208.2	205.9	204.9	-	124.6	126.4	124.7	123.5	-
Bread, cake, and related products .....	2051	161.2	162.9	159.8	159.5	-	88.1	89.7	89.0	88.8	-
Cookies and crackers .....	2052	45.1	45.3	46.1	45.4	-	36.5	36.7	35.7	34.7	-
Sugar and confectionery products .....	206	87.0	85.2	91.4	87.9	-	66.4	65.2	70.9	68.1	-
Cane and beet sugar .....	2061-3	19.0	18.8	20.1	19.6	-	14.0	14.3	15.2	14.9	-
Confectionery products .....	2065	49.2	47.9	52.7	49.9	-	39.9	38.7	43.3	40.9	-
Fats and oils .....	207	33.8	34.1	34.6	34.5	-	24.5	24.1	25.4	25.5	-
Beverages .....	208	200.5	203.3	195.2	197.7	-	86.5	88.8	82.2	83.2	-
Malt beverages .....	2082	40.4	40.8	39.0	39.7	-	25.3	26.0	24.2	24.3	-
Bottled and canned soft drinks .....	2086	117.9	119.6	115.4	116.8	-	38.3	39.6	37.8	38.6	-
Misc. food and kindred products .....	209	164.5	166.5	166.9	164.9	-	122.5	124.2	124.1	122.2	-
Tobacco manufactures .....	21	51.0	51.5	52.1	50.4	49.7	38.3	38.4	39.2	37.4	36.5
Cigarettes .....	211	39.0	39.4	38.6	38.5	-	29.3	29.4	29.1	28.9	-
Textile mill products .....	22	717.8	721.3	728.0	726.1	728.9	622.7	625.9	632.3	630.4	632.6
Weaving mills, cotton .....	221	99.3	99.7	101.3	100.9	-	89.5	89.9	91.7	91.4	-
Weaving mills, synthetics .....	222	85.5	85.9	91.3	91.2	-	76.1	76.8	81.3	81.0	-
Weaving and finishing mills, wool .....	223	18.0	18.3	19.4	19.4	-	14.7	15.1	15.9	15.8	-
Narrow fabric mills .....	224	23.0	23.1	24.3	24.4	-	19.9	20.0	21.1	21.0	-
Knitting mills .....	225	212.5	214.3	207.7	208.3	-	186.3	188.0	183.4	184.4	-
Women's hosiery, except socks .....	2251	36.3	36.3	35.3	34.0	-	32.5	32.4	31.6	31.2	-
Hosiery, nec .....	2252	35.2	35.4	35.5	35.5	-	31.7	31.8	32.1	32.1	-
Knit outerwear mills .....	2253	71.0	71.8	66.8	68.8	-	63.0	63.9	59.8	61.6	-
Knit underwear mills .....	2254	25.8	26.1	25.7	25.6	-	21.8	22.1	21.8	21.6	-
Circular knit fabric mills .....	2257	25.5	25.9	25.5	25.3	-	22.2	22.6	22.4	22.1	-
Textile finishing, except wool .....	226	59.9	60.0	59.8	59.1	-	50.1	50.3	49.8	49.1	-
Finishing plants, cotton .....	2261	23.7	23.8	24.2	24.2	-	20.0	20.1	20.1	20.0	-
Finishing plants, synthetics .....	2262	22.4	22.3	21.8	21.4	-	18.2	18.2	17.7	17.4	-
Floor covering mills .....	227	56.7	57.3	58.1	57.6	-	46.1	46.3	46.6	46.1	-
Yarn and thread mills .....	228	110.1	110.0	111.7	110.6	-	98.6	98.3	100.1	99.1	-
Yarn mills, except wool .....	2281	80.7	80.7	82.7	82.1	-	73.1	73.0	75.0	74.4	-
Throwing and winding mills .....	2282	15.8	15.8	15.0	14.8	-	14.0	14.0	13.2	13.1	-
Miscellaneous textile goods .....	229	52.8	52.7	54.4	54.6	-	41.4	41.2	42.4	42.5	-
Apparel and other textile products .....	23	1,094.6	1,098.4	1,104.4	1,102.1	1,102.5	920.8	922.5	929.5	927.6	926.6
Men's and boys' suits and coats .....	231	56.9	57.7	58.2	57.8	-	48.5	49.3	50.4	50.0	-
Men's and boys' furnishings .....	232	303.0	304.9	313.0	313.2	-	261.8	263.6	270.5	270.4	-
Men's and boys' shirts and nightwear .....	2321	86.0	86.2	85.2	85.4	-	73.8	74.2	73.1	73.2	-
Men's and boys' separate trousers .....	2327	49.1	48.8	50.4	50.2	-	43.0	42.7	43.8	43.7	-
Men's and boys' work clothing .....	2328	92.5	93.9	96.2	96.8	-	81.1	82.1	84.3	84.8	-
Women's and misses' outerwear .....	233	354.6	355.4	352.9	352.3	-	296.9	296.4	295.1	294.3	-
Women's and misses' blouses and waists .....	2331	47.1	46.8	45.3	44.6	-	39.2	38.8	37.4	36.9	-
Women's and misses' dresses .....	2335	84.9	83.3	84.3	83.9	-	71.5	69.7	70.4	69.7	-
Women's and misses' suits and coats .....	2337	37.0	41.2	39.3	39.8	-	30.2	34.1	32.1	32.3	-
Women's and misses' outerwear, nec .....	2339	185.6	184.1	184.0	184.0	-	156.0	153.8	155.2	155.4	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Nondurable goods—Continued</b>											
Apparel and other textile products—Continued											
Women's and children's undergarments .....	234	73.5	72.8	71.6	70.9		60.6	59.9	59.1	58.5	
Women's and children's underwear .....	2341	59.8	59.1	58.1	57.6		50.8	50.2	49.9	49.4	
Brassieres and allied garments .....	2342	13.7	13.7	13.5	13.3		9.8	9.7	9.2	9.1	
Children's outerwear .....	236	57.6	58.3	57.4	55.6		48.2	48.7	48.2	46.6	
Children's dresses and blouses .....	2361	24.2	24.4	24.3	23.5		21.2	21.3	21.1	20.5	
Misc. apparel and accessories .....	238	41.9	42.5	41.7	42.0		35.2	35.8	34.7	35.0	
Misc. fabricated textile products .....	239	189.3	188.9	192.0	192.7		155.5	154.7	157.7	159.0	
Curtains and draperies .....	2391	25.3	25.4	25.1	25.0		20.6	20.4	20.6	20.5	
House furnishings, nec .....	2392	51.2	51.4	53.3	53.6		43.2	43.4	45.3	45.5	
Automotive and apparel trimmings .....	2396	40.0	39.2	38.8	39.0		33.6	32.9	31.8	32.4	
Paper and allied products .....	26	674.1	675.6	683.8	684.1	686.8	511.8	512.4	518.7	518.0	521.1
Paper and pulp mills .....	261,2,6	190.5	189.9	190.6	191.0	-	144.9	144.4	145.2	145.4	-
Paper mills, except building paper .....	262	166.4	166.1	167.0	167.4		126.1	125.6	126.6	126.9	
Paperboard mills .....	263	53.6	53.8	53.5	53.2		40.2	40.4	40.6	40.3	
Misc. converted paper products .....	264	230.4	231.2	233.5	233.3		171.8	171.7	172.4	171.4	
Paper coating and glazing .....	2641	57.8	57.8	58.0	58.1		37.2	36.7	36.6	36.1	
Envelopes .....	2642	27.0	26.9	27.7	27.7		21.1	20.8	21.4	21.2	
Bags, except textile bags .....	2643	51.8	51.8	53.3	53.0		40.9	40.8	42.0	41.5	
Paperboard containers and boxes .....	265	199.6	200.7	206.2	206.6		154.9	155.9	160.5	160.9	
Folding paperboard boxes .....	2651	44.2	44.4	45.2	45.5		34.9	35.2	35.9	36.2	
Corrugated and solid fiber boxes .....	2653	108.3	108.7	112.6	112.2		82.1	82.3	85.3	84.9	
Sanitary food containers .....	2654	22.2	22.5	22.8	23.0		19.1	19.4	19.5	19.7	
Printing and publishing .....	27	1,497.3	1,499.9	1,548.4	1,555.7	1,554.5	835.9	837.3	869.5	874.9	871.9
Newspapers .....	271	465.8	466.6	475.3	475.4	-	170.5	171.2	172.2	172.4	-
Periodicals .....	272	119.2	119.5	126.3	126.6		43.2	43.6	46.9	46.6	
Books .....	273	112.8	112.4	113.2	114.2		61.1	60.8	61.4	62.4	
Book publishing .....	2731	84.1	83.3	84.5	85.3		38.7	37.9	38.5	39.0	
Book printing .....	2732	28.7	29.1	28.7	28.9		22.4	22.9	22.9	23.4	
Miscellaneous publishing .....	274	76.5	77.2	81.1	81.5		41.6	41.7	42.6	42.8	
Commercial printing .....	275	524.9	525.7	546.4	551.5		379.0	379.5	399.0	403.5	
Commercial printing, letterpress .....	2751	161.5	162.0	168.3	170.2		116.5	116.7	120.2	121.9	
Commercial printing, lithographic .....	2752	335.1	335.6	348.0	351.2		239.9	240.5	254.7	257.5	
Manifold business forms .....	276	49.3	49.3	51.0	51.1		34.2	34.2	35.0	34.9	
Blankbooks and bookbinding .....	278	72.6	72.7	76.8	77.0		58.5	58.2	60.8	60.8	
Printing trade services .....	279	52.6	52.8	54.9	55.2		39.2	39.5	40.7	40.6	
Chemicals and allied products .....	28	1,014.2	1,017.6	1,050.2	1,051.9	1,057.3	569.3	571.4	591.9	592.1	596.1
Industrial inorganic chemicals .....	281	128.8	129.1	133.0	132.3	-	66.7	67.3	67.1	66.6	-
Industrial inorganic chemicals, nec .....	2819	85.6	85.7	89.6	88.9		48.1	48.4	48.4	47.9	
Plastics materials and synthetics .....	282	165.6	165.2	167.7	167.6		110.5	109.4	109.4	109.8	
Plastics materials and resins .....	2821	74.5	74.2	77.1	77.3		44.3	44.0	44.7	45.3	
Organic fibers, noncellulosic .....	2824	64.2	64.0	63.3	63.3		46.4	45.4	44.6	44.6	
Drugs .....	283	212.5	212.3	223.3	225.1		98.2	97.7	101.8	102.4	
Pharmaceutical preparations .....	2834	168.9	169.0	178.0	179.2		76.8	76.5	79.5	79.7	
Soap, cleaners, and toilet goods .....	284	147.8	150.4	159.3	159.5		93.3	95.2	103.1	102.8	
Soap and other detergents .....	2841	43.5	44.2	44.6	44.5		27.5	27.9	27.7	27.6	
Polishing, sanitation, and finishing preparations .....	2842,3	40.3	40.4	42.9	42.9		22.1	22.3	25.0	24.8	
Toilet preparations .....	2844	64.0	65.8	71.8	72.1		43.7	45.0	50.4	50.4	
Paints and allied products .....	285	61.8	62.3	61.5	61.6		30.2	30.6	30.1	30.1	
Industrial organic chemicals .....	286	150.3	150.4	153.6	154.3		83.4	83.9	88.4	89.1	
Cyclic crudes and intermediates .....	2865	28.5	28.7	29.3	29.5		18.8	18.8	18.3	18.3	
Gum, wood, and industrial organic chemicals, nec .....	2861,9	121.8	121.7	124.3	124.8		64.6	65.1	70.1	70.8	
Agricultural chemicals .....	287	52.9	52.6	54.0	53.3		33.7	33.4	35.8	34.8	
Miscellaneous chemical products .....	289	94.5	95.3	97.8	98.2		53.3	53.9	56.2	56.5	
Petroleum and coal products .....	29	163.7	165.7	161.9	164.2	166.1	106.1	108.7	104.2	106.2	108.5
Petroleum refining .....	291	125.8	126.2	125.3	125.3	-	79.4	80.4	79.6	79.3	-
Paving and roofing materials .....	295	25.9	27.5	24.0	26.3		19.9	21.5	17.6	19.8	

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Nondurable goods—Continued</b>											
Rubber and misc. plastics products .....	30	814.7	816.2	861.0	865.3	870.3	633.1	634.0	670.3	672.4	677.7
Tires and inner tubes .....	301	85.7	85.6	85.9	86.0	-	62.2	61.9	61.5	61.4	-
Rubber and plastics footwear .....	302	11.1	11.0	12.8	12.9	-	9.1	9.0	10.8	10.6	-
Reclaimed rubber, and rubber and plastics hose and belting .....	303,4	22.4	21.5	23.7	23.9	-	16.2	15.5	17.4	17.7	-
Fabricated rubber products, nec .....	306	103.3	102.7	107.7	107.7	-	79.0	78.5	82.6	82.7	-
Miscellaneous plastics products .....	307	592.2	595.4	630.9	634.8	-	466.6	469.1	498.0	500.0	-
Leather and leather products .....	31	141.4	142.6	145.3	145.1	146.2	118.4	119.3	119.9	119.8	121.0
Leather tanning and finishing .....	311	14.6	14.6	14.3	14.3	-	12.2	12.2	11.7	11.9	-
Footwear, except rubber .....	314	82.4	83.9	86.4	86.0	-	71.0	72.3	73.4	73.1	-
Men's footwear, except athletic .....	3143	35.4	35.8	38.6	38.3	-	28.7	29.0	31.0	30.8	-
Women's footwear, except athletic .....	3144	30.5	31.1	30.1	29.6	-	26.9	27.3	26.6	26.1	-
Luggage .....	316	10.5	10.5	11.0	11.3	-	7.5	7.6	7.7	7.9	-
Handbags and personal leather goods .....	317	16.4	16.8	16.0	15.9	-	13.4	13.6	12.8	12.5	-
<b>Transportation and public utilities .....</b>		<b>5,324</b>	<b>5,358</b>	<b>5,473</b>	<b>5,510</b>	<b>5,564</b>	<b>4,406</b>	<b>4,441</b>	<b>4,537</b>	<b>4,571</b>	<b>4,617</b>
<b>Transportation .....</b>		<b>3,120</b>	<b>3,149</b>	<b>3,239</b>	<b>3,274</b>	<b>3,320</b>					
Railroad transportation .....	40	310.8	314.7	295.5	300.3	-	-	-	-	-	-
Class I railroads <sup>2</sup> .....	4011	273.0	276.6	255.8	259.8	-	-	-	-	-	-
Local and interurban passenger transit .....	41	302.9	309.1	314.1	317.6	-	280.6	286.7	290.3	292.9	-
Local and suburban transportation .....	411	106.5	107.5	112.4	113.5	-	97.3	98.2	102.6	103.5	-
Taxicabs .....	412	34.7	34.2	33.6	33.8	-	-	-	-	-	-
Intercity highway transportation .....	413	30.1	31.0	30.7	31.0	-	27.2	28.2	27.7	28.0	-
School buses .....	415	109.8	113.5	114.5	115.4	-	-	-	-	-	-
Trucking and warehousing .....	42	1,427.3	1,435.8	1,490.0	1,501.9	-	1,238.7	1,246.9	1,293.8	1,304.9	-
Trucking and trucking terminals .....	421,3	1,325.5	1,333.4	1,379.5	1,392.2	-	1,153.7	1,161.6	1,201.4	1,213.5	-
Public warehousing .....	422	101.8	102.4	110.5	109.7	-	85.0	85.3	92.4	91.4	-
Water transportation .....	44	175.2	178.4	172.3	175.5	-	-	-	-	-	-
Local water transportation .....	445	26.1	26.9	25.2	25.7	-	-	-	-	-	-
Water transportation services .....	446	95.9	98.7	94.8	97.3	-	-	-	-	-	-
Transportation by air .....	45	590.8	595.1	631.0	637.8	-	-	-	-	-	-
Air transportation .....	451,2	520.3	524.1	553.4	559.5	-	-	-	-	-	-
Air transportation services .....	458	70.5	71.0	77.6	78.3	-	-	-	-	-	-
Pipe lines, except natural gas .....	46	17.8	18.0	15.9	15.9	-	13.0	13.1	10.9	10.9	-
Transportation services .....	47	294.9	297.6	320.0	324.6	-	-	-	-	-	-
Freight forwarding .....	471	62.4	62.5	66.8	66.8	-	-	-	-	-	-
Communication and public utilities .....		<b>2,204</b>	<b>2,209</b>	<b>2,234</b>	<b>2,236</b>	<b>2,244</b>					
Communication .....	48	1,285.9	1,286.2	1,305.6	1,305.9	-	973.6	975.3	985.8	986.5	-
Telephone communication .....	481	901.0	900.8	905.6	904.2	-	663.5	664.5	665.4	664.0	-
Radio and television broadcasting .....	483	235.7	236.3	242.0	243.0	-	193.4	194.4	197.9	199.3	-
Radio broadcasting .....	4832	115.5	115.6	115.4	115.8	-	-	-	-	-	-
Television broadcasting .....	4833	120.2	120.7	126.6	127.2	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	918.3	922.5	928.5	930.2	-	728.2	731.6	734.1	735.4	-
Electric services .....	491	445.3	445.4	444.4	445.2	-	340.9	340.3	338.9	339.5	-
Gas production and distribution .....	492	164.0	164.6	164.7	165.1	-	130.0	130.6	129.8	130.4	-
Combination utility services .....	493	204.7	204.9	203.8	202.6	-	168.5	168.7	167.3	166.1	-
Sanitary services .....	495	78.0	80.9	88.5	90.0	-	67.7	70.4	76.5	77.7	-
<b>Wholesale trade .....</b>		<b>5,805</b>	<b>5,835</b>	<b>6,016</b>	<b>6,065</b>	<b>6,108</b>	<b>4,642</b>	<b>4,672</b>	<b>4,832</b>	<b>4,876</b>	<b>4,915</b>
Durable goods .....	50	3,404	3,422	3,573	3,602	3,629	2,693	2,712	2,844	2,868	-
Motor vehicles and automotive equipment .....	501	431.1	433.9	443.7	446.7	-	344.9	347.7	355.8	358.3	-
Automobiles and other motor vehicles .....	5012	111.3	111.5	116.6	117.4	-	-	-	-	-	-
Automotive parts and supplies .....	5013	290.2	292.7	297.4	299.0	-	-	-	-	-	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Wholesale trade—Continued</b>											
Durable goods—Continued											
Furniture and home furnishings .....	502	140.8	141.1	143.8	142.8		113.1	113.9	116.0	115.1	
Furniture .....	5021	62.6	62.4	64.3	63.8		-	-	-	-	
Home furnishings .....	5023	78.2	78.7	79.5	79.0		-	-	-	-	
Lumber and construction materials .....	503	227.2	232.8	252.0	259.2		187.0	192.4	205.0	211.4	
Lumber, plywood, and millwork .....	5031	103.5	105.4	116.2	119.0		-	-	-	-	
Construction materials, nec .....	5039	123.7	127.4	135.8	140.2		-	-	-	-	
Sporting goods, toys, and hobby goods .....	504	83.3	83.6	87.8	88.0		68.5	69.2	72.3	72.3	
Metals and minerals, except petroleum .....	505	131.3	132.5	141.6	142.9		102.5	103.5	112.0	112.8	
Electrical goods .....	506	490.9	492.2	512.3	512.9		374.2	374.5	391.1	392.0	
Electrical apparatus and equipment .....	5063	268.3	269.7	283.9	285.1		-	-	-	-	
Electrical appliances, TV and radios .....	5064	68.9	68.3	68.6	68.0		-	-	-	-	
Electronic parts and equipment .....	5065	153.7	154.2	159.8	159.8		-	-	-	-	
Hardware, plumbing, and heating equipment .....	507	258.5	261.1	267.5	268.4		207.9	210.8	215.8	216.3	
Hardware .....	5072	89.5	90.6	91.6	92.2		-	-	-	-	
Plumbing and hydronic heating supplies .....	5074	106.8	107.0	111.5	110.8		-	-	-	-	
Machinery, equipment, and supplies .....	508	1,445.8	1,449.8	1,516.6	1,531.0		1,139.6	1,144.1	1,208.0	1,220.2	
Commercial machines and equipment .....	5081	539.4	540.4	572.0	573.6		-	-	-	-	
Construction and mining machinery .....	5082	77.2	77.5	79.4	80.4		-	-	-	-	
Farm machinery and equipment .....	5083	114.2	115.4	117.7	120.8		-	-	-	-	
Industrial machinery and equipment .....	5084	301.1	301.4	312.9	316.4		-	-	-	-	
Industrial supplies .....	5085	127.8	128.4	134.1	135.6		-	-	-	-	
Professional equipment and supplies .....	5086	175.9	176.0	186.3	188.2		-	-	-	-	
Miscellaneous durable goods .....	509	194.9	195.2	207.8	209.6		155.1	155.9	168.0	169.3	
Scrap and waste materials .....	5093	87.0	87.7	95.0	96.4		-	-	-	-	
Nondurable goods .....	51	2,401	2,413	2,443	2,463	2,479	1,949	1,960	1,988	2,008	
Paper and paper products .....	511	200.2	201.4	209.1	209.1	-	162.7	164.1	169.6	169.5	
Drugs, proprietaries, and sundries .....	512	166.4	165.4	173.1	174.0		138.5	137.7	145.7	146.0	
Apparel, piece goods, and notions .....	513	197.6	197.5	200.4	199.7		147.4	147.0	152.6	152.6	
Groceries and related products .....	514	774.7	781.2	781.5	786.1		653.9	660.6	658.2	663.9	
Groceries, general line .....	5141	247.9	248.4	252.2	253.1		-	-	-	-	
Meats and meat products .....	5147	65.2	65.2	64.5	64.0		-	-	-	-	
Fresh fruits and vegetables .....	5148	94.5	98.0	94.7	98.3		-	-	-	-	
Chemicals and allied products .....	516	128.6	129.5	130.5	131.8		93.8	94.6	97.1	97.7	
Petroleum and petroleum products .....	517	196.1	197.0	200.8	201.4		152.9	153.9	156.6	157.3	
Petroleum bulk stations and terminals .....	5171	82.0	82.7	85.5	86.0		-	-	-	-	
Petroleum products, nec .....	5172	114.1	114.3	115.3	115.4		-	-	-	-	
Beer, wine, and distilled beverages .....	518	149.0	151.2	151.8	152.4		122.8	124.6	124.4	125.0	
Beer and ale .....	5181	93.3	95.1	94.3	95.2		-	-	-	-	
Wines and distilled beverages .....	5182	55.7	56.1	57.5	57.2		-	-	-	-	
Miscellaneous nondurable goods .....	519	462.8	466.0	471.5	481.9		375.0	377.1	382.8	392.3	
Farm supplies .....	5191	154.1	155.5	154.6	163.8		-	-	-	-	
<b>Retail trade .....</b>		<b>18,187</b>	<b>18,413</b>	<b>18,612</b>	<b>18,873</b>	<b>19,128</b>	<b>16,160</b>	<b>16,381</b>	<b>16,475</b>	<b>16,721</b>	<b>16,942</b>
Building materials and garden supplies .....	52	737.1	759.6	740.9	773.5		613.8	634.2	610.6	641.4	
Lumber and other building materials .....	521	399.9	412.2	404.5	415.0		338.7	349.5	338.9	348.7	
Hardware stores .....	525	154.5	157.8	160.0	164.2		128.4	131.8	132.3	136.4	
General merchandise stores .....	53	2,309.9	2,337.5	2,436.0	2,445.6	2,468.4	2,168.3	2,195.8	2,261.5	2,265.7	
Department stores .....	531	1,929.0	1,949.1	2,032.3	2,039.1	-	1,827.8	1,848.4	1,901.3	1,903.7	
Variety stores .....	533	233.6	235.1	239.2	239.4		212.8	214.2	217.6	217.2	
Misc. general merchandise stores .....	539	147.3	153.3	164.5	167.1		127.7	133.2	142.6	144.8	
Food stores .....	54	2,922.0	2,943.9	3,001.3	3,011.1	3,042.5	2,692.2	2,712.9	2,756.3	2,765.1	
Grocery stores .....	541	2,570.8	2,592.3	2,650.6	2,659.1	-	2,378.7	2,398.5	2,446.3	2,455.1	
Meat markets and freezer provisioners .....	542	56.7	56.7	58.1	58.4		-	-	-	-	
Dairy products stores .....	545	27.6	29.7	23.6	23.2		-	-	-	-	
Retail bakeries .....	546	170.1	170.6	176.5	175.7		154.8	155.3	160.5	159.0	
Automotive dealers and service stations .....	55	1,981.4	1,999.2	2,034.1	2,053.7	2,070.1	1,661.5	1,678.6	1,699.8	1,716.9	
New and used car dealers .....	551,2	971.4	974.3	997.0	1,001.6	-	807.7	810.3	825.6	829.6	
Auto and home supply stores .....	553	312.1	315.3	319.3	324.5		252.2	255.0	258.3	262.4	
Gasoline service stations .....	554	602.3	609.3	618.5	622.2		524.7	532.0	537.2	540.3	

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Retail trade—Continued</b>											
Apparel and accessory stores .....	56	1,096.1	1,086.5	1,073.6	1,078.2		925.1	917.7	906.3	910.2	
Men's and boys' clothing and furnishings .....	561	106.2	105.5	103.3	104.2		86.3	86.2	84.5	85.0	
Women's ready-to-wear stores .....	562	386.0	386.1	373.8	376.7		328.3	328.7	315.1	317.5	
Family clothing stores .....	565	246.0	247.4	248.9	248.0		212.6	213.8	216.5	215.8	
Shoe stores .....	566	223.4	217.0	217.5	217.3		181.4	176.8	179.7	179.9	
Furniture and home furnishings stores .....	57	779.3	785.8	817.5	816.3		646.7	652.6	669.7	668.8	
Furniture and home furnishings stores .....	571	437.1	439.8	451.7	452.1		359.9	362.6	366.8	367.3	
Furniture stores .....	5712	273.0	273.8	281.2	281.4		-	-	-	-	
Household appliance stores .....	572	84.5	85.4	92.7	93.4		72.3	73.0	79.3	79.3	
Radio, television, and music stores .....	573	257.7	260.6	273.1	270.8		214.5	217.0	223.6	222.2	
Radio and television stores .....	5732	186.4	189.3	196.9	193.4		-	-	-	-	
Music stores .....	5733	71.3	71.3	76.2	77.4		-	-	-	-	
Eating and drinking places .....	58	6,068.6	6,196.4	6,142.5	6,313.3	6,450.2	5,523.7	5,647.1	5,584.3	5,754.7	
Miscellaneous retail .....	59	2,292.2	2,304.5	2,366.4	2,381.7		1,929.1	1,941.7	1,986.3	1,998.5	
Drug stores and proprietary stores .....	591	572.2	574.1	590.9	588.0		486.6	489.0	504.0	500.5	
Liquor stores .....	592	122.0	122.2	122.4	123.1		-	-	-	-	
Miscellaneous shopping goods stores .....	594	754.9	754.1	777.2	780.3		631.9	630.1	646.6	650.2	
Sporting goods and bicycle shops .....	5941	129.8	128.3	138.7	138.3		-	-	-	-	
Book stores .....	5942	77.5	77.5	79.2	78.2		-	-	-	-	
Stationery stores .....	5943	75.8	75.5	77.0	77.5		-	-	-	-	
Jewelry stores .....	5944	146.8	145.3	150.2	151.5		-	-	-	-	
Gift, novelty, and souvenir shops .....	5947	151.2	153.7	148.8	152.5		-	-	-	-	
Sewing, needlework, and piece goods .....	5949	61.5	61.4	61.2	61.2		-	-	-	-	
Nonstore retailers .....	596	270.0	270.5	279.4	277.1		243.3	243.6	249.7	247.3	
Mail order houses .....	5961	125.9	125.6	128.8	127.5		-	-	-	-	
Merchandising machine operators .....	5962	85.8	87.1	89.8	90.2		-	-	-	-	
Fuel and ice dealers .....	598	106.0	105.0	113.5	112.0		88.2	87.1	94.9	93.2	
Retail stores, nec .....	599	384.2	394.1	395.5	412.5		312.5	323.5	319.8	334.3	
<b>Finance, insurance, and real estate<sup>3</sup></b> .....		6,497	6,539	6,599	6,627	6,640	4,783	4,811	4,782	4,800	4,814
Finance .....		3,256	3,267	3,293	3,292	3,289					
Banking .....	60	1,730.6	1,732.6	1,728.9	1,727.6		1,246.5	1,247.4	1,236.3	1,235.4	
Commercial and stock savings banks .....	602	1,557.7	1,559.6	1,555.9	1,553.1		1,117.4	1,118.7	1,109.1	1,106.8	
State banks, Federal Reserve .....	6022	340.8	341.4	344.8	344.0		-	-	-	-	
State banks, not Federal Reserve .....	6023,4	368.5	370.4	372.4	372.1		-	-	-	-	
Mutual savings banks .....	603	83.7	83.8	84.2	84.8		-	-	-	-	
Credit agencies other than banks .....	61	889.6	894.1	890.3	890.0		667.4	670.1	660.6	660.8	
Savings and loan associations .....	612	391.9	394.5	395.6	394.2		299.0	301.0	299.7	298.9	
Federal savings and loan associations .....	6122	218.0	219.4	222.1	222.1		-	-	-	-	
State associations, insured .....	6123	168.9	170.1	168.7	167.3		-	-	-	-	
Personal credit institutions .....	614	235.4	235.6	244.9	244.9		181.7	182.0	188.6	188.4	
Business credit institutions .....	615	54.9	54.9	61.4	62.9		-	-	-	-	
Mortgage bankers and brokers .....	616	182.0	183.8	165.0	164.7		-	-	-	-	
Security, commodity brokers, and services .....	62	435.0	437.3	462.0	461.0						
Security brokers and dealers .....	621	342.1	343.2	358.3	356.9						
Holding and other investment offices .....	67	201.1	202.6	212.0	213.1						
Insurance .....		2,009	2,016	2,058	2,063	2,065					
Insurance carriers .....	63	1,409.6	1,412.7	1,441.1	1,443.7		957.8	956.2	962.3	962.1	
Life insurance .....	631	579.8	579.9	591.4	591.9		360.3	357.5	354.5	354.3	
Medical service and health insurance .....	632	198.4	198.1	201.7	201.6		160.0	159.3	163.3	162.8	
Fire, marine, and casualty insurance .....	633	522.4	524.6	545.8	547.6		352.9	354.1	367.4	367.4	
Title insurance .....	636	63.1	63.8	55.5	56.0		-	-	-	-	
Insurance agents, brokers, and service .....	64	599.8	603.5	617.0	619.0						

See footnotes at end of table.



**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Finance, insurance, and real estate—Continued</b>											
Real estate, and combined real estate, insurance, etc ....		1,232	1,256	1,248	1,272	1,286					
Real estate .....	65	1,221.0	1,245.4	1,238.0	1,261.7						
Real estate operators and lessors .....	651	525.6	529.9	522.9	532.9						
Real estate agents and managers .....	653	509.9	518.5	536.9	540.1						
Subdividers and developers .....	655	151.7	162.7	145.8	156.2						
Combined real estate, insurance, etc .....	66	10.5	10.4	10.0	10.0						
<b>Services .....</b>		<b>24,020</b>	<b>24,170</b>	<b>24,978</b>	<b>25,231</b>	<b>25,361</b>	<b>21,056</b>	<b>21,199</b>	<b>21,822</b>	<b>22,049</b>	<b>22,143</b>
Hotels and other lodging places .....	70	1,434.3	1,475.4	1,496.4	1,533.3		-	-	-	-	
Hotels, motels, and tourist courts .....	701	1,396.4	1,434.4	1,456.8	1,490.2		1,243.6	1,282.2	1,296.4	1,326.4	
Personal services .....	72	1,163.9	1,137.5	1,244.6	1,254.7		-	-	-	-	
Laundry, cleaning, and garment services .....	721	400.6	404.1	408.6	411.5		356.2	360.0	363.7	366.1	
Photographic studios, portrait .....	722	51.4	52.3	56.1	55.1		-	-	-	-	
Beauty shops .....	723	352.3	352.9	356.8	359.5		317.8	318.8	319.0	321.2	
Funeral service and crematories .....	726	77.3	78.1	77.4	77.9		-	-	-	-	
Business services .....	73	5,081.0	5,149.6	5,345.4	5,378.6	5,423.8	4,347.5	4,412.1	4,563.7	4,596.5	
Advertising .....	731	210.1	210.5	213.7	213.0	-	155.2	156.2	159.7	158.5	
Advertising agencies .....	7311	154.3	154.8	158.1	157.4		-	-	-	-	
Credit reporting and collection .....	732	100.2	100.0	95.2	95.3		-	-	-	-	
Mailing, reproduction, and stenographic .....	733	205.6	207.9	230.8	235.0		-	-	-	-	
Services to buildings .....	734	704.8	718.7	705.1	719.4		635.4	648.7	638.9	652.5	
Personnel supply services .....	736	1,148.7	1,186.4	1,247.9	1,251.3		-	-	-	-	
Employment agencies .....	7361	178.9	181.5	187.3	186.0		-	-	-	-	
Temporary help supply services .....	7362	897.4	932.2	978.1	982.1		-	-	-	-	
Computer and data processing services .....	737	637.7	640.2	707.0	712.7		500.9	502.2	552.1	557.4	
Computer programming and software .....	7372	236.0	237.2	268.2	272.4		-	-	-	-	
Data processing services .....	7374	296.4	296.2	322.0	322.5		-	-	-	-	
Miscellaneous business services .....	739	2,064.8	2,076.7	2,136.3	2,142.3		-	-	-	-	
Research development laboratories, nec .....	7391	193.9	193.7	197.5	197.3		-	-	-	-	
Management and public relations .....	7392	578.8	583.9	611.2	609.9		-	-	-	-	
Detective and protective services .....	7393	452.9	453.1	459.9	462.5		-	-	-	-	
Equipment rental and leasing .....	7394	237.9	243.5	249.3	252.1		-	-	-	-	
Photofinishing laboratories .....	7395	77.1	78.6	75.9	76.0		-	-	-	-	
Auto repair, services, and garages .....	75	784.0	794.8	819.3	818.4		655.0	664.0	680.5	680.7	
Automotive rentals, without drivers .....	751	157.9	162.0	163.9	160.6		-	-	-	-	
Automotive repair shops .....	753	463.6	468.8	488.4	492.8		382.1	386.7	401.6	406.9	
Miscellaneous repair services .....	76	314.0	316.0	332.9	336.3		260.4	262.4	275.0	276.7	
Electrical repair shops .....	762	101.4	100.8	107.8	108.9		-	-	-	-	
Motion pictures .....	78	236.2	235.4	233.9	234.7		198.9	198.1	194.3	196.0	
Motion picture production and services .....	781	117.3	115.1	116.3	107.5		94.3	92.4	91.3	84.2	
Motion picture theaters .....	783	105.4	106.9	102.0	111.9		-	-	-	-	
Amusement and recreation services .....	79	879.8	929.2	828.3	895.4		770.7	823.6	699.4	757.8	
Health services .....	80	6,736.5	6,767.7	7,081.4	7,111.0	7,151.7	5,989.5	6,018.1	6,292.9	6,317.1	
Offices of physicians .....	801	1,027.2	1,036.5	1,107.1	1,115.8	-	845.0	853.9	906.6	914.8	
Offices of dentists .....	802	467.2	467.8	482.5	484.6		411.3	412.3	424.3	426.1	
Nursing and personal care facilities .....	805	1,276.4	1,280.8	1,309.8	1,310.3		1,152.9	1,156.8	1,182.0	1,182.3	
Skilled nursing care facilities .....	8051	855.0	858.1	876.4	877.3		-	-	-	-	
Nursing and personal care, nec .....	8059	421.4	422.7	433.4	433.0		-	-	-	-	
Hospitals .....	806	3,109.7	3,122.5	3,278.9	3,291.3		2,836.4	2,847.0	2,995.4	3,004.1	
General medical and surgical hospitals .....	8062	2,900.6	2,911.7	3,055.6	3,067.3		-	-	-	-	
Psychiatric hospitals .....	8063	74.1	74.6	79.9	80.4		-	-	-	-	
Specialty hospitals, excluding psychiatric .....	8069	135.0	136.2	143.4	143.6		-	-	-	-	
Medical and dental laboratories .....	807	132.7	133.5	142.9	144.7		-	-	-	-	
Outpatient care facilities .....	808	260.8	262.8	275.1	279.2		-	-	-	-	

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT  
NOT SEASONALLY ADJUSTED**

**B-2. Employees on nonagricultural payrolls by detailed industry—Continued**

(In thousands)

Industry	1972 SIC Code	All employees					Production workers <sup>1</sup>				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Services—Continued</b>											
Legal services .....	81	784.1	786.7	807.1	811.5		659.5	661.9	675.2	678.2	
Educational services .....	82	1,527.9	1,464.5	1,570.6	1,566.2						
Elementary and secondary schools .....	821	377.7	378.7	385.8	384.2						
Colleges and universities .....	822	988.4	923.0	1,013.3	1,008.5						
Correspondence and vocational schools .....	824	77.9	77.6	80.9	80.9						
Social services .....	83	1,488.6	1,499.4	1,572.7	1,583.4						
Individual and family services .....	832	296.2	299.4	305.4	304.8						
Job training and related services .....	833	219.0	220.1	226.7	229.6						
Residential care .....	836	342.1	345.4	365.4	367.1						
Museums, botanical and zoological gardens .....	84	47.0	49.1	48.0	49.8						
Membership organizations .....	86	1,566.8	1,574.1	1,589.7	1,593.6						
Business associations .....	861	92.5	92.7	92.5	92.2						
Labor organizations .....	863	131.8	133.3	135.4	133.3						
Civic and social associations .....	864	356.6	359.1	371.3	376.2						
Miscellaneous services .....	89	1,317.7	1,308.5	1,386.5	1,389.1		1,075.3	1,062.0	1,122.5	1,123.7	
Engineering and architectural services .....	891	699.8	710.5	733.7	739.0		589.4	597.6	612.6	616.9	
Noncommercial research organizations .....	892	121.6	120.8	124.7	124.8		-	-	-	-	
Accounting, auditing, and bookkeeping .....	893	489.3	449.0	500.6	497.5		368.9	347.9	390.2	386.6	
<b>Government</b> .....		17,297	17,303	17,671	17,658	17,694					
<b>Federal Government<sup>4</sup></b> .....		2,930	2,947	2,964	2,968	2,966					
Executive, by agency <sup>4</sup> .....		2,873.4	2,889.8	2,905.6							
Department of Defense .....		976.2	981.9	973.0							
Postal Service <sup>5</sup> .....		813.4	813.6	827.1							
Other executive agencies .....		1,083.8	1,094.3	1,105.5							
Legislative .....		37.1	37.8	37.7							
Judicial .....		19.3	19.4	20.5							
<b>Federal government, by industry:</b>											
Manufacturing activities .....		124.6	125.2	123.6	122.7						
Shipbuilding and repairing .....	3731	75.8	76.3	74.9	74.9						
Transportation and public utilities, except Postal Service .....		40.0	39.8	40.8	40.5						
Services .....		412.6	417.3	414.7	413.2						
Hospitals .....	806	249.2	251.4	251.1	249.1						
<b>State government</b> .....		4,061	4,010	4,140	4,149	4,124					
Hospitals .....	806	437.0	437.1	443.8	444.7	-					
Education .....	82	1,709.5	1,648.0	1,739.6	1,737.3						
General administration, including executive, legislative, and judicial functions .....		1,385.5	1,390.4	1,417.8	1,425.9						
<b>Local government</b> .....		10,306	10,346	10,567	10,541	10,604					
Transportation and public utilities .....		487.5	488.0	488.2	488.4	-					
Hospitals .....	806	603.3	604.7	627.7	629.0						
Education .....	82	5,895.8	5,899.6	6,059.9	6,020.7						
General administration, including executive, legislative, and judicial functions .....		2,996.4	3,026.0	3,056.5	3,062.2						

<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> Data relate to line haul railroads with operating revenues of \$50,000,000 or more.

<sup>3</sup> Data for nonoffice sales agents are excluded from the nonsupervisory count for all series in this division.

<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.

<sup>p</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and differ from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
NOT SEASONALLY ADJUSTED**

**B-3. Women employees on nonagricultural payrolls by major industry and manufacturing group**

(In thousands)

Industry	Feb. 1987	Mar. 1987	Jan. 1988	Feb. 1988	Mar. 1988
<b>Total</b> .....	46,393	46,714	48,130	48,375	48,704
<b>Total private</b> .....	37,591	37,842	39,177	39,283	39,531
<b>Goods-producing</b> .....	6,748	6,765	6,955	6,963	6,991
<b>Mining</b> .....	95	95	96	96	96
<b>Construction</b> .....	501	507	534	534	542
<b>Manufacturing</b> .....	6,152	6,163	6,325	6,333	6,353
<b>Durable goods</b> .....	2,965	2,968	3,047	3,048	3,060
Lumber and wood products .....	112	114	119	119	120
Furniture and fixtures .....	158	159	168	167	166
Stone, clay, and glass products .....	112	113	114	115	115
Primary metal industries .....	100	101	104	105	105
Fabricated metal products .....	315	315	324	324	325
Machinery, except electrical .....	445	444	466	467	470
Electrical and electronic equipment .....	867	862	882	879	881
Transportation equipment .....	397	397	395	392	393
Instruments and related products .....	299	299	306	308	308
Miscellaneous manufacturing .....	161	165	169	173	176
<b>Nondurable goods</b> .....	3,187	3,195	3,278	3,285	3,293
Food and kindred products .....	484	485	503	500	498
Tobacco manufactures .....	18	17	19	18	17
Textile mill products .....	346	348	351	351	351
Apparel and other textile products .....	871	871	874	880	881
Paper and allied products .....	161	162	165	164	165
Printing and publishing .....	634	637	663	665	670
Chemicals and allied products .....	288	289	301	302	304
Petroleum and coal products .....	24	24	23	23	24
Rubber and misc. plastics products .....	279	281	296	296	298
Leather and leather products .....	83	82	85	85	86
<b>Service-producing</b> .....	39,645	39,949	41,175	41,412	41,713
<b>Transportation and public utilities</b> .....	1,506	1,512	1,575	1,581	1,594
<b>Wholesale trade</b> .....	1,696	1,704	1,783	1,790	1,802
<b>Retail trade</b> .....	9,368	9,424	9,915	9,815	9,840
<b>Finance, insurance, and real estate</b> .....	4,007	4,030	4,119	4,113	4,130
<b>Services</b> .....	14,266	14,407	14,830	15,021	15,174
<b>Government</b> .....	8,802	8,872	8,908	9,091	9,173
Federal .....	1,030	1,038	1,051	1,053	1,057
State .....	1,937	1,958	1,943	2,008	2,023
Local .....	5,835	5,876	5,914	6,030	6,093

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and differ from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

**B-4. Employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
<b>Total</b> .....	101,829	102,078	102,430	102,672	102,908	103,371	103,678	104,001	104,282	104,729	105,020	105,269	105,478
<b>Total private</b> .....	84,859	85,094	85,421	85,856	85,851	86,241	86,520	86,794	87,044	87,475	87,700	87,957	88,122
<b>Goods-producing</b> .....	24,653	24,884	24,788	24,851	24,902	25,025	25,123	25,201	25,180	25,271	25,330	25,438	25,446
<b>Mining</b> .....	716	719	722	728	734	740	736	735	728	731	733	739	737
Oil and gas extraction .....	401	404	408	412	417	421	418	417	414	415	419	423	423
<b>Construction</b> .....	4,967	4,983	4,997	5,012	5,012	5,060	5,090	5,118	5,083	5,150	5,192	5,240	5,234
General building contractors .....	1,316	1,319	1,320	1,326	1,328	1,340	1,348	1,352	1,365	1,377	1,383	1,401	1,396
<b>Manufacturing</b> .....	18,970	18,982	19,069	19,111	19,156	19,225	19,297	19,348	19,369	19,390	19,405	19,459	19,475
<b>Durable goods</b> .....	11,159	11,166	11,190	11,246	11,269	11,315	11,355	11,390	11,393	11,404	11,411	11,458	11,470
Lumber and wood products .....	738	736	740	739	744	744	750	754	754	756	755	757	757
Furniture and fixtures .....	514	516	524	524	526	529	531	533	536	535	534	536	537
Stone, clay, and glass products .....	581	580	579	580	580	583	585	588	583	584	585	587	583
Primary metal industries .....	743	746	751	755	761	766	768	769	768	770	772	773	775
Blast furnaces and basic steel products .....	269	271	272	274	276	278	279	279	279	280	281	281	281
Fabricated metal products .....	1,397	1,400	1,404	1,405	1,412	1,421	1,429	1,433	1,435	1,438	1,439	1,444	1,449
Machinery, except electrical .....	2,007	2,013	2,020	2,031	2,039	2,049	2,062	2,074	2,085	2,091	2,099	2,110	2,117
Electrical and electronic equipment .....	2,072	2,066	2,075	2,081	2,085	2,094	2,100	2,110	2,112	2,112	2,115	2,118	2,116
Transportation equipment .....	2,048	2,047	2,032	2,063	2,052	2,052	2,047	2,046	2,036	2,031	2,025	2,044	2,050
Motor vehicles and equipment .....	869	867	842	874	860	859	854	851	839	837	835	848	852
Instruments and related products .....	693	694	695	696	696	700	704	704	704	705	705	705	707
Miscellaneous manufacturing .....	366	368	370	372	374	377	379	379	380	382	382	384	379
<b>Nondurable goods</b> .....	7,811	7,816	7,879	7,865	7,887	7,910	7,942	7,958	7,976	7,986	7,994	8,001	8,005
Food and kindred products .....	1,618	1,621	1,629	1,625	1,627	1,630	1,636	1,638	1,647	1,649	1,647	1,648	1,640
Tobacco manufactures .....	55	55	55	54	53	52	54	54	55	54	54	54	53
Textile mill products .....	721	724	730	728	730	731	733	733	732	732	729	727	728
Apparel and other textile products .....	1,095	1,098	1,116	1,098	1,104	1,106	1,110	1,106	1,105	1,104	1,106	1,100	1,099
Paper and allied products .....	678	677	678	680	682	682	683	684	685	686	687	688	689
Printing and publishing .....	1,501	1,505	1,510	1,514	1,518	1,522	1,528	1,532	1,538	1,544	1,548	1,554	1,556
Chemicals and allied products .....	1,020	1,014	1,025	1,029	1,032	1,036	1,041	1,047	1,047	1,049	1,052	1,055	1,059
Petroleum and coal products .....	165	165	165	165	168	167	167	166	166	165	164	165	165
Rubber and misc. plastics products .....	816	815	824	827	830	839	845	851	854	856	860	864	870
Leather and leather products .....	142	142	147	145	145	145	145	146	147	147	147	146	146
<b>Service-producing</b> .....	77,176	77,394	77,642	77,821	78,004	78,346	78,555	78,800	79,082	79,458	79,690	79,831	80,032
<b>Transportation and public utilities</b> .....	5,356	5,363	5,373	5,394	5,427	5,448	5,466	5,481	5,499	5,513	5,530	5,542	5,581
Transportation .....	3,143	3,153	3,151	3,171	3,201	3,214	3,231	3,244	3,261	3,272	3,285	3,297	3,313
Communication and public utilities .....	2,213	2,210	2,222	2,223	2,226	2,234	2,235	2,237	2,238	2,241	2,245	2,245	2,248
<b>Wholesale trade</b> .....	5,841	5,880	5,874	5,892	5,914	5,935	5,958	5,984	6,010	6,035	6,061	6,089	6,113
Durable goods .....	3,422	3,434	3,450	3,463	3,478	3,498	3,514	3,536	3,555	3,573	3,591	3,609	3,629
Nondurable goods .....	2,419	2,426	2,424	2,429	2,436	2,437	2,444	2,448	2,455	2,462	2,470	2,480	2,484
<b>Retail trade</b> .....	18,417	18,481	18,543	18,589	18,605	18,705	18,761	18,784	18,927	19,045	19,050	19,083	19,128
General merchandise stores .....	2,412	2,418	2,437	2,449	2,457	2,489	2,495	2,494	2,526	2,561	2,543	2,542	2,547
Food stores .....	2,957	2,982	2,962	2,961	2,958	2,971	2,979	2,988	3,014	3,029	3,044	3,045	3,055
Automotive dealers and service stations .....	1,994	2,001	2,007	2,010	2,015	2,026	2,026	2,033	2,038	2,047	2,055	2,062	2,064
Eating and drinking places .....	6,087	6,109	6,128	6,143	6,152	6,191	6,218	6,232	6,260	6,291	6,319	6,326	6,336
<b>Finance, insurance, and real estate</b> .....	8,539	8,553	8,570	8,581	8,588	8,604	8,608	8,619	8,633	8,636	8,651	8,649	8,639
Finance .....	3,273	3,280	3,288	3,289	3,292	3,295	3,299	3,301	3,308	3,305	3,308	3,302	3,296
Insurance .....	2,017	2,019	2,024	2,029	2,032	2,043	2,042	2,049	2,052	2,053	2,060	2,065	2,065
Real estate .....	1,249	1,254	1,258	1,263	1,264	1,266	1,267	1,269	1,273	1,276	1,285	1,282	1,278
<b>Services</b> .....	24,053	24,153	24,273	24,369	24,415	24,524	24,604	24,725	24,795	24,975	25,078	25,156	25,235
Business services .....	5,158	5,164	5,179	5,212	5,233	5,282	5,287	5,308	5,321	5,385	5,405	5,417	5,435
Health services .....	6,778	6,806	6,836	6,875	6,894	6,928	6,982	6,995	7,019	7,056	7,088	7,125	7,159
<b>Government</b> .....	16,970	16,984	17,009	17,016	17,055	17,130	17,158	17,207	17,218	17,254	17,320	17,312	17,356
Federal .....	2,936	2,939	2,941	2,943	2,962	2,966	2,974	2,980	2,973	2,972	2,970	2,968	2,954
State .....	3,954	3,946	3,965	3,971	3,973	3,985	3,988	4,001	4,006	4,014	4,031	4,040	4,067
Local .....	10,080	10,099	10,103	10,102	10,120	10,179	10,196	10,226	10,239	10,268	10,319	10,304	10,335

<sup>P</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and

updated seasonal adjustment factors and differ from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES  
SEASONALLY ADJUSTED**

**B-5. Women employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1987											1988		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
<b>Total</b> .....	46,779	46,962	47,076	47,254	47,458	47,582	47,700	47,941	48,072	48,240	48,396	48,615	48,772	
<b>Total private</b> .....	38,182	38,333	38,443	38,581	38,776	38,893	38,985	39,170	39,295	39,425	39,573	39,767	39,881	
<b>Goods-producing</b> .....	6,811	6,832	6,846	6,859	6,909	6,905	6,931	6,963	6,990	7,007	7,022	7,028	7,040	
<b>Mining</b> .....	95	95	95	95	96	96	96	96	96	96	96	96	96	
<b>Construction</b> .....	516	521	525	528	531	533	536	538	542	543	546	549	552	
<b>Manufacturing</b> .....	6,200	6,216	6,226	6,236	6,282	6,276	6,299	6,329	6,352	6,368	6,380	6,383	6,392	
<b>Durable goods</b> .....	2,975	2,979	2,982	2,987	2,997	3,011	3,024	3,038	3,045	3,056	3,059	3,062	3,067	
Lumber and wood products .....	116	116	117	117	119	118	119	120	120	121	122	122	122	
Furniture and fixtures .....	159	159	161	162	165	164	165	166	166	166	167	166	166	
Stone, clay, and glass products .....	114	114	114	114	114	114	114	115	115	116	116	116	116	
Primary metal industries .....	100	100	100	101	101	103	103	104	104	105	104	105	104	
Fabricated metal products .....	316	317	317	318	319	320	321	322	323	324	325	325	326	
Machinery, except electrical .....	442	447	446	447	450	454	456	458	460	463	466	467	469	
Electrical and electronic equipment .....	865	864	863	863	867	870	873	877	878	881	882	882	885	
Transportation equipment .....	397	396	396	396	391	396	398	398	398	399	399	396	393	
Instruments and related products .....	299	299	300	300	301	301	303	304	306	306	306	308	308	
Miscellaneous manufacturing .....	167	167	168	169	170	171	172	174	175	175	175	178	178	
<b>Nondurable goods</b> .....	3,225	3,237	3,244	3,249	3,285	3,265	3,275	3,291	3,307	3,312	3,321	3,321	3,325	
Food and kindred products .....	513	514	513	514	520	514	515	518	521	521	528	528	526	
Tobacco manufactures .....	18	18	18	18	17	16	17	17	17	18	18	18	17	
Textile mill products .....	350	349	350	351	354	353	353	353	354	354	353	353	352	
Apparel and other textile products .....	869	871	873	876	892	876	880	883	886	883	881	879	880	
Paper and allied products .....	163	163	164	163	163	164	165	165	166	167	167	167	167	
Printing and publishing .....	636	641	643	645	647	650	651	654	658	660	664	666	669	
Chemicals and allied products .....	289	291	292	291	295	296	297	299	301	303	303	304	305	
Petroleum and coal products .....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
Rubber and misc. plastics products .....	280	282	282	282	285	286	287	291	293	296	296	296	298	
Leather and leather products .....	83	84	85	85	88	86	86	87	87	86	87	86	87	
<b>Service-producing</b> .....	39,968	40,130	40,230	40,395	40,549	40,677	40,769	40,978	41,082	41,233	41,374	41,587	41,732	
<b>Transportation and public utilities</b> .....	1,518	1,525	1,532	1,540	1,542	1,551	1,559	1,568	1,572	1,576	1,580	1,588	1,599	
<b>Wholesale trade</b> .....	1,714	1,719	1,724	1,731	1,739	1,749	1,756	1,762	1,774	1,785	1,795	1,802	1,813	
<b>Retail trade</b> .....	9,699	9,741	9,751	9,789	9,827	9,856	9,876	9,925	9,955	9,972	10,056	10,127	10,123	
<b>Finance, insurance, and real estate</b> .....	4,046	4,064	4,076	4,088	4,101	4,105	4,108	4,120	4,126	4,131	4,139	4,139	4,147	
<b>Services</b> .....	14,394	14,452	14,514	14,574	14,658	14,727	14,755	14,832	14,878	14,954	14,981	15,083	15,159	
<b>Government</b> .....	8,597	8,629	8,633	8,673	8,682	8,689	8,715	8,771	8,777	8,815	8,823	8,848	8,891	
Federal .....	1,042	1,044	1,045	1,045	1,045	1,049	1,056	1,057	1,060	1,062	1,060	1,061	1,061	
State .....	1,897	1,904	1,908	1,913	1,925	1,929	1,927	1,935	1,937	1,945	1,947	1,952	1,960	
Local .....	5,658	5,681	5,680	5,715	5,712	5,711	5,732	5,779	5,780	5,808	5,816	5,835	5,870	

\* This series is not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and differ from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

**B-6. Production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>p</sup>	May <sup>p</sup>
<b>Total private</b> .....	68,703	68,890	69,155	69,343	69,463	69,766	69,988	70,234	70,405	70,787	70,961	71,152	71,239
<b>Goods-producing</b> .....	17,306	17,334	17,417	17,468	17,506	17,601	17,678	17,743	17,698	17,798	17,839	17,909	17,913
<b>Mining</b> .....	510	512	517	522	528	534	531	530	524	527	529	534	531
<b>Construction</b> .....	3,873	3,883	3,894	3,908	3,903	3,949	3,972	3,998	3,949	4,022	4,059	4,096	4,081
<b>Manufacturing</b> .....	12,923	12,939	13,006	13,038	13,075	13,118	13,175	13,215	13,225	13,249	13,251	13,279	13,301
<b>Durable goods</b> .....	7,408	7,417	7,432	7,483	7,499	7,532	7,564	7,590	7,582	7,599	7,598	7,632	7,648
Lumber and wood products .....	618	616	619	617	621	621	627	630	629	631	631	632	634
Furniture and fixtures .....	411	413	420	419	420	424	425	427	428	427	426	427	430
Stone, clay, and glass products .....	449	448	448	448	449	451	453	457	453	454	455	457	452
Primary metal industries .....	559	561	565	571	577	580	584	584	583	586	588	591	593
Blast furnaces and basic steel products .....	203	205	206	207	210	212	213	213	214	216	217	218	218
Fabricated metal products .....	1,034	1,038	1,040	1,043	1,050	1,055	1,063	1,068	1,068	1,071	1,071	1,074	1,081
Machinery, except electrical .....	1,186	1,192	1,197	1,207	1,213	1,221	1,230	1,238	1,244	1,250	1,256	1,263	1,269
Electrical and electronic equipment .....	1,214	1,211	1,221	1,224	1,225	1,233	1,235	1,241	1,240	1,241	1,242	1,245	1,244
Transportation equipment .....	1,294	1,293	1,274	1,305	1,292	1,290	1,285	1,283	1,273	1,271	1,261	1,273	1,277
Motor vehicles and equipment .....	675	675	652	684	670	669	665	661	651	649	648	658	661
Instruments and related products .....	376	376	378	378	380	383	385	385	387	388	388	389	391
Miscellaneous manufacturing .....	267	269	270	271	272	274	277	277	277	280	280	281	277
<b>Nondurable goods</b> .....	5,515	5,522	5,574	5,555	5,576	5,586	5,611	5,625	5,643	5,650	5,653	5,647	5,653
Food and kindred products .....	1,145	1,148	1,153	1,149	1,151	1,153	1,159	1,161	1,169	1,172	1,168	1,167	1,161
Tobacco manufactures .....	42	41	42	41	39	39	40	41	42	41	41	40	40
Textile mill products .....	626	628	635	632	634	634	636	636	636	636	634	632	633
Apparel and other textile products .....	920	923	939	922	927	929	932	930	929	928	930	926	924
Paper and allied products .....	514	514	516	516	520	518	518	519	520	521	521	521	523
Printing and publishing .....	836	840	842	846	849	851	856	858	863	867	870	871	870
Chemicals and allied products .....	572	569	576	579	582	582	585	589	589	589	592	593	597
Petroleum and coal products .....	108	108	108	108	109	109	109	109	109	108	107	107	107
Rubber and misc. plastics products .....	633	632	639	641	644	650	655	661	664	666	669	670	677
Leather and leather products .....	119	119	124	121	121	121	121	121	122	122	121	120	121
<b>Service-producing</b> .....	51,397	51,556	51,738	51,875	51,957	52,165	52,310	52,491	52,707	52,989	53,122	53,243	53,326
<b>Transportation and public utilities</b> .....	4,439	4,450	4,460	4,477	4,502	4,517	4,533	4,545	4,560	4,574	4,587	4,599	4,617
<b>Wholesale trade</b> .....	4,676	4,695	4,706	4,720	4,736	4,752	4,777	4,802	4,825	4,848	4,881	4,901	4,920
<b>Retail trade</b> .....	16,384	16,433	16,486	16,508	16,520	16,610	16,651	16,671	16,795	16,902	16,897	16,941	16,942
<b>Finance, insurance, and real estate</b> .....	4,811	4,815	4,819	4,822	4,821	4,822	4,818	4,824	4,831	4,827	4,825	4,819	4,814
<b>Services</b> .....	21,087	21,163	21,267	21,348	21,378	21,464	21,531	21,649	21,696	21,838	21,932	21,983	22,033

<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>p</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and differ from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
INDEXES OF DIFFUSION  
SEASONALLY ADJUSTED**

**B-7. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased, seasonally adjusted**

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1986.....	57.0	47.3	49.5	50.8	51.9	46.8	51.9	54.1	51.4	53.0	58.9	58.9
	1987.....	50.8	59.2	61.1	62.4	62.4	61.6	70.8	62.2	68.1	67.3	67.8	68.4
	1988.....	61.6	61.6	62.2	<sup>P</sup> 62.7	<sup>P</sup> 56.2							
Over 3-month span	1986.....	50.0	47.6	45.7	46.2	46.2	46.2	48.1	51.9	50.5	55.9	59.7	59.2
	1987.....	57.6	57.0	65.1	69.2	68.1	71.9	73.8	76.8	74.1	76.5	78.1	73.0
	1988.....	71.6	66.8	<sup>P</sup> 66.8	<sup>P</sup> 64.1								
Over 6-month span	1986.....	48.1	47.3	43.8	42.7	43.2	47.0	46.5	50.0	55.9	53.2	55.9	58.4
	1987.....	64.6	64.3	63.0	70.3	72.4	77.3	78.4	79.7	82.7	77.8	77.0	76.5
	1988.....	<sup>P</sup> 73.2	<sup>P</sup> 67.6										
Over 12-month span	1986.....	42.2	41.6	43.8	44.9	45.7	48.6	46.8	48.6	51.6	53.8	56.5	57.8
	1987.....	63.8	67.3	69.5	73.5	76.8	76.8	78.9	78.9	79.7	<sup>P</sup> 77.8	<sup>P</sup> 77.8	
	1988.....												

Based on the number of employees, seasonally adjusted for 1, 3, and 6 month spans, on the payrolls of 185 private nonagricultural industries. Data for the 12-month span are unadjusted.

<sup>P</sup> = preliminary.

NOTE: Figures are the percent of industries with employment

rising. (Half of the unchanged components are counted as rising). Data are centered within the spans. Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and differ from data previously published. See the article in this issue for additional information.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Alabama</b> .....	1,497.6	1,514.5	1,519.2	11.5	11.3	11.4	73.4	72.9	73.5
Birmingham .....	390.3	398.0	401.7	5.7	5.7	5.7	23.0	24.1	25.0
Huntsville .....	121.3	124.8	125.9	.1	.1	.1	5.3	5.3	5.3
Mobile .....	160.2	162.0	162.6	.5	.5	.5	9.5	9.4	9.4
Montgomery .....	123.9	126.9	126.7	.2	.2	.2	7.5	8.1	7.9
Tuscaloosa .....	58.2	59.7	60.1	2.6	2.5	2.5	2.9	2.9	3.1
<b>Alaska</b> .....	205.5	200.6	204.6	8.3	8.6	9.0	9.2	7.5	8.3
<b>Arizona</b> .....	1,387.1	1,423.6	1,423.4	10.5	11.8	11.9	103.3	94.4	93.9
Phoenix .....	913.4	936.3	935.6	.6	.6	.6	69.5	62.9	62.6
Tucson .....	245.2	252.1	252.0	1.6	1.7	1.7	19.8	18.8	18.6
<b>Arkansas</b> .....	830.1	849.9	858.2	4.0	4.1	4.2	33.2	32.3	33.8
Fayetteville-Springdale .....	47.5	49.9	50.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	1.8	1.8
Fort Smith .....	75.5	77.6	78.4	.9	1.0	1.0	2.9	2.8	2.8
Little Rock-North Little Rock .....	227.0	233.1	234.2	.4	.4	.4	10.5	10.8	11.1
Pine Bluff .....	31.9	32.7	32.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.5	1.6
<b>California</b> .....	11,560.4	11,958.3	11,993.8	39.9	40.9	41.0	562.5	596.0	611.2
Anaheim-Santa Ana .....	1,078.3	1,105.6	1,106.9	1.9	1.4	1.3	61.8	63.8	64.1
Bakersfield .....	157.1	159.8	160.2	12.6	13.3	13.5	9.4	8.8	8.8
Fresno .....	200.6	208.4	208.6	.6	.7	.7	12.4	12.3	12.5
Los Angeles-Long Beach .....	3,988.1	4,088.8	4,087.8	9.3	9.5	9.5	143.4	152.5	153.1
Modesto .....	101.0	106.8	107.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.7	6.5	6.4
Oakland .....	806.8	826.4	828.2	3.2	3.2	3.2	46.0	49.0	49.7
Oxnard-Ventura .....	201.9	210.1	210.8	2.6	2.7	2.7	12.2	12.9	12.8
Riverside-San Bernardino .....	596.3	635.9	638.3	1.2	1.3	1.3	48.3	53.6	54.5
Sacramento .....	542.5	568.5	571.8	.8	.8	.8	31.5	33.4	34.3
San Diego .....	855.1	891.7	896.0	.8	.8	.8	54.6	57.0	57.8
San Francisco .....	924.1	942.2	943.1	1.0	.9	.9	33.8	34.1	34.4
San Jose .....	778.5	797.1	797.1	.2	.2	.2	30.9	31.2	31.8
Santa Barbara-Santa Maria-Lompoc .....	144.6	147.2	147.6	1.2	1.3	1.3	6.0	6.2	6.3
Santa Rosa-Petaluma .....	122.7	127.8	129.4	.7	.7	.7	7.9	8.1	8.5
Stockton .....	140.0	142.0	143.0	.1	.1	.1	7.8	7.7	8.1
Vallejo-Fairfield-Napa .....	122.4	126.7	127.0	.3	.3	.3	8.5	8.8	9.4
<b>Colorado</b> .....	1,400.3	1,394.4	1,395.3	21.2	20.7	20.6	68.1	58.2	60.6
Boulder-Longmont .....	103.7	105.1	105.4	.3	.3	.3	3.5	3.1	3.3
Denver .....	792.2	788.6	791.3	14.0	13.8	13.7	37.2	34.2	35.6
<b>Connecticut</b> .....	1,634.7	1,655.5	1,672.5	1.6	1.6	1.8	74.6	74.8	80.0
Bridgeport-Milford .....	196.5	198.8	200.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.4	8.7	9.3
Hartford .....	469.5	482.2	484.4	.3	.2	.3	19.0	19.3	20.4
New Haven-Meriden .....	248.9	252.2	255.4	.3	.3	.3	12.2	12.4	13.1
Stamford .....	124.4	127.3	128.1	.6	.5	.5	5.2	5.4	5.6
Waterbury .....	88.2	87.2	87.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.1	4.2	4.4
<b>Delaware</b> .....	314.7	327.3	329.1	.1	.1	.1	19.8	20.3	21.1
Wilmington .....	270.3	278.7	280.4	.2	.2	.2	16.4	16.4	17.2
<b>District of Columbia</b> .....	650.8	660.9	667.4	.1	.1	.1	15.0	15.9	15.8
Washington MSA .....	2,054.6	2,115.0	2,127.1	1.2	1.1	1.2	128.3	131.4	134.4
<b>Florida</b> .....	4,826.5	5,108.4	5,099.3	8.5	8.8	8.8	333.5	347.7	346.8
Daytona Beach .....	112.3	118.4	118.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.0	8.3	8.3
Fort Lauderdale-Hollywood-Pompano Beach .....	465.2	488.1	485.2	.4	.4	.4	34.9	34.7	34.8
Fort Myers-Cape Coral .....	108.3	117.7	116.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	11.9	13.2	13.2
Jacksonville .....	390.8	408.7	411.1	.5	.4	.4	27.2	27.3	27.6
Melbourne-Titusville-Palm Bay .....	141.4	147.8	148.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.6	8.2	8.1
Miami-Hialeah .....	823.2	845.0	838.2	.9	.9	.9	41.5	40.7	40.9
Orlando .....	472.5	495.6	498.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	33.0	34.7	34.7
Pensacola .....	122.9	125.4	126.0	.3	.3	.3	8.9	9.2	9.2
Sarasota .....	103.7	110.5	109.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	10.5	10.8	10.6
Tallahassee .....	108.9	111.6	111.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.7	5.8	5.8
Tampa-St. Petersburg-Clearwater .....	796.3	820.7	819.7	.7	.7	.6	57.8	59.3	59.2
West Palm Beach-Boca Raton-Delray Beach .....	325.0	349.6	345.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	26.8	28.6	28.0

See footnotes at end of table.



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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Alabama</b> .....	363.7	371.8	371.9	72.5	72.1	72.3	329.8	331.9	334.0
Birmingham .....	54.0	55.6	56.0	27.4	27.8	27.9	97.3	99.4	100.4
Huntsville .....	30.6	31.3	31.5	2.8	2.9	2.9	22.6	23.5	23.7
Mobile .....	25.5	25.8	25.6	9.3	9.2	9.3	43.2	43.4	43.8
Montgomery .....	18.9	19.3	19.3	4.9	5.0	5.0	27.8	28.5	28.5
Tuscaloosa .....	9.3	9.9	10.0	1.9	1.9	1.9	12.0	12.3	12.4
<b>Alaska</b> .....	11.7	12.0	12.9	16.7	16.8	16.9	39.2	38.6	39.5
<b>Arizona</b> .....	185.9	187.7	188.3	71.4	74.5	74.5	339.3	347.0	346.5
Phoenix .....	134.6	136.9	137.5	46.1	50.6	50.5	231.1	234.0	233.7
Tucson .....	31.0	30.7	30.8	8.4	9.5	9.6	55.1	57.4	57.2
<b>Arkansas</b> .....	215.9	224.7	225.6	49.6	51.4	51.2	187.5	189.9	193.4
Fayetteville-Springdale .....	11.7	12.2	12.3	4.2	5.0	5.0	10.6	11.3	11.5
Fort Smith .....	26.0	26.8	27.2	3.8	4.1	4.1	15.6	15.3	15.7
Little Rock-North Little Rock .....	31.5	33.0	33.1	16.3	16.9	17.0	54.9	55.5	55.9
Pine Bluff .....	6.1	6.5	6.4	2.5	2.4	2.4	6.9	6.7	6.9
<b>California</b> .....	2,081.9	2,127.5	2,130.6	577.7	576.9	576.6	2,703.1	2,833.9	2,842.0
Anaheim-Santa Ana .....	247.1	252.1	253.1	34.4	34.4	34.3	264.0	276.1	276.7
Bakersfield .....	10.9	11.1	11.1	7.9	8.1	8.0	37.1	38.0	38.4
Fresno .....	20.2	22.4	22.9	10.7	11.1	11.1	51.4	53.1	53.1
Los Angeles-Long Beach .....	900.8	914.5	913.2	205.0	207.8	207.7	902.6	922.5	925.3
Modesto .....	21.3	23.3	23.1	4.3	4.4	4.3	26.0	27.7	28.1
Oakland .....	102.5	104.2	104.6	56.0	56.3	56.2	197.7	202.4	201.8
Oxnard-Ventura .....	28.6	30.5	30.3	10.8	10.0	9.8	49.5	51.7	52.0
Riverside-San Bernardino .....	79.4	84.1	84.7	30.5	31.5	31.6	147.7	159.9	160.5
Sacramento .....	40.3	41.8	42.5	24.3	25.4	25.6	129.3	137.8	138.1
San Diego .....	122.4	123.1	123.3	33.3	34.3	34.4	201.4	215.4	216.1
San Francisco .....	77.9	80.2	79.6	77.1	78.3	75.9	207.3	210.4	210.5
San Jose .....	257.7	262.3	262.8	21.0	21.7	21.7	146.6	153.6	152.9
Santa Barbara-Santa Maria-Lompoc .....	22.5	22.1	22.4	5.1	5.0	5.0	33.9	35.1	35.3
Santa Rosa-Petaluma .....	18.0	18.8	18.8	6.3	6.3	6.3	31.3	33.5	33.9
Stockton .....	22.1	22.2	22.4	8.2	8.1	8.4	32.1	33.1	33.4
Vallejo-Fairfield-Napa .....	11.2	11.6	11.5	4.6	4.4	4.3	29.0	30.5	30.4
<b>Colorado</b> .....	182.5	183.5	184.2	83.7	82.9	82.7	346.3	350.3	349.6
Boulder-Longmont .....	27.9	28.1	28.3	2.3	2.3	2.3	22.3	22.5	22.8
Denver .....	94.5	94.6	95.2	60.3	60.1	60.0	197.8	198.8	198.8
<b>Connecticut</b> .....	388.6	380.8	380.1	71.1	73.1	73.1	363.7	373.8	378.4
Bridgeport-Milford .....	58.9	57.6	57.5	8.4	9.4	9.3	44.5	45.8	46.3
Hartford .....	91.4	93.3	93.1	17.7	18.0	18.1	99.0	102.4	102.3
New Haven-Meriden .....	46.9	46.5	46.8	18.2	18.1	18.5	58.8	57.5	58.3
Stamford .....	24.0	24.0	23.8	5.1	5.3	5.4	29.9	30.8	30.6
Waterbury .....	25.1	23.7	23.8	3.2	3.2	3.3	16.9	17.5	17.4
<b>Delaware</b> .....	68.8	68.3	68.5	13.2	14.1	14.1	68.5	71.1	71.5
Wilmington .....	59.3	57.6	57.6	14.1	15.2	15.2	58.9	58.6	58.9
<b>District of Columbia</b> .....	16.0	16.5	16.5	24.5	24.5	24.7	62.5	62.7	63.6
Washington MSA .....	85.5	87.4	87.5	99.2	102.8	103.8	405.8	421.8	422.4
<b>Florida</b> .....	526.4	541.8	541.1	253.7	259.9	261.8	1,309.4	1,397.1	1,392.6
Daytona Beach .....	11.7	12.0	11.9	3.4	3.5	3.6	33.4	35.7	35.7
Fort Lauderdale-Hollywood-Pompano Beach .....	44.7	48.5	48.4	22.1	23.2	23.4	139.9	148.8	145.2
Fort Myers-Cape Coral .....	5.3	5.6	5.6	4.8	5.0	5.0	32.7	35.5	35.0
Jacksonville .....	38.8	39.2	36.9	27.7	28.2	28.3	104.0	109.3	109.9
Melbourne-Titusville-Palm Bay .....	27.5	29.4	29.6	5.8	6.0	6.0	32.7	34.8	35.0
Miami-Hialeah .....	94.5	97.3	97.1	88.5	87.9	87.9	218.7	224.6	222.9
Orlando .....	53.8	54.6	54.8	24.2	25.8	26.0	123.1	130.3	130.8
Pensacola .....	11.5	11.4	11.4	6.1	5.9	5.9	31.8	33.1	33.2
Sarasota .....	8.7	9.2	9.2	3.5	3.6	3.6	30.8	33.6	32.9
Tallahassee .....	4.8	4.8	4.7	3.1	3.1	3.2	22.7	23.1	22.9
Tampa-St. Petersburg-Clearwater .....	91.2	93.7	93.7	38.0	38.9	39.0	222.1	231.0	229.9
West Palm Beach-Boca Raton-Delray Beach .....	35.5	36.6	35.9	12.0	12.2	12.3	67.3	66.1	64.8

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Alabama</b> .....	70.5	69.8	69.9	273.9	280.6	282.2	302.3	304.1	304.0
Birmingham .....	29.0	29.1	29.2	92.8	94.7	95.6	61.1	61.8	61.9
Huntsville .....	3.6	3.6	3.7	27.2	28.5	29.0	29.1	29.6	29.7
Mobile .....	8.2	7.9	7.9	36.0	37.0	37.1	28.0	28.8	29.0
Montgomery .....	7.4	7.6	7.6	25.8	26.2	26.2	31.4	32.0	32.0
Tuscaloosa .....	2.0	2.1	2.1	8.2	8.5	8.5	19.3	19.6	19.6
<b>Alaska</b> .....	11.3	10.6	10.6	41.6	39.7	40.3	67.5	66.8	67.1
<b>Arizona</b> .....	93.9	94.2	93.8	344.3	382.9	363.1	238.5	251.1	251.4
Phoenix .....	74.5	74.8	74.4	232.4	245.2	245.2	122.6	131.3	131.1
Tucson .....	12.7	12.4	12.4	64.6	68.3	68.3	51.0	53.3	53.4
<b>Arkansas</b> .....	37.7	37.5	37.7	153.8	158.1	160.5	148.4	151.9	151.8
Fayetteville-Springdale .....	1.5	1.5	1.5	7.0	7.4	7.4	10.6	10.7	10.6
Fort Smith .....	2.7	2.7	2.7	16.0	16.8	16.8	7.6	8.1	8.1
Little Rock-North Little Rock .....	15.6	15.9	16.0	51.8	53.9	54.3	46.0	46.7	46.4
Pine Bluff .....	1.5	1.5	1.5	6.1	6.3	6.3	7.3	7.8	7.8
<b>California</b> .....	798.5	816.3	815.3	2,885.1	2,995.1	2,999.3	1,911.7	1,971.7	1,977.8
Anaheim-Santa Ana .....	91.0	90.3	90.1	260.5	288.3	267.5	117.6	119.2	119.8
Bakersfield .....	6.3	6.1	6.2	32.1	33.2	33.2	40.8	41.2	41.0
Fresno .....	13.6	12.9	12.6	48.8	48.3	48.0	44.9	47.6	47.7
Los Angeles-Long Beach .....	283.4	291.3	291.7	1,039.5	1,077.7	1,073.0	504.1	513.0	514.3
Modesto .....	4.4	4.7	4.6	20.9	21.7	22.0	17.4	18.5	18.7
Oakland .....	54.2	55.7	55.7	186.6	191.6	192.8	160.6	164.0	164.2
Oxnard-Ventura .....	10.5	10.7	10.9	46.9	50.4	51.0	40.8	41.2	41.3
Riverside-San Bernardino .....	26.1	27.0	27.1	141.8	151.4	151.9	121.3	127.1	126.7
Sacramento .....	33.1	34.1	34.4	115.8	124.4	125.2	167.4	170.8	170.9
San Diego .....	60.0	61.8	62.1	224.7	236.1	237.9	157.9	163.2	163.6
San Francisco .....	112.7	113.3	113.1	278.7	289.4	290.9	137.6	137.6	137.8
San Jose .....	34.9	34.4	34.6	196.9	204.9	204.5	88.3	88.8	88.6
Santa Barbara-Santa Maria-Lompoc .....	8.6	8.7	8.7	39.5	40.6	40.6	27.8	28.2	28.0
Santa Rosa-Petaluma .....	8.3	8.4	8.4	27.7	29.6	29.6	22.5	23.3	23.2
Stockton .....	8.8	8.7	8.5	29.9	30.4	30.3	31.0	31.7	31.8
Vallejo-Fairfield-Napa .....	4.5	4.4	4.3	27.3	29.2	29.4	37.0	37.5	37.4
<b>Colorado</b> .....	99.2	97.4	97.1	333.3	331.6	330.9	266.0	269.8	269.6
Boulder-Longmont .....	4.1	4.1	4.0	21.2	21.7	21.7	22.1	23.0	22.9
Denver .....	66.8	66.0	66.0	195.8	194.3	195.1	125.8	126.8	127.1
<b>Connecticut</b> .....	148.1	150.6	151.6	382.5	392.6	398.8	204.5	208.4	208.7
Bridgeport-Milford .....	11.3	12.1	12.3	45.4	44.9	45.5	19.6	20.3	20.6
Hartford .....	76.0	78.4	78.5	105.9	108.7	109.9	60.2	61.9	61.8
New Haven-Meriden .....	15.1	15.4	15.5	67.6	69.6	70.6	31.8	32.4	32.5
Stamford .....	12.8	13.2	13.3	36.0	37.4	38.0	10.8	10.7	10.7
Waterbury .....	4.3	4.4	4.4	20.1	21.2	21.5	12.5	13.0	13.1
<b>Delaware</b> .....	26.1	27.7	27.8	71.8	77.7	78.3	46.4	48.0	47.7
Wilmington .....	23.1	24.6	24.6	63.3	67.8	68.7	37.0	38.3	38.1
<b>District of Columbia</b> .....	37.1	37.6	37.8	230.2	239.1	242.9	265.4	264.3	265.9
Washington MSA .....	122.3	127.6	128.2	655.2	684.1	690.6	557.2	558.9	559.2
<b>Florida</b> .....	355.6	369.8	369.6	1,301.1	1,398.3	1,399.5	738.3	785.0	779.1
Daytona Beach .....	6.4	6.6	6.6	31.3	32.7	32.4	18.1	19.6	19.7
Fort Lauderdale-Hollywood-Pompano Beach .....	39.4	41.1	41.3	125.8	134.6	132.7	58.0	60.8	61.0
Fort Myers-Cape Coral .....	7.8	8.5	8.4	30.2	33.5	33.1	15.5	16.3	16.5
Jacksonville .....	37.0	39.0	39.2	98.8	106.4	107.9	57.2	58.9	58.9
Melbourne-Titusville-Palm Bay .....	5.3	5.7	5.8	40.8	42.3	42.7	20.6	21.3	21.3
Miami-Hialeah .....	66.7	68.1	67.9	225.3	227.5	227.3	107.1	117.8	113.3
Orlando .....	32.5	34.7	35.0	151.4	158.3	160.0	54.4	57.1	57.1
Pensacola .....	5.6	5.7	5.7	30.1	30.8	31.3	28.6	29.0	29.0
Sarasota .....	8.3	8.8	8.7	29.9	32.0	31.9	12.1	12.5	12.6
Tallahassee .....	4.9	4.9	4.9	21.9	22.5	22.7	45.8	47.3	47.4
Tampa-St. Petersburg-Clearwater .....	64.9	66.4	66.6	220.7	225.7	225.7	100.9	105.0	105.0
West Palm Beach-Boca Raton-Delray Beach .....	28.5	29.7	29.3	95.7	104.5	103.2	39.4	41.8	42.0

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Georgia</b> .....	2,744.1	2,784.4	2,787.2	8.3	8.4	8.4	147.5	148.5	148.7
Athens .....	62.3	63.3	63.1	.2	.2	.2	2.4	2.3	2.4
Atlanta .....	1,356.0	1,380.7	1,381.7	1.4	1.4	1.4	71.3	70.2	70.8
Augusta .....	156.5	157.7	157.8	.5	.5	.5	9.0	9.6	9.8
Columbus .....	92.0	91.9	92.8	.1	.1	.1	5.1	5.2	5.3
Macon-Warner Robins .....	117.1	118.8	119.2	.1	.1	.1	5.0	4.8	4.9
Savannah .....	101.7	102.1	102.0	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	6.8	6.6	6.4
<b>Hawaii</b> .....	457.2	467.7	467.5	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	20.9	20.1	20.3
Honolulu .....	364.9	372.9	372.7	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	16.4	15.8	15.9
<b>Idaho</b> .....	327.6	333.7	337.3	2.3	2.9	3.0	12.4	11.2	12.2
Boise City .....	85.9	87.7	88.1	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	4.2	3.8	4.0
<b>Illinois</b> .....	4,874.4	4,951.6	4,980.1	23.5	23.5	23.7	178.6	183.5	196.8
Aurora-Elgin .....	132.4	137.4	138.6	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	5.7	6.0	6.5
Bloomington-Normal .....	55.9	56.4	57.2	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	1.6	1.5	1.6
Champaign-Urbana-Rantoul .....	86.0	87.2	86.5	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	2.2	2.2	2.2
Chicago .....	2,989.2	3,047.6	3,065.6	2.5	2.3	2.5	112.3	114.6	122.1
Davenport-Rock Island-Moline .....	156.2	154.4	155.5	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	4.6	4.0	4.4
Decatur .....	49.8	50.0	49.8	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	1.8	1.7	1.8
Joliet .....	95.7	96.7	96.9	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	4.8	5.0	5.1
Lake County .....	181.5	187.7	191.7	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	7.7	8.1	8.7
Peoria .....	132.2	134.8	135.4	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	5.0	4.6	5.2
Rockford .....	122.5	126.2	126.3	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	4.1	4.0	4.1
Springfield .....	97.0	97.9	97.9	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	2.6	2.8	2.9
<b>Indiana</b> .....	2,288.2	2,340.6	2,380.9	8.5	7.8	8.0	94.6	94.4	105.6
Anderson .....	48.4	47.9	48.5	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	1.3	1.2	1.3
Bloomington .....	51.3	52.4	53.9	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	2.1	1.9	2.2
Elkhart-Goshen .....	97.0	100.4	102.2	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	2.7	2.6	2.8
Evansville .....	124.7	125.9	127.7	2.2	2.0	2.0	7.2	6.6	7.0
Fort Wayne .....	183.2	169.9	192.9	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	8.7	9.3	10.2
Gary-Hammond .....	217.6	222.7	226.8	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	10.9	10.9	12.0
Indianapolis .....	594.3	611.4	621.6	.8	.8	.8	29.0	29.6	31.8
Lafayette .....	64.3	64.7	65.8	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	2.2	2.5	2.9
Muncie .....	51.1	51.7	52.4	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	1.8	1.9	2.0
South Bend-Mishawaka .....	110.3	113.1	114.4	( <sup>c</sup> )	( <sup>c</sup> )	( <sup>c</sup> )	4.8	5.0	5.4
Terre Haute .....	53.4	53.6	54.5	.3	.3	.3	1.8	2.0	2.2
<b>Iowa</b> .....	1,104.0	1,126.5	1,139.2	2.2	2.0	2.2	32.7	28.3	32.8
Cedar Rapids .....	85.1	89.5	90.5	.1	.1	.1	3.2	2.8	3.1
Des Moines .....	202.5	212.1	214.1	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	6.8	7.1	7.4
Dubuque .....	41.3	43.1	43.6	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	1.1	1.1	1.3
Sioux City .....	48.6	51.5	51.9	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	1.8	1.5	1.7
Waterloo-Cedar Falls .....	60.8	62.3	63.3	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	1.6	1.4	1.8
<b>Kansas</b> .....	1,001.4	1,012.3	1,017.0	11.1	11.7	11.8	43.2	38.9	40.8
Topeka .....	86.0	88.3	88.6	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	3.4	3.2	3.2
Wichita .....	224.5	229.0	230.5	2.1	2.4	2.4	9.4	8.7	9.4
<b>Kentucky</b> .....	1,300.8	1,338.6	1,347.4	38.4	37.0	36.7	55.2	59.4	62.3
Lexington-Fayette .....	174.0	177.0	179.7	.7	.5	.5	10.0	8.9	9.4
Louisville .....	429.2	445.8	449.2	.5	.4	.4	19.9	23.2	24.2
Owensboro .....	32.7	33.7	33.3	.8	.7	.7	1.8	2.2	2.2
<b>Louisiana</b> .....	1,477.6	1,494.5	1,495.6	53.0	54.9	54.7	81.8	79.3	81.5
Alexandria .....	44.9	45.4	45.5	.2	.2	.2	2.3	2.2	2.3
Baton Rouge .....	211.6	212.9	213.5	.8	.8	.8	20.3	20.1	20.5
Houma-Thibodaux .....	51.1	52.6	52.8	5.7	5.8	5.9	1.5	1.6	1.6
Lafayette .....	80.7	82.2	82.1	10.1	10.4	10.3	3.0	3.0	3.0
Monroe .....	55.4	53.3	53.5	.3	.3	.3	3.0	2.6	2.6
New Orleans .....	507.5	511.6	511.7	14.1	14.8	14.8	21.8	22.4	22.6
Shreveport .....	131.8	132.1	132.0	3.3	2.8	2.8	6.6	6.9	7.3
<b>Maine</b> .....	488.2	507.0	513.1	.1	.1	.1	28.9	28.4	31.4
Lewiston-Auburn .....	38.9	39.9	40.1	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	2.0	2.1	2.2
Portland .....	120.1	123.0	125.5	( <sup>b</sup> )	( <sup>b</sup> )	( <sup>b</sup> )	8.6	8.5	9.1

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Georgia</b> .....	567.4	572.3	570.1	173.4	174.7	175.8	684.9	688.5	690.2
Athens .....	15.0	15.3	14.9	1.7	1.8	1.8	12.6	12.9	13.0
Atlanta .....	188.2	189.7	188.2	113.9	117.4	118.2	374.4	376.6	376.4
Augusta .....	35.5	36.5	36.4	5.2	5.2	5.1	34.3	33.4	33.6
Columbus .....	20.1	20.0	20.3	3.7	3.4	3.5	20.3	19.7	19.9
Macon-Warner Robins .....	18.2	18.1	18.2	4.9	4.8	4.7	26.4	26.7	26.8
Savannah .....	16.9	17.1	17.0	9.7	9.1	9.3	24.6	24.9	24.8
<b>Hawaii</b> .....	21.9	21.4	22.0	36.4	36.9	36.8	122.0	124.9	124.7
Honolulu .....	16.1	15.8	16.5	29.7	30.4	30.3	95.4	98.0	97.9
<b>Idaho</b> .....	51.1	53.6	54.3	17.5	17.6	17.9	83.5	83.3	83.8
Boise City .....	10.5	11.9	12.1	5.1	5.1	5.1	22.4	22.8	22.8
<b>Illinois</b> .....	928.4	942.2	944.3	293.3	300.1	299.8	1,209.3	1,231.8	1,241.6
Aurora-Elgin .....	35.7	37.4	37.2	2.9	3.1	3.0	37.4	38.0	38.5
Bloomington-Normal .....	4.9	4.9	5.6	2.6	2.6	2.6	12.7	12.8	12.8
Champaign-Urbana-Rantoul .....	8.0	8.0	8.0	2.4	2.3	2.3	19.1	19.3	19.1
Chicago .....	548.6	551.6	551.1	180.2	194.0	192.5	750.9	767.2	773.9
Davenport-Rock Island-Moline .....	33.8	32.6	33.0	8.2	8.2	8.2	42.3	42.4	42.4
Decatur .....	13.3	13.1	13.1	4.9	4.9	4.8	11.1	11.3	11.3
Joliet .....	19.1	19.7	19.8	8.3	8.2	8.2	22.7	22.9	22.9
Lake County .....	41.4	43.8	44.1	6.7	7.1	7.1	46.6	51.2	51.5
Peoria .....	30.8	33.6	33.7	6.7	6.6	6.6	32.9	32.8	32.8
Rockford .....	40.7	43.8	43.8	4.4	4.3	4.3	28.9	29.0	29.1
Springfield .....	4.0	3.9	3.9	4.7	4.9	4.9	21.9	22.0	22.0
<b>Indiana</b> .....	611.7	623.4	628.8	117.6	128.2	127.4	539.7	546.4	561.4
Anderson .....	17.4	18.4	18.8	1.5	1.5	1.5	11.1	11.1	11.4
Bloomington .....	8.5	9.1	9.2	1.7	1.7	1.8	11.3	11.5	11.9
Elkhart-Goshen .....	52.7	54.8	55.8	2.8	2.8	2.8	17.6	18.2	18.6
Evansville .....	30.8	30.4	30.5	6.5	6.6	6.7	32.6	33.3	33.8
Fort Wayne .....	50.1	51.4	51.5	11.8	12.1	12.3	45.1	47.3	48.3
Gary-Hammond .....	54.0	55.6	56.7	14.8	14.7	14.9	51.6	52.4	53.6
Indianapolis .....	107.2	105.8	106.3	38.2	37.2	36.1	152.3	156.2	161.8
Lafayette .....	11.7	12.0	12.2	1.9	2.0	2.0	13.0	12.8	13.0
Muncie .....	10.9	10.7	10.7	2.3	2.5	2.5	12.6	12.7	12.9
South Bend-Mishawaka .....	24.0	23.8	23.9	4.9	5.0	5.1	26.5	29.7	30.0
Terre Haute .....	10.4	9.9	9.9	2.5	2.8	2.8	14.5	14.5	15.0
<b>Iowa</b> .....	211.0	221.8	222.9	52.3	53.6	54.0	279.2	283.5	287.7
Cedar Rapids .....	21.8	23.3	23.7	5.5	6.4	6.4	20.6	21.5	21.9
Des Moines .....	23.4	25.7	25.8	11.9	12.3	12.5	52.8	55.4	56.0
Dubuque .....	12.3	12.8	13.1	1.6	1.7	1.7	9.3	9.8	9.8
Sioux City .....	8.0	10.2	10.1	3.0	3.2	3.2	12.9	13.5	13.7
Waterloo-Cedar Falls .....	13.0	14.7	14.7	1.7	1.7	1.7	14.4	14.5	14.9
<b>Kansas</b> .....	176.6	179.2	179.4	81.4	80.7	81.0	247.4	253.9	254.9
Topeka .....	9.1	8.9	9.1	6.8	6.5	6.5	19.1	20.4	20.5
Wichita .....	58.8	59.8	59.5	10.8	10.8	10.7	52.1	52.8	53.5
<b>Kentucky</b> .....	256.6	267.7	267.1	87.5	87.4	87.8	308.4	321.0	324.9
Lexington-Fayette .....	27.9	30.0	29.8	7.5	7.8	7.8	41.3	42.5	43.7
Louisville .....	85.8	87.2	86.7	27.2	28.9	29.3	105.3	110.8	111.7
Owensboro .....	5.6	5.8	5.8	2.1	2.1	2.1	6.3	6.4	6.4
<b>Louisiana</b> .....	162.1	167.0	167.6	103.3	104.3	104.0	356.2	360.9	361.1
Alexandria .....	3.4	3.4	3.4	2.1	2.2	2.2	10.5	10.9	10.9
Baton Rouge .....	18.4	18.7	18.6	10.0	10.4	10.4	50.1	50.4	50.8
Houma-Thibodaux .....	3.6	4.3	4.3	5.5	5.8	5.8	13.2	13.4	13.5
Lafayette .....	5.8	8.0	5.9	5.7	5.5	5.5	21.9	22.4	22.5
Monroe .....	7.4	7.2	7.2	2.9	2.6	2.6	14.4	14.1	14.2
New Orleans .....	41.5	43.5	43.8	43.3	43.5	43.8	133.5	133.7	133.7
Shreveport .....	18.0	17.1	17.2	8.4	8.0	8.0	32.4	32.3	32.2
<b>Maine</b> .....	101.2	105.6	104.7	20.1	20.3	20.7	118.1	125.3	127.8
Lewiston-Auburn .....	10.0	10.5	10.5	1.4	1.4	1.4	9.4	9.5	9.6
Portland .....	15.7	16.5	16.6	5.8	5.9	5.9	34.9	35.0	35.4

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Georgia</b> .....	153.3	155.4	156.1	531.6	547.0	549.2	477.7	489.6	488.7
Athens .....	1.9	1.9	2.0	9.5	9.8	9.6	19.0	19.2	19.3
Atlanta .....	97.0	98.7	99.1	315.6	324.8	325.8	194.2	201.8	201.8
Augusta .....	6.1	6.1	6.1	32.3	32.6	32.8	33.7	33.8	33.7
Columbus .....	6.1	6.1	6.2	15.9	16.5	16.7	20.7	20.7	20.7
Macon-Warner Robins .....	7.3	7.7	7.8	21.8	22.8	23.0	33.4	33.7	33.6
Savannah .....	4.3	4.3	4.3	23.7	23.9	23.9	15.7	16.3	16.3
<b>Hawaii</b> .....	33.5	34.2	34.3	124.7	130.1	129.4	97.8	100.1	100.0
Honolulu .....	28.1	28.7	28.7	96.5	99.9	99.2	82.7	84.3	84.2
<b>Idaho</b> .....	19.3	18.9	18.9	67.2	70.2	70.7	74.3	75.8	76.5
Boise City .....	7.6	7.4	7.4	19.0	19.1	19.1	17.1	17.6	17.6
<b>Illinois</b> .....	354.0	362.2	363.4	1,151.3	1,173.0	1,176.2	736.0	735.3	734.3
Aurora-Elgin .....	6.4	6.6	6.6	29.1	30.7	31.2	15.1	15.5	15.5
Bloomington-Normal .....	9.3	9.6	9.6	11.7	11.8	11.8	13.1	13.2	13.2
Champaign-Urbana-Rantoul .....	3.3	3.4	3.4	15.9	16.2	16.3	35.1	35.8	35.2
Chicago .....	252.9	260.3	260.8	769.3	793.9	799.2	362.5	363.7	363.5
Davenport-Rock Island-Moline .....	8.0	8.1	8.2	31.7	31.5	31.7	27.6	27.6	27.6
Decatur .....	2.7	2.7	2.7	10.5	10.7	10.6	5.5	5.6	5.5
Joliet .....	3.7	3.7	3.8	20.2	19.9	19.9	16.6	17.0	16.9
Lake County .....	6.8	6.9	6.9	40.7	39.9	42.7	29.0	30.1	30.1
Peoria .....	7.0	7.0	7.0	33.4	33.9	33.8	16.4	16.3	16.3
Rockford .....	5.1	5.3	5.3	26.8	27.1	27.0	12.5	12.7	12.7
Springfield .....	8.0	7.9	7.9	23.7	23.9	23.8	32.0	32.4	32.4
<b>Indiana</b> .....	114.0	117.1	118.3	447.0	465.8	472.8	355.2	357.6	358.5
Anderson .....	1.6	1.6	1.6	9.7	10.0	9.9	5.8	6.0	5.9
Bloomington .....	1.7	1.8	1.8	8.0	8.2	8.4	18.0	18.1	18.5
Elkhart-Goshen .....	2.4	2.6	2.6	12.8	13.6	13.8	5.7	5.9	5.9
Evansville .....	5.1	5.3	5.3	28.2	29.6	30.0	12.1	12.1	12.3
Fort Wayne .....	12.0	12.0	12.1	37.6	39.6	40.4	18.0	18.3	18.2
Gary-Hammond .....	8.2	8.4	8.4	47.3	48.7	49.4	30.8	31.9	31.8
Indianapolis .....	44.7	46.9	47.7	133.7	140.8	143.1	90.3	92.1	92.1
Lafayette .....	3.0	3.1	3.1	11.3	11.3	11.5	21.2	20.9	21.2
Muncie .....	1.6	1.7	1.7	10.2	10.6	10.8	11.7	11.8	11.9
South Bend-Mishawaka .....	6.2	6.3	6.4	30.5	31.6	32.0	11.5	11.7	11.6
Terre Haute .....	2.0	2.1	2.1	11.1	11.1	11.3	10.9	11.0	11.1
<b>Iowa</b> .....	63.9	65.7	65.8	248.0	251.0	253.3	214.7	220.8	220.5
Cedar Rapids .....	4.8	4.9	4.9	18.7	19.7	19.8	10.4	10.8	10.6
Des Moines .....	26.2	28.4	28.6	51.5	53.1	53.7	30.0	29.9	29.9
Dubuque .....	1.4	1.4	1.4	12.1	12.6	12.7	3.4	3.8	3.7
Sioux City .....	2.6	2.5	2.6	13.8	14.2	14.3	6.5	6.4	6.3
Waterloo-Cedar Falls .....	3.0	2.8	2.8	14.4	14.4	14.5	12.6	12.8	12.8
<b>Kansas</b> .....	56.1	56.9	56.9	199.9	206.1	207.4	205.7	204.9	204.8
Topeka .....	6.1	6.6	6.6	20.5	21.0	21.0	20.9	21.6	21.6
Wichita .....	11.3	11.3	11.3	52.7	56.0	56.0	27.5	27.6	27.7
<b>Kentucky</b> .....	60.6	61.1	61.1	272.0	280.6	283.3	241.9	244.4	244.2
Lexington-Fayette .....	9.0	9.2	9.1	41.6	41.4	42.5	36.0	36.7	36.9
Louisville .....	28.6	29.0	29.2	101.7	104.1	105.4	60.2	62.2	62.3
Owensboro .....	1.5	1.5	1.4	7.6	7.8	7.8	5.0	5.2	5.1
<b>Louisiana</b> .....	84.5	84.7	84.8	318.2	328.7	328.2	316.5	314.7	313.7
Alexandria .....	2.6	2.6	2.6	11.1	11.2	11.2	12.7	12.7	12.7
Baton Rouge .....	13.5	13.4	13.3	42.5	43.7	44.0	56.0	55.4	55.1
Houma-Thibodaux .....	2.3	2.3	2.3	8.5	8.8	8.8	10.8	10.6	10.6
Lafayette .....	3.9	3.7	3.7	17.5	18.3	18.3	12.8	12.9	12.9
Monroe .....	4.5	4.4	4.5	11.5	11.5	11.5	11.4	10.6	10.6
New Orleans .....	34.1	33.9	34.0	133.0	135.5	135.1	86.2	84.3	84.3
Shreveport .....	7.4	7.4	7.2	30.5	32.3	32.2	25.2	25.3	25.1
<b>Maine</b> .....	24.5	24.9	25.2	104.2	109.4	110.4	91.1	92.8	92.8
Lewiston-Auburn .....	2.1	2.3	2.3	10.0	10.2	10.1	4.0	3.9	4.0
Portland .....	11.9	12.3	12.6	27.7	29.1	30.1	15.5	15.7	15.8

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Maryland</b> .....	2,006.0	2,022.5	2,028.1	1.8	1.7	1.8	147.6	147.2	150.0
Baltimore MSA .....	1,083.1	1,084.5	1,089.4	.3	.3	.3	71.5	71.3	73.0
Baltimore City .....	455.7	458.6	457.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	18.8	18.8	19.2
Suburban Maryland-D.C. ....	706.3	721.0	721.8	.6	.6	.7	62.0	61.8	63.3
<b>Massachusetts</b> .....	3,030.2	3,070.7	3,099.6	1.7	1.7	1.8	128.9	134.5	142.7
Boston .....	1,707.1	1,733.4	1,743.2	.8	.9	1.0	65.4	67.6	72.6
Brockton .....	71.6	73.3	74.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.7	3.8	4.3
Fall River .....	54.5	55.3	55.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.3	2.1	2.6
Fitchburg-Leominster .....	39.9	39.8	40.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.4	2.4	2.6
Lawrence-Haverhill .....	161.1	163.2	165.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.9	7.5	7.9
Lowell .....	105.1	106.1	107.8	.2	.1	.1	5.3	5.2	5.8
New Bedford .....	66.1	67.8	68.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.0	3.0	3.5
Springfield .....	236.6	241.4	243.4	.1	.1	.1	9.4	9.0	10.2
Worcester .....	197.2	203.5	205.8	.1	.1	.2	9.0	8.9	10.1
<b>Michigan</b> .....	3,710.4	3,693.3	3,729.4	9.8	9.4	10.0	111.7	110.0	121.4
Ann Arbor .....	164.6	170.0	172.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.8	5.0	5.7
Battle Creek .....	56.5	56.6	57.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.6	1.7	1.9
Benton Harbor .....	63.0	63.9	64.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.4	1.2	1.3
Detroit .....	1,859.6	1,841.3	1,856.3	.8	.8	.8	54.4	53.0	58.2
Flint .....	175.6	165.1	166.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.2	3.7	4.0
Grand Rapids .....	308.5	315.5	318.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	14.1	13.0	14.0
Kalamazoo .....	104.1	105.4	106.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.1	2.8	3.0
Lansing-East Lansing .....	203.0	198.7	207.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.0	4.4	4.7
Muskegon .....	55.3	55.6	56.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	1.8	1.9
Saginaw-Bay City-Midland .....	149.6	152.3	154.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.4	5.5	5.9
<b>Minnesota</b> .....	1,937.5	1,963.8	1,991.0	5.3	6.3	6.6	75.8	64.6	72.0
Duluth .....	86.5	87.4	88.2	3.1	4.5	4.5	3.8	2.4	2.6
Minneapolis-St. Paul .....	1,265.3	1,291.9	1,304.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	51.3	45.8	49.7
Rochester .....	55.9	57.0	57.4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1.6	1.5	1.7
St. Cloud .....	68.6	70.8	71.7	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3.6	3.4	3.9
<b>Mississippi</b> .....	859.9	880.4	885.7	5.8	6.4	6.3	32.7	32.8	33.3
Jackson .....	174.9	179.3	180.9	.9	1.2	1.1	7.9	8.2	8.3
<b>Missouri</b> .....	2,178.8	2,195.0	2,216.6	5.4	5.4	5.5	96.7	94.1	97.9
Kansas City .....	735.9	734.3	739.5	.5	.5	.5	36.3	35.3	36.1
St. Louis .....	1,115.8	1,126.2	1,135.0	3.5	3.5	3.5	55.4	53.6	55.2
Springfield .....	106.7	111.5	112.4	.1	.1	.1	4.7	5.2	5.4
<b>Montana</b> .....	272.6	270.3	272.7	5.4	5.9	5.9	8.0	6.9	8.3
<b>Nebraska</b> .....	656.7	664.2	668.6	1.7	1.5	1.7	22.8	21.5	23.4
Lincoln .....	110.7	112.3	111.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.9	3.8	4.1
Omaha .....	297.2	302.5	303.2	.2	.2	.2	11.6	10.9	11.6
<b>Nevada</b> .....	490.1	515.7	519.8	7.3	9.4	9.8	28.5	30.3	31.4
Las Vegas .....	279.4	294.7	296.6	.3	.3	.3	17.9	18.8	19.2
Reno .....	129.3	135.2	136.2	.8	.9	1.0	6.8	7.1	7.5
<b>New Hampshire</b> .....	502.1	522.4	525.8	.6	.6	.7	34.9	34.5	37.3
Nashua .....	91.3	95.4	95.6	.1	.1	.1	4.8	5.2	5.5
Portsmouth-Dover-Rochester,NH-ME .....	106.9	108.8	112.2	.1	.1	.1	5.7	5.6	6.1
<b>New Jersey</b> .....	3,563.1	3,612.0	3,649.5	2.2	2.4	2.4	160.9	167.0	177.6
Atlantic City .....	156.2	154.8	159.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	10.0	10.0	10.4
Bergen-Passaic .....	664.1	678.7	682.9	.1	.1	.1	30.3	30.8	31.8
Camden .....	420.3	431.6	436.2	.1	.1	.1	23.6	25.4	26.9
Jersey City .....	238.9	244.0	244.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.5	7.4	7.6
Middlesex-Somerset-Hunterdon .....	512.1	525.7	530.5	.6	.6	.6	22.1	22.8	24.1
Monmouth-Ocean .....	318.0	321.7	328.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	20.5	22.0	23.9
Newark .....	949.6	963.4	968.6	.7	.7	.7	36.6	38.7	41.1
Trenton .....	193.0	197.7	199.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.9	4.8	5.3

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Maryland</b> .....	206.7	206.1	205.7	92.0	91.2	91.3	507.8	515.0	516.7
Baltimore MSA .....	131.0	131.3	130.9	52.6	52.3	52.8	264.8	265.7	267.2
Baltimore City .....	44.7	44.6	44.3	27.5	27.5	27.5	96.8	99.0	98.2
Suburban Maryland-D.C. ....	34.5	35.8	35.8	26.0	27.1	27.2	187.0	192.6	192.2
<b>Massachusetts</b> .....	600.1	585.9	584.8	127.9	129.5	129.6	710.7	712.3	721.3
Boston .....	281.7	275.7	275.0	75.0	75.4	75.9	381.9	382.4	382.8
Brockton .....	11.3	11.5	11.3	5.0	5.1	5.0	21.7	22.5	22.7
Fall River .....	16.7	16.6	16.1	1.9	1.8	1.9	13.7	14.7	15.0
Fitchburg-Leominster .....	11.8	11.6	11.6	1.6	1.7	1.6	9.9	10.0	10.1
Lawrence-Haverhill .....	51.0	50.4	50.1	6.8	6.7	6.6	35.5	36.6	36.1
Lowell .....	36.1	36.0	36.0	3.4	3.6	3.4	22.4	22.8	23.3
New Bedford .....	19.5	19.1	19.0	2.7	2.9	2.9	16.2	16.6	16.8
Springfield .....	50.8	51.3	51.4	9.5	10.0	9.8	55.5	56.7	57.5
Worcester .....	45.7	46.4	46.3	8.4	8.5	8.7	47.3	47.4	47.8
<b>Michigan</b> .....	980.5	921.0	931.4	150.1	149.1	151.0	837.0	852.0	864.6
Ann Arbor .....	39.6	38.5	38.9	4.1	4.4	4.5	27.8	28.4	30.0
Battle Creek .....	14.8	14.8	14.8	1.8	1.8	1.8	11.2	11.3	11.6
Benton Harbor .....	21.2	21.2	21.1	2.3	2.2	2.3	12.7	13.1	13.4
Detroit .....	480.5	444.6	445.5	83.6	85.6	86.9	430.5	439.1	445.1
Flint .....	62.0	48.3	48.7	4.7	4.5	4.5	43.8	45.5	46.0
Grand Rapids .....	95.1	96.4	96.6	11.3	11.2	11.3	78.1	81.1	81.8
Kalamazoo .....	29.8	29.8	30.0	3.2	3.3	3.3	22.5	23.1	23.4
Lansing-East Lansing .....	35.8	28.5	34.0	5.9	5.6	5.7	40.5	42.2	42.2
Muskegon .....	17.5	17.1	17.3	2.4	2.3	2.3	12.1	12.1	12.4
Saginaw-Bay City-Midland .....	43.4	41.5	42.1	7.0	6.9	6.8	34.9	36.2	36.6
<b>Minnesota</b> .....	368.3	378.2	381.0	99.4	100.5	101.0	481.2	484.0	492.6
Duluth .....	7.3	7.7	7.7	5.6	5.6	5.9	21.6	21.3	21.4
Minneapolis-St. Paul .....	250.6	257.6	258.4	68.9	70.8	71.2	309.9	315.9	318.6
Rochester .....	10.3	10.8	10.8	1.7	1.7	1.7	11.4	11.1	11.1
St. Cloud .....	11.8	12.3	12.2	3.4	3.4	3.4	20.6	21.6	21.7
<b>Mississippi</b> .....	225.8	233.3	233.5	41.7	42.6	42.6	183.7	186.0	188.6
Jackson .....	20.1	20.7	20.8	12.4	12.8	12.9	41.9	42.4	42.8
<b>Missouri</b> .....	413.7	420.9	420.9	142.2	142.2	143.2	532.8	535.1	542.9
Kansas City .....	113.8	111.4	111.5	56.2	55.1	55.5	189.2	189.6	191.0
St. Louis .....	214.5	218.9	218.9	72.6	74.0	74.2	272.8	271.8	275.5
Springfield .....	19.5	21.1	21.2	6.8	7.2	7.2	30.2	30.9	31.3
<b>Montana</b> .....	19.6	20.1	20.2	19.2	18.9	18.8	71.6	71.1	71.9
<b>Nebraska</b> .....	86.2	90.7	90.9	42.0	42.6	43.0	168.9	169.3	170.9
Lincoln .....	13.3	13.6	13.7	5.7	5.8	5.7	25.4	25.5	25.3
Omaha .....	32.8	35.1	34.8	22.5	22.9	22.9	75.8	76.2	76.6
<b>Nevada</b> .....	22.5	23.9	23.8	27.2	28.1	28.0	98.0	103.8	104.2
Las Vegas .....	8.5	8.8	8.6	15.3	16.0	15.9	57.9	61.8	62.0
Reno .....	8.3	8.2	8.0	8.9	9.2	9.2	26.4	30.0	30.1
<b>New Hampshire</b> .....	117.1	121.0	120.6	16.9	17.5	17.4	126.1	132.0	132.1
Nashua .....	36.0	37.2	37.3	2.1	2.1	2.1	20.7	21.8	21.4
Portsmouth-Dover-Rochester, NH-ME .....	20.6	20.6	20.8	2.8	3.0	3.0	27.4	28.1	29.1
<b>New Jersey</b> .....	676.0	667.3	666.9	236.0	242.0	243.2	848.5	856.7	865.0
Atlantic City .....	8.2	8.3	8.4	6.2	6.0	6.1	31.8	30.6	33.4
Bergen-Passaic .....	160.1	160.8	161.0	28.6	28.7	28.6	189.3	193.9	194.3
Camden .....	71.5	71.5	71.5	18.3	18.7	18.9	113.3	117.4	118.5
Jersey City .....	48.4	47.7	47.2	30.9	30.2	30.4	58.4	61.0	61.2
Middlesex-Somerset-Hunterdon .....	112.9	115.7	115.1	42.5	44.0	44.5	123.5	126.2	127.0
Monmouth-Ocean .....	30.6	29.9	29.8	16.1	16.6	16.6	85.8	86.0	87.5
Newark .....	181.8	180.0	178.6	80.6	81.6	80.6	194.7	196.1	197.3
Trenton .....	31.1	30.7	30.7	6.4	6.7	6.7	30.9	31.8	32.0

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Maryland</b> .....	122.8	125.9	125.9	531.1	539.9	542.8	396.1	395.5	393.9
Baltimore MSA .....	74.5	74.4	74.0	281.0	286.1	286.3	207.3	203.1	204.9
Baltimore City .....	43.6	44.0	43.8	139.5	140.0	139.8	84.9	84.6	84.6
Suburban Maryland-D.C. ....	40.3	41.7	42.0	204.6	210.0	210.4	151.2	151.4	150.2
<b>Massachusetts</b> .....	213.8	224.1	225.3	847.4	872.6	883.5	399.7	410.1	410.6
Boston .....	147.8	154.3	154.9	553.6	567.6	571.6	200.9	209.5	209.4
Brockton .....	3.1	3.1	3.2	15.0	15.5	15.6	11.8	11.8	12.0
Fall River .....	2.9	3.2	3.1	10.2	10.3	10.5	6.8	6.6	6.5
Fitchburg-Leominster .....	1.7	1.8	1.8	7.8	8.0	8.3	4.7	4.3	4.4
Lawrence-Haverhill .....	6.2	6.4	6.5	32.5	33.6	34.7	21.2	22.0	21.6
Lowell .....	4.3	4.2	4.3	20.0	20.2	20.8	13.4	14.0	14.1
New Bedford .....	2.5	2.6	2.7	12.4	13.0	13.2	9.8	10.6	10.5
Springfield .....	15.6	16.6	16.5	57.3	59.0	59.1	38.4	38.7	38.8
Worcester .....	13.6	14.7	14.9	49.0	51.6	52.0	24.1	25.9	25.8
<b>Michigan</b> .....	177.1	183.0	183.5	817.0	825.0	829.4	627.3	643.9	638.1
Ann Arbor .....	4.5	4.7	4.8	31.5	34.8	34.5	52.1	54.1	53.6
Battle Creek .....	3.9	3.2	3.2	11.8	12.2	12.2	11.3	11.5	11.5
Benton Harbor .....	2.5	2.7	2.7	14.1	14.6	14.8	8.6	8.7	8.7
Detroit .....	104.6	107.0	107.1	461.7	462.1	466.5	243.4	249.2	246.1
Flint .....	5.8	5.8	5.8	30.4	31.0	31.0	24.7	26.2	26.0
Grand Rapids .....	13.7	13.9	13.9	64.9	67.7	69.0	31.1	31.8	31.5
Kalamazoo .....	4.7	5.0	5.0	23.0	23.2	23.4	17.8	18.1	18.2
Lansing-East Lansing .....	11.2	12.1	12.1	36.6	37.7	39.5	67.5	68.1	68.6
Muskegon .....	1.3	1.3	1.3	11.3	11.6	11.7	8.8	9.3	9.0
Saginaw-Bay City-Midland .....	5.9	6.1	6.2	32.2	33.5	34.3	20.7	22.6	22.4
<b>Minnesota</b> .....	118.4	122.0	122.5	467.8	481.5	487.4	321.3	326.6	327.8
Duluth .....	3.1	3.1	3.1	20.4	20.5	20.8	21.5	22.3	22.3
Minneapolis-St. Paul .....	91.1	95.3	95.8	318.5	325.3	329.6	174.3	180.7	181.0
Rochester .....	1.5	1.6	1.6	23.3	24.1	24.5	6.1	6.2	6.0
St. Cloud .....	2.3	2.4	2.4	14.4	14.6	14.4	12.6	13.2	13.7
<b>Mississippi</b> .....	38.2	38.8	39.0	138.1	141.3	142.6	193.8	199.4	199.7
Jackson .....	14.2	14.3	14.4	38.5	39.7	40.2	39.1	40.1	40.3
<b>Missouri</b> .....	134.6	134.4	135.4	501.3	506.7	514.3	352.1	358.2	356.5
Kansas City .....	58.1	58.2	58.2	168.4	170.5	172.3	113.4	113.7	114.4
St. Louis .....	73.9	73.4	73.5	281.5	287.4	291.3	141.6	143.6	142.9
Springfield .....	4.8	4.7	4.7	27.0	28.2	28.4	13.6	14.1	14.1
<b>Montana</b> .....	13.2	12.5	12.5	63.5	64.7	64.6	72.1	70.2	70.5
<b>Nebraska</b> .....	47.7	47.9	48.0	150.6	150.2	151.0	136.8	140.5	139.7
Lincoln .....	8.1	8.5	8.5	23.3	23.6	23.6	31.0	31.5	31.0
Omaha .....	28.9	28.6	28.5	80.4	82.6	82.9	45.0	46.0	45.7
<b>Nevada</b> .....	23.2	24.2	24.5	218.7	228.1	230.5	64.7	67.9	67.6
Las Vegas .....	13.9	15.0	15.1	133.1	139.3	140.7	32.5	34.7	34.6
Reno .....	7.0	6.8	6.9	52.7	55.8	56.4	16.4	17.2	17.1
<b>New Hampshire</b> .....	31.0	33.4	33.6	109.7	116.9	117.5	65.8	66.5	66.6
Nashua .....	3.7	4.1	4.1	17.2	17.8	17.9	6.7	7.1	7.2
Portsmouth-Dover-Rochester,NH-ME .....	6.3	6.6	6.6	19.4	19.7	20.9	24.6	24.9	25.6
<b>New Jersey</b> .....	222.9	232.1	233.5	866.4	887.0	902.2	550.2	557.5	558.7
Atlantic City .....	6.9	7.1	7.1	68.8	68.2	69.7	24.2	24.5	24.5
Bergen-Passaic .....	37.1	39.0	39.4	150.0	156.8	158.7	68.6	68.6	69.0
Camden .....	23.8	25.5	25.8	98.7	100.6	102.2	71.0	72.4	72.3
Jersey City .....	12.3	13.1	13.2	41.9	43.1	43.3	40.5	41.5	41.6
Middlesex-Somerset-Hunterdon .....	35.0	36.0	36.1	104.0	107.9	110.1	71.5	72.5	73.0
Monmouth-Ocean .....	17.6	18.3	18.2	66.5	66.9	67.5	60.7	61.8	61.9
Newark .....	75.9	78.9	79.0	243.9	251.1	254.7	135.4	136.3	136.6
Trenton .....	9.4	9.5	9.5	55.8	57.7	58.5	54.5	56.5	56.5

See footnotes at end of table.



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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>New Mexico</b> .....	525.9	534.5	536.9	14.4	15.3	15.2	31.0	29.0	29.7
Albuquerque .....	230.4	234.4	235.6	.2	.2	.2	15.8	14.8	15.1
Las Cruces .....	40.9	41.2	41.2	.1	.1	.1	2.2	2.1	2.1
Santa Fe .....	52.9	54.1	54.6	.1	.1	.1	2.4	2.2	2.3
<b>New York</b> .....	7,990.3	8,105.3	8,154.2	5.8	5.4	5.9	312.2	314.0	334.1
Albany-Schenectady-Troy .....	399.4	408.5	411.6	.4	.2	.3	17.3	17.2	19.4
Binghamton .....	119.7	121.3	122.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.6	4.4	4.8
Buffalo .....	431.0	437.6	440.4	.3	.4	.4	15.0	14.2	15.7
Elmira .....	37.4	39.7	40.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.4	1.3	1.5
Nassau-Suffolk .....	1,120.9	1,139.8	1,148.2	.2	.2	.2	58.1	60.3	62.1
New York PMSA .....	4,089.7	4,138.0	4,144.0	1.3	1.3	1.2	148.0	152.5	157.0
New York City .....	3,572.5	3,612.1	3,613.7	.8	.7	.7	115.8	120.7	123.5
Niagara Falls .....	78.2	80.3	80.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.6	2.8	3.1
Orange County .....	100.2	103.0	104.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.0	5.5	6.1
Poughkeepsie .....	115.4	118.8	120.4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6.1	5.6	6.2
Rochester .....	461.4	464.8	469.5	.7	.6	.6	17.0	17.1	18.7
Rockland County .....	95.7	98.3	98.6	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5.0	5.1	5.2
Syracuse .....	295.1	300.7	306.4	.2	.2	.2	13.5	14.2	16.0
Utica-Rome .....	116.9	121.9	123.3	.1	.2	.2	3.4	3.1	3.7
Westchester County .....	403.8	409.0	412.8	.3	.3	.3	25.9	25.2	26.5
<b>North Carolina</b> .....	2,839.8	2,922.1	2,934.1	4.9	4.9	4.9	158.4	164.0	166.9
Asheville .....	75.9	77.8	78.6	.1	.1	.1	4.0	4.2	4.3
Charlotte-Gastonia-Rock Hill .....	570.9	596.9	597.8	.4	.4	.4	32.8	36.9	37.2
Greensboro-Winston-Salem-High Point .....	462.7	471.0	470.5	.3	.3	.3	24.5	24.4	24.8
Raleigh-Durham .....	381.4	389.8	392.2	.3	.4	.4	21.2	21.8	22.2
<b>North Dakota</b> .....	250.3	250.3	252.8	3.7	4.1	4.1	9.1	7.1	8.2
Bismarck .....	36.4	36.3	36.8	.2	.2	.2	1.3	1.1	1.3
Fargo-Moorhead .....	70.6	72.1	73.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.0	2.7	3.0
Grand Forks .....	29.9	30.0	30.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.4	1.0	1.2
<b>Ohio</b> .....	4,539.2	4,595.8	4,655.8	20.7	19.5	19.7	162.2	165.5	178.9
Akron .....	262.6	267.5	270.2	.5	.5	.5	8.2	7.8	8.7
Cincinnati .....	673.1	678.3	692.8	.3	.5	.6	27.9	29.2	30.9
Cleveland .....	880.1	893.3	902.0	1.0	1.0	1.0	25.6	25.8	27.7
Columbus .....	650.8	667.3	673.9	.9	.9	1.0	25.1	26.4	27.7
Dayton-Springfield .....	426.5	430.8	434.7	.4	.4	.4	15.1	15.5	16.9
Toledo .....	277.4	284.0	287.1	.2	.2	.2	9.6	10.5	11.4
Youngstown-Warren .....	187.4	189.8	193.0	.6	.8	.6	6.7	6.4	7.5
<b>Oklahoma</b> .....	1,104.4	1,093.4	1,095.8	45.2	44.2	44.3	33.3	31.3	31.7
Enid .....	21.8	21.7	21.7	1.0	1.0	1.0	.6	.6	.6
Lawton .....	34.1	33.6	33.8	.3	.2	.2	1.2	1.2	1.2
Oklahoma City .....	400.2	397.4	397.2	11.5	11.1	11.1	12.1	12.1	12.2
Tulsa .....	287.5	286.8	287.3	15.2	15.0	15.0	10.2	9.0	9.2
<b>Oregon</b> .....	1,078.8	1,113.9	1,124.0	1.4	1.3	1.3	32.1	33.7	36.4
Eugene-Springfield .....	103.0	106.5	107.4	.1	.1	.1	2.6	2.9	3.1
Portland .....	546.3	565.0	569.5	.5	.4	.4	17.7	18.9	20.0
Salem .....	93.5	95.0	95.8	.1	.1	.1	3.0	2.9	3.1
<b>Pennsylvania</b> .....	4,891.4	4,948.0	5,003.7	30.7	29.5	29.6	209.7	208.2	224.5
Allentown-Bethlehem .....	289.8	271.9	275.0	.6	.5	.6	12.3	13.1	13.9
Altoona .....	50.1	50.9	51.3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.5	2.4	2.5
Beaver County .....	50.7	50.8	51.3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3.8	4.0	4.1
Erie .....	109.4	110.6	111.9	.2	.2	.2	3.0	2.8	3.2
Harrisburg-Lebanon-Carlisle .....	290.5	296.2	299.3	.3	.3	.3	12.0	12.3	13.2
Johnstown .....	78.9	77.7	78.8	3.7	3.6	3.6	2.6	2.2	2.6
Lancaster .....	177.3	181.2	183.5	.4	.3	.4	10.0	10.6	11.2
Philadelphia PMSA .....	2,139.2	2,188.7	2,175.7	1.1	1.1	1.1	98.1	102.8	108.9
Philadelphia City .....	775.7	779.4	779.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	17.2	15.8	16.9
Pittsburgh .....	853.6	853.6	860.0	5.5	5.7	5.5	40.5	36.7	39.3

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>New Mexico</b> .....	37.0	39.5	39.7	28.7	28.8	28.8	125.3	127.7	129.0
Albuquerque .....	19.7	20.5	20.5	12.1	12.5	12.5	58.3	60.1	60.4
Las Cruces .....	3.9	3.8	3.7	1.4	1.3	1.3	7.8	8.6	8.7
Santa Fe .....	1.6	1.7	1.7	1.2	1.2	1.3	10.2	10.5	10.8
<b>New York</b> .....	1,212.2	1,219.0	1,216.1	400.3	403.6	403.3	1,874.4	1,674.2	1,687.5
Albany-Schenectady-Troy .....	49.1	48.8	48.4	18.2	16.2	16.4	84.1	87.2	87.6
Binghamton .....	37.6	38.3	38.3	4.4	4.5	4.5	26.0	26.3	26.7
Buffalo .....	76.5	77.0	77.2	21.2	21.1	21.3	107.4	109.4	109.9
Elmira .....	7.6	8.6	8.7	1.4	1.4	1.4	10.4	10.5	10.6
Nassau-Suffolk .....	177.7	175.4	175.5	47.4	49.0	48.9	299.3	300.9	304.2
New York PMSA .....	456.1	461.3	458.1	237.8	239.5	238.6	755.1	754.2	754.8
New York City .....	377.2	378.3	375.2	212.6	213.7	212.6	632.4	630.4	630.6
Niagara Falls .....	24.0	23.8	23.8	3.4	3.6	3.7	17.9	18.7	19.0
Orange County .....	14.9	14.8	15.0	6.0	6.0	6.0	26.2	27.6	27.9
Poughkeepsie .....	30.0	29.7	29.8	3.3	3.3	3.3	21.3	24.2	24.4
Rochester .....	131.8	131.4	131.6	14.4	14.5	14.6	98.8	100.2	101.4
Rockland County .....	14.6	14.7	14.7	4.0	4.1	4.1	22.4	23.4	23.5
Syracuse .....	52.7	51.9	51.8	17.8	17.6	18.0	68.8	71.0	72.3
Utica-Rome .....	23.7	24.4	24.2	4.2	4.5	4.5	25.9	26.1	26.8
Westchester County .....	62.5	66.5	66.2	20.6	21.1	21.2	96.1	95.9	96.3
<b>North Carolina</b> .....	847.7	862.8	859.3	139.4	144.6	145.9	630.0	653.0	658.3
Asheville .....	19.0	19.2	19.4	3.6	3.7	3.7	18.0	18.3	18.6
Charlotte-Gastonia-Rock Hill .....	152.2	155.5	154.9	47.5	49.2	49.2	135.5	143.6	143.6
Greensboro-Winston-Salem-High Point .....	152.2	153.4	151.4	27.2	27.9	28.0	102.2	104.6	105.2
Raleigh-Durham .....	58.1	58.1	58.2	16.9	16.7	16.6	80.1	83.0	83.6
<b>North Dakota</b> .....	15.3	16.0	15.8	16.1	16.1	16.2	67.1	66.7	68.0
Bismarck .....	1.9	1.9	2.0	2.6	2.7	2.7	9.7	9.6	9.7
Fargo-Moorhead .....	4.8	4.9	4.9	4.3	4.8	4.7	20.8	20.8	21.4
Grand Forks .....	1.7	1.8	1.8	1.5	1.5	1.5	8.2	8.1	8.3
<b>Ohio</b> .....	1,093.1	1,088.8	1,098.1	204.8	204.5	207.4	1,077.0	1,094.7	1,110.7
Akron .....	66.1	66.7	67.0	12.8	12.8	12.8	64.5	65.1	65.8
Cincinnati .....	146.9	137.7	143.4	34.8	35.9	36.0	167.3	170.5	173.0
Cleveland .....	199.4	201.8	201.8	41.2	40.0	40.4	210.7	214.8	217.2
Columbus .....	103.3	101.6	102.3	27.3	27.9	28.1	163.5	169.9	171.4
Dayton-Springfield .....	103.9	102.5	102.8	15.2	15.3	15.4	95.3	97.3	98.5
Toledo .....	62.0	61.8	62.0	13.5	13.5	13.7	87.7	70.3	71.1
Youngstown-Warren .....	49.7	49.5	50.1	7.5	7.6	7.6	47.2	48.9	49.8
<b>Oklahoma</b> .....	153.0	154.6	155.1	63.3	61.3	60.9	267.1	261.0	262.6
Enid .....	1.6	1.6	1.6	2.2	2.1	2.1	6.3	6.2	6.2
Lawton .....	3.5	3.4	3.4	1.5	1.2	1.2	8.6	8.3	8.4
Oklahoma City .....	46.7	47.0	46.9	19.8	19.1	19.1	100.0	98.3	98.4
Tulsa .....	46.7	47.6	47.7	23.1	23.6	23.7	69.7	69.1	68.8
<b>Oregon</b> .....	197.0	204.5	206.9	57.6	58.7	58.5	269.1	281.1	284.2
Eugene-Springfield .....	19.3	19.5	19.8	4.1	4.2	4.3	26.1	26.4	26.6
Portland .....	91.0	96.6	97.5	33.9	35.1	35.0	142.0	146.7	148.3
Salem .....	12.1	12.4	12.3	2.9	2.9	2.9	21.0	21.5	21.6
<b>Pennsylvania</b> .....	1,037.5	1,044.8	1,048.1	245.8	245.5	244.7	1,108.9	1,115.9	1,129.6
Allentown-Bethlehem .....	77.2	75.8	75.6	14.0	13.8	13.9	59.3	60.3	60.7
Altoona .....	11.2	11.1	11.0	4.6	4.6	4.6	12.6	13.0	13.1
Beaver County .....	9.8	9.6	9.6	5.2	5.1	5.1	11.2	10.7	10.9
Erie .....	34.2	34.6	34.7	3.8	3.8	3.6	23.2	22.9	23.5
Harrisburg-Lebanon-Carlisle .....	51.2	51.8	52.2	18.1	18.1	18.1	65.7	67.0	67.4
Johnstown .....	12.6	13.2	13.4	5.2	5.1	5.2	16.1	16.0	16.4
Lancaster .....	59.7	59.4	59.4	7.0	6.8	7.0	41.9	43.1	43.6
Philadelphia PMSA .....	374.1	373.9	373.2	98.5	97.6	96.7	492.0	500.9	499.8
Philadelphia City .....	96.2	95.2	94.7	44.9	45.6	44.8	148.3	148.7	151.6
Pittsburgh .....	124.4	124.9	122.6	45.1	43.2	43.6	213.1	210.3	212.9

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>New Mexico</b> .....	26.9	27.1	27.3	121.5	124.3	124.8	141.1	142.8	142.6
Albuquerque .....	14.8	14.8	15.0	63.8	64.3	64.8	45.7	47.2	47.1
Las Cruces .....	1.6	1.7	1.7	6.4	6.7	6.7	17.5	16.9	16.9
Santa Fe .....	2.0	2.0	2.0	13.7	14.3	14.4	21.7	22.1	22.0
<b>New York</b> .....	783.5	793.6	793.6	2,188.7	2,248.8	2,271.2	1,413.2	1,446.6	1,442.5
Albany-Schenectady-Troy .....	22.2	22.7	22.9	99.4	103.3	103.8	110.8	112.8	112.7
Binghamton .....	4.0	4.0	4.1	21.7	22.1	22.4	21.3	21.6	21.5
Buffalo .....	26.1	27.2	27.3	110.1	113.3	114.1	74.3	75.3	74.6
Elmira .....	1.4	1.4	1.4	9.2	10.1	10.4	6.2	6.5	6.5
Nassau-Suffolk .....	74.0	77.1	77.3	281.9	288.1	291.7	182.3	188.7	188.2
New York PMSA .....	577.5	579.4	578.4	1,250.4	1,278.4	1,282.5	663.4	673.5	673.5
New York City .....	544.3	545.3	543.7	1,107.8	1,132.4	1,137.1	581.6	590.6	590.2
Niagara Falls .....	1.9	1.9	1.9	15.9	18.7	16.7	12.3	12.9	12.5
Orange County .....	3.9	4.0	4.0	21.5	22.1	22.4	22.5	22.9	23.1
Poughkeepsie .....	4.4	4.6	4.7	25.6	25.9	26.6	24.6	25.4	25.4
Rochester .....	21.5	21.2	21.8	111.6	112.9	114.7	65.6	66.8	66.1
Rockland County .....	4.9	5.3	5.4	23.6	24.2	24.2	21.2	21.4	21.4
Syracuse .....	19.0	19.3	19.4	72.1	74.8	76.9	50.9	51.6	51.7
Ulrica-Rome .....	6.5	6.8	6.9	26.0	26.8	27.6	29.1	29.7	29.6
Westchester County .....	27.6	28.0	28.4	114.1	114.4	115.8	56.8	57.7	58.1
<b>North Carolina</b> .....	124.5	130.0	130.9	481.5	501.9	506.7	453.4	460.9	461.2
Asheville .....	2.7	2.5	2.5	16.9	17.7	17.9	11.5	12.1	12.1
Charlotte-Gastonia-Rock Hill .....	35.9	36.8	36.9	103.2	110.2	111.3	63.4	64.3	64.3
Greensboro-Winston-Salem-High Point .....	22.8	23.3	23.5	80.6	82.7	82.8	52.9	54.4	54.5
Raleigh-Durham .....	22.5	23.1	23.3	93.3	97.3	98.2	86.9	89.4	89.7
<b>North Dakota</b> .....	12.4	12.3	12.3	60.4	62.5	63.0	66.2	65.5	65.2
Bismarck .....	1.7	1.6	1.6	10.4	10.7	10.8	8.6	8.5	8.5
Fargo-Moorhead .....	4.4	4.6	4.6	19.1	19.6	20.0	14.2	14.7	14.4
Grand Forks .....	1.1	1.1	1.1	6.6	6.9	6.9	9.4	9.6	9.4
<b>Ohio</b> .....	240.0	247.1	249.1	1,041.3	1,066.9	1,086.1	700.2	708.9	705.8
Akron .....	10.4	10.7	10.7	56.1	58.6	59.7	43.9	45.3	45.0
Cincinnati .....	39.8	41.3	41.7	166.8	173.4	177.2	89.2	89.7	89.9
Cleveland .....	53.5	55.4	55.5	231.1	237.0	241.1	117.4	117.6	117.3
Columbus .....	56.2	58.4	58.4	153.1	159.5	162.0	121.1	122.7	123.0
Dayton-Springfield .....	17.6	17.9	18.1	103.8	107.3	108.4	75.2	74.5	74.2
Toledo .....	11.2	11.2	11.2	70.1	72.6	73.9	43.0	44.0	43.6
Youngstown-Warren .....	8.1	8.2	8.3	43.4	43.8	44.8	24.0	24.8	24.2
<b>Oklahoma</b> .....	59.6	57.1	57.0	230.3	231.3	232.5	252.6	252.6	251.5
Enid .....	1.0	1.0	1.0	5.3	5.7	5.7	3.6	3.5	3.5
Lawton .....	1.6	1.5	1.5	5.5	5.8	5.8	11.9	12.0	11.9
Oklahoma City .....	24.9	23.9	23.7	88.0	88.7	88.9	97.2	97.2	96.9
Tulsa .....	17.2	16.9	17.1	69.3	69.5	69.8	36.1	36.1	36.0
<b>Oregon</b> .....	71.3	72.7	73.2	242.1	249.2	251.5	208.2	212.7	212.0
Eugene-Springfield .....	4.9	4.8	4.8	23.8	24.7	25.1	21.9	23.9	23.6
Portland .....	46.7	47.7	47.9	136.5	140.0	141.2	78.0	79.6	79.2
Salem .....	5.4	5.6	5.6	19.1	19.7	20.0	29.9	29.9	30.2
<b>Pennsylvania</b> .....	290.2	292.5	294.5	1,271.3	1,307.6	1,328.9	697.3	704.0	703.8
Allentown-Bethlehem .....	11.3	11.6	11.7	65.0	66.6	68.3	30.1	30.2	30.3
Altoona .....	1.5	1.6	1.7	10.5	10.9	11.1	7.2	7.3	7.3
Beaver County .....	1.8	1.8	1.8	11.1	11.5	11.7	8.0	8.1	8.1
Erie .....	5.3	5.4	5.4	25.9	27.0	27.7	13.8	13.9	13.6
Harrisburg-Lebanon-Carlisle .....	16.7	17.4	17.5	60.4	62.0	63.3	61.1	67.3	67.3
Johnstown .....	4.7	4.7	4.8	19.3	20.1	20.2	12.7	12.8	12.6
Lancaster .....	6.6	7.0	7.0	35.9	37.6	38.4	15.8	16.4	16.5
Philadelphia PMSA .....	162.3	162.9	163.3	610.8	625.0	629.2	302.3	304.5	303.5
Philadelphia City .....	72.8	73.0	73.1	254.4	257.7	255.6	141.9	143.4	143.1
Pittsburgh .....	53.7	53.1	53.3	264.5	273.2	276.3	106.8	106.5	106.5

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Pennsylvania—Continued</b>									
Reading .....	145.8	150.9	152.5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6.1	6.4	6.8
Scranton—Wilkes-Barre .....	287.3	290.4	294.6	0.7	0.6	0.6	11.1	10.1	11.8
Williamsport .....	49.5	52.0	52.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1.8	1.7	1.8
York .....	167.6	173.2	175.0	.4	.4	.4	9.3	10.1	10.7
<b>Rhode Island</b> .....	449.8	449.4	456.3	.1	.1	.1	18.8	17.9	19.5
Pawtucket—Woonsocket—Attleboro .....	132.0	131.3	133.2	.1	.1	.1	4.6	4.7	4.8
Providence .....	317.2	318.2	322.9	.1	.1	.1	13.8	13.3	14.5
<b>South Carolina</b> .....	1,388.1	1,424.7	1,439.0	1.6	1.6	1.6	84.4	86.4	88.0
Charleston .....	185.6	191.3	192.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	13.2	13.5	13.6
Columbia .....	224.5	232.9	234.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	13.7	14.0	14.1
Greenville—Spartanburg .....	306.9	311.8	315.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	20.4	21.3	21.9
<b>South Dakota</b> .....	252.8	252.9	256.3	2.5	2.4	2.5	8.9	7.8	9.3
Rapid City .....	33.8	33.9	34.7	.2	.2	.3	2.0	1.7	2.0
Sioux Falls .....	64.1	64.3	64.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.5	2.4	2.9
<b>Tennessee</b> .....	1,987.4	2,043.4	2,055.3	6.8	6.3	6.5	91.9	96.7	99.9
Chattanooga .....	187.2	192.2	191.2	.8	.8	.9	8.1	8.8	9.4
Johnson City—Kingsport—Bristol .....	157.8	163.4	164.2	.3	.2	.2	6.1	6.6	6.7
Knoxville .....	247.5	246.4	248.6	2.1	1.8	1.8	11.6	10.7	10.4
Memphis .....	415.8	431.9	432.4	.1	.1	.1	18.9	20.3	20.4
Nashville .....	472.1	463.6	463.5	.6	.5	.6	28.1	25.4	25.8
<b>Texas</b> .....	6,482.0	6,538.7	6,547.4	178.9	181.3	180.2	347.2	319.5	321.4
Abilene .....	48.4	49.2	49.3	2.0	2.1	2.1	2.1	2.0	2.0
Amarillo .....	77.2	77.5	78.0	1.4	1.2	1.2	3.4	3.5	3.5
Austin .....	357.4	351.8	352.4	.8	.8	.7	17.1	15.3	15.2
Beaumont—Port Arthur .....	128.6	128.8	127.4	1.5	1.4	1.5	7.8	7.5	7.6
Brazoria .....	57.0	57.6	58.0	1.8	1.9	1.8	5.9	5.9	6.2
Brownsville—Harlingen .....	85.4	67.3	67.3	.1	.1	.1	2.3	2.2	2.2
Bryan—College Station .....	47.2	48.2	48.5	.6	.6	.6	1.9	2.1	2.2
Corpus Christi .....	123.6	124.8	125.1	4.4	3.8	3.8	6.8	6.1	6.1
Dallas .....	1,326.9	1,326.9	1,327.5	18.7	18.2	18.2	64.3	53.1	52.2
El Paso .....	184.5	187.1	188.7	.1	.1	.1	9.5	9.2	9.3
Ft. Worth—Arlington .....	512.6	512.9	513.8	3.6	3.5	3.7	25.1	20.2	20.2
Galveston—Texas City .....	71.5	69.3	70.3	.5	.6	.6	4.5	3.0	2.9
Houston .....	1,372.1	1,395.7	1,399.5	61.5	63.3	63.6	84.6	80.6	81.0
Killeen—Temple .....	68.9	70.1	70.4	.1	.1	.1	3.6	3.5	3.5
Laredo .....	35.3	35.9	38.3	1.8	2.0	2.0	1.3	1.3	1.3
Longview—Marshall .....	64.0	65.3	65.6	3.6	3.5	3.5	3.0	3.3	3.3
Lubbock .....	91.1	91.7	92.0	.4	.4	.4	3.4	3.3	3.4
McAllen—Edinburg—Mission .....	88.1	91.3	90.0	.8	.9	.9	3.9	4.0	4.1
Midland .....	43.5	44.4	44.6	9.5	9.9	9.9	1.2	1.1	1.1
San Angelo .....	36.2	36.6	36.6	.4	.4	.4	1.6	1.6	1.6
San Antonio .....	501.5	508.9	511.0	2.6	2.7	2.7	29.4	28.1	27.3
Sherman—Denison .....	37.3	38.1	38.1	.1	.1	.1	1.7	1.7	1.8
Texarkana .....	45.0	45.4	45.0	.1	.1	.1	1.9	2.1	2.0
Waco .....	77.3	78.6	78.5	.1	.1	.1	3.6	3.5	3.7
Wichita Falls .....	50.2	50.3	50.2	1.9	1.9	1.9	1.7	1.7	1.7
<b>Utah</b> .....	835.9	643.8	646.8	7.8	8.4	8.4	26.1	21.1	22.4
Provo—Orem .....	73.5	79.1	78.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.5	2.2	2.5
Salt Lake City—Ogden .....	443.5	448.8	450.2	2.4	2.7	2.7	18.3	15.8	16.3
<b>Vermont</b> .....	238.9	249.1	245.6	.5	.6	.7	14.8	18.6	16.5
Barre—Montpelier .....	32.4	34.6	34.2	.2	.2	.2	1.9	2.0	2.3
Burlington .....	73.1	76.2	77.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.1	4.8	4.7

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Pennsylvania-Continued</b>									
Reading .....	47.3	48.8	48.9	6.8	6.9	7.0	32.3	32.9	33.4
Scranton-Wilkes-Barre .....	71.9	70.4	71.0	15.2	15.5	15.7	64.9	66.9	67.3
Williamsport .....	15.7	16.7	16.7	1.9	1.8	1.9	11.1	11.8	12.0
York .....	57.3	60.0	60.2	7.2	7.5	7.9	40.7	41.2	41.8
<b>Rhode Island</b>									
Pawtucket-Woonsocket-Attleboro .....	116.5	115.2	115.5	15.4	15.5	15.7	101.4	102.5	103.8
Providence .....	53.9	53.1	53.3	3.4	3.5	3.6	31.8	31.7	32.5
Providence .....	74.0	71.9	72.1	11.5	12.1	12.2	68.7	69.7	70.5
<b>South Carolina</b>									
Charleston .....	369.5	378.0	378.2	57.8	59.8	60.4	304.9	320.2	326.5
Columbia .....	19.5	20.0	20.3	9.4	10.0	10.1	45.8	46.3	46.6
Greenville-Spartanburg .....	28.6	29.9	30.5	10.1	10.3	10.4	49.2	51.0	51.5
Greenville-Spartanburg .....	99.4	100.6	101.1	11.0	11.5	11.6	70.6	71.6	72.7
<b>South Dakota</b>									
Rapid City .....	27.9	29.7	29.9	12.3	12.3	12.2	66.2	65.7	67.4
Rapid City .....	3.2	3.1	3.2	1.8	1.8	1.8	9.5	9.6	9.8
Sioux Falls .....	8.2	8.3	8.3	4.6	4.6	4.5	17.4	17.5	17.4
<b>Tennessee</b>									
Chattanooga .....	491.1	498.2	497.2	102.0	105.0	105.7	467.4	476.4	481.1
Johnson City-Kingsport-Bristol .....	45.3	46.6	46.1	8.7	8.3	8.3	42.2	44.3	44.0
Knoxville .....	53.1	53.9	54.0	6.0	5.9	6.0	34.9	35.7	35.8
Memphis .....	50.1	50.4	50.0	9.5	9.9	10.1	62.2	61.6	63.2
Nashville .....	51.9	52.9	53.1	38.2	39.8	39.9	114.9	119.4	119.1
Nashville .....	90.0	87.2	86.4	22.5	24.2	24.3	113.9	112.7	112.3
<b>Texas</b>									
Abilene .....	918.6	938.4	937.5	380.6	384.0	385.6	1,635.0	1,633.2	1,637.5
Amarillo .....	4.5	4.6	4.6	2.4	2.4	2.4	13.4	13.5	13.6
Austin .....	9.9	10.0	10.0	5.7	5.8	5.9	22.0	22.2	22.5
Beaumont-Port Arthur .....	39.4	39.3	39.2	10.8	10.9	10.8	79.5	77.5	77.9
Brazoria .....	25.1	24.3	24.2	9.7	9.5	9.4	31.3	30.8	31.0
Brownsville-Harlingen .....	15.3	15.6	15.6	2.3	2.3	2.3	11.0	10.9	10.9
Bryan-College Station .....	9.4	10.2	10.3	3.1	3.1	3.2	17.4	17.5	17.5
Corpus Christi .....	3.0	3.2	3.2	1.5	1.6	1.5	9.9	9.3	9.7
Dallas .....	11.4	11.2	11.1	6.9	6.8	6.9	31.7	32.4	32.6
El Paso .....	221.1	221.5	220.9	88.6	90.9	91.6	343.2	345.2	345.5
Ft. Worth-Arlington .....	35.7	37.2	37.5	9.9	10.4	10.5	45.9	46.6	46.8
Galveston-Texas City .....	113.5	117.4	117.1	29.2	30.7	30.9	136.3	133.4	133.2
Houston .....	8.6	8.6	8.5	5.1	4.5	4.5	14.0	13.9	14.4
Killeen-Temple .....	143.2	150.2	150.6	96.4	98.2	98.7	345.8	350.4	350.5
Laredo .....	7.9	7.9	8.0	2.6	2.7	2.7	15.9	16.0	16.2
Longview-Marshall .....	1.7	1.5	1.5	4.4	4.8	4.8	10.2	10.2	10.3
Lubbock .....	15.1	15.8	15.8	3.2	3.2	3.2	16.4	16.7	16.7
McAllen-Edinburg-Mission .....	7.3	7.4	7.3	4.9	5.0	5.0	26.5	27.1	27.4
Midland .....	12.1	12.4	12.1	3.0	2.8	2.7	26.1	27.3	26.8
San Angelo .....	2.8	2.8	2.8	2.1	2.2	2.2	10.1	10.1	10.2
San Antonio .....	5.6	5.6	5.6	3.2	3.1	3.1	9.4	9.5	9.5
Sherman-Denison .....	46.2	46.6	47.1	18.1	17.9	18.0	129.4	131.2	132.7
Texarkana .....	10.8	11.1	11.1	2.0	2.0	2.0	8.2	8.2	8.3
Waco .....	7.3	7.3	7.2	1.8	1.7	1.7	10.2	10.5	10.6
Wichita Falls .....	14.6	14.7	14.7	3.2	3.3	3.3	18.8	19.1	19.1
Wichita Falls .....	8.4	8.2	8.2	2.6	2.6	2.6	12.2	12.1	12.1
<b>Utah</b>									
Provo-Orem .....	90.1	95.2	95.3	37.5	38.1	38.2	150.5	150.1	150.8
Salt Lake City-Ogden .....	10.2	12.5	12.7	2.7	2.9	3.0	15.2	16.3	16.4
Salt Lake City-Ogden .....	61.1	62.5	62.6	28.8	29.4	29.4	110.4	111.2	110.4
<b>Vermont</b>									
Barre-Montpelier .....	48.9	49.1	49.1	9.8	10.5	10.4	55.2	56.9	56.8
Burlington .....	4.6	4.7	4.6	.8	.9	.9	6.9	7.2	7.2
Burlington .....	16.3	16.8	17.0	2.8	2.9	2.9	17.1	17.5	17.7

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Pennsylvania—Continued</b>									
Reading .....	7.5	7.7	7.8	29.1	30.7	31.1	16.9	17.5	17.5
Scranton—Wilkes—Barre .....	12.6	12.9	13.0	68.8	72.1	73.1	42.1	41.9	42.1
Williamsport .....	2.3	2.3	2.4	9.6	10.4	10.6	7.1	7.3	7.4
York .....	4.9	5.1	5.2	29.5	30.7	30.6	18.3	18.2	18.2
<b>Rhode Island</b>									
Pawtucket—Woonsocket—Attleboro .....	3.7	3.6	3.6	24.3	24.4	25.0	10.2	10.2	10.3
Providence .....	21.1	21.6	21.6	83.3	84.6	86.9	44.7	44.9	45.0
<b>South Carolina</b>									
Charleston .....	8.3	8.5	8.6	39.2	40.7	40.9	50.1	52.2	52.4
Columbia .....	17.8	18.7	18.9	42.7	44.4	44.5	62.1	64.2	64.4
Greenville—Spartanburg .....	11.6	12.0	12.0	51.7	54.8	55.6	42.0	39.7	40.0
<b>South Dakota</b>									
Rapid City .....	1.7	1.7	1.7	8.5	8.9	9.0	6.8	6.9	6.9
Sioux Falls .....	6.2	6.2	6.2	17.7	18.1	17.9	7.6	7.3	7.4
<b>Tennessee</b>									
Chattanooga .....	11.9	11.7	11.6	36.6	37.3	36.6	33.7	34.4	34.3
Johnson City—Kingsport—Bristol .....	5.2	5.4	5.3	27.6	31.1	31.4	24.6	24.6	24.8
Knoxville .....	9.3	9.5	9.6	51.2	50.4	51.1	51.5	52.1	52.4
Memphis .....	24.1	24.9	24.9	96.5	99.2	99.9	71.2	75.3	75.0
Nashville .....	32.9	33.2	33.4	116.7	112.0	112.2	67.3	68.4	68.5
<b>Texas</b>									
Abilene .....	2.5	2.6	2.6	13.2	13.1	13.1	8.3	8.9	8.9
Amarillo .....	4.5	4.5	4.4	16.2	16.1	16.4	14.1	14.2	14.1
Austin .....	25.3	24.8	24.8	84.3	83.6	83.6	100.2	99.6	100.2
Beaumont—Port Arthur .....	5.3	5.2	5.3	27.7	27.7	28.0	20.2	20.4	20.4
Brazoria .....	2.0	2.0	2.0	7.7	7.9	8.1	11.0	11.1	11.1
Brownsville—Harlingen .....	3.5	3.6	3.5	13.4	14.0	13.9	16.3	16.6	16.6
Bryan—College Station .....	1.8	1.7	1.7	8.2	8.6	8.6	20.3	21.1	21.0
Corpus Christi .....	6.9	6.9	7.0	28.0	29.3	29.3	27.5	28.3	28.3
Dallas .....	133.1	128.5	128.5	308.0	318.1	319.5	149.9	151.4	151.1
El Paso .....	9.5	9.4	9.5	34.5	34.9	35.5	39.5	39.3	39.5
Ft. Worth—Arlington .....	27.9	26.9	26.9	110.2	112.3	113.0	66.8	68.5	68.8
Galveston—Texas City .....	4.2	4.1	4.1	13.6	13.9	14.5	21.0	20.7	20.8
Houston .....	102.1	97.3	97.2	350.7	366.1	368.2	187.8	189.6	189.7
Killeen—Temple .....	3.0	3.0	3.0	15.0	15.4	15.4	20.8	21.5	21.5
Laredo .....	1.6	1.7	1.7	5.9	5.9	6.1	8.4	8.5	8.6
Longview—Marshall .....	3.1	2.7	2.7	11.2	11.6	11.9	8.4	8.5	8.5
Lubbock .....	5.5	5.2	5.5	21.2	22.0	21.7	21.9	21.3	21.3
McAllen—Edinburg—Mission .....	3.6	3.7	3.7	14.5	14.7	14.6	24.1	25.5	25.1
Midland .....	2.7	2.5	2.5	8.6	8.7	8.7	6.5	7.1	7.2
San Angelo .....	1.8	1.8	1.8	7.6	7.8	7.8	6.6	6.8	6.8
San Antonio .....	39.7	40.4	40.0	120.1	124.5	125.7	116.0	117.5	117.5
Sherman—Denison .....	1.7	1.8	1.7	8.3	8.9	8.8	4.5	4.3	4.3
Texarkana .....	1.9	1.9	1.9	9.3	9.4	9.4	12.5	12.4	12.1
Waco .....	4.7	4.7	4.7	19.9	20.7	20.4	12.4	12.5	12.5
Wichita Falls .....	2.4	2.3	2.3	11.5	11.6	11.6	9.5	9.9	9.8
<b>Utah</b>									
Provo—Orem .....	2.3	2.3	2.3	26.9	29.0	25.6	13.7	13.9	13.9
Salt Lake City—Ogden .....	27.4	27.7	27.8	99.7	104.9	106.5	95.3	94.6	94.5
<b>Vermont</b>									
Barre—Montpelier .....	3.0	3.0	2.9	6.9	8.3	7.7	8.1	8.3	8.4
Burlington .....	3.5	3.7	3.7	17.6	18.6	19.0	11.7	11.9	12.3

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Total			Mining			Construction		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Virginia</b> .....	2,653.5	2,737.8	2,763.4	15.1	15.0	14.9	178.8	181.9	189.0
Bristol .....	31.0	32.3	33.1	.1	.1	.1	.9	.8	.9
Charlottesville .....	65.3	67.7	68.7	.1	.1	.1	3.5	3.6	3.7
Danville .....	39.7	39.9	40.3	.1	.1	.1	1.6	1.7	1.8
Lynchburg .....	71.9	72.5	72.7	.1	.1	.1	3.2	3.2	3.4
Norfolk-Virginia Beach-Newport News .....	546.7	558.5	566.1	.1	.1	.1	38.9	37.9	38.9
Northern Virginia .....	697.6	733.5	738.1	.5	.5	.5	51.3	53.6	55.3
Richmond-Petersburg .....	431.5	447.1	448.0	.5	.5	.5	27.9	29.2	29.8
Roanoke .....	119.5	118.6	118.6	.2	.2	.2	7.2	7.3	7.4
<b>Washington</b> .....	1,815.1	1,876.4	1,901.1	2.9	3.2	3.3	83.1	87.2	92.6
Seattle .....	915.1	960.1	968.6	.5	.6	.6	45.0	48.8	51.0
<b>West Virginia</b> .....	593.1	593.1	599.9	35.7	33.9	33.5	21.8	19.6	22.3
Charleston .....	105.4	104.6	105.4	2.1	2.0	2.1	3.9	3.3	3.7
Huntington-Ashland .....	102.1	101.5	102.5	1.2	1.4	1.4	3.9	3.5	3.9
Parkersburg-Marietta .....	58.9	59.2	59.8	.6	.6	.6	2.6	2.3	2.6
Wheeling .....	57.7	57.5	58.0	2.2	2.0	2.0	1.8	1.6	1.8
<b>Wisconsin</b> .....	2,056.5	2,094.9	2,125.4	2.0	1.6	2.3	63.8	61.9	70.3
Appleton-Oshkosh-Neenah .....	140.8	146.3	147.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.5	5.9	6.2
Eau Claire .....	55.2	56.4	57.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.4	1.5
Green Bay .....	92.6	95.4	96.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.1	2.8	3.1
Janesville-Beloit .....	53.9	55.2	56.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.2	1.0	1.1
Kenosha .....	40.3	41.4	42.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.2	.7	.8
La Crosse .....	51.4	51.6	53.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.1	1.7
Madison .....	197.3	201.1	203.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.9	7.3	7.3
Milwaukee .....	690.0	705.5	711.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	21.0	20.7	21.3
Racine .....	69.0	70.4	70.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.7	1.6	1.8
Wausau .....	45.0	46.0	46.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.4	1.2	1.3
<b>Wyoming</b> .....	175.7	173.5	174.9	16.7	17.2	17.0	9.7	7.2	8.3
<b>Puerto Rico</b> .....	745.5	772.5	773.2	.8	.8	.9	33.6	36.7	36.7
Caguas .....	48.4	50.3	50.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Mayaguez .....	53.4	56.0	55.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Ponce .....	49.3	50.0	49.9	.1	.2	.2	3.0	3.5	3.6
San Juan .....	459.5	478.4	480.8	.4	.5	.5	25.2	27.1	27.1
<b>Virgin Islands</b> .....	39.3	40.8	40.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.6	2.0	2.0

See footnotes at end of table.

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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Virginia</b> .....	427.2	423.8	425.3	140.6	144.2	144.3	596.8	626.6	631.2
Bristol .....	10.3	10.8	11.2	1.1	1.1	1.1	7.6	8.1	8.3
Charlottesville .....	8.7	8.5	8.9	2.2	2.3	2.3	13.0	13.8	14.1
Danville .....	16.6	16.3	16.4	1.0	1.0	1.0	8.1	8.6	8.9
Lynchburg .....	23.9	23.4	23.3	2.9	2.8	2.8	14.5	14.9	15.1
Norfolk-Virginia Beach-Newport News .....	67.1	68.4	69.3	25.9	25.6	25.7	132.3	135.7	137.7
Northern Virginia .....	35.0	35.3	35.4	48.8	51.2	51.7	156.2	166.3	166.6
Richmond-Petersburg .....	62.1	62.5	62.6	22.5	23.4	23.4	102.4	107.9	108.8
Roanoke .....	19.9	19.3	19.2	9.0	8.5	8.5	32.7	31.8	31.8
<b>Washington</b> .....	309.8	324.0	328.9	95.6	99.6	100.7	441.9	453.8	461.5
Seattle .....	178.5	191.1	191.5	57.5	58.9	59.3	221.8	230.7	233.2
<b>West Virginia</b> .....	85.7	84.7	84.9	36.3	36.2	36.5	136.2	139.7	141.7
Charleston .....	11.3	10.8	10.9	8.2	8.5	8.5	27.7	27.8	28.0
Huntington-Ashland .....	19.0	18.9	18.9	7.9	7.6	7.6	26.2	26.2	26.6
Parkersburg-Marietta .....	13.7	13.9	13.8	2.1	2.1	2.1	14.3	14.3	14.6
Wheeling .....	7.1	7.0	7.1	3.2	3.2	3.2	15.4	15.9	15.8
<b>Wisconsin</b> .....	516.5	535.0	538.6	93.4	94.9	95.5	482.7	493.1	502.1
Appleton-Oshkosh-Neenah .....	48.8	51.6	51.8	5.1	5.2	5.2	30.6	30.8	31.4
Eau Claire .....	10.2	10.4	10.6	3.5	3.5	3.7	15.7	16.1	16.7
Green Bay .....	23.9	24.3	24.5	6.3	6.2	6.3	24.6	25.4	25.4
Janesville-Beloit .....	17.1	17.8	17.8	2.3	2.5	2.4	13.2	13.2	13.7
Kenosha .....	13.1	14.7	14.6	1.4	1.2	1.2	8.8	8.7	9.1
La Crosse .....	10.8	11.0	11.2	2.4	2.5	2.5	13.7	14.0	14.2
Madison .....	21.9	22.9	23.0	7.0	7.2	7.3	43.5	45.0	45.5
Milwaukee .....	168.4	172.9	173.8	34.7	35.2	35.4	156.9	160.8	163.2
Racine .....	24.3	24.8	24.7	2.2	2.1	2.2	16.2	16.8	16.7
Wausau .....	12.2	13.0	13.3	2.7	2.9	2.9	11.0	11.1	11.5
<b>Wyoming</b> .....	7.6	7.8	7.9	12.7	12.5	12.6	39.0	38.5	38.7
<b>Puerto Rico</b> .....	149.1	156.3	154.6	16.3	15.5	15.7	132.7	137.0	138.2
Caguas .....	15.1	15.4	15.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.0	9.3	9.4
Mayaguez .....	19.1	20.5	20.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.6	7.8	7.8
Ponce .....	9.7	9.2	9.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.8	7.6	7.7
San Juan .....	64.3	66.4	66.4	12.5	12.5	13.1	91.4	97.0	97.9
<b>Virgin Islands</b> .....	2.1	2.2	2.3	2.6	2.7	2.6	9.4	9.7	9.6

See footnotes at end of table.



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

**B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Virginia</b> .....	141.2	146.0	147.4	621.7	654.4	688.3	532.1	545.9	545.0
Bristol .....	1.2	1.3	1.3	4.7	5.0	5.1	5.2	5.1	5.1
Charlottesville .....	3.5	3.6	3.6	11.7	11.6	12.0	22.6	24.2	24.0
Danville .....	1.2	1.2	1.2	5.8	5.7	5.7	5.2	5.3	5.2
Lynchburg .....	3.8	3.9	4.0	14.4	14.2	14.3	9.3	10.0	9.7
Norfolk-Virginia Beach-Newport News .....	26.1	27.1	27.4	127.9	135.1	138.5	128.4	128.6	128.5
Northern Virginia .....	44.8	48.3	48.4	220.4	234.9	237.2	140.7	143.4	143.0
Richmond-Petersburg .....	35.6	35.5	35.6	90.6	95.4	95.5	90.0	92.7	91.8
Roanoke .....	8.0	8.4	8.5	27.4	27.7	27.7	15.2	15.4	15.3
<b>Washington</b> .....	106.9	107.1	107.7	412.8	436.9	442.3	362.1	364.6	364.1
Seattle .....	67.7	67.7	68.1	212.9	230.2	232.8	131.2	132.1	132.1
<b>West Virginia</b> .....	23.9	24.3	24.4	123.9	123.1	125.4	129.6	131.6	131.2
Charleston .....	6.0	6.0	6.0	25.1	25.2	25.2	21.1	21.2	21.0
Huntington-Ashland .....	3.9	3.8	3.8	20.1	21.2	21.4	19.9	16.9	18.9
Parkersburg-Marietta .....	2.3	2.3	2.3	13.6	13.6	13.8	9.7	10.1	10.0
Wheeling .....	2.6	2.7	2.7	16.0	15.6	15.7	9.4	9.5	9.7
<b>Wisconsin</b> .....	111.3	112.7	113.5	449.1	459.3	464.7	337.7	336.4	338.2
Appleton-Oshkosh-Neenah .....	7.0	7.4	7.5	28.9	27.9	28.0	16.6	17.2	17.2
Eau Claire .....	1.9	1.9	1.9	11.7	12.0	12.3	10.7	11.1	10.9
Green Bay .....	3.3	3.4	3.5	20.3	22.0	22.4	11.0	11.3	11.4
Janesville-Beloit .....	1.6	1.7	1.7	11.6	12.2	12.6	6.7	6.7	7.0
Kenosha .....	1.2	1.3	1.4	8.2	8.3	8.4	6.4	6.5	6.5
La Crosse .....	1.4	1.4	1.5	13.6	14.0	14.3	7.9	7.6	7.7
Madison .....	17.3	17.7	18.1	42.4	43.6	44.1	58.2	57.3	58.2
Milwaukee .....	48.0	48.8	46.7	178.2	184.0	185.7	82.6	83.1	82.8
Racine .....	2.2	2.3	2.3	14.1	14.5	14.7	8.2	8.3	8.1
Wausau .....	3.4	3.4	3.4	7.8	6.2	6.2	6.5	6.2	6.3
<b>Wyoming</b> .....	7.5	7.2	7.2	30.6	30.9	30.9	51.9	52.2	52.3
<b>Puerto Rico</b> .....	34.3	35.9	36.1	109.3	114.4	114.3	269.4	275.8	276.6
Caguas .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	15.3	15.5	15.5
Mayaguez .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	18.0	18.6	18.6
Ponce .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.3	9.4	9.2	16.4	16.9	16.8
San Juan .....	28.0	29.3	29.4	78.7	81.8	81.6	158.9	163.8	164.9
<b>Virgin Islands</b> .....	1.7	1.7	1.7	9.3	9.7	9.7	12.6	12.8	12.9

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

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1987 benchmarks except Colorado. Data for Colorado have been adjusted to December 1986 benchmarks.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private <sup>1</sup>			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
<b>Annual averages</b>									
1964 .....	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965 .....	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966 .....	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967 .....	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968 .....	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969 .....	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970 .....	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971 .....	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972 .....	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973 .....	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974 .....	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975 .....	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976 .....	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977 .....	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978 .....	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979 .....	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980 .....	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981 .....	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982 .....	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983 .....	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984 .....	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985 .....	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986 .....	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987 .....	34.8	8.98	312.50	42.4	12.52	530.85	37.8	12.69	479.68
<b>Monthly data, not seasonally adjusted</b>									
<b>1987:</b>									
May .....	34.8	\$8.93	\$310.76	42.4	\$12.50	\$530.00	38.5	\$12.66	\$487.41
June .....	35.0	8.91	311.85	42.3	12.52	529.60	38.1	12.66	482.35
July .....	35.0	8.90	311.50	42.0	12.41	521.22	38.6	12.60	486.36
August .....	35.2	8.94	314.69	42.7	12.40	529.48	38.6	12.68	489.45
September .....	34.7	9.05	314.04	42.3	12.50	528.75	36.5	12.79	466.84
October .....	34.9	9.08	316.89	42.9	12.42	532.82	38.8	12.82	497.42
November .....	34.8	9.13	317.72	42.6	12.54	534.20	37.1	12.83	475.99
December .....	34.8	9.13	317.72	43.1	12.60	543.06	37.6	12.81	481.66
<b>1988:</b>									
January .....	34.4	9.18	315.79	42.1	12.77	537.62	35.9	12.99	466.34
February .....	34.5	9.17	316.37	41.8	12.71	531.28	36.1	12.82	462.80
March .....	34.4	9.18	315.79	41.9	12.59	527.52	37.4	12.87	481.34
April <sup>1</sup> .....	34.7	9.22	319.93	42.8	12.58	538.42	37.9	12.85	487.02
May <sup>2</sup> .....	34.6	9.26	320.40	42.4	12.53	531.27	38.4	12.87	494.21

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

**C-1. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural 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	2.61	106.49
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	2.88	116.06
1968 .....	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.05	122.31
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	3.44	137.26
1971 .....	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.5	3.65	144.18
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	39.3	4.08	160.34
1974 .....	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.39	170.33
1975 .....	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.7	4.73	183.05
1976 .....	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.03	194.66
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	38.5	6.96	267.96
1981 .....	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.56	291.06
1982 .....	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.09	309.85
1983 .....	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.55	329.18
1984 .....	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.89	342.27
1985 .....	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.16	351.74
1986 .....	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.35	358.11
1987 .....	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
	Monthly data, not seasonally adjusted									
<b>1987:</b>										
May .....	40.9	\$9.87	\$9.45	\$403.68	39.1	\$11.93	\$466.46	38.3	\$9.56	\$366.15
June .....	41.1	9.87	9.44	405.66	39.2	11.94	468.05	38.3	9.54	365.38
July .....	40.6	9.87	9.45	400.72	39.6	12.00	475.20	38.2	9.56	365.19
August .....	40.9	9.86	9.42	403.27	39.7	12.06	478.78	38.3	9.60	367.68
September .....	40.8	9.99	9.53	407.59	39.2	12.11	474.71	38.0	9.64	366.32
October .....	41.3	9.95	9.48	410.94	39.4	12.12	477.53	38.3	9.65	369.60
November .....	41.4	10.01	9.54	414.41	39.3	12.21	479.85	38.2	9.72	371.30
December .....	41.8	10.07	9.59	420.93	39.2	12.24	479.81	38.2	9.73	371.69
<b>1988:</b>										
January .....	41.0	10.07	9.62	412.87	39.0	12.16	474.24	37.9	9.78	370.66
February .....	40.7	10.05	9.63	409.04	38.9	12.23	475.75	37.9	9.78	370.66
March .....	40.9	10.07	9.64	411.86	38.6	12.19	470.53	37.9	9.78	370.66
April <sup>p</sup> .....	41.0	10.11	9.67	414.51	38.9	12.17	473.41	38.2	9.88	377.42
May <sup>p</sup> .....	41.0	10.14	9.70	415.74	38.8	12.18	472.58	38.1	9.88	376.43

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964 .....	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965 .....	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966 .....	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967 .....	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968 .....	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969 .....	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970 .....	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971 .....	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972 .....	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973 .....	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974 .....	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975 .....	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976 .....	32.1	3.57	114.60	36.4	4.27	155.43	33.3	4.31	143.52
1977 .....	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978 .....	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979 .....	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980 .....	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981 .....	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982 .....	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983 .....	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984 .....	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985 .....	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986 .....	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987 .....	29.2	6.11	178.41	36.3	8.73	316.90	32.5	8.48	275.60
Monthly data, not seasonally adjusted									
<b>1987:</b>									
May .....	29.2	\$6.09	\$177.83	36.3	\$8.72	\$316.54	32.4	\$8.40	\$272.16
June .....	29.6	6.08	179.97	36.4	8.63	314.13	32.7	8.37	273.70
July .....	30.0	6.07	182.10	36.2	8.63	312.41	32.8	8.34	273.55
August .....	30.2	6.07	183.31	36.4	8.74	318.14	32.9	8.40	276.36
September .....	29.5	6.20	182.90	36.0	8.73	314.28	32.4	8.54	276.70
October .....	29.1	6.16	179.26	36.2	8.76	317.11	32.5	8.61	279.83
November .....	29.0	6.18	179.22	36.3	8.89	322.71	32.5	8.71	283.08
December .....	29.3	6.19	181.37	36.0	8.81	317.16	32.4	8.73	282.85
<b>1988:</b>									
January .....	28.3	6.24	176.59	36.2	8.96	324.35	32.4	8.81	285.44
February .....	28.5	6.23	177.56	36.4	9.02	328.33	32.6	8.81	287.21
March .....	28.6	6.24	178.46	35.8	8.97	321.13	32.3	8.80	284.24
April <sup>p</sup> .....	28.9	6.25	180.63	36.2	9.05	327.61	32.6	8.82	287.53
May <sup>p</sup> .....	29.0	6.27	181.83	35.7	9.17	327.37	32.4	8.87	287.39

<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>p</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks. Thus, data beginning in April 1986 may differ slightly from those previously published. See the article in this issue for additional information.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Total private .....</b>		34.5	34.8	34.4	34.7	34.6					
<b>Mining .....</b>		41.6	42.4	41.9	42.8	42.4					
Metal mining .....	10	41.8	41.7	42.8	42.9						
Iron ores .....	101	40.0	41.2	41.5	-						
Copper ores .....	102	43.7	42.7	44.6	45.1						
Coal mining .....	11,12	40.9	42.1	42.1	42.1						
Bituminous coal and lignite mining .....	12	41.0	42.2	42.1	42.2						
Oil and gas extraction .....	13	41.0	41.2	41.0	42.2						
Crude petroleum, natural gas, and natural gas liquids .....	131,2	40.5	40.8	40.4	41.8						
Oil and gas field services .....	138	41.3	41.5	41.4	42.4						
Nonmetallic minerals, except fuels .....	14	44.7	46.3	44.3	45.8						
Crushed and broken stone .....	142	45.4	48.0	45.4	47.2						
<b>Construction .....</b>		37.4	38.5	37.4	37.9	38.4					
General building contractors .....	15	37.2	37.8	37.2	37.4						
Residential building construction .....	152	36.7	37.3	36.3	36.5						
Operative builders .....	153	37.4	37.9	38.4	38.2						
Nonresidential building construction .....	154	37.8	38.4	38.0	38.3						
Heavy construction contractors .....	16	40.7	42.8	40.9	42.0						
Highway and street construction .....	161	40.5	43.9	40.3	41.8						
Heavy construction, except highway .....	162	40.8	42.1	41.1	42.0						
Special trade contractors .....	17	36.6	37.6	36.6	37.1						
Plumbing, heating, and air conditioning .....	171	37.8	38.5	38.0	38.3						
Painting, paper hanging, and decorating .....	172	36.0	36.8	35.2	35.9						
Electrical work .....	173	38.3	38.7	38.6	38.6						
Masonry, stonework, and plastering .....	174	34.5	35.5	34.9	35.3						
Carpentering and flooring .....	175	35.2	36.0	35.3	35.5						
Roofing and sheet metal work .....	176	32.7	34.3	33.3	34.3						
<b>Manufacturing .....</b>		40.4	40.9	40.9	41.0	41.0	3.3	3.6	3.6	3.7	3.8
<b>Durable goods .....</b>		41.1	41.5	41.6	41.7	41.8	3.4	3.6	3.8	4.0	4.0
Lumber and wood products .....	24	40.6	41.3	39.9	40.6	40.5	3.6	4.0	3.3	3.5	
Logging camps and logging contractors .....	241	40.2	40.4	39.7	40.3	-	3.8	4.2	3.8	4.2	
Sawmills and planing mills .....	242	41.7	42.6	41.3	41.8		4.4	4.7	4.1	4.3	
Sawmills and planing mills, general .....	2421	42.1	42.8	41.6	42.2		4.7	4.9	4.4	4.7	
Hardwood dimension and flooring .....	2426	40.3	42.0	40.1	40.0		3.4	4.2	3.0	3.0	
Millwork, plywood, and structural members .....	243	41.0	41.8	39.4	40.4		3.5	4.0	2.9	3.2	
Millwork .....	2431	41.1	42.4	39.2	40.5		2.8	3.8	2.1	2.7	
Wood kitchen cabinets .....	2434	40.4	40.3	38.2	39.2		3.3	3.3	2.2	2.7	
Hardwood veneer and plywood .....	2435	40.9	41.3	40.7	40.8		4.0	3.9	3.7	3.6	
Softwood veneer and plywood .....	2436	42.5	43.1	41.2	43.0		5.0	4.9	4.8	4.9	
Wood containers .....	244	38.1	38.5	38.4	39.1		2.7	2.9	3.0	3.3	
Wood buildings and mobile homes .....	245	38.5	39.7	37.9	38.9		2.2	2.8	1.9	2.3	
Mobile homes .....	2451	38.0	38.9	37.3	38.6		1.9	2.3	1.6	2.2	
Miscellaneous wood products .....	249	40.0	40.5	40.6	40.3		3.3	3.2	3.1	2.9	
Furniture and fixtures .....	25	38.8	39.6	39.0	39.1	38.9	2.2	2.5	2.4	2.5	
Household furniture .....	251	38.7	39.3	38.9	38.7	-	2.2	2.4	2.3	2.3	
Wood household furniture .....	2511	39.2	39.8	39.3	39.4		2.5	2.5	2.5	2.6	
Upholstered household furniture .....	2512	37.9	38.2	37.5	37.1		1.8	1.8	1.5	1.5	
Metal household furniture .....	2514	41.0	41.4	42.1	41.2		3.7	4.1	4.0	3.5	
Mattresses and bedsprings .....	2515	37.1	37.7	38.9	38.9		1.7	2.5	2.8	3.1	
Office furniture .....	252	39.0	40.3	39.7	40.2		2.1	2.9	2.1	2.5	
Public building and related furniture .....	253	39.2	39.9	39.8	40.5		2.3	2.6	3.6	3.8	
Partitions and fixtures .....	254	39.1	40.2	39.4	40.1		2.0	2.8	2.8	2.9	
Miscellaneous furniture and fixtures .....	259	38.5	40.0	37.6	37.9		2.1	2.4	1.8	1.9	
Stone, clay, and glass products .....	32	42.1	42.8	42.0	42.5	42.8	4.9	5.3	4.8	5.2	
Flat glass .....	321	45.7	46.3	45.1	45.7	-	6.5	7.1	6.8	7.4	
Glass and glassware, pressed or blown .....	322	41.3	41.3	41.5	41.9		4.5	4.7	4.5	4.7	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Total private .....</b>		\$8.91	\$8.93	\$9.18	\$9.22	\$9.26	\$307.40	\$310.76	\$315.79	\$319.93	\$320.40
<b>Mining .....</b>		12.51	12.50	12.59	12.58	12.53	520.42	530.00	527.52	538.42	531.27
Metal mining .....	10	13.03	12.86	13.08	12.83		544.65	536.26	559.82	550.41	
Iron ores .....	101	15.28	14.14	14.22	-		611.20	582.57	590.13	-	
Copper ores .....	102	11.40	11.48	11.70	11.80		498.18	490.20	521.82	532.18	
Coal mining .....	11,12	15.55	15.61	15.76	15.80		636.00	657.18	663.50	665.18	
Bituminous coal and lignite mining .....	12	15.61	15.67	15.81	15.86		640.01	661.27	665.60	669.29	
Oil and gas extraction .....	13	11.56	11.55	11.58	11.67		473.96	475.86	474.78	492.47	
Crude petroleum, natural gas, and natural gas liquids .....	131,2	13.95	13.96	14.32	14.37		564.98	569.57	578.53	600.67	
Oil and gas field services .....	138	9.97	10.01	10.04	10.18		411.76	415.42	415.66	431.63	
Nonmetallic minerals, except fuels .....	14	10.50	10.56	10.78	10.84		469.35	488.93	477.55	496.47	
Crushed and broken stone .....	142	9.82	10.05	10.14	10.25		445.83	482.40	460.36	483.80	
<b>Construction .....</b>		12.62	12.66	12.87	12.85	12.87	471.99	487.41	481.34	487.02	494.21
General building contractors .....	15	11.60	11.63	12.04	12.08		431.52	439.61	447.89	451.79	
Residential building construction .....	152	10.94	10.92	11.40	11.43		401.50	407.32	413.82	417.20	
Operative builders .....	153	10.16	10.09	10.94	10.79		379.98	382.41	420.10	412.18	
Nonresidential building construction .....	154	12.42	12.50	12.80	12.88		469.48	480.00	486.40	493.30	
Heavy construction contractors .....	16	12.00	12.17	12.01	12.15		488.40	520.88	491.21	510.30	
Highway and street construction .....	161	11.50	11.92	11.76	11.91		465.75	523.29	473.93	497.84	
Heavy construction, except highway .....	162	12.27	12.32	12.12	12.28		500.62	518.67	498.13	515.76	
Special trade contractors .....	17	13.25	13.26	13.47	13.40		484.95	498.58	493.00	497.14	
Plumbing, heating, and air conditioning .....	171	13.53	13.51	13.65	13.72		511.43	520.14	518.70	525.48	
Painting, paper hanging, and decorating .....	172	12.55	12.54	12.83	12.75		451.80	461.47	451.62	457.73	
Electrical work .....	173	14.63	14.69	14.69	14.66		560.33	568.50	567.03	565.88	
Masonry, stonework, and plastering .....	174	13.40	13.53	13.56	13.58		462.30	480.32	473.24	479.37	
Carpentering and flooring .....	175	12.46	12.50	12.70	12.70		438.59	450.00	448.31	450.85	
Roofing and sheet metal work .....	176	11.50	11.57	12.03	11.92		376.05	396.85	400.60	408.86	
<b>Manufacturing .....</b>		9.87	9.87	10.07	10.11	10.14	398.75	403.68	411.86	414.51	415.74
<b>Durable goods .....</b>		10.38	10.38	10.59	10.65	10.67	426.62	430.77	440.54	444.11	446.01
Lumber and wood products .....	24	8.36	8.37	8.45	8.49	8.55	339.42	345.68	337.16	344.69	346.28
Logging camps and logging contractors .....	241	10.64	10.63	10.43	10.58	-	427.73	429.45	414.07	426.37	-
Sawmills and planing mills .....	242	8.58	8.55	8.59	8.65		357.79	364.23	354.77	361.57	
Sawmills and planing mills, general .....	2421	8.95	8.90	8.93	8.99		376.80	380.92	371.49	379.38	
Hardwood dimension and flooring .....	2426	6.73	6.78	6.91	6.95		271.22	284.76	277.09	278.00	
Millwork, plywood, and structural members .....	243	8.29	8.32	8.59	8.56		339.89	347.78	338.45	345.82	
Millwork .....	2431	8.57	8.63	8.88	8.75		352.23	365.91	348.10	354.38	
Wood kitchen cabinets .....	2434	7.66	7.64	7.83	7.88		309.46	307.89	299.11	308.90	
Hardwood veneer and plywood .....	2435	6.79	6.79	6.94	6.99		277.71	280.43	282.46	285.19	
Softwood veneer and plywood .....	2436	9.69	9.65	10.15	10.19		411.83	415.92	418.18	438.17	
Wood containers .....	244	6.09	6.14	6.25	6.33		232.03	236.39	240.00	247.50	
Wood buildings and mobile homes .....	245	7.87	7.86	7.98	8.04		303.00	312.04	302.44	312.76	
Mobile homes .....	2451	7.96	7.92	8.02	8.12		302.48	308.09	299.15	313.43	
Miscellaneous wood products .....	249	7.27	7.32	7.23	7.31		290.80	296.46	293.54	294.59	
Furniture and fixtures .....	25	7.59	7.63	7.76	7.81	7.87	294.49	302.15	302.64	305.37	306.14
Household furniture .....	251	6.99	7.04	7.19	7.22	-	270.51	276.67	279.69	279.41	-
Wood household furniture .....	2511	6.50	6.52	6.72	6.74		254.80	259.50	264.10	265.56	
Upholstered household furniture .....	2512	7.72	7.73	7.93	7.94		292.59	295.29	297.38	294.57	
Metal household furniture .....	2514	6.85	6.98	6.85	6.94		280.85	288.97	288.39	285.93	
Mattresses and bedsprings .....	2515	7.41	7.63	7.73	7.83		274.91	287.65	300.70	304.59	
Office furniture .....	252	8.64	8.67	8.82	8.85		336.96	349.40	350.15	355.77	
Public building and related furniture .....	253	8.04	8.13	8.06	8.21		315.17	324.39	320.79	332.51	
Partitions and fixtures .....	254	9.11	9.07	9.25	9.32		356.20	364.61	364.45	373.73	
Miscellaneous furniture and fixtures .....	259	8.04	8.00	8.23	8.21		309.54	320.00	309.45	311.16	
Stone, clay, and glass products .....	32	10.23	10.26	10.36	10.40	10.45	430.68	439.13	435.12	442.00	447.26
Flat glass .....	321	14.34	14.50	14.71	14.96	-	655.34	671.35	663.42	683.67	-
Glass and glassware, pressed or blown .....	322	11.46	11.37	11.51	11.64		473.30	469.58	477.67	487.72	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products—Continued											
Glass containers .....	3221	41.9	41.8	41.0	41.9		5.6	5.8	5.1	5.7	
Pressed and blown glass, nec .....	3229	40.6	40.7	42.0	41.9		3.3	3.3	3.9	3.6	
Products of purchased glass .....	323	41.1	41.4	41.6	42.0		3.5	3.5	3.2	3.4	
Cement, hydraulic .....	324	41.5	41.3	43.5	42.9		3.6	3.4	4.2	3.8	
Structural clay products .....	325	42.2	42.1	41.7	42.0		4.1	4.1	4.2	4.3	
Pottery and related products .....	326	39.9	40.3	40.3	39.7		2.9	2.7	3.1	3.0	
Concrete, gypsum, and plaster products .....	327	43.3	44.8	42.3	43.4		6.3	7.2	5.9	6.7	
Concrete block and brick .....	3271	45.8	46.7	45.0	45.0		8.2	9.0	7.1	7.9	
Concrete products, nec .....	3272	42.5	43.3	42.5	42.7		5.2	6.0	5.6	6.0	
Ready-mixed concrete .....	3273	42.4	44.8	40.7	42.6		6.1	7.4	5.5	6.6	
Misc. nonmetallic mineral products .....	329	41.6	41.8	42.5	42.6		4.2	4.3	4.7	4.7	
Abrasive products .....	3291	40.5	41.7	43.3	43.1		2.7	2.9	4.0	3.9	
Asbestos products .....	3292	43.2	43.1	43.3	42.5		5.7	5.3	3.9	4.0	
Primary metal industries											
Blast furnaces and basic steel products .....	331	42.9	43.0	43.7	43.8	43.9	4.4	4.6	5.5	5.6	
Blast furnaces and steel mills .....	3312	43.0	43.0	43.9	44.1	-	4.4	4.6	5.6	5.8	
Steel pipe and tubes .....	3317	42.3	42.8	42.9	43.2		4.2	4.9	5.5	5.8	
Iron and steel foundries .....	332	42.1	42.6	43.5	43.6		4.5	4.9	5.3	5.7	
Gray iron foundries .....	3321	41.8	42.3	43.4	43.8		4.8	5.3	5.5	6.2	
Malleable iron foundries .....	3322	41.8	40.5	42.0	41.6		3.2	3.1	4.0	3.5	
Steel foundries, nec .....	3325	41.5	42.8	43.7	43.8		3.6	4.5	5.2	5.4	
Primary nonferrous metals .....	333	43.4	43.5	43.8	44.0		4.5	4.4	4.9	4.8	
Primary aluminum .....	3334	44.1	44.9	44.2	44.4		4.6	5.0	4.8	5.0	
Nonferrous rolling and drawing .....	335	42.8	43.2	43.5	43.4		5.0	5.4	5.6	5.9	
Copper rolling and drawing .....	3351	42.6	42.8	43.8	43.3		5.5	5.5	5.8	5.7	
Aluminum sheet, plate, and foil .....	3353	44.0	44.4	45.4	44.5		7.0	6.7	7.6	7.3	
Nonferrous wire drawing and insulating .....	3357	42.3	42.6	43.2	43.1		4.1	4.7	4.9	5.3	
Nonferrous foundries .....	336	41.0	41.4	41.8	41.9		3.1	3.4	3.9	3.9	
Aluminum foundries .....	3361	41.2	41.9	42.4	42.7		3.4	3.7	4.3	4.3	
Fabricated metal products											
Metal cans and shipping containers .....	341	43.9	44.2	43.5	44.3	41.9	3.2	3.6	3.9	4.0	
Metal cans .....	3411	43.9	44.0	43.7	44.4		5.5	5.8	5.5	5.6	
Cutlery, hand tools, and hardware .....	342	40.3	40.9	41.7	41.8		2.5	3.0	3.7	3.9	
Hand and edge tools, and hand saws and blades ..	3423,5	40.7	41.4	41.6	41.1		2.6	2.9	3.4	3.2	
Hardware, nec .....	3429	39.7	40.3	41.5	42.0		2.5	3.0	3.7	4.3	
Plumbing and heating, except electric ..	343	39.6	40.6	40.6	40.7		2.2	2.9	3.1	3.1	
Plumbing fittings and brass goods .....	3432	40.4	41.3	41.2	41.1		2.0	2.8	3.4	3.4	
Heating equipment, except electric .....	3433	38.6	40.0	39.6	40.0		2.0	2.6	2.3	2.2	
Fabricated structural metal products .....	344	40.1	40.8	40.4	40.7		2.7	3.2	3.2	3.4	
Fabricated structural metal .....	3441	41.2	41.8	41.5	42.0		3.1	3.7	4.0	4.5	
Metal doors, sash, and trim .....	3442	39.4	40.4	38.5	39.8		2.3	3.2	2.1	2.9	
Fabricated plate work (boiler shops) .....	3443	41.0	41.5	42.5	42.1		3.3	3.4	4.2	3.9	
Sheet metal work .....	3444	39.3	39.7	40.1	39.9		2.4	2.9	3.0	2.9	
Architectural metal work .....	3446	40.2	40.6	39.7	39.5		3.0	3.0	3.0	2.8	
Screw machine products, bolts, etc .....	345	42.2	42.8	42.9	42.7		4.3	4.9	5.1	4.9	
Screw machine products .....	3451	40.9	41.0	41.8	41.6		3.1	3.5	4.5	4.2	
Bolts, nuts, rivets, and washers .....	3452	43.6	44.8	44.2	44.1		5.8	6.6	5.9	5.9	
Metal forgings and stampings .....	346	41.8	41.9	42.6	43.1		4.2	4.1	4.7	5.2	
Iron and steel forgings .....	3462	41.1	41.7	43.3	43.3		3.2	3.3	4.5	5.1	
Automotive stampings .....	3465	43.6	42.8	43.7	45.3		5.4	4.9	5.4	6.7	
Metal stampings, nec .....	3469	40.0	40.8	41.2	40.8		3.1	3.4	4.1	3.9	
Metal services, nec .....	347	40.2	40.7	41.1	40.8		3.2	3.4	3.7	3.6	
Plating and polishing .....	3471	40.4	40.4	41.0	40.5		3.1	3.4	3.8	3.5	
Metal coating and allied services .....	3479	39.9	41.2	41.2	41.3		3.3	3.5	3.4	3.7	
Ordnance and accessories, nec .....	348	41.0	41.0	42.0	41.5		2.7	2.9	3.3	3.2	
Ammunition, except for small arms, nec .....	3483	40.0	40.1	41.1	40.6		2.2	2.3	2.7	2.5	
Misc. fabricated metal products .....	349	40.5	41.2	41.9	41.8		2.8	3.3	3.8	3.7	
Valves and pipe fittings .....	3494	40.7	41.5	42.6	42.1		2.8	3.3	4.1	3.7	
Misc. fabricated wire products .....	3496	40.2	40.8	41.0	41.1		2.6	3.3	3.5	3.5	
Machinery, except electrical											
Engines and turbines .....	351	42.8	42.2	44.2	44.4	42.4	3.4	3.7	4.3	4.3	
Turbines and turbine generator sets .....	3511	39.0	39.5	42.5	43.1	-	5.8	4.7	5.2	5.4	
Internal combustion engines, nec .....	3519	44.1	43.1	44.7	44.8		6.6	5.1	5.5	5.5	
Farm and garden machinery .....	352	41.5	41.5	43.7	43.7		3.3	3.2	4.2	4.3	
Farm machinery and equipment .....	3523	41.5	42.0	43.9	44.1		3.4	3.6	4.3	4.7	

See footnotes at end of table.

ESTABLISHMENT DATA  
HOURS AND EARNINGS  
NOT SEASONALLY ADJUSTED

C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products—Continued											
Glass containers .....	3221	\$12.00	\$11.88	\$11.93	\$12.15		\$502.80	\$496.58	\$489.13	\$509.09	
Pressed and blown glass, nec .....	3229	10.82	10.75	11.06	11.05		439.29	437.53	464.52	463.00	
Products of purchased glass .....	323	9.04	8.92	8.86	8.97		371.54	369.29	368.58	376.74	
Cement, hydraulic .....	324	13.48	13.41	13.26	13.14		559.42	553.83	576.81	563.71	
Structural clay products .....	325	8.46	8.43	8.72	8.85		357.01	354.90	363.62	371.70	
Pottery and related products .....	326	8.83	8.85	9.14	9.25		352.32	356.66	368.34	367.23	
Concrete, gypsum, and plaster products .....	327	9.92	10.07	10.10	10.09		429.54	451.14	427.23	437.91	
Concrete block and brick .....	3271	8.86	8.90	9.14	9.31		405.79	415.63	411.30	418.95	
Concrete products, nec .....	3272	8.72	8.87	9.07	9.00		370.60	384.07	385.48	384.30	
Ready-mixed concrete .....	3273	10.82	10.96	10.99	10.90		458.77	491.01	447.29	464.34	
Misc. nonmetallic mineral products .....	329	10.33	10.33	10.55	10.56		429.73	431.79	448.38	449.86	
Abrasive products .....	3291	9.76	9.81	10.08	10.07		395.28	409.08	436.46	434.02	
Asbestos products .....	3292	10.33	10.27	10.36	10.64		446.26	442.64	448.59	452.20	
Primary metal industries .....	33	11.92	11.92	12.07	12.12	\$12.14	506.60	510.18	523.84	526.01	\$529.30
Blast furnaces and basic steel products .....	331	13.78	13.73	13.89	13.96	13.99	591.16	590.39	606.99	611.45	614.16
Blast furnaces and steel mills .....	3312	14.49	14.43	14.63	14.68	-	623.07	620.49	642.26	647.39	-
Steel pipe and tubes .....	3317	11.01	11.16	10.94	10.92		465.72	477.65	469.33	471.74	
Iron and steel foundries .....	332	10.75	10.79	10.86	10.97		452.58	459.65	472.41	478.29	
Gray iron foundries .....	3321	11.20	11.24	11.38	11.55		468.16	475.45	493.89	505.89	
Malleable iron foundries .....	3322	11.60	11.58	11.66	11.52		484.88	468.99	489.72	479.23	
Steel foundries, nec .....	3325	10.10	10.17	10.18	10.20		419.15	435.28	444.87	446.76	
Primary nonferrous metals .....	333	12.84	12.87	13.17	13.19		557.26	559.85	576.85	580.36	
Primary aluminum .....	3334	13.26	13.29	13.59	13.59		584.77	596.72	600.68	603.40	
Nonferrous rolling and drawing .....	335	11.33	11.39	11.51	11.55		484.92	492.05	500.69	501.27	
Copper rolling and drawing .....	3351	10.56	10.60	10.75	10.78		449.86	453.68	470.85	466.77	
Aluminum sheet, plate, and foil .....	3353	13.77	13.92	13.89	13.81		605.88	618.05	630.61	614.55	
Nonferrous wire drawing and insulating .....	3357	11.20	11.29	11.60	11.75		473.76	480.95	501.12	506.43	
Nonferrous foundries .....	336	9.58	9.52	9.59	9.62		392.78	394.13	400.86	403.08	
Aluminum foundries .....	3361	9.90	9.78	9.84	9.82		407.88	409.78	417.22	419.31	
Fabricated metal products .....	34	9.95	9.94	10.14	10.22	10.23	406.96	410.52	421.82	426.17	428.64
Metal cans and shipping containers .....	341	13.16	13.16	13.43	13.51	-	577.72	581.67	584.21	598.49	-
Metal cans .....	3411	13.92	13.93	14.31	14.38		611.09	612.92	625.35	638.47	
Cutlery, hand tools, and hardware .....	342	9.89	9.87	10.02	10.25		398.57	403.68	417.83	428.45	
Hand and edge tools, and hand saws and blades .....	3423,5	9.17	9.16	9.24	9.30		373.22	379.22	384.38	382.23	
Hardware, nec .....	3429	10.23	10.21	10.37	10.75		406.13	411.46	430.36	451.50	
Plumbing and heating, except electric .....	343	9.12	9.15	9.25	9.23		361.15	371.49	375.55	375.66	
Plumbing fittings and brass goods .....	3432	8.64	8.73	8.88	8.89		349.06	360.55	365.86	365.38	
Heating equipment, except electric .....	3433	9.12	9.10	8.94	8.94		352.03	364.00	354.02	357.60	
Fabricated structural metal products .....	344	9.22	9.23	9.50	9.47		369.72	376.58	383.80	385.43	
Fabricated structural metal .....	3441	9.69	9.79	10.13	10.11		399.23	409.22	420.40	424.62	
Metal doors, sash, and trim .....	3442	7.66	7.66	8.00	8.04		301.80	309.46	308.00	319.99	
Fabricated plate work (boiler shops) .....	3443	10.25	10.15	10.26	10.23		420.25	421.23	436.05	430.68	
Sheet metal work .....	3444	9.57	9.61	9.77	9.76		376.10	381.52	391.78	389.42	
Architectural metal work .....	3446	8.83	8.87	8.89	8.81		354.97	360.12	352.93	348.00	
Screw machine products, bolts, etc .....	345	9.60	9.76	9.94	9.94		405.12	417.73	426.43	424.44	
Screw machine products .....	3451	8.91	9.07	9.30	9.27		364.42	371.87	388.74	385.63	
Bolts, nuts, rivets, and washers .....	3452	10.34	10.49	10.67	10.72		450.82	469.95	471.61	472.75	
Metal forgings and stampings .....	346	11.71	11.66	12.04	12.30		489.48	488.55	512.90	530.13	
Iron and steel forgings .....	3462	12.43	12.39	12.75	13.00		510.87	516.66	552.08	562.90	
Automotive stampings .....	3465	13.51	13.47	14.14	14.47		589.04	576.52	617.92	655.49	
Metal stampings, nec .....	3469	9.21	9.19	9.41	9.49		368.40	374.95	387.69	387.19	
Metal services, nec .....	347	8.03	7.95	8.12	8.20		322.81	323.57	333.73	334.56	
Plating and polishing .....	3471	7.95	7.90	8.19	8.22		321.18	319.16	335.79	332.91	
Metal coating and allied services .....	3479	8.19	8.04	8.00	8.16		326.78	331.25	329.60	337.01	
Ordnance and accessories, nec .....	348	10.87	10.86	11.22	11.19		445.67	445.26	471.24	464.39	
Ammunition, except for small arms, nec .....	3483	10.45	10.44	10.86	10.81		418.00	418.64	446.35	438.89	
Misc. fabricated metal products .....	349	9.25	9.28	9.37	9.40		374.63	382.34	392.60	392.92	
Valves and pipe fittings .....	3494	9.83	9.87	10.19	10.22		400.08	409.61	434.09	430.26	
Misc. fabricated wire products .....	3496	8.38	8.43	8.32	8.33		336.88	343.94	341.12	342.36	
Machinery, except electrical .....	35	10.63	10.63	10.84	10.88	10.91	442.21	446.46	462.87	463.49	462.58
Engines and turbines .....	351	13.52	13.27	13.55	13.64	-	578.66	559.99	598.91	605.62	-
Turbines and turbine generator sets .....	3511	12.77	12.69	13.88	13.82		498.03	501.26	589.90	595.64	
Internal combustion engines, nec .....	3519	13.74	13.44	13.46	13.59		605.93	579.26	601.66	608.83	
Farm and garden machinery .....	352	9.90	9.84	9.81	9.84		410.85	408.36	428.70	430.01	
Farm machinery and equipment .....	3523	10.69	10.59	10.51	10.54		443.64	444.78	461.39	464.81	

See footnotes at end of table.



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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Machinery, except electrical—Continued											
Construction and related machinery .....	353	41.9	42.3	43.5	43.4		2.9	3.4	4.3	4.4	
Construction machinery .....	3531	42.9	42.7	44.9	44.3		2.7	3.1	4.0	4.2	
Mining machinery .....	3532	41.2	42.3	43.2	42.7		3.1	4.3	5.0	4.7	
Oil field machinery .....	3533	42.6	43.0	43.6	44.5		4.5	5.1	5.9	6.3	
Conveyors and conveying equipment .....	3535	41.7	42.3	42.7	42.8		3.3	3.8	4.5	4.4	
Industrial trucks and tractors .....	3537	39.8	40.4	41.1	41.4		2.1	2.4	3.1	3.0	
Metalworking machinery .....	354	41.8	42.1	43.4	43.1		4.0	4.3	5.3	5.0	
Machine tools, metal cutting types .....	3541	41.2	41.6	42.9	42.4		2.9	3.3	4.6	3.9	
Machine tools, metal forming types .....	3542	40.4	41.4	44.6	44.3		3.5	4.1	6.1	5.7	
Special dies, tools, jigs, and fixtures .....	3544	42.8	42.7	44.0	43.7		5.0	5.0	6.0	5.7	
Machine tool accessories .....	3545	40.6	41.3	42.1	42.2		3.1	3.7	4.6	4.3	
Power driven hand tools .....	3546	39.4	40.9	42.7	42.0		2.0	3.1	3.3	3.5	
Special industry machinery .....	355	41.3	41.9	42.2	42.1		3.4	3.9	4.5	4.5	
Food products machinery .....	3551	40.9	41.8	42.2	42.6		2.8	3.5	3.9	4.1	
Textile machinery .....	3552	42.8	43.6	42.7	42.6		3.8	4.5	4.1	3.9	
Printing trades machinery .....	3555	39.5	40.9	40.6	39.3		3.1	4.1	5.1	4.8	
General industrial machinery .....	356	41.6	42.1	42.9	42.9		3.1	3.5	4.3	4.7	
Pumps and pumping equipment .....	3561	41.1	42.6	43.7	44.0		2.6	3.5	4.4	4.4	
Ball and roller bearings .....	3562	43.6	43.2	44.2	44.1		4.8	4.6	5.4	6.2	
Air and gas compressors .....	3563	41.5	42.5	43.1	42.6		2.8	3.2	5.2	5.5	
Blowers and fans .....	3564	39.9	42.0	40.6	40.9		1.6	2.8	2.1	2.4	
Speed changers, drives, and gears .....	3566	42.7	41.8	44.5	44.5		3.7	3.5	5.5	5.8	
Power transmission equipment, nec .....	3568	40.9	41.0	42.2	41.6		3.6	3.5	5.0	4.7	
Office and computing machines .....	357	42.1	42.5	41.6	41.2		3.1	3.2	3.2	3.1	
Electronic computing equipment .....	3573	41.9	42.5	42.2	41.7		3.1	3.2	3.2	3.0	
Refrigeration and service machinery .....	358	40.9	41.6	41.7	41.7		2.7	3.3	3.5	3.4	
Refrigeration and heating equipment .....	3585	40.9	41.8	42.0	42.3		2.5	3.3	3.7	3.6	
Misc. machinery, except electrical .....	359	41.0	41.5	42.0	42.0		3.4	3.6	4.5	4.4	
Carburetors, pistons, rings, and valves .....	3592	41.5	41.4	42.7	43.1		3.6	3.7	4.8	5.3	
Machinery, except electrical, nec .....	3599	41.0	41.5	41.9	41.9		3.4	3.6	4.5	4.3	
Electrical and electronic equipment .....	36	40.3	40.6	40.9	40.8	40.8	2.6	2.7	3.0	3.0	
Electric distributing equipment .....	361	39.9	40.5	42.4	42.3	-	2.1	2.4	3.6	3.4	
Transformers .....	3612	40.4	41.2	42.3	42.2		1.9	2.5	3.6	3.5	
Switchgear and switchboard apparatus .....	3613	39.6	40.0	42.6	42.3		2.4	2.4	3.5	3.3	
Electrical industrial apparatus .....	362	40.4	40.8	42.3	42.0		2.5	2.9	4.0	3.7	
Motors and generators .....	3621	40.4	40.7	42.1	42.1		2.8	3.2	4.2	4.1	
Industrial controls .....	3622	39.8	40.3	41.9	40.9		1.7	2.0	3.2	2.4	
Household appliances .....	363	39.9	39.9	39.6	39.5		2.4	2.6	2.3	2.3	
Household refrigerators and freezers .....	3632	40.8	40.2	40.2	39.7		2.5	2.9	3.5	3.1	
Household laundry equipment .....	3633	40.1	40.5	40.0	39.8		2.1	2.4	1.5	1.7	
Electric housewares and fans .....	3634	40.4	39.9	40.4	40.1		2.5	2.5	2.8	2.6	
Electric lighting and wiring equipment .....	364	39.4	39.8	40.3	40.3		2.4	2.5	3.0	3.0	
Electric lamps .....	3641	40.1	40.0	40.5	40.3		2.6	2.7	3.4	3.1	
Current-carrying wiring devices .....	3643	39.0	40.0	39.9	40.3		2.4	2.6	2.8	3.0	
Noncurrent-carrying wiring devices .....	3644	40.5	40.6	42.1	40.4		2.5	2.7	3.5	2.4	
Residential lighting fixtures .....	3645	37.6	37.9	38.3	38.4		.9	1.1	1.7	1.7	
Radio and TV receiving equipment .....	365	40.4	40.3	39.8	40.1		2.1	2.0	2.2	2.9	
Radio and TV receiving sets .....	3651	40.6	40.5	39.6	39.9		1.4	1.4	1.6	2.4	
Communication equipment .....	366	40.9	41.3	41.1	40.9		2.3	2.5	2.6	2.5	
Telephone and telegraph apparatus .....	3661	41.1	41.9	43.0	42.9		2.0	2.6	3.3	3.3	
Radio and TV communication equipment .....	3662	40.9	41.1	40.4	40.2		2.4	2.5	2.4	2.2	
Electronic components and accessories .....	367	40.3	40.8	40.6	40.4		3.0	3.0	3.2	3.1	
Electronic tubes .....	3671-3	42.8	41.9	42.1	42.9		2.5	2.6	2.4	2.7	
Semiconductors and related devices .....	3674	40.3	40.5	40.2	40.1		4.1	3.4	3.4	3.4	
Electronic components, nec .....	3679	40.2	41.1	40.9	40.4		2.8	3.1	3.3	3.1	
Misc. electrical equipment and supplies .....	369	39.9	40.5	41.6	41.9		2.7	3.1	3.3	3.8	
Storage batteries .....	3691	38.5	40.6	41.5	40.9		1.7	3.1	2.7	2.7	
Engine electrical equipment .....	3694	40.7	41.0	41.9	42.8		3.8	3.8	3.8	4.9	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>
<b>Durable goods—Continued</b>											
Machinery, except electrical—Continued											
Construction and related machinery .....	353	\$11.00	\$10.96	\$11.06	\$11.05		\$460.90	\$463.61	\$481.11	\$479.57	
Construction machinery .....	3531	12.18	12.12	12.28	12.33		522.52	517.52	551.37	546.22	
Mining machinery .....	3532	11.20	11.34	11.53	11.39		461.44	479.68	498.10	486.35	
Oil field machinery .....	3533	11.20	11.14	10.73	10.70		477.12	479.02	467.83	476.15	
Conveyors and conveying equipment .....	3535	9.71	9.71	9.77	9.84		404.91	410.73	417.18	421.15	
Industrial trucks and tractors .....	3537	9.69	9.64	9.72	9.79		385.66	389.46	399.49	405.31	
Metalworking machinery .....	354	11.08	11.06	11.30	11.31		463.14	465.63	490.42	487.46	
Machine tools, metal cutting types .....	3541	10.92	10.98	11.27	11.18		449.90	456.77	483.48	474.03	
Machine tools, metal forming types .....	3542	11.42	11.48	11.71	11.77		461.37	475.27	522.27	521.41	
Special dies, tools, jigs, and fixtures .....	3544	11.86	11.81	12.04	12.11		507.61	504.29	529.76	529.21	
Machine tool accessories .....	3545	9.88	9.90	10.12	10.09		401.13	408.87	426.05	425.80	
Power driven hand tools .....	3546	8.58	8.52	8.84	8.85		338.05	348.47	377.47	371.70	
Special industry machinery .....	355	10.54	10.60	10.96	10.99		435.30	444.14	462.51	462.68	
Food products machinery .....	3551	10.57	10.62	10.97	10.96		432.31	443.92	462.93	466.90	
Textile machinery .....	3552	8.59	8.75	9.11	9.15		367.65	381.50	389.00	389.79	
Printing trades machinery .....	3555	11.24	11.30	11.86	11.92		443.98	462.17	481.52	468.46	
General industrial machinery .....	356	10.26	10.30	10.46	10.58		426.82	433.63	448.73	453.88	
Pumps and pumping equipment .....	3561	10.88	10.98	11.04	11.17		447.17	467.75	482.45	491.48	
Ball and roller bearings .....	3562	10.87	10.92	10.93	11.15		473.93	471.74	483.11	491.72	
Air and gas compressors .....	3563	10.18	10.30	10.45	10.50		422.47	437.75	450.40	447.30	
Blowers and fans .....	3564	9.12	9.08	9.27	9.30		363.89	381.36	376.36	380.37	
Speed changers, drives, and gears .....	3566	10.06	10.14	10.40	10.52		429.56	423.85	462.80	468.14	
Power transmission equipment, nec .....	3568	10.55	10.52	10.60	10.63		431.50	431.32	447.32	442.21	
Office and computing machines .....	357	10.13	10.18	10.46	10.60		426.47	432.65	435.14	436.72	
Electronic computing equipment .....	3573	10.14	10.18	10.45	10.61		424.87	432.65	440.99	442.44	
Refrigeration and service machinery .....	358	10.22	10.24	10.54	10.51		418.00	425.98	439.52	438.27	
Refrigeration and heating equipment .....	3585	10.43	10.45	10.75	10.70		426.59	436.81	451.50	452.61	
Misc. machinery, except electrical .....	359	10.30	10.34	10.57	10.55		422.30	429.11	443.94	443.10	
Carburetors, pistons, rings, and valves .....	3592	12.56	12.74	12.95	12.99		521.24	527.44	552.97	559.87	
Machinery, except electrical, nec .....	3599	9.97	9.99	10.25	10.22		408.77	414.59	429.48	428.22	
Electrical and electronic equipment .....	36	9.81	9.81	10.04	10.09	\$10.11	395.34	398.29	410.64	411.67	\$412.49
Electric distributing equipment .....	361	9.11	9.10	9.39	9.38		363.49	368.55	398.14	396.77	
Transformers .....	3612	8.97	8.97	9.19	9.18		362.39	369.56	388.74	387.40	
Switchgear and switchboard apparatus .....	3613	9.24	9.22	9.56	9.56		365.90	368.80	407.26	404.39	
Electrical industrial apparatus .....	362	9.72	9.76	9.99	10.02		392.69	398.21	422.58	420.84	
Motors and generators .....	3621	9.61	9.64	9.99	10.03		388.24	392.35	420.58	422.26	
Industrial controls .....	3622	9.59	9.61	9.86	9.86		381.68	387.28	413.13	403.27	
Household appliances .....	363	9.70	9.71	10.05	10.04		387.03	387.43	397.98	396.58	
Household refrigerators and freezers .....	3632	11.00	11.04	11.69	11.55		448.80	443.81	469.94	458.54	
Household laundry equipment .....	3633	11.41	11.50	11.72	11.85		457.54	465.75	468.80	471.63	
Electric housewares and fans .....	3634	7.37	7.37	7.37	7.31		297.75	294.06	297.75	293.13	
Electric lighting and wiring equipment .....	364	9.10	9.07	9.37	9.46		358.54	360.99	377.61	381.24	
Electric lamps .....	3641	10.11	10.20	10.66	10.75		405.41	408.00	431.73	433.23	
Current-carrying wiring devices .....	3643	8.66	8.59	8.96	9.03		337.74	343.60	357.50	363.91	
Noncurrent-carrying wiring devices .....	3644	9.28	9.30	9.32	9.34		375.84	377.58	392.37	377.34	
Residential lighting fixtures .....	3645	6.65	6.73	6.87	6.90		250.04	255.07	263.12	264.96	
Radio and TV receiving equipment .....	365	9.23	9.16	9.31	9.60		372.89	369.15	370.54	384.96	
Radio and TV receiving sets .....	3651	9.55	9.47	9.73	9.97		387.73	383.54	385.31	397.80	
Communication equipment .....	366	11.63	11.66	11.94	12.01		475.67	481.56	490.73	491.21	
Telephone and telegraph apparatus .....	3661	11.21	11.21	11.44	11.45		460.73	469.70	491.92	491.21	
Radio and TV communication equipment .....	3662	11.78	11.84	12.14	12.24		481.80	486.62	490.46	492.05	
Electronic components and accessories .....	367	8.84	8.82	9.04	9.05		356.25	359.86	367.02	365.62	
Electronic tubes .....	3671-3	11.09	11.01	11.36	11.19		474.65	461.32	478.26	480.05	
Semiconductors and related devices .....	3674	10.52	10.51	11.00	11.04		423.96	425.66	442.20	442.70	
Electronic components, nec .....	3679	8.05	8.05	8.13	8.11		323.61	330.86	332.52	327.64	
Misc. electrical equipment and supplies .....	369	10.55	10.56	10.73	10.78		420.95	427.68	446.37	451.68	
Storage batteries .....	3691	11.04	11.11	11.30	11.14		425.04	451.07	468.95	455.63	
Engine electrical equipment .....	3694	11.21	11.20	11.40	11.58		456.25	459.20	477.66	495.62	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	41.9	42.2	42.5	42.9	43.1	3.9	4.2	4.3	4.8	
Motor vehicles and equipment .....	371	42.2	42.5	43.0	44.1	44.6	4.0	4.3	4.6	5.7	
Motor vehicles and car bodies .....	3711	42.0	42.2	42.9	44.2	-	3.8	4.1	4.4	5.6	
Truck and bus bodies .....	3713	41.4	41.9	43.4	42.8		3.6	3.9	4.5	4.3	
Motor vehicle parts and accessories .....	3714	42.7	43.1	43.4	44.5		4.4	4.7	5.0	6.2	
Truck trailers .....	3715	40.7	41.1	40.2	40.3		2.8	3.4	2.4	2.4	
Aircraft and parts .....	372	42.0	42.4	42.5	41.7		4.3	4.7	4.6	4.2	
Aircraft .....	3721	41.6	42.2	42.0	41.3		3.9	4.3	4.2	3.7	
Aircraft engines and engine parts .....	3724	41.8	42.2	42.1	41.2		4.2	4.6	4.2	3.8	
Aircraft equipment, nec .....	3728	42.6	42.9	43.6	42.7		4.9	5.2	5.5	5.2	
Ship and boat building and repairing .....	373	40.7	40.8	40.7	41.1		2.8	2.9	2.9	3.2	
Ship building and repairing .....	3731	40.5	40.6	41.1	41.4		2.5	2.7	3.1	3.1	
Boat building and repairing .....	3732	41.1	41.1	40.1	40.4		3.2	3.4	2.6	3.3	
Railroad equipment .....	374	39.9	40.2	42.9	42.7		2.0	1.2	3.9	4.0	
Guided missiles, space vehicles, and parts .....	376	42.5	42.0	43.0	42.6		4.1	3.9	4.0	4.2	
Guided missiles and space vehicles .....	3761	42.7	42.1	43.1	42.5		4.4	4.0	4.2	4.3	
Miscellaneous transportation equipment .....	379	40.1	39.7	39.9	40.7		3.5	3.5	2.7	3.6	
Travel trailers and campers .....	3792	38.0	37.6	37.8	39.6		2.0	1.8	1.3	3.0	
Instruments and related products .....	38	40.8	41.2	41.6	41.4	41.2	2.5	2.8	3.2	2.9	
Engineering and scientific instruments .....	381	41.0	41.2	41.8	42.1	-	2.4	2.8	3.1	2.9	
Measuring and controlling devices .....	382	40.7	41.0	41.7	41.1		2.2	2.6	3.1	2.6	
Environmental controls .....	3822	39.7	40.3	40.0	38.6		2.4	2.7	3.1	2.0	
Process control instruments .....	3823	42.4	42.6	44.1	42.8		2.8	3.1	4.3	3.4	
Instruments to measure electricity .....	3825	39.6	39.9	41.4	40.9		1.7	2.0	2.9	2.4	
Optical instruments and lenses .....	383	40.8	41.4	43.4	42.7		2.6	2.7	3.6	3.1	
Medical instruments and supplies .....	384	40.2	40.6	41.0	41.3		2.5	2.9	3.1	2.9	
Surgical and medical instruments .....	3841	40.8	41.2	40.9	41.7		2.9	3.2	2.9	2.8	
Surgical appliances and supplies .....	3842	39.5	40.1	41.1	40.8		2.1	2.5	3.3	3.1	
Ophthalmic goods .....	385	40.0	40.8	40.2	39.9		2.5	2.6	2.9	2.9	
Photographic equipment and supplies .....	386	43.3	42.9	43.0	-		3.5	3.5	3.8	-	
Watches, clocks, and watchcases .....	387	39.1	41.6	39.1	38.9		1.7	2.8	1.5	1.1	
Miscellaneous manufacturing .....	39	38.9	39.2	39.2	39.1	39.1	2.2	2.5	2.3	2.3	
Jewelry, silverware, and plated ware .....	391	38.0	38.5	37.6	38.2	-	2.0	1.9	1.7	1.8	
Jewelry, precious metal .....	3911	37.2	37.6	36.7	37.2		1.6	1.4	1.2	1.4	
Musical instruments .....	393	40.7	41.0	41.3	41.6		2.8	3.1	2.8	3.1	
Toys and sporting goods .....	394	38.7	39.1	39.3	38.9		2.0	2.2	2.3	2.2	
Dolls, games, toys, and children's vehicles .....	3942,4	38.2	38.3	38.5	37.8		1.8	1.9	1.6	1.2	
Sporting and athletic goods, nec .....	3949	39.1	39.7	39.9	39.7		2.1	2.4	2.8	3.0	
Pens, pencils, office, and art supplies .....	395	39.9	40.5	40.8	40.0		1.8	2.6	2.6	2.2	
Costume jewelry and notions .....	396	36.6	37.2	37.9	37.9		2.4	2.9	1.5	1.6	
Costume jewelry .....	3961	34.1	34.8	36.3	36.9		1.9	2.5	.6	.8	
Miscellaneous manufactures .....	399	39.8	39.8	39.5	39.4		2.3	2.7	2.8	2.6	
Signs and advertising displays .....	3993	39.7	39.8	39.0	39.7		2.3	2.5	2.5	2.7	
<b>Nondurable goods .....</b>		39.5	40.2	40.0	39.9	40.0	3.2	3.5	3.4	3.4	3.5
Food and kindred products .....	20	39.4	40.1	39.6	39.6	40.2	3.5	3.8	3.5	3.6	-
Meat products .....	201	38.5	39.4	38.7	39.2	-	2.9	3.5	3.2	3.5	
Meat packing plants .....	2011	40.8	41.4	40.2	40.4		4.0	4.6	4.1	3.9	
Sausages and other prepared meats .....	2013	39.8	40.4	39.3	39.6		3.0	3.6	3.4	3.7	
Poultry dressing plants .....	2016	36.4	37.8	37.2	38.2		2.2	2.9	2.4	3.0	
Dairy products .....	202	41.3	41.6	41.0	40.7		4.5	4.8	4.0	3.9	
Cheese, natural and processed .....	2022	39.1	39.7	39.6	38.7		3.9	4.0	3.5	3.2	
Fluid milk .....	2026	42.6	42.8	41.6	41.8		5.2	5.3	4.4	4.3	
Preserved fruits and vegetables .....	203	38.0	38.7	38.7	38.6		2.7	2.9	2.8	3.0	
Canned specialties .....	2032	37.2	37.9	37.5	39.0		1.5	1.9	3.0	4.5	
Canned fruits and vegetables .....	2033	37.7	39.1	38.8	38.3		2.8	3.2	2.7	3.0	
Frozen fruits and vegetables .....	2037	36.6	38.4	37.9	37.3		2.8	2.8	2.2	2.6	
Grain mill products .....	204	43.1	43.6	43.3	43.4		5.3	5.4	5.1	5.5	
Flour and other grain mill products .....	2041	46.1	46.3	43.4	44.8		6.0	5.6	4.6	5.4	
Prepared feeds, nec .....	2048	42.9	43.2	42.9	42.6		5.5	5.9	5.1	5.1	
Bakery products .....	205	40.1	40.0	39.4	39.5		3.9	3.9	3.5	3.6	
Bread, cake, and related products .....	2051	39.1	39.2	38.5	38.9		3.9	4.0	3.6	3.9	
Cookies and crackers .....	2052	42.5	41.9	41.7	41.0		3.8	3.5	3.1	2.7	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Durable goods—Continued</b>											
Transportation equipment .....	37	\$12.79	\$12.85	\$13.20	\$13.29	\$13.29	\$535.90	\$542.27	\$561.00	\$570.14	\$572.80
Motor vehicles and equipment .....	371	13.41	13.43	13.93	14.10	14.07	565.90	570.78	598.99	621.81	627.52
Motor vehicles and car bodies .....	3711	15.05	15.12	15.95	16.05	-	632.10	638.06	684.26	709.41	-
Truck and bus bodies .....	3713	11.36	11.43	11.75	11.80	-	470.30	478.92	509.95	505.04	-
Motor vehicle parts and accessories .....	3714	12.61	12.60	13.04	13.29	-	538.45	543.06	565.94	591.41	-
Truck trailers .....	3715	9.36	9.36	9.20	9.24	-	380.95	384.70	369.84	372.37	-
Aircraft and parts .....	372	12.98	13.08	13.43	13.40	-	545.16	554.59	570.78	558.78	-
Aircraft .....	3721	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	-	-	-	-	-	-
Aircraft engines and engine parts .....	3724	\$13.06	\$13.11	\$13.58	\$13.55	-	545.91	553.24	571.72	558.26	-
Aircraft equipment, nec .....	3728	12.05	12.18	12.50	12.48	-	513.33	522.52	545.00	532.90	-
Ship and boat building and repairing .....	373	10.15	10.28	10.40	10.35	-	413.11	419.42	423.28	425.39	-
Ship building and repairing .....	3731	11.45	11.64	11.59	11.50	-	463.73	472.58	476.35	476.10	-
Boat building and repairing .....	3732	7.93	7.97	8.19	8.30	-	325.92	327.57	328.42	335.32	-
Railroad equipment .....	374	12.17	11.80	12.01	12.03	-	485.58	474.36	515.23	513.68	-
Guided missiles, space vehicles, and parts .....	376	12.33	12.41	13.01	13.02	-	524.03	521.22	559.43	554.65	-
Guided missiles and space vehicles .....	3761	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	-	-	-	-	-	-
Miscellaneous transportation equipment .....	379	\$10.64	\$10.61	\$10.24	\$10.32	-	426.66	421.22	\$408.58	\$420.02	-
Travel trailers and campers .....	3792	8.82	8.97	8.58	8.77	-	335.16	337.27	324.32	347.29	-
Instruments and related products .....	38	9.65	9.66	9.88	9.87	9.91	393.72	397.99	411.01	408.62	408.29
Engineering and scientific instruments .....	381	10.52	10.62	10.83	10.73	-	431.32	437.54	452.69	451.73	-
Measuring and controlling devices .....	382	9.43	9.48	9.76	9.78	-	383.80	388.68	406.99	401.96	-
Environmental controls .....	3822	8.95	8.83	9.18	9.14	-	355.32	355.85	367.20	352.80	-
Process control instruments .....	3823	9.39	9.43	9.52	9.46	-	398.14	401.72	419.83	404.89	-
Instruments to measure electricity .....	3825	9.56	9.71	10.07	10.13	-	378.58	387.43	416.90	414.32	-
Optical instruments and lenses .....	383	10.59	10.49	10.59	10.48	-	432.07	434.29	459.61	447.50	-
Medical instruments and supplies .....	384	8.64	8.64	8.85	8.78	-	347.33	350.78	362.85	362.61	-
Surgical and medical instruments .....	3841	8.77	8.72	9.08	9.00	-	357.82	359.26	371.37	375.30	-
Surgical appliances and supplies .....	3842	8.50	8.52	8.59	8.49	-	335.75	341.65	353.05	346.39	-
Ophthalmic goods .....	385	7.28	7.29	7.47	7.42	-	291.20	297.43	300.29	296.06	-
Photographic equipment and supplies .....	386	13.05	13.09	13.54	-	-	565.07	561.56	582.22	-	-
Watches, clocks, and watchcases .....	387	7.15	7.19	7.21	7.28	-	279.57	299.10	281.91	283.19	-
Miscellaneous manufacturing .....	39	7.69	7.74	7.91	7.91	7.98	299.14	303.41	310.07	309.28	312.02
Jewelry, silverware, and plated ware .....	391	8.30	8.27	8.51	8.53	-	315.40	318.40	319.98	325.85	-
Jewelry, precious metal .....	3911	8.44	8.39	8.65	8.66	-	313.97	315.46	317.46	322.15	-
Musical instruments .....	393	7.38	7.34	7.98	7.96	-	300.37	300.94	329.57	331.14	-
Toys and sporting goods .....	394	7.04	7.13	7.23	7.18	-	272.45	278.78	284.14	279.30	-
Dolls, games, toys, and children's vehicles .....	3942,4	6.97	7.01	7.01	6.98	-	266.25	268.48	269.89	263.84	-
Sporting and athletic goods, nec .....	3949	7.10	7.22	7.39	7.33	-	277.61	286.63	294.86	291.00	-
Pens, pencils, office, and art supplies .....	395	7.63	7.76	7.73	7.73	-	304.44	314.28	315.38	309.20	-
Costume jewelry and notions .....	396	6.13	6.28	6.60	6.57	-	224.36	233.62	250.14	249.00	-
Costume jewelry .....	3961	5.47	5.66	6.08	6.09	-	186.53	196.97	220.70	224.72	-
Miscellaneous manufactures .....	399	8.47	8.49	8.67	8.70	-	337.11	337.90	342.47	342.78	-
Signs and advertising displays .....	3993	8.77	8.87	9.07	9.05	-	348.17	353.03	353.73	359.29	-
<b>Nondurable goods .....</b>		9.16	9.14	9.33	9.36	9.39	361.82	367.43	373.20	373.46	375.60
Food and kindred products .....	20	8.97	8.99	9.07	9.12	9.13	353.42	360.50	359.17	361.15	367.03
Meat products .....	201	7.44	7.45	7.48	7.55	-	286.44	293.53	289.48	295.96	-
Meat packing plants .....	2011	8.36	8.34	8.31	8.45	-	341.09	345.28	334.06	341.38	-
Sausages and other prepared meats .....	2013	8.88	8.94	8.97	9.03	-	353.42	361.18	352.52	357.59	-
Poultry dressing plants .....	2016	6.06	6.14	6.22	6.25	-	220.58	232.09	231.38	238.75	-
Dairy products .....	202	9.60	9.62	9.78	9.78	-	396.48	400.19	400.98	398.05	-
Cheese, natural and processed .....	2022	8.93	8.96	9.13	9.12	-	349.16	355.71	361.55	352.94	-
Fluid milk .....	2026	10.16	10.10	10.15	10.21	-	432.82	432.28	422.24	426.78	-
Preserved fruits and vegetables .....	203	8.48	8.47	8.58	8.54	-	322.24	327.79	332.05	329.64	-
Canned specialties .....	2032	10.25	10.34	10.32	10.50	-	381.30	391.89	387.00	409.50	-
Canned fruits and vegetables .....	2033	8.49	8.52	8.61	8.65	-	320.07	333.13	334.07	331.30	-
Frozen fruits and vegetables .....	2037	7.96	7.76	7.95	7.67	-	291.34	297.98	301.31	286.09	-
Grain mill products .....	204	10.58	10.69	10.94	11.07	-	456.00	466.08	473.70	480.44	-
Flour and other grain mill products .....	2041	10.25	10.31	10.66	10.58	-	472.53	477.35	462.64	473.98	-
Prepared feeds, nec .....	2048	8.37	8.34	8.61	8.65	-	359.07	360.29	369.37	368.49	-
Bakery products .....	205	10.02	10.01	10.15	10.21	-	401.80	400.40	399.91	403.30	-
Bread, cake, and related products .....	2051	9.88	9.93	10.17	10.19	-	386.31	389.26	391.55	396.39	-
Cookies and crackers .....	2052	10.32	10.20	10.10	10.26	-	438.60	427.38	421.17	420.66	-

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>
<b>Nondurable goods—Continued</b>											
<b>Food and kindred products—Continued</b>											
Sugar and confectionery products .....	206	39.1	39.4	40.0	38.4		2.4	2.4	3.1	2.3	
Cane and beet sugar .....	2061-3	41.0	40.1	42.8	39.6		4.2	3.3	5.6	3.4	
Confectionery products .....	2065	38.1	38.5	38.5	37.3		1.7	1.9	2.2	1.8	
Fats and oils .....	207	41.2	41.2	42.6	42.6		4.7	4.7	4.8	4.9	
Beverages .....	208	40.4	41.9	40.1	40.9		3.6	4.8	3.5	4.1	
Malt beverages .....	2082	42.2	43.6	42.4	43.0		4.8	5.7	5.5	6.2	
Bottled and canned soft drinks .....	2086	40.1	42.1	39.5	40.8		3.4	5.2	2.8	3.7	
Misc. food and kindred products .....	209	37.8	38.9	38.3	37.5		3.6	3.9	3.3	3.1	
Tobacco manufactures .....	21	37.7	39.3	39.3	38.6	39.6	1.7	3.2	2.2	2.2	
Cigarettes .....	211	38.1	39.9	39.6	38.9	-	2.0	3.8	2.5	2.5	
Textile mill products .....	22	40.9	41.9	41.0	41.0	40.8	3.7	4.4	3.8	3.9	
Weaving mills, cotton .....	221	41.8	42.8	41.4	41.7	-	5.6	5.7	4.6	4.8	
Weaving mills, synthetics .....	222	41.9	42.1	41.7	41.4		4.1	4.6	4.3	4.1	
Weaving and finishing mills, wool .....	223	41.0	42.9	42.2	42.5		.4	1.8	3.0	3.2	
Narrow fabric mills .....	224	39.6	40.1	41.1	41.3		2.8	3.0	3.3	3.3	
Knitting mills .....	225	39.0	40.2	39.5	39.4		2.5	3.5	2.9	2.9	
Women's hosiery, except socks .....	2251	37.8	39.6	39.0	38.4		2.2	3.2	2.7	2.7	
Hosiery, nec .....	2252	37.3	39.0	39.9	38.8		1.6	2.6	2.9	2.3	
Knit outerwear mills .....	2253	38.2	39.5	38.5	38.9		2.1	3.2	2.5	2.4	
Knit underwear mills .....	2254	39.3	39.6	38.5	36.9		2.1	2.7	1.6	1.8	
Circular knit fabric mills .....	2257	42.4	42.7	40.8	42.0		5.0	5.6	4.2	4.9	
Textile finishing, except wool .....	226	40.9	42.0	41.6	41.8		4.1	4.8	4.4	4.4	
Finishing plants, cotton .....	2261	42.1	42.5	42.7	41.9		4.3	4.8	4.9	4.6	
Finishing plants, synthetics .....	2262	40.5	41.9	41.7	42.4		3.6	4.3	4.3	4.8	
Floor covering mills .....	227	41.8	44.3	42.8	42.3		2.9	4.7	3.5	3.7	
Yarn and thread mills .....	228	42.0	42.6	40.9	41.0		4.7	5.1	4.2	4.3	
Yarn mills, except wool .....	2281	42.8	43.5	41.2	41.4		5.1	5.6	4.3	4.5	
Throwing and winding mills .....	2282	38.2	38.0	39.0	38.4		3.1	3.1	3.2	2.7	
Miscellaneous textile goods .....	229	42.1	42.7	42.9	42.8		3.9	4.4	4.4	4.7	
Apparel and other textile products .....	23	35.8	37.1	37.0	36.8	36.8	1.3	1.8	1.7	1.7	
Men's and boys' suits and coats .....	231	34.5	35.9	37.1	36.8	-	.7	1.0	1.4	1.3	
Men's and boys' furnishings .....	232	35.8	37.4	36.8	36.5		1.1	1.5	1.5	1.4	
Men's and boys' shirts and nightwear .....	2321	36.4	37.6	37.0	36.9		1.2	1.5	1.3	1.3	
Men's and boys' separate trousers .....	2327	35.2	36.9	36.7	36.2		.8	1.3	1.6	1.4	
Men's and boys' work clothing .....	2328	35.1	36.9	36.2	35.7		1.0	1.5	1.5	1.4	
Women's and misses' outerwear .....	233	34.5	35.8	36.1	35.9		1.2	1.5	1.8	1.6	
Women's and misses' blouses and waists .....	2331	34.8	35.3	35.7	35.1		1.0	1.1	1.5	1.0	
Women's and misses' dresses .....	2335	34.1	35.4	36.1	36.2		1.3	1.4	1.9	1.8	
Women's and misses' suits and coats .....	2337	33.4	35.8	35.6	35.7		1.0	2.0	1.5	1.5	
Women's and misses' outerwear, nec .....	2339	34.9	36.0	36.3	36.0		1.3	1.6	2.0	1.7	
Women's and children's undergarments .....	234	35.8	37.3	37.5	37.3		.5	1.1	1.5	1.4	
Women's and children's underwear .....	2341	36.0	37.5	37.7	37.3		.4	.9	1.4	1.2	
Brassieres and allied garments .....	2342	34.5	36.0	36.3	37.4		.9	1.9	2.2	2.6	
Children's outerwear .....	236	35.5	37.1	36.5	35.9		1.0	1.5	1.6	1.1	
Children's dresses and blouses .....	2361	34.9	36.1	34.8	34.9		.8	1.2	1.3	1.1	
Misc. apparel and accessories .....	238	37.6	39.0	38.3	38.0		1.8	2.5	2.2	2.0	
Misc. fabricated textile products .....	239	38.2	39.2	38.5	38.8		2.5	2.9	2.2	2.6	
Curtains and draperies .....	2391	36.7	38.4	35.6	35.6		1.7	1.8	1.0	1.1	
House furnishings, nec .....	2392	37.7	38.8	38.2	37.7		2.1	2.6	2.1	1.9	
Automotive and apparel trimmings .....	2396	40.4	41.4	40.9	41.9		4.9	5.3	4.4	5.4	
Paper and allied products .....	26	42.8	43.3	42.9	43.1	43.1	4.7	5.0	4.7	4.9	
Paper and pulp mills .....	261,2,6	45.6	45.6	45.2	45.1	-	6.5	6.7	6.3	6.4	
Paper mills, except building paper .....	262	45.8	45.5	45.4	45.3		6.6	6.7	6.4	6.5	
Paperboard mills .....	263	43.9	43.9	43.5	44.6		7.1	7.3	6.4	7.3	
Misc. converted paper products .....	264	41.3	41.9	41.7	41.7		3.4	3.7	3.7	3.7	
Paper coating and glazing .....	2641	43.3	43.9	43.2	43.1		3.8	4.2	3.8	3.9	
Envelopes .....	2642	40.9	41.7	41.0	40.5		2.5	3.0	3.2	3.0	
Bags, except textile bags .....	2643	40.7	41.3	41.4	41.6		3.4	3.6	4.0	4.1	
Paperboard containers and boxes .....	265	41.7	42.4	41.9	42.4		3.8	4.4	4.0	4.4	
Folding paperboard boxes .....	2651	41.7	42.2	41.6	41.9		3.6	4.2	3.9	4.1	
Corrugated and solid fiber boxes .....	2653	42.3	42.8	42.6	43.0		4.1	4.6	4.4	4.8	
Sanitary food containers .....	2654	40.5	41.9	41.9	42.5		3.6	4.4	3.5	4.5	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Nondurable goods—Continued</b>											
Food and kindred products—Continued											
Sugar and confectionery products .....	206	\$9.31	\$9.37	\$9.45	\$9.56		\$364.02	\$369.18	\$378.00	\$367.10	
Cane and beet sugar .....	2061-3	11.13	11.01	10.95	10.98		456.33	441.50	468.66	434.81	
Confectionery products .....	2065	8.07	8.15	8.32	8.40		307.47	313.78	320.32	313.32	
Fats and oils .....	207	9.21	9.21	9.16	9.19		379.45	379.45	390.22	391.49	
Beverages .....	208	11.97	12.03	12.10	12.03		483.59	504.06	485.21	492.03	
Malt beverages .....	2082	16.65	16.70	16.78	16.57		702.63	728.12	711.47	712.51	
Bottled and canned soft drinks .....	2086	9.52	9.60	9.59	9.59		381.75	404.16	378.81	391.27	
Misc. food and kindred products .....	209	8.27	8.21	8.45	8.55		312.61	319.37	323.64	320.63	
Tobacco manufactures .....	21	14.33	14.60	14.42	14.99	\$15.29	540.24	573.78	566.71	578.61	\$605.48
Cigarettes .....	211	16.38	16.69	17.02	17.24	-	624.08	665.93	673.99	670.64	-
Textile mill products .....	22	7.10	7.12	7.31	7.35	7.32	290.39	298.33	299.71	301.35	298.66
Weaving mills, cotton .....	221	7.45	7.43	7.66	7.72	-	311.41	318.00	317.12	321.92	-
Weaving mills, synthetics .....	222	7.64	7.69	7.89	7.91		320.12	323.75	329.01	327.47	
Weaving and finishing mills, wool .....	223	7.62	7.59	7.98	7.98		312.42	325.61	336.76	339.15	
Narrow fabric mills .....	224	6.75	6.61	6.78	6.80		267.30	265.06	278.66	280.84	
Knitting mills .....	225	6.47	6.52	6.63	6.64		252.33	262.10	261.89	261.92	
Women's hosiery, except socks .....	2251	6.23	6.28	6.49	6.51		235.49	248.69	253.11	249.98	
Hosiery, nec .....	2252	6.13	6.19	6.35	6.35		228.65	241.41	253.37	246.38	
Knit outerwear mills .....	2253	6.48	6.48	6.43	6.37		247.54	255.96	247.56	247.79	
Knit underwear mills .....	2254	6.03	6.15	6.38	6.44		236.98	243.54	245.63	237.64	
Circular knit fabric mills .....	2257	7.13	7.19	7.39	7.48		302.31	307.01	301.51	314.16	
Textile finishing, except wool .....	226	7.44	7.42	7.67	7.73		304.30	311.64	319.07	323.11	
Finishing plants, cotton .....	2261	7.40	7.40	7.74	7.75		311.54	314.50	330.50	324.73	
Finishing plants, synthetics .....	2262	7.71	7.70	7.87	8.00		312.26	322.63	328.18	339.20	
Floor covering mills .....	227	7.46	7.57	7.57	7.67		311.83	335.35	324.00	324.44	
Yarn and thread mills .....	228	6.71	6.72	6.98	7.02		281.82	286.27	285.48	287.82	
Yarn mills, except wool .....	2281	6.72	6.72	6.97	7.00		287.62	292.32	287.16	289.80	
Throwing and winding mills .....	2282	6.74	6.76	7.11	7.16		257.47	256.88	277.29	274.94	
Miscellaneous textile goods .....	229	8.13	8.09	8.26	8.33		342.27	345.44	354.35	356.52	
Apparel and other textile products .....	23	5.93	5.87	6.03	6.04	6.06	212.29	217.78	223.11	222.27	223.01
Men's and boys' suits and coats .....	231	6.82	6.65	6.81	6.80	-	235.29	238.74	252.65	250.24	-
Men's and boys' furnishings .....	232	5.48	5.44	5.56	5.54		196.18	203.46	204.61	202.21	
Men's and boys' shirts and nightwear .....	2321	5.28	5.20	5.44	5.43		192.19	195.52	201.28	200.37	
Men's and boys' separate trousers .....	2327	5.37	5.37	5.40	5.40		189.02	198.15	198.18	195.48	
Men's and boys' work clothing .....	2328	5.58	5.51	5.58	5.54		195.86	203.32	202.00	197.78	
Women's and misses' outerwear .....	233	5.67	5.63	5.84	5.83		195.62	201.55	210.82	209.30	
Women's and misses' blouses and waists .....	2331	5.03	5.02	5.12	5.08		175.04	177.21	182.78	178.31	
Women's and misses' dresses .....	2335	6.01	5.95	6.10	6.09		204.94	210.63	220.21	220.46	
Women's and misses' suits and coats .....	2337	6.48	6.39	6.46	6.45		216.43	228.76	229.98	230.27	
Women's and misses' outerwear, nec .....	2339	5.53	5.46	5.77	5.75		193.00	196.56	209.45	207.00	
Women's and children's undergarments .....	234	5.47	5.46	5.68	5.67		195.83	203.66	213.00	211.49	
Women's and children's underwear .....	2341	5.30	5.27	5.50	5.50		190.80	197.63	207.35	205.15	
Brassieres and allied garments .....	2342	6.42	6.48	6.70	6.59		221.49	233.28	243.21	246.47	
Children's outerwear .....	236	5.21	5.18	5.45	5.41		184.96	192.18	198.93	194.22	
Children's dresses and blouses .....	2361	4.98	4.96	5.44	5.42		173.80	179.06	189.31	189.16	
Misc. apparel and accessories .....	238	5.62	5.63	5.87	5.88		211.31	219.57	224.82	223.44	
Misc. fabricated textile products .....	239	7.22	7.16	7.21	7.29		275.80	280.67	277.59	282.85	
Curtains and draperies .....	2391	5.86	5.75	5.96	5.93		215.06	220.80	212.18	211.11	
House furnishings, nec .....	2392	6.04	6.00	6.14	6.11		227.71	232.80	234.55	230.35	
Automotive and apparel trimmings .....	2396	11.02	10.88	11.09	11.28		445.21	450.43	453.58	472.63	
Paper and allied products .....	26	11.39	11.41	11.52	11.59	11.68	487.49	494.05	494.21	499.53	503.41
Paper and pulp mills .....	261,2,6	13.91	13.98	14.13	14.15	-	634.30	637.49	638.68	638.17	-
Paper mills, except building paper .....	262	13.96	14.05	14.17	14.18		639.37	639.28	643.32	642.35	
Paperboard mills .....	263	14.27	14.30	14.30	14.53		626.45	627.77	622.05	648.04	
Misc. converted paper products .....	264	9.87	9.87	10.02	10.07		407.63	413.55	417.83	419.92	
Paper coating and glazing .....	2641	11.03	10.98	11.22	11.26		477.60	482.02	484.70	485.31	
Envelopes .....	2642	9.04	9.15	9.47	9.59		369.74	381.56	388.27	388.40	
Bags, except textile bags .....	2643	9.18	9.08	9.25	9.29		373.63	375.00	382.95	386.46	
Paperboard containers and boxes .....	265	9.69	9.76	9.86	9.95		404.07	413.82	413.13	421.88	
Folding paperboard boxes .....	2651	10.09	10.15	10.27	10.37		420.75	428.33	427.23	434.50	
Corrugated and solid fiber boxes .....	2653	9.83	9.93	9.98	10.06		415.81	425.00	425.15	432.58	
Sanitary food containers .....	2654	9.32	9.32	9.55	9.73		377.46	390.51	400.15	413.53	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>2</sup>	May 1988 <sup>2</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>2</sup>	May 1988 <sup>2</sup>
<b>Nondurable goods—Continued</b>											
Printing and publishing .....	27	37.6	37.8	38.2	38.0	37.6	2.7	2.9	3.2	3.0	
Newspapers .....	271	33.6	33.9	33.4	33.4	-	1.5	1.7	1.4	1.3	
Periodicals .....	272	38.7	38.3	37.9	38.0		3.0	2.7	3.1	3.0	
Books .....	273	38.2	38.3	39.9	39.8		3.7	3.9	3.8	3.9	
Book publishing .....	2731	38.0	38.4	38.7	38.6		3.5	3.7	3.3	3.2	
Book printing .....	2732	38.6	38.0	42.0	41.8		4.0	4.2	4.5	5.1	
Miscellaneous publishing .....	274	36.7	36.4	36.7	36.8		3.0	2.7	2.3	2.5	
Commercial printing .....	275	39.1	39.2	39.6	39.4		3.2	3.4	3.8	3.5	
Commercial printing, letterpress .....	2751	38.9	39.1	39.0	38.9		2.8	2.9	3.0	2.9	
Commercial printing, lithographic .....	2752	39.0	39.1	39.7	39.4		3.3	3.5	4.1	3.7	
Manifold business forms .....	276	40.5	41.0	41.7	41.1		2.7	3.2	3.9	3.4	
Blankbooks and bookbinding .....	278	37.4	37.9	39.2	39.3		1.7	1.9	2.9	2.8	
Printing trade services .....	279	38.1	38.2	38.9	38.1		2.9	3.2	4.4	3.5	
Chemicals and allied products .....	28	42.2	42.2	42.5	42.2	42.0	3.8	3.9	4.1	4.0	
Industrial inorganic chemicals .....	281	42.4	41.9	43.0	43.0	-	4.2	3.8	4.2	4.2	
Industrial inorganic chemicals, nec .....	2819	42.9	42.5	43.5	43.3		4.0	3.8	4.1	4.1	
Plastics materials and synthetics .....	282	43.1	42.7	43.3	43.0		4.1	4.2	4.5	4.5	
Plastics materials and resins .....	2821	43.9	43.6	43.7	43.5		4.5	4.5	4.7	4.7	
Organic fibers, noncellulosic .....	2824	42.7	42.0	42.8	42.5		3.7	3.9	4.1	4.1	
Drugs .....	283	41.4	41.3	41.4	41.1		2.8	2.7	3.1	2.9	
Pharmaceutical preparations .....	2834	41.2	41.1	41.4	40.9		2.9	2.8	3.2	2.9	
Soap, cleaners, and toilet goods .....	284	40.6	41.0	40.6	39.8		2.7	3.0	3.5	3.3	
Soap and other detergents .....	2841	42.5	43.3	43.5	43.0		4.2	4.8	5.7	5.3	
Polishing, sanitation, and finishing preparations .....	2842,3	40.3	40.6	41.2	41.2		2.3	2.5	3.2	2.9	
Toilet preparations .....	2844	39.5	39.8	38.8	37.3		2.0	2.2	2.5	2.3	
Paints and allied products .....	285	41.3	42.4	42.2	42.3		3.2	4.2	3.9	4.1	
Industrial organic chemicals .....	286	44.0	44.3	44.3	44.0		5.3	5.5	5.3	5.2	
Cyclic crudes and intermediates .....	2865	43.7	43.4	42.2	42.3		5.3	5.7	4.7	4.3	
Gum, wood, and industrial organic chemicals, nec .....	2861,9	44.1	44.5	44.9	44.4		5.3	5.4	5.5	5.4	
Agricultural chemicals .....	287	43.6	43.2	43.6	43.6		5.6	4.9	5.6	5.3	
Miscellaneous chemical products .....	289	41.2	41.1	41.9	42.0		3.2	3.2	3.6	3.7	
Petroleum and coal products .....	29	44.0	44.0	43.7	44.1	44.3	5.1	5.0	4.9	5.4	
Petroleum refining .....	291	44.1	43.7	43.8	44.3		4.8	4.3	4.7	5.1	
Paving and roofing materials .....	295	44.8	46.2	44.6	44.5		7.2	8.6	6.7	7.6	
Rubber and misc. plastics products .....	30	41.0	41.6	41.7	41.7	41.5	3.5	3.9	4.1	4.2	
Tires and inner tubes .....	301	42.7	43.4	45.8	45.3	-	4.2	5.0	6.2	6.3	
Rubber and plastics footwear .....	302	40.9	41.7	39.2	39.0		1.5	2.0	1.4	1.7	
Reclaimed rubber, and rubber and plastics hose and belting .....	303,4	40.7	41.1	43.6	44.4		2.5	3.5	4.2	4.6	
Fabricated rubber products, nec .....	306	40.2	41.6	41.5	41.8		3.1	3.6	3.7	3.8	
Miscellaneous plastics products .....	307	40.9	41.3	41.2	41.3		3.6	3.9	3.9	4.0	
Leather and leather products .....	31	36.7	38.7	37.4	36.8	37.8	1.7	2.2	1.9	1.9	
Leather tanning and finishing .....	311	41.6	41.6	41.2	41.3	-	4.4	4.3	4.5	4.5	
Footwear, except rubber .....	314	35.8	38.6	36.9	36.2		1.4	2.1	1.5	1.4	
Men's footwear, except athletic .....	3143	36.1	38.4	37.8	37.1		1.3	1.7	1.4	.9	
Women's footwear, except athletic .....	3144	35.0	39.4	35.9	34.5		1.7	2.8	1.6	1.8	
Luggage .....	316	39.5	39.2	39.5	39.6		1.3	1.6	3.1	3.2	
Handbags and personal leather goods .....	317	35.1	36.8	36.3	35.7		1.6	2.2	2.5	2.4	
<b>Transportation and public utilities</b> .....		38.8	39.1	38.6	38.9	38.8					
Railroad transportation:											
Class I railroads <sup>3</sup> .....	4011	42.5	43.9	43.1	42.1						
Local and interurban passenger transit .....	41	33.4	34.0	33.6	33.8						
Local and suburban transportation .....	411	38.6	38.5	38.2	38.3						
Intercity highway transportation .....	413	40.4	38.8	38.6	39.2						
Trucking and warehousing .....	42	38.1	38.4	37.7	37.9						
Trucking and trucking terminals .....	421,3	38.1	38.5	37.6	37.9						
Public warehousing .....	422	37.9	38.0	38.6	38.2						
Pipe lines, except natural gas .....	46	41.1	42.2	42.2	42.1						

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1967	May 1967	Mar. 1968	Apr. 1968 <sup>p</sup>	May 1968 <sup>p</sup>	Apr. 1967	May 1967	Mar. 1968	Apr. 1968 <sup>p</sup>	May 1968 <sup>p</sup>
<b>Nondurable goods—Continued</b>											
Printing and publishing .....	27	\$10.17	\$10.19	\$10.45	\$10.40	\$10.45	\$382.39	\$385.18	\$399.19	\$395.20	\$392.92
Newspapers .....	271	10.15	10.18	10.37	10.44	-	341.04	345.10	346.36	348.70	-
Periodicals .....	272	10.70	10.56	10.79	10.80	-	414.09	404.45	408.94	410.40	-
Books .....	273	9.14	9.19	9.35	9.24	-	349.15	351.98	373.07	367.75	-
Book publishing .....	2731	8.71	8.81	8.96	8.83	-	330.98	338.30	346.75	340.84	-
Book printing .....	2732	9.88	9.83	9.95	9.87	-	381.37	373.54	417.90	412.57	-
Miscellaneous publishing .....	274	9.23	9.24	9.74	9.76	-	338.74	336.34	357.46	359.17	-
Commercial printing .....	275	10.46	10.49	10.75	10.65	-	408.99	411.21	425.70	419.61	-
Commercial printing, letterpress .....	2751	10.11	10.15	10.32	10.26	-	393.28	396.87	402.48	399.11	-
Commercial printing, lithographic .....	2752	10.59	10.59	10.91	10.79	-	413.01	414.07	433.13	425.13	-
Manifold business forms .....	276	10.60	10.69	10.86	10.88	-	429.30	438.29	452.86	447.17	-
Blankbooks and bookbinding .....	278	8.01	8.09	8.32	8.39	-	299.57	306.61	326.14	329.73	-
Printing trade services .....	279	12.50	12.27	12.98	12.85	-	476.25	468.71	504.92	489.59	-
Chemicals and allied products .....	28	12.30	12.32	12.53	12.56	12.64	519.06	519.90	532.53	530.03	530.88
Industrial inorganic chemicals .....	281	13.46	13.45	13.68	13.72	-	570.70	563.56	588.24	589.96	-
Industrial inorganic chemicals, nec .....	2819	13.52	13.55	13.66	13.70	-	580.01	575.88	594.21	593.21	-
Plastics materials and synthetics .....	282	12.51	12.57	12.81	12.86	-	539.18	536.74	554.67	552.98	-
Plastics materials and resins .....	2821	13.49	13.60	13.69	13.76	-	592.21	592.96	598.25	598.56	-
Organic fibers, noncellulosic .....	2824	11.92	11.99	12.29	12.30	-	508.98	503.58	526.01	522.75	-
Drugs .....	283	11.55	11.58	11.94	11.95	-	478.17	478.25	494.32	491.15	-
Pharmaceutical preparations .....	2834	11.25	11.25	11.57	11.68	-	463.50	462.38	479.00	477.71	-
Soap, cleaners, and toilet goods .....	284	10.92	10.92	11.06	10.98	-	443.35	447.72	449.04	437.00	-
Soap and other detergents .....	2841	13.96	14.04	14.61	14.43	-	593.30	607.93	635.54	620.49	-
Polishing, sanitation, and finishing preparations .....	2842,3	9.96	10.02	10.17	10.21	-	401.39	406.81	419.00	420.65	-
Toilet preparations .....	2844	9.37	9.28	9.34	9.22	-	370.12	369.34	362.39	343.91	-
Paints and allied products .....	285	10.82	10.87	11.20	11.14	-	446.87	460.89	472.64	471.22	-
Industrial organic chemicals .....	286	14.83	14.82	14.83	15.05	-	652.52	656.53	656.97	662.20	-
Cyclic crudes and intermediates .....	2865	14.53	14.70	14.80	14.80	-	634.96	637.98	624.56	626.04	-
Gum, wood, and industrial organic chemicals, nec .....	2861,9	14.91	14.85	14.84	15.11	-	657.53	660.83	666.32	670.88	-
Agricultural chemicals .....	287	11.45	11.58	12.09	11.82	-	499.22	500.26	527.12	515.35	-
Miscellaneous chemical products .....	289	11.33	11.30	11.40	11.49	-	466.80	464.43	477.66	482.58	-
Petroleum and coal products .....	29	14.55	14.54	14.98	15.02	14.93	640.20	639.76	654.63	662.38	661.40
Petroleum refining .....	291	15.73	15.74	16.09	16.23	-	693.69	687.84	704.74	718.99	-
Paving and roofing materials .....	295	11.27	11.46	11.52	11.51	-	504.90	529.45	513.79	512.20	-
Rubber and misc. plastics products .....	30	8.84	8.86	9.00	9.03	9.05	362.44	368.58	375.30	376.55	375.58
Tires and inner tubes .....	301	13.80	13.93	14.26	14.18	-	589.26	604.56	653.11	642.35	-
Rubber and plastics footwear .....	302	5.96	6.01	6.19	6.33	-	243.76	250.62	242.65	246.87	-
Reclaimed rubber, and rubber and plastics hose and belting .....	303,4	8.86	8.91	9.04	9.23	-	360.60	366.20	394.14	409.81	-
Fabricated rubber products, nec .....	306	8.59	8.59	8.76	8.76	-	345.32	357.34	363.54	366.17	-
Miscellaneous plastics products .....	307	8.25	8.26	8.38	8.42	-	337.43	341.14	345.26	347.75	-
Leather and leather products .....	31	6.14	6.05	6.23	6.29	6.28	225.34	234.14	233.00	231.47	237.38
Leather tanning and finishing .....	311	8.09	8.11	8.42	8.49	-	336.54	337.38	346.90	350.64	-
Footwear, except rubber .....	314	5.83	5.70	5.94	5.97	-	208.71	220.02	219.19	216.11	-
Men's footwear, except athletic .....	3143	6.25	6.06	6.29	6.31	-	225.63	232.70	237.76	234.10	-
Women's footwear, except athletic .....	3144	5.47	5.42	5.66	5.69	-	191.45	213.55	203.19	196.31	-
Luggage .....	316	6.30	6.41	6.34	6.44	-	248.85	251.27	250.43	255.02	-
Handbags and personal leather goods .....	317	5.80	5.84	5.89	5.88	-	203.58	214.91	213.81	209.92	-
<b>Transportation and public utilities .....</b>		<b>11.94</b>	<b>11.93</b>	<b>12.19</b>	<b>12.17</b>	<b>12.18</b>	<b>463.27</b>	<b>466.46</b>	<b>470.53</b>	<b>473.41</b>	<b>472.58</b>
Railroad transportation:											
Class I railroads <sup>3</sup> .....	4011	14.23	14.28	14.75	14.80	-	604.78	626.89	635.73	623.08	-
Local and interurban passenger transit .....	41	8.22	8.13	8.36	8.35	-	274.55	276.42	280.90	282.23	-
Local and suburban transportation .....	411	8.86	8.76	9.01	8.96	-	342.00	337.26	344.18	343.17	-
Intercity highway transportation .....	413	11.47	11.44	11.35	11.23	-	463.39	443.87	438.11	440.22	-
Trucking and warehousing .....	42	10.81	10.84	10.88	10.92	-	411.86	416.26	410.18	413.87	-
Trucking and trucking terminals .....	421,3	10.99	11.01	11.06	11.08	-	418.72	423.89	415.86	419.93	-
Public warehousing .....	422	8.40	8.47	8.67	8.81	-	318.36	321.86	334.66	336.54	-
Pipe lines, except natural gas .....	46	15.25	15.41	15.70	15.89	-	626.78	650.30	662.54	668.97	-

See footnotes at end of table.



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

**C-2. Average hours and earnings of production or nonsupervisory workers' on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>
<b>Transportation and public utilities—Continued</b>											
Communication .....	48	39.8	39.6	39.5	39.8						
Telephone communication .....	481	41.1	40.7	40.9	41.2						
Radio and television broadcasting .....	483	36.2	36.3	35.6	35.9						
Electric, gas, and sanitary services .....	49	41.2	41.4	41.0	41.4						
Electric services .....	491	40.9	41.1	41.0	41.5						
Gas production and distribution .....	492	40.5	40.5	40.5	40.8						
Combination utility services .....	493	42.1	42.4	41.2	41.3						
Sanitary services .....	495	42.0	43.0	42.4	43.1						
<b>Wholesale trade .....</b>		<b>38.0</b>	<b>38.3</b>	<b>37.9</b>	<b>38.2</b>	<b>38.1</b>					
Durable goods .....	50	38.5	38.6	38.4	38.7						
Motor vehicles and automotive equipment .....	501	38.0	38.2	38.0	38.5						
Furniture and home furnishings .....	502	36.8	36.8	37.9	37.9						
Lumber and construction materials .....	503	39.0	39.4	38.9	39.4						
Sporting goods, toys, and hobby goods .....	504	36.2	36.3	36.2	36.2						
Metals and minerals, except petroleum .....	505	40.3	40.4	40.5	40.7						
Electrical goods .....	506	38.2	38.4	37.8	37.9						
Hardware, plumbing, and heating equipment .....	507	38.2	38.4	38.2	38.6						
Machinery, equipment, and supplies .....	508	38.9	39.0	38.7	39.0						
Miscellaneous durable goods .....	509	37.7	37.9	38.0	38.1						
Nondurable goods .....	51	37.4	37.7	37.2	37.5						
Paper and paper products .....	511	36.7	37.0	36.6	37.0						
Drugs, proprietaries, and sundries .....	512	37.1	36.8	37.2	36.6						
Apparel, piece goods, and notions .....	513	36.0	36.5	37.1	36.8						
Groceries and related products .....	514	37.8	38.1	37.4	37.6						
Chemicals and allied products .....	516	39.1	39.2	39.5	39.7						
Petroleum and petroleum products .....	517	38.7	39.2	38.2	38.6						
Beer, wine, and distilled beverages .....	518	35.9	35.9	35.8	35.9						
Miscellaneous nondurable goods .....	519	37.2	37.7	36.8	37.4						
<b>Retail trade .....</b>		<b>29.2</b>	<b>29.2</b>	<b>28.6</b>	<b>28.9</b>	<b>29.0</b>					
Building materials and garden supplies .....	52	36.5	37.0	36.0	36.3						
Lumber and other building materials .....	521	38.2	38.6	37.9	38.1						
Hardware stores .....	525	33.0	33.1	32.0	32.9						
General merchandise stores .....	53	28.4	28.4	26.6	27.2						
Department stores .....	531	28.2	28.2	26.2	26.8						
Variety stores .....	533	29.1	29.1	28.5	28.7						
Misc. general merchandise stores .....	539	29.8	29.8	28.6	29.2						
Food stores .....	54	30.0	29.8	29.5	29.8						
Grocery stores .....	541	30.3	30.1	29.6	30.0						
Retail bakeries .....	546	27.5	27.1	28.0	28.3						
Automotive dealers and service stations .....	55	36.5	36.6	36.3	36.6						
New and used car dealers .....	551,2	37.2	37.2	37.3	37.4						
Auto and home supply stores .....	553	39.1	39.6	38.0	38.6						
Gasoline service stations .....	554	34.0	34.1	33.9	34.3						
Apparel and accessory stores .....	56	27.0	26.5	26.3	26.6						
Men's and boys' clothing and furnishings .....	561	30.2	29.7	28.2	28.4						
Women's ready-to-wear stores .....	562	25.8	25.6	24.8	25.0						
Family clothing stores .....	565	27.1	26.4	26.2	26.7						
Shoe stores .....	566	28.3	26.8	27.5	27.8						
Furniture and home furnishings stores .....	57	32.6	32.8	32.6	32.7						
Furniture and home furnishings stores .....	571	32.6	32.8	33.2	33.5						
Household appliance stores .....	572	33.2	33.6	33.1	33.5						
Radio, television, and music stores .....	573	32.5	32.4	31.5	31.2						
Eating and drinking places <sup>4</sup> .....	58	25.6	25.9	25.3	25.8						

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>2</sup>	May 1988 <sup>2</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>2</sup>	May 1988 <sup>2</sup>
<b>Transportation and public utilities—Continued</b>											
Communication .....	48	\$12.31	\$12.31	\$12.61	\$12.61		\$489.94	\$487.48	\$498.10	\$501.88	
Telephone communication .....	481	13.04	13.04	13.31	13.31		535.94	530.73	544.38	548.37	
Radio and television broadcasting .....	483	10.78	10.75	11.26	11.33		390.24	390.23	400.86	406.75	
Electric, gas, and sanitary services .....	49	13.65	13.70	14.20	14.13		562.38	567.18	582.20	584.98	
Electric services .....	491	13.73	13.81	14.28	14.28		561.56	567.59	585.48	592.62	
Gas production and distribution .....	492	12.94	12.98	13.20	13.17		524.07	525.69	534.60	537.34	
Combination utility services .....	493	15.85	15.96	16.91	16.70		667.29	676.70	696.69	689.71	
Sanitary services .....	495	10.03	10.08	10.61	10.59		421.26	433.44	449.86	456.43	
<b>Wholesale trade .....</b>		<b>9.52</b>	<b>9.56</b>	<b>9.78</b>	<b>9.88</b>	<b>\$9.88</b>	<b>361.76</b>	<b>366.15</b>	<b>370.66</b>	<b>377.42</b>	<b>\$376.43</b>
Durable goods .....	50	9.65	9.69	9.97	10.10		371.53	374.03	382.85	390.87	
Motor vehicles and automotive equipment .....	501	8.63	8.63	9.04	9.12		327.94	329.67	343.52	351.12	
Furniture and home furnishings .....	502	8.87	8.96	9.07	9.32		326.42	329.73	343.75	353.23	
Lumber and construction materials .....	503	9.14	9.20	9.43	9.56		356.46	362.48	366.83	376.66	
Sporting goods, toys, and hobby goods .....	504	9.76	9.68	9.57	9.68		353.31	351.38	346.43	350.42	
Metals and minerals, except petroleum .....	505	10.31	10.34	10.59	10.62		415.49	417.74	428.90	432.23	
Electrical goods .....	506	9.93	10.03	10.29	10.51		379.33	385.15	388.96	398.33	
Hardware, plumbing, and heating equipment .....	507	9.20	9.18	9.37	9.46		351.44	352.51	357.93	365.16	
Machinery, equipment, and supplies .....	508	10.29	10.32	10.67	10.80		400.28	402.48	412.93	421.20	
Miscellaneous durable goods .....	509	7.70	7.77	7.91	7.96		290.29	294.48	300.58	303.28	
Nondurable goods .....	51	9.34	9.39	9.50	9.55		349.32	354.00	353.40	358.13	
Paper and paper products .....	511	10.01	10.13	10.26	10.30		367.37	374.81	375.52	381.10	
Drugs, proprietaries, and sundries .....	512	10.85	11.03	10.90	11.17		402.54	405.90	405.48	408.82	
Apparel, piece goods, and notions .....	513	9.22	9.22	9.33	9.50		331.92	336.53	346.14	349.60	
Groceries and related products .....	514	9.49	9.48	9.69	9.71		358.72	361.19	362.41	365.10	
Chemicals and allied products .....	516	12.04	12.04	12.19	12.28		470.76	471.97	481.51	487.52	
Petroleum and petroleum products .....	517	9.56	9.66	9.53	9.63		369.97	378.67	364.05	371.72	
Beer, wine, and distilled beverages .....	518	10.97	11.11	10.92	11.09		393.82	398.85	390.94	398.13	
Miscellaneous nondurable goods .....	519	7.65	7.69	7.79	7.77		284.58	289.91	286.67	290.60	
<b>Retail trade .....</b>		<b>6.09</b>	<b>6.09</b>	<b>6.24</b>	<b>6.25</b>	<b>6.27</b>	<b>177.83</b>	<b>177.83</b>	<b>178.46</b>	<b>180.63</b>	<b>181.83</b>
Building materials and garden supplies .....	52	6.94	6.93	7.23	7.24		253.31	256.41	260.28	262.81	
Lumber and other building materials .....	521	7.30	7.28	7.61	7.67		278.86	281.01	288.42	292.23	
Hardware stores .....	525	5.95	5.93	6.19	6.20		196.35	196.28	198.08	203.98	
General merchandise stores .....	53	6.45	6.45	6.48	6.49		183.18	183.18	172.37	176.53	
Department stores .....	531	6.75	6.75	6.77	6.78		190.35	190.35	177.37	181.70	
Variety stores .....	533	4.81	4.82	4.91	4.94		139.97	140.26	139.94	141.78	
Misc. general merchandise stores .....	539	5.05	5.00	5.32	5.30		150.49	149.00	152.15	154.76	
Food stores .....	54	6.98	6.96	7.00	6.98		209.40	207.41	206.50	208.00	
Grocery stores .....	541	7.13	7.10	7.12	7.09		216.04	213.71	210.75	212.70	
Retail bakeries .....	546	5.61	5.61	5.91	5.93		154.28	152.03	165.48	167.82	
Automotive dealers and service stations .....	55	7.75	7.84	8.06	8.21		282.88	286.94	292.58	300.49	
New and used car dealers .....	551,2	9.44	9.57	9.78	10.00		351.17	356.00	364.79	374.00	
Auto and home supply stores .....	553	6.62	6.70	6.94	7.08		258.84	265.32	263.72	273.29	
Gasoline service stations .....	554	5.47	5.52	5.69	5.74		185.98	188.23	192.89	196.88	
Apparel and accessory stores .....	56	5.53	5.57	5.70	5.74		149.31	147.61	149.91	152.68	
Men's and boys' clothing and furnishings .....	561	6.60	6.71	6.78	6.95		199.32	199.29	191.20	197.38	
Women's ready-to-wear stores .....	562	5.20	5.20	5.38	5.45		134.16	133.12	133.42	136.25	
Family clothing stores .....	565	5.44	5.51	5.48	5.56		147.42	145.46	143.58	148.45	
Shoe stores .....	566	5.57	5.60	5.90	5.85		157.63	150.08	162.25	162.63	
Furniture and home furnishings stores .....	57	7.46	7.45	7.67	7.78		243.20	244.36	250.04	254.41	
Furniture and home furnishings stores .....	571	7.60	7.58	7.82	7.91		247.76	248.62	259.62	264.99	
Household appliance stores .....	572	7.31	7.32	7.51	7.71		242.69	245.95	248.58	258.29	
Radio, television, and music stores .....	573	7.27	7.27	7.45	7.56		236.28	235.55	234.68	235.87	
Eating and drinking places <sup>4</sup> .....	58	4.38	4.39	4.50	4.50		112.13	113.70	113.85	116.10	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	May 1988 <sup>a</sup>
<b>Retail trade—Continued</b>											
Miscellaneous retail .....	59	30.2	30.4	29.5	29.8						
Drug stores and proprietary stores .....	591	28.0	28.1	27.4	27.5						
Miscellaneous shopping goods stores .....	594	28.5	28.4	28.0	28.5						
Nonstore retailers .....	596	33.2	33.2	32.0	32.2						
Fuel and ice dealers .....	598	37.6	37.7	38.1	38.2						
Retail stores, nec .....	599	32.7	33.5	31.1	31.4						
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		<b>36.3</b>	<b>36.3</b>	<b>35.8</b>	<b>36.2</b>	<b>35.7</b>					
Banking .....	60	36.1	36.2	35.4	36.2						
Commercial and stock savings banks .....	602	36.1	36.2	35.4	36.3						
Credit agencies other than banks .....	61	36.9	36.7	36.1	36.6						
Savings and loan associations .....	612	36.3	36.2	35.5	36.1						
Personal credit institutions .....	614	36.6	36.5	36.3	36.6						
Insurance carriers .....	63	37.4	37.4	37.2	37.3						
Life insurance .....	631	37.0	37.0	36.8	36.9						
Medical service and health insurance .....	632	38.2	38.1	38.1	38.0						
Fire, marine, and casualty insurance .....	633	37.2	37.2	37.1	37.1						
<b>Services</b> .....		<b>32.4</b>	<b>32.4</b>	<b>32.3</b>	<b>32.6</b>	<b>32.4</b>					
Hotels and other lodging places:											
Hotels, motels, and tourist courts <sup>4</sup> .....	701	30.2	30.8	30.6	31.2						
Personal services:											
Laundry, cleaning, and garment services .....	721	34.4	34.7	33.9	34.4						
Beauty shops <sup>4</sup> .....	723	29.8	29.7	29.6	30.0						
Business services .....	73	33.3	33.5	33.5	33.8						
Advertising .....	731	36.5	36.5	36.3	37.0						
Services to buildings .....	734	28.5	28.7	29.0	29.2						
Computer and data processing services .....	737	37.4	37.3	37.5	37.9						
Auto repair, services, and garages .....	75	36.8	36.8	36.1	36.4						
Automotive repair shops .....	753	38.3	38.3	37.8	38.0						
Miscellaneous repair services .....	76	37.7	37.6	37.8	38.1						
Motion pictures .....	78	27.9	27.8	29.2	28.3						
Motion picture production and services .....	781	35.1	36.2	38.1	37.6						
Amusement and recreation services .....	79	28.3	28.2	27.5	27.7						
Health services .....	80	32.2	32.2	32.2	32.3						
Offices of physicians .....	801	30.6	30.8	31.0	31.2						
Offices of dentists .....	802	28.3	28.0	28.4	28.4						
Nursing and personal care facilities .....	805	31.2	31.3	31.0	31.4						
Hospitals .....	806	34.0	34.0	33.9	33.8						
Legal services .....	81	34.5	34.5	34.3	34.9						
Miscellaneous services .....	89	39.2	38.4	39.0	39.4						
Engineering and architectural services .....	891	39.4	39.5	39.3	39.4						
Accounting, auditing, and bookkeeping .....	893	40.0	37.1	39.6	40.4						

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Retail trade—Continued</b>											
Miscellaneous retail .....	59	\$6.30	\$6.30	\$6.51	\$6.56		\$190.26	\$191.52	\$192.05	\$195.49	
Drug stores and proprietary stores .....	591	5.85	5.88	6.12	6.18		163.80	165.23	167.69	169.95	
Miscellaneous shopping goods stores .....	594	5.88	5.89	6.13	6.21		167.58	167.28	171.64	176.99	
Nonstore retailers .....	596	7.20	7.24	7.30	7.35		239.04	240.37	233.60	236.67	
Fuel and ice dealers .....	598	9.00	8.91	9.18	9.16		338.40	335.91	349.76	349.91	
Retail stores, nec .....	599	6.41	6.40	6.55	6.62		209.61	214.40	203.71	207.87	
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		8.72	8.72	8.97	9.05	\$9.17	316.54	316.54	321.13	327.61	\$327.37
Banking .....	60	7.47	7.49	7.75	7.79		269.67	271.14	274.35	282.00	
Commercial and stock savings banks .....	602	7.21	7.24	7.46	7.51		260.28	262.09	264.08	272.61	
Credit agencies other than banks .....	61	7.86	7.85	8.05	8.12		290.03	288.10	290.61	297.19	
Savings and loan associations .....	612	7.33	7.34	7.57	7.62		266.08	265.71	268.74	275.08	
Personal credit institutions .....	614	7.35	7.37	7.64	7.70		269.01	269.01	277.33	283.36	
Insurance carriers .....	63	9.53	9.54	10.01	10.09		356.42	356.80	372.37	376.36	
Life insurance .....	631	9.11	9.13	9.49	9.56		337.07	337.81	349.23	352.76	
Medical service and health insurance .....	632	9.34	9.35	9.71	9.74		356.79	356.24	369.95	370.12	
Fire, marine, and casualty insurance .....	633	9.86	9.89	10.49	10.61		366.79	367.91	389.18	393.63	
<b>Services</b> .....		8.41	8.40	8.80	8.82	8.87	272.48	272.16	284.24	287.53	287.39
Hotels and other lodging places:											
Hotels, motels, and tourist courts <sup>4</sup> .....	701	6.13	6.11	6.38	6.40		185.13	188.19	195.23	199.68	
Personal services:											
Laundry, cleaning, and garment services .....	721	6.10	6.13	6.28	6.30		209.84	212.71	212.89	216.72	
Beauty shops <sup>4</sup> .....	723	6.40	6.41	6.70	6.76		190.72	190.38	198.32	202.80	
Business services .....	73	8.64	8.65	9.03	9.06		287.71	289.78	302.51	306.23	
Advertising .....	731	11.58	11.72	12.18	12.36		422.67	427.78	442.13	457.32	
Services to buildings .....	734	6.66	6.66	6.65	6.77		189.81	191.14	192.85	197.68	
Computer and data processing services .....	737	11.98	12.01	12.42	12.53		448.05	447.97	465.75	474.89	
Auto repair, services, and garages .....	75	7.73	7.74	8.04	8.10		284.46	284.83	290.24	294.84	
Automotive repair shops .....	753	8.37	8.39	8.72	8.77		320.57	321.34	329.62	333.26	
Miscellaneous repair services .....	76	9.02	9.06	9.42	9.52		340.96	343.37	356.08	362.71	
Motion pictures .....	78	11.91	11.74	12.55	11.32		332.29	326.37	366.46	320.35	
Motion picture production and services .....	781	16.12	15.67	16.75	15.49		565.81	567.25	638.18	582.42	
Amusement and recreation services .....	79	7.28	7.04	7.66	7.55		206.02	198.53	210.65	209.14	
Health services .....	80	8.60	8.61	9.05	9.11		276.92	277.24	291.41	294.25	
Offices of physicians .....	801	8.30	8.33	8.68	8.75		253.98	256.56	269.08	273.00	
Offices of dentists .....	802	8.46	8.48	8.80	8.83		239.42	237.44	249.92	250.77	
Nursing and personal care facilities .....	805	5.93	5.95	6.20	6.22		185.02	186.24	192.20	195.31	
Hospitals .....	806	9.72	9.73	10.27	10.35		330.48	330.82	348.15	349.83	
Legal services .....	81	11.79	11.77	12.36	12.46		406.76	406.07	423.95	434.85	
Miscellaneous services .....	89	11.80	11.99	12.18	12.27		462.56	460.42	475.02	483.44	
Engineering and architectural services .....	891	12.90	12.89	13.23	13.28		508.26	509.16	519.94	523.23	
Accounting, auditing, and bookkeeping .....	893	9.91	10.15	10.26	10.42		396.40	376.57	406.30	420.97	

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

<sup>2</sup> See table C-2a 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 \$50,000,000 or more.

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

<sup>5</sup> Data for nonoffice sales agents are excluded from all series in this division.

- Data not available.

<sup>p</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and may differ slightly from data previously published. See the article in this issue for additional information.

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

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

Because of special circumstances in the aerospace industry, in June 1986 BLS began publishing an hourly earnings series for SIC 3721 which includes lump-sum payments. Beginning this month, a series including lump-sum payments also is being published for SIC 3761. Both series begin in October 1983, the effective date of the first aerospace collective bargaining agreement using lump-sum

payments. These series are presented in table 2a below 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.

In addition, table C-2a contains corrected data back to October 1983 for SIC 3761 for hourly earnings excluding lump-sum payments. Corrected data for the larger industry group—SIC 376—appear in table C-2b.

Lump-sum payments are but one of several recent changes in the way that employees are compensated. The changes are widespread and they differ by industry. Because of these developments, the Bureau is conducting a broad-based review of all concepts and definitions used in its earnings and wage programs to determine the proper treatment of lump-sum payments and other new compensation practices.

**C-2a. Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing**

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average hourly earnings, excluding lump-sum payments SIC(3721)													
1983 .....											\$12.76	\$12.83	\$12.93
1984 .....	\$12.91	\$12.82	\$12.88	\$12.85	\$12.81	\$12.78	\$12.87	\$12.89	\$12.87	\$12.97	13.04	13.05	13.13
1985 .....	13.18	13.01	13.12	13.11	13.04	13.06	13.11	13.05	13.16	13.26	13.35	13.37	13.48
1986 .....	13.48	13.38	13.44	13.46	13.45	13.38	13.42	13.41	13.44	13.48	13.52	13.67	13.65
1987 .....	13.74	13.61	13.61	13.66	13.62	13.72	13.71	13.67	13.76	13.77	13.81	13.95	14.00
1988 .....		13.96	13.98	13.99	<sup>P</sup> 13.96								
Average hourly earnings, including lump-sum payments SIC(3721)													
1983 .....											\$12.83	\$12.92	\$13.03
1984 .....	\$13.11	\$12.95	\$13.02	\$13.02	\$12.98	\$12.97	\$13.06	\$13.11	\$13.09	\$13.19	13.26	13.28	13.37
1985 .....	13.40	13.26	13.36	13.33	13.26	13.27	13.33	13.29	13.39	13.48	13.54	13.57	13.68
1986 .....	13.80	13.58	13.64	13.66	13.68	13.60	13.64	13.61	13.63	13.67	14.19	14.31	14.26
1987 .....	14.32	14.21	14.25	14.29	14.31	14.37	14.37	14.37	14.44	14.43	14.13	14.26	14.41
1988 .....		14.39	14.44	14.46	<sup>P</sup> 14.43								
Average hourly earnings, excluding lump-sum payments SIC(3761)													
1983 .....											\$11.94	\$12.02	\$12.07
1984 .....	\$12.01	\$11.99	\$11.96	\$11.95	\$11.97	\$11.86	\$12.02	\$11.87	\$11.90	\$12.14	12.06	12.07	12.29
1985 .....	12.36	12.32	12.32	12.26	12.22	12.13	12.25	12.23	12.36	12.53	12.51	12.52	12.60
1986 .....	12.48	12.55	12.58	12.23	12.52	12.24	12.43	12.40	12.51	12.62	12.58	12.53	12.59
1987 .....	12.90	12.63	12.53	12.49	12.67	12.76	12.83	12.92	13.06	13.15	13.09	13.26	13.49
1988 .....		13.28	13.32	13.35	<sup>P</sup> 13.38								
Average hourly earnings, including lump-sum payments SIC(3761)													
1983 .....											\$11.96	\$12.05	\$12.10
1984 .....	\$12.14	\$12.03	\$12.00	\$12.00	\$12.08	\$11.97	\$12.13	\$11.99	\$12.07	\$12.31	12.24	12.28	12.50
1985 .....	12.56	12.54	12.54	12.47	12.44	12.34	12.47	12.45	12.57	12.73	12.71	12.67	12.74
1986 .....	12.66	12.70	12.73	12.37	12.67	12.39	12.58	12.55	12.63	12.74	12.87	12.84	12.88
1987 .....	13.19	12.91	12.82	12.76	12.97	13.06	13.13	13.23	13.37	13.46	13.32	13.50	13.74
1988 .....		13.55	13.60	13.63	<sup>P</sup> 13.60								

<sup>P</sup> = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**C-2b. Corrected average hourly and weekly earnings in guided missiles, space vehicles, and parts manufacturing (SIC 376)**

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Corrected average hourly earnings												
1983											\$11.70	\$11.79	\$11.83
1984	\$11.82	\$11.77	11.78	\$11.75	\$11.77	\$11.71	\$11.82	\$11.70	\$11.74	\$11.94	11.86	11.91	12.05
1985	12.14	12.11	12.10	12.05	12.01	11.95	12.03	12.01	12.15	12.27	12.28	12.30	12.36
1986	12.20	12.33	12.31	12.03	12.24	12.01	12.11	12.14	12.19	12.25	12.21	12.23	12.32
1987	12.60	12.35	12.25	12.20	12.33	12.41	12.46	12.64	12.80	12.89	12.82	12.95	13.14
1988		12.95	13.02	13.01	<sup>p</sup> 13.02								
Corrected average weekly earnings													
1983											\$489.06	\$490.46	\$505.14
1984	\$496.44	\$495.52	\$495.94	\$489.98	\$497.87	\$489.48	\$496.44	\$476.19	\$489.56	503.87	494.56	501.41	519.36
1985	517.74	512.25	504.57	508.51	494.81	499.51	512.48	500.82	516.38	522.70	520.67	532.59	546.31
1986	517.28	541.29	520.71	511.28	514.08	506.82	511.04	503.81	515.64	513.28	510.38	519.78	535.92
1987	535.50	529.81	519.40	518.50	524.03	521.22	524.57	523.30	541.44	546.54	543.57	554.26	578.16
1988		568.51	557.26	559.43	<sup>p</sup> 554.65								

<sup>p</sup> = preliminary.

**C-3. Average hourly earnings, excluding overtime<sup>1</sup> of production workers on manufacturing payrolls**

Industry	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Manufacturing</b> .....	\$9.49	\$9.45	\$9.64	\$9.67	\$9.70
<b>Durable goods</b> .....	9.97	9.95	10.13	10.16	10.18
Lumber and wood products .....	8.00	7.99	8.12	8.13	( <sup>2</sup> )
Furniture and fixtures .....	7.38	7.39	7.53	7.57	( <sup>2</sup> )
Stone, clay, and glass products .....	9.67	9.66	9.80	9.80	( <sup>2</sup> )
Primary metal industries .....	11.34	11.30	11.39	11.41	( <sup>2</sup> )
Fabricated metal products .....	9.57	9.52	9.69	9.75	( <sup>2</sup> )
Machinery, except electrical .....	10.21	10.18	10.32	10.36	( <sup>2</sup> )
Electrical and electronic equipment .....	9.51	9.49	9.68	9.73	( <sup>2</sup> )
Transportation equipment .....	12.22	12.24	12.57	12.59	( <sup>2</sup> )
Instruments and related products .....	9.36	9.34	9.52	9.54	( <sup>2</sup> )
Miscellaneous manufacturing .....	7.48	7.50	7.68	7.69	( <sup>2</sup> )
<b>Nondurable goods</b> .....	8.81	8.76	8.95	8.97	\$9.00
Food and kindred products .....	8.59	8.58	8.69	8.72	( <sup>2</sup> )
Tobacco manufactures .....	14.00	14.03	14.03	14.58	( <sup>2</sup> )
Textile mill products .....	6.80	6.76	6.99	7.02	( <sup>2</sup> )
Apparel and other textile products .....	5.82	5.74	5.89	5.91	( <sup>2</sup> )
Paper and allied products .....	10.80	10.78	10.92	10.96	( <sup>2</sup> )
Printing and publishing .....	9.81	9.82	10.03	10.01	( <sup>2</sup> )
Chemicals and allied products .....	11.77	11.78	11.95	11.99	( <sup>2</sup> )
Petroleum and coal products .....	13.76	13.75	14.19	14.16	( <sup>2</sup> )
Rubber and misc. plastics products .....	8.48	8.46	8.58	8.59	( <sup>2</sup> )
Leather and leather products .....	6.00	5.88	6.07	6.13	( <sup>2</sup> )

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

<sup>2</sup> Not available.

<sup>p</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and may differ slightly from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**C-4. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry, in current and constant (1977) dollars.**

Industry	Average hourly earnings					Average weekly earnings				
	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>	Apr. 1987	May 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	May 1988 <sup>p</sup>
<b>Total private:</b>										
Current dollars .....	\$8.91	\$8.93	\$9.18	\$9.22	\$9.26	\$307.40	\$310.76	\$315.79	\$319.93	\$320.40
Constant (1977) dollars .....	4.87	4.86	4.86	4.85	( <sup>2</sup> )	167.89	169.17	167.08	168.38	( <sup>2</sup> )
<b>Mining:</b>										
Current dollars .....	12.51	12.50	12.59	12.58	\$12.53	520.42	530.00	527.52	538.42	\$531.27
Constant (1977) dollars .....	6.83	6.80	6.66	6.62	( <sup>2</sup> )	284.23	288.51	279.11	283.38	( <sup>2</sup> )
<b>Construction:</b>										
Current dollars .....	12.62	12.66	12.87	12.85	\$12.87	471.99	487.41	481.34	487.02	\$494.21
Constant (1977) dollars .....	6.89	6.89	6.81	6.76	( <sup>2</sup> )	257.78	265.33	254.68	256.33	( <sup>2</sup> )
<b>Manufacturing:</b>										
Current dollars .....	9.87	9.87	10.07	10.11	\$10.14	398.75	403.68	411.86	414.51	\$415.74
Constant (1977) dollars .....	5.39	5.37	5.33	5.32	( <sup>2</sup> )	217.78	219.75	217.92	218.16	( <sup>2</sup> )
<b>Transportation and public utilities:</b>										
Current dollars .....	11.94	11.93	12.19	12.17	\$12.18	463.27	466.46	470.53	473.41	\$472.58
Constant (1977) dollars .....	6.52	6.49	6.45	6.40	( <sup>2</sup> )	253.01	253.92	248.96	249.16	( <sup>2</sup> )
<b>Wholesale trade:</b>										
Current dollars .....	9.52	9.56	9.78	9.88	\$9.88	361.76	366.15	370.66	377.42	\$376.43
Constant (1977) dollars .....	5.20	5.20	5.17	5.20	( <sup>2</sup> )	197.58	199.32	196.12	198.64	( <sup>2</sup> )
<b>Retail trade:</b>										
Current dollars .....	6.09	6.09	6.24	6.25	\$6.27	177.83	177.83	178.46	180.63	\$181.83
Constant (1977) dollars .....	3.33	3.32	3.30	3.29	( <sup>2</sup> )	97.12	96.80	94.42	95.07	( <sup>2</sup> )
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	8.72	8.72	8.97	9.05	\$9.17	316.54	316.54	321.13	327.61	\$327.37
Constant (1977) dollars .....	4.76	4.75	4.75	4.76	( <sup>2</sup> )	172.88	172.31	169.91	172.43	( <sup>2</sup> )
<b>Services:</b>										
Current dollars .....	8.41	8.40	8.80	8.82	\$8.87	272.48	272.16	284.24	287.53	\$287.39
Constant (1977) dollars .....	4.59	4.57	4.66	4.64	( <sup>2</sup> )	148.81	148.15	150.39	151.33	( <sup>2</sup> )

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

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

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Data in this table have been revised to reflect March 1987 benchmarks and may differ slightly from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**C-5. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

Industry	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
<b>Total private</b> .....	34.8	34.7	34.8	34.8	34.6	34.9	34.8	34.6	34.7	34.8	34.6	34.9	34.7
<b>Mining</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Construction</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Manufacturing</b> .....	41.0	41.0	41.0	41.0	40.6	41.2	41.2	41.0	41.1	41.0	40.9	41.2	41.1
<i>Overtime hours</i> .....	3.8	3.7	3.8	3.8	3.7	3.9	3.9	3.8	3.9	3.7	3.7	4.0	4.0
<b>Durable goods</b> .....	41.6	41.5	41.6	41.5	41.0	41.8	41.8	41.5	41.6	41.5	41.5	41.9	41.9
<i>Overtime hours</i> .....	3.8	3.8	3.8	3.9	3.7	4.0	4.0	3.9	4.0	3.8	3.8	4.2	4.2
Lumber and wood products .....	40.9	40.6	40.6	40.5	39.6	40.4	40.7	40.4	40.2	40.3	40.1	40.6	40.1
Furniture and fixtures .....	40.0	40.0	40.0	40.0	39.5	40.1	40.2	39.8	39.6	39.5	39.3	39.5	39.3
Stone, clay, and glass products .....	42.3	42.0	42.3	42.2	42.0	42.5	42.4	42.5	42.0	42.3	42.3	42.5	42.3
Primary metal industries .....	42.9	43.0	43.2	43.3	43.2	43.6	43.5	43.4	43.4	43.1	43.3	43.4	43.7
Blast furnaces and basic steel products ..	43.0	43.2	43.7	43.7	44.6	43.9	43.8	44.0	44.0	43.8	43.7	43.6	43.9
Fabricated metal products .....	41.5	41.6	41.5	41.5	40.9	41.9	42.1	41.7	41.8	41.6	41.6	42.0	42.1
Machinery, except electrical .....	42.2	42.3	42.5	42.3	41.7	42.6	42.7	42.6	42.7	42.6	42.5	42.8	42.6
Electrical and electronic equipment .....	40.9	40.9	40.9	40.9	40.4	41.0	41.0	40.9	41.1	40.9	40.9	41.2	41.1
Transportation equipment .....	42.2	41.9	41.8	41.8	41.4	42.4	42.3	41.5	42.0	42.0	42.1	43.0	43.1
Motor vehicles and equipment .....	42.3	42.0	41.8	41.9	41.5	42.8	42.9	41.4	42.1	42.3	42.3	44.1	44.3
Instruments and related products .....	41.4	41.4	41.5	41.6	41.0	41.9	41.4	41.2	41.8	41.3	41.4	41.7	41.4
Miscellaneous manufacturing .....	39.4	39.4	39.5	39.7	38.9	39.5	39.2	39.2	39.1	39.3	39.2	39.4	39.3
<b>Nondurable goods</b> .....	40.3	40.2	40.3	40.3	40.1	40.4	40.3	40.3	40.3	40.2	40.1	40.3	40.0
<i>Overtime hours</i> .....	3.7	3.6	3.7	3.7	3.6	3.8	3.7	3.7	3.8	3.6	3.6	3.6	3.7
Food and kindred products .....	40.1	40.1	40.1	40.2	40.2	40.4	40.4	40.5	40.6	40.3	40.1	40.2	40.2
Tobacco manufactures .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Textile mill products .....	42.0	42.1	42.3	42.0	41.4	41.8	41.6	41.5	41.5	41.6	41.2	41.6	40.9
Apparel and other textile products .....	37.1	37.0	37.2	37.2	36.4	37.3	37.1	37.1	36.8	37.0	37.0	37.4	36.8
Paper and allied products .....	43.5	43.4	43.5	43.4	43.7	43.6	43.5	43.3	43.4	43.3	43.2	43.4	43.3
Printing and publishing .....	38.0	38.0	38.1	38.1	38.1	38.1	38.0	38.0	38.1	38.1	38.1	38.2	37.8
Chemicals and allied products .....	42.2	42.2	42.2	42.4	42.5	42.5	42.5	42.5	42.5	42.4	42.5	42.2	42.0
Petroleum and coal products .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rubber and misc. plastics products .....	41.7	41.7	41.6	41.6	41.3	41.8	41.8	41.6	41.7	41.6	41.7	41.9	41.6
Leather and leather products .....	38.4	38.5	38.4	38.9	37.8	38.8	38.3	38.0	38.0	37.8	37.9	37.1	37.5
<b>Transportation and public utilities</b> .....	39.3	39.0	39.3	39.3	39.1	39.3	39.2	39.1	39.5	39.1	38.8	39.2	39.0
<b>Wholesale trade</b> .....	38.3	38.1	38.1	38.2	38.0	38.2	38.2	38.0	38.1	38.2	38.1	38.3	38.1
<b>Retail trade</b> .....	29.3	29.2	29.3	29.4	29.5	29.2	29.2	28.8	29.0	29.1	29.0	29.2	29.1
<b>Finance, insurance, and real estate</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Services</b> .....	32.5	32.5	32.5	32.5	32.5	32.6	32.6	32.5	32.6	32.7	32.4	32.7	32.5

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

components and consequently cannot be separated with sufficient precision.  
<sup>P</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and may differ slightly from data previously published. See the article in this issue for additional information.



**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**C-6. Indexes of aggregate weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(1977=100)

Industry	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>P</sup>	May <sup>P</sup>
<b>Total private</b> .....	120.4	120.5	121.1	121.6	121.1	122.5	122.8	122.5	123.0	123.9	123.6	125.0	124.5
<b>Goods-producing</b> .....	98.7	98.7	99.3	99.6	98.0	101.0	101.2	101.3	100.5	101.1	101.6	102.7	102.2
<b>Mining</b> .....	80.8	80.8	81.9	82.9	82.7	85.0	84.1	84.0	81.7	82.5	83.2	86.0	84.1
<b>Construction</b> .....	133.0	132.7	133.0	133.9	127.0	136.7	136.4	137.7	132.1	136.0	139.1	141.1	139.8
<b>Manufacturing</b> .....	92.9	93.0	93.6	93.8	93.2	94.8	95.1	95.0	95.2	95.2	95.2	96.1	95.8
<b>Durable goods</b> .....	90.4	90.4	90.7	91.3	90.3	92.5	92.9	92.5	92.7	92.7	92.7	94.0	94.0
Lumber and wood products .....	103.0	101.9	102.4	101.8	100.2	102.2	103.9	103.7	103.0	103.6	103.1	104.5	103.6
Furniture and fixtures .....	110.3	110.8	112.7	112.4	111.3	114.1	114.6	114.0	113.7	113.2	112.3	113.2	113.4
Stone, clay, and glass products .....	86.3	85.5	86.1	85.9	85.7	87.1	87.3	88.3	86.5	87.3	87.5	88.3	86.9
Primary metal industries .....	63.0	63.4	64.1	65.0	65.5	66.5	66.8	66.6	66.5	66.4	66.9	67.4	68.1
Blast furnaces and basic steel products .....	49.2	50.2	51.3	51.8	54.0	53.9	54.1	54.1	53.9	53.9	54.1	54.3	54.6
Fabricated metal products .....	87.4	88.0	87.9	88.2	87.5	90.1	91.2	90.7	90.9	90.8	90.8	91.9	92.7
Machinery, except electrical .....	84.8	85.4	86.2	86.5	85.7	88.1	89.0	89.3	90.0	90.2	90.4	91.6	91.6
Electrical and electronic equipment .....	99.6	99.3	100.2	100.4	99.3	101.4	101.5	101.8	102.2	101.8	101.9	102.9	102.5
Transportation equipment .....	99.5	98.8	97.1	99.4	97.5	99.7	99.1	97.1	97.5	97.3	96.8	99.8	100.3
Motor vehicles and equipment .....	88.6	87.4	83.3	88.5	85.7	88.9	88.7	84.6	84.7	85.7	84.8	89.8	90.6
Instruments and related products .....	102.0	102.0	102.8	103.0	102.1	105.2	104.4	103.9	106.0	105.0	105.2	106.3	106.1
Miscellaneous manufacturing .....	81.0	81.6	82.2	82.9	81.5	83.4	83.6	83.6	83.4	84.8	84.5	85.3	83.9
<b>Nondurable goods</b> .....	96.7	96.7	97.8	97.5	97.3	98.3	98.5	98.7	99.0	99.0	98.8	99.1	98.5
Food and kindred products .....	98.9	99.2	99.6	99.5	99.7	100.3	100.9	101.3	102.2	101.7	100.9	101.1	100.5
Tobacco manufactures .....	76.3	75.8	75.5	73.2	70.9	71.7	73.8	76.4	77.2	75.8	74.8	74.0	73.0
Textile mill products .....	82.2	82.7	84.0	83.0	82.1	82.9	82.7	82.5	82.5	82.7	81.7	82.2	80.9
Apparel and other textile products .....	85.0	85.0	87.0	85.4	84.0	86.3	86.1	85.9	85.1	85.5	85.7	86.2	84.6
Paper and allied products .....	100.6	100.4	101.0	100.8	102.3	101.7	101.4	101.2	101.6	101.5	101.3	101.8	101.9
Printing and publishing .....	130.3	130.9	131.6	132.2	132.7	133.0	133.4	133.7	134.9	135.5	136.0	136.5	134.9
Chemicals and allied products .....	93.9	93.4	94.5	95.5	96.2	96.2	96.7	97.4	97.4	97.1	97.9	97.3	97.5
Petroleum and coal products .....	85.3	83.9	85.9	83.7	84.7	85.1	85.3	86.3	86.3	84.5	83.5	84.3	84.9
Rubber and misc. plastics products .....	115.3	115.1	116.1	116.5	116.2	118.7	119.6	120.1	120.9	121.0	121.8	122.6	123.0
Leather and leather products .....	56.7	56.8	59.1	58.4	56.7	58.2	57.5	57.0	57.5	57.2	56.9	55.2	56.3
<b>Service-producing</b> .....	132.4	132.5	133.2	133.8	133.9	134.3	134.7	134.2	135.5	136.4	135.8	137.3	136.7
<b>Transportation and public utilities</b> .....	109.0	108.4	109.5	109.9	110.0	110.9	111.0	111.0	112.6	111.8	111.2	112.7	112.5
<b>Wholesale trade</b> .....	119.0	118.9	119.2	119.8	119.6	120.7	121.3	121.3	122.2	123.1	123.6	124.8	124.6
<b>Retail trade</b> .....	122.2	122.2	123.0	123.6	124.1	123.5	123.8	122.2	124.0	125.2	124.8	126.0	125.5
<b>Finance, insurance, and real estate</b> .....	141.5	141.6	141.4	141.8	140.6	141.1	141.3	139.6	141.3	141.6	139.6	141.0	139.3
<b>Services</b> .....	151.6	152.1	152.9	153.5	153.7	154.8	155.3	155.6	156.5	158.0	157.2	159.0	158.4

<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>P</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and may differ slightly from data previously published. See the article in this issue for additional information.

**ESTABLISHMENT DATA  
EARNINGS  
SEASONALLY ADJUSTED**

**C-7. The Hourly Earnings Index and average hourly and weekly earnings of production or nonsupervisory workers <sup>1</sup> on private nonagricultural payrolls, seasonally adjusted**

Industry	1987								1988				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. <sup>2</sup>	May <sup>3</sup>
Hourly Earnings Index <sup>2</sup> (1977 = 100)													
<b>Total private (in current dollars) .....</b>	172.9	172.9	173.2	174.1	174.6	174.9	175.6	175.7	176.6	176.7	177.0	177.8	178.8
<b>Mining .....</b>	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Construction .....</b>	154.8	155.4	154.9	155.1	154.8	155.2	156.5	155.4	157.6	156.8	157.5	157.5	157.6
<b>Manufacturing .....</b>	174.2	174.5	174.5	175.3	176.3	176.1	176.4	176.6	176.8	177.0	177.3	177.8	178.4
<b>Transportation and public utilities .....</b>	176.0	175.6	176.2	177.0	176.8	177.5	177.6	178.2	178.3	179.1	179.4	179.5	180.5
<b>Wholesale trade .....</b>	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Retail trade .....</b>	160.3	160.6	161.1	161.5	162.3	162.1	162.4	162.7	163.4	163.4	163.8	164.6	165.3
<b>Finance, insurance, and real estate .....</b>	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Services .....</b>	180.0	180.2	180.9	182.4	182.5	183.9	184.9	185.2	186.5	186.3	186.9	188.2	190.4
<b>Total private (in constant dollars)<sup>4</sup> .....</b>	94.0	93.8	93.7	93.7	93.7	93.6	93.8	93.7	93.8	93.7	93.5	93.5	( <sup>3</sup> )
Average hourly earnings													
<b>Total private .....</b>	\$8.95	\$8.95	\$8.96	\$9.01	\$9.02	\$9.07	\$9.10	\$9.11	\$9.14	\$9.13	\$9.16	\$9.22	\$9.28
<b>Mining .....</b>	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Construction .....</b>	\$12.70	\$12.74	\$12.71	\$12.72	\$12.70	\$12.72	\$12.81	\$12.74	\$12.91	\$12.82	\$12.90	\$12.90	\$12.91
<b>Manufacturing .....</b>	9.88	9.89	9.88	9.94	10.00	9.99	10.00	10.01	10.02	10.03	10.05	10.10	10.15
<b>Transportation and public utilities .....</b>	12.00	12.00	12.03	12.09	12.07	12.12	12.13	12.16	12.14	12.19	12.21	12.19	12.25
<b>Wholesale trade .....</b>	9.57	9.55	9.59	9.65	9.64	9.70	9.71	9.69	9.75	9.72	9.76	9.88	9.89
<b>Retail trade .....</b>	6.09	6.10	6.12	6.13	6.18	6.16	6.17	6.19	6.20	6.20	6.22	6.24	6.27
<b>Finance, insurance, and real estate .....</b>	8.72	8.65	8.70	8.79	8.76	8.82	8.89	8.84	8.92	8.91	8.90	9.00	9.16
<b>Services .....</b>	8.43	8.44	8.46	8.53	8.55	8.60	8.65	8.67	8.72	8.72	8.75	8.81	8.91
Average weekly earnings													
<b>Total private:</b>													
In current dollars .....	311.46	310.57	311.81	313.55	312.09	316.54	316.68	315.21	317.16	317.72	316.94	321.78	322.02
In constant (1977) dollars <sup>4</sup> .....	169.36	168.42	168.64	168.76	167.61	169.36	169.08	168.02	168.43	168.46	167.43	169.18	( <sup>3</sup> )

<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> Excludes the effects of two types of changes that are unrelated to underlying wage rate movements: Fluctuations in overtime in manufacturing and interindustry employment shifts.

<sup>3</sup> These series are not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular

components and consequently cannot be separated with sufficient precision.

<sup>4</sup> The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

<sup>5</sup> Not available.

<sup>6</sup> = preliminary.

NOTE: Data in this table have been revised to reflect March 1987 benchmarks and updated seasonal adjustment factors and may differ slightly from data previously published. See the article in this issue for additional information.

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

**C-8. 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		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Alabama</b> .....	40.8	41.0	41.0	\$8.70	\$8.99	\$8.99	\$354.96	\$368.59	\$368.59
Birmingham .....	40.4	41.6	41.4	8.99	9.12	9.11	363.20	379.39	377.15
Mobile .....	42.2	40.6	40.4	10.00	10.58	10.55	422.00	429.55	426.22
<b>Alaska</b> .....	43.6	43.9	35.7	12.41	11.47	12.61	541.08	503.53	450.18
<b>Arizona</b> .....	40.0	41.1	41.0	9.93	9.79	9.82	397.20	402.37	402.62
<b>Arkansas</b> .....	40.4	40.8	40.8	7.85	8.06	8.02	317.14	328.85	327.22
Fayetteville-Springdale .....	40.1	41.1	41.6	7.02	7.32	7.33	281.50	300.85	304.93
Fort Smith .....	41.1	40.3	41.3	8.48	8.57	8.64	348.53	345.37	356.83
Little Rock-North Little Rock .....	41.0	40.7	40.1	8.51	8.64	8.55	348.91	351.65	342.86
Pine Bluff .....	41.9	42.0	43.8	10.80	10.49	10.17	452.52	440.58	445.45
<b>California</b> .....	39.5	( <sup>1</sup> )	( <sup>1</sup> )	10.68	( <sup>1</sup> )	( <sup>1</sup> )	421.86	( <sup>1</sup> )	( <sup>1</sup> )
<b>Colorado</b> .....	39.6	39.9	40.7	10.07	10.29	10.22	398.77	410.57	415.95
Denver .....	38.9	39.8	41.4	10.67	10.65	10.50	415.06	423.87	434.70
<b>Connecticut</b> .....	41.9	41.9	41.5	10.32	10.78	10.78	432.41	450.84	446.54
Bridgeport-Milford .....	41.9	42.1	42.2	10.77	11.24	11.16	451.26	473.20	470.95
Hartford .....	41.5	42.8	42.5	10.57	11.04	11.02	438.66	472.51	468.35
New Haven-Meriden .....	40.3	40.4	40.3	10.05	10.19	10.19	405.02	411.68	410.66
Stamford .....	40.2	40.7	40.7	11.31	12.08	12.16	454.66	491.66	494.91
Waterbury .....	41.1	42.5	42.9	8.87	9.12	9.16	364.56	387.60	392.96
<b>Delaware</b> .....	40.1	38.9	39.7	10.45	10.72	10.63	419.05	417.01	422.01
Wilmington .....	41.0	40.3	40.4	12.21	13.02	12.96	500.61	524.71	523.58
<b>District of Columbia:</b>									
Washington MSA .....	39.5	39.1	39.2	10.76	11.03	11.24	425.02	431.27	440.61
<b>Florida</b> .....	40.5	40.6	40.6	8.14	8.28	8.25	329.67	336.17	334.95
Fort Lauderdale-Hollywood-Pompano Beach .....	42.2	41.2	40.9	7.89	8.40	8.31	332.96	346.08	339.88
Jacksonville .....	40.2	40.9	41.1	8.82	8.99	8.99	354.56	367.69	369.49
Miami-Hialeah .....	38.3	38.9	38.5	7.12	7.08	7.06	272.70	275.41	271.81
Orlando .....	40.5	40.8	40.6	8.55	8.73	8.70	346.28	356.18	353.22
Pensacola .....	43.1	43.5	42.0	10.50	11.13	10.87	452.55	484.16	456.54
Tampa-St. Petersburg-Clearwater .....	39.6	41.1	41.3	7.48	7.91	7.98	296.21	325.10	328.75
West Palm Beach-Boca Raton-Delray Beach .....	40.7	42.4	40.0	9.21	9.34	9.18	374.85	396.02	367.20
<b>Georgia</b> .....	40.3	41.4	41.2	8.47	8.60	8.63	341.34	356.04	355.56
Atlanta .....	40.9	42.0	41.9	9.94	10.17	10.19	406.55	427.14	426.96
Savannah .....	44.5	47.0	47.8	10.74	11.35	11.15	477.93	533.45	532.97
<b>Hawaii</b> .....	39.4	40.5	40.0	9.16	9.77	9.67	360.90	395.69	388.80
Honolulu .....	39.3	40.2	39.6	9.34	9.90	9.78	387.06	397.98	389.24
<b>Idaho</b> .....	37.8	37.3	37.6	9.44	9.55	9.51	356.83	356.22	357.58
<b>Illinois</b> .....	41.2	41.8	41.7	10.84	11.06	11.07	448.61	462.31	461.62
Aurora-Elgin .....	41.3	42.1	41.4	10.33	10.66	10.70	426.63	448.79	442.98
Bloomington-Normal .....	38.7	40.9	40.3	10.56	11.16	11.28	408.67	456.44	453.76
Champaign-Urbana-Rantoul .....	40.8	40.0	39.3	9.45	9.27	9.51	385.56	370.80	373.74
Chicago .....	41.4	42.3	42.1	10.53	10.71	10.72	435.94	453.03	451.31
Davenport-Rock Island-Moline .....	40.2	40.3	40.5	12.95	12.51	12.52	520.59	504.15	507.06
Decatur .....	42.0	42.3	42.7	13.95	14.12	14.15	565.90	597.28	604.21
Joliet .....	41.9	41.4	41.3	11.84	11.88	11.87	487.72	491.00	490.23
Lake County .....	39.3	40.4	40.1	10.78	11.20	11.27	423.65	452.48	451.93
Peoria .....	42.7	48.0	47.2	12.98	13.48	13.43	553.39	647.04	633.90
Rockford .....	41.6	43.0	42.8	10.77	11.89	11.58	448.03	502.67	495.62
Springfield .....	41.3	42.8	42.8	11.45	11.31	11.31	472.89	481.81	481.81
<b>Indiana</b> .....	41.2	41.7	41.8	11.02	11.36	11.35	454.02	473.71	474.43

See footnotes at end of table.

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

**C-8. 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		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>a</sup>
<b>Iowa</b> .....	40.1	41.5	41.3	\$10.68	\$10.53	\$10.53	\$428.27	\$437.00	\$434.89
Cedar Rapids .....	39.2	39.8	39.3	11.66	11.92	11.97	457.07	474.42	470.42
Des Moines .....	43.3	42.8	41.6	11.93	11.77	11.92	516.57	503.76	495.87
Dubuque .....	41.7	40.2	40.5	12.83	12.03	11.67	535.01	483.61	472.64
Sioux City .....	38.7	33.3	34.9	8.60	8.26	8.31	332.82	275.06	290.02
<b>Kansas</b> .....	40.7	40.8	40.6	9.94	10.02	10.07	404.56	408.82	408.84
Topeka .....	42.7	43.8	44.0	10.92	11.45	11.16	466.28	501.51	491.04
Wichita .....	39.1	41.0	40.3	10.81	10.35	10.37	422.67	424.35	417.91
<b>Kentucky</b> .....	39.2	40.3	40.2	10.02	10.08	10.11	392.78	406.22	406.42
Lexington-Fayette .....	38.5	39.3	38.8	10.32	10.17	10.11	397.32	399.68	392.27
Louisville .....	40.8	41.4	41.4	11.27	11.69	11.75	459.82	483.97	486.45
<b>Louisiana</b> .....	41.3	42.6	42.5	10.99	10.85	10.97	453.89	462.21	466.23
Baton Rouge .....	42.9	42.5	42.6	12.03	12.43	12.48	516.09	528.28	531.65
New Orleans .....	39.6	41.5	42.1	10.76	10.38	10.43	426.10	430.77	439.10
Shreveport .....	39.7	41.4	41.2	11.50	11.66	11.74	456.55	482.72	483.69
<b>Maine</b> .....	41.3	41.0	40.4	8.75	8.81	8.90	361.38	361.21	359.56
Lewiston-Auburn .....	40.4	41.4	40.4	7.35	7.75	7.87	296.94	320.85	317.95
Portland .....	40.0	42.5	40.7	9.18	9.41	9.35	367.20	399.93	380.55
<b>Maryland</b> .....	40.4	40.7	40.8	10.09	10.31	10.37	407.64	419.62	423.10
Baltimore MSA .....	41.9	42.0	42.0	10.79	11.04	11.11	452.10	463.68	466.62
<b>Massachusetts</b> .....	40.2	41.3	41.3	9.66	10.07	10.17	388.33	415.89	420.02
Boston .....	40.1	41.5	41.4	10.55	10.85	10.90	423.06	450.28	451.26
Springfield .....	41.7	43.0	42.7	9.11	9.51	9.56	379.89	408.93	408.21
Worcester .....	40.6	40.7	40.0	9.70	10.27	10.28	393.82	417.99	411.20
<b>Michigan</b> .....	42.1	42.7	43.4	12.98	13.27	13.40	546.46	566.63	581.56
Ann Arbor .....	45.7	44.9	45.8	14.12	14.34	14.69	645.28	643.87	672.80
Battle Creek .....	41.6	41.9	41.3	13.58	13.99	14.26	564.93	586.18	588.94
Detroit .....	43.4	43.9	44.7	13.79	14.14	14.40	598.49	620.75	643.68
Flint .....	43.3	42.5	44.2	14.93	16.46	16.17	646.47	699.55	714.71
Grand Rapids .....	39.0	40.9	41.5	11.03	11.39	11.40	430.17	465.85	473.10
Kalamazoo .....	42.5	42.6	43.1	12.09	12.25	12.29	513.82	521.85	529.70
Lansing-East Lansing .....	42.7	43.7	41.8	13.96	14.52	14.29	596.09	634.52	597.32
Muskegon .....	40.7	40.1	40.4	11.86	12.06	11.97	482.70	483.61	483.59
Saginaw-Bay City-Midland .....	42.1	43.0	43.9	14.44	15.07	15.16	607.92	648.01	665.52
<b>Minnesota</b> .....	39.9	40.3	40.5	10.39	10.43	10.49	414.56	420.33	424.85
Duluth .....	37.7	39.1	40.3	10.82	10.95	10.99	407.91	428.15	442.90
Minneapolis-St. Paul .....	40.2	40.6	40.8	11.14	11.13	11.11	447.83	451.88	453.29
St. Cloud .....	38.7	39.4	40.1	9.30	9.70	9.70	359.91	382.18	388.97
<b>Mississippi</b> .....	39.4	40.1	39.8	7.55	7.75	7.81	297.47	310.78	310.84
Jackson .....	39.5	40.3	40.6	8.46	8.83	8.90	334.17	355.85	361.34
<b>Missouri</b> .....	39.9	40.5	40.5	9.91	10.12	10.19	395.41	409.86	412.70
Kansas City .....	39.9	40.8	40.8	11.24	11.62	11.52	448.48	474.10	470.02
St. Louis .....	40.9	41.3	41.3	11.43	11.65	11.77	467.49	481.15	486.10
Springfield .....	38.9	39.8	39.1	8.54	8.49	8.53	332.21	337.90	333.52
<b>Montana</b> .....	38.7	38.7	39.8	10.86	10.46	10.68	420.28	404.80	425.06
<b>Nebraska</b> .....	39.6	39.8	40.5	9.27	9.42	9.51	367.09	374.92	385.16
Lincoln .....	38.9	41.2	40.6	9.76	9.95	10.02	379.66	409.94	406.81
Omaha .....	39.8	41.1	41.8	9.88	10.24	10.33	393.22	420.86	431.79
<b>Nevada</b> .....	40.7	39.8	38.5	9.77	10.23	10.00	397.64	407.15	385.00
Las Vegas .....	41.5	40.1	38.3	12.45	12.54	12.57	516.68	502.85	481.43
<b>New Hampshire</b> .....	40.6	40.8	40.8	9.18	9.48	9.52	372.71	386.78	388.42
Nashua .....	41.6	40.4	40.3	11.11	11.50	11.71	482.18	464.60	471.91

See footnotes at end of table.

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

**C-8. 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		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>New Jersey</b> .....	40.9	41.4	41.2	\$10.38	\$10.76	\$10.80	\$424.54	\$445.46	\$444.96
<b>New Mexico</b> .....	39.8	41.6	41.0	8.69	9.03	9.01	345.86	375.65	369.41
Albuquerque .....	39.7	41.1	41.0	9.07	9.26	9.27	360.08	380.59	380.07
<b>New York</b> .....	39.2	39.9	39.8	10.08	10.28	10.32	395.14	410.17	410.74
Albany-Schenectady-Troy .....	39.4	40.1	40.5	10.53	10.83	10.83	414.88	434.28	438.62
Binghamton .....	39.1	41.1	40.7	9.32	9.46	9.53	364.41	388.81	387.87
Buffalo .....	41.6	43.0	43.4	12.07	12.13	12.25	502.11	521.59	531.65
Elmira .....	40.6	41.5	41.5	9.62	9.81	9.74	390.57	407.12	404.21
Nassau-Suffolk .....	39.8	39.8	40.1	10.61	11.00	11.03	422.28	437.80	442.30
New York PMSA .....	37.2	37.5	37.0	9.41	9.60	9.82	350.05	360.00	355.94
New York City .....	36.9	37.3	36.9	9.33	9.48	9.37	344.28	353.60	345.75
Niagara Falls .....	40.7	42.3	42.7	12.70	13.29	13.25	516.89	562.17	565.78
Orange County .....	38.0	40.0	39.1	7.89	8.02	8.04	299.82	320.80	314.36
Poughkeepsie .....	42.3	41.0	41.0	9.21	9.76	9.81	389.58	400.16	402.21
Rochester .....	40.8	42.7	43.0	11.93	12.40	12.47	486.74	529.48	536.21
Rockland County .....	40.1	37.4	34.2	10.23	10.54	11.23	410.22	394.20	384.07
Syracuse .....	40.1	42.0	41.7	11.20	11.48	11.88	449.12	482.16	494.56
Utica-Rome .....	41.0	41.1	40.9	9.59	9.68	9.68	393.19	397.85	395.91
Westchester County .....	38.8	39.6	39.4	9.79	10.92	11.08	379.85	432.43	435.76
<b>North Carolina</b> .....	40.4	40.3	40.5	7.75	8.02	8.05	313.10	323.21	326.03
Asheville .....	41.7	41.0	41.2	7.81	8.12	8.09	325.68	332.92	333.31
Charlotte-Gastonia-Rock Hill .....	41.0	40.7	41.0	8.01	8.30	8.31	328.41	337.81	340.71
Greensboro-Winston-Salem-High Point .....	40.0	40.1	40.0	8.57	8.77	8.84	342.80	351.68	353.60
Raleigh-Durham .....	40.9	41.5	41.4	8.78	9.06	9.09	359.10	375.99	376.33
<b>North Dakota</b> .....	37.9	38.1	39.3	8.43	8.35	8.54	319.50	318.14	335.62
Fargo-Moorhead .....	36.1	38.0	37.2	8.43	8.29	8.39	304.32	315.02	312.11
<b>Ohio</b> .....	42.1	42.7	43.2	11.71	11.91	12.04	492.99	508.56	520.13
Akron .....	43.0	43.2	43.8	11.25	11.46	11.73	483.75	495.07	513.77
Cincinnati .....	41.8	42.0	42.1	10.99	10.80	11.01	459.38	453.60	463.52
Cleveland .....	42.7	43.5	43.6	11.59	11.73	11.82	494.89	510.26	515.35
Columbus .....	41.1	41.3	41.7	11.35	11.49	11.58	466.49	474.54	482.89
Dayton-Springfield .....	41.3	43.2	43.7	11.77	12.48	12.68	486.10	539.14	554.12
Toledo .....	42.4	43.1	43.4	12.67	13.19	13.23	537.21	568.49	574.18
Youngstown-Warren .....	43.1	41.6	42.2	13.27	13.41	13.58	571.94	557.86	573.08
<b>Oklahoma</b> .....	40.7	40.4	41.5	10.06	10.25	10.35	409.44	414.10	429.53
Oklahoma City .....	39.8	40.4	41.3	11.12	11.44	11.55	442.58	462.18	477.02
Tulsa .....	40.5	41.3	41.2	10.57	10.76	10.89	428.09	444.39	448.67
<b>Oregon</b> .....	39.4	39.1	39.9	10.52	10.69	10.74	414.49	417.98	428.53
Eugene-Springfield .....	40.6	40.3	41.0	10.62	10.56	10.75	431.17	425.57	440.75
Portland .....	39.2	39.7	39.5	10.71	10.95	10.96	419.83	434.72	432.92
Salem .....	38.7	38.5	38.5	9.62	9.46	9.68	372.29	364.21	372.68

See footnotes at end of table.

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

**C-8. 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		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Pennsylvania</b> .....	40.2	40.8	40.9	\$9.92	\$10.14	\$10.20	\$398.78	\$413.71	\$417.18
Allentown-Bethlehem .....	38.8	40.4	40.4	10.39	10.19	10.33	403.13	411.68	417.33
Altoona .....	39.1	40.4	40.3	8.73	8.68	8.73	341.34	350.67	351.82
Beaver County .....	41.5	42.3	42.3	10.83	10.58	10.49	449.45	447.53	443.73
Erie .....	40.6	42.8	42.3	10.19	10.36	10.38	413.71	443.41	439.07
Harrisburg-Lebanon-Carlisle .....	39.3	39.9	39.5	9.35	9.42	9.42	367.46	375.86	372.09
Johnstown .....	38.3	39.5	40.0	8.34	8.47	8.29	319.42	334.57	331.60
Lancaster .....	39.6	40.1	40.3	9.69	9.89	9.96	383.72	396.59	401.39
Philadelphia PMSA .....	40.4	40.3	40.3	10.71	11.03	11.18	432.68	444.51	450.55
Pittsburgh .....	41.0	41.7	42.1	11.08	11.23	11.29	454.28	468.29	475.31
Reading .....	40.0	40.8	40.9	10.05	10.55	10.65	402.00	430.44	435.59
Scranton-Wilkes-Barre .....	38.3	38.8	38.7	8.64	8.81	8.84	330.91	341.83	342.11
Williamsport .....	40.6	41.5	40.9	8.56	8.73	8.73	347.54	362.30	357.06
York .....	41.7	42.3	42.6	9.34	9.65	9.72	389.48	408.20	414.07
<b>Rhode Island</b> .....	40.0	39.9	39.9	8.08	8.39	8.43	323.20	334.76	336.36
Pawtucket-Woonsocket-Attleboro .....	40.5	40.7	40.2	7.63	7.94	7.99	309.02	323.16	321.20
Providence .....	39.7	39.7	39.8	8.13	8.37	8.40	322.76	332.29	334.32
<b>South Carolina</b> .....	41.4	41.6	41.4	8.05	8.26	8.27	333.27	343.62	342.38
Charleston .....	41.9	41.5	40.9	9.07	9.14	9.08	380.03	379.31	371.37
Columbia .....	40.7	41.4	41.4	7.88	8.27	8.35	320.72	342.38	345.69
Greenville-Spartanburg .....	41.5	41.7	41.6	7.96	8.22	8.21	330.34	342.77	341.54
<b>South Dakota</b> .....	41.5	41.4	41.9	8.01	8.02	8.01	332.42	332.03	335.62
Sioux Falls .....	45.4	44.5	43.6	8.22	8.29	8.14	373.19	368.91	354.90
<b>Tennessee</b> .....	40.5	41.8	41.8	8.77	8.84	8.86	355.19	369.51	370.35
Chattanooga .....	41.7	41.8	40.0	7.86	7.90	8.15	327.76	330.22	326.00
Johnson City-Kingsport-Bristol .....	42.6	43.4	42.9	9.11	9.39	9.28	388.09	407.53	398.11
Knoxville .....	39.1	40.9	40.3	9.18	9.02	9.02	358.94	368.92	363.51
Memphis .....	42.2	44.1	43.2	8.89	8.94	8.98	375.16	394.25	387.94
Nashville .....	41.9	41.3	41.4	10.09	10.30	10.21	422.77	425.39	422.69
<b>Texas</b> .....	40.9	41.7	41.9	9.88	9.90	9.93	404.09	412.83	416.07
Dallas .....	41.1	41.0	41.3	9.73	9.69	9.70	399.90	397.29	400.61
Ft. Worth-Arlington .....	40.4	41.6	41.4	9.73	10.97	11.10	393.09	456.35	459.54
Houston .....	43.3	43.6	44.0	11.28	11.25	11.30	488.42	490.50	497.20
San Antonio .....	40.7	39.9	40.8	7.67	7.58	7.57	312.17	302.44	308.86
<b>Utah</b> .....	38.7	39.8	40.4	9.95	9.93	9.86	385.07	395.21	398.34
Salt Lake City-Ogden .....	39.8	40.0	40.3	9.84	9.90	9.82	391.63	396.00	395.75
<b>Vermont</b> .....	39.9	40.5	39.7	8.97	9.29	9.25	357.90	376.24	367.23
Burlington .....	41.1	41.1	40.0	9.86	9.51	9.42	405.25	390.86	376.80
<b>Virginia</b> .....	40.7	40.9	41.4	9.04	9.38	9.40	367.93	383.64	389.16
Bristol .....	40.9	42.9	41.3	7.82	7.90	7.78	319.84	338.91	321.31
Charlottesville .....	40.0	39.9	39.7	7.39	7.65	7.63	295.60	305.24	302.91
Danville .....	41.9	41.6	42.7	7.93	8.66	8.65	332.27	360.26	369.36
Lynchburg .....	41.7	40.7	40.5	8.47	8.61	8.59	353.20	350.43	347.90
Northern Virginia .....	38.8	40.2	40.3	9.63	10.37	10.63	373.64	416.87	428.39
Richmond-Petersburg .....	40.7	41.4	41.8	11.44	11.86	12.03	465.61	491.00	502.85
Roanoke .....	40.4	40.2	40.0	8.81	9.33	9.07	355.92	375.07	362.80
<b>Washington</b> .....	40.0	40.0	39.7	11.77	11.73	11.65	470.80	469.20	462.51

See footnotes at end of table.

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

**C-8. 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		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>West Virginia</b> .....	40.2	41.0	40.8	\$10.65	\$10.72	\$10.95	\$428.13	\$439.52	\$446.76
Charleston .....	42.0	42.4	42.0	13.16	13.48	13.68	552.72	571.55	574.56
Huntington-Ashland .....	38.7	41.4	42.3	12.02	11.77	12.08	465.17	487.28	510.98
Parkersburg-Marietta .....	41.7	42.3	41.6	11.95	12.26	12.76	498.32	518.60	530.82
Wheeling .....	40.8	40.8	41.7	12.12	11.72	11.90	494.50	478.18	486.23
<b>Wisconsin</b> .....	40.4	41.5	41.5	10.57	10.64	10.72	427.03	441.56	444.88
Appleton-Oshkosh .....	42.6	43.3	42.7	10.66	11.16	11.17	454.12	483.23	476.96
Eau Claire .....	39.1	39.6	38.9	11.07	10.85	10.81	432.84	429.66	420.51
Green Bay .....	41.7	41.2	40.5	11.34	11.54	11.52	472.88	475.45	466.56
Janesville-Beloit .....	38.0	39.6	40.3	12.18	12.09	12.14	462.84	478.76	489.24
Kenosha .....	38.9	41.5	45.2	11.99	12.88	13.70	466.41	534.52	619.24
La Crosse .....	39.0	38.5	38.8	9.16	9.14	9.20	357.24	351.89	356.96
Madison .....	40.5	41.4	41.2	9.98	10.24	10.09	404.19	423.94	415.71
Milwaukee .....	40.2	41.7	41.6	11.68	11.57	11.67	469.54	462.47	485.47
Racine .....	39.6	40.8	39.9	11.05	11.06	11.02	437.58	451.25	439.70
Wausau .....	41.7	41.7	42.3	9.79	10.07	10.26	408.24	418.92	434.00
<b>Wyoming</b> .....	39.3	36.4	36.1	9.70	9.64	9.94	381.21	350.90	378.71
<b>Puerto Rico</b> .....	37.2	39.0	39.0	5.41	5.45	5.47	201.25	212.55	213.33
<b>Virgin Islands</b> .....	42.7	39.9	4.6	9.04	9.47	9.26	386.01	377.85	385.22

<sup>1</sup> Not available.

<sup>P</sup> = preliminary.

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

publication. All State and area data have been adjusted to March 1987 benchmarks, except Colorado. Data for Colorado have been adjusted to December 1986 benchmarks.

**PRODUCTIVITY DATA  
SEASONALLY ADJUSTED**

**C-9. Hours of wage and salary workers in nonagricultural establishments by major industry, seasonally adjusted**

Industry	Millions of hours (annual rate) <sup>1</sup>			Percent change		
	Mar. 1988 <sup>r</sup>	Apr. 1988 <sup>r</sup>	May 1988 <sup>p</sup>	May 1987 to May 1988 <sup>p</sup>	Mar. 1988 to Apr. 1988 <sup>r</sup>	Apr. 1988 to May 1988 <sup>p</sup>
Total .....	194,996	196,595	196,287	3.4	0.8	-0.2
Private sector .....	160,237	161,723	161,228	3.4	.9	-.3
Mining .....	1,603	1,653	1,623	3.1	3.1	-1.8
Construction .....	10,304	10,395	10,353	5.2	.9	-.4
Manufacturing .....	41,293	41,442	41,482	2.8	.4	.1
Durable goods .....	24,545	24,706	24,757	3.3	.7	.2
Nondurable goods .....	16,748	16,736	16,725	2.1	-.1	-.1
Transportation and public utilities .....	11,165	11,306	11,279	3.3	1.3	-.2
Wholesale trade .....	11,986	12,146	12,110	4.1	1.3	-.3
Retail trade .....	28,712	28,989	28,915	3.2	1.0	-.3
Finance, insurance, and real estate .....	12,376	12,525	12,352	-.1	1.2	-1.4
Services .....	42,798	43,267	43,113	4.8	1.1	-.4
Government .....	34,760	34,872	35,059	3.1	.3	.5

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

<sup>p</sup> = preliminary.

= 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 2134-1, chapter 13, Productivity Measures: Business Economy and Major Sectors. SOURCE: Office of Productivity and Technology (202 523 9261).



**PRODUCTIVITY DATA  
SEASONALLY ADJUSTED**

**C-10. Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted**

(1977 = 100)

Item	Annual average		Quarterly index										
	1986	1987	1985		1986				1987				1988
			III	IV	I	II	III	IV	I	II	III	IV	
<b>Business sector</b>													
Output per hour of all persons .....	109.5	110.5	108.2	107.9	109.5	109.7	109.6	109.6	109.7	110.1	111.3	110.9	111.8
Output .....	128.0	132.2	124.7	125.3	127.3	127.5	128.1	129.0	130.2	131.1	133.1	134.4	136.3
Hours .....	116.9	119.7	115.2	116.1	116.3	116.3	116.9	117.8	118.7	119.1	119.6	121.2	121.9
Compensation per hour .....	182.8	188.2	177.0	179.3	180.7	182.2	183.6	185.2	185.8	187.3	189.1	190.6	192.2
Real compensation per hour .....	101.1	100.4	99.5	99.7	100.1	101.3	101.5	101.7	100.7	100.3	100.3	100.2	100.2
Unit labor costs .....	166.9	170.3	163.6	166.1	165.0	166.2	167.5	169.0	169.4	170.2	169.8	171.8	171.9
Unit nonlabor payments .....	163.8	169.4	161.8	160.2	163.1	163.9	165.7	162.4	166.0	168.6	172.2	170.8	170.8
Implicit price deflator .....	165.8	170.0	163.0	164.0	164.3	165.4	166.9	166.7	168.2	169.6	170.7	171.4	171.5
<b>Nonfarm business sector</b>													
Output per hour of all persons .....	107.5	108.4	106.4	105.9	107.7	107.7	107.5	107.5	107.6	108.0	109.1	108.8	109.8
Output .....	127.5	131.8	124.3	124.9	126.9	127.1	127.6	128.5	129.7	130.7	132.7	134.1	136.1
Hours .....	118.6	121.6	116.9	117.9	117.9	118.0	118.7	119.6	120.6	121.1	121.7	123.2	123.9
Compensation per hour .....	182.0	187.1	176.2	178.3	180.0	181.3	182.6	184.4	184.9	186.3	187.9	189.5	191.2
Real compensation per hour .....	100.6	99.8	99.0	99.2	99.8	100.8	100.9	101.2	100.2	99.7	99.7	99.6	99.7
Unit labor costs .....	169.3	172.7	165.7	168.3	167.2	168.4	169.8	171.5	171.8	172.5	172.2	174.1	174.1
Unit nonlabor payments .....	165.2	170.4	163.4	160.8	164.7	165.2	167.0	163.9	167.4	169.2	173.0	171.8	172.3
Implicit price deflator .....	167.8	171.9	164.9	165.7	166.4	167.3	168.8	168.8	170.3	171.4	172.5	173.3	173.4
<b>Manufacturing<sup>1</sup></b>													
Output per hour of all persons .....	128.8	132.4	125.3	126.2	127.7	128.5	129.3	129.7	130.4	132.3	133.4	133.6	134.5
Output .....	125.9	130.7	123.2	124.2	125.3	125.3	126.0	127.0	128.0	129.3	131.6	133.9	135.4
Hours .....	97.8	98.7	98.3	98.4	98.1	97.5	97.5	97.9	98.1	97.7	98.7	100.3	100.7
Compensation per hour .....	182.7	185.1	178.0	180.2	181.0	182.1	183.1	184.3	183.9	184.8	185.4	186.3	188.4
Real compensation per hour .....	101.0	98.7	100.0	100.3	100.3	101.3	101.2	101.2	99.6	98.9	98.3	97.9	98.2
Unit labor costs .....	141.8	139.7	142.1	142.8	141.8	141.7	141.7	142.2	141.0	139.6	139.0	139.5	140.1
<b>Durable goods<sup>1</sup></b>													
Output per hour of all persons .....	136.8	141.6	131.6	133.1	135.3	136.0	137.5	138.3	139.6	141.3	142.5	143.2	144.4
Output .....	134.1	139.1	130.8	132.3	133.7	133.3	134.1	135.2	136.6	137.4	139.6	143.0	144.5
Hours .....	98.0	98.2	99.4	99.4	98.8	98.0	97.5	97.8	97.8	97.2	98.0	99.8	100.1
Compensation per hour .....	181.4	183.3	176.6	179.4	179.9	180.8	181.6	183.1	182.2	182.9	183.4	184.4	187.2
Real compensation per hour .....	100.3	97.8	99.2	99.8	99.7	100.5	100.4	100.5	98.7	98.0	97.3	97.0	97.6
Unit labor costs .....	132.6	129.4	134.2	134.7	132.9	132.9	132.1	132.4	130.5	129.5	128.8	128.8	129.6
<b>Nondurable goods<sup>1</sup></b>													
Output per hour of all persons .....	116.8	118.8	115.6	115.5	116.1	117.1	117.0	116.9	116.9	119.1	120.1	119.3	119.9
Output .....	113.7	118.1	111.8	112.1	112.8	113.5	113.9	114.7	115.2	117.2	119.6	120.4	121.9
Hours .....	97.4	99.4	96.8	97.1	97.2	96.9	97.3	98.1	98.6	98.5	99.6	100.9	101.6
Compensation per hour .....	184.8	188.4	180.0	181.2	182.7	184.3	185.8	186.5	186.9	188.2	189.0	189.8	190.8
Real compensation per hour .....	102.2	100.5	101.1	100.8	101.2	102.5	102.7	102.4	101.3	100.8	100.3	99.8	99.5
Unit labor costs .....	158.3	158.6	155.7	156.9	157.3	157.4	158.8	159.6	159.9	158.0	157.4	159.1	159.1
<b>Nonfinancial corporations</b>													
Output per all-employee hour .....	109.9	110.2	109.2	108.9	109.8	109.7	109.9	110.5	109.7	109.9	110.8	110.5	111.4
Output .....	129.4	132.7	127.4	127.7	129.1	128.8	129.3	130.4	130.9	131.6	133.7	134.8	137.2
Hours .....	117.7	120.5	116.6	117.3	117.6	117.4	117.6	118.0	119.3	119.8	120.6	122.0	123.1
Compensation per hour .....	178.9	182.7	173.8	175.7	177.2	178.4	179.5	181.0	180.8	182.0	183.3	184.8	186.3
Real compensation per hour .....	98.9	97.5	97.6	97.8	98.2	99.2	99.2	99.4	98.0	97.5	97.2	97.1	97.1
Total unit costs .....	167.7	171.0	163.7	166.0	166.3	167.2	168.5	168.7	169.7	170.9	171.0	172.5	172.3
Unit labor costs .....	162.8	165.8	159.1	161.4	161.5	162.6	163.2	163.8	164.8	165.6	165.5	167.2	167.2
Unit nonlabor costs .....	182.2	186.5	177.5	179.4	180.7	180.6	184.2	183.2	184.1	186.6	187.3	188.0	187.2
Unit profits .....	129.3	136.1	142.5	128.7	129.7	129.5	130.6	127.7	132.2	132.9	142.1	137.0	136.4
Implicit price deflator .....	163.1	166.8	161.2	161.5	161.9	162.7	164.0	163.8	165.2	166.3	167.5	168.2	168.0

<sup>1</sup> Revisions to quarterly output measures were introduced in the manufacturing sector; measures of productivity and unit labor costs were also affected.

= revised.  
SOURCE: Office of Productivity and Technology (202 523 9261).

**PRODUCTIVITY DATA  
SEASONALLY ADJUSTED**

**C-11. Percent changes from the preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted annual rates**

Item	Percent change from											
	Previous quarter						Same quarter, previous year					
	IV 1986	I 1987	II 1987	III 1987	IV 1987	I 1988'	IV 1986	I 1987	II 1987	III 1987	IV 1987	I 1988'
<b>Business sector</b>												
Output per hour of all persons .....	-0.1	0.5	1.4	4.7	-1.5	3.2	1.5	0.2	0.4	1.6	1.3	1.9
Output .....	3.0	3.5	3.0	6.3	4.0	5.5	2.9	2.3	2.8	3.9	4.2	4.7
Hours .....	3.1	3.0	1.6	1.5	5.6	2.2	1.4	2.1	2.5	2.3	2.9	2.7
Compensation per hour .....	3.6	1.4	3.3	3.8	3.2	3.6	3.3	2.8	2.8	3.0	2.9	3.5
Real compensation per hour .....	.8	-3.8	-1.5	.0	-5	.2	2.0	.6	-1.0	-1.1	-1.5	-5
Unit labor costs .....	3.7	.9	1.8	-9	4.7	.3	1.8	2.7	2.4	1.4	1.6	1.5
Unit nonlabor payments .....	-7.7	9.0	6.4	8.8	-3.2	.2	1.4	1.8	2.8	3.9	5.1	2.9
Implicit price deflator .....	-5	3.7	3.4	2.5	1.8	.3	1.7	2.3	2.6	2.3	2.8	2.0
<b>Nonfarm business sector</b>												
Output per hour of all persons .....	.0	.4	1.4	4.2	-1.0	3.6	1.5	-.1	.3	1.5	1.3	2.1
Output .....	2.9	3.8	3.2	6.3	4.2	5.9	2.9	2.2	2.9	4.0	4.4	4.9
Hours .....	2.9	3.4	1.7	2.0	5.2	2.2	1.4	2.3	2.6	2.5	3.1	2.8
Compensation per hour .....	4.0	1.1	3.0	3.6	3.5	3.4	3.4	2.7	2.7	2.9	2.8	3.4
Real compensation per hour .....	1.3	-4.1	-1.8	-.3	-1	.0	2.1	.4	-1.1	-1.2	-1.6	-.5
Unit labor costs .....	4.0	.8	1.5	-.6	4.5	-.2	1.9	2.8	2.4	1.4	1.5	1.3
Unit nonlabor payments .....	-7.2	8.8	4.6	9.3	-2.7	1.1	1.9	1.6	2.4	3.6	4.9	3.0
Implicit price deflator .....	.0	3.4	2.6	2.7	1.9	.2	1.9	2.4	2.4	2.2	2.7	1.9
<b>Manufacturing<sup>1</sup></b>												
Output per hour of all persons .....	1.2	2.4	5.9	3.3	.5	2.8	2.8	2.1	3.0	3.2	3.0	3.1
Output .....	3.2	3.2	4.2	7.3	7.3	4.5	2.3	2.2	3.2	4.4	5.5	5.8
Hours .....	2.0	.8	-1.6	3.8	6.7	1.6	-.5	.0	.2	1.2	2.4	2.6
Compensation per hour .....	2.7	-1.0	2.0	1.3	2.1	4.6	2.3	1.6	1.5	1.2	1.1	2.5
Real compensation per hour .....	-.1	-6.1	-2.7	-2.4	-1.5	1.2	1.0	-.7	-2.3	-2.9	-3.2	-1.4
Unit labor costs .....	1.4	-3.4	-3.7	-1.9	1.5	1.7	-.5	-.6	-1.5	-1.9	-1.9	-.6
<b>Durable goods<sup>1</sup></b>												
Output per hour of all persons .....	2.3	3.9	4.9	3.4	2.2	3.4	3.8	3.1	3.8	3.6	3.6	3.5
Output .....	3.4	4.0	2.4	6.7	10.0	4.3	2.2	2.2	3.1	4.1	5.7	5.8
Hours .....	1.1	.0	-2.4	3.3	7.7	.8	-1.5	-.9	-.7	.5	2.1	2.3
Compensation per hour .....	3.4	-1.9	1.6	1.1	2.2	6.2	2.1	1.3	1.2	1.0	.7	2.8
Real compensation per hour .....	.7	-6.9	-3.1	-2.6	-1.4	2.7	.7	-1.0	-2.5	-3.0	-3.5	-1.1
Unit labor costs .....	1.1	-5.6	-3.2	-2.2	.0	2.7	-1.7	-1.8	-2.6	-2.5	-2.8	-.7
<b>Nondurable goods<sup>1</sup></b>												
Output per hour of all persons .....	-.4	.0	7.8	3.3	-2.5	2.1	1.2	.7	1.7	2.6	2.1	2.6
Output .....	2.9	1.9	7.2	8.2	2.7	5.0	2.3	2.1	3.3	5.0	5.0	5.8
Hours .....	3.3	1.9	-.5	4.7	5.4	2.8	1.1	1.4	1.6	2.3	2.9	3.1
Compensation per hour .....	1.5	.7	2.8	1.7	1.6	2.2	2.9	2.3	2.1	1.7	1.7	2.1
Real compensation per hour .....	-1.1	-4.5	-1.9	-2.0	-1.9	-1.1	1.6	.0	-1.7	-2.4	-2.6	-1.7
Unit labor costs .....	1.9	.7	-4.6	-1.5	4.3	.1	1.7	1.6	.4	-.9	-.3	-.5
<b>Nonfinancial corporations</b>												
Output per all-employee hour .....	2.1	-2.9	.7	3.3	-1.0	3.4	1.5	.0	.2	.8	.0	1.6
Output .....	3.4	1.5	2.2	6.4	3.5	7.3	2.1	1.4	2.2	3.4	3.4	4.8
Hours .....	1.3	4.6	1.6	3.0	4.6	3.8	.6	1.5	2.0	2.6	3.4	3.2
Compensation per hour .....	3.5	-.5	2.6	2.9	3.3	3.4	3.0	2.0	2.0	2.1	2.1	3.1
Real compensation per hour .....	.7	-5.6	-2.1	-.9	-.4	.0	1.7	-.2	-1.7	-2.0	-2.3	-.8
Total unit costs .....	.3	2.4	2.9	.1	3.6	-.5	1.6	2.0	2.2	1.4	2.2	1.5
Unit labor costs .....	1.3	2.5	2.0	-.4	4.3	.0	1.5	2.1	1.8	1.3	2.1	1.5
Unit nonlabor costs .....	-2.3	2.2	5.4	1.5	1.6	-1.7	2.1	1.9	3.3	1.7	2.7	1.7
Unit profits .....	-8.5	14.7	2.1	30.7	-13.4	-1.9	-.8	1.9	2.6	8.8	7.3	3.2
Implicit price deflator .....	-5	3.5	2.8	2.8	1.7	-.6	1.4	2.0	2.3	2.1	2.7	1.7

<sup>1</sup> Revisions to quarterly output measures were introduced in the manufacturing sector; measures of productivity and unit labor costs were also affected.

' = revised.  
SOURCE: Office of Productivity and Technology (202 523 9261).

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

**D-1. Labor force status by State and selected metropolitan areas**

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Alabama</b> .....	1,878.9	1,851.2	1,845.0	142.7	137.5	125.2	7.6	7.4	6.8
Birmingham .....	445.0	437.7	437.6	29.6	27.1	24.5	6.6	6.2	5.6
Huntsville .....	128.8	129.2	129.8	6.7	6.6	6.3	5.2	5.1	4.9
Mobile .....	211.3	206.7	205.0	18.8	19.7	18.0	8.9	9.5	8.8
Montgomery .....	135.6	134.6	133.6	8.4	8.5	7.7	6.2	6.3	5.8
Tuscaloosa .....	69.8	69.1	68.8	4.1	4.0	3.4	5.9	5.8	5.0
<b>Alaska</b> .....	246.7	241.8	242.7	30.7	26.0	24.0	12.5	10.8	9.9
<b>Arizona</b> .....	1,618.9	1,640.4	1,632.1	101.6	89.7	88.4	6.3	5.5	5.4
Phoenix .....	1,003.3	1,016.7	1,013.1	53.0	46.7	45.0	5.3	4.6	4.4
Tucson .....	308.1	313.4	312.6	15.4	14.3	14.1	5.0	4.6	4.5
<b>Arkansas</b> .....	1,085.4	1,121.0	1,128.1	89.6	91.5	84.2	8.3	8.2	7.5
Fayetteville-Springdale .....	57.7	61.3	61.5	2.5	2.6	2.3	4.3	4.3	3.7
Fort Smith .....	90.1	94.3	95.0	5.4	5.9	5.4	6.0	6.3	5.7
Little Rock-North Little Rock .....	255.6	265.4	265.7	18.9	18.1	16.7	7.4	6.8	6.3
Pine Bluff .....	36.8	37.6	37.6	3.4	3.3	2.9	9.3	8.7	7.7
<b>California</b> <sup>1</sup> .....	13,664.7	13,957.6	14,037.3	788.7	739.9	699.4	5.8	5.3	5.0
Anaheim-Santa Ana .....	1,301.1	1,300.1	1,332.6	38.9	38.1	38.0	3.0	2.9	2.9
Bakersfield .....	224.6	228.2	230.5	23.9	27.0	21.8	10.7	11.8	9.5
Fresno .....	292.9	287.1	302.4	33.0	38.3	33.2	11.3	13.3	11.0
Los Angeles-Long Beach .....	4,153.0	4,379.0	4,096.8	265.0	193.0	174.6	6.4	4.4	4.3
Modesto .....	147.5	150.9	154.6	19.7	20.5	20.5	13.4	13.6	13.3
Oakland .....	1,030.6	1,031.0	1,070.6	49.7	47.5	47.1	4.8	4.6	4.4
Oxnard-Ventura .....	337.0	341.2	357.1	15.6	15.7	17.2	4.6	4.6	4.8
Riverside-San Bernardino .....	897.6	941.6	977.7	45.4	49.6	50.9	5.1	5.3	5.2
Sacramento .....	670.6	688.1	718.9	34.8	37.2	37.0	5.2	5.4	5.1
San Diego .....	1,054.2	1,080.0	1,123.5	43.9	45.0	45.3	4.2	4.2	4.0
San Francisco .....	869.1	866.5	900.8	32.2	29.9	30.6	3.7	3.4	3.4
San Jose .....	809.7	807.3	824.6	35.7	32.5	31.8	4.4	4.0	3.9
Santa Barbara-Santa Maria-Lompoc .....	177.6	176.9	185.1	7.9	8.5	8.3	4.4	4.8	4.5
Santa Rosa-Petaluma .....	185.4	189.6	199.8	8.7	9.0	9.0	4.7	4.7	4.5
Stockton .....	190.1	186.2	194.1	18.8	20.1	18.8	9.9	10.8	9.7
Vallejo-Fairfield-Napa .....	181.3	183.8	190.6	10.4	10.6	10.2	5.7	5.8	5.3
<b>Colorado</b> .....	1,702.2	1,703.2	1,698.9	140.1	130.3	115.8	8.2	7.7	6.8
Boulder-Longmont .....	129.5	130.6	130.2	7.7	7.3	6.2	6.0	5.6	4.8
Denver .....	891.2	887.3	883.2	66.1	61.2	53.6	7.4	6.9	6.1
<b>Connecticut</b> .....	1,747.1	1,691.1	1,705.6	56.5	52.3	43.4	3.2	3.1	2.5
Bridgeport-Milford .....	230.5	222.7	223.9	9.1	8.7	7.3	3.9	3.9	3.2
Hartford .....	422.3	412.9	413.5	12.5	11.5	9.4	3.0	2.8	2.3
New Haven-Meriden .....	271.1	262.1	267.4	8.5	7.6	6.7	3.2	2.9	2.5
Stamford .....	117.5	114.2	115.1	2.8	2.4	2.2	2.4	2.1	1.9
Waterbury .....	102.4	98.6	98.3	4.7	4.1	3.2	4.6	4.2	3.2
<b>Delaware</b> .....	326.4	338.4	343.4	10.2	12.4	11.1	3.1	3.7	3.2
Wilmington .....	286.4	296.5	297.9	10.9	12.2	10.0	3.8	4.1	3.4
<b>District of Columbia</b> .....	329.4	330.1	333.3	21.6	17.6	17.2	6.6	5.3	5.2
Washington .....	2,101.1	2,154.4	2,176.3	67.2	62.3	59.0	3.2	2.9	2.7
<b>Florida</b> <sup>1</sup> .....	5,767.9	6,045.2	6,035.4	298.7	286.8	304.0	5.2	4.7	5.0
Daytona Beach .....	144.4	153.1	153.4	6.5	6.5	7.3	4.5	4.2	4.7
Fort Lauderdale-Hollywood-Pompano Beach .....	607.1	641.2	638.6	26.5	25.5	27.7	4.4	4.0	4.3
Fort Myers-Cape Coral .....	131.8	143.4	142.8	4.7	4.7	5.4	3.6	3.3	3.8
Jacksonville .....	432.0	457.3	458.8	22.3	24.2	24.3	5.2	5.3	5.3
Melbourne-Titusville-Palm Bay .....	170.1	178.3	181.3	9.9	8.3	8.9	5.8	4.7	4.9
Miami-Hialeah .....	896.3	925.9	918.4	51.6	47.6	50.6	5.8	5.1	5.5
Orlando .....	543.8	568.6	569.5	24.8	24.7	25.3	4.6	4.3	4.4
Pensacola .....	145.1	149.5	149.9	8.7	9.0	9.1	6.0	6.0	6.1
Sarasota .....	114.2	122.6	122.5	4.0	4.0	4.7	3.5	3.3	3.8
Tallahassee .....	121.5	124.7	125.0	4.5	4.5	4.9	3.7	3.6	3.9
Tampa-St. Petersburg-Clearwater .....	944.0	980.2	978.9	46.2	44.2	46.6	4.9	4.5	4.8
West Palm Beach-Boca Raton-Delray Beach .....	388.1	414.9	411.7	19.8	17.7	20.9	5.1	4.3	5.1

See footnotes at end of table.

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

**D-1. Labor force status by State and selected metropolitan areas—Continued**

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Georgia</b> .....	3,024.0	3,073.8	3,085.3	166.9	180.1	179.6	5.5	5.9	5.8
Athens .....	71.6	72.3	72.3	3.0	3.0	3.1	4.2	4.2	4.2
Atlanta .....	1,426.4	1,456.3	1,463.7	66.0	72.6	75.0	4.6	5.0	5.1
Augusta .....	179.3	178.9	179.5	11.0	11.3	11.3	6.2	6.3	6.3
Columbus .....	100.3	99.5	100.0	6.6	7.2	6.8	6.6	7.2	6.8
Macon-Warner Robins .....	126.8	128.5	128.9	6.5	7.3	7.1	5.1	5.7	5.5
Savannah .....	109.8	111.4	111.5	6.7	8.0	7.8	6.1	7.2	7.0
<b>Hawaii</b> .....	510.9	528.9	530.5	20.4	16.7	15.3	4.0	3.2	2.9
Honolulu .....	381.3	395.2	396.5	13.6	11.2	10.1	3.6	2.8	2.5
<b>Idaho</b> .....	464.2	456.6	465.2	42.2	38.7	33.3	9.1	8.5	7.2
Boise City .....	103.1	102.3	103.7	6.2	5.2	4.6	6.0	5.1	4.5
<b>Illinois<sup>1</sup></b> .....	5,642.7	5,677.4	5,684.3	464.6	440.5	421.0	8.2	7.8	7.4
Aurora-Elgin .....	168.5	173.2	173.3	11.3	10.8	9.7	6.7	6.2	5.6
Bloomington-Normal .....	64.8	67.2	66.2	3.3	4.5	3.5	5.0	6.7	5.2
Champaign-Urbana-Rantoul .....	87.1	88.4	87.0	4.3	4.2	3.8	5.0	4.8	4.4
Chicago .....	3,084.6	3,124.3	3,131.5	225.9	213.8	214.5	7.3	6.8	6.8
Davenport-Rock Island-Moline .....	181.7	178.8	178.8	14.9	14.6	13.3	8.2	8.2	7.4
Decatur .....	58.3	57.1	57.0	6.7	5.5	5.9	11.6	9.7	10.3
Joliet .....	191.5	192.9	190.9	17.1	17.2	15.8	8.9	8.9	8.2
Lake County .....	254.4	261.8	265.1	12.9	12.7	12.0	5.1	4.8	4.5
Peoria .....	151.6	150.8	150.0	14.1	11.6	10.7	9.3	7.7	7.2
Rockford .....	146.6	145.4	143.7	16.9	12.5	11.8	11.5	8.6	8.2
Springfield .....	106.5	107.2	105.9	6.0	6.4	5.7	5.6	6.0	5.4
<b>Indiana</b> .....	2,726.0	2,698.5	2,743.4	178.9	155.6	130.6	6.6	5.8	4.8
Anderson .....	59.3	57.3	57.7	3.9	3.7	2.9	6.5	6.5	5.0
Bloomington .....	59.6	58.3	60.1	3.7	2.1	1.8	6.2	3.6	2.9
Elkhart-Goshen .....	90.9	92.6	94.0	3.6	3.8	2.7	4.0	4.1	2.8
Evansville .....	141.1	139.0	140.1	10.7	9.7	8.1	7.6	6.9	5.8
Fort Wayne .....	192.0	192.7	196.2	10.3	9.3	8.4	5.4	4.8	4.3
Gary-Hammond .....	254.1	246.6	250.3	26.9	18.4	16.1	10.6	7.5	6.5
Indianapolis .....	641.7	644.1	655.0	31.8	29.4	25.4	4.9	4.6	3.9
Lafayette .....	65.5	64.4	65.9	2.2	2.1	1.9	3.4	3.3	2.9
Muncie .....	60.1	59.2	59.7	4.1	3.8	3.0	6.9	6.3	5.0
South Bend-Mishawaka .....	125.2	125.6	127.4	6.3	6.3	5.7	5.1	5.0	4.4
Terre Haute .....	59.4	58.3	59.1	4.0	4.0	3.4	6.8	6.9	5.7
<b>Iowa</b> .....	1,447.2	1,449.7	1,459.8	86.8	83.4	64.1	6.0	5.8	4.4
Cedar Rapids .....	91.8	95.3	96.0	5.4	4.6	3.6	5.8	4.8	3.7
Des Moines .....	218.2	225.6	227.0	10.6	9.9	8.0	4.8	4.4	3.5
Dubuque .....	43.2	45.3	45.2	2.7	3.2	2.3	6.1	7.1	5.1
Sioux City .....	61.0	59.5	59.8	4.2	4.0	3.2	6.8	6.7	5.4
Waterloo-Cedar Falls .....	69.3	68.9	69.0	6.6	5.0	4.0	9.5	7.3	5.7
<b>Kansas</b> .....	1,263.5	1,284.8	1,290.2	61.3	63.7	53.9	4.9	5.0	4.2
Topeka .....	89.5	94.1	93.9	3.9	4.4	3.5	4.3	4.7	3.8
Wichita .....	248.2	255.7	255.9	12.7	13.0	11.4	5.1	5.1	4.5
<b>Kentucky</b> .....	1,678.3	1,700.6	1,705.6	152.1	160.4	145.9	9.1	9.4	8.6
Lexington-Fayette .....	180.8	184.7	189.1	9.5	9.8	11.1	5.3	5.3	5.9
Louisville .....	487.3	508.0	509.5	34.9	34.7	32.4	7.2	6.8	6.4
Owensboro .....	44.4	44.7	43.9	5.1	4.3	3.6	11.5	9.7	8.3
<b>Louisiana</b> .....	1,974.6	1,893.8	1,886.0	257.7	223.1	200.3	13.0	11.8	10.6
Alexandria .....	61.5	60.0	59.8	6.6	6.4	5.8	10.7	10.7	9.8
Baton Rouge .....	265.9	259.4	258.2	27.6	25.4	22.5	10.4	9.8	8.7
Houma-Thibodaux .....	74.9	69.5	69.1	14.2	9.2	8.2	18.9	13.2	11.8
Lafayette .....	102.3	96.6	95.8	14.7	10.6	9.5	14.4	11.0	9.9
Monroe .....	71.5	67.5	67.3	7.5	7.7	7.0	10.6	11.5	10.3
New Orleans .....	607.2	586.6	585.5	65.6	58.4	54.0	10.8	10.0	9.2
Shreveport .....	169.2	163.9	163.4	20.0	18.4	16.9	11.8	11.2	10.4
<b>Maine</b> .....	573.9	583.0	591.3	32.1	30.5	25.9	5.6	5.2	4.4
Lewiston-Auburn .....	41.4	41.7	41.4	2.7	2.3	1.8	6.5	5.5	4.4
Portland .....	121.4	123.5	125.0	3.2	3.3	2.5	2.7	2.6	2.0

See footnotes at end of table.

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

**D-1. Labor force status by State and selected metropolitan areas—Continued**

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>Maryland</b> .....	2,397.7	2,401.4	2,405.6	100.7	110.9	95.8	4.2	4.6	4.0
Baltimore .....	1,165.4	1,158.6	1,156.7	53.1	58.8	50.2	4.6	5.1	4.3
<b>Massachusetts</b> <sup>1</sup> .....	3,056.3	3,168.6	3,135.4	118.4	113.8	91.6	3.9	3.6	2.9
Boston .....	1,520.3	1,576.8	1,556.4	49.8	46.7	39.3	3.3	3.0	2.5
Brockton .....	95.7	99.9	99.1	4.2	3.9	3.3	4.3	3.9	3.3
Fall River .....	75.4	77.2	75.7	5.5	5.2	3.7	7.2	6.7	4.9
Fitchburg-Leominster .....	46.9	46.1	45.8	2.5	1.9	1.5	5.3	4.2	3.3
Lawrence-Haverhill .....	182.8	188.0	186.3	9.0	7.9	6.8	4.9	4.2	3.6
Lowell .....	148.2	151.9	151.7	5.9	5.4	4.3	4.0	3.5	2.8
New Bedford .....	83.6	88.2	86.8	5.3	5.3	4.0	6.3	6.0	4.6
Springfield .....	249.4	259.8	256.1	9.7	9.3	7.1	3.9	3.6	2.8
Worcester .....	211.5	223.3	221.0	7.2	7.5	5.7	3.4	3.3	2.6
<b>Michigan</b> <sup>1</sup> .....	4,451.5	4,448.8	4,510.9	378.7	384.7	399.7	8.5	8.6	7.5
Ann Arbor .....	155.7	160.0	163.3	7.5	6.8	6.0	4.8	4.3	3.7
Battle Creek .....	62.4	63.9	63.9	4.7	5.8	4.7	7.6	9.1	7.3
Benton Harbor .....	76.2	77.0	78.4	6.3	5.7	5.2	8.2	7.4	6.7
Detroit .....	2,158.7	2,141.7	2,166.9	178.2	177.9	160.1	8.3	8.3	7.4
Flint .....	195.9	196.2	198.2	19.0	29.8	28.6	9.7	15.2	14.4
Grand Rapids .....	339.0	344.2	349.7	22.0	20.0	17.8	6.5	5.8	5.1
Kalamazoo .....	112.7	113.9	115.6	5.9	5.8	5.1	5.3	5.1	4.4
Lansing-East Lansing .....	234.3	231.7	238.1	15.2	17.0	13.4	6.5	7.4	5.6
Muskegon .....	67.3	66.0	66.9	7.9	6.4	5.9	11.7	9.7	8.8
Saginaw-Bay City-Midland .....	181.1	182.8	184.5	18.3	16.9	14.0	10.1	9.3	7.6
<b>Minnesota</b> .....	2,236.9	2,265.9	2,308.0	125.7	109.1	87.0	5.6	4.8	3.8
Duluth .....	106.5	105.0	106.6	11.4	7.9	6.8	10.7	7.6	6.4
Minneapolis-St.Paul .....	1,327.2	1,353.4	1,369.8	57.2	50.5	41.5	4.3	3.7	3.0
Rochester .....	56.4	57.8	58.4	2.3	1.9	1.5	4.1	3.3	2.5
St. Cloud .....	91.2	94.4	95.8	5.8	5.3	4.1	6.4	5.7	4.3
<b>Mississippi</b> .....	1,152.1	1,157.9	1,148.9	118.5	100.3	83.9	10.3	8.7	7.3
Jackson .....	198.3	201.7	202.9	14.9	12.1	10.7	7.5	6.0	5.3
<b>Missouri</b> .....	2,582.9	2,536.5	2,553.7	165.8	136.5	119.4	6.4	5.4	4.7
Kansas City .....	835.9	832.3	834.5	41.8	39.6	35.1	5.0	4.8	4.2
St. Louis .....	1,272.0	1,251.3	1,251.3	97.4	78.1	70.9	7.7	6.2	5.7
Springfield .....	121.4	122.5	122.6	5.8	4.8	4.4	4.8	3.9	3.6
<b>Montana</b> .....	407.3	403.1	408.0	33.3	37.0	31.1	8.2	9.2	7.6
<b>Nebraska</b> .....	804.1	783.6	794.7	40.9	34.8	26.6	5.1	4.4	3.3
Lincoln .....	120.1	118.5	119.9	3.9	3.5	2.8	3.2	3.0	2.3
Omaha .....	319.9	315.4	315.0	17.5	14.5	11.6	5.5	4.6	3.7
<b>Nevada</b> .....	548.1	568.3	573.4	35.9	35.5	33.6	6.5	6.2	5.9
Las Vegas .....	319.3	332.0	334.7	21.0	21.3	21.0	6.6	6.4	6.3
Reno .....	135.6	139.6	140.3	8.1	8.1	7.3	6.0	5.8	5.2
<b>New Hampshire</b> .....	572.3	590.8	602.0	15.0	16.8	13.8	2.6	2.8	2.3
Nashua .....	95.1	100.2	99.4	2.4	2.6	2.3	2.5	2.6	2.4
Portsmouth-Dover-Rochester .....	128.0	131.5	132.5	3.1	3.1	2.0	2.4	2.3	1.5
<b>New Jersey</b> <sup>1</sup> .....	3,948.4	3,976.2	3,953.8	149.7	173.1	125.1	3.8	4.4	3.2
Atlantic City .....	167.8	165.5	165.6	9.3	12.0	8.0	5.6	7.2	4.9
Bergen-Passaic .....	719.8	726.5	721.8	24.3	26.9	19.1	3.4	3.7	2.7
Jersey City .....	267.3	271.0	266.9	17.3	19.4	15.5	6.5	7.2	5.8
Middlesex-Somerset-Hunterdon .....	552.3	560.1	559.5	14.3	16.6	12.1	2.6	3.0	2.2
Monmouth-Ocean .....	466.4	468.2	471.6	13.8	18.1	12.3	3.0	3.9	2.6
Newark .....	961.1	964.7	956.3	37.8	42.0	30.9	3.9	4.4	3.2
Trenton .....	171.4	173.7	172.6	5.4	6.2	4.2	3.1	3.5	2.4
<b>New Mexico</b> .....	681.2	690.4	691.9	63.9	60.0	58.3	9.4	8.7	8.4
Albuquerque .....	261.8	265.5	265.2	17.0	16.4	15.9	6.5	6.2	6.0
Las Cruces .....	55.0	55.3	56.5	3.9	4.3	4.2	7.1	7.8	7.5
Santa Fe .....	64.2	66.1	67.5	4.0	3.9	3.8	6.2	5.8	5.7

See footnotes at end of table.

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

**D-1. Labor force status by State and selected metropolitan areas—Continued**

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>P</sup>
<b>New York<sup>1</sup></b> .....	8,323.9	8,426.6	8,224.2	402.2	362.1	282.4	4.8	4.3	3.4
Albany-Schenectady-Troy .....	408.7	415.2	407.1	17.5	15.1	11.9	4.3	3.6	2.9
Binghamton .....	123.6	125.2	122.9	5.8	4.9	3.8	4.7	3.9	3.1
Buffalo .....	436.2	441.0	429.5	25.8	23.6	18.2	5.9	5.4	4.2
Elmira .....	39.5	41.5	41.2	1.9	1.6	1.2	4.8	3.8	3.0
Nassau-Suffolk .....	1,394.9	1,413.3	1,387.2	47.2	41.6	33.3	3.4	2.9	2.4
<b>New York</b> .....	3,847.5	3,890.6	3,774.0	185.0	164.5	133.2	4.8	4.2	3.5
New York City .....	3,191.0	3,223.0	3,118.7	165.0	147.0	119.4	5.2	4.6	3.8
Orange County .....	127.6	130.6	129.0	5.2	5.0	3.6	4.1	3.9	2.8
Poughkeepsie .....	123.3	126.1	125.0	3.6	3.3	2.4	2.9	2.6	1.9
Rochester .....	488.5	489.6	479.1	23.2	19.9	14.8	4.8	4.1	3.1
Syracuse .....	312.1	315.5	311.3	20.2	19.4	14.2	6.5	6.2	4.6
Utica-Rome .....	132.1	134.4	131.4	8.0	7.4	5.2	6.0	5.5	4.0
<b>North Carolina<sup>1</sup></b> .....	3,206.1	3,265.0	3,251.5	139.1	129.1	109.4	4.3	4.0	3.4
Asheville .....	84.3	86.9	85.1	3.7	3.2	2.5	4.4	3.6	2.9
Charlotte-Gastonia-Rock Hill .....	614.4	637.6	634.9	21.9	19.9	19.0	3.6	3.1	3.0
Greensboro-Winston-Salem-High Point .....	507.2	516.0	512.5	17.7	16.5	14.4	3.5	3.2	2.8
Raleigh-Durham .....	390.1	398.2	397.0	10.4	11.0	9.6	2.7	2.8	2.4
<b>North Dakota</b> .....	329.7	318.7	325.0	19.8	17.8	14.9	6.0	5.6	4.6
Bismarck .....	44.4	44.5	43.9	2.6	2.7	2.1	5.8	6.2	4.8
Fargo-Moorhead .....	84.4	85.1	86.4	3.3	3.1	2.6	3.9	3.7	3.0
Grand Forks .....	36.4	36.3	36.6	1.4	1.4	1.3	4.0	3.9	3.4
<b>Ohio<sup>1</sup></b> .....	5,214.7	5,295.0	5,256.9	368.2	416.4	315.8	7.1	7.9	6.0
Akron .....	318.2	324.5	321.4	23.5	26.5	19.9	7.4	8.2	6.2
Cincinnati .....	737.7	753.9	753.8	40.4	47.2	38.8	5.5	6.3	5.1
Cleveland .....	916.9	934.3	927.1	58.1	68.0	51.6	8.3	7.3	5.6
Columbus .....	687.4	704.7	703.7	36.6	43.0	34.1	5.3	6.1	4.8
Dayton-Springfield .....	460.8	466.3	463.7	26.0	30.5	23.0	5.6	6.6	5.0
Toledo .....	307.9	312.3	311.0	23.0	22.8	17.7	7.5	7.3	5.7
Youngstown-Warren .....	218.4	221.4	220.0	19.3	21.0	15.8	8.8	9.5	7.2
<b>Oklahoma</b> .....	1,568.9	1,525.2	1,525.0	124.0	104.7	93.3	7.9	6.9	6.1
Enid .....	30.4	29.9	29.8	2.4	1.7	1.6	7.8	5.8	5.3
Lawton .....	49.9	50.0	49.8	2.5	2.9	2.7	5.1	5.8	5.5
Oklahoma City .....	508.4	498.5	496.2	32.1	28.2	24.4	6.3	5.7	4.9
Tulsa .....	348.4	340.0	337.0	30.8	26.0	23.0	8.8	7.7	6.8
<b>Oregon</b> .....	1,372.4	1,420.2	1,427.6	91.3	94.3	87.4	6.7	6.6	6.1
Eugene-Springfield .....	137.7	141.9	142.6	8.1	8.4	7.7	5.9	5.9	5.4
Portland .....	625.9	652.1	654.9	34.8	34.2	31.6	5.6	5.2	4.8
Salem .....	127.1	130.4	131.3	8.9	9.1	9.0	7.0	7.0	6.8
<b>Pennsylvania<sup>1</sup></b> .....	5,463.9	5,617.5	5,656.1	295.0	313.8	260.0	5.4	5.8	4.6
Allentown-Bethlehem .....	308.6	315.1	317.2	14.5	15.0	12.2	4.7	4.7	3.9
Altoona .....	58.0	58.7	58.2	3.8	4.4	3.6	6.5	7.6	6.2
Beaver County .....	60.3	62.0	61.8	5.4	6.3	5.2	9.0	10.2	8.4
Erie .....	123.2	125.9	128.7	8.7	9.0	7.3	7.1	7.1	5.8
Harrisburg-Lebanon-Carlisle .....	298.8	311.6	313.6	10.8	13.4	10.5	3.6	4.3	3.3
Johnstown .....	90.0	92.7	92.2	7.2	8.1	5.9	7.9	8.7	6.4
Lancaster .....	201.8	210.2	214.3	6.7	7.1	6.3	3.3	3.4	3.0
Philadelphia .....	2,328.1	2,387.3	2,386.1	94.9	102.7	86.6	4.1	4.3	3.6
Pittsburgh .....	921.6	937.6	939.3	60.1	60.9	52.1	6.5	6.5	5.6
Reading .....	184.8	171.5	174.8	8.4	8.5	7.6	5.1	5.0	4.3
Scranton-Wilkes-Barre .....	337.3	344.1	346.8	23.3	23.1	18.1	6.9	6.7	5.2
Williamsport .....	55.4	59.4	60.7	3.0	3.6	2.8	5.4	6.1	4.6
York .....	200.3	210.7	212.9	8.5	9.3	7.9	4.3	4.4	3.7
<b>Rhode Island</b> .....	520.4	520.5	524.4	21.4	21.2	17.6	4.1	4.1	3.4
Pawtucket-Woonsocket-Attleboro .....	167.8	168.2	166.1	8.2	7.9	6.5	4.9	4.7	3.9
Providence .....	339.0	341.3	343.6	13.3	13.6	11.2	3.9	4.0	3.3
<b>South Carolina</b> .....	1,823.7	1,841.1	1,846.7	90.6	83.5	74.0	5.6	5.1	4.5
Charleston .....	219.6	223.9	225.0	10.1	9.8	8.7	4.6	4.4	3.9
Columbia .....	227.0	232.7	234.4	8.5	8.1	7.7	3.8	3.5	3.3
Greenville-Spartanburg .....	322.5	320.1	323.1	14.9	12.3	10.9	4.6	3.8	3.4
<b>South Dakota</b> .....	350.8	347.8	358.5	14.5	12.7	9.8	4.1	3.7	2.7
Rapid City .....	38.7	39.3	40.1	1.6	1.5	1.3	4.2	3.8	3.1
Sioux Falls .....	70.4	72.5	72.7	2.1	3.0	2.4	3.1	4.2	3.2

See footnotes at end of table.

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

**D-1. Labor force status by State and selected metropolitan areas—Continued**

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Apr. 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>p</sup>	Apr. 1987	Mar. 1988	Apr. 1988 <sup>p</sup>
<b>Tennessee</b> .....	2,321.6	2,377.6	2,373.6	156.7	139.6	125.2	6.8	5.9	5.3
Chattanooga .....	205.4	213.4	212.1	12.0	11.6	10.5	5.8	5.4	4.9
Johnson City-Kingsport-Bristol .....	213.3	221.2	220.6	14.7	12.9	11.5	6.9	5.8	5.2
Knoxville .....	282.0	282.1	283.0	20.3	16.6	15.5	7.2	5.9	5.5
Memphis LMA .....	436.2	456.2	453.3	25.0	22.6	20.5	5.7	4.9	4.5
Nashville .....	518.3	519.4	517.1	21.7	23.0	21.0	4.2	4.4	4.1
<b>Texas<sup>1</sup></b> .....	8,099.9	8,167.1	8,235.0	671.3	674.1	577.0	8.3	8.3	7.0
Abilene .....	53.5	53.7	54.0	4.5	4.1	3.4	8.4	7.6	6.2
Amarillo .....	97.4	98.2	99.5	5.9	6.4	5.4	6.1	6.5	5.4
Austin .....	425.8	425.0	428.4	25.8	29.1	24.1	6.1	6.8	5.6
Beaumont-Port Arthur .....	160.9	157.6	159.4	20.3	18.3	16.5	12.6	11.6	10.3
Brazoria .....	79.2	80.4	81.8	7.3	7.5	6.6	9.3	9.4	8.1
Brownsville-Harlingen .....	93.5	97.0	97.4	13.0	14.6	12.8	13.9	15.0	13.1
Bryan-College Station .....	56.2	56.5	57.5	3.2	2.8	2.4	5.8	4.9	4.1
Corpus Christi .....	160.2	160.1	161.8	18.9	17.2	15.2	11.8	10.7	9.4
Dallas .....	1,423.3	1,433.9	1,449.5	87.8	90.8	80.7	6.2	6.3	5.6
El Paso .....	225.6	233.9	235.9	23.1	27.0	23.6	10.2	11.6	10.0
Fort Worth-Arlington .....	863.5	868.0	874.7	45.4	46.9	41.0	6.8	7.0	6.1
Galveston-Texas City .....	107.7	105.8	107.2	10.5	10.9	9.5	9.8	10.3	8.9
Houston .....	1,571.9	1,577.1	1,590.4	141.9	123.4	106.9	9.0	7.8	6.7
Killeen-Temple .....	90.7	93.0	94.0	6.7	7.8	6.9	7.4	8.4	7.3
Laredo .....	45.0	46.7	46.1	7.0	8.1	6.3	15.5	17.3	13.6
Longview-Marshall .....	77.5	78.2	78.6	8.1	7.8	6.5	10.5	9.9	8.3
Lubbock .....	109.9	111.8	112.9	6.5	6.7	5.8	5.9	6.0	5.1
McAllen-Edinburg-Mission .....	141.5	152.4	146.9	23.4	30.2	22.8	16.6	19.8	15.5
Midland .....	49.6	49.0	49.3	4.7	3.5	3.0	9.5	7.1	6.0
San Angelo .....	44.7	44.7	45.2	2.8	2.8	2.5	6.2	6.3	5.5
San Antonio .....	596.1	613.7	620.0	44.3	50.5	43.8	7.4	8.2	7.1
Sherman-Denison .....	48.2	49.4	49.7	3.6	3.7	3.0	7.4	7.4	6.0
Texarkana .....	56.5	58.4	58.0	4.8	4.9	4.3	8.5	8.5	7.5
Waco .....	90.9	92.2	93.2	6.9	7.4	6.3	7.6	8.0	6.8
Wichita Falls .....	56.7	57.2	57.4	4.3	4.3	3.4	7.6	7.6	5.8
<b>Utah</b> .....	753.1	760.2	750.5	50.1	44.0	39.3	6.6	5.8	5.2
Provo-Orem .....	98.5	99.6	99.6	7.3	5.3	4.4	7.4	5.3	4.4
Salt Lake City-Ogden .....	497.7	505.0	495.3	29.1	27.5	24.3	5.8	5.5	4.9
<b>Vermont</b> .....	289.6	298.1	298.3	13.0	11.0	10.1	4.5	3.7	3.4
Burlington .....	73.1	75.2	76.1	2.0	1.8	1.3	2.8	2.4	1.8
<b>Virginia</b> .....	2,964.9	3,038.9	3,064.2	125.4	114.8	105.9	4.2	3.8	3.5
Charlottesville .....	65.8	68.6	69.1	2.1	2.0	1.5	3.2	2.9	2.2
Danville .....	50.6	50.7	51.5	3.6	3.4	3.4	7.2	6.7	6.6
Lynchburg .....	71.3	71.8	71.5	3.2	3.5	2.9	4.5	4.8	4.1
Norfolk-Virginia Beach-Newport News .....	592.0	602.2	609.7	27.5	25.1	24.3	4.7	4.2	4.0
Richmond-Petersburg .....	425.6	438.9	439.5	15.2	14.0	13.6	3.6	3.2	3.1
Roanoke .....	118.5	118.4	118.0	4.5	4.7	4.0	3.8	3.9	3.4
<b>Washington</b> .....	2,219.2	2,302.6	2,318.8	172.6	170.0	145.4	7.8	7.4	6.3
Seattle .....	983.3	1,036.4	1,037.7	60.3	58.6	51.9	6.1	5.7	5.0
<b>West Virginia</b> .....	751.8	748.2	740.8	88.4	88.3	71.5	11.8	11.8	9.7
Charleston .....	117.1	115.4	114.8	11.6	11.3	9.2	9.9	9.8	8.0
Huntington-Ashland .....	128.4	126.6	125.3	14.7	13.6	10.7	11.4	10.7	8.5
Parkersburg-Marietta .....	72.0	71.8	71.1	6.8	6.8	5.1	9.4	9.4	7.2
Wheeling .....	72.3	72.1	71.1	7.4	8.1	6.4	10.2	11.2	9.1
<b>Wisconsin</b> .....	2,472.1	2,466.4	2,492.0	159.8	153.0	115.4	6.5	6.2	4.6
Appleton-Oshkosh-Neenah .....	162.0	163.7	164.8	10.7	9.2	6.9	6.6	5.6	4.2
Eau Claire .....	71.2	71.6	72.5	4.4	4.4	3.2	6.2	6.1	4.4
Green Bay .....	103.9	104.6	105.5	6.4	6.4	4.7	6.2	6.1	4.5
Janesville-Beloit .....	71.5	70.3	71.5	6.0	4.5	3.5	8.4	6.3	4.9
Kenosha .....	54.5	54.5	54.8	4.0	3.3	2.5	7.3	6.0	4.6
La Crosse .....	53.7	53.5	54.3	2.7	2.8	2.1	5.0	5.2	3.9
Madison .....	213.3	213.6	217.7	8.2	7.6	6.1	3.8	3.5	2.8
Milwaukee .....	735.2	735.7	740.9	41.1	37.0	29.3	5.6	5.0	4.0
Racine .....	86.3	85.4	85.3	6.5	5.3	4.0	7.5	6.2	4.7
Wausau .....	58.4	58.9	59.3	4.2	4.4	3.1	7.2	7.4	5.2
<b>Wyoming</b> .....	242.4	227.3	230.0	24.6	18.0	14.9	10.2	7.9	6.5

<sup>1</sup> Data are obtained directly from the Current Population Survey. See the Explanatory Notes for State and Area Labor Force Data.

<sup>2</sup> Not available.

<sup>p</sup> = preliminary.

NOTE: Data refer to place of residence. Estimates for 1987 have been

benchmarked to 1987 Current Population Survey annual averages. Except in the 11 States designated by footnote 1, estimates for 1988 are provisional and will be revised when new benchmark information becomes available. Area definitions are published annually in the May issue of this publication.

# Explanatory Notes

## 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 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, including 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 over about 55,800 households, representing 729 areas in 1,973 counties and independent cities, 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 by the Bureau of Labor Statistics, in cooperation with State agencies. The establishment survey is designed to provide industry information on nonagricultural 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 currently based on payroll reports from a sample of over 300,000 establishments employing over 38 million nonagricultural wage and salary workers. The data relate to all workers, full or part time, who received pay during the payroll period which includes the 12th day of the month.

### RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

Data from these two sources differ from each other because of differences in definitions and coverage, sources 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 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, unpaid workers who worked 15 hours or more during the survey week in family-operated enterprises, and members of the Armed Forces stationed in the United States. Civilian employment in both agricultural and nonagricultural industries is included. The payroll survey covers only wage and salary employees on the payrolls of nonagricultural 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 and are classified according to the job at which they worked the greatest number of hours during the survey week. 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 survey week—that is, were not working but had jobs from which they were temporarily absent because of illness, bad weather, vacation, 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 not those on leave without pay for the entire payroll period.

For a comprehensive discussion of the differences between household and establishment survey employment data, see Gloria P. Green's article, "Comparing Employment Estimates From Household and Payroll Surveys," *Monthly Labor Review*, December 1969.

### Hours of work

The household survey measures hours actually worked whereas the payroll survey measures hours paid for by



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

## Earnings

The household survey measures median 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 household survey earnings series, see *Technical Description of the Quarterly Data on Weekly Earnings from the Current Population Survey*, BLS Bulletin 2113.

## 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 at all during the survey week 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 Department of Labor, exclude 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). Beginning in January 1978, coverage was extended to include domestic workers whose employers paid \$1,000 or more in wages in any calendar quarter, agricultural employees whose employers engaged 10 or more workers in 20 weeks or paid a total of \$20,000 or more in wages in any calendar quarter, and almost all State and local government employees.

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

*Agricultural employment estimates of the Department of Agriculture.* The principal differences in coverage are the inclusion of persons under 16 in the Economics and 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 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 manufactures and business, Bureau of the Census.* BLS establishment statistics on employment differ from employment counts derived by the Bureau of 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.* Data in *County Business Patterns* (CBP), published by the Bureau of the Census, U.S. Department of Commerce, 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 government, and coverage is incomplete for some of the nonprofit activities.

*Employment covered by State unemployment insurance programs.* Most nonagricultural wage and salary workers are covered by the unemployment insurance programs. However, certain activities, such as interstate railroads, parochial schools, and churches, are not covered by unemployment insurance whereas these are included in the BLS establishment statistics.

# Household Data (A tables)

## COLLECTION AND COVERAGE

Statistics on the employment status of the population, the personal, occupational, and other characteristics of the employed, the unemployed, and persons not in the labor force, and related data are compiled for the BLS by the Bureau of the Census in its Current Population Survey (CPS). A detailed description of this survey appears in *Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Survey*, BLS Report 463. Historical national data are published in *Labor Force Statistics Derived From the Current Population Survey: A Databook*, BLS Bulletin 2096.

These monthly surveys of the population are conducted 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 of the month. This is known as the survey week. Actual field interviewing is conducted in the following week.

Inmates of institutions and persons under 16 years of age are not covered in the regular monthly enumerations, and are excluded from the population and labor force statistics shown in this publication. Data on the members of the Armed Forces stationed in the United States, who are included as part of the categories "noninstitutional population," "labor force," and "total employment." are obtained from the Department of Defense.

Each month about 55,800 occupied units are eligible for interview. About 2,600 of these households are visited 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 of between 4 and 5 percent. In addition to the 55,800 occupied units, there are 11,500 sample units in an average month which are visited but found to be vacant or otherwise not enumerated. Part of the sample is changed each month. The rotation plan 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 used since 1967 are as follows:

*Employed persons* are (a) all civilians who, during the survey week, did any work at all as paid employees, 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 illness, bad weather, vacation, labor-management disputes, or personal reasons, whether they were paid for the time off or were seeking other jobs. Members of the Armed Forces stationed in the United States are also included in the employed total.

Each employed person is counted only once. Those who held more than one job are counted in the job at which they worked the greatest number of hours during the survey 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 the house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and similar organizations.

*Unemployed persons* are all civilians who had no employment during the survey week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the prior 4 weeks. Persons who were waiting to be recalled to a job from which they had been laid off or were waiting to report to a new job within 30 days need not be looking for work to be classified as unemployed.

*Duration of unemployment* represents the length of time (through the current survey week) during which persons classified as unemployed had been continuously looking for work. For persons on layoff, duration of unemployment represents the number of full weeks since the termination of their most recent employment. A period of 2 weeks or more during which a person was employed or ceased looking for work is considered to break the continuity of the present period of seeking work. Measurements of mean and median duration are computed from a distribution of single weeks of 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 four major groups. (1) *Job losers* are persons whose employment ended involuntarily who immediately began looking for work, and persons on layoff. (2) *Job leavers* are persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work. (3) *Reentrants* are persons who previously worked at a full-time job lasting 2 weeks or longer but were out of the labor force prior to beginning to look for work. (4) *New entrants* are persons who never worked at a full-time job lasting 2 weeks or longer. Each of these four categories of the unemployed may be expressed as an unemployment rate or proportion of the entire civilian labor force; the sum of the four rates thus equals the unemployment rate for all civilian workers.

*Jobseekers* are all unemployed persons who made

specific efforts to find a job sometime during the 4-week period preceding the survey week. Jobseekers do not include those persons unemployed because they (a) were waiting to be called back to a job from which they had been laid off or (b) were waiting to report to a new job within 30 days. Jobseekers are grouped by the methods used to seek work, including going to a public or private employment agency or to an employer directly, seeking assistance from friends or relatives, placing or answering ads, or utilizing some other 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.

The *civilian labor force* comprises all civilians classified as employed or unemployed in accordance with the criteria described above. The *labor force* also includes members of the Armed Forces stationed in the United States.

The *overall unemployment rate* represents the number unemployed as a percent of the labor force, including members of the Armed Forces stationed in the United States.

The *unemployment rate for all civilian workers* represents the number unemployed as a percent of the civilian labor force. This measure can also be computed for groups within the labor force classified by sex, age, race, Hispanic origin, marital status, etc.

*Participation rates* represent the proportion of the population that is in the labor force. The *labor force participation rate* is the ratio of the labor force, including the resident Armed Forces, to the noninstitutional population. The *civilian labor force participation rate* is the ratio of the civilian labor force to the civilian noninstitutional population. Civilian labor force participation rates are usually published for sex-age groups, often cross-classified by other demographic characteristics such as race and educational attainment.

*Employment-population ratios* represent the proportion of the noninstitutional population that is employed. The *total employment-population ratio* is total employment, including the resident Armed Forces, as a percent of the noninstitutional population. The *civilian employment-population ratio* is the percentage of all employed civilians in the civilian noninstitutional population.

*Not in the labor force* includes all persons who are not classified as employed or unemployed. These persons are further classified as engaged in own home housework, in school, unable to work because of long-term physical or mental illness, retired, and other. The "other" group includes individuals reported as too old or temporarily unable to work, the voluntarily idle, seasonal workers for whom the survey week fell in an off season and who were not reported as looking for work, and persons who did not look for work because they believed that no jobs were available in the area or that no jobs were available for which they could qualify—discouraged workers. Persons doing only incidental, unpaid family work (less than 15 hours in the specified week) are also classified as not in labor force.

For persons not in the labor force, data on previous work experience, intentions to seek work, desire for a job at the

time of interview, and reasons for not looking for work are published on a quarterly basis. As of January 1970, the detailed questions for persons not in the labor force are asked only in those households that are in the fourth and eighth months of the sample, i.e., the "outgoing" groups, those which had been in the sample for 3 previous months and would not be in for the subsequent month. Between 1967 and 1969, these questions were asked in those households entering the sample for the first time and those returning for the second 4 months of interviewing, i.e., the "incoming" groups.

*Occupation, industry, and class of worker* for the employed apply to the job held in the survey week. Persons with two or more jobs are classified in the job at which they worked the greatest number of hours during the survey week. The unemployed are classified according to their last full-time job lasting 2 weeks or more. The classifications of occupations and industries used in data derived from the CPS are defined as in the 1980 census. Information on the detailed categories included in these groups is available upon request.

The class-of-worker breakdown specifies wage and salary workers subdivided into private and government workers; self-employed workers; and unpaid family workers. Wage and salary workers receive wages, salary, commission, 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, or trade, or operate a farm. 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.

*Hours of work* statistics relate to the actual number of hours worked during the survey 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 figures relate to the number of hours worked in all jobs during the week; all the hours are credited to the major job.

Persons who worked 35 hours or more during the survey week are designated as working *full time*. Persons who worked between 1 and 34 hours are designated as working *part time*. Part-time workers are classified by their usual status at their present job (either full or part time) and by their reason for working part time during the survey week (economic or noneconomic reasons). Economic reasons include: Slack work, material shortages, repairs to plant or equipment, start or termination of a job during the week, and inability to find full-time work. Noneconomic reasons include: Labor dispute, bad weather, own illness, vacation, demands of home or school, no desire for full-time work, and full-time worker only during peak season. Persons on full-time schedules include, in addition to those working 35 hours or more, those who worked from 1 to 34 hours for noneconomic reasons and usually work full time.

Data on employment "at work" differ from data on total employment because they exclude persons 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.

Employed persons are also categorized into full- and part-time groupings based primarily on their *usual status*. In this context, *full-time workers* are those who (a) worked 35 hours or more during the survey week, (b) worked 1 to 34 hours for economic or noneconomic reasons, but usually work full time, and (c) were with a job but not at work and usually work full time. Similarly, *part-time workers* are those who (a) voluntarily worked 1 to 34 hours during the survey week, (b) worked 1 to 34 hours for economic reasons, but usually work part time, i.e., persons who could only find part-time work; and (c) were with a job but not at work and usually work part time.

Unemployment rates for full- and part-time workers are calculated using the concepts of the *full- and part-time labor force* which are based on the type of job—full or part-time—that persons—whether working or unemployed—report that they want. The "full-time labor force" includes all persons working part time but who desire full-time work, that is, working part time for economic reasons. Thus, this category consists of persons on full-time schedules; all persons involuntarily working part time regardless of their usual status; and unemployed persons seeking full-time jobs. The "part-time labor force" consists of persons working part time voluntarily and unemployed persons seeking part-time work. Employed persons with a job but not at work are distributed according to whether they usually work on full-time or voluntary part-time schedules.

*Labor force time lost* is a measure of aggregate hours lost to the economy through unemployment and involuntary part-time employment and is expressed as a percent of potentially available aggregate hours. It is computed by assuming that; (1) unemployed persons looking for full-time work lost an average of 37.5 hours, (2) those looking for part-time work lost the average number of hours actually worked by voluntary part-time workers during the survey week, and (3) persons on part time for economic reasons lost the difference between 37.5 hours and the actual number of hours they worked.

*White, black, and other* are terms used to describe the race of workers. Included in the "other" group are American Indians, Alaskan Natives, and Asians and Pacific Islanders. All tables in this publication which contain racial data, with the exception of A-5 and its annual counterpart, present data for the black population group. Because of their relatively small sample size, data for "other" races are not published. In the enumeration process, race is determined by the household respondent.

*Hispanic origin* refers to persons who identified themselves in the enumeration process as Mexican, Puerto Rican living on the mainland, Cuban, Central or South American, or of other Hispanic origin or descent. Persons of Hispanic ori-

gin may be of any race; thus they are included in both the white and black population groups.

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

*Usual weekly earnings* data are provided from responses to the question "How much does...USUALLY earn per week at this job before deductions?" Included are any overtime pay, commissions, or tips usually received. 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 the incorporated self-employed) who usually work full time on their sole or primary job.

*Median earnings* 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* are 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 reported as members of 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, includes persons who are separated because of marital discord, as well as persons who are living apart because either the husband or the wife was employed and living away from home, serving in the Armed Forces, or had a different place of residence for any reason.

A *household* consists of all persons—related family members and all unrelated persons—who occupy a housing unit. 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* refers to 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 even though they may include a related subfamily, that is, a married couple or a parent-child group related by birth or marriage to the householder and sharing the living quarters. The

count of families used in this publication excludes unrelated subfamilies such as lodgers, guests, or resident employees living in a household but not related to the householder. 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. Data on the earnings of families exclude all those in which there is no wage or salary earner or in which the husband, wife, or other persons maintaining the family is either self-employed or in the Armed Forces.

*Poverty areas* are defined as those census tracts in tracted areas, and Minor Civil Division's (MCD's) in untraced areas, in which 20 percent or more of the noninstitutional residents were poor according to the 1980 decennial census. Persons were classified as poor or nonpoor by comparing money income to a series of poverty income thresholds which vary by family size and number of children. While poverty areas have a substantial concentration of low-income residents, many poor persons live outside these areas, and conversely, the areas include many people who are not poor.

The *metropolitan areas* classification consists of the total of all Metropolitan Statistical Areas (MSA's) as defined by the Office of Management and Budget (OMB) as of June 30, 1983. These definitions differ from those used in the 1980 decennial census. A detailed discussion of the MSA definitions as well as changes in terminology can be found in "The New Metropolitan Area Definitions" section of the *1980 Census of Population Supplementary Report on Metropolitan Statistical Areas*, PC-S1-18. Nonmetropolitan areas consist of the total territory outside MSA's.

The *urban population*, as defined for the 1980 census, comprises all persons living in urbanized areas and in places of 2,500 or more inhabitants outside urbanized areas. More specifically, the urban population consists of all persons living in (1) places of 2,500 or more inhabitants incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the New England States, New York, and Wisconsin), but excluding those persons living in the rural portions of extended cities; and (2) other territories, incorporated and unincorporated, included in urbanized areas. The population not classified as urban constitutes the rural population.

## HISTORICAL COMPARABILITY

### Change in lower age limit

The lower age limit for official statistics on the labor force, employment, and unemployment was raised from 14 to 16 years of age in January 1967. Insofar as possible, historical series have been revised to provide consistent information based on the population 16 years and over. For a detailed discussion of this and other definitional changes introduced at that time, including estimates of their effect on the various series, see "New Definitions for Employment and Unemployment," *Employment and Earnings and Monthly*

*Report on the Labor Force*, February 1967.

### Noncomparability of labor force levels

In addition to the changes introduced in 1967, there are several other periods of noncomparability in the labor force data: (1) 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. (2) 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. (3) 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. (4) 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; and unemployment levels and rates were essentially unchanged. (5) A subsequent population adjustment based on the 1970 census was introduced in March 1973. 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.

In addition, beginning in January 1974, the methodology 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 *Employment and Earnings*.

Effective in July 1975, as a result of the immigration 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, and all of the changes were in the other 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 *Employment and Earnings*.

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 estimation 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 *Employment and Earnings*.

Beginning in January 1982, the second-stage ratio adjustment methodology was changed in the CPS estimation procedure. 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 *Employment and Earnings*. 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 total population and 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 is also described in the February 1982 article cited above. The revisions did not, however, smooth out the breaks in series occurring between 1972 and 1979 that are described above, and data users should make allowances for them in making certain data comparisons.

Beginning in January 1983, the first-stage ratio adjustment methodology was updated to account for results obtained 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 *Employment and Earnings*. 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 methodology 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 civilian population and labor force estimates were raised by about 425,000 and 305,000, respectively, and civilian 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 have been 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.

### **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 *Employment and Earnings*.

Beginning in January 1983, the occupational and industrial classification systems used in the 1980 census were introduced into the CPS. These systems differ from those developed for the 1970 census, which were used in the CPS from January 1971 through December 1982.

The 1980 census occupational classification system evolved

from the Standard Occupational Classification system (SOC). While the CPS occupational data are now comparable with other data sources, the new system is 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 is based on the 1972 Standard Industrial Classification system (SIC), as modified in 1977. The adoption of the new system had a much less 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 *Employment and Earnings*.

### Changes in the sample design

Since the inception of the survey, there have been various changes in the design of the CPS sample. Most of these changes were made in order to improve the efficiency of the sample design and/or to increase the reliability of the sample estimates.

One major change made after every decennial census is to change the sample design to make use of the recently collected census materials. Also, the number of sample areas and the number of sample persons are increased occasionally. In 1953, the current rotation plan was introduced, in which a sample unit is interviewed for 4 months, leaves the sample for 8 months, and then returns to the sample for another 4 months. When Alaska and Hawaii achieved statehood, three more sample areas were added to account for the population in these States. After the 1960 census, selection of a major portion of the sample from census address lists was begun, though a portion of the sample is still collected using area sampling. Following the 1970 census, the ultimate sampling unit was changed from a noncontiguous cluster of six housing units to a usually contiguous cluster of four housing units. In January 1978, a supplemental sample of 9,000 housing units, selected in 24 States and the District of Columbia and designed to provide more reliable annual average estimates for States, was incorporated into the design. In October 1978, a coverage improvement sample, composed of approximately 450 sample household units which represented 237,000 occupied mobile homes and 600,000 new construction housing units, was included in computing the estimates in order to provide coverage of mo-

mobile homes and new construction units that previously had no chance for selection in the CPS sample selected from the 1970 census frame. In January 1980, another supplemental sample of 9,000 households selected in 32 States and the District of Columbia was added to the existing sample. A sample reduction of about 6,000 units was implemented in May 1981. Beginning in January 1982, the sample was expanded by 100 households to provide additional coverage in counties added to SMSA's, which were redefined in 1973.

Beginning in 1985, a new State-based CPS sample was selected based on 1980 census information rather than 1970 census information. The selection of new sample areas provided an opportunity to improve the efficiency of the sample design. Sample areas chosen to replace incoming sample areas account for only 10 percent of the national estimate. The new CPS sample has resulted in increased reliability for State estimates with a slightly reduced sample size. Sample households are chosen from 729 sample areas, which represent 1,973 geographic areas in the United States. This current number of sample areas is not completely comparable to the old number of sample areas since many of the sample areas have been redefined. (See pp. 7-10 of the May 1984 issue of *Employment and Earnings*, for an overview of these new definitions and the introduction of the new sample.) A sample reduction of about 4,000 households was implemented in April 1988.

Table A provides a description of some aspects of the CPS sample design in use during the different data collection periods. 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.

### 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. Beginning in 1985, almost all sample persons within the same State have the same probability of selection. These estimates are then adjusted for noninterviews, and the ratio estimation procedure is applied.

1. *Noninterview adjustment.* The weights for all interviewed households are adjusted to the extent needed 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 by combinations of similar sample areas that are not necessarily contained within a State. Similarity of sample areas is based on Metropolitan Statistical Area (MSA) status and size. Within

**Table A. Characteristics of the CPS sample, 1947 to date**

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 present . . . . .	729	53,200	2,600	11,500

<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.

each combination of sample areas there is a further breakdown by residence. MSA sample areas are categorized by "central city" and "balance of the MSA". Residence categories of non-MSA areas are "urban" and "rural". The proportion of sample households not interviewed varies from 4 to 5 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 residence. Since 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 estimates as follows:

a. *First-stage ratio estimate.* In the CPS, a portion of the 729 sample areas is chosen to represent other areas not in the sample; the remainder of the sample areas represent only themselves. The first-stage ratio estimation procedure was designed to reduce the portion of the variance resulting from requiring sample areas to represent nonsample areas. Therefore, this procedure is not applied to sample areas which represent only themselves. The adjustment is made at the State level for each of the 43 States which contain nonsample areas by race cells of black and non-black. The procedure corrects for differences that existed in each cell at the time of the 1980 census between the race distribution of the population in sample areas and the known race distribution of the State.

b. *Second-stage ratio estimate.* In this stage, the sample proportions of persons in specific categories are adjusted to the distribution of independent current estimates of the civilian noninstitutional population in the same categories. The second-stage ratio adjustment, which is performed to

further reduce variability of the estimates and to correct to some extent for CPS undercoverage relative to the decennial census, is carried out in three steps. In the first step, the sample estimates are adjusted within each State and the District of Columbia to an independent control for the population 16 years and over. The second step involves an adjustment by Hispanic origin to a national estimate for eight age-sex categories by Hispanic and non-Hispanic. In the third step, a national adjustment is made by the race categories of white, black, and other races to independent estimates by age and sex. The white and black categories contain 32 age-sex groups each; the other races category has 6 age-sex cells. The entire second-stage adjustment procedure is iterated six times, each time beginning at the weights developed the previous time. This ensures that the sample estimates of the population for both State and national age-sex-race-origin categories will be virtually equal to the independent population control totals. This second-stage adjustment procedure incorporates changes instituted in January 1985. The nature and effect of these changes are discussed in detail in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1985" in the February 1985 issue of *Employment and Earnings*.

The controls by State for the civilian noninstitutional population 16 years and over are an arithmetic extrapolation of the trend in the growth of this segment of the population using the two most recent July 1 estimates, adjusted as a last step to a current estimate of the U.S. population of this group. State estimates by age for July 1 are published annually in *Current Population Reports, Series P-25*. For a description of the methodology used in developing the State total, see Report 957 of that series. A description of the age estimates methodology is available in Report 1010 of that series.

Prior to January 1985, there was no separate control for Hispanics in the second-stage ratio procedure. These Hispanic controls are prepared by carrying forward the 1980 census count for Hispanics by adding estimated Hispanic births and immigrants and subtracting estimated Hispanic deaths



and emigrants to yield an estimate of the Hispanic population by age and sex.

During the period from January 1982 to December 1984, the "inflation-deflation" method was temporarily discontinued in the preparation of the independent national controls used for the age-sex-race groups in the third step of the second-stage ratio estimation procedure. These controls were prepared by carrying forward the 1980 census data after taking account of subsequent aging of the population, births, deaths, and net migration and then subtracting the estimate for the institutional population and Armed Forces. Beginning in January 1985, the "inflation-deflation" method of deriving independent population controls was reintroduced into the CPS estimation procedure. With the "inflation-deflation" method, the independent controls are prepared by inflating the 1980 census counts to include estimated undercounts by age, sex and race, aging this population forward to each subsequent month and later age by adding births and net migration, and subtracting deaths. These post-censal population estimates are then deflated to census level to reflect the pattern of net undercount in the most recent census by age, sex, and race. Because an estimate of undercount is first added and then subtracted, the size of each race-sex group is unaffected by the "inflation-deflation" method. Similarly, the final estimate is affected only by the age structure of the undercount, but not the level. This feature of the method is important since the exact amount of undercount in the 1980 census remains unknown.

Data on births and deaths between April 1, 1980, and the estimate date are based on tabulations of vital statistics for the resident population made by the National Center for Health Statistics and data on deaths of military personnel overseas from the Department of Defense. Estimates of net civilian immigration are based on data provided by the Immigration and Naturalization Service, the Department of Defense, the Office of Personnel Management, and the Puerto Rico Planning Board. The civilian noninstitutional population is derived by subtracting the Armed Forces and the institutional population for the estimate date from the total including Armed Forces overseas. The institutional population is computed by applying institutional proportions derived from the 1980 census to the total population, including Armed Forces overseas for the estimate date. All computations described above are performed in cells defined by single year of age, race, and sex. The independent national control totals are then obtained by collapsing these cells into broader age groups for the population 16 years and older.

Beginning in January 1986, two changes were introduced into the estimation of the independent population controls. For the first time, an explicit allowance for net undocumented immigration since April 1, 1980 (the census date) was added to the estimated level of legal immigration. In addition, an increase in the estimate of emigration of legal foreign-born residents has been incorporated into the postcensal population estimates since 1980. The nature and effect of these changes are discussed in detail in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986" in the February 1986 issue of *Employment and Earnings*.

3. *Composite estimate procedure.* In deriving statistics for a given month, a composite estimating procedure is used which takes account of net changes from the previous month for continuing parts of the sample (75 percent), as well as the sample results for the current month. Also included is an additional term which is an estimate of the net difference between incoming and continuing parts of the current month's sample. Almost all estimates of month-to-month change are improved by this procedure, and most estimates of level are also improved, but to a lesser extent.

### **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 primarily indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration but do not measure 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., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness of respondents to provide correct information, inability to recall information, errors made in collection such as in recording or coding the data, errors made in 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 have been studied by means of a reinterview program. This program is used to estimate various sources of error as well as to evaluate and control the work of the interviewers. A random sample of each interviewer's work is inspected through reinterview at regular intervals. The results indicate, among other things, that the data published from the CPS are subject to moderate systematic biases. A description of the CPS reinterview program and some of the other results may be found in the *Current Population Survey Reinterview Program*,

January 1961 Through December 1966, Technical Paper No. 19, Bureau of the Census, U.S. Department of Commerce.

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

Undercoverage in the CPS results from missed housing units and missed persons within sample households. Compared to the level of the decennial census, undercoverage is about 6 percent. 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 combined than for whites. Ratio estimation to independent age-sex-race-Hispanic 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-Hispanic origin group. Further, the independent population controls used have not been adjusted for undercoverage in the 1980 census.

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

**Sampling error.** The standard error is primarily a measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The sample estimate and its estimated standard error enable one to construct confidence intervals, ranges that would include the average of all possible samples with a known probability. For example, if all possible samples were selected, each of these surveyed under essentially the same general conditions and using the same sample design, and an estimate and its estimated error were calculated from 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 average result of all possible samples.

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 average of all possible samples.

3. Approximately 95 percent of the intervals from 2 standard errors below the estimate to 2 standard errors above the estimate would include the average result of all possible samples.

In order to derive standard errors that would be applicable to a large number of estimates and could be prepared at a moderate cost, a number of approximations are required. First, the standard errors in this volume reflect the sample design and estimation procedures in effect prior to the expansions for State estimates. Thus, these standard errors may slightly overstate the standard errors applicable to the present design. Second, instead of computing an individual standard error for each estimate, generalized sets of standard errors are computed for various types of characteristics. This generalization yields more stable estimates of the standard errors. Consequently, the sets of standard errors provided give an indication of the order of magnitude of the standard error of an estimate rather than the precise standard error.

Tables B and C show approximate standard errors for major employment status characteristics for monthly estimates and for changes for consecutive months. These standard errors are applicable to the level of the estimates in recent months.

Tables D through H provide generalized standard errors for monthly level and month-to-month change for estimated totals, unemployment rates, and percentages. Table I contains factors for use with table H for computing standard errors, as described below, for monthly level and month-to-month change for percentages. Standard errors for intermediate values not shown in the table may be approximated by linear interpolation. The standard error for estimated changes from one month to the next is more closely related to the monthly level for the characteristic than to the size of the specific month-to-month change itself. Thus, in order to use the generalized standard errors for month-to-month change as given in the tables of standard errors, it is necessary to obtain the monthly estimate for the characteristic. It should be noted that the tables of standard errors for month-to-month change apply only to estimates of change between 2 consecutive months. Estimates of change for non-consecutive months are subject to higher standard errors. Table J contains factors for use with tables D, F, H, and I to compute approximate standard errors for levels, labor force participation rates, and percentages as pertaining to the year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages. Note that standard errors for changes in quarterly and yearly estimates apply only to consecutive quarters and years. For years prior to 1967, the standard errors must be adjusted due to the differences in the sample size. For years prior to 1956, the standard errors should be multiplied by 1.50, and for the 1956-66 period they should be multiplied by 1.22. Table K provides generalized standard

**Table B. Standard errors for major employment status categories**

(in thousands)

Employment status, sex, age, and race	Standard error of—	
	Monthly level	Month-to-month change (consecutive months only)
Total, 16 years and over:		
Civilian labor force . . . . .	275	212
Employed . . . . .	293	224
Unemployed . . . . .	136	140
Men, 20 years and over:		
Civilian labor force . . . . .	173	151
Employed . . . . .	186	163
Unemployed . . . . .	93	95
Women, 20 years and over:		
Civilian labor force . . . . .	211	155
Employed . . . . .	212	160
Unemployed . . . . .	83	87
Both sexes, 16 to 19 years:		
Civilian labor force . . . . .	88	94
Employed . . . . .	92	102
Unemployed . . . . .	59	66
Black, 16 years and over:		
Civilian labor force . . . . .	94	73
Employed . . . . .	104	79
Unemployed . . . . .	68	71
Men, 20 years and over:		
Civilian labor force . . . . .	59	51
Employed . . . . .	64	57
Unemployed . . . . .	44	47
Women, 20 years and over:		
Civilian labor force . . . . .	76	50
Employed . . . . .	76	54
Unemployed . . . . .	45	48
Both sexes, 16 to 19 years:		
Civilian labor force . . . . .	36	40
Employed . . . . .	33	38
Unemployed . . . . .	30	33

errors for quarterly estimates of persons and families for use with the CPS earnings data.

*Standard errors for estimated totals.* Tables D and E provide generalized standard errors for monthly totals and for month-to-month change. The figures given in these tables are to be used for the characteristics as indicated.

*Illustration.* Assume that in a given month the number of persons working a specific number of hours was 12,000,000, an increase of 400,000 over the previous month. Linear interpolation in the second column of table D shows that the standard error on an estimate of 12,000,000 is about 174,000. The 68-percent confidence interval as shown by these data is from 11,826,000 to 12,174,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Recall that the standard error of a month-to-month change is primarily dependent on the size of the monthly estimate. Thus, using linear interpolation in the first column of table E, the standard error on a month-to-month change of 400,000, when the monthly level is approximately 12,000,000, is about 129,000.

*Standard errors for rates and percentages.* The reliability of an estimated unemployment rate or an estimated percentage, computed using sample data for both numerator and denominator, depends upon both the size of the rate or percentage and the total upon which the rate or percentage is based. Estimated rates and percentages are relatively more

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

Characteristic	Standard error of—		Characteristic	Standard error of—	
	Monthly level	Consecutive-month change		Monthly level	Consecutive-month change
Total (all civilian workers) . . . . .	0.11	0.12			
Men, 20 years and over . . . . .	.15	.15			
Women, 20 years and over . . . . .	.16	.17			
Both sexes, 16 to 19 years . . . . .	.67	.81			
White workers . . . . .	.11	.12			
Black workers . . . . .	.51	.54			
Married men, spouse present . . . . .	.15	.17			
Married women, spouse present . . . . .	.19	.21			
Full-time workers . . . . .	.12	.13			
Part-time workers . . . . .	.34	.42			
Unemployed 15 weeks and over . . . . .	.06	.07			
			<b>Occupation—Continued</b>		
			Precision production, craft, and repair . . . . .	0.32	0.36
			Machine operators, assemblers, and inspectors . . . . .	.49	.55
			Transportation and material moving . . . . .	.59	.66
			Handlers, equipment cleaners, helpers, and laborers . . . . .	.72	.82
			Farming, forestry, and fishing . . . . .	.68	.76
			<b>Industry</b>		
			Nonagricultural private wage and salary workers . . . . .	.12	.13
			Mining . . . . .	1.63	1.86
			Construction . . . . .	.65	.75
			Manufacturing . . . . .	.26	.29
			Durable goods . . . . .	.33	.37
			Nondurable goods . . . . .	.42	.47
			Transportation, communications, and public utilities . . . . .	.42	.48
			Wholesale and retail trade . . . . .	.27	.30
			Finance and services . . . . .	.20	.22
			Government workers . . . . .	.23	.25
			Agricultural wage and salary workers . . . . .	1.16	1.32
<b>Occupation</b>					
Executive, administrative, and managerial . . . . .	.22	.24			
Professional specialty . . . . .	.19	.21			
Technicians and related support . . . . .	.47	.52			
Sales . . . . .	.29	.33			
Administrative support, including clerical . . . . .	.23	.26			
Private household . . . . .	1.18	1.33			
Protective service . . . . .	.76	.85			
Service, except private household and protective . . . . .	.39	.43			

reliable than the corresponding estimates of the numerator of the rates or percentages; this is particularly true for percentages of 50 percent or more. As a general rule, percentages are not published when the monthly base is less than 75,000, the quarterly average base is less than 60,000, or the annual average base is less than 35,000.

Tables F and G show generalized standard errors for monthly level and month-to-month change for unemployment rates. Generalized standard errors for estimated monthly percentages and estimated month-to-month change in percentage can be obtained through the use of the standard errors in table H and the factors in table I. First, obtain the standard error from table H for the specific percentage and base. The generalized standard error is then calculated by multiplying the standard error from table H by the appropriate factor from table I. When the numerator and denominator of the percentage are in different categories, use the factor indicated by the numerator of the percentage.

*Illustration.* Assume that in a given month 2.9 percent of a total of 112,440,000 employed persons are employed in agriculture. The standard error on an estimate of 2.9 percent with a base of 112,440,000 is obtained from table H (0.08 percent). The appropriate factor from table I for the numerator of the percentage, agricultural employment, is 1.26. The generalized standard error on the estimated 2.9 percent is then approximately  $0.08 \times 1.26 = 0.10$  percentage point.

*Standard errors for year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages.* The approximate standard errors of levels, rates, and percentages involving year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages may be obtained by using table J in conjunction with the other tables. Standard errors for estimates of change are more closely related to the level of the estimate than to the size of the specific change. Thus, to obtain the standard error of an estimate of an average level, rate, or percentage, or an estimate of a change in level, rate, or percentage, it is first necessary to find the appropriate estimate of level. For an estimate of an average level, rate, or percentage, find the standard error of this estimate. For an estimate of change in level, rate, or percentage, find the standard error of the average of the two estimates affecting the change. Then, after computing the standard error by treating these estimates as monthly estimates and using the procedures above, multiply this result by a suitable factor from table J to obtain the approximate standard error for the average or change.

*Illustration.* Suppose that one is interested in the year-to-year change of a monthly unemployment rate. Assume that for a certain month the unemployment rate is 6.2 percent, based on a total of 119,865,000 in the civilian labor force, and that

**Table D. Standard errors for estimates of monthly level**

(in thousands)

Estimated monthly level	Characteristic <sup>1</sup>								
	Agricultural employment	Unemployment		Labor force data other than agricultural employment and unemployment					
		Total or white	Black	Total or white	Black	Total or white, 16 to 19 years	Black, 16 to 19 years	Total or white men only, or women only	Black men only, or women only
50 . . . . .	15	11	12	12	12	12	12	11	10
100 . . . . .	21	16	17	17	17	17	16	15	14
500 . . . . .	47	36	38	37	37	36	32	34	31
1,000 . . . . .	66	51	53	52	51	50	35	49	43
2,000 . . . . .	93	72	73	74	70	68		68	58
4,000 . . . . .	131	101	97	104	92	86		95	73
6,000 . . . . .	159	123	110	126	104	92		115	76
8,000 . . . . .	182	141	116	145	109	88		132	69
10,000 . . . . .	202	156		161	108	72		145	47
15,000 . . . . .	-	188		193	74			172	
20,000 . . . . .		213		219				191	
30,000 . . . . .		-		259				215	
40,000 . . . . .				286				225	
50,000 . . . . .				306				222	
60,000 . . . . .				319				206	
70,000 . . . . .				326				172	
80,000 . . . . .				327				107	
100,000 . . . . .				314					
120,000 . . . . .				274					
140,000 . . . . .				195					

<sup>1</sup> When determining the standard error of an estimate for a group which is a subset of the age, sex, or race groups listed, use the standard error for the next larger group, e.g., when determining the standard error

of the estimated number of employed persons age 20 to 54 years, use the column for total employed.

**Table E. Standard errors for estimates of month-to-month change**

(in thousands)

Estimated monthly level	Characteristic <sup>1</sup>							
	Unemployment				Labor force data other than unemployment and agricultural employment			
	Total or white	Both sexes 16 to 19 years, or part-time labor force <sup>2</sup>	Black	Black, 16 to 19 years	Total or white	Black	Total or white, 16 to 19 years	Black, 16 to 19 years
50 . . . . .	13	14	13	14	9	9	14	14
100 . . . . .	18	20	19	20	12	12	20	19
500 . . . . .	40	45	41	38	27	27	43	37
1,000 . . . . .	56	63	57	41	39	38	59	39
2,000 . . . . .	78	89	76		55	52	80	-
4,000 . . . . .	108	124	95		77	68	100	
6,000 . . . . .	129	150	99		93	78	104	
8,000 . . . . .	144	-	89		107	82	94	
10,000 . . . . .	157		58		119	81	65	
15,000 . . . . .	177		-		143	59	-	
20,000 . . . . .	184				163	-		
30,000 . . . . .					192			
40,000 . . . . .					213			
50,000 . . . . .					228			
60,000 . . . . .					238			
70,000 . . . . .					244			
80,000 . . . . .					245			
100,000 . . . . .					237			
120,000 . . . . .					212			
140,000 . . . . .					160			

<sup>1</sup> See footnote 1, table D.

<sup>2</sup> Part-time labor force for unemployment also includes persons reentering

the labor force, persons who left their last job, and persons by duration of unemployment.

a year prior to this the unemployment rate was 7.0 percent, based on a total of 117,834,000 in the civilian labor force for the month. First, the standard error on the average of the two estimates, 6.6 percent with a base of 118,850,000, is obtained from table F (0.11 percentage point). The appropriate factor, then, from table J is 1.40. The approximate standard error on the change of 0.8 percent is then given by 0.11 x 1.40 = 0.15 percentage point.

The approximate standard error of levels involving year-to-year change of quarterly estimates pertaining to CPS earnings data for persons and families may be obtained by using table K in conjunction with the following formula:

$$\text{Standard error of year-to-year change} = \sqrt{\left(\frac{\text{Standard error}}{x}\right)^2 + \left(\frac{\text{Standard error}}{y}\right)^2 - 2(P) \left(\frac{\text{Standard error}}{x}\right) \left(\frac{\text{Standard error}}{y}\right)}$$

X is the estimate for one quarter and Y is the estimate for another quarter. The coefficient, P, is a measure of the corre-

lation between the estimates X and Y resulting from the presence of some of the same respondents in the sample for each estimate. For consecutive year-to-year changes of quarterly estimates, the values of P are 0.30 for persons (total, white, and black) and 0.35 for families (total, white, and black). The respective values for estimates of Hispanics are 0.45 and 0.55.

*Illustration.* Assume that in a given quarter the number of women employed as full-time wage and salary workers was 27,000,000 and in the same quarter a year later, their number had increased to 29,000,000. Using linear interpolation in the eighth column of table K, the standard error of an estimate of 27,000,000 is 216,000; for 29,000,000 it is 221,000. Using the above formula, the standard error of the 2,000,000 year-to-year change is:

$$(216,000)^2 + (221,000)^2 - 2(.30) (216,000) (221,000),$$

or about 259,000.

**Table F. Standard errors for unemployment rates**

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
		2	5	10	15	20	25	30	35	50
50 . . . . .	2.28	3.20	4.98	6.85	8.13	9.09	9.82	10.36	10.75	11.12
100 . . . . .	1.61	2.26	3.52	4.84	5.75	6.43	6.94	7.33	7.60	7.87
500 . . . . .	.72	1.01	1.58	2.16	2.57	2.88	3.11	3.28	3.40	3.52
1,000 . . . . .	.51	.72	1.11	1.53	1.82	2.03	2.20	2.32	2.40	2.49
2,000 . . . . .	.36	.51	.79	1.08	1.29	1.44	1.55	1.64	1.70	1.76
4,000 . . . . .	.25	.36	.56	.77	.91	1.02	1.10	1.16	1.20	1.24
6,000 . . . . .	.21	.29	.45	.62	.74	.83	.90	.95	.98	1.02
10,000 . . . . .	.16	.23	.35	.48	.58	.64	.69	.73	.76	.79
20,000 . . . . .	.11	.16	.25	.34	.41	.45	.49	.52	.54	.56
60,000 . . . . .	.07	.09	.14	.20	.24	.26	.28	.30	.31	.32
100,000 . . . . .	.05	.07	.11	.15	.18	.20	.22	.23	.24	.25
120,000 . . . . .	.05	.07	.10	.14	.17	.19	.20	.21	.22	.23
140,000 . . . . .	.04	.06	.09	.13	.15	.17	.19	.20	.21	.21

**Table G. Standard errors for month-to-month change in unemployment rates**

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
		2	5	10	15	20	25	30	35	50
50 . . . . .	2.53	3.57	5.60	7.83	9.47	10.79	11.91	12.87	13.71	15.67
100 . . . . .	1.79	2.52	3.96	5.53	6.69	7.63	8.42	9.10	9.69	11.08
500 . . . . .	.80	1.13	1.77	2.47	2.99	3.41	3.76	4.06	4.33	4.94
1,000 . . . . .	.57	.80	1.25	1.75	2.11	2.41	2.65	2.87	3.05	3.48
2,000 . . . . .	.40	.56	.88	1.23	1.49	1.70	1.87	2.02	2.15	2.44
4,000 . . . . .	.28	.40	.63	.87	1.05	1.20	1.32	1.42	1.51	1.70
6,000 . . . . .	.23	.33	.51	.71	.86	.97	1.07	1.15	1.22	1.37
10,000 . . . . .	.18	.25	.39	.55	.66	.75	.82	.88	.93	1.03
20,000 . . . . .	.13	.18	.28	.38	.46	.51	.56	.60	.62	.66
60,000 . . . . .	.07	.10	.16	.21	.24	.27	.28	.29	.30	.32
100,000 . . . . .	.06	.08	.12	.15	.17	.18	.19	.20	.21	.22
120,000 . . . . .	.05	.07	.11	.14	.15	.16	.17	.18	.19	.20
140,000 . . . . .	.05	.07	.10	.13	.14	.15	.16	.17	.18	.19

**Table H. Standard errors for estimated percentages and month-to-month change in percentages for labor force data**

Monthly base of percentages (in thousands)	Percentage of monthly level									
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	50
50 . . . . .	2.34	3.29	5.12	7.05	8.39	9.40	10.18	10.77	11.21	11.75
100 . . . . .	1.65	2.33	3.62	4.99	5.94	6.65	7.20	7.62	7.93	8.31
500 . . . . .	.74	1.04	1.62	2.23	2.65	2.97	3.22	3.41	3.55	3.72
1,000 . . . . .	.52	.74	1.15	1.58	1.88	2.10	2.28	2.41	2.51	2.63
2,000 . . . . .	.37	.52	.81	1.12	1.33	1.49	1.61	1.70	1.77	1.86
4,000 . . . . .	.26	.37	.57	.79	.94	1.05	1.14	1.20	1.25	1.31
6,000 . . . . .	.21	.30	.47	.64	.77	.86	.93	.98	1.02	1.07
10,000 . . . . .	.17	.23	.36	.50	.59	.66	.72	.76	.79	.83
20,000 . . . . .	.12	.16	.26	.35	.42	.47	.51	.54	.56	.59
40,000 . . . . .	.08	.12	.18	.25	.30	.33	.36	.38	.40	.42
60,000 . . . . .	.07	.10	.15	.20	.24	.27	.29	.31	.32	.34
80,000 . . . . .	.06	.08	.13	.18	.21	.24	.25	.27	.28	.29
100,000 . . . . .	.05	.07	.11	.16	.19	.21	.23	.24	.25	.26
120,000 . . . . .	.05	.07	.10	.14	.17	.19	.21	.22	.23	.24
140,000 . . . . .	.04	.06	.10	.13	.16	.18	.19	.20	.21	.22
160,000 . . . . .	.04	.06	.09	.12	.15	.17	.18	.19	.20	.21

NOTE: The standard errors in this table must be multiplied by the factors in table I to obtain the approximate standard error for a specific characteristic.

**Table I. Factors to be used with table H to compute approximate standard errors for percentages and month-to-month change in percentages**

Characteristic	Factor		Characteristic	Factor	
	Monthly level	Month-to-month change		Monthly level	Month-to-month change
Agricultural employment:			Unemployment:		
Total or full-time labor force . . . . .	1.26	1.05	Part-time labor force, duration of unemployment, left last job, reentering labor force . . . . .	1.01	1.21
Part-time labor force . . . . .	1.26	1.50	All other unemployment characteristics:		
Labor force data other than agricultural employment and unemployment:			Total or white:		
Total . . . . .	1.00	.74	Total . . . . .	.97	1.08
Men only . . . . .	.93	.84	Both sexes, 16 to 19 years . . . . .	.97	1.21
Women only . . . . .	.86	.75	Black:		
Both sexes, 16 to 19 years . . . . .	1.00	1.18	Total . . . . .	1.04	1.13
Part-time labor force . . . . .	1.00	1.18	Both sexes, 16 to 19 years . . . . .	1.04	1.24

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

Characteristic	Factor				
	Year-to-year change of monthly estimate	Quarterly averages	Change in quarterly averages	Yearly averages	Change in yearly averages
Agricultural employment:					
Total or men . . . . .	1.30	0.89	0.80	0.72	0.70
Women or teenagers (16 to 19 years) . . . . .	1.30	.83	.80	.58	.70
Part time . . . . .	1.40	.74	.80	.46	.70
Labor force data other than agricultural employment and unemployment:					
Total or white . . . . .	1.30	.88	.88	.67	.70
Black teenagers (16 to 19 years) . . . . .	1.30	.82	.88	.57	.70
Part time . . . . .	1.40	.74	.88	.46	.60
Unemployment:					
Total . . . . .	1.40	.76	.88	.50	.65
Part time . . . . .	1.40	.69	.88	.39	.54

**Table K. Standard errors for estimates of quarterly levels, to be used with CPS earnings data**

(In thousands)

Estimated quarterly level	Characteristic								
	Total			Men				Women	
	Part-time workers	Total or full-time workers		Part-time workers	Total or full-time workers			Total, full-time, or part-time workers	
		Total or white	Black		Total	White	Black	Total or white	Black
10 .	5	5	5	5	5	5	5	5	5
50 .	11	12	12	11	12	12	12	11	11
75 .	13	15	15	13	15	15	15	13	13
100 .	15	17	17	15	17	17	17	15	15
150 .	19	21	21	19	21	21	21	19	19
200 .	22	24	24	22	24	24	24	22	21
250 .	24	27	27	24	27	27	27	24	24
300 .	26	30	30	26	30	30	29	26	26
500 .	34	38	38	34	38	38	37	34	33
750 .	42	47	46	42	47	47	45	42	41
1,000 .	48	54	53	48	54	54	50	48	46
1,500 .	59	66	63	59	66	66	59	59	56
2,000 .	68	76	72	68	76	76	65	68	63
2,500 .	76	85	79	75	84	84	69	75	69
3,000 .	83	93	85	82	92	92	71	82	74
5,000 .	107	119	100	105	117	116	64	105	85
7,500 .	130	145	107	127	140	138	64	127	88
10,000 .	149	165	102	144	157	155		145	-
15,000 .	180	198	102	187	183	179		173	
20,000 .	205	224		192	199	193		195	
25,000 .	226	244		207	209	199		211	
30,000 .	224	261		219	212	198		224	
40,000 .	273	286		233	201	174		242	
50,000 .	296	301		-	160	100		249	
75,000 .	331	304			160	-		-	
100,000 .	343	255			-				



# Establishment Data (Tables B-1 through C-8)

## COLLECTION

Payroll reports provide current information on wage and salary employment and hours and earnings in nonagricultural establishments, by industry and geographic location. Historical statistics are published in *Employment, Hours, and Earnings, United States, 1909-84*, and *Employment, Hours, and Earnings, States and Areas, 1939-82* and their supplements.

### Federal-State cooperation

Under cooperative arrangements, responding establishments report employment, hours, and earnings data to State agencies. State agencies mail the forms to the establishments and examine the returns for consistency, accuracy, and completeness. The States use the reported data to prepare State and area series and also send the reported data to the BLS (Washington Office) for use in preparing the national series. This avoids a duplicate reporting burden on establishments, and, together with the use of similar estimating techniques at the national and State levels, promotes increased comparability between estimates.

### Shuttle schedules

Form BLS 790—Report on Employment, Payroll, and Hours is the name of the data collection schedule. The collection agency returns the schedule to the respondent each month so that the next month's data can be entered on the space allotted for that month. This "shuttle" procedure assures maximum comparability and accuracy of reporting, since the respondent can see the figures that have been reported for previous months.

Form BLS 790 provides for entry of data on the total number of full- and part-time workers on the payrolls of nonagricultural establishments and, for most industries, employment, payroll, and hours of production and related workers or nonsupervisory workers for the pay period which includes the 12th of the month.

## 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 and for States and areas are classified in accordance with the 1972 *Standard Industrial Classification Manual (SICM)*, Office of Management and Budget. The BLS tabulates and estimates statistics which distinguish between private and public establishments, thus maintaining continuity with previously published statistics for the private and government sector.

### 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 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 also are 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 changes in number of employees on nonagricultural payrolls.* These indexes measure the percent of industries which posted increases in employment over the specified time span. The indexes are calculated from 185 seasonally adjusted employment series (two-digit non-manufacturing industries and three-digit manufacturing industries) covering all nonagricultural payroll employment in the private sector. A more detailed discussion of these indexes appears in "Introduction of Diffusion Indexes," in the December issue of *Employment and Earnings*.

### 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* include 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* include 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* include 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* covers 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 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. "Fringe benefits" (such as health and other types of insurance, contributions to retirement, etc., paid by the employer) are also excluded.

*Hours* cover 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* cover 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 differ-

ent 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 figures for 1977. 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.

Since overtime hours are premium hours by definition, weekly hours and overtime hours do not necessarily move in the same direction from month to month; for example, overtime premiums may be paid for hours in excess of the straight-time workday although less than a full week is worked. 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. In addition, such factors as work stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on average hours.

*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 (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, as defined above. 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-time 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*, or earnings in constant dollars, 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).

## ESTIMATING METHODS

The principal features of the procedure used to estimate employment for the establishment statistics are (1) the use of the "link relative" technique, which is a form of ratio estimation; (2) periodic adjustment of employment levels to new benchmarks; and (3) the use of size and regional stratification.

### The "link relative" technique

From a sample composed of establishments reporting for both the previous and current months, the ratio of current-month employment to that of the previous month is computed. This is called a "link relative." The estimates of employment (all employees, including production and nonproduction workers together) for the current month are obtained by multiplying the estimates for the previous month by these link relatives. In addition, bias correction factors are applied to selected employment estimates each month. The size of the bias correction factors is determined from past benchmark comparisons. Beginning with data for April 1983, these factors are modified by changes in the sample link relatives for the most recent quarter. Other features of the general procedures are described in table L.

### Size and regional stratification

A number of industries are stratified by size of establishment and/or by region, and the stratified production or non-supervisory worker data are used to weight the hours and earnings for aggregation into broader industry groupings. Accordingly, the basic estimating cell for an employment, hours, or earnings series, as the term is used in the summary of computational methods in table L, may be a whole industry or a size stratum, a region stratum, or a size stratum of a region within an industry.

### Benchmark adjustments

Employment estimates are compared periodically with benchmarks (comprehensive counts of employment) for the various nonagricultural industries, and appropriate adjustments are made as indicated. The industry estimates are currently projected from March 1986 levels. Normally, benchmark adjustments are made annually.

The primary sources of benchmark information are employment data, by industry, compiled quarterly by State agencies from reports of establishments covered under State unemployment insurance laws. These tabulations cover about 98 percent of employees on nonagricultural payrolls in the United States. Benchmark data for the residual are obtained

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

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

<sup>1</sup> The estimates are computed by multiplying the above product by bias adjustment 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.

from the records of the Social Security Administration, the Interstate Commerce Commission, and a number of other agencies in private industry or government.

The estimates for the benchmark month are compared with new benchmark levels, industry by industry. If revisions are necessary, the monthly series of estimates between benchmark periods are adjusted between the new benchmark and the preceding one, and the new benchmark for each industry is then carried forward progressively to the current month by use of the sample trends. Thus, under this procedure, the benchmark is used to establish the level of employment; the sample is used to measure the month-to-month changes in the level. A comparison of the actual amounts of revisions made at the time of the March 1987 benchmark adjustment is shown in table M.

Data for all months since the last benchmark to which the series has been adjusted are subject to revision. Revised data are published as soon as possible after each benchmark revision.

## THE SAMPLE

### Design

The sampling plan used in the establishment survey is known as "sampling proportionate to average size of establishment." This design is an optimum allocation design among strata since the sampling variance is proportional to the average size of establishments. Under this type of design, large establishments fall into the sample with certainty. The size of the sample for the various industries is determined empirically on the basis of experience and of cost considerations. In a manufacturing industry in which a high proportion of total employment is concentrated in relatively few 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 only a few chosen from among the smaller establishments or none at all if the concentration of employment is great enough. On the other hand, in an industry in which a large proportion of total employment is

**Table M. Comparison of nonagricultural employment benchmarks and estimates for March 1987**

Industry	Benchmark	Estimate	Percent difference
Total . . . . .	100,427	100,462	(1)
Mining . . . . .	696	718	-3.2
Construction . . . . .	4,531	4,599	-1.5
Manufacturing . . . . .	18,810	18,897	-.5
Transportation and public utilities . . . . .	5,274	5,275	(1)
Wholesale trade . . . . .	5,763	5,725	.7
Retail trade . . . . .	17,902	17,737	.9
Finance, insurance, and real estate . . . . .	6,443	6,478	-.5
Services . . . . .	23,754	23,723	.1
Government . . . . .	17,254	17,310	-3

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

in small establishments, the sample design calls for inclusion of all large establishments and also for a substantial number of the small 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 design samples for these industries with a smaller proportion of universe employment than is the case for most manufacturing industries. Since individual establishments in these nonmanufacturing divisions generally show less fluctuation from regular cyclical or seasonal patterns than do establishments in manufacturing industries, these smaller samples (in terms of employment) generally produce reliable estimates.

In the context of the BLS establishment survey program, with its emphasis on producing timely data at minimum cost, a sample must be obtained which will provide coverage of a sufficiently large segment of the universe to provide reasonably reliable estimates that can be published promptly and regularly. The present sample meets these specifications for most industries. With its use, the BLS is able to produce preliminary estimates each month for many industries and for many geographic levels within a few weeks after the reference period, and, at a somewhat later date, statistics in considerably greater industrial detail.

### Coverage

The BLS sample of establishment employment and payrolls is the largest monthly sampling operation in the field of social statistics. Table N shows the approximate proportion of total employment in each industry division covered by the group of establishments furnishing monthly employment data. The coverage for individual industries within the division may vary from the proportions shown.

**Table N. Approximate size and coverage of BLS employment and payrolls sample, March 1987<sup>1</sup>**

Industry	Number of establishments in sample	Employees	
		Number reported	Percent of total
Total . . . . .	248,441	35,149,000	35
Mining . . . . .	3,434	264,000	38
Construction . . . . .	22,567	816,000	18
Manufacturing . . . . .	49,214	9,593,000	51
Transportation and public utilities . . . . .	11,807	2,109,000	40
Wholesale trade . . . . .	21,802	922,000	16
Retail trade . . . . .	44,982	3,580,000	20
Finance, insurance, and real estate . . . . .	17,699	2,126,000	33
Services . . . . .	54,782	5,463,000	23
Government:			
Federal <sup>2</sup> . . . . .	5,000	2,916,000	100
State . . . . .	4,795	3,280,000	81
Local . . . . .	15,161	6,276,000	61

<sup>1</sup> Since a few establishments do not report payroll and hours information, hours and earnings estimates may be based on a slightly smaller sample than employment estimates.

<sup>2</sup> National estimates of Federal employment by agency 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 5,000 reports covering about 62 percent of employment in Federal establishments.

## Reliability

Although the relatively large size of the BLS establishment sample assures a high degree of accuracy, the estimates derived from it may differ from the figures that would be obtained if it were possible to take a complete census using the same schedules and procedures. As discussed under the previous section, a link relative technique is used to estimate employment. This requires the use of the previous month's estimate as the base in computing the current month's estimate. Thus, small sampling and response errors may accumulate over several months. To remove this accumulated error, the estimates are usually adjusted annually to new benchmarks. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments (resulting from changes in their product which are not reflected in the levels of estimates until the data are adjusted to new benchmarks). In fact, at the more detailed industry levels, particularly within manufacturing, changes in classification are the major cause of benchmark adjustments. Another cause of differences arises from improvements in the quality of the benchmark data. Table O presents the average percent revisions of the five most recent benchmarks for major industry divisions. Detailed descriptions of individual benchmark revisions are available from the Bureau upon request.

The hours and earnings estimates for basic estimating cells are not subject to benchmark revisions, although the broader groupings may be affected slightly by changes in employment weights. The hours and earnings estimates, however, are subject to sampling errors, which may be expressed as

**Table O. Average benchmark revision in employment estimates and relative errors for average weekly hours and average hourly earnings by industry**

(In percent)

Industry	Average benchmark revision in estimates of employment <sup>1</sup>	Relative error <sup>2</sup>	
		Average weekly hours	Average hourly earnings
Total	0.2		
Total private	.2	0.1	0.2
Mining	2.9	1.0	1.3
Construction	1.4	.2	.5
Manufacturing	.8	.1	.2
Durable goods	.9	.1	.3
Nondurable goods	.8	.1	.2
Transportation and public utilities	.3	.7	.6
Wholesale trade	.8	.2	.4
Retail trade	.9	.2	.4
Finance, insurance, and real estate	.3	.2	.4
Services	.2	.4	.6
Government <sup>3</sup>	.5	—	—

<sup>1</sup> The average percent revision in employment for the 1983-87 benchmarks.

<sup>2</sup> Relative errors relate to 1982 data.

<sup>3</sup> Estimates for government are based on a total count for Federal Government provided by the Office of Personnel Management and a sample of State and local government reports.

relative errors of the estimate. (A relative error is a standard error expressed as a percent of the estimate.) Relative errors for major industries are presented in table O and for individual industries with the specified number of employees in table P. The chances are about 2 out of 3 that the hours and earnings estimates from the sample would differ by a smaller percentage than the relative error from the averages that would have been obtained from a complete census.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The measure is the standard deviation adjusted for the bias in estimates:

$$RMSE = \sqrt{(\text{standard deviation})^2 + (\text{bias})^2}$$

If the bias is small, the chances are about 2 out of 3 that an estimate from the sample would differ from its benchmark by less than the root-mean-square error. The chances are about 19 out of 20 that the difference would be less than twice the root-mean-square error.

Approximations of the root-mean-square errors (based on the most recent benchmark revisions) of differences between final estimates and benchmarks are presented in table P.

For the two most recent months, estimates of employment, hours, and earnings are preliminary and are so footnoted in the tables. These figures are based on less than the total sample and are revised when all the reports in the sample have been received. Table Q presents root-mean-square errors of the amounts of revisions that may be expected between the preliminary and final levels of employment and preliminary and final month-to-month changes. 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.

## STATISTICS FOR STATES AND AREAS

State and area employment, hours, and earnings data are collected and prepared by State agencies in cooperation with BLS. The area statistics relate to metropolitan areas.

**Table P. Root-mean-square errors of differences between benchmarks and estimates of employment and average relative errors for average weekly hours and average hourly earnings**

Size of employment estimate	Root-mean-square error of employment estimates <sup>1</sup>	Relative error <sup>2</sup> (in percent)	
		Average weekly hours	Average hourly earnings
50,000	2,100	2.2	4.0
100,000	3,900	1.3	2.3
200,000	5,600	1.1	2.0
500,000	14,000	.9	1.6
1,000,000	15,000	.8	1.2
2,000,000	26,000	.5	.9

<sup>1</sup> Assuming 12-month intervals between benchmark revisions.

<sup>2</sup> Relative errors relate to 1982 data.

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. These statistics are based on the same

establishment reports used by BLS for preparing national estimates. For employment, the sum of the State figures may differ slightly from the equivalent official U.S. totals on a national basis, because some States have more recent benchmarks than others and because of the effects of differing industrial and geographic stratification.

**Table Q. Errors of preliminary employment estimates**

Industry	Root-mean-square error of—		Industry	Root-mean-square error of—	
	Monthly level	Month-to-month change		Monthly level	Month-to-month change
Total . . . . .	89,600	89,100	Nondurable goods—Continued		
Total private . . . . .	62,700	60,000	Chemicals and allied products . . . . .	2,700	2,900
Goods-producing industries . . . . .	22,400	20,800	Petroleum and coal products . . . . .	1,200	1,100
Mining . . . . .	4,700	4,400	Rubber and misc. plastics products . . . . .	1,600	1,700
Oil and gas extraction . . . . .	4,000	3,400	Leather and leather products . . . . .	1,800	1,700
Construction . . . . .	14,800	15,700	Service-producing industries . . . . .	86,300	85,700
General building contractors . . . . .	5,000	5,200	Transportation and public utilities . . . . .	15,500	13,900
Manufacturing . . . . .	19,200	19,300	Transportation . . . . .	17,800	17,300
Durable goods . . . . .	14,400	12,700	Communication and public utilities . . . . .	6,800	6,400
Lumber and wood products . . . . .	2,300	2,100	Wholesale trade . . . . .	9,400	8,200
Furniture and fixtures . . . . .	1,700	1,700	Durable goods . . . . .	6,100	5,500
Stone, clay, and glass products . . . . .	1,600	1,600	Nondurable goods . . . . .	5,400	4,600
Primary metal industries . . . . .	4,700	4,700	Retail trade . . . . .	40,700	36,100
Blast furnaces and basic steel products . . . . .	3,600	3,400	General merchandise stores . . . . .	23,900	21,400
Fabricated metal products . . . . .	2,500	2,300	Food stores . . . . .	6,900	6,200
Machinery, except electrical . . . . .	6,000	7,300	Automotive dealers and service stations . . . . .	3,300	3,200
Electrical and electronic equipment . . . . .	5,100	5,100	Eating and drinking places . . . . .	10,900	10,300
Transportation equipment . . . . .	8,100	7,400	Finance, insurance, and real estate . . . . .	8,400	7,500
Motor vehicles and equipment . . . . .	7,000	7,000	Finance . . . . .	4,000	3,900
Instruments and related products . . . . .	2,000	2,200	Insurance . . . . .	3,800	3,100
Miscellaneous manufacturing . . . . .	1,900	1,800	Real estate . . . . .	4,800	3,800
Nondurable goods . . . . .	8,900	8,500	Services . . . . .	34,700	31,700
Food and kindred products . . . . .	5,600	5,700	Business services . . . . .	11,000	10,500
Tobacco manufactures . . . . .	1,600	1,500	Health services . . . . .	10,300	10,100
Textile mill products . . . . .	1,800	1,700	Government . . . . .	62,800	54,500
Apparel and other textile products . . . . .	4,700	4,100	Federal . . . . .	16,900	11,700
Paper and allied products . . . . .	1,600	1,400	State . . . . .	22,600	20,600
Printing and publishing . . . . .	2,200	2,100	Local . . . . .	34,900	32,400

NOTE: Data are based on differences from December 1982 through December 1987.

## Productivity Data (Tables C-9 through C-11)

### COLLECTION

Productivity data are compiled by the Bureau of Labor Statistics from establishment data and from estimates of compensation and gross national product supplied by the U.S. Department of Commerce and the Federal Reserve Board.

### CONCEPTS

*Hours of wage and salary workers in nonagricultural establishments* refer to hours paid for all employees—production workers, nonsupervisory workers, and salaried workers.

*Output* is the constant-dollar market value of final goods and services produced in a given period. Indexes of *output per hour* of all persons measure changes in the volume of goods and services produced per paid hour of labor input.

*Compensation per hour* includes wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. The data also include an estimate of wages, salaries, and supplementary payments for the self-employed, except for nonfinancial corporations, in which there are no self-employed.

*Real compensation per hour* is compensation per hour adjusted to eliminate the effect of changes in the Consumer Price Index for All Urban Consumers (CPI-U).

*Unit labor costs* measure the labor compensation cost required to produce one unit of output and are derived by dividing compensation per hour by output per hour.

*Unit nonlabor payments* include profits, depreciation, interest, and indirect taxes per unit of output. They are com-

puted by subtracting compensation of all persons from the current-dollar gross national product and dividing by output. In these tables, unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

*Unit profits* include corporate profits and inventory valuation adjustments per unit of output.

The *implicit price deflator* is derived by dividing the current-dollar estimate of gross product by the constant-dollar estimate, making the deflator, in effect, a price index for gross product of the sector reported.

### NOTES ON THE DATA

For the business sector and the nonfarm business sector, these indexes relate to the gross domestic product less households and institutions, owner-occupied housing, and the statistical discrepancy. For the nonfinancial corporate sector, the indexes refer to the gross domestic product of nonfinancial corporate business.

Manufacturing output data are supplied by the Bureau of Economic Analysis, U.S. Department of Commerce, and the Federal Reserve Board. Quarterly measures have been adjusted by the Bureau of Labor Statistics to annual estimates of output (gross product originating) from the Bureau of Economic Analysis. Compensation and hours data are from the Bureau of Economic Analysis and the Bureau of Labor Statistics. Historical statistics for most productivity measures appear in *Trends in Multifactor Productivity, 1948-81*, BLS Bulletin 2178. Additional information may be obtained from the Office of Productivity and Technology (202 523-9261).

## State and Area Labor Force Data (D table)

### 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 are derived from standardized procedures developed by BLS are the basis of determining eligibility of an area for benefits under Federal programs such as the Job Training Partnership Act and the Public Works and Economic Development Act.

Annual average data for the States and areas shown in table D 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 and unemployment 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, D.C. 20402. The report "Employment and Unemployment in States and Local Areas" is published monthly through GPO and is available on microfiche only on a subscription basis.

### ESTIMATING METHODS

The civilian labor force and unemployment estimates in 11 large States: New York, California, Illinois, Ohio, New Jersey, Pennsylvania, Michigan, Texas, Massachusetts,



North Carolina, and Florida are sufficiently reliable to be used directly from the CPS. For a description of the CPS concepts, see "Household Data," above.

Monthly labor force and unemployment estimates in the remaining 39 States, the District of Columbia, and over 2,600 labor market areas are prepared in several stages. The civilian labor force is the sum of the employment and unemployment levels, which are estimated in accordance with the BLS *Manual for Developing Local Area Unemployment Statistics*.

1. *Preliminary estimate—employment*: The total civilian employment estimate is based on data from the survey of establishments which produces an estimate of payroll employment. This place-of-work estimate 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 for the several categories of employment on the basis of employment relationships which existed at the time of the 1980 decennial census. These factors are applied to the payroll employment estimates for the current period to obtain adjusted employment estimates to which are added estimates for employment not covered by unemployment insurance (UI).

2. *Preliminary estimate—unemployment*: In the current month, the estimate of unemployment is an aggregate of the estimates for each of three categories: (1) Persons who were previously employed in industries covered by State UI laws; (2) those previously employed in industries not covered by these laws; and (3) those who were entering the civilian labor force for the first time or reentering after a period of separation. This is referred to below as the UI-based estimate.

An estimate for those previously employed in covered industries is derived from a count of current employment insurance claimants, plus estimates of claimants whose benefits have been exhausted, those persons disqualified from receiving benefits for nonmonetary reasons (because they quit, were discharged for cause, etc., but would otherwise have been eligible), and persons who either filed claims late or not at all.

The estimate of those previously employed in industries not covered by UI is derived by applying to the employment estimate for each noncovered industry or class of worker subgroup in the State, the ratio of covered unemployment to covered employment weighted by factors reflecting national historical relationships.

For the third category, new entrants and reentrants into the labor force, a composite estimate is developed from equations that relate the total entrants into the labor force to the experienced unemployed and the experienced labor force. For each month, the estimate of entrants into the labor force

is a function of: (a) the month of the year; (b) the level of the experienced unemployed; (c) the level of the experienced labor force; and (d) the proportion of the working age population that is considered "youth."

3. *Monthly reconciliation with the CPS*. Each month correction factors for employment and unemployment are applied at the State level to the UI-based estimates obtained above for each of the 39 States and the District of Columbia. These correction factors are based on the ratio of the CPS to the UI-based estimates for the 6-month period ending in the current month (e.g., a 6-month moving average). The adjustment is necessary because the State-prepared estimates are not as reliable as the CPS data due to differences in the State UI laws, the structural limitations of the UI-based estimating method, and errors in the UI data.

4. *Substate adjustment for additivity*. Independent estimates of employment and unemployment are prepared for the State (obtained directly from the CPS in the 11 large States or by the UI-based method in the remaining States), and labor market areas (LMA's) within the State. The total of the geographic areas in the LMA's exhausts the geographic boundaries of the State. A proportional adjustment is applied to all substate LMA estimates to ensure that the sub-State estimates of employment and unemployment add to the independent State totals.

5. *Benchmark correction procedures*. Once each year, monthly estimates prepared by the State employment security agencies using UI-based estimating procedures are adjusted, or benchmarked, by BLS to the annual average CPS estimates for the 39 States and the District of Columbia for which monthly CPS estimates are not used directly. This adjustment is made because the State-prepared monthly estimates are not as reliable as the CPS annual averages due to the limitations of the 6-month moving average adjustment procedure. Revisions to the inputs used in the UI-based estimates are also made at the time of the annual benchmark.

The State wide benchmarked estimates are produced in three stages. First the monthly UI-based estimates are adjusted by the ratio of the CPS to the UI-based annual averages. Second, the difference between the ratio of annual averages for two consecutive years is wedged into the monthly estimates in order to minimize the disturbance to the original series. Finally, the third-stage estimates are forced into agreement with CPS annual averages. In the 11 States for which CPS estimates are used monthly, no benchmark correction is required, as the average of the 12 monthly State CPS estimates will equal CPS annual averages.

## Seasonal Adjustment

Over the course of a year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical and other nonseasonal movements in the series. In evaluating changes in a seasonally adjusted series, it is important to note that seasonal adjustment is merely an approximation based on past experience. Seasonally adjusted estimates have a broader margin of possible error than the original data on which they are based, since 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 regularly in *Employment and Earnings*.

The seasonal adjustment program used for these series is an adaptation of the standard ratio-to-moving-average method. It provides for "moving" adjustment factors to take account of changing seasonal patterns. A detailed description of the method is given in *The X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15, Bureau of the Census (1967).

Beginning in January 1980, BLS introduced two major modifications in the seasonal adjustment methodology for data from the household survey. First, the data are being seasonally adjusted with a procedure called X-11 ARIMA, which was developed at Statistics Canada as an extension of the existing 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. The X-11 procedure was originally developed at the Bureau of the Census and had been used by the BLS to seasonally adjust labor force series since 1973. Tests have shown that use of the X-11 ARIMA procedure, which places more emphasis on recent data, provides better seasonal adjustments than does the X-11 method alone.

The second change is that seasonal adjustment factors are calculated for use during the first 6 months of the year rather than for the entire year. In July of each year, BLS calculates and publishes in *Employment and Earnings* a set of seasonal adjustment factors for use in the second half, based on the experience through June. Revisions of historical data for the most recent 5 years are made 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.

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 the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall 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.

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 rate for the first 6 months of the following year, and a description of the current seasonal adjustment methodology are published in each January issue of *Employment and Earnings*. Revised seasonally adjusted data covering the revision period for a broader range of labor force series are published in the February issue of this publication.

Beginning in July 1980, the BLS also uses the X-11 ARIMA methodology in seasonally adjusting the establishment data, which previously had been computed using the *BLS Seasonal Factor Method*. All series are seasonally adjusted using the multiplicative models under X-11 ARIMA. Seasonal adjustment factors used in calculating the current year's estimates are based on actual data through March 1988 and projected data through March 1989. The ARIMA model options for projecting the data series for 1 year ahead have been used in seasonally adjusting the establishment series since June 1981.

Seasonal adjustment factors are directly applied to the component levels. Seasonally adjusted totals for most of these series are then obtained by taking a weighted average of the seasonally adjusted data for the component series. Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and seasonally adjusted average weekly hours.

Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing average weekly earnings, seasonally adjusted, by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours, seasonally adjusted, by production

or nonsupervisory workers, seasonally adjusted, and dividing by the 1977 base. For total private, total goods-producing, total private service-producing, wholesale trade, retail trade, manufacturing, and durable and nondurable goods industries, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours, seasonally adjusted, for the appropriate component industries and dividing by the 1977 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 failed or unsatisfactory seasonally adjusted series are used in the aggregation to broader level seasonally adjusted series, however.

Beginning in June 1983, seasonal adjustment factors for Federal Government employment are derived from unadjust-

ed data which include Christmas temporary workers employed by the Postal Service. In earlier years the number of these workers was substantial, and at times varied greatly from year to year, based on administrative decisions of the Postal Service. Hence, it was considered desirable to exclude this group from the unadjusted data upon which the seasonal adjustment factors were based. In the past several years, the number of these workers has decreased to the point where their presence has no impact on seasonal adjustment. Temporary census takers for the 1980 decennial census are removed prior to the calculation of seasonal adjustment factors for Federal Government employment.

The revised seasonally adjusted series for the establishment data reflect experience through March 1988. Seasonal adjustment factors to be used for current adjustment appear in the June 1988 issue of *Employment and Earnings*.

# U.S. Department of Labor Bureau of Labor Statistics

REGION I - BOSTON John Fitzgerald Kennedy Federal Building Suite 1603 Boston, MA 02203	REGION II - NEW YORK 201 Varick Street New York, NY 10014	REGION III - PHILADELPHIA 3535 Market Street P.O. Box 13309 Philadelphia, PA 19101	REGION IV - ATLANTA Suite 540 1371 Peachtree Street, NE. Atlanta, GA 30367
REGION V - CHICAGO 9th Floor 230 S. Dearborn Street Chicago, IL 60604	REGION VI - DALLAS Room 221 525 Griffin Street Dallas, TX 75202	REGIONS VII and VIII - KANSAS CITY 15th Floor 911 Walnut Street Kansas City, MO 64106	REGIONS IX and X - SAN FRANCISCO 71 Stevenson Street P.O. Box 3766 San Francisco, CA 94119

## COOPERATING STATE AGENCIES

*Current Employment Statistics Program (CES), and State and Local Area Unemployment Statistics Program (LAUS)*

BLS Region	
IV ALABAMA	-Research and Statistics Div., Depart. of Industrial Relations, Industrial Relations Building, Room 427, Montgomery 36130
X ALASKA	-Employment Security Division, Department of Labor, P.O. Box 25501, Juneau 99802
IX ARIZONA	-Department of Economic Security, 733-A, P.O. Box 6123, Phoenix 85005
VI ARKANSAS	-Employment Security Division, Department of Labor, State Capitol Mall, P.O. Box 2981, Little Rock 72203
IX CALIFORNIA	-Employment Data and Research Div., Employment Development Depart., P.O. Box 1679, Sacramento 95808.
VIII COLORADO	-Division of Employment and Training, 1330 Fox Street, Denver 80204
I CONNECTICUT	-Employment Security Division, Labor Department, 200 Folly Brook Boulevard, Wethersfield 06109
III DELAWARE	-Department of Labor, University Plaza Office Complex, P.O. Box 9029, Newark 19711
III DIST. OF COL.	-Division of Labor Market Information, Research and Analysis, Department of Employment Services, 500 C Street N.W., Room 411, Washington 20001
IV FLORIDA	-Bureau of Research and Information, Depart. of Labor and Employment Security, 2574 Seagate Drive, Tallahassee 32301
IV GEORGIA	-Department of Labor, 254 Washington Street, S.W., Atlanta 30334
IX HAWAII	-Department of Labor and Industrial Relations, 830 Punchbowl Street, Room 304, Honolulu 96813
X IDAHO	-Department of Employment, P.O. Box 35, Boise 83735
V ILLINOIS	-Bureau of Employment Security, 910 South Michigan Avenue, 12th Floor, Chicago 60605
V INDIANA	-Employment Security Division, 10 North Senate Avenue, Indianapolis 46204
VII IOWA	-Department of Job Service, 1000 East Grand Avenue, Des Moines 50319
VII KANSAS	-Department of Human Resources, 401 Topeka Avenue, Topeka 66603
IV KENTUCKY	-Department for Employment Services, Cabinet for Human Resources, 275 E. Main Street, Frankfort 40621
VI LOUISIANA	-Department of Labor, P.O. Box 44094, Capitol Station, Baton Rouge 70804
I MAINE	-Division of Research and Analysis, Department of Labor, 20 Union Street, Augusta 04330
III MARYLAND	-Research and Analysis Division, Department of Human Resources, 1100 North Eutaw Street, Baltimore 21201
I MASSACHUSETTS	-Division of Employment Security, Charles F. Hurley Building, Government Center, Boston 02114
V MICHIGAN	-Research and Statistics Division, Employment Security Commission, 7310 Woodward Avenue, Detroit 48202
V MINNESOTA	-Department of Jobs and Training, 390 North Robert Street, St. Paul 55101
IV MISSISSIPPI	-Labor Market Information Department, Employment Security Commission, P.O. Box 1699, Jackson 39215-1699
VII MISSOURI	-Division of Employment Security, P.O. Box 59, Jefferson City 65104
VIII MONTANA	-Department of Labor and Industry, P.O. Box 1728, Helena 59601
VII NEBRASKA	-Division of Employment, Department of Labor, P.O. Box 94600, Lincoln 68509
IX NEVADA	-Employment Security Department, 500 East Third Street, Carson City 89713
I NEW HAMPSHIRE	-Department of Employment Security, 32 South Main Street, Concord 03301
II NEW JERSEY	-Division of Planning and Research, Department of Labor, P.O. Box 2765, Trenton 08625
VI NEW MEXICO	-Employment Services Division, Employment Security Department, P.O. Box 1928, Albuquerque 87103
II NEW YORK	-Division of Research and Statistics, Department of Labor, State Campus, Building 12, Albany 12240
IV NORTH CAROLINA	-Labor Market Information Division, Employment Security Commission, P.O. Box 25903, Raleigh 27611
VIII NORTH DAKOTA	-Job Service, P.O. Box 1537, Bismarck 58502
V OHIO	-Labor Market Information Division, Bureau of Employment Services, P.O. Box 1618, Columbus 43216
VI OKLAHOMA	-Research and Planning Division, Employment Security Commission, 310 Will Rogers Memorial Office Building, Oklahoma City 73105
X OREGON	-Employment Division, Department of Human Resources, 875 Union Street N.E., Salem 97311
III PENNSYLVANIA	-Research and Statistics Division, Department of Labor and Industry, 7th and Forster Streets, Harrisburg 17121
II PUERTO RICO	-Department of Labor and Human Resources, Bureau of Labor Statistics, 505 Munoz Rivera Ave., 17th Fl., Hato Rey 00918 (CES). Bureau of Employment Security, 505 Munoz Rivera Ave., 15th Fl., Hato Rey 00918 (LAUS)
I RHODE ISLAND	-Department of Employment Security, 24 Mason Street, Providence 02903
IV SOUTH CAROLINA	-Employment Security Commission, P.O. Box 995, Columbia 29202
VIII SOUTH DAKOTA	-Department of Labor, P.O. Box 1730, Aberdeen 57401
IV TENNESSEE	-Department of Employment Security, Cordell Hull Office Building, Room 519, Nashville 37219
VI TEXAS	-Employment Commission, 15th and Congress Avenue, Austin 78778
VIII UTAH	-Department of Employment Security, P.O. Box 11249, Salt Lake City 84147
I VERMONT	-Department of Employment and Training, P.O. Box 488, Montpelier 05602
III VIRGINIA	-Division of Research and Analysis, Employment Commission, P.O. Box 1358, Richmond 23211
II VIRGIN ISLANDS	-Bureau of Labor Statistics, Department of Labor, P.O. Box 818, St. Thomas 00801
X WASHINGTON	-Employment Security Department, 212 Maple Park, Olympia 98504
III WEST VIRGINIA	-Division of Labor and Economic Security, Depart. of Employment Security, 112 California Avenue, Charleston 25305
V WISCONSIN	-Department of Industry, Labor, and Human Relations, P.O. Box 7944, Madison 53707
VIII WYOMING	-Employment Security Commission, P.O. Box 2760, Casper 82602