

# Employment and Earnings

## March 1980



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In this issue:  
1979 annual averages for all  
national industry series





## U.S. DEPARTMENT OF LABOR Ray Marshall, Secretary

BUREAU OF LABOR STATISTICS  
Janet L. Norwood, Commissioner

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Communications on editorial matters should be addressed to: Editors, Employment and Earnings, Bureau of Labor Statistics, Washington, D.C. 20212. Inquiries regarding the text and *Household Data* should be addressed to: Attention of Gloria P. Green, or phone: (202) 523-1944. Inquiries relating to *Establishment Data* and all other tables should be addressed to: Attention of Gloria P. Goings, or phone: (202) 523-1146. Send correspondence on circulation and subscription matters (including address changes) to the Superintendent of Documents.

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## Calendar of Features

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

### Household data

Annual averages	Jan.
Revised seasonally adjusted series	Feb.
Quarterly averages: Seasonally adjusted data, persons not in labor force, persons of Hispanic origin, Vietnam-Era veterans and nonveterans, poverty-nonpoverty area data, family relationship data.	Jan., Apr., July, Oct.

### Establishment data

National annual averages:	
Industry divisions (preliminary)	Jan.
Industry detail (final)	Mar.
Women employment detail (final)	Mar.
National data adjusted to new benchmarks	Oct. <sup>1</sup>
Revised seasonally adjusted series	Oct. <sup>2</sup>
State and area annual averages	May
Area definitions	May

<sup>1</sup> The issue that introduces new benchmark varies. The October 1979 issue marks the introduction of March 1978 benchmarks.

<sup>2</sup> Revised data introduced October 1979.

# Employment and Earnings

Vol. 27 No. 3 March 1980

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Editors: Gloria P. Green, Gloria P. Goings, Rosalie K. Epstein

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# Employment and Unemployment Developments, February 1980

The overall employment situation in February was little changed from January.

Total employment—as measured by the monthly survey of households—was close to 98 million for the third consecutive month. Since February a year ago, employment has grown by a modest 1.5 million. The Nation's unemployment rate was 6.0 percent, compared with the January rate of 6.2 percent.

Nonfarm payroll employment—as measured by the monthly survey of establishments—rose slightly from the January level. Payroll jobs have increased by 2 million since February 1979. Hours of work, as measured by the same survey, declined over the month.

## Unemployment

The number of unemployed persons in February, 6.3 million, and the unemployment rate, 6.0 percent, were little changed from the previous month. The two-tenths difference in the rate from January to February is overstated because of rounding; the actual change is not statistically significant. Unemployment had risen in January from a 17-month plateau during which time the overall rate had fluctuated narrowly between 5.7 and 5.9 percent.

Jobless rates for most worker categories showed little movement in February. Accordingly, unemployment rates for adult men (4.6 percent), adult women (5.7 percent), teenagers (16.5 percent), whites (5.3 percent), and blacks (11.5 percent) were about the same as in January. In contrast, there were jobless rate declines for married men and workers in durable goods manufacturing, groups which had experienced sharp increases in joblessness in the prior month. (See table A-36.)

## Total employment and the labor force

Total employment was little different from the January level, although employment among adult men rebounded from a sharp drop a month earlier. Employment rose 1.5 million from February 1979, the smallest over-the-year change in more than 4 years.

The civilian labor force was little changed from January's level and up 2.0 million over the year. The civilian labor force participation rate was at a high of 63.9 percent for the last three months. (See table A-33.)

## Industry payroll employment

Nonfarm payroll employment rose by 140,000 in February to 90.7 million. (See table B-4.) Since February 1979, payroll employment has grown by 2 million or 2.3 percent. As with total employment, the pace was slower than anytime in the previous 4 years.

As in the prior month, February employment growth was concentrated in the service-producing sector, and the biggest increase was in trade (up 110,000). Employment in the services industry also rose over the month, by 60,000. Over the past year, jobs in trade have grown by 475,000 and services by 700,000.

Overall manufacturing employment was little changed in February, although there were offsetting movements among the component industries. A strike contributed to an employment drop of about 50,000 jobs in petroleum and coal products. On the other hand, employment in transportation equipment nearly returned to its December level, following a drop in January. This industry has been relatively weak since last summer and has comprised the bulk of the overall manufacturing job decline of 115,000 over the past year.

Construction employment edged down following an unusually large increase in January. Mining continued its long-term uptrend; employment in this industry has advanced 7.9 percent over the past year.

## Hours

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls fell by 0.2 hour in February to 35.4 hours; the most marked declines occurred in the goods-producing sector. In manufacturing, the workweek fell by 0.2 to 40.1 hours, and overtime was down a tenth of an hour to 3.1 hours. (See table C-7.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls fell by 0.2 percent to 126.4 (1967=100) in February but was still up 1.4 percent over the year. The manufacturing index fell 0.3 percent over the month and has declined 3.0 percent since February 1979. (See table C-8.)

## Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose by

0.5 percent in February and were up 7.5 percent over the year (seasonally adjusted). Average weekly earnings declined by 0.1 percent from January but have risen by 6.6 percent over the year.

Before adjustment for seasonality, average hourly earnings rose 4 cents in February to \$6.46 and were 46 cents above February 1979. Average weekly earnings were \$226.75, up \$1.41 over the month and \$14.35 over the year. (See tables C-1 and C-9.)

#### **The Hourly Earnings Index**

The Hourly Earnings Index—earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries—was 242.2 (1967=100) in February, 0.8 percent higher than in January. The Index was 8.1 percent above February a year ago. In dollars of constant purchasing power, the Index decreased 5.2 percent during the 12-month period ended in January. (See table C-9.)

# Comparison of Nonagricultural Employment Estimates From Two Surveys

\*Gloria Peterson Green

Each month the Bureau of Labor Statistics analyzes and publishes two independently derived estimates of nonagricultural employment, based on data collected from the Current Population Survey (household survey) and the Current Employment Survey (establishment survey). Both series are important in appraising current labor market trends and in assessing the overall performance of the economy. Data from the household survey are obtained from a sample of 56,000 households<sup>1</sup> and measure the *work status of individuals*, whereas data from the establishment survey are derived from payroll records of approximately 162,000 firms employing over 30 million workers and are essentially a count of *occupied jobs*.

The levels of the employment estimates from the two surveys differ markedly but, with some exceptions such as the 1977-79 period, their movements have been generally comparable. Differences do occur, at times, with respect to the magnitude and direction of month-to-month changes and in the timing and extent of business cycle swings. At least some of these differences arise because the series measure somewhat different phenomena—employed individuals versus paid jobs.

This article continues the Bureau's annual practice of providing an analysis of quantifiable differences between the series and a discussion of some major unmeasurable causes of discrepancies between them.<sup>2</sup>

## Concepts and coverage

Nonagricultural employment estimates from the household and establishment surveys differ in several basic respects. The household survey, although based on a smaller sample, encompasses a larger segment of the population in that it covers all wage and salary workers including private household workers, as well as the self-employed and unpaid family workers. The establishment survey is limited to wage and salary employees on the payrolls of nonagricultural firms. The household survey also includes persons "with a job but not at work" during the survey week, as a result of such factors as bad weather, illness, vacation, or various personal reasons, whether or not they were paid for the time absent. By its very nature, the establishment survey

does not cover employees unless they are paid—on the payroll—during the reference period.

The household survey provides information on the labor force activity of the entire civilian noninstitutional population 16 years of age and over, without duplication, since each individual is classified as either employed, unemployed, or not in the labor force. Persons holding more than one job are classified according to the job at which they worked the most hours. The establishment survey has no age qualification, and employees working at more than one job or otherwise appearing on more than one payroll are counted separately for each appearance.

## Quantifiable differences

Table 1 shows annual average levels of the two series for 1977-79, with identification of quantifiable differences. The reconciliation technique involves a series of adjustments to the total nonagricultural employment estimate of the household survey to bring it into as close conformity as possible with the definition of employment in the establishment survey. Thus, estimates for the following groups are *subtracted* from the household employment total: Self-employed workers, unpaid family workers, private household workers, and workers on unpaid absences from their jobs during the

\* Gloria Peterson Green is an editor of *Employment and Earnings* and an economist in the Division of Employment and Unemployment Analysis, Office of Current Employment Analysis, Bureau of Labor Statistics.

<sup>1</sup> Beginning in 1980, the national CPS sample was expanded from 56,000 to 65,000 households in order to improve the reliability of State estimates. This expansion had no significant effect on the national estimates of employment and other measures derived from the survey.

<sup>2</sup> Prior analyses of the quantifiable differences between the two series appeared in the March 1978 and March 1979 issues of this publication. For discussions of the conceptual and definitional differences between the two surveys, as well as the long-term trends in their movements, see Gloria P. Green, "Comparing Employment Estimates From Household and Payroll Surveys," *Monthly Labor Review*, Dec. 1969, pp. 9-20, and Christopher G. Gellner, "A 25-year Look at Employment as Measured by Two Surveys," *Monthly Labor Review*, July 1973, pp. 14-23. Additional information appears in articles by Alexander Korns, "Cyclical Fluctuations in the Difference Between the Payroll and Household Measures of Employment," and "The Difference Between the Payroll and Household Measures of Employment, 1975-79," in the May and December 1979 issues, respectively, of the *Survey of Current Business*, Bureau of Economic Analysis, U.S. Department of Commerce.



**Table 1. Reconciliation of nonagricultural employment estimates from the household and establishment surveys, annual averages, 1977-79**

(In thousands)

Item	1977	1978 <sup>1</sup>	1979	Change 1978-79
Payroll series, as published	<u>82,423</u>	<u>86,446</u>	<u>89,482</u>	<u>3,051</u>
Household series, as published	<u>87,302</u>	<u>91,031</u>	<u>93,648</u>	<u>2,617</u>
Less:				
Self-employed workers	6,005	6,305	6,652	347
Unpaid family workers	492	472	455	-17
Private household workers	1,376	1,363	1,240	-123
Unpaid absentees	2,143	2,152	2,208	56
Equals:				
Nonagricultural wage and salary workers less private household workers and unpaid absentees	<u>77,286</u>	<u>80,739</u>	<u>83,093</u>	<u>2,354</u>
Plus:				
14- and 15-year olds	671	702	699	-3
Agricultural service workers	297	316	357	41
Equals:				
Household series adjusted by above factors	<u>78,254</u>	<u>81,757</u>	<u>84,149</u>	<u>2,392</u>
Difference:				
Payroll series less adjusted household series <sup>2</sup>	4,169	4,689	5,334	645

<sup>1</sup> Comparisons of 1978 household survey data with data for prior years are affected by the introduction of an expansion in the sample and revisions in the estimation procedures introduced in January 1978. As a result, total nonagricultural employment was raised by about 120,000.

<sup>2</sup> As discussed more fully in the text, there are several factors which account for the remaining difference. Perhaps the largest is the dual jobholding reflected in the payroll series. This

is corroborated to some degree in the household surveys for the month of May. In 1977, 1978, and 1979, the estimated numbers of persons holding a second nonagricultural wage and salary job were 2,923,000, 2,870,000 and 2,993,000, respectively. Another primary source of discrepancy is the undercounting of the population in the decennial censuses, which, in turn, results in an understatement of the household survey's employment estimates.

survey week. Then, estimates of employed 14- and 15-years-olds in nonagricultural wage and salary jobs (excluding private households) and workers employed in agricultural services are *added* to the household series.<sup>3</sup>

After adjustments were made to take account of these measurable differences in concepts and coverage, the establishment survey estimates exceeded those of the household survey by 4.2 million in 1977, 4.7 million in 1978, and 5.3 million in 1979. These remaining differences stem from multiple counting in the payroll survey, undercounting of the population in the household survey, and a number of other factors which cannot be quantified with any degree of certainty. Moreover, both surveys are affected by measurement errors of various kinds. Whether these unquantifiable differences change markedly over time so as to account for at least some of the nearly 1.2 million increase from 1977 to 1979 in the measurable difference is conjectural.

### Sources of unquantifiable differences

Multiple counting of workers in the establishment survey stems primarily from workers holding two or more jobs concurrently but may also result from workers leaving one job and obtaining another within the same reference period and thus appearing on the

payroll records of more than one employer. Moreover, multiple counting may occur when a worker is continued on a payroll while being compensated for earned vacation time, even though he or she has left the job. In the absence of a matching of payroll records and Social Security numbers, the extent of multiple jobholding in the establishment survey is virtually impossible to determine. In the household survey, however, this phenomenon is measured to some degree in special surveys conducted once each year in the month of May.<sup>4</sup> In May 1979, the number of persons 16 years of age and over working as nonagricultural wage and salary

<sup>3</sup> Agricultural service workers are classified in agricultural industries in the household survey; in the establishment survey, they are a sub-category of the services industry. Coverage is limited to those subgroups which are largely nonagricultural in nature, such as veterinary, animal, landscape, and horticultural services. With respect to the age adjustment, data on persons under 14 who may be employed in nonagricultural industries are not collected in the household survey.

<sup>4</sup> Given the timing and infrequency of the survey, the effects of this phenomenon during the year on employment levels cannot be quantified. It is likely, however, that changes in employment levels during the year can be attributed in part to wide seasonal swings in the extent of dual jobholding. Excellent examples are teachers working in summer jobs and exceptional hiring during special buying periods such as the Christmas season. These swings, of course, would be reflected in the establishment survey but not in the household survey.

workers on second jobs totaled 3.0 million. Eliminating this and other types of dual counting would, of course, significantly reduce the differential between the two series.

The undercount of the population in the decennial population censuses has an important effect, because population control totals for the household survey sample are based on projections from the most recent census. The Census Bureau has estimated that 5.3 million persons, or 2.5 percent of the population, were missed in the 1970 census; however, there are no "true" estimates of how many of these persons held wage and salary jobs in nonagricultural industries.<sup>5</sup> The inclusion of missed workers in the household survey estimates of employment would also significantly reduce the differential between the series.

Finally, there are several groups of workers who are counted on the payrolls of establishments but are outside the scope of the household survey. These include military personnel who also hold civilian jobs, institutionalized individuals working in or outside the institution, and foreign workers (such as residents of Canada or Mexico) who commute to jobs in the United States. Moreover, the establishment survey probably includes many illegal aliens, particularly in the trade and services industries, whereas these persons would be reluctant to be identified and thus counted in the household survey. Adjustments for these unquantified differences in coverage would also reduce the differential in the levels of the series.

### Sampling variability

Statistics derived from the household and establishment surveys are subject to sampling error, that is, estimates of the number of employed persons and other measures provided from these surveys may differ from the figures that would be obtained if a complete census were taken using the same schedules, instructions, and enumerators. In the household survey, the amount of the difference arising from sampling can be expressed in terms of standard error.<sup>6</sup> The chances are 68 out of 100 that an estimate will differ by no more than one standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from a complete census. At the 90-percent level of confidence—the limits used by the BLS in its

analyses—the monthly sampling error for the household survey estimate of nonagricultural wage and salary employment is on the order of plus or minus 393,000. (On an annual average basis, the error is about 263,000.) As in any sample survey, the results are also subject to errors of response, reporting, processing, and undercoverage.

In the establishment survey, sampling and response error may accumulate over several months, because the estimating procedure employs the previous month's estimate as the base in computing the current month's level (link-relative technique). Moreover, estimates for the 2 most current months are based on incomplete returns and are revised when all of the returns in the sample are received. To remove any errors that accumulate over time, the employment estimates are adjusted annually to new benchmarks (comprehensive counts of employment). In addition to increasing the reliability of the sample estimates, the benchmark revisions adjust the estimates for intervening changes in industrial classification and the formation of new establishments.<sup>7</sup>

Employment estimates are currently projected from March 1978 benchmark levels, which were introduced in the October 1979 issue of this publication.<sup>8</sup> Since the 1978 benchmark revisions, the magnitude of recent changes in the payroll series has greatly exceeded those in the household series, and recent differences between the series have widened. However, this benchmark revision—and upward revisions in the monthly bias adjustment factors that were introduced coincident with the benchmark—do not appear to explain very much of the increased difference between the series' employment totals over the 1977-79 period.

<sup>5</sup> The National Commission on Employment and Unemployment Statistics estimated the magnitude of the undercount of these workers to be 2.6 million in 1977. See *Counting the Labor Force* (U.S. Government Printing Office, Washington, D.C., 1979), p. 195.

<sup>6</sup> Approximations of the standard errors for the household survey data are published monthly in tables A through I in the Explanatory Notes of this publication.

<sup>7</sup> Measures of reliability (approximations of error) and actual amounts of revision due to benchmark adjustments are published monthly in tables K through P in the Explanatory Notes of this publication.

<sup>8</sup> See Maxine Both, "BLS Establishment Estimates Revised to March 1978 Benchmark Levels," *Employment and Earnings*, Oct. 1979, p. 7.

# Changes in the Spendable and Real Earnings Series for 1980

\*Mary Lee Seifert

The increase in the social security tax base, effective January 1, affected the formulas for calculating spendable earnings for those workers whose earnings equaled or exceeded the old base rate. This article presents the formulas to be used in calculating spendable earnings for 1980. This article also discusses the revised seasonally adjusted constant dollar series which were revised to reflect revised seasonal adjustment factors for the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W, All items, 1967=100).

The spendable earnings series are derived by applying to the gross average weekly earnings of production and nonsupervisory workers in the private nonagricultural sector formulas which subtract the applicable social security and Federal income tax liabilities from those earnings.<sup>1</sup> The Federal income tax liabilities are derived by assuming the use of the standard deduction and are applied in two cases: that of a single worker with no dependents and that of a married worker with three dependents filing a joint Federal income tax return.<sup>2</sup>

While Federal income tax rates and the earned income credit, as modified by the Revenue Act of 1978, are unchanged from 1979, the Social Security Amendments of 1977 calls for an increase in the yearly base earnings level to which the social security tax rate of 6.13 percent is applied. The 1980 tax base is \$25,900 (equivalent to \$498.07 weekly), an increase of \$3,000 over the 1979 tax base of \$22,900 (equivalent to \$440.38 per week).

Workers earning more than \$440.38 per week or over \$22,900 per year were affected by this change. The maximum increase in taxes will be \$3.53 per week paid by workers earning \$498.07 per week or more; this translates to a maximum tax of \$1,587.67 per year for those earning \$25,900 per year or more. Currently, the gross average weekly earnings levels of production and non-supervisory workers at the division levels are below the \$440.38 level. Therefore, no effect is shown.

The formulas for calculating spendable earnings for 1980 are presented in table 1, along with the formulas for 1978 and 1979.<sup>3</sup>

Real earnings, or earnings in constant dollars, are calculated by deflating earnings in current dollars by the CPI-W. Seasonally adjusted real earnings series have been revised to reflect seasonal experience in the CPI-W through December 1979. The revised seasonally adjusted constant-dollar series are published in table 2. Although the constant-dollar series from 1964-1974 are unaffected by this revision, they are republished here along with the revised constant-dollar data for 1975-1978 as a convenience to users.

\* Mary Lee Seifert is an economist in the Division of Industry Employment Statistics, Office of Employment Structure and Trends, Bureau of Labor Statistics.

<sup>1</sup> For a technical description of the calculation, uses, and limitations of the spendable earnings series, see Carol M. Utter, "The Spendable Earnings Series: A Technical Note on its Calculation," *Employment and Earnings and Monthly Report on the Labor Force*, February 1969, pp. 6-10; Jack Alterman, "Compensation per Man-Hour and Take-Home Pay," *Monthly Labor Review*, June 1971, pp. 25-34; John F. Early, "Factors Affecting Trends in Real Spendable Earnings," *Monthly Labor Review*, May 1973, pp. 16-19; and Paul Ryscavage, "Two Divergent Measures of Purchasing Power," *Monthly Labor Review*, August 1979, pp. 25-29.

<sup>2</sup> Spendable earnings formulas are derived from the following general formula:

$$X(1-t-s) + t(X^{\sim} + E) - C, \text{ where}$$

X = gross average weekly earnings,

s = social security tax rate,

t = marginal Federal income tax rate applicable to earnings,

X<sup>~</sup> = weekly earnings subject to Federal income tax at lower rates than t,

E = total exemptions in dollars on a weekly basis, and

C = cumulation of tax paid on X.

Where earnings exceed the social security tax base the general formula is:

$$X(1-t) + t(X^{\sim} + E) - C - S^{\sim}, \text{ where}$$

S<sup>~</sup> = social security tax base x social security tax rate / 52.

Where earnings are at levels where the earned income credit is applicable, the general formula is:

$$X(1-t-s-eic) + t(X^{\sim} + E) - C + eic^{\sim}, \text{ where}$$

eic = earned income tax rate, currently .125 for 6000 < 52X < 10000,

eic<sup>~</sup> = equivalent fixed amount the earned income credit adds to weekly earnings, currently \$24.04 (equals to 1250/50) for 6000 < 52X < 10000. The 1250 derives from the amount of the credit (500) plus the effective eic tax rate (.125) times the amount of earnings not subject to tax at that rate (6000), that is 1250 = 500 + 6000 x .125.

<sup>3</sup> The spendable earnings formulas used for earlier years of the series are presented in the September 1979 and March 1978 issues of *Employment and Earnings*.

**Table 1. Spendable Average Weekly Earnings Formulas, 1978-80**

Period	Worker with no dependents <sup>1</sup>		Married worker with 3 dependents <sup>1</sup>	
	Gross average weekly earnings	Formula (X = gross average weekly earnings)	Gross average weekly earnings	Formula (X = gross average weekly earnings)
January—December 1978	0 - 61.54	.9395X	0 -144.62 †	.9395X
	61.55- 66.35	.7995X+ 8.61	144.63-153.85 †	.6895X+ 36.15
	66.36- 75.96	.7895X+ 9.27	153.86-157.69	.7895X+ 20.77
	75.97- 85.58	.7795X+10.03	157.70-176.92	.7795X+ 22.34
	85.59- 90.38	.7695X+10.89	176.93-196.15	.7695X+ 24.12
	90.39- 95.19	.7895X+ 9.09	196.16-253.85	.7495X+ 28.04
	95.20-133.65	.7695X+11.00	253.86-273.08	.7695X+ 22.97
	133.66-172.12	.7495X+13.67	273.09-292.31	.7395X+ 31.16
	172.13-210.58	.7195X+18.83	292.32-340.38	.7195X+ 37.00
	210.59-229.81	.7095X+20.94	340.39-350.00	.78 X+ 16.41
	229.82-249.04	.6895X+25.53	350.01-426.92	.75 X+ 26.91
	249.05-287.50	.6695X+30.51	426.93-503.85	.72 X+ 39.72
	287.51-325.96	.6495X+36.26	503.86-580.77	.68 X+ 59.87
	325.97-340.38	.6295X+42.78	580.78-657.69	.64 X+ 83.10
	340.39-364.42	.69 X+22.19	657.70-734.62	.61 X+102.83
	364.43-402.88	.66 X+33.12		
	402.89-441.35	.64 X+41.18		
January—June 1979	0 - 63.46	.9387X	0 -165.89 †	.9387X
	63.47- 84.61	.7987X+ 8.88	165.90-182.69 †	.6737X+ 43.96
	84.62-103.84	.7787X+10.58	182.70-192.30 †	.6537X+ 47.62
	103.85-144.23	.7587X+12.65	192.31-223.07	.7787X+ 23.58
	144.24-182.69	.7487X+14.09	223.08-305.76	.7587X+ 28.03
	182.70-226.92	.7287X+17.75	305.77-384.61	.7287X+ 37.21
	226.93-267.30	.6987X+24.56	384.62-440.38	.6987X+ 48.75
	267.31-307.69	.6787X+29.90	440.39-465.38	.76 X+ 21.75
	307.70-369.23	.6387X+42.21	465.39-550.00	.72 X+ 40.37
	369.24-440.38	.5987X+56.98	550.01-651.92	.68 X+ 62.37
	440.39-471.15	.66 X+29.98	651.93-753.84	.63 X+ 94.96
	471.16-573.07	.61 X+53.54		
	July—December 1979 <sup>2</sup>	0 - 63.46	.9387X	0 - 96.15 †
63.47- 84.61		.7987X+ 8.88	96.16-115.38 †	.9387X+ 9.62
84.62-103.84		.7787X+10.58	115.39-142.30 †	.8137X+ 24.04
103.85-144.23		.7587X+12.65c	142.31-182.69 †	.6737X+ 43.96
144.24-182.69		.7487X+14.09	182.70-192.30 †	.6537X+ 47.62
182.70-226.92		.7287X+17.75	192.31-223.07	.7787X+ 23.58
226.93-267.30		.6987X+24.56	223.08-305.76	.7587X+ 28.03
267.31-307.69		.6787X+29.90	305.77-384.61	.7287X+ 37.21
307.70-369.23		.6387X+42.21	384.62-440.38	.6987X+ 48.75
369.24-440.38		.5987X+56.98	440.39-465.38	.76 X+ 21.75
440.39-471.15		.66 X+29.98	465.39-550.00	.72 X+ 40.37
471.16-573.07		.61 X+53.54	550.01-651.92	.68 X+ 62.37
			651.93-753.84	.63 X+ 94.96
1979 Annual Average <sup>3</sup>	0 - 63.46	.9387X	0- 96.15 †	.9887X
	63.47- 84.61	.7987X+ 8.88	96.16-115.38 †	.9387X+ 4.81
	84.62-103.84	.7787X+10.58	115.39-142.30 †	.8762X+ 12.02
	103.85-144.23	.7587X+12.65c	142.31-165.89 †	.8062X+ 21.98
	144.24-182.69	.7487X+14.09	165.90-182.69 †	.6737X+ 43.96
	182.70-226.92	.7287X+17.75	182.70-192.30 †	.6537X+ 47.62
	226.93-267.30	.6987X+24.56	192.31-223.07	.7787X+ 23.58
	267.31-307.69	.6787X+29.90	223.08-305.76	.7587X+ 28.03
	307.70-369.23	.6387X+42.21	305.77-384.61	.7287X+ 37.21
	369.24-440.38	.5987X+56.98	384.62-440.38	.6987X+ 48.75
	440.39-471.15	.66 X+29.98	440.39-465.38	.76 X+ 21.75
	471.16-573.07	.61 X+53.54	465.39-550.00	.72 X+ 40.37
			550.01-651.92	.68 X+ 62.37
		651.93-753.84	.63 X+ 94.96	

See footnotes at end of table.

**Table 1. Spendable Average Weekly Earnings Formulas, 1978-80—Continued**

Period	Worker with no dependents <sup>1</sup>		Married worker with 3 dependents <sup>1</sup>	
	Gross average weekly earnings	Formula (X = gross average weekly earnings)	Gross average weekly earnings	Formula (X = gross average weekly earnings)
January—December 1980	0.00 - 63.46	.9387X	0.00 - 96.15 †	1.0387X
	63.47 - 84.61	.7987X + 8.88	96.16 - 115.38 †	.9387X + 9.62
	84.62 - 103.84	.7787X + 10.58	115.39 - 142.30 †	.8137X + 24.04
	103.85 - 144.23	.7587X + 12.65	142.31 - 182.69 †	.6737X + 43.96
	144.24 - 182.69	.7487X + 14.09	182.70 - 192.30 †	.6537X + 47.62
	182.70 - 226.92	.7287X + 17.75	192.31 - 223.07	.7787X + 23.58
	226.93 - 267.30	.6987X + 24.56	223.08 - 305.76	.7587X + 28.03
	267.31 - 307.69	.6787X + 29.90	305.77 - 384.61	.7287X + 37.21
	307.70 - 369.23	.6387X + 42.21	384.62 - 465.38	.6987X + 48.75
	369.24 - 471.15	.5987X + 56.98	465.39 - 498.07	.6587X + 67.37
	471.16 - 498.07	.5487X + 80.54	498.08 - 550.00	.72 X + 36.84
	498.08 - 573.07	.61 X + 50.01	550.01 - 651.92	.68 X + 58.84
	573.08 - 675.00	.56 X + 78.66	651.93 - 753.84	.63 X + 91.43
	675.01 - 817.30	.49 X + 112.41	753.85 - 957.69	.57 X + 136.66

<sup>1</sup> For workers who earned the average weekly earnings.  
<sup>2</sup> July 1979 marked the beginning of earned income credit advance payments. Prior to this, earned income credits were included only to the extent that they reduced positive income tax liabilities.  
<sup>3</sup> Formulas for computing annual averages take into account changes during the year in income tax rates.  
† Workers with earnings in this range were eligible for earned income credits.  
c=corrected.

**Table 2. Revised seasonally adjusted real earnings series of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>GROSS AVERAGE HOURLY EARNINGS - IN 1967 DOLLARS</b>												
1964.....	\$2.50	\$2.52	\$2.51	\$2.52	\$2.53	\$2.53	\$2.54	\$2.56	\$2.56	\$2.54	\$2.56	\$2.56
1965.....	2.56	2.58	2.59	2.58	2.60	2.59	2.60	2.61	2.61	2.63	2.63	2.62
1966.....	2.63	2.62	2.63	2.63	2.63	2.64	2.64	2.63	2.64	2.64	2.65	2.65
1967.....	2.66	2.66	2.67	2.67	2.67	2.68	2.69	2.69	2.68	2.68	2.69	2.69
1968.....	2.70	2.71	2.71	2.73	2.73	2.74	2.73	2.74	2.75	2.74	2.75	2.76
1969.....	2.76	2.77	2.76	2.76	2.77	2.77	2.77	2.78	2.77	2.78	2.78	2.77
1970.....	2.77	2.77	2.77	2.76	2.77	2.77	2.78	2.79	2.78	2.77	2.78	2.78
1971.....	2.80	2.81	2.83	2.83	2.84	2.83	2.83	2.85	2.85	2.86	2.86	2.88
1972.....	2.93	2.91	2.93	2.94	2.94	2.94	2.94	2.96	2.96	2.98	2.98	2.99
1973.....	2.99	2.97	2.97	2.97	2.96	2.96	2.99	2.94	2.95	2.94	2.94	2.93
1974.....	2.91	2.89	2.88	2.87	2.88	2.89	2.88	2.87	2.86	2.85	2.83	2.83
1975.....	2.81	2.81	2.81	2.81	2.82	2.82	2.80	2.81	2.81	2.80	2.81	2.80
1976.....	2.82	2.83	2.83	2.83	2.85	2.85	2.85	2.86	2.87	2.87	2.88	2.88
1977.....	2.88	2.87	2.87	2.88	2.89	2.88	2.89	2.89	2.89	2.91	2.90	2.90
1978.....	2.91	2.91	2.91	2.93	2.92	2.91	2.92	2.91	2.91	2.91	2.91	2.91
1979.....	2.90	2.89	2.88	2.85	2.84	2.83	2.83	2.82	2.80	2.78	2.78	2.77
<b>GROSS AVERAGE WEEKLY EARNINGS - IN 1967 DOLLARS</b>												
1964.....	\$96.12	\$97.39	\$97.29	\$97.90	\$98.01	\$97.90	\$98.27	\$99.10	\$98.15	\$98.38	\$98.96	\$99.74
1965.....	99.65	100.21	100.81	100.26	100.82	100.16	100.59	100.85	100.39	101.61	101.77	101.67
1966.....	101.71	101.98	101.86	101.63	101.58	101.83	102.03	101.41	101.69	101.68	101.77	101.65
1967.....	102.32	101.31	101.44	101.35	101.41	101.77	101.95	102.19	101.79	101.59	102.31	102.11
1968.....	101.91	102.52	102.59	102.48	103.37	103.70	103.47	103.52	104.12	103.71	103.38	103.79
1969.....	104.41	104.17	103.93	104.05	104.73	104.29	104.44	104.65	104.52	104.44	104.28	104.24
1970.....	103.47	103.58	103.50	102.69	102.89	102.89	103.46	103.55	102.42	102.17	102.45	102.55
1971.....	103.31	103.75	104.42	104.38	104.78	104.56	104.04	105.25	104.23	105.51	105.93	106.40
1972.....	108.04	107.80	108.53	109.16	108.60	108.63	108.58	109.20	109.65	110.57	110.21	110.14
1973.....	110.20	109.88	110.33	110.34	109.57	109.55	110.58	108.32	108.74	108.19	108.71	107.88
1974.....	106.77	106.48	105.66	104.40	105.61	105.64	105.24	104.60	104.61	103.79	102.29	102.08
1975.....	101.60	101.03	100.70	100.89	101.53	101.57	100.79	101.87	101.63	101.39	101.80	101.69
1976.....	102.76	102.85	102.13	102.32	103.24	102.96	102.84	103.07	102.87	103.30	103.71	103.65
1977.....	103.19	103.72	103.46	103.63	104.26	103.85	104.13	103.64	104.20	104.59	104.55	104.08
1978.....	103.46	103.94	104.57	105.41	104.67	104.49	104.72	104.15	104.03	104.17	104.03	104.15
1979.....	103.88	103.13	103.31	100.57	101.55	100.85	100.60	100.24	100.04	99.10	99.16	98.88
<b>SPENDABLE AVERAGE WEEKLY EARNINGS - IN 1967 DOLLARS<sup>2</sup></b>												
1964.....	\$87.15	\$88.17	\$88.09	\$88.57	\$88.65	\$88.56	\$88.84	\$89.50	\$88.73	\$88.90	\$89.34	\$89.99
1965.....	90.58	91.06	91.55	91.07	91.53	90.95	91.31	91.54	91.14	92.15	92.27	92.16
1966.....	91.42	91.57	91.45	91.23	91.18	91.36	91.49	90.94	91.15	91.09	91.17	91.06
1967.....	91.38	90.56	90.65	90.57	90.59	90.83	90.95	91.11	90.74	90.56	91.10	90.91
1968.....	90.71	91.17	91.20	90.80	91.44	91.65	91.40	91.39	91.80	91.43	91.12	91.40
1969.....	91.42	91.19	90.92	90.94	91.42	91.02	91.08	91.18	91.04	90.93	90.75	90.66
1970.....	90.78	90.80	90.70	90.01	90.13	90.52	90.57	89.63	89.38	89.57	89.61	89.61
1971.....	91.56	91.89	92.39	92.32	92.59	92.37	91.94	92.87	92.05	93.04	93.36	93.68
1972.....	96.33	96.09	96.64	97.11	96.64	96.64	96.56	97.03	97.34	98.04	97.72	97.64
1973.....	96.91	96.54	96.84	96.75	96.08	96.00	96.79	94.84	95.13	94.62	94.93	94.21
1974.....	93.25	92.88	92.15	91.10	91.92	91.85	91.49	90.86	90.75	90.03	88.78	88.53
1975.....	88.09	87.60	87.31	87.42	91.93	91.89	91.15	91.94	91.67	91.41	91.64	91.47
1976.....	91.55	91.61	91.02	91.13	91.79	91.53	91.37	91.46	91.24	91.50	91.75	91.64
1977.....	91.20	91.48	91.21	91.25	91.66	94.95	95.10	94.66	95.04	95.30	95.19	94.75
1978.....	92.46	92.75	93.12	93.64	92.97	92.71	92.78	92.27	92.07	92.05	91.86	91.84
1979.....	92.37	91.66	91.68	89.44	90.09	89.43	89.12	88.73	88.44	87.61	87.53	87.17

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

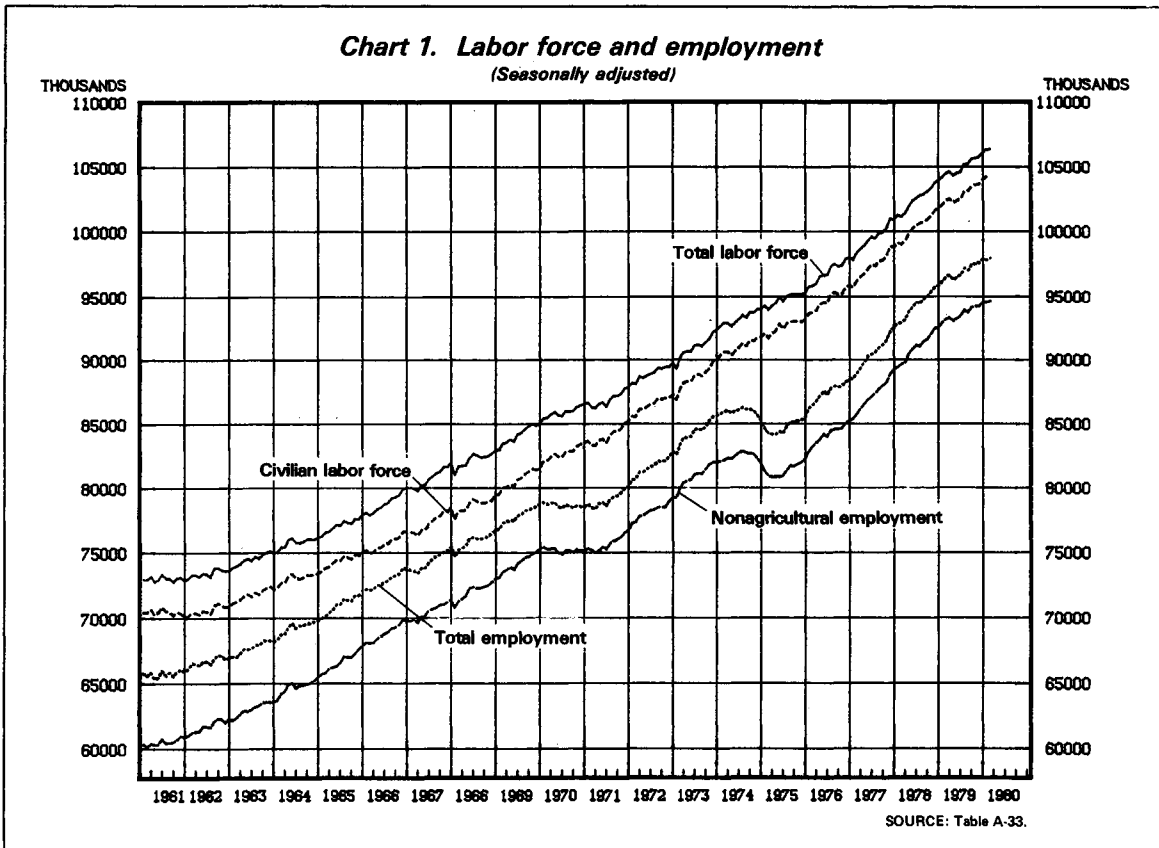
<sup>2</sup> Married workers with 3 dependents who earned the average weekly earnings.

NOTE: The seasonally adjusted real earnings series, shown above, from January 1975 through December 1979, have been revised to reflect seasonal experience in the CPI-W through 1979.

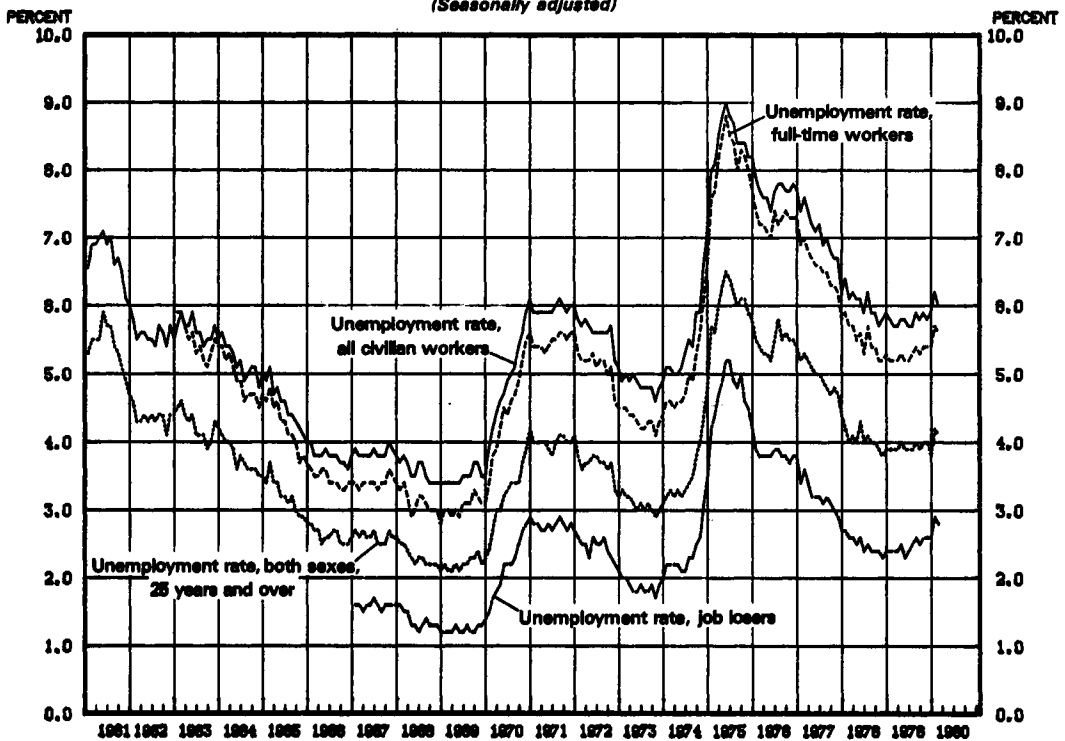
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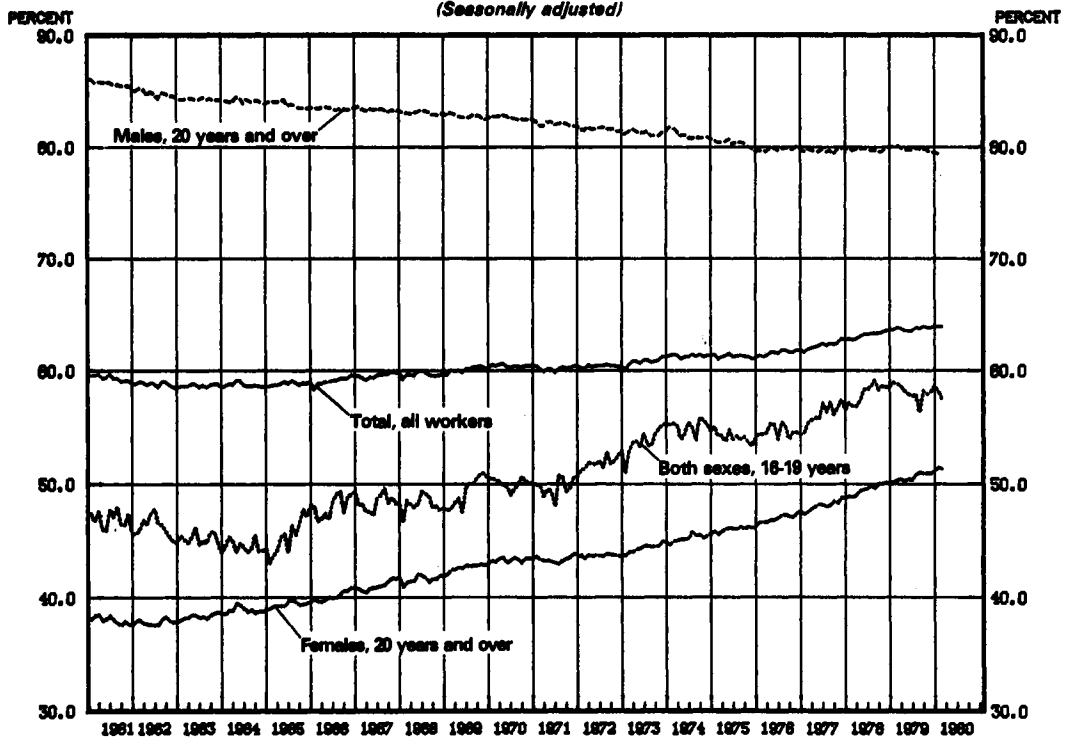


**Chart 2. Major unemployment indicators**  
(Seasonally adjusted)



SOURCE: Tables A-36, A-38, and A-39.

**Chart 3. Civilian labor force participation rates by sex and age**  
(Seasonally adjusted)

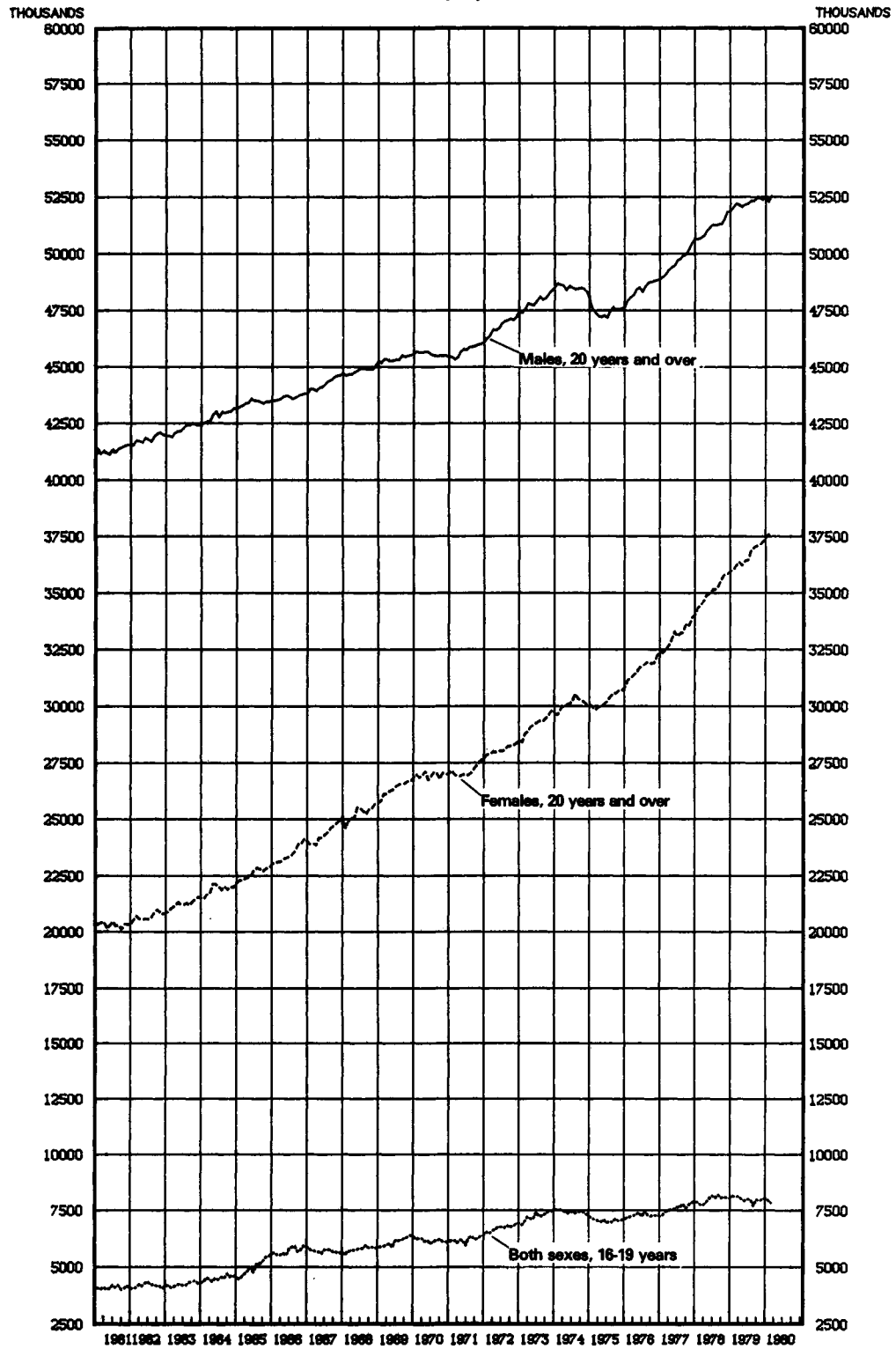


SOURCE: Table A-33.



**Chart 4. Total employment by sex and age**

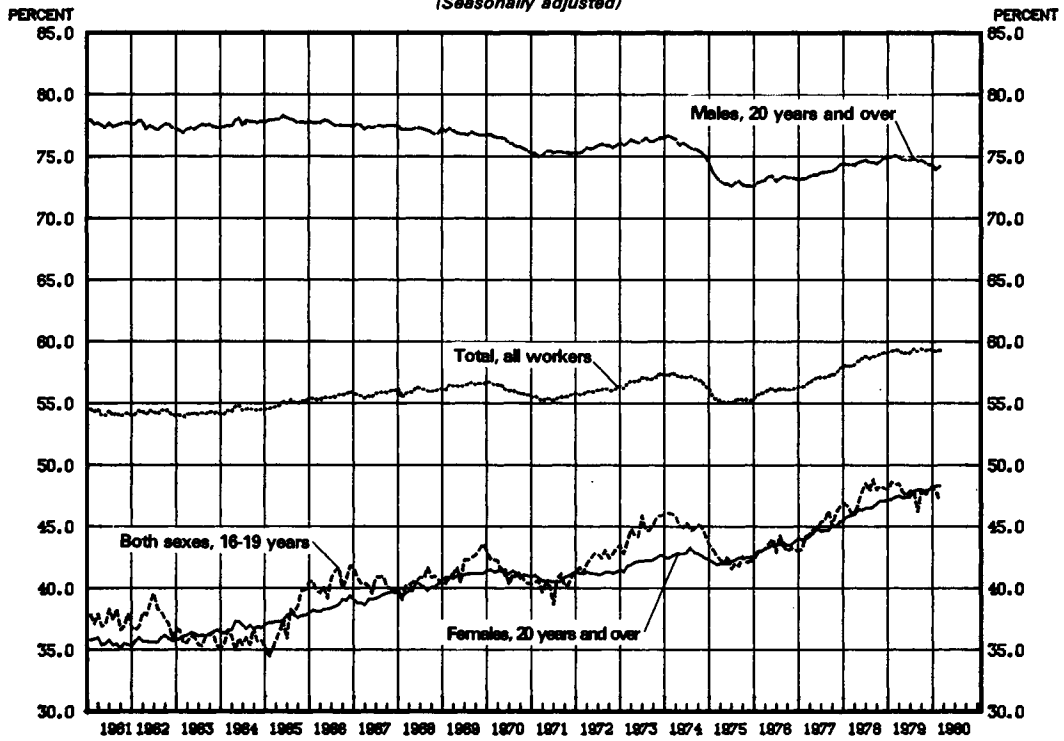
(Seasonally adjusted)



SOURCE: Table A-33.

**Chart 5. Employment—population ratios by sex and age**

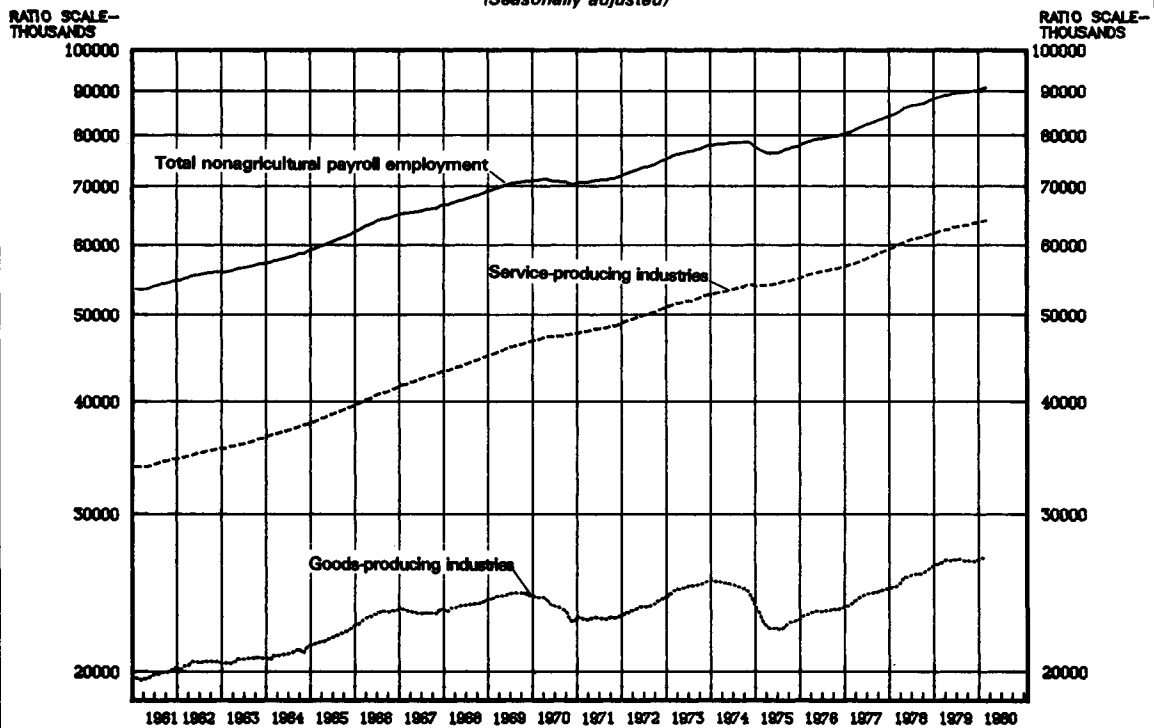
(Seasonally adjusted)



SOURCE: Table A-33.

**Chart 6. Payroll employment in goods-and service-producing industries**

(Seasonally adjusted)

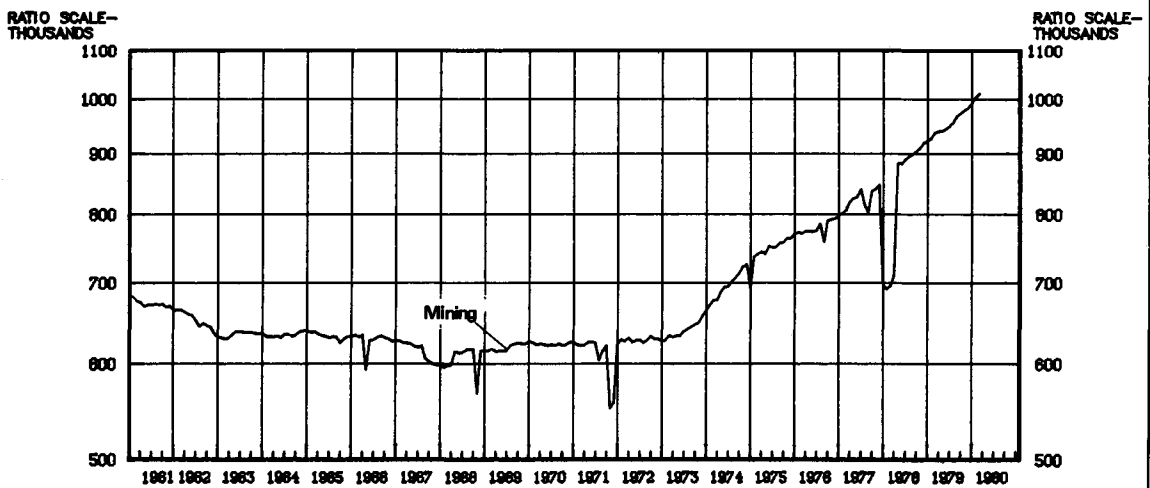
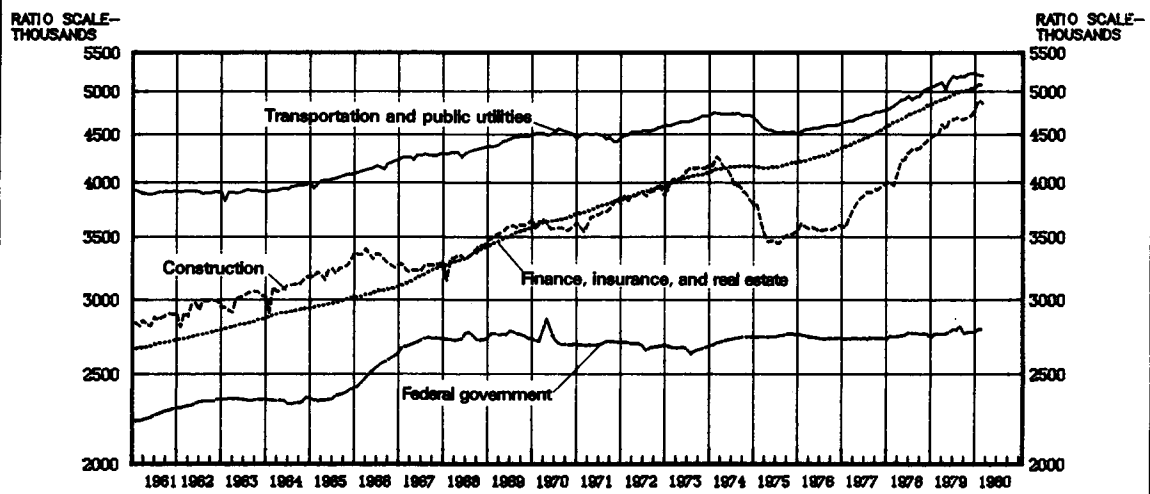
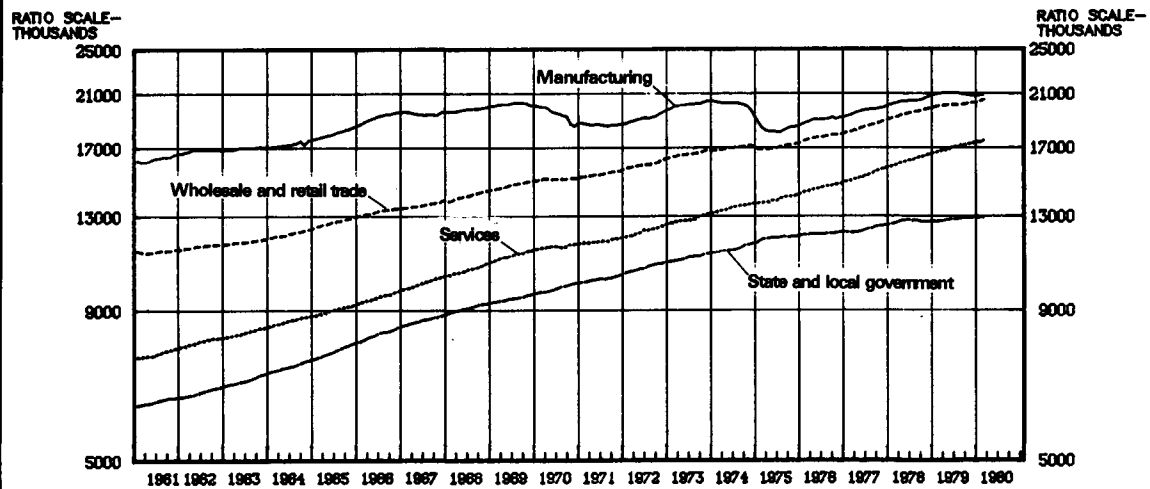


NOTE: Data for two most recent months are preliminary.

SOURCE: Table B-4.

### Chart 7. Nonagricultural payroll employment by industry

(Seasonally adjusted)

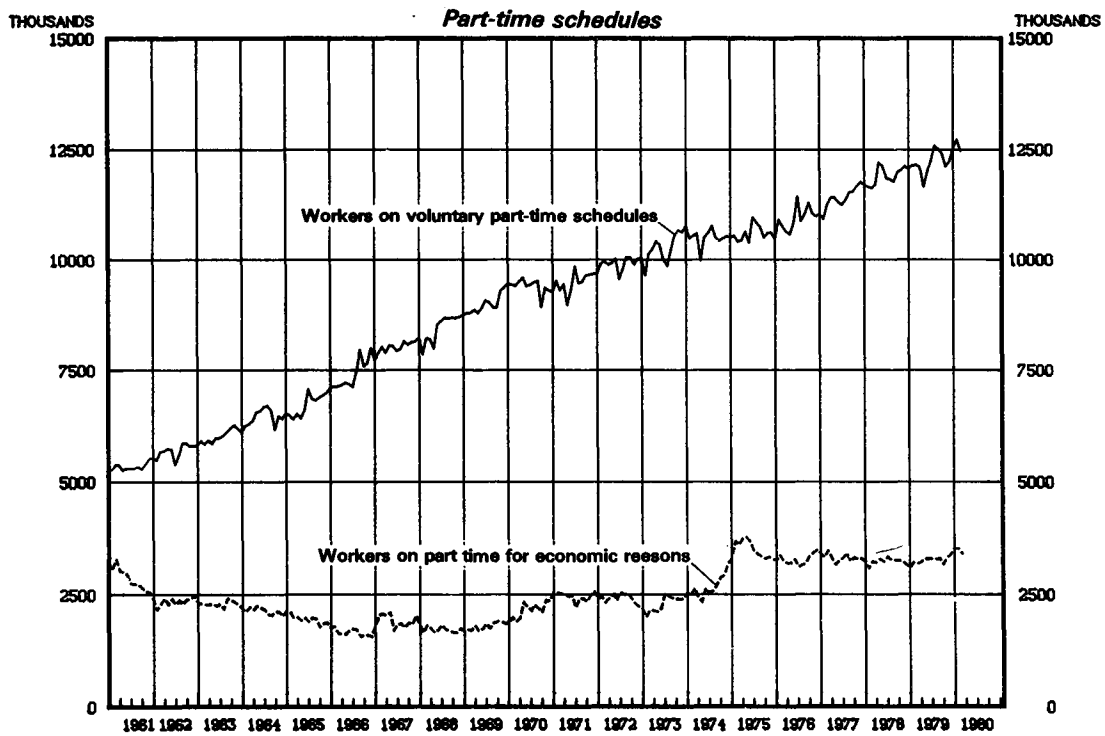
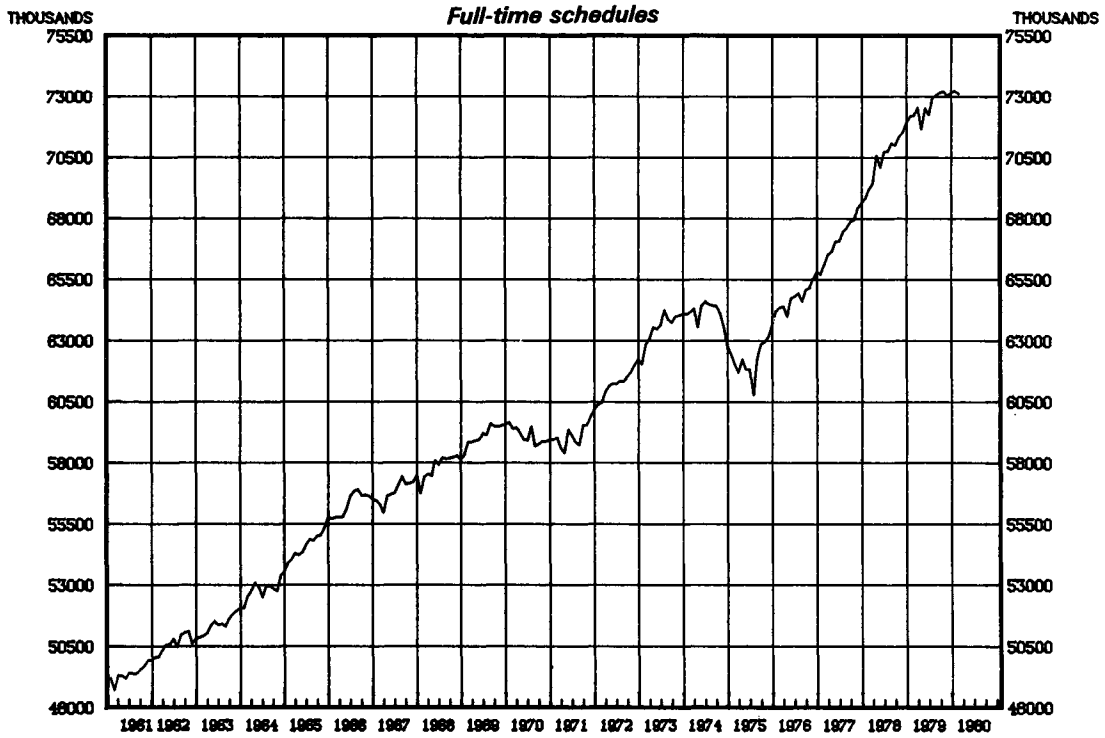


NOTE: Data for two most recent months are preliminary.

SOURCE: Table B-4.

**Chart 8. Persons at work full and part time in nonagricultural industries**

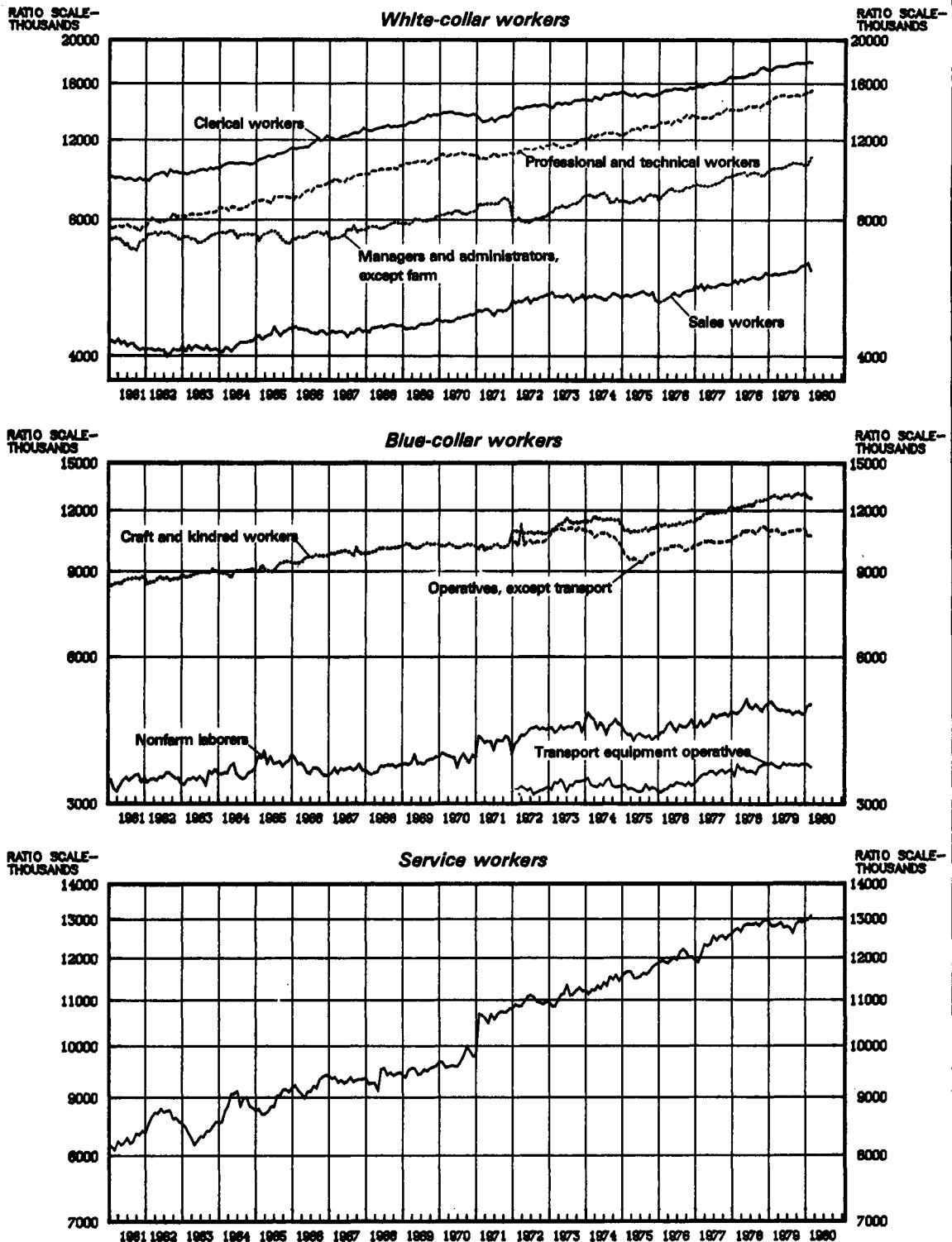
*(Seasonally adjusted)*



SOURCE: Table A-42.

### Chart 9. Employment in nonfarm occupations

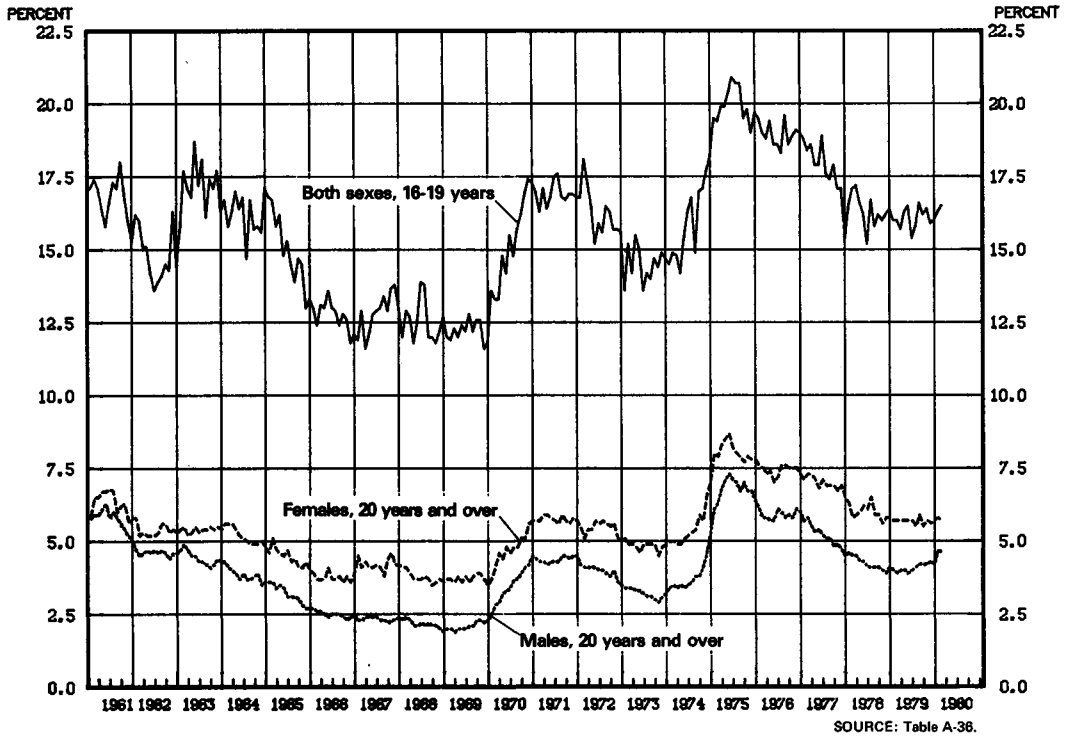
(Seasonally adjusted)



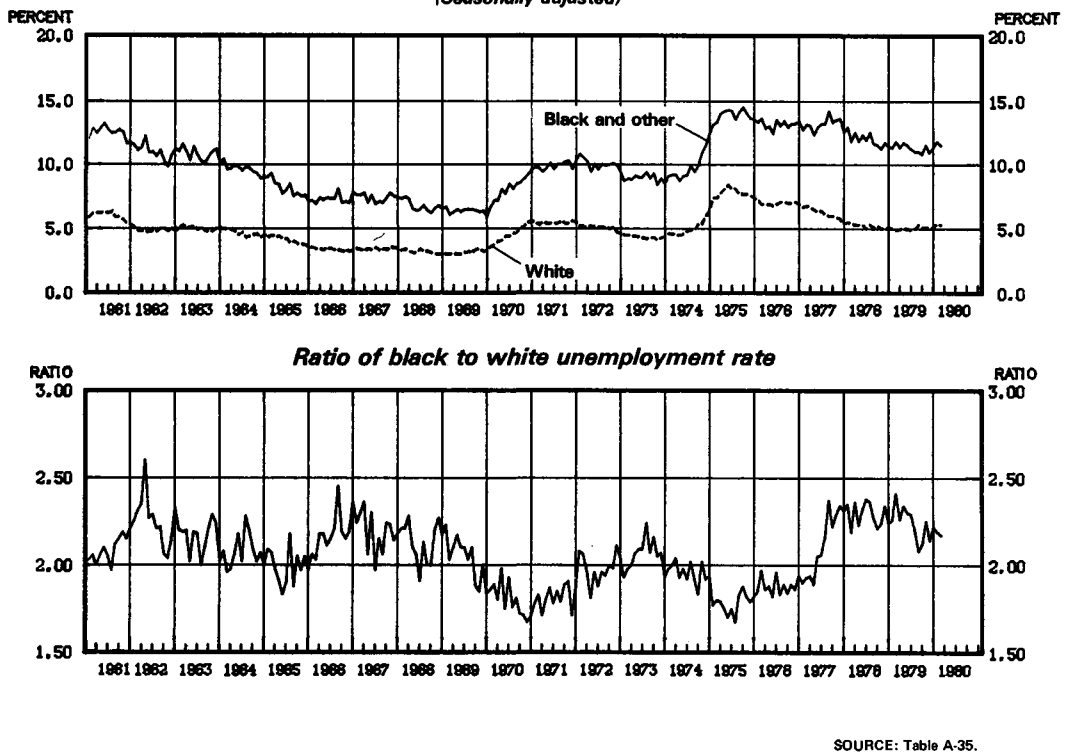
NOTE: Two breaks in series occurred in 1971 stemming from the reclassification of occupations introduced in January and from a questionnaire change concerning "major activity" introduced in December. See "Changes in occupational classification system" in the Explanatory Notes.

SOURCE: Table A-42.

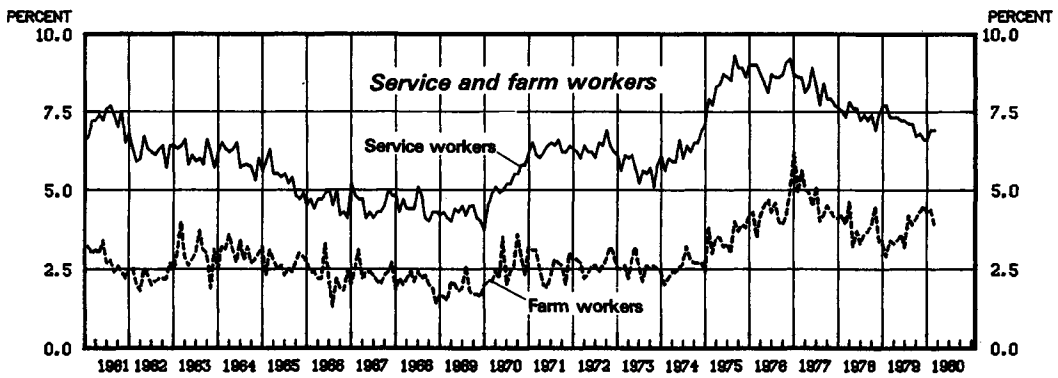
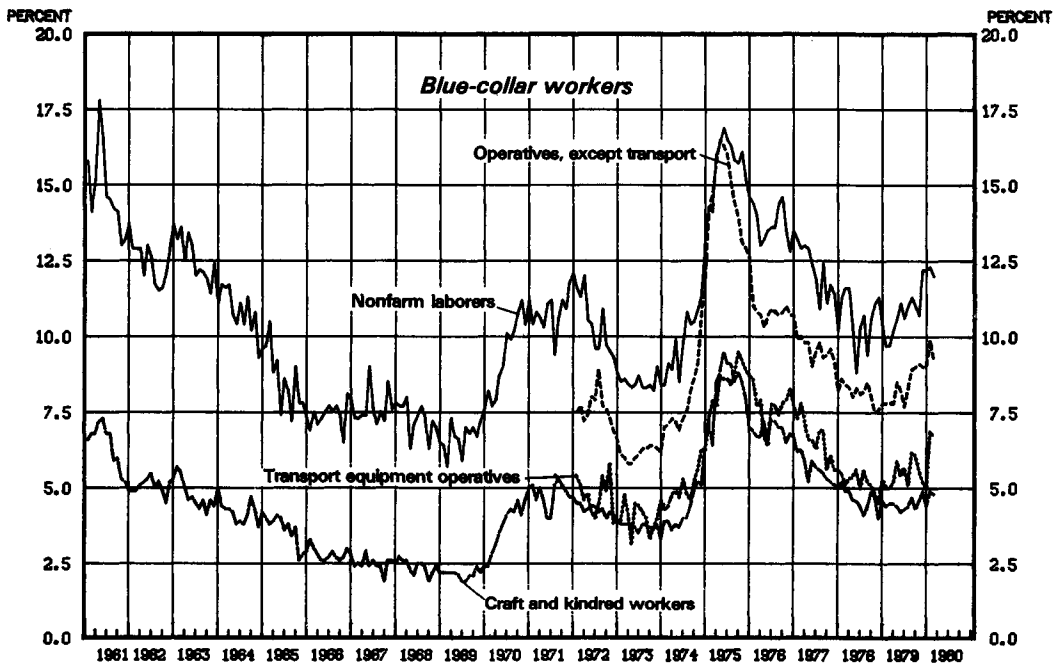
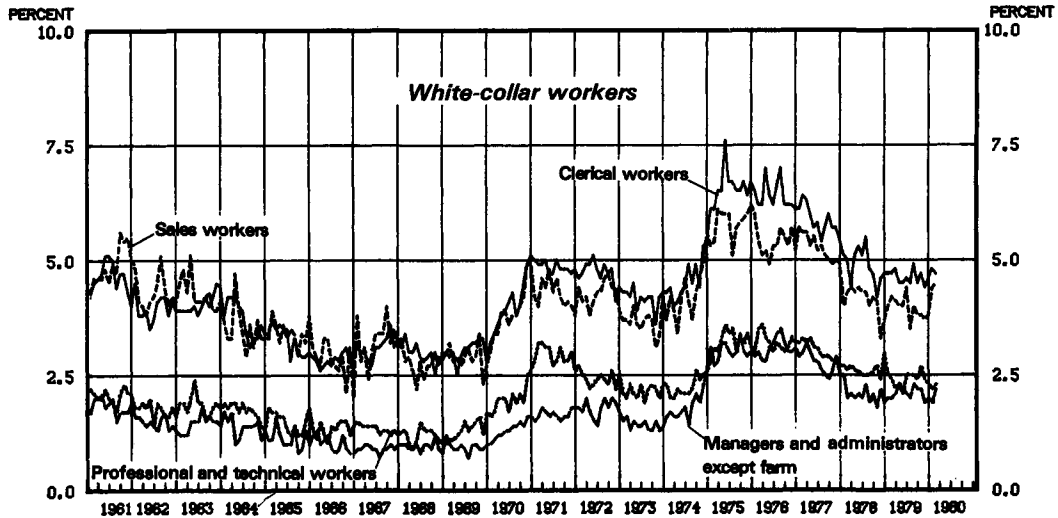
**Chart 10. Unemployment rates by sex and age**  
(Seasonally adjusted)



**Chart 11. Unemployment rates by race**  
(Seasonally adjusted)



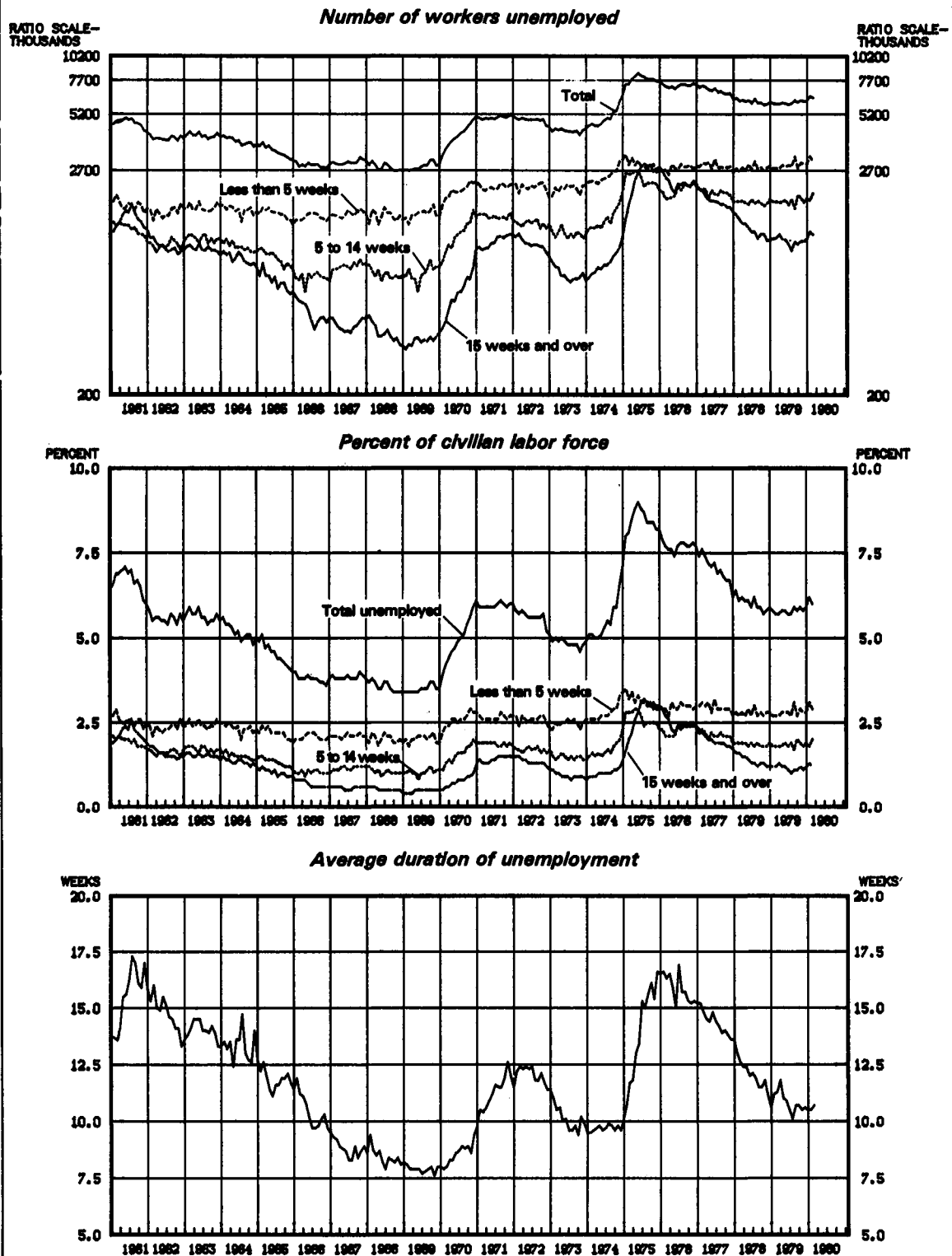
**Chart 12. Unemployment rates by major occupational groups**  
(Seasonally adjusted)



SOURCE: Table A-36.

### Chart 13. Duration of unemployment

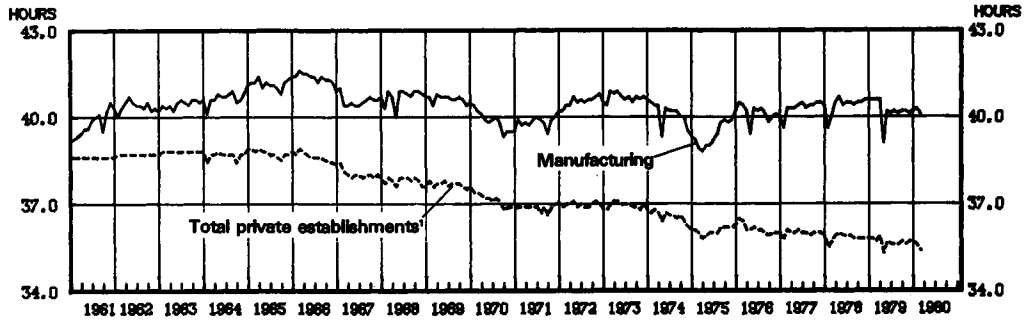
(Seasonally adjusted)



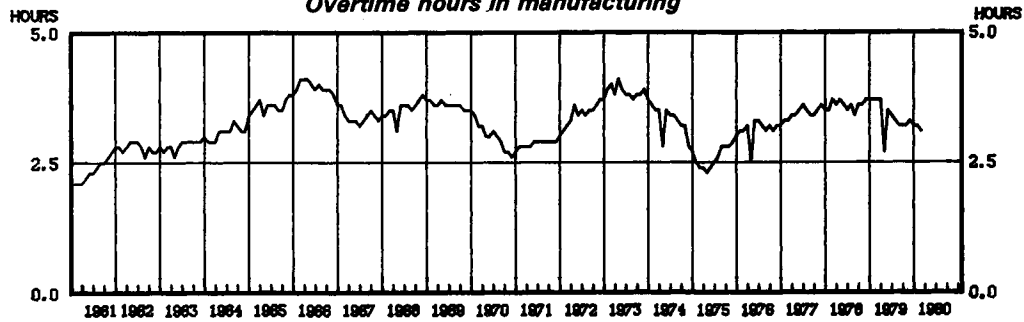
SOURCE: Table A-37.



**Chart 14. Average weekly hours in nonagricultural industries**  
(Seasonally adjusted)



**Overtime hours in manufacturing**

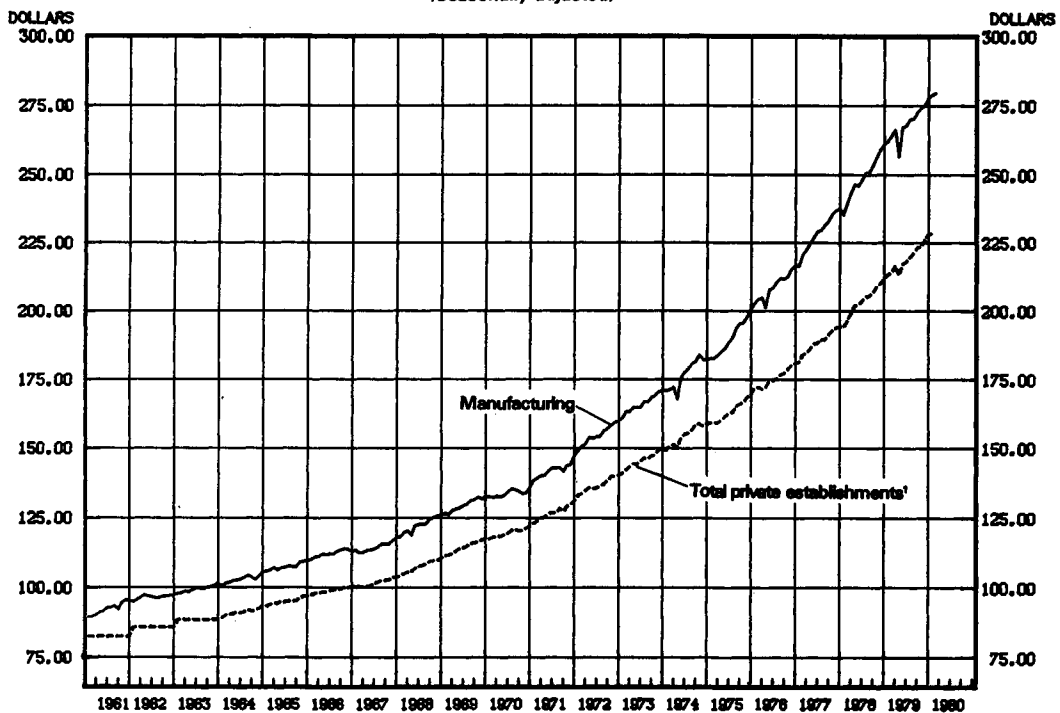


<sup>1</sup>Annual averages prior to 1964.

NOTE: Data for two most recent months are preliminary.

SOURCE: Table C-7.

**Chart 15. Average weekly earnings in nonagricultural industries**  
(Seasonally adjusted)

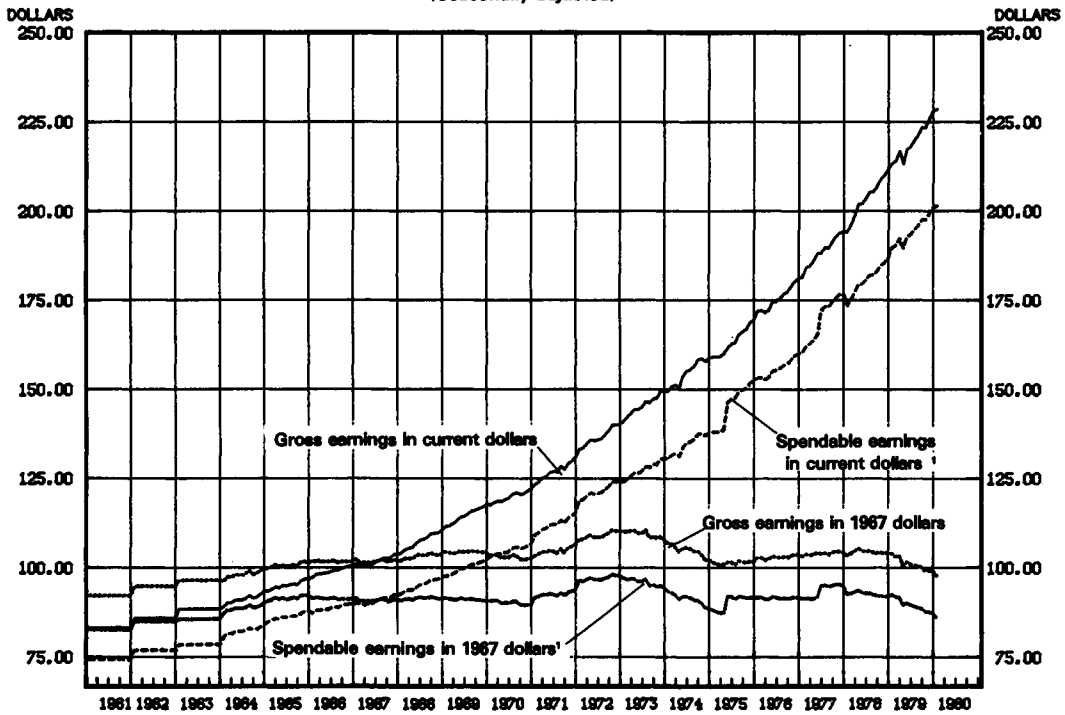


<sup>1</sup>Annual averages prior to 1964.

NOTE: Data for two most recent months are preliminary.

SOURCE: Tables C-7 and C-9.

**Chart 16. Total private gross and spendable weekly earnings**  
(Seasonally adjusted)

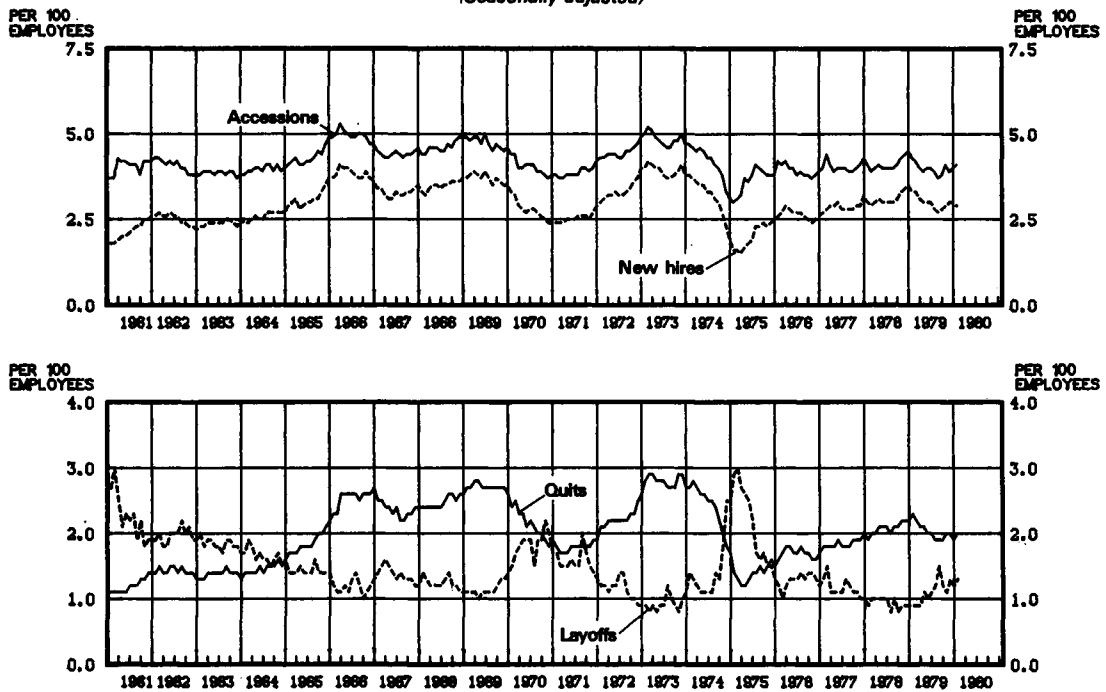


<sup>1</sup> Married worker with three dependents.

NOTE: Data prior to 1964 are annual averages. Data for current month are preliminary.

SOURCE: Table C-9.

**Chart 17. Labor turnover rates in manufacturing**  
(Seasonally adjusted)



NOTE: Data for current month are preliminary.

SOURCE: Table D-3.

**HOUSEHOLD DATA  
HISTORICAL**

**A-1. Employment status of the noninstitutional population 16 years and over, 1947 to date**

(Numbers in thousands)

Year and month	Total noninstitutional population	Total labor force		Civilian labor force						Not in labor force
		Number	Percent of population	Total	Employed			Unemployed		
					Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>Annual averages</b>										
<b>TOTAL</b>										
1947.....	103,418	60,941	58.9	59,350	57,038	7,890	49,148	2,311	3.9	42,477
1948.....	104,527	62,080	59.4	60,621	58,343	7,629	50,714	2,276	3.8	42,447
1949.....	105,611	62,903	59.6	61,286	57,651	7,658	49,993	3,637	5.9	42,708
1950.....	106,645	63,858	59.9	62,208	58,918	7,160	51,758	3,288	5.3	42,787
1951.....	107,721	65,117	60.4	62,017	59,961	6,726	53,235	2,055	3.3	42,604
1952.....	108,823	65,730	60.4	62,138	60,250	6,500	53,749	1,883	3.0	43,093
1953.....	110,601	66,560	60.2	63,015	61,179	6,260	54,919	1,834	2.9	44,041
1954.....	111,671	66,993	60.0	63,643	60,109	6,205	53,904	3,532	5.5	44,678
1955.....	112,732	68,072	60.4	65,023	62,170	6,450	55,722	2,852	4.4	44,660
1956.....	113,811	69,409	61.0	66,552	63,799	6,283	57,514	2,750	4.1	44,402
1957.....	115,065	69,729	60.6	66,929	64,071	5,947	58,123	2,859	4.3	45,336
1958.....	116,363	70,275	60.4	67,639	63,036	5,586	57,450	4,602	6.8	46,088
1959.....	117,881	70,921	60.2	68,369	64,630	5,565	59,065	3,740	5.5	46,960
1960.....	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	5.5	47,617
1961.....	121,343	73,031	60.2	70,459	65,746	5,200	60,546	4,714	6.7	48,312
1962 <sup>1</sup> .....	122,981	73,442	59.7	70,614	66,702	4,944	61,759	3,911	5.5	49,539
1963.....	125,154	74,571	59.6	71,833	67,762	4,687	63,076	4,070	5.7	50,583
1964.....	127,224	75,830	59.6	73,091	69,305	4,523	64,782	3,786	5.2	51,394
1965.....	129,236	77,178	59.7	74,455	71,088	4,361	66,726	3,366	4.5	52,058
1966.....	131,180	78,893	60.1	75,770	72,895	3,979	68,915	2,875	3.8	52,288
1967.....	133,319	80,793	60.6	77,347	74,372	3,844	70,527	2,975	3.8	52,527
1968.....	135,562	82,272	60.7	78,737	75,920	3,817	72,103	2,817	3.6	53,291
1969.....	137,841	84,240	61.1	80,734	77,902	3,606	74,296	2,832	3.5	53,602
1970.....	140,182	85,903	61.3	82,715	78,627	3,462	75,165	4,088	4.9	54,280
1971.....	142,596	86,929	61.0	84,113	79,120	3,387	75,732	4,993	5.9	55,666
1972 <sup>1</sup> .....	145,775	88,991	61.0	86,542	81,702	3,472	78,230	4,840	5.6	56,785
1973.....	148,263	91,040	61.4	88,714	84,409	3,452	80,957	4,304	4.9	57,222
1974.....	150,827	93,240	61.8	91,011	85,935	3,492	82,443	5,076	5.6	57,587
1975.....	153,449	94,793	61.8	92,613	84,783	3,380	81,403	7,830	8.5	58,655
1976.....	156,048	96,917	62.1	94,773	87,485	3,297	84,188	7,288	7.7	59,130
1977.....	158,559	99,534	62.8	97,401	90,546	3,244	87,302	6,855	7.0	59,025
1978 <sup>1</sup> .....	161,058	102,537	63.7	100,420	94,373	3,342	91,031	6,047	6.0	58,521
1979.....	163,620	104,996	64.2	102,908	96,945	3,297	93,648	5,963	5.8	58,623
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1979:</b>										
February..	162,633	104,473	64.2	102,379	96,496	3,307	93,189	5,883	5.7	58,160
March....	162,909	104,595	64.2	102,505	96,623	3,320	93,303	5,882	5.7	58,314
April....	163,008	104,280	64.0	102,198	96,254	3,215	93,039	5,944	5.8	58,728
May.....	163,260	104,476	64.0	102,398	96,495	3,246	93,249	5,903	5.8	58,784
June.....	163,469	104,552	64.0	102,476	96,652	3,242	93,409	5,824	5.7	58,917
July.....	163,685	105,175	64.3	103,093	97,184	3,267	93,917	5,909	5.7	58,511
August...	163,891	105,218	64.2	103,128	97,004	3,315	93,689	6,124	5.9	58,673
September	164,106	105,586	64.3	103,494	97,504	3,364	94,140	5,990	5.8	58,519
October..	164,468	105,688	64.3	103,595	97,474	3,294	94,180	6,121	5.9	58,780
November.	164,682	105,744	64.2	103,652	97,608	3,385	94,223	6,044	5.8	58,937
December.	164,898	106,088	64.3	103,999	97,912	3,359	94,553	6,087	5.9	58,810
<b>1980:</b>										
January..	165,101	106,310	64.4	104,229	97,804	3,270	94,534	6,425	6.2	58,791
February..	165,298	106,346	64.3	104,260	97,953	3,326	94,626	6,307	6.0	58,951

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

<sup>2</sup> Because seasonality, by definition, does not exist in population figures, data for "total noninstitutional population" are not seasonally adjusted.

**HOUSEHOLD DATA  
HISTORICAL**

**A-2. Employment status of the noninstitutional population 16 years and over by sex, 1967 to date**

[Numbers in thousands]

Year, month, and sex	Total noninstitutional population	Total labor force		Civilian labor force						Not in labor force
		Number	Percent of population	Total	Employed			Unemployed		
					Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>Annual averages</b>										
<b>MALES</b>										
1967.....	64,316	52,398	81.5	48,987	47,479	3,164	44,315	1,508	3.1	11,919
1968.....	65,345	53,030	81.2	49,533	48,114	3,157	44,957	1,419	2.9	12,315
1969.....	66,365	53,688	80.9	50,221	48,818	2,963	45,855	1,403	2.8	12,677
1970.....	67,409	54,343	80.6	51,195	48,960	2,861	46,099	2,235	4.4	13,066
1971.....	68,512	54,797	80.0	52,021	49,245	2,790	46,455	2,776	5.3	13,715
1972 <sup>1</sup> .....	69,864	55,671	79.7	53,265	50,630	2,839	47,791	2,635	4.9	14,193
1973 <sup>1</sup> .....	71,020	56,479	79.5	54,203	51,963	2,833	49,130	2,240	4.1	14,541
1974.....	72,253	57,349	79.4	55,186	52,518	2,900	49,618	2,668	4.8	14,904
1975.....	73,494	57,706	78.5	55,615	51,230	2,801	48,429	4,385	7.9	15,788
1976.....	74,739	58,397	78.1	56,359	52,391	2,716	49,675	3,968	7.0	16,241
1977.....	75,981	59,467	78.3	57,449	53,861	2,639	51,222	3,588	6.2	16,519
1978 <sup>1</sup> .....	77,169	60,535	78.4	58,542	55,491	2,681	52,810	3,051	5.2	16,634
1979.....	78,397	61,466	78.4	59,517	56,499	2,645	53,854	3,018	5.1	16,931
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1979:</b>										
February..	77,926	61,397	78.8	59,434	56,476	2,655	53,821	2,958	5.0	16,529
March....	78,058	61,376	78.6	59,421	56,449	2,656	53,793	2,972	5.0	16,682
April....	78,105	61,240	78.4	59,293	56,294	2,593	53,701	2,999	5.1	16,865
May.....	78,225	61,257	78.3	59,313	56,372	2,608	53,764	2,941	5.0	16,969
June.....	78,323	61,311	78.3	59,370	56,477	2,600	53,877	2,893	4.9	17,012
July.....	78,427	61,540	78.5	59,597	56,570	2,614	53,956	3,027	5.1	16,887
August...	78,525	61,437	78.2	59,491	56,408	2,650	53,758	3,083	5.2	17,088
September	78,627	61,759	78.5	59,812	56,714	2,677	54,037	3,098	5.2	16,867
October..	78,805	61,675	78.3	59,727	56,629	2,666	53,963	3,098	5.2	17,130
November.	78,906	61,652	78.1	59,704	56,580	2,716	53,864	3,124	5.2	17,255
December.	79,009	61,762	78.2	59,823	56,734	2,714	54,020	3,089	5.2	17,247
<b>1980:</b>										
January..	79,104	61,810	78.1	59,878	56,486	2,665	53,821	3,392	5.7	17,295
February..	79,196	61,951	78.2	60,014	56,732	2,702	54,029	3,283	5.5	17,245
<b>Annual averages</b>										
<b>FEMALES</b>										
1967.....	69,003	28,395	41.2	28,360	26,893	680	26,212	1,468	5.2	40,608
1968.....	70,217	29,242	41.6	29,204	27,807	660	27,147	1,397	4.8	40,976
1969.....	71,476	30,551	42.7	30,513	29,084	643	28,441	1,429	4.7	40,924
1970.....	72,774	31,560	43.4	31,520	29,667	601	29,066	1,853	5.9	41,214
1971.....	74,084	32,132	43.4	32,091	29,875	598	29,277	2,217	6.9	41,952
1972 <sup>1</sup> .....	75,911	33,320	43.9	33,277	31,072	633	30,439	2,205	6.6	42,591
1973 <sup>1</sup> .....	77,242	34,561	44.7	34,510	32,446	619	31,827	2,064	6.0	42,681
1974.....	78,575	35,892	45.7	35,825	33,417	592	32,825	2,408	6.7	42,680
1975.....	79,954	37,087	46.4	36,998	33,553	579	32,973	3,445	9.3	42,868
1976.....	81,309	38,520	47.4	38,414	35,095	582	34,513	3,320	8.6	42,799
1977.....	82,577	40,067	48.5	39,952	36,685	605	36,080	3,267	8.2	42,510
1978 <sup>1</sup> .....	83,890	42,002	50.1	41,878	38,882	661	38,221	2,996	7.2	41,887
1979.....	85,223	43,531	51.1	43,391	40,446	652	39,794	2,945	6.8	41,692
<b>Monthly data, seasonally adjusted<sup>2</sup></b>										
<b>1979:</b>										
February..	84,707	43,077	50.9	42,945	40,020	652	39,368	2,925	6.8	41,631
March....	84,851	43,220	50.9	43,084	40,174	664	39,510	2,910	6.8	41,632
April....	84,903	43,040	50.7	42,905	39,960	622	39,338	2,945	6.9	41,863
May.....	85,035	43,220	50.8	43,085	40,123	638	39,485	2,962	6.9	41,815
June.....	85,145	43,241	50.8	43,106	40,175	643	39,532	2,931	6.8	41,905
July.....	85,259	43,635	51.2	43,496	40,614	653	39,961	2,882	6.6	41,624
August...	85,366	43,782	51.3	43,637	40,596	665	39,931	3,041	7.0	41,585
September	85,479	43,827	51.3	43,682	40,790	687	40,103	2,892	6.6	41,652
October..	85,663	44,013	51.4	43,868	40,845	628	40,217	3,023	6.9	41,651
November.	85,775	44,093	51.4	43,948	41,028	669	40,359	2,920	6.6	41,683
December.	85,889	44,326	51.6	44,176	41,178	645	40,533	2,998	6.8	41,563
<b>1980:</b>										
January..	85,997	44,501	51.7	44,352	41,318	605	40,713	3,034	6.8	41,495
February..	86,102	44,396	51.6	44,246	41,221	624	40,597	3,025	6.8	41,706

<sup>1</sup> See footnote 1, table A-1.

<sup>2</sup> See footnote 2, table A-1.

A-3. Employment status of the noninstitutional population by sex, age, and race

(Numbers in thousands)

Sex, age, and race	February 1980										
	Total labor force		Civilian labor force				Not in labor force				
	Number	Percent of population	Total	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
<b>MALES</b>											
16 years and over	61,176	77.2	59,239	55,319	3,920	6.6	18,020	405	4,813	1,699	11,103
16 to 21 years	8,180	64.4	7,532	6,257	1,275	16.9	4,512	11	4,046	31	424
16 to 19 years	4,775	56.8	4,490	3,660	830	18.5	3,630	9	3,328	20	272
16 to 17 years	1,822	44.1	1,804	1,424	380	21.1	2,314	8	2,187	8	110
18 to 19 years	2,952	69.2	2,686	2,237	450	16.7	1,316	1	1,140	11	163
20 to 64 years	54,487	89.3	52,835	49,809	3,026	5.7	6,540	165	1,475	1,208	3,690
20 to 24 years	8,844	85.6	8,114	7,109	1,005	12.4	1,485	8	1,134	35	308
25 to 64 years	38,480	94.2	37,560	35,787	1,772	4.7	2,353	91	333	657	1,271
25 to 29 years	8,718	94.8	8,358	7,764	594	7.1	480	11	214	39	217
30 to 34 years	8,000	96.1	7,750	7,384	366	4.7	326	16	63	86	162
35 to 39 years	6,436	95.7	6,248	5,951	297	4.8	287	15	20	94	158
40 to 44 years	5,318	94.8	5,232	5,065	168	3.2	289	10	12	82	184
45 to 49 years	5,016	93.3	4,986	4,804	183	3.7	359	7	11	137	204
50 to 64 years	4,992	89.1	4,985	4,820	164	3.3	611	22	14	219	346
55 to 64 years	7,162	72.6	7,161	6,913	249	3.5	2,702	66	9	516	2,112
55 to 59 years	4,431	82.5	4,430	4,304	127	2.9	939	23	7	249	660
60 to 64 years	2,731	60.8	2,731	2,609	122	4.5	1,763	43	2	266	1,451
65 years and over	1,914	19.6	1,914	1,849	65	3.4	7,851	331	10	471	7,140
65 to 69 years	1,123	29.5	1,123	1,074	48	4.3	2,689	64	8	165	2,453
70 years and over	792	13.3	792	775	17	2.1	5,162	167	1	307	4,687
<b>White</b>											
16 years and over	54,401	78.1	52,894	49,786	3,109	5.9	15,261	315	3,828	1,349	9,769
16 to 21 years	7,200	66.9	6,714	5,724	990	14.8	3,562	3	2,206	26	326
16 to 19 years	4,248	59.8	4,035	3,383	652	16.2	2,855	4	2,613	17	220
16 to 17 years	1,663	47.8	1,648	1,333	315	19.1	1,813	4	1,717	5	85
18 to 19 years	2,585	71.3	2,386	2,050	337	14.1	1,042	--	896	12	135
20 to 64 years	48,428	90.1	47,135	44,721	2,414	5.1	5,344	113	1,207	949	3,075
20 to 24 years	7,682	86.7	7,134	6,346	788	11.0	1,182	4	949	28	201
25 to 64 years	34,188	95.0	33,444	32,029	1,414	4.2	1,809	58	254	502	994
25 to 29 years	14,759	96.1	14,276	13,514	762	5.3	599	20	211	92	275
30 to 34 years	10,477	96.0	10,248	9,873	375	3.7	431	12	25	128	267
35 to 44 years	8,952	92.0	8,920	8,642	278	3.1	778	26	18	282	452
55 to 64 years	6,558	73.6	6,557	6,346	211	3.2	2,353	51	3	419	1,879
55 to 59 years	4,051	83.7	4,050	3,935	116	2.9	789	14	4	200	571
60 to 64 years	2,507	61.6	2,507	2,412	95	3.8	1,564	37	--	218	1,309
65 years and over	1,725	19.6	1,725	1,682	43	2.5	7,062	198	7	383	6,474
<b>Black and other</b>											
16 years and over	6,775	71.1	6,345	5,533	812	12.8	2,759	90	985	350	1,334
16 to 21 years	980	50.8	818	534	284	34.8	951	8	840	5	98
16 to 19 years	527	40.5	455	278	178	39.0	775	5	714	3	53
16 to 17 years	159	24.1	155	91	65	41.6	501	4	470	3	24
18 to 19 years	368	57.3	300	187	113	37.7	274	1	244	--	28
20 to 64 years	6,058	83.5	5,700	5,087	612	10.7	1,196	52	269	258	616
20 to 24 years	1,162	79.3	981	763	217	22.1	303	4	184	7	107
25 to 64 years	4,292	88.7	4,116	3,758	358	8.7	544	33	79	155	276
25 to 29 years	1,959	90.5	1,832	1,634	198	10.8	207	7	65	32	103
30 to 34 years	1,277	89.8	1,232	1,142	90	7.3	145	14	7	48	75
35 to 44 years	1,056	84.6	1,056	982	69	6.6	193	13	7	75	98
55 to 64 years	604	63.4	604	566	38	6.3	349	15	5	97	232
55 to 59 years	380	71.7	380	369	11	3.0	150	9	3	49	90
60 to 64 years	224	53.0	224	197	27	11.9	198	6	2	48	143
65 years and over	189	19.3	189	168	22	11.4	789	33	2	89	665

# HOUSEHOLD DATA

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

(Numbers in thousands)

Sex, age, and race	February 1980										
	Total labor force		Civilian labor force				Not in labor force				
	Number	Percent of population	Total	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
<b>FEMALES</b>											
16 years and over	44,168	51.3	44,018	40,945	3,073	7.0	41,934	31,357	4,795	1,102	4,679
16 to 21 years	6,792	54.7	6,733	5,778	955	14.2	5,634	1,339	3,963	14	318
16 to 19 years	4,054	49.4	4,027	3,337	691	17.2	4,158	631	3,312	6	208
16 to 17 years	1,557	38.9	1,555	1,260	295	19.0	2,444	175	2,176	--	94
18 to 19 years	2,497	59.3	2,472	2,076	396	16.0	1,715	457	1,137	6	115
20 to 64 years	38,964	60.9	38,841	36,508	2,333	6.0	24,990	21,044	1,466	501	1,979
20 to 24 years	6,956	67.4	6,882	6,231	651	9.5	3,361	2,060	1,014	20	268
25 to 54 years	27,365	64.2	27,315	25,774	1,541	5.6	15,248	13,613	445	258	932
25 to 29 years	6,255	66.7	6,220	5,764	456	7.3	3,118	2,729	189	29	171
30 to 34 years	5,568	65.2	5,558	5,202	356	6.4	2,975	2,696	109	24	146
35 to 39 years	4,551	64.4	4,548	4,323	225	4.9	2,517	2,303	66	29	119
40 to 44 years	3,973	66.8	3,972	3,781	191	4.8	1,975	1,761	41	36	137
45 to 49 years	3,557	62.8	3,556	3,392	164	4.6	2,111	1,879	21	51	159
50 to 54 years	3,462	57.6	3,462	3,313	149	4.3	2,551	2,243	19	89	200
55 to 64 years	4,643	42.1	4,643	4,502	141	3.0	6,380	5,371	7	223	779
55 to 59 years	2,920	49.4	2,920	2,831	89	3.0	2,985	2,569	6	116	294
60 to 64 years	1,724	33.7	1,724	1,672	52	3.0	3,396	2,802	1	107	485
65 years and over	1,150	8.3	1,150	1,101	49	4.3	12,786	9,682	16	596	2,492
65 to 69 years	716	15.1	716	676	40	5.6	4,042	3,224	5	99	714
70 years and over	434	4.7	434	424	9	2.1	8,744	6,458	11	497	1,778
<b>White</b>											
16 years and over	38,248	51.1	38,135	35,754	2,381	6.2	36,660	28,058	3,759	856	3,988
16 to 21 years	5,948	56.9	5,904	5,194	710	12.0	4,500	1,092	3,151	10	248
16 to 19 years	3,585	52.0	3,566	3,053	513	14.4	3,307	523	2,607	4	173
16 to 17 years	1,410	42.1	1,408	1,170	238	16.9	1,935	146	1,710	--	79
18 to 19 years	2,175	61.3	2,157	1,882	275	12.7	1,372	377	897	4	95
20 to 64 years	33,646	60.7	33,552	31,730	1,821	5.4	21,749	18,594	1,136	367	1,652
20 to 24 years	6,012	69.0	5,957	5,482	475	8.0	2,702	1,673	809	18	202
25 to 54 years	23,487	63.8	23,448	22,229	1,220	5.2	13,302	12,036	323	188	755
25 to 29 years	10,052	65.6	10,018	9,404	615	6.1	5,272	4,787	202	42	241
30 to 34 years	7,313	65.0	7,310	6,970	340	4.6	3,935	3,593	85	53	204
35 to 54 years	6,121	59.9	6,121	5,855	265	4.3	4,095	3,655	35	93	311
55 to 64 years	4,147	41.9	4,147	4,020	127	3.1	5,745	4,885	5	161	694
55 to 59 years	2,593	49.1	2,593	2,514	78	3.0	2,690	2,338	4	82	266
60 to 64 years	1,554	33.7	1,554	1,506	48	3.1	3,055	2,547	1	79	429
65 years and over	1,017	8.1	1,017	971	47	4.6	11,604	8,941	16	485	2,162
<b>Black and other</b>											
16 years and over	5,920	52.9	5,883	5,191	691	11.8	5,273	3,299	1,036	247	692
16 to 21 years	844	42.7	829	584	245	29.6	1,134	248	812	4	70
16 to 19 years	469	35.5	462	284	178	38.5	851	108	706	2	35
16 to 17 years	148	22.5	147	90	57	38.9	508	28	465	--	15
18 to 19 years	321	48.4	315	194	121	38.3	343	80	240	2	20
20 to 64 years	5,318	62.1	5,288	4,778	510	9.6	3,241	2,450	329	133	327
20 to 24 years	943	58.9	926	750	176	19.0	659	387	205	2	65
25 to 54 years	3,878	66.6	3,866	3,546	321	8.3	1,947	1,578	123	70	177
25 to 34 years	1,770	68.3	1,759	1,562	197	11.2	822	639	96	11	76
35 to 44 years	1,210	68.5	1,210	1,134	76	6.3	557	471	21	12	53
45 to 54 years	897	61.3	897	850	48	5.3	568	468	5	47	48
55 to 64 years	496	43.9	496	483	14	2.8	635	486	2	62	85
55 to 59 years	327	52.6	327	316	10	3.2	294	230	2	34	28
60 to 64 years	169	33.2	169	166	3	2.0	340	255	--	28	57
65 years and over	133	10.1	133	130	3	2.2	1,182	741	1	111	330

## A-4. Labor force by sex, age, and race

Sex, age, and race	Total labor force				Civilian labor force			
	Thousands of persons		Participation rates		Thousands of persons		Participation rates	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
<b>MALES</b>								
16 years and over	60,503	61,176	77.6	77.2	58,540	59,239	77.1	76.7
16 to 19 years	4,882	4,775	57.8	56.8	4,579	4,490	56.2	55.3
16 to 17 years	1,925	1,822	45.9	44.1	1,906	1,804	45.6	43.8
18 to 19 years	2,957	2,952	69.5	69.2	2,674	2,686	67.3	67.1
20 to 24 years	8,748	8,844	85.7	85.6	8,011	8,114	84.6	84.5
25 to 54 years	37,822	38,480	94.5	94.2	36,900	37,560	94.4	94.1
25 to 34 years	16,179	16,718	95.4	95.4	15,573	16,108	95.2	95.2
35 to 44 years	11,484	11,754	95.8	95.3	11,206	11,480	95.7	95.2
45 to 54 years	10,158	10,007	91.8	91.2	10,121	9,971	91.8	91.1
55 to 64 years	7,140	7,162	73.4	72.6	7,139	7,161	73.4	72.6
55 to 59 years	4,385	4,431	82.2	82.5	4,384	4,430	82.2	82.5
60 to 64 years	2,754	2,731	62.7	60.8	2,754	2,731	62.7	60.8
65 years and over	1,911	1,914	20.1	19.6	1,911	1,914	20.1	19.6
<b>White</b>								
16 years and over	53,803	54,401	78.4	78.1	52,238	52,894	77.9	77.6
16 to 19 years	4,309	4,248	60.2	59.8	4,075	4,035	58.8	58.6
16 to 17 years	1,735	1,663	49.0	47.8	1,719	1,648	48.8	47.6
18 to 19 years	2,574	2,585	71.0	71.3	2,356	2,386	69.2	69.6
20 to 24 years	7,581	7,682	86.3	86.7	7,010	7,134	85.3	85.8
25 to 54 years	33,646	34,188	95.2	95.0	32,889	33,444	95.1	94.9
25 to 34 years	14,314	14,759	96.1	96.1	13,823	14,276	96.0	96.0
35 to 44 years	10,240	10,477	96.5	96.0	10,007	10,248	96.5	96.0
45 to 54 years	9,092	8,952	92.5	92.0	9,059	8,920	92.5	92.0
55 to 64 years	6,514	6,558	74.0	73.6	6,513	6,557	74.0	73.6
55 to 59 years	3,996	4,051	83.0	83.7	3,995	4,050	83.0	83.7
60 to 64 years	2,519	2,507	63.1	61.6	2,519	2,507	63.1	61.6
65 years and over	1,751	1,725	20.4	19.6	1,751	1,725	20.4	19.6
<b>Black and other</b>								
16 years and over	6,700	6,775	72.3	71.1	6,302	6,345	71.1	69.7
16 to 19 years	573	527	44.4	40.5	504	455	41.3	37.0
16 to 17 years	190	159	28.9	24.1	187	155	28.5	23.7
18 to 19 years	383	368	60.7	57.3	318	300	56.1	52.3
20 to 24 years	1,167	1,162	82.0	79.3	1,001	981	79.6	76.4
25 to 54 years	4,175	4,292	89.3	88.7	4,010	4,116	88.9	88.3
25 to 34 years	1,865	1,959	90.5	90.5	1,749	1,832	90.0	89.9
35 to 44 years	1,244	1,277	90.3	89.8	1,200	1,232	89.9	89.5
45 to 54 years	1,066	1,056	86.3	84.6	1,062	1,052	86.3	84.5
55 to 64 years	625	604	67.2	63.4	625	604	67.2	63.4
55 to 59 years	390	380	74.0	71.7	390	380	74.0	71.7
60 to 64 years	236	224	58.3	53.0	236	224	58.3	53.0
65 years and over	160	189	16.9	19.3	160	189	16.9	19.3

# HOUSEHOLD DATA

## A-4. Labor force by sex, age, and race—Continued

Sex, age, and race	Total labor force				Civilian labor force			
	Thousands of persons		Participation rates		Thousands of persons		Participation rates	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
<b>FEMALES</b>								
16 years and over	42,840	44,168	50.6	51.3	42,709	44,018	50.5	51.2
16 to 19 years	4,207	4,054	50.9	49.4	4,184	4,027	50.8	49.2
16 to 17 years	1,719	1,557	42.3	38.9	1,718	1,555	42.3	38.9
18 to 19 years	2,488	2,497	59.2	59.3	2,466	2,472	59.0	59.0
20 to 24 years	6,963	6,956	68.3	67.4	6,896	6,882	68.1	67.2
25 to 54 years	25,893	27,365	62.0	64.2	25,851	27,315	61.9	64.2
25 to 34 years	11,052	11,823	63.8	66.0	11,015	11,778	63.7	65.9
35 to 44 years	7,929	8,524	62.7	65.5	7,925	8,520	62.7	65.5
45 to 54 years	6,911	7,019	58.6	60.1	6,911	7,018	58.6	60.1
55 to 64 years	4,606	4,643	42.4	42.1	4,606	4,643	42.4	42.1
55 to 59 years	2,865	2,920	48.9	49.4	2,865	2,920	48.9	49.4
60 to 64 years	1,741	1,724	34.7	33.7	1,741	1,724	34.7	33.7
65 years and over	1,172	1,150	8.6	8.3	1,172	1,150	8.6	8.3
<b>White</b>								
16 years and over	37,080	38,248	50.2	51.1	36,977	38,135	50.2	51.0
16 to 19 years	3,739	3,585	53.8	52.0	3,721	3,566	53.6	51.9
16 to 17 years	1,544	1,410	45.3	42.1	1,543	1,408	45.3	42.1
18 to 19 years	2,195	2,175	61.9	61.3	2,178	2,157	61.7	61.1
20 to 24 years	6,012	6,012	69.7	69.0	5,960	5,957	69.5	68.8
25 to 54 years	22,172	23,487	61.3	63.8	22,139	23,448	61.3	63.8
25 to 34 years	9,366	10,052	63.0	65.6	9,337	10,018	63.0	65.5
35 to 44 years	6,792	7,313	62.1	65.0	6,789	7,310	62.1	65.0
45 to 54 years	6,014	6,121	58.1	59.9	6,013	6,121	58.1	59.9
55 to 64 years	4,129	4,147	42.2	41.9	4,129	4,147	42.2	41.9
55 to 59 years	2,566	2,593	48.9	49.1	2,566	2,593	48.9	49.1
60 to 64 years	1,563	1,554	34.6	33.7	1,563	1,554	34.6	33.7
65 years and over	1,028	1,017	8.3	8.1	1,028	1,017	8.3	8.1
<b>Black and other</b>								
16 years and over	5,760	5,920	53.0	52.9	5,732	5,883	52.8	52.7
16 to 19 years	468	469	35.6	35.5	463	462	35.4	35.2
16 to 17 years	175	148	26.7	22.5	175	147	26.6	22.4
18 to 19 years	293	321	44.6	48.4	288	315	44.2	47.9
20 to 24 years	951	943	60.8	58.9	936	926	60.4	58.4
25 to 54 years	3,721	3,878	66.1	66.6	3,712	3,866	66.1	66.5
25 to 34 years	1,686	1,770	68.2	68.3	1,678	1,759	68.1	68.2
35 to 44 years	1,137	1,210	66.5	68.5	1,137	1,210	66.5	68.5
45 to 54 years	898	897	62.1	61.3	897	897	62.1	61.2
55 to 64 years	477	496	43.4	43.9	477	496	43.4	43.9
55 to 59 years	299	327	48.9	52.6	299	327	48.9	52.6
60 to 64 years	178	169	36.5	33.2	178	169	36.5	33.2
65 years and over	144	133	11.3	10.1	144	133	11.3	10.1



## A-5. Employment status of black workers by sex and age

[Numbers in thousands]

Sex and age	February 1980						
	Civilian labor force						Not in labor force
	Total	Employed			Unemployed		
		Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>TOTAL</b>							
16 years and over .....	10,336	8,984	213	8,771	1,352	13.1	6,935
16 to 19 years .....	770	455	8	446	315	40.9	1,451
16 to 17 years .....	252	146	3	144	105	41.8	900
18 to 19 years .....	518	308	6	303	210	40.5	551
20 to 24 years .....	1,638	1,267	28	1,239	371	22.6	816
25 to 54 years .....	6,697	6,093	137	5,955	604	9.0	2,067
25 to 34 years .....	3,002	2,650	46	2,604	351	11.7	812
35 to 44 years .....	2,057	1,913	52	1,861	145	7.0	600
45 to 54 years .....	1,637	1,530	39	1,491	108	6.6	654
55 to 64 years .....	950	906	24	882	44	4.6	879
55 to 59 years .....	608	591	10	581	17	2.8	396
60 to 64 years .....	341	315	14	301	27	7.9	483
65 years and over .....	282	264	16	248	18	6.3	1,722
<b>Males</b>							
16 years and over .....	5,348	4,613	192	4,421	735	13.7	2,393
16 to 19 years .....	380	224	6	216	156	41.1	692
16 to 17 years .....	126	70	3	68	54	42.9	452
18 to 19 years .....	254	152	4	149	102	40.2	240
20 to 24 years .....	840	637	21	615	204	24.3	248
25 to 54 years .....	3,455	3,130	126	3,004	325	9.4	461
25 to 34 years .....	1,526	1,347	42	1,305	178	11.7	160
35 to 44 years .....	1,040	959	48	911	81	7.8	129
45 to 54 years .....	889	824	36	789	66	7.4	170
55 to 64 years .....	517	482	23	459	35	6.8	316
55 to 59 years .....	324	314	10	304	10	3.1	137
60 to 64 years .....	192	168	13	155	24	12.5	179
65 years and over .....	156	141	16	125	15	9.6	676
<b>Females</b>							
16 years and over .....	4,988	4,371	21	4,350	617	12.4	4,542
16 to 19 years .....	390	231	2	230	159	40.7	750
16 to 17 years .....	126	76	--	76	51	40.1	448
18 to 19 years .....	264	156	2	154	108	41.0	311
20 to 24 years .....	798	630	7	624	167	21.0	568
25 to 54 years .....	3,242	2,963	11	2,951	279	8.6	1,606
25 to 34 years .....	1,476	1,303	4	1,299	173	11.7	652
35 to 44 years .....	1,017	954	4	950	64	6.3	471
45 to 54 years .....	748	706	3	702	42	5.6	484
55 to 64 years .....	433	424	1	423	9	2.2	563
55 to 59 years .....	284	277	--	277	7	2.4	259
60 to 64 years .....	149	147	1	146	3	1.8	304
65 years and over .....	126	123	--	123	3	2.0	1,046

NOTE: According to the 1970 Census, black workers comprised about 89 percent of the "black and other" population group.

# HOUSEHOLD DATA

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

(Numbers in thousands)

Employment status and race	Total		Males, 20 years and over		Females, 20 years and over		Both sexes, 16-19 years	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
<b>TOTAL</b>								
Total noninstitutional population .....	162,633	165,298	69,476	70,792	76,440	77,890	16,717	16,616
Total labor force .....	103,343	105,343	55,621	56,401	38,634	40,114	9,089	8,829
Percent of population .....	63.5	63.7	80.1	79.7	50.5	51.5	54.4	53.1
Civilian labor force .....	101,249	103,257	53,961	54,749	38,525	39,991	8,763	8,517
Employed .....	94,765	96,264	51,324	51,658	36,193	37,609	7,248	6,997
Agriculture .....	2,796	2,836	2,117	2,213	442	424	238	198
Nonagricultural industries .....	91,969	93,428	49,207	49,445	35,751	37,185	7,011	6,798
Unemployed .....	6,484	6,993	2,637	3,091	2,332	2,382	1,515	1,520
Percent of labor force .....	6.4	6.8	4.9	5.6	6.1	6.0	17.3	17.9
Not in labor force .....	59,290	59,954	13,855	14,391	37,807	37,776	7,628	7,788
<b>White</b>								
Total noninstitutional population .....	142,493	144,570	61,500	62,560	66,877	68,016	14,116	13,995
Total labor force .....	90,883	92,649	49,493	50,153	33,341	34,663	8,049	7,833
Percent of population .....	63.8	64.1	80.5	80.2	49.9	51.0	57.0	56.0
Civilian labor force .....	89,215	91,029	48,163	48,860	33,256	34,569	7,796	7,600
Employed .....	84,237	85,540	46,113	46,403	31,504	32,701	6,621	6,435
Agriculture .....	2,551	2,567	1,905	1,984	419	398	228	135
Nonagricultural industries .....	81,687	82,972	44,208	44,419	31,085	32,303	6,394	6,250
Unemployed .....	4,978	5,490	2,051	2,457	1,752	1,868	1,175	1,165
Percent of labor force .....	5.6	6.0	4.3	5.0	5.3	5.4	15.1	15.3
Not in labor force .....	51,610	51,921	12,007	12,406	33,536	33,353	6,067	6,162
<b>Black and other</b>								
Total noninstitutional population .....	20,140	20,727	7,976	8,232	9,564	9,874	2,601	2,622
Total labor force .....	12,460	12,695	6,127	6,247	5,293	5,451	1,040	996
Percent of population .....	61.9	61.2	76.8	75.9	55.3	55.2	40.0	38.0
Civilian labor force .....	12,033	12,228	5,797	5,889	5,269	5,421	967	917
Employed .....	10,527	10,725	5,211	5,255	4,689	4,908	627	562
Agriculture .....	246	269	212	229	24	26	10	13
Nonagricultural industries .....	10,282	10,456	4,999	5,026	4,666	4,881	617	549
Unemployed .....	1,506	1,503	586	634	579	513	340	355
Percent of labor force .....	12.5	12.3	10.1	10.8	11.0	9.5	35.2	38.8
Not in labor force .....	7,680	8,033	1,849	1,985	4,271	4,423	1,561	1,626

**HOUSEHOLD DATA**

**A-7. Employment status of the noninstitutional population 16-21 years of age by race and sex**

(Numbers in thousands)

Employment status	February 1980								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
<b>TOTAL</b>									
Total noninstitutional population .....	25,118	12,692	12,426	21,210	10,762	10,448	3,908	1,931	1,977
Total labor force .....	14,972	8,180	6,792	13,148	7,200	5,948	1,824	980	844
Percent of population .....	59.6	64.4	54.7	62.0	66.9	56.9	46.7	50.8	42.7
Civilian labor force .....	14,265	7,532	6,733	12,618	6,714	5,904	1,647	818	829
Employed .....	12,035	6,257	5,778	10,917	5,724	5,194	1,117	534	584
Agriculture .....	321	268	53	291	243	48	29	25	5
Nonagricultural industries .....	11,714	5,989	5,725	10,626	5,480	5,146	1,088	509	579
Unemployed .....	2,230	1,275	955	1,701	990	710	529	284	245
Looking for full-time work .....	1,361	805	556	1,004	603	400	358	202	156
Looking for part-time work .....	868	469	399	697	387	310	171	83	89
Percent of labor force .....	15.6	16.9	14.2	13.5	14.8	12.0	32.1	34.8	29.6
Not in labor force .....	10,146	4,512	5,634	8,062	3,562	4,500	2,084	951	1,134
<b>Major activity: going to school</b>									
Civilian labor force .....	4,397	2,364	2,033	3,951	2,141	1,810	445	223	223
Employed .....	3,594	1,896	1,698	3,327	1,768	1,559	267	128	139
Agriculture .....	106	90	15	97	83	14	8	7	1
Nonagricultural industries .....	3,489	1,806	1,683	3,230	1,685	1,545	259	121	138
Unemployed .....	802	467	335	625	373	252	178	94	83
Looking for full-time work .....	88	42	46	60	29	31	27	12	15
Looking for part-time work .....	715	426	289	564	344	221	150	82	68
Percent of labor force .....	18.2	19.8	16.5	15.8	17.4	13.9	39.9	42.4	37.4
Not in labor force .....	8,009	4,046	3,963	6,357	3,206	3,151	1,652	840	812
<b>Major activity: other</b>									
Civilian labor force .....	9,868	5,168	4,700	8,667	4,573	4,094	1,201	595	606
Employed .....	8,440	4,361	4,079	7,591	3,956	3,635	850	406	444
Agriculture .....	215	177	38	194	160	34	21	18	3
Nonagricultural industries .....	8,225	4,184	4,042	7,397	3,796	3,601	829	388	441
Unemployed .....	1,428	807	620	1,076	617	459	352	190	162
Looking for full-time work .....	1,274	764	510	943	574	369	331	189	141
Looking for part-time work .....	154	44	110	133	43	90	21	1	21
Percent of labor force .....	14.5	15.6	13.2	12.4	13.5	11.2	29.3	31.9	26.7
Not in labor force .....	2,137	466	1,671	1,705	355	1,349	432	111	321

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## A-8. Full- and part-time status of the civilian labor force by sex, age, and race

[Numbers in thousands]

Race, sex, and age	February 1980								
	Full-time labor force					Part-time labor force			
	Total	Employed		Unemployed (looking for full-time work)		Total	Employed on voluntary part time <sup>1</sup>	Unemployed (looking for part-time work)	
		Full-time schedules <sup>1</sup>	Part time for economic reasons	Number	Percent of full-time labor force			Number	Percent of part-time labor force
<b>TOTAL</b>									
Both sexes, 16 years and over.....	86,977	77,994	3,490	5,493	6.3	16,280	14,780	1,500	9.2
16 to 21 years.....	8,392	6,331	699	1,361	16.2	5,873	5,004	868	14.8
16 to 19 years.....	3,905	2,727	396	781	20.0	4,613	3,874	739	16.0
16 to 17 years.....	551	288	87	176	31.9	2,807	2,308	499	17.8
18 to 19 years.....	3,353	2,439	309	606	18.1	1,805	1,566	240	13.3
20 years and over.....	83,072	75,267	3,094	4,712	5.7	11,668	10,907	761	6.5
20 to 24 years.....	12,637	10,487	715	1,435	11.4	2,360	2,139	221	9.4
25 years and over.....	70,435	64,780	2,379	3,277	4.7	9,308	8,768	540	5.8
25 to 54 years.....	58,465	53,660	1,904	2,902	5.0	6,409	5,998	410	6.4
55 years and over.....	11,970	11,120	475	375	3.1	2,899	2,770	130	4.5
<b>Males, 16 years and over.....</b>	<b>53,798</b>	<b>48,933</b>	<b>1,568</b>	<b>3,297</b>	<b>6.1</b>	<b>5,441</b>	<b>4,818</b>	<b>623</b>	<b>11.5</b>
16 to 21 years.....	4,631	3,516	310	805	17.4	2,901	2,431	469	16.2
16 to 19 years.....	2,155	1,559	175	420	19.5	2,335	1,926	409	17.5
20 years and over.....	51,643	47,373	1,393	2,876	5.6	3,106	2,892	214	6.9
20 to 24 years.....	7,107	5,874	321	911	12.8	1,007	914	94	9.3
25 years and over.....	44,536	41,498	1,072	1,965	4.4	2,099	1,979	120	5.7
25 to 54 years.....	36,716	34,174	826	1,715	4.7	844	788	56	6.6
55 years and over.....	7,820	7,325	246	249	3.2	1,255	1,191	64	5.1
<b>Females, 16 years and over.....</b>	<b>33,179</b>	<b>29,061</b>	<b>1,922</b>	<b>2,196</b>	<b>6.6</b>	<b>10,839</b>	<b>9,962</b>	<b>877</b>	<b>8.1</b>
16 to 21 years.....	3,761	2,815	389	556	14.8	2,972	2,573	399	13.4
16 to 19 years.....	1,750	1,168	221	361	20.6	2,278	1,948	330	14.5
20 years and over.....	31,429	27,894	1,701	1,835	5.8	8,561	8,015	547	6.4
20 to 24 years.....	5,530	4,613	393	523	9.5	1,353	1,225	128	9.4
25 years and over.....	25,899	23,282	1,307	1,312	5.1	7,209	6,790	420	5.6
25 to 54 years.....	21,750	19,486	1,078	1,187	5.5	5,565	5,211	354	6.4
55 years and over.....	4,149	3,796	229	125	3.0	1,644	1,579	65	4.0
<b>White</b>									
<b>Males, 16 years and over.....</b>	<b>48,006</b>	<b>44,046</b>	<b>1,363</b>	<b>2,597</b>	<b>5.4</b>	<b>4,889</b>	<b>4,377</b>	<b>512</b>	<b>10.5</b>
16 to 21 years.....	4,078	3,197	278	603	14.8	2,635	2,249	387	14.7
16 to 19 years.....	1,924	1,443	159	322	16.7	2,111	1,781	330	15.6
20 years and over.....	46,082	42,603	1,204	2,275	4.9	2,778	2,596	182	6.5
20 to 24 years.....	6,229	5,238	285	706	11.3	904	823	82	9.0
25 years and over.....	39,852	37,364	920	1,568	3.9	1,874	1,774	101	5.4
25 to 54 years.....	32,715	30,640	705	1,371	4.2	728	685	43	5.9
55 years and over.....	7,136	6,725	216	197	2.8	1,146	1,089	57	5.0
<b>Females, 16 years and over.....</b>	<b>28,321</b>	<b>25,102</b>	<b>1,567</b>	<b>1,653</b>	<b>5.8</b>	<b>9,814</b>	<b>9,085</b>	<b>729</b>	<b>7.4</b>
16 to 21 years.....	3,232	2,489	343	400	12.4	2,672	2,362	310	11.6
16 to 19 years.....	1,518	1,056	202	259	17.1	2,048	1,794	254	12.4
20 years and over.....	26,804	24,046	1,364	1,393	5.2	7,766	7,291	475	6.1
20 to 24 years.....	4,735	4,044	321	369	7.8	1,222	1,116	106	8.7
25 years and over.....	22,069	20,001	1,044	1,025	4.6	6,543	6,175	369	5.6
25 to 54 years.....	18,338	16,562	866	910	5.0	5,110	4,801	310	6.1
55 years and over.....	3,731	3,439	177	115	3.1	1,433	1,374	59	4.1
<b>Black and other</b>									
<b>Males, 16 years and over.....</b>	<b>5,792</b>	<b>4,887</b>	<b>205</b>	<b>700</b>	<b>12.1</b>	<b>553</b>	<b>441</b>	<b>111</b>	<b>20.1</b>
16 to 21 years.....	553	319	32	202	36.5	265	182	83	31.2
16 to 19 years.....	231	116	16	98	42.6	224	145	79	35.2
20 years and over.....	5,561	4,771	189	602	10.8	328	296	32	9.8
20 to 24 years.....	878	636	36	205	23.4	103	91	12	11.5
25 years and over.....	4,683	4,135	152	396	8.5	225	205	20	8.9
25 to 54 years.....	3,999	3,534	121	344	8.6	116	103	13	11.2
55 years and over.....	684	601	31	52	7.6	109	102	8	7.3
<b>Females, 16 years and over.....</b>	<b>4,858</b>	<b>3,960</b>	<b>355</b>	<b>543</b>	<b>11.2</b>	<b>1,025</b>	<b>877</b>	<b>148</b>	<b>14.5</b>
16 to 21 years.....	529	326	47	156	29.5	300	211	89	29.6
16 to 19 years.....	232	111	19	101	43.8	230	153	76	33.2
20 years and over.....	4,626	3,848	336	442	9.5	795	724	72	9.0
20 to 24 years.....	795	569	72	154	19.4	130	109	22	16.7
25 years and over.....	3,830	3,279	264	288	7.5	666	615	51	7.7
25 to 54 years.....	3,411	2,923	212	277	8.1	455	411	44	9.7
55 years and over.....	418	356	52	10	2.4	211	204	6	2.8

<sup>1</sup> Employed persons with a job but not at work are distributed proportionately among the full- and part-time employed categories.

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**A-9. Employment status of the noninstitutional population by family relationship**

[Numbers in thousands]

Family relationship	February 1980									
	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, 18 years and over</b> .....	103,257	63.3	96,264	6,993	6.8	59,954	31,763	9,608	2,801	15,783
<b>Husbands<sup>1</sup></b> .....	40,925	80.9	39,257	1,668	4.1	9,688	183	229	1,135	8,141
With employed wife .....	21,173	91.8	20,406	766	3.6	1,903	37	100	384	1,383
With unemployed wife .....	1,206	92.1	1,063	143	11.9	104	2	6	34	62
With wife not in labor force .....	16,780	70.0	16,161	619	3.7	7,181	122	86	642	6,331
<b>Wives</b> .....	24,386	50.4	23,076	1,310	5.4	23,961	21,633	316	298	1,715
With employed husband .....	21,469	57.1	20,406	1,063	5.0	16,161	15,039	265	93	765
With unemployed husband .....	910	59.5	767	143	15.7	619	576	13	11	18
With husband not in labor force .....	2,007	21.8	1,903	104	5.2	7,181	6,018	38	193	932
<b>Relatives in husband-wife families</b> .....	13,454	58.8	11,662	1,791	13.3	9,432	1,240	6,475	373	1,345
18-19 years .....	5,927	51.9	4,986	941	15.9	5,488	157	5,038	15	277
20-24 years .....	4,858	73	4,280	578	11.9	1,761	163	1,323	37	239
25 years and over .....	2,669	5	2,396	272	10.2	2,183	920	114	321	829
<b>Women who head families</b> .....	5,100	58.6	4,645	455	8.9	3,596	2,821	144	145	486
<b>Relatives in female-headed families</b> .....	4,090	53.6	3,353	736	18.0	3,547	789	1,713	273	771
18-19 years .....	1,365	46.7	1,000	365	26.7	1,556	80	1,313	10	153
20-24 years .....	1,195	67.4	965	230	19.2	577	105	335	11	125
25 years and over .....	1,530	52.0	1,388	141	9.2	1,414	604	65	252	493
<b>Persons not living in families<sup>2</sup></b> .....	15,302	61.1	14,271	1,033	6.8	9,730	5,097	731	577	3,325

<sup>1</sup> Includes a small number of single, separated, widowed, or divorced men who head families.

<sup>2</sup> Individuals living alone or with unrelated persons plus a small number of persons in secondary families.

**A-10. Unemployed persons by marital status, sex, age, and race**

Marital status, sex, age, and race	Males				Females			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
	<b>Total, 18 years and over</b> .....	3,508	3,920	6.0	6.6	2,976	3,073	7.0
<b>Married, spouse present</b> .....	1,366	1,592	3.4	4.0	1,297	1,373	5.4	5.6
<b>Widowed, divorced, or separated</b> .....	325	407	7.2	8.5	579	584	7.3	7.0
<b>Single (never married)</b> .....	1,817	1,922	13.0	13.3	1,100	1,116	10.1	10.1
<b>White, 18 years and over</b> .....	2,734	3,109	5.2	5.9	2,244	2,381	6.1	6.2
<b>Married, spouse present</b> .....	1,139	1,375	3.1	3.8	1,089	1,183	5.1	5.3
<b>Widowed, divorced, or separated</b> .....	239	289	6.6	7.4	413	440	6.5	6.5
<b>Single (never married)</b> .....	1,356	1,445	11.2	11.5	741	758	8.1	8.2
<b>Black and other, 18 years and over</b> .....	773	812	12.3	12.8	732	691	12.8	11.8
<b>Married, spouse present</b> .....	226	217	6.4	6.1	208	190	8.5	7.5
<b>Widowed, divorced, or separated</b> .....	86	118	9.7	13.6	166	144	10.6	8.8
<b>Single (never married)</b> .....	461	477	24.7	25.0	359	358	20.8	20.6
<b>Total, 20 to 64 years of age</b> .....	2,556	3,026	4.9	5.7	2,276	2,333	6.1	6.0
<b>Married, spouse present</b> .....	1,290	1,512	3.4	4.0	1,210	1,268	5.2	5.3
<b>Widowed, divorced, or separated</b> .....	301	393	7.1	8.7	531	542	7.3	7.1
<b>Single (never married)</b> .....	965	1,119	10.2	11.1	535	522	7.7	7.2
<b>White, 20 to 64 years of age</b> .....	1,979	2,414	4.3	5.1	1,708	1,821	5.3	5.4
<b>Married, spouse present</b> .....	1,071	1,314	3.1	3.8	1,011	1,092	4.9	5.1
<b>Widowed, divorced, or separated</b> .....	218	279	6.4	7.6	379	403	6.6	6.6
<b>Single (never married)</b> .....	690	819	8.5	9.5	318	328	5.6	5.5
<b>Black and other, 20 to 64 years of age</b> .....	578	612	10.3	10.7	567	510	11.1	9.6
<b>Married, spouse present</b> .....	219	198	6.4	5.8	199	176	8.4	7.2
<b>Widowed, divorced, or separated</b> .....	84	114	9.9	13.7	152	139	10.4	9.0
<b>Single (never married)</b> .....	274	301	20.1	20.5	217	194	16.8	14.9

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## A-11. Unemployed persons by occupation of last job and sex

Occupation	Thousands of persons		Unemployment rates					
			Total		Males		Females	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
Total, 16 years and over	6,484	6,993	6.4	6.8	6.0	6.6	7.0	7.0
White-collar workers	1,761	1,837	3.5	3.5	2.4	2.3	4.4	4.6
Professional and technical	347	334	2.2	2.1	1.8	1.8	2.8	2.4
Managers and administrators, except farm	223	265	2.1	2.4	1.7	1.8	3.5	3.9
Sales workers	307	335	4.9	5.2	3.9	3.8	6.2	7.0
Clerical workers	884	902	4.8	4.8	3.8	2.9	5.1	5.3
Blue-collar workers	2,797	3,286	8.3	9.7	7.8	9.3	10.5	11.3
Craft and kindred workers	849	900	6.4	6.8	6.4	6.9	5.9	5.1
Carpenters and other construction craft	479	505	11.9	12.5	11.8	12.4	(1)	(1)
All other	370	395	4.0	4.3	3.9	4.3	5.4	4.3
Operatives, except transport	1,070	1,250	9.1	10.7	7.3	9.3	11.8	12.8
Transport equipment operatives	246	329	6.5	8.6	6.8	8.9	3.4	4.9
Nonfarm laborers	633	807	13.0	16.0	13.4	16.5	10.4	11.6
Construction laborers	274	287	28.0	27.6	28.0	27.1	(1)	(1)
All other	359	520	9.2	13.0	9.2	13.4	9.7	10.0
Service workers	1,043	1,001	7.6	7.2	7.5	7.7	7.7	6.9
Private household	55	46	4.6	4.1	(1)	(1)	4.5	4.2
All other	988	954	7.9	7.5	7.5	7.8	8.2	7.3
Farm workers	122	137	5.0	5.5	3.9	4.3	10.7	12.4
No previous work experience	761	732	--	--	--	--	--	--
16 to 19 years	544	538	--	--	--	--	--	--
20 to 24 years	127	128	--	--	--	--	--	--
25 years and over	90	66	--	--	--	--	--	--

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

## A-12. Unemployed persons by industry of last job and sex

Industry	Percent distribution		Unemployment rates					
			Total		Males		Females	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
Total, 16 years and over	100.0	100.0	6.4	6.8	6.0	6.6	7.0	7.0
Nonagricultural private wage and salary workers	75.8	77.0	6.6	7.1	6.3	7.1	7.0	7.0
Mining	1.0	.8	7.1	6.3	7.8	7.0	--	1.3
Construction	13.1	12.1	17.5	17.1	18.1	17.9	10.6	6.5
Manufacturing	19.7	24.5	5.6	7.4	4.3	6.3	8.5	9.8
Durable goods	10.3	14.5	4.9	7.2	4.1	6.6	7.2	9.0
Lumber and wood products	.6	1.1	5.9	12.2	4.5	13.1	14.6	6.1
Furniture and fixtures	1.0	.5	9.9	6.7	11.3	5.8	7.5	8.6
Stone, clay, and glass products	.7	1.0	6.3	9.4	6.7	8.4	4.4	13.5
Primary metal industries	.5	1.6	2.7	8.4	2.3	7.8	5.4	12.4
Fabricated metal products	1.3	2.0	5.7	8.3	5.4	6.7	6.8	14.2
Machinery, except electrical equipment	1.1	1.5	2.7	3.6	2.1	3.7	4.9	3.2
Electrical equipment	1.8	1.5	5.1	4.4	3.4	2.7	7.2	6.4
Transportation equipment	1.9	3.9	5.2	11.8	4.9	10.8	7.0	16.3
Automobiles	1.2	3.1	6.1	17.2	5.8	15.7	7.6	24.2
Other transportation equipment	.6	.8	4.0	5.1	3.6	4.8	6.2	6.5
Instruments and related products	.3	.4	3.6	4.3	.8	2.1	6.8	7.1
Other durable goods industries	1.0	.9	8.3	8.5	6.1	4.8	11.6	13.6
Nondurable goods	9.4	10.0	6.8	7.7	4.8	5.7	9.7	10.5
Food and kindred products	2.2	2.6	7.6	10.0	5.0	7.0	13.4	16.2
Textile mill products	1.2	.9	9.2	7.4	7.3	4.5	11.3	10.5
Apparel and other textile products	2.2	2.0	10.5	10.3	12.8	10.3	9.9	10.3
Paper and allied products	.5	.7	4.3	6.6	4.2	6.2	4.5	7.6
Printing and publishing	1.2	1.5	5.2	6.6	4.4	5.6	6.6	8.2
Chemicals and allied products	.4	1.0	2.0	5.0	1.3	4.1	4.0	7.0
Rubber and plastics products	.9	.7	7.0	6.7	3.0	4.7	13.6	9.9
Other nondurable goods industries	.9	.6	8.9	7.5	7.8	4.2	11.5	11.8
Transportation and public utilities	3.1	4.0	3.8	5.1	3.8	5.4	3.8	4.1
Railroads and railway express	.3	.4	3.4	4.4	3.4	4.5	(1)	(1)
Other transportation	2.2	2.7	5.5	7.3	5.6	7.7	5.1	5.5
Communication and other public utilities	.6	.9	1.9	2.8	1.3	2.5	2.9	3.4
Wholesale and retail trade	21.7	20.0	7.6	7.5	6.3	6.2	9.0	8.9
Finance, insurance, and real estate	2.6	2.8	3.1	3.6	2.3	3.0	3.7	4.0
Service industries	14.7	12.7	5.6	5.2	5.6	5.4	5.6	5.0
Professional services	6.5	5.0	4.3	3.4	3.3	2.6	4.7	3.7
All other service industries	8.1	7.7	7.6	7.9	7.9	8.1	7.3	7.6
Agricultural wage and salary workers	2.5	2.5	12.4	13.3	9.9	11.3	22.6	21.8
All other classes of workers	9.9	10.0	2.6	2.8	2.2	2.6	3.1	3.0
No previous work experience	11.7	10.5	--	--	--	--	--	--

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

A-13. Unemployed persons by reason for unemployment, sex, age, and race

Reason for unemployment	Total unemployed		Males, 20 years and over		Females, 20 years and over		Both sexes, 16 to 19 years		White		Black and other	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
<b>UNEMPLOYMENT LEVEL</b>												
Total unemployed, in thousands.....	6,484	6,993	2,637	3,091	2,332	2,382	1,515	1,520	4,978	5,490	1,506	1,503
Job losers.....	3,106	3,643	1,793	2,226	909	1,007	404	410	2,426	2,914	680	729
On layoff.....	1,154	1,530	677	1,025	339	407	138	99	960	1,306	195	224
Other job losers.....	1,952	2,113	1,116	1,201	570	600	266	311	1,466	1,608	485	505
Job leavers.....	819	805	298	324	349	333	171	148	670	663	149	142
Reentrants.....	1,800	1,814	472	480	930	909	397	425	1,359	1,416	441	399
New entrants.....	759	730	74	61	143	133	543	537	523	497	236	233
<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.....	47.9	52.1	68.0	72.1	38.9	42.3	26.6	27.0	48.8	53.1	45.1	48.5
On layoff.....	17.8	21.9	25.7	33.2	14.5	17.1	9.1	6.5	19.3	23.8	12.9	14.9
Other job losers.....	30.1	30.2	42.3	38.9	24.4	25.2	17.5	20.5	29.5	29.3	32.2	33.6
Job leavers.....	12.6	11.5	11.3	10.5	15.0	14.0	11.3	9.7	13.5	12.1	9.9	9.4
Reentrants.....	27.8	25.9	17.9	15.5	39.9	38.2	26.2	28.0	27.3	25.8	29.3	26.5
New entrants.....	11.7	10.4	2.8	2.0	6.1	5.6	35.8	35.3	10.5	9.1	15.7	15.5
<b>UNEMPLOYMENT RATE</b>												
Total unemployment rate.....	6.4	6.8	4.9	5.6	6.1	6.0	17.3	17.9	5.6	6.0	12.5	12.3
Job loser rate <sup>1</sup> .....	3.0	3.5	3.4	4.1	2.4	2.5	4.6	4.9	2.7	3.2	5.6	5.9
On layoff.....	.8	.8	.6	.6	.9	.8	2.0	1.7	.8	.7	1.2	1.2
Other job losers.....	1.8	1.8	.9	.9	2.4	2.3	4.5	5.0	1.5	1.6	3.7	3.3
Job leaver rate <sup>1</sup> .....	.8	.7	.1	.1	.4	.3	6.2	6.3	.6	.5	2.0	1.9

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

A-14. Unemployed persons by reason for unemployment, duration, sex, and age

[Percent distribution]

Reason, sex, and age	February 1980						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over	15 to 26 weeks	27 weeks and over
<b>Total, 16 years and over.....</b>	6,993	100.0	41.2	37.9	20.9	13.5	7.4
Job losers.....	3,643	100.0	33.6	43.3	23.1	14.9	8.2
On layoff.....	1,530	100.0	39.5	46.2	14.3	10.8	3.5
Other job losers.....	2,113	100.0	29.3	41.2	29.5	17.8	11.7
Job leavers.....	805	100.0	47.5	33.6	18.9	13.6	5.2
Reentrants.....	1,814	100.0	49.0	33.1	17.9	11.4	6.4
New entrants.....	730	100.0	52.3	27.9	19.9	11.9	8.0
<b>Males, 20 years and over.....</b>	3,091	100.0	33.5	42.2	24.3	14.9	9.4
Job losers.....	2,226	100.0	30.7	45.1	24.2	15.2	9.0
On layoff.....	1,025	100.0	37.2	49.3	13.5	10.4	3.1
Other job losers.....	1,201	100.0	25.1	41.6	33.3	19.3	14.0
Job leavers.....	324	100.0	42.4	33.0	24.6	16.9	7.6
Reentrants.....	480	100.0	41.0	36.0	23.0	12.4	10.5
New entrants.....	61	100.0	(1)	(1)	(1)	(1)	(1)
<b>Females, 20 years and over.....</b>	2,382	100.0	45.9	33.8	20.3	13.2	7.1
Job losers.....	1,007	100.0	37.8	37.7	24.5	15.9	8.6
On layoff.....	407	100.0	44.6	38.3	17.1	12.7	4.4
Other job losers.....	600	100.0	33.2	37.3	29.5	18.1	11.4
Job leavers.....	333	100.0	47.8	36.7	15.5	11.1	4.4
Reentrants.....	909	100.0	53.0	30.4	16.7	10.8	5.8
New entrants.....	133	100.0	54.6	19.8	25.6	14.6	11.0
<b>Both sexes, 16 to 19 years.....</b>	1,520	100.0	49.3	35.8	15.0	11.2	3.7
Job losers.....	410	100.0	39.0	47.2	13.8	10.6	3.2
On layoff.....	99	100.0	42.6	46.8	10.6	7.9	2.8
Other job losers.....	311	100.0	37.9	47.3	14.8	11.4	3.4
Job leavers.....	148	100.0	58.0	28.0	14.0	12.1	1.8
Reentrants.....	425	100.0	49.6	35.8	14.6	11.6	3.0
New entrants.....	537	100.0	54.4	29.1	16.5	11.2	5.2

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

# HOUSEHOLD DATA

## A-15. Unemployed jobseekers by the jobsearch methods used, sex, age, and race

Sex, age, and race	February 1980								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
<b>Total, 16 years and over</b> .....	6,993	5,367	27.5	6.2	70.0	32.0	14.1	7.1	1.57
16 to 19 years .....	1,520	1,402	18.1	2.8	76.0	28.0	12.9	7.1	1.45
20 to 24 years .....	1,656	1,302	32.4	6.7	68.7	34.4	13.3	4.8	1.60
25 to 34 years .....	1,772	1,250	31.8	7.8	69.5	32.7	16.1	8.2	1.66
35 to 44 years .....	881	599	28.9	8.3	63.8	38.4	14.9	7.2	1.61
45 to 54 years .....	660	458	29.3	7.6	68.3	31.7	14.0	8.3	1.59
55 to 64 years .....	389	274	26.3	8.0	65.3	27.7	14.2	10.9	1.53
65 years and over .....	114	83	26.5	2.4	63.9	24.1	12.0	3.6	1.33
<b>Males, 16 years and over</b> .....	3,920	2,789	31.0	6.1	70.7	30.4	16.4	9.5	1.64
16 to 19 years .....	830	751	17.2	2.8	76.0	27.2	16.4	7.7	1.47
20 to 24 years .....	1,005	736	36.0	5.7	68.1	34.8	16.2	6.3	1.67
25 to 34 years .....	960	577	38.5	9.4	69.8	32.4	18.0	11.4	1.80
35 to 44 years .....	465	288	36.8	10.4	68.4	34.0	16.3	11.1	1.77
45 to 54 years .....	347	219	37.9	5.5	71.7	20.5	16.0	14.6	1.66
55 to 64 years .....	249	169	27.2	5.3	65.7	29.0	14.2	16.6	1.58
65 years and over .....	65	50	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Females, 16 years and over</b> .....	3,073	2,579	23.7	6.3	69.2	33.7	11.6	4.5	1.49
16 to 19 years .....	691	651	19.2	2.8	76.0	28.9	8.9	6.3	1.42
20 to 24 years .....	651	566	27.7	8.0	69.6	33.9	9.5	3.0	1.52
25 to 34 years .....	812	673	26.2	6.4	69.2	33.0	14.4	5.5	1.55
35 to 44 years .....	416	310	21.6	6.5	59.7	42.6	13.5	3.5	1.47
45 to 54 years .....	313	239	21.3	10.0	65.3	41.8	12.1	2.5	1.53
55 to 64 years .....	141	105	24.8	13.3	64.8	26.7	15.2	1.9	1.47
65 years and over .....	49	33	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>White, 16 years and over</b> .....	5,490	4,107	26.2	6.6	70.6	34.6	13.6	6.8	1.58
Males .....	3,109	2,141	29.1	6.4	72.1	32.1	15.8	9.4	1.65
Females .....	2,381	1,966	22.9	6.8	69.0	37.3	11.2	4.0	1.51
<b>Black and other, 16 years and over</b> .....	1,503	1,260	31.8	4.9	67.9	23.7	15.8	7.9	1.52
Males .....	812	647	37.2	4.9	66.2	25.0	18.5	9.6	1.62
Females .....	691	613	26.1	4.9	69.8	22.5	12.9	6.0	1.42

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

waiting to begin a new wage and salary job within 30 days are not actually seeking jobs. It should also be noted that the percent using each method will always total more than 100 because many jobseekers use more than one method.

NOTE: The jobseekers total is less than the total unemployed because persons on layoff or

## A-16. Unemployed jobseekers by the jobsearch methods used, sex, and reason for unemployment

Sex and reason	February 1980								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
<b>Total, 16 years and over</b> .....	6,993	5,367	27.5	6.2	70.0	32.0	14.1	7.1	1.57
Job losers .....	3,643	2,129	34.2	6.3	71.1	32.5	15.4	8.3	1.68
Job leavers .....	805	801	30.0	7.6	71.4	37.1	17.9	3.7	1.68
Reentrants .....	1,814	1,715	22.3	6.8	65.4	31.9	12.0	8.2	1.47
New entrants .....	730	723	17.0	2.8	75.9	25.4	10.9	4.3	1.36
<b>Males, 16 years and over</b> .....	3,920	2,789	31.0	6.1	70.7	30.4	16.4	9.5	1.64
Job losers .....	2,492	1,413	36.3	6.4	72.0	31.0	16.3	10.7	1.73
Job leavers .....	392	399	31.3	6.3	73.2	37.1	20.3	3.8	1.72
Reentrants .....	715	661	26.8	7.1	66.0	27.1	13.5	12.4	1.53
New entrants .....	321	317	15.5	2.2	71.3	26.8	18.3	5.0	1.39
<b>Females, 16 years and over</b> .....	3,073	2,579	23.7	6.3	69.2	33.7	11.6	4.5	1.49
Job losers .....	1,151	716	30.0	6.0	69.4	35.5	13.7	3.6	1.58
Job leavers .....	413	403	28.5	9.2	69.5	37.0	15.4	3.5	1.63
Reentrants .....	1,099	1,054	19.6	6.6	65.1	34.9	11.1	5.6	1.43
New entrants .....	409	406	18.2	3.2	79.6	24.4	5.4	3.7	1.34

NOTE: See notes, table A-15.



## A-17. Unemployed persons by duration of unemployment

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
Total, 16 years and over .....	6,484	6,993	100.0	100.0	5,030	5,493	100.0	100.0
Less than 5 weeks .....	2,683	2,878	41.4	41.2	1,855	2,030	36.9	37.0
5 to 14 weeks .....	2,393	2,653	36.9	37.9	1,986	2,192	39.5	39.9
15 weeks and over .....	1,407	1,462	21.7	20.9	1,190	1,270	23.7	23.1
5 to 10 weeks .....	1,797	1,967	27.7	28.1	1,477	1,597	29.4	29.1
11 to 14 weeks .....	596	685	9.2	9.8	508	594	10.1	10.8
15 to 26 weeks .....	847	946	13.1	13.5	693	811	13.8	14.8
27 weeks and over .....	560	516	8.6	7.4	497	459	9.9	8.4
27 to 51 weeks .....	294	291	4.5	4.2	256	264	5.1	4.8
52 weeks and over .....	266	225	4.1	3.2	241	195	4.8	3.5
Average (mean) duration, in weeks .....	11.3	10.7	--	--	12.3	11.5	--	--
Median duration, in weeks .....	6.8	6.7	--	--	7.6	7.6	--	--

## A-18. Unemployed persons by duration, sex, age, race, and marital status

Sex, age, race, and marital status	Thousands of persons					Average (mean) duration, in weeks	Median duration, in weeks	Less than 5 weeks as a percent of unemployed in group		15 weeks and over as a percent of unemployed in group	
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over			Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
	February 1980								Feb. 1979	Feb. 1980	Feb. 1979
Total, 16 years and over .....	6,993	2,878	2,653	946	516	10.7	6.7	41.4	41.2	21.7	20.9
16 to 21 years .....	2,230	1,040	842	244	104	8.8	5.6	46.3	46.6	16.8	15.6
16 to 19 years .....	1,520	749	544	171	57	8.1	5.1	48.4	49.3	16.7	15.0
20 to 24 years .....	1,656	656	683	205	113	10.6	6.6	42.2	39.6	19.7	19.2
25 to 34 years .....	1,772	712	676	267	117	10.6	7.0	41.2	40.2	22.0	21.7
35 to 44 years .....	881	353	315	125	89	12.0	7.2	38.1	40.0	26.6	24.2
45 to 54 years .....	660	244	260	96	60	12.1	7.6	33.6	37.0	28.2	23.6
55 to 64 years .....	389	108	145	69	66	16.5	10.3	30.9	27.8	28.7	34.9
65 years and over .....	114	56	31	12	15	12.7	5.4	41.0	49.0	18.8	23.6
Males, 16 years and over .....	3,920	1,432	1,606	567	316	11.5	7.6	35.9	36.5	23.4	22.5
16 to 21 years .....	1,275	568	497	152	57	9.0	6.0	44.1	44.6	17.8	16.4
16 to 19 years .....	830	398	301	107	25	8.1	5.4	45.8	47.9	16.8	15.9
20 to 24 years .....	1,005	359	445	127	74	11.0	7.1	40.4	35.7	20.9	20.0
25 to 34 years .....	960	322	409	157	73	11.7	8.2	31.9	33.5	25.4	23.9
35 to 44 years .....	465	152	189	72	51	13.0	8.4	27.5	32.7	29.7	26.6
45 to 54 years .....	347	113	148	53	33	13.2	8.4	25.9	32.7	30.4	24.7
55 to 64 years .....	249	59	96	44	49	17.9	10.9	27.1	23.6	30.0	37.8
65 years and over .....	65	29	18	7	11	12.6	6.4	26.4	(1)	22.4	(1)
Females, 16 years and over .....	3,073	1,446	1,047	380	200	9.8	5.6	47.9	47.0	19.7	18.9
16 to 21 years .....	955	471	345	92	47	8.4	5.1	49.1	49.3	15.5	14.6
16 to 19 years .....	691	352	243	64	32	8.1	4.9	52.0	50.9	16.5	13.9
20 to 24 years .....	651	297	237	79	38	9.9	5.8	44.4	45.6	18.2	18.0
25 to 34 years .....	812	390	267	111	44	9.4	5.4	50.8	48.0	18.4	19.1
35 to 44 years .....	416	201	125	53	37	10.9	5.4	47.8	48.2	23.8	21.7
45 to 54 years .....	313	131	112	43	27	10.9	6.6	42.6	41.8	25.6	22.5
55 to 64 years .....	141	49	49	25	17	13.9	8.7	36.6	35.2	26.8	29.7
65 years and over .....	49	27	14	5	4	12.8	4.6	(1)	(1)	(1)	(1)
Whites, 16 years and over .....	5,490	2,260	2,129	737	364	10.4	6.5	42.9	41.2	20.2	20.1
Males .....	3,109	1,119	1,326	445	219	11.1	7.5	37.6	36.0	21.6	21.4
Females .....	2,381	1,141	804	293	144	9.6	5.4	49.4	47.9	18.5	18.3
Black and other, 16 years and over .....	1,503	618	523	209	153	11.9	7.2	36.5	41.1	26.6	24.1
Males .....	812	313	280	122	97	13.0	7.7	29.8	38.6	29.6	26.9
Females .....	691	305	243	87	56	10.7	6.6	43.4	44.1	23.5	20.7
Males, 16 years and over:											
Married, spouse present .....	1,592	527	680	260	126	11.9	8.4	31.4	33.1	23.2	24.2
Widowed, divorced, or separated .....	407	127	170	51	59	13.9	8.6	30.7	31.2	28.7	27.0
Single (never married) .....	1,922	778	756	255	132	10.6	6.7	40.1	40.5	22.6	20.1
Females, 16 years and over:											
Married, spouse present .....	1,373	677	444	171	81	9.3	5.1	50.7	49.3	19.4	18.4
Widowed, divorced, or separated .....	584	242	200	94	49	11.6	7.0	45.3	41.4	21.5	24.4
Single (never married) .....	1,116	527	404	115	70	9.5	5.5	46.0	47.2	19.2	16.6

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

# HOUSEHOLD DATA

## A-19. Unemployed persons by duration, occupation, and industry of last job

Occupation and industry	Thousands of persons					Average (mean) duration, in weeks	Median duration, in weeks	Less than 5 weeks as a percent of unemployed in group		16 weeks and over as a percent of unemployed in group	
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over			Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
	February 1980										
<b>OCCUPATION</b>											
White-collar workers .....	1,837	790	664	245	137	10.7	6.2	43.3	43.0	25.0	20.8
Professional and managerial .....	599	220	205	110	65	13.6	7.3	39.1	36.7	29.1	29.2
Sales workers .....	335	158	116	35	26	9.2	5.4	38.2	47.2	25.6	18.1
Clerical workers .....	902	412	344	100	47	9.4	5.8	47.7	45.7	22.1	16.3
Blue-collar workers .....	3,286	1,177	1,415	454	241	11.0	7.7	37.2	35.8	20.6	21.1
Craft and kindred workers .....	900	314	410	114	62	11.2	7.5	35.5	34.9	20.5	19.5
Operatives, except transport .....	1,250	501	496	156	97	10.6	7.2	42.8	40.1	20.6	20.2
Transport equipment operatives .....	329	95	156	55	23	11.5	9.0	35.2	28.8	20.3	23.8
Nonfarm laborers .....	807	267	352	128	59	11.4	8.1	30.8	33.1	20.7	23.2
Service workers .....	1,001	469	326	134	72	10.3	5.8	45.7	46.9	20.3	20.5
<b>INDUSTRY<sup>1</sup></b>											
Agriculture .....	177	65	69	32	12	10.0	8.0	42.8	36.6	16.6	24.6
Construction .....	880	273	466	110	30	9.8	7.9	30.0	31.0	16.4	16.0
Manufacturing .....	1,721	655	660	252	154	11.6	7.7	42.4	38.0	24.1	23.6
Durable goods .....	1,019	384	391	165	79	11.2	7.8	41.6	37.7	25.9	24.0
Nondurable goods .....	702	271	270	87	75	12.1	7.6	43.3	38.5	22.1	23.1
Transportation and public utilities .....	311	111	114	61	26	12.4	8.5	37.1	35.5	23.0	27.9
Wholesale and retail trade .....	1,412	646	505	149	111	10.0	5.7	46.5	45.8	18.8	18.4
Finance and service industries .....	1,376	585	503	186	100	10.9	6.3	43.3	42.5	24.9	20.8
Public administration .....	210	85	66	43	16	12.1	7.8	33.8	40.3	34.1	28.1
No previous work experience .....	732	383	203	88	58	10.3	4.8	45.9	52.3	20.6	19.9

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

## A-20. Employed persons by sex and age

[In thousands]

Age and type of industry	Total		Males		Females	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
All industries .....	94,765	96,264	55,032	55,319	39,733	40,945
16 to 19 years .....	7,248	6,997	3,708	3,660	3,540	3,337
16 to 17 years .....	2,907	2,684	1,482	1,424	1,425	1,260
18 to 19 years .....	4,341	4,313	2,226	2,237	2,115	2,076
20 to 24 years .....	13,428	13,341	7,196	7,109	6,232	6,231
25 to 54 years .....	59,799	61,562	35,402	35,787	24,397	25,774
25 to 34 years .....	25,001	26,114	14,765	15,148	10,235	10,966
35 to 44 years .....	18,403	19,119	10,857	11,015	7,546	8,104
45 to 54 years .....	16,395	16,329	9,780	9,624	6,616	6,705
55 to 64 years .....	11,343	11,415	6,895	6,913	4,448	4,502
65 to 69 years .....	6,998	7,134	4,245	4,304	2,753	2,831
70 to 74 years .....	4,345	4,281	2,650	2,609	1,695	1,672
75 years and over .....	2,946	2,950	1,830	1,849	1,116	1,101
Nonegricultural industries .....	91,969	93,428	52,708	52,936	39,261	40,493
16 to 19 years .....	7,011	6,798	3,501	3,491	3,510	3,308
16 to 17 years .....	2,768	2,588	1,365	1,334	1,403	1,255
18 to 19 years .....	4,242	4,210	2,135	2,157	2,107	2,053
20 to 24 years .....	13,133	13,036	6,954	6,854	6,179	6,182
25 to 54 years .....	58,271	60,005	34,172	34,518	24,099	25,485
25 to 34 years .....	24,444	25,533	14,309	14,654	10,135	10,879
35 to 44 years .....	17,933	18,638	10,473	10,630	7,460	8,009
45 to 54 years .....	15,893	15,833	9,390	9,235	6,504	6,598
55 to 64 years .....	10,891	10,922	6,506	6,481	4,385	4,440
65 to 69 years .....	6,756	6,880	4,048	4,084	2,708	2,797
70 to 74 years .....	4,135	4,042	2,458	2,398	1,676	1,644
75 years and over .....	2,664	2,667	1,575	1,591	1,088	1,077
Agriculture .....	2,796	2,836	2,324	2,383	472	453
16 to 19 years .....	238	198	208	170	30	29
16 to 17 years .....	138	95	117	90	22	5
18 to 19 years .....	99	103	91	80	8	23
20 to 24 years .....	295	305	242	255	53	49
25 to 54 years .....	1,528	1,557	1,231	1,268	298	289
25 to 34 years .....	556	580	456	493	100	87
35 to 44 years .....	470	480	384	386	86	95
45 to 54 years .....	502	496	390	389	112	107
55 to 64 years .....	452	493	389	431	63	62
65 to 69 years .....	242	254	197	220	45	34
70 to 74 years .....	210	239	192	211	18	28
75 years and over .....	283	283	255	259	28	24

**A-21. Employed persons by occupation, sex, and age**  
 (In thousands)

Occupation	Total		Males, 20 years and over		Females, 20 years and over		Males, 16-19 years		Females, 16-19 years	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
	<b>TOTAL</b> .....	94,765	96,264	51,324	51,658	36,193	37,609	3,708	3,660	3,540
<b>White-collar workers</b> .....	48,911	50,525	22,511	22,929	23,902	25,116	614	696	1,883	1,785
Professional and technical.....	15,244	15,753	8,540	8,600	6,513	6,980	91	88	99	84
Health workers.....	2,812	2,914	949	926	1,840	1,973	9	4	15	12
Teachers, except college.....	3,308	3,329	938	943	2,333	2,357	7	3	30	26
Other professional and technical.....	9,124	9,510	6,653	6,731	2,340	2,650	75	81	54	46
Managers and administrators, except farm.....	10,258	10,850	7,705	7,943	2,462	2,785	50	71	40	51
Salaried workers.....	8,464	8,988	6,336	6,528	2,044	2,342	46	70	39	45
Self-employed workers in retail trade.....	870	879	587	576	281	302	2	--	1	1
Self-employed workers, except retail trade.....	923	983	783	840	136	141	3	1	1	2
Sales workers.....	5,963	6,055	3,100	3,136	2,243	2,297	229	236	391	387
Retail trade.....	3,111	3,057	1,006	978	1,554	1,560	176	160	374	360
Other industries.....	2,852	2,998	2,093	2,158	689	737	54	76	16	27
Clerical workers.....	17,447	17,866	3,166	3,249	12,685	13,054	243	301	1,352	1,263
Stenographers, typists, and secretaries.....	4,884	4,973	74	66	4,441	4,586	10	6	359	315
Other clerical workers.....	12,563	12,893	3,092	3,183	8,244	8,468	233	295	993	946
<b>Blue-collar workers</b> .....	30,927	30,527	23,175	22,835	5,269	5,404	2,062	1,932	422	356
Craft and kindred workers.....	12,505	12,346	11,276	11,168	674	701	499	437	56	41
Carpenters.....	1,172	1,090	1,093	1,036	15	15	62	38	2	1
Construction craft, except carpenters.....	2,389	2,447	2,251	2,324	25	38	106	84	7	1
Mechanics and repairers.....	3,406	3,301	3,180	3,069	43	59	183	168	2	3
Metal craft.....	1,255	1,337	1,174	1,244	29	46	44	44	8	5
Blue-collar worker supervisors, not elsewhere classified.....	1,715	1,684	1,528	1,475	177	184	9	17	2	8
All other.....	2,567	2,488	2,049	2,021	386	359	97	86	36	22
Operatives, except transport.....	10,657	10,426	5,879	5,656	3,925	3,950	603	587	251	232
Durable goods manufacturing.....	4,995	4,769	3,125	2,897	1,577	1,595	188	187	104	89
Nondurable goods manufacturing.....	3,244	3,315	1,243	1,288	1,795	1,817	103	109	102	101
Other industries.....	2,418	2,341	1,510	1,471	552	538	311	291	45	42
Transport equipment operatives.....	3,535	3,507	3,093	3,035	261	305	158	160	23	7
Drivers, motor vehicles.....	3,034	2,998	2,634	2,576	245	284	133	133	22	6
All other.....	501	509	459	460	16	21	25	28	1	1
Nonfarm laborers.....	4,230	4,248	2,927	2,976	409	448	802	748	92	76
Construction.....	705	752	593	606	10	8	96	137	5	1
Manufacturing.....	1,065	980	810	743	147	158	91	70	17	9
Other industries.....	2,460	2,516	1,524	1,627	252	282	615	541	69	65
<b>Service workers</b> .....	12,603	12,866	3,821	4,023	6,707	6,776	861	888	1,213	1,178
Private household workers.....	1,133	1,065	13	17	877	848	12	8	231	192
Service workers, except private household.....	11,470	11,801	3,808	4,006	5,830	5,928	850	880	982	986
Food service workers.....	4,158	4,296	756	848	2,179	2,220	554	537	669	690
Protective service workers.....	1,400	1,438	1,265	1,275	116	133	17	22	1	8
All other.....	5,912	6,067	1,787	1,883	3,535	3,575	279	321	312	288
<b>Farm workers</b> .....	2,324	2,347	1,816	1,872	315	313	171	144	22	18
Farmers and farm managers.....	1,348	1,397	1,217	1,247	118	132	11	18	2	2
Farm laborers and supervisors.....	976	949	599	626	198	181	159	126	20	16
Paid workers.....	786	776	578	600	90	80	109	83	10	13
Unpaid family workers.....	190	174	22	26	108	101	50	43	10	3

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## A-22. Employed persons by occupation, sex, and race

[Percent distribution]

Occupation and race	Total		Males		Females	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
<b>TOTAL</b>						
Total, 16 years and over (thousands)	94,765	96,264	55,032	55,319	39,733	40,445
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	51.6	52.5	42.0	42.7	64.9	65.7
Professional and technical	16.1	16.4	15.7	15.7	16.6	17.3
Managers and administrators, except farm	10.8	11.3	14.1	14.5	6.3	6.9
Sales workers	6.3	6.3	6.0	6.1	6.6	6.6
Clerical workers	18.4	18.6	6.2	6.4	35.3	35.0
Blue-collar workers	32.6	31.7	45.9	44.8	14.3	14.1
Craft and kindred workers	13.2	12.8	21.4	21.0	1.8	1.7
Operatives, except transport	11.2	10.8	11.8	11.3	10.5	10.7
Transport equipment operatives	3.7	3.6	5.9	5.8	.7	.8
Nonfarm laborers	4.5	4.4	6.8	6.7	1.3	1.5
Service workers	13.3	13.4	8.5	8.9	19.9	19.4
Private household workers	1.2	1.1	(1)	(1)	2.8	2.5
Other service workers	12.1	12.3	8.5	8.8	17.1	16.9
Farm workers	2.5	2.4	3.6	3.6	.8	.8
Farmers and farm managers	1.4	1.5	2.2	2.3	.3	.3
Farm laborers and supervisors	1.0	1.0	1.4	1.4	.5	.5
<b>White</b>						
Total, 16 years and over (thousands)	84,237	85,540	49,504	49,786	34,733	35,754
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	53.3	54.2	43.6	44.3	67.1	67.9
Professional and technical	16.6	16.8	16.3	16.3	17.1	17.6
Managers and administrators, except farm	11.5	12.0	14.9	15.3	6.7	7.4
Sales workers	6.7	6.7	6.4	6.5	7.1	7.1
Clerical workers	18.5	18.6	6.0	6.3	36.2	35.8
Blue-collar workers	32.2	31.1	45.1	43.8	13.9	13.5
Craft and kindred workers	13.7	13.3	21.9	21.4	1.9	1.9
Operatives, except transport	10.8	10.3	11.3	10.8	10.1	9.6
Transport equipment operatives	3.7	3.5	5.7	5.4	.7	.8
Nonfarm laborers	4.1	4.1	6.1	6.2	1.2	1.2
Service workers	11.9	12.2	7.6	8.2	18.1	17.7
Private household workers	.9	.8	(1)	(1)	2.2	1.9
Other service workers	11.0	11.3	7.6	8.1	15.9	15.8
Farm workers	2.5	2.5	3.7	3.7	.9	.9
Farmers and farm managers	1.6	1.6	2.4	2.5	.3	.4
Farm laborers and supervisors	1.0	.9	1.3	1.2	.6	.5
<b>Black and other</b>						
Total, 16 years and over (thousands)	10,527	10,725	5,528	5,533	4,999	5,191
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	38.1	38.9	27.7	27.9	49.7	50.5
Professional and technical	11.9	12.6	10.4	10.8	13.6	14.6
Managers and administrators, except farm	5.2	5.3	7.0	6.7	3.3	3.8
Sales workers	2.9	2.8	2.5	2.5	3.4	3.0
Clerical workers	18.0	18.2	7.8	7.9	29.3	29.2
Blue-collar workers	35.9	36.3	52.8	53.6	17.1	17.8
Craft and kindred workers	9.3	9.3	16.5	17.2	1.3	1.0
Operatives, except transport	14.8	15.2	16.0	15.8	13.6	14.4
Transport equipment operatives	4.4	4.9	7.8	8.9	.5	.7
Nonfarm laborers	7.3	6.9	12.5	11.7	1.7	1.7
Service workers	24.2	22.9	16.5	15.1	32.8	31.2
Private household workers	3.5	3.4	.1	.1	7.2	6.8
Other service workers	20.8	19.6	16.4	15.0	25.7	24.4
Farm workers	1.8	1.9	3.1	3.4	.4	.4
Farmers and farm managers	.3	.4	.5	.7	.1	.1
Farm laborers and supervisors	1.5	1.6	2.5	2.7	.3	.4

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

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**A-23. Employed persons by class of worker, age, and sex**

[In thousands]

Age and sex	February 1980								
	Nonagricultural industries					Agriculture			
	Wage and salary workers				Self employed	Unpaid family workers	Wage and salary workers	Self employed	Unpaid family workers
	Total	Private household workers	Government	Other					
<b>Total, 16 years and over</b> .....	96,267	1,121	15,773	69,374	6,796	364	1,158	1,498	180
16 to 19 years .....	6,698	218	496	5,984	82	19	130	22	47
16 to 17 years .....	2,537	161	152	2,224	43	9	54	11	30
18 to 19 years .....	4,161	57	344	3,759	39	10	76	10	17
20 to 24 years .....	12,681	70	1,536	11,075	332	22	202	82	21
25 to 34 years .....	23,913	134	4,481	19,298	1,560	60	313	240	27
35 to 44 years .....	16,930	155	3,664	13,111	1,609	100	203	251	26
45 to 54 years .....	14,198	195	3,191	10,812	1,543	93	131	331	34
55 to 64 years .....	9,757	201	2,026	7,530	1,114	50	122	356	16
65 to 69 years .....	6,171	110	1,322	4,740	677	32	70	172	11
70 to 74 years .....	3,586	91	704	2,791	438	18	51	184	4
75 years and over .....	2,091	148	378	1,564	556	21	56	216	10
<b>Males, 16 years and over</b> .....	48,132	82	7,748	40,302	4,768	36	967	1,347	69
16 to 19 years .....	3,433	27	207	3,199	46	11	107	20	43
16 to 17 years .....	1,304	14	83	1,207	24	6	51	11	28
18 to 19 years .....	2,130	13	124	1,993	21	6	56	9	15
20 to 24 years .....	6,605	7	657	5,941	237	11	164	77	15
25 to 34 years .....	13,588	8	2,190	11,390	1,061	5	265	222	6
35 to 44 years .....	9,498	8	1,785	7,704	1,132	--	166	219	--
45 to 54 years .....	8,115	8	1,654	6,452	1,118	2	104	285	--
55 to 64 years .....	5,686	10	1,035	4,642	795	--	109	324	--
65 to 69 years .....	3,606	3	676	2,926	478	--	63	157	--
70 to 74 years .....	2,080	6	359	1,715	317	--	45	166	--
75 years and over .....	1,207	13	220	974	377	7	52	200	6
<b>Females, 16 years and over</b> .....	38,136	1,039	8,025	29,072	2,029	328	191	151	110
16 to 19 years .....	3,264	191	289	2,784	36	8	24	2	3
16 to 17 years .....	1,233	147	69	1,018	18	3	3	--	2
18 to 19 years .....	2,031	45	220	1,767	18	4	20	1	1
20 to 24 years .....	6,076	63	879	5,134	95	11	38	5	6
25 to 34 years .....	10,325	126	2,291	7,908	499	55	48	18	21
35 to 44 years .....	7,432	147	1,879	5,407	477	99	37	32	26
45 to 54 years .....	6,083	186	1,537	4,360	424	91	28	46	33
55 to 64 years .....	4,071	191	992	2,889	319	50	13	32	17
65 to 69 years .....	2,566	106	646	1,813	199	32	7	15	12
70 to 74 years .....	1,506	85	346	1,075	120	18	6	18	5
75 years and over .....	884	135	158	591	179	14	4	16	4

**A-24. Employed persons by industry and occupation**

[In thousands]

Industry	February 1980											
	Total employed	White-collar workers				Blue-collar workers				Service workers		Farm workers
		Professional and technical workers	Managers and administrators, except farm	Sales workers	Clerical workers	Craft and kindred workers	Operatives, except transport	Transport equipment operatives	Nonfarm laborers	Private household workers	Other service workers	
<b>Total, 16 years and over:</b> .....												
<b>Agriculture</b> .....	2,836	67	36	4	61	50	13	36	209	--	13	2,347
Mining .....	907	132	82	3	108	229	270	49	22	--	11	--
Construction .....	5,765	190	767	24	438	3,122	285	162	752	--	25	--
Manufacturing .....	21,911	2,512	1,629	546	2,658	4,338	8,084	727	980	--	437	--
Durable goods .....	13,368	1,741	917	189	1,612	2,868	4,769	361	633	--	277	--
Nondurable goods .....	8,543	771	712	357	1,046	1,470	3,315	366	347	--	160	--
Transportation and public utilities .....	6,274	555	668	60	1,445	1,332	136	1,458	462	--	158	--
Wholesale and retail trade .....	19,507	373	3,869	3,988	3,517	1,414	891	830	1,203	--	3,423	--
Wholesale trade .....	3,825	140	776	931	770	328	174	421	255	--	30	--
Retail trade .....	15,683	233	3,092	3,057	2,747	1,086	717	409	948	--	3,393	--
Finance, insurance, and real estate .....	5,811	307	1,183	1,271	2,594	127	9	12	77	--	232	--
Services .....	28,110	10,570	2,004	156	5,214	1,436	674	188	398	1,065	6,406	--
Private households .....	1,179	8	--	--	12	7	1	1	46	1,065	39	--
Other service industries .....	26,931	10,562	2,004	156	5,202	1,429	673	187	352	--	6,367	--
Public administration .....	5,142	1,046	612	3	1,832	299	63	46	146	--	1,096	--

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### A-25. Employed persons with a job but not at work by reason, pay status, and sex

(In thousands)

Reason not working	All industries		Nonagricultural industries					
			Total		Wage and salary workers <sup>1</sup>			
	Feb. 1979				Feb. 1980		Paid absences <sup>2</sup>	
			Feb. 1979	Feb. 1980			Feb. 1979	Feb. 1980
Total, 16 years and over . . . . .	4,475	4,551	4,276	4,270	1,649	1,686	1,935	1,929
Vacation . . . . .	1,380	1,401	1,346	1,349	846	851	337	348
Illness . . . . .	1,537	1,638	1,512	1,578	628	646	758	763
Bad weather . . . . .	678	493	572	394	--	--	--	--
Industrial dispute . . . . .	73	130	71	130	--	--	--	--
All other reasons . . . . .	807	889	774	818	176	189	839	818
Males, 16 years and over . . . . .	2,697	2,732	2,507	2,481	1,008	998	1,054	1,057
Vacation . . . . .	812	818	783	769	517	503	161	161
Illness . . . . .	827	918	803	871	377	399	374	385
All other reasons <sup>3</sup> . . . . .	1,057	996	921	840	114	96	519	512
Females, 16 years and over . . . . .	1,778	1,819	1,769	1,789	641	689	880	871
Vacation . . . . .	567	583	563	580	328	347	176	187
Illness . . . . .	709	720	709	707	251	247	385	378
All other reasons <sup>3</sup> . . . . .	502	515	497	501	62	94	320	307

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

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

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

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

### A-26. Persons at work by type of industry and hours of work

Hours of work	February 1980					
	Thousands of persons			Percent distribution		
	All industries	Nonagricultural industries	Agriculture	All industries	Nonagricultural industries	Agriculture
Total, 16 years and over . . . . .	91,713	89,159	2,555	100.0	100.0	100.0
1-34 hours . . . . .	24,411	23,499	912	26.6	26.4	35.7
1-4 hours . . . . .	792	749	43	.9	.8	1.7
5-14 hours . . . . .	4,583	4,321	262	5.0	4.8	10.3
15-29 hours . . . . .	11,720	11,309	411	12.8	12.7	16.1
30-34 hours . . . . .	7,316	7,120	196	8.0	8.0	7.7
35 hours and over . . . . .	67,303	65,659	1,644	73.4	73.6	64.3
35-39 hours . . . . .	6,230	6,096	134	6.8	6.8	5.2
40 hours . . . . .	37,788	37,343	445	41.2	41.9	17.4
41 hours and over . . . . .	23,285	22,220	1,065	25.4	24.9	41.7
41 to 48 hours . . . . .	9,302	9,103	199	10.1	10.2	7.8
49 to 59 hours . . . . .	8,264	7,919	345	9.0	8.9	13.5
60 hours and over . . . . .	5,719	5,198	521	6.2	5.8	20.4
Average hours, total at work . . . . .	38.1	38.0	40.8	--	--	--
Average hours, workers on full-time schedules . . . . .	42.5	42.4	48.1	--	--	--

A-27. Persons at work 1 - 34 hours by usual status and reason for working less than 35 hours

(Numbers in thousands)

Reason for working less than 35 hours	February 1980					
	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 . . . . .	24,411	8,726	15,685	23,499	8,296	15,203
Economic reasons . . . . .	3,489	1,568	1,921	3,292	1,430	1,862
Slack work . . . . .	1,901	1,240	661	1,727	1,111	616
Material shortages or repairs to plant and equipment . . . . .	63	63	--	60	60	--
New job started during week . . . . .	171	171	--	169	169	--
Job terminated during week . . . . .	95	95	--	91	91	--
Could find only part-time work . . . . .	1,261	--	1,261	1,246	--	1,246
Other reasons . . . . .	20,922	7,158	13,764	20,207	6,865	13,342
Does not want, or unavailable for, full-time work . . . . .	11,474	--	11,474	11,172	--	11,172
Vacation . . . . .	752	752	--	731	731	--
Illness . . . . .	2,534	2,342	192	2,472	2,293	179
Bad weather . . . . .	967	967	--	790	790	--
Industrial dispute . . . . .	20	20	--	20	20	--
Legal or religious holiday . . . . .	1,670	1,670	--	1,670	1,670	--
Full time for this job . . . . .	1,517	--	1,517	1,457	--	1,457
All other reasons . . . . .	1,986	1,406	580	1,893	1,360	533
Average hours:						
Economic reasons . . . . .	21.7	23.8	20.0	21.8	24.1	20.1
Other reasons . . . . .	21.2	26.7	18.4	21.3	26.9	18.4
Worked 30 to 34 hours:						
Economic reasons . . . . .	1,066	670	396	1,016	629	387
Other reasons . . . . .	6,250	4,088	2,162	6,104	4,005	2,099

A-28. Nonagricultural workers by industry and full- or part-time status

(Numbers in thousands)

Industry	February 1980								Average hours, total at work	Average hours, workers on full-time schedules
	Full- or part-time status									
	Total at work	On part time for economic reasons	On voluntary part time	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> . . . . .	89,159	3,292	13,342	72,525	50,305	9,103	13,117	38.0	42.4	
Wage and salary workers . . . . .	82,610	2,882	12,126	67,602	48,129	8,543	10,930	37.8	42.0	
Construction . . . . .	4,232	213	241	3,778	2,870	420	488	38.1	40.4	
Manufacturing . . . . .	20,618	529	769	19,320	13,835	2,877	2,608	40.6	41.8	
Durable goods . . . . .	12,585	202	312	12,071	8,682	1,776	1,613	41.0	41.8	
Nondurable goods . . . . .	8,033	327	457	7,249	5,154	1,101	994	39.9	41.9	
Transportation and public utilities . . . . .	5,708	141	399	5,168	3,599	612	957	40.6	42.8	
Wholesale and retail trade . . . . .	16,776	934	4,437	11,405	7,169	1,843	2,393	35.7	43.2	
Finance, insurance, and real estate . . . . .	5,148	60	553	4,535	3,473	451	611	38.5	41.0	
Service industries . . . . .	24,383	933	5,428	18,022	13,252	1,759	3,011	35.6	41.6	
Private households . . . . .	1,079	136	560	383	276	34	73	23.7	42.9	
All other industries . . . . .	23,304	797	4,868	17,639	12,976	1,725	2,938	36.1	41.6	
Public administration . . . . .	4,916	56	289	4,571	3,496	449	626	39.6	41.2	
Self-employed workers . . . . .	6,184	402	1,037	4,745	2,066	546	2,133	40.9	48.0	
Unpaid family workers . . . . .	364	8	178	178	110	14	54	23.2	45.0	

<sup>1</sup> Includes mining, not shown separately.

# HOUSEHOLD DATA

## A-29. Persons at work in nonagricultural industries by full- or part-time status, sex, age, race, and marital status

(Numbers in thousands)

Sex, age, race, and marital status	February 1980							
	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>								
Both sexes, 16 years and over .....	89,159	3,292	13,342	72,525	50,305	22,220	38.0	42.4
16 to 21 years .....	11,321	680	4,676	5,965	4,744	1,221	29.3	40.2
16 to 19 years .....	6,549	385	3,607	2,557	2,046	511	25.6	39.7
18 to 17 years .....	2,498	86	2,151	261	225	36	17.7	37.5
18 to 19 years .....	4,051	299	1,456	2,296	1,822	474	30.4	39.9
20 years and over .....	82,609	2,907	9,735	69,967	48,257	21,710	39.0	42.5
20 to 24 years .....	12,610	692	2,003	9,915	7,495	2,420	36.6	41.2
25 years and over .....	69,999	2,214	7,731	60,054	40,763	19,291	39.5	42.7
25 to 44 years .....	42,336	1,340	4,113	36,883	24,564	12,319	40.0	42.9
45 to 64 years .....	25,216	778	2,449	21,989	15,362	6,627	39.6	42.4
65 years and over .....	2,448	97	1,168	1,183	838	345	29.1	42.5
<b>Males, 16 years and over .....</b>	<b>50,455</b>	<b>1,396</b>	<b>4,213</b>	<b>44,846</b>	<b>27,849</b>	<b>16,997</b>	<b>41.0</b>	<b>43.8</b>
16 to 21 years .....	5,766	297	2,241	3,228	2,373	855	30.8	41.2
16 to 19 years .....	3,346	168	1,761	1,417	1,050	367	27.0	40.8
18 to 17 years .....	1,287	38	1,091	158	127	31	18.8	38.7
18 to 19 years .....	2,058	129	670	1,259	922	337	32.2	41.1
20 years and over .....	47,109	1,229	2,451	43,429	26,798	16,631	42.0	43.8
20 to 24 years .....	6,633	300	859	5,474	3,766	1,708	38.4	42.4
25 years and over .....	40,477	927	1,592	37,958	23,034	14,924	42.6	44.1
25 to 44 years .....	24,259	596	532	23,131	13,606	9,525	43.3	44.4
45 to 64 years .....	14,752	278	405	14,069	8,907	5,162	42.5	43.6
65 years and over .....	1,466	53	654	759	523	236	30.0	42.3
<b>Females, 16 years and over .....</b>	<b>38,704</b>	<b>1,894</b>	<b>9,129</b>	<b>27,681</b>	<b>22,458</b>	<b>5,223</b>	<b>34.2</b>	<b>40.1</b>
16 to 21 years .....	5,555	383	2,435	2,737	2,371	366	27.8	39.0
16 to 19 years .....	3,204	217	1,846	1,141	995	146	24.0	38.3
18 to 17 years .....	1,211	48	1,060	103	97	6	16.5	35.6
18 to 19 years .....	1,993	168	786	1,039	900	139	28.5	38.5
20 years and over .....	35,500	1,679	7,283	26,538	21,458	5,080	35.1	40.2
20 to 24 years .....	5,977	392	1,144	4,441	3,729	712	34.6	39.8
25 years and over .....	29,523	1,287	6,139	22,097	17,729	4,368	35.2	40.3
25 to 44 years .....	18,077	743	3,581	13,753	10,959	2,794	35.4	40.2
45 to 64 years .....	10,463	499	2,044	7,920	6,456	1,464	35.5	40.3
65 years and over .....	982	44	514	424	315	109	27.6	42.9
<b>RACE</b>								
White .....	79,213	2,758	12,154	64,301	43,578	20,723	38.2	42.6
Males .....	45,447	1,214	3,834	40,399	24,434	15,965	41.2	44.0
Females .....	33,766	1,544	8,319	23,903	19,145	4,758	34.1	40.2
Black and other .....	9,946	532	1,188	8,226	6,729	1,497	37.0	40.6
Males .....	5,008	182	378	4,448	3,417	1,031	39.1	41.6
Females .....	4,938	350	810	3,778	3,313	465	34.8	39.5
<b>MARITAL STATUS</b>								
<b>Males, 16 years and over:</b>								
Married, spouse present .....	35,039	711	1,248	33,080	19,889	13,191	42.8	44.1
Widowed, divorced, or separated .....	3,930	165	211	3,554	2,271	1,283	41.2	43.5
Single (never married) .....	11,485	521	2,753	8,211	5,687	2,524	35.4	42.3
<b>Females, 16 years and over:</b>								
Married, spouse present .....	21,858	1,023	5,327	15,508	12,719	2,789	34.1	39.9
Widowed, divorced, or separated .....	7,372	361	1,067	5,944	4,626	1,318	36.8	40.8
Single (never married) .....	9,474	511	2,735	6,228	5,112	1,116	32.3	40.0



HOUSEHOLD DATA

A-30. Persons at work in nonfarm occupations by full- or part-time status and sex

[Numbers in thousands]

Occupational group and sex	February 1980								
	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		
<b>Total, 16 years and over</b> .....	89,596	3,321	13,407	72,868	50,511	9,126	13,231	38.0	42.4
<b>White-collar workers</b> .....	48,550	1,078	7,141	40,331	27,207	4,732	8,392	38.8	42.8
Professional and technical .....	15,173	249	1,859	13,065	8,690	1,540	2,835	39.6	42.9
Managers and administrators, except farm .....	10,391	116	503	9,772	4,740	1,390	3,642	45.0	46.6
Sales workers .....	5,764	264	1,430	4,070	2,511	557	1,002	36.0	43.5
Clerical workers .....	17,222	450	3,349	13,423	11,264	1,246	913	35.2	39.6
<b>Blue-collar workers</b> .....	28,750	1,354	2,112	25,284	17,909	3,618	3,757	39.3	41.9
Craft and kindred workers .....	11,571	406	432	10,733	7,259	1,639	1,835	40.6	42.2
Operatives, except transport .....	9,923	518	591	8,814	6,746	1,211	857	38.9	41.0
Transport equipment operatives .....	3,311	159	353	2,799	1,606	428	765	41.1	45.0
Nonfarm laborers .....	3,945	272	735	2,938	2,297	340	301	34.7	40.2
<b>Service workers</b> .....	12,296	889	4,154	7,253	5,395	776	1,082	32.1	41.9
Private household .....	1,023	120	546	357	252	36	69	23.4	42.3
Other service workers .....	11,273	769	3,608	6,896	5,144	739	1,013	32.9	41.9
<b>Males, 16 years and over</b> .....	50,783	1,417	4,239	45,127	28,010	6,432	10,685	41.0	43.8
<b>White-collar workers</b> .....	22,777	273	1,618	20,886	11,533	2,871	6,482	43.0	45.2
Craft and kindred workers .....	8,422	79	535	7,808	4,707	956	2,145	42.6	44.5
Managers and administrators, except farm .....	7,682	71	245	7,366	3,231	1,056	3,079	46.3	47.4
Sales workers .....	3,232	66	365	2,801	1,532	430	833	41.2	44.8
Clerical workers .....	3,440	57	474	2,909	2,059	430	420	38.2	41.7
<b>Blue-collar workers</b> .....	23,273	943	1,495	20,835	14,192	3,115	3,528	40.0	42.4
Craft and kindred workers .....	10,866	382	331	10,153	6,819	1,562	1,772	40.9	42.3
Operatives, except transport .....	5,945	207	318	5,420	3,847	836	737	40.2	42.0
Transport equipment operatives .....	3,011	133	209	2,669	1,524	403	742	42.2	45.1
Nonfarm laborers .....	3,450	223	637	2,590	1,999	315	276	34.8	40.3
<b>Service workers</b> .....	4,733	201	1,126	3,406	2,285	446	675	36.3	43.5
Private household .....	25	--	10	15	9	1	5	35.3	53.1
Other service workers .....	4,708	202	1,116	3,390	2,275	446	669	36.3	43.5
<b>Females, 16 years and over</b> .....	38,814	1,904	9,168	27,742	22,501	2,695	2,546	34.2	40.1
<b>White-collar workers</b> .....	25,773	805	5,523	19,445	15,673	1,862	1,910	35.1	40.2
Professional and technical .....	6,750	169	1,324	5,257	3,982	584	691	35.8	40.6
Managers and administrators, except farm .....	2,709	45	258	2,406	1,508	334	564	41.4	44.1
Sales workers .....	2,532	199	1,065	1,268	978	127	163	29.5	40.5
Clerical workers .....	13,781	393	2,875	10,513	9,204	816	493	34.5	39.0
<b>Blue-collar workers</b> .....	5,478	411	617	4,450	3,718	503	229	36.3	39.7
Craft and kindred workers .....	705	24	101	580	440	77	63	37.0	40.6
Operatives, except transport .....	3,978	312	273	3,393	2,898	375	120	37.1	39.4
Transport equipment operatives .....	299	27	144	128	80	25	23	29.5	42.3
Nonfarm laborers .....	495	49	99	347	298	25	24	34.0	40.0
<b>Service workers</b> .....	7,563	688	3,028	3,847	3,110	330	407	29.5	40.4
Private household .....	998	121	535	342	242	36	64	23.1	41.9
Other service workers .....	6,565	567	2,493	3,505	2,867	294	344	30.5	40.3

# HOUSEHOLD DATA

## A-31. Employment status of 14-15 year-olds by sex and race

(Numbers in thousands)

Employment status	February 1980								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
Civilian noninstitutional population .....	7,714	3,924	3,790	6,419	3,273	3,146	1,295	651	644
Civilian labor force .....	1,141	576	565	1,063	531	532	77	44	33
Employed .....	996	493	502	954	469	485	42	25	17
Agriculture .....	57	43	14	56	42	14	2	1	--
Nonagricultural industries .....	938	450	488	898	427	472	40	23	17
Unemployed .....	145	82	62	109	63	46	35	19	16
Unemployment rate .....	12.7	14.2	11.0	10.3	11.9	8.7	45.5	(1)	(1)
Not in labor force .....	6,574	3,348	3,226	5,356	2,742	2,614	1,218	606	611
Keeping house .....	43	12	31	35	10	24	8	2	2
Going to school .....	6,375	3,243	3,132	5,191	2,647	2,544	1,184	596	588
Unable to work .....	8	4	4	6	3	3	2	1	2
All other reasons .....	148	90	58	125	81	43	23	8	15

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

## A-32. Employed 14-15 year-olds by sex, class of worker, and occupation

Characteristics	February 1980					
	Thousands of persons			Percent distribution		
	Both sexes	Males	Females	Both sexes	Males	Females
<b>CLASS OF WORKER</b>						
<b>Total</b> .....	996	493	502	100.0	100.0	100.0
Nonagricultural industries .....	938	450	488	94.3	91.1	97.0
Wage and salary workers .....	858	396	462	86.2	80.2	91.8
Private household workers .....	313	51	262	31.5	10.3	52.1
Government workers .....	40	22	18	4.0	4.5	3.6
Other wage and salary workers .....	504	323	182	50.7	65.4	36.2
Self-employed workers .....	74	53	22	7.4	10.7	4.4
Unpaid family workers .....	7	2	5	.7	.4	1.0
Agriculture .....	57	43	14	5.7	8.7	2.8
Wage and salary workers .....	36	31	5	3.6	6.3	1.0
Self-employed workers .....	4	2	1	.4	.4	.2
Unpaid family workers .....	17	10	8	1.7	2.0	1.6
<b>OCCUPATION</b>						
<b>Total</b> .....	996	493	502	100.0	100.0	100.0
White-collar workers .....	296	202	96	29.9	40.8	19.1
Professional and technical .....	17	8	9	1.7	1.6	1.8
Managers and administrators, except farm .....	--	--	--	--	--	--
Sales workers .....	215	178	37	21.6	36.0	7.4
Clerical workers .....	66	17	49	6.6	3.4	9.7
Blue-collar workers .....	106	97	10	10.7	19.6	2.0
Craft and kindred workers .....	8	7	1	.8	1.4	.2
Operatives, except transport .....	30	24	6	3.0	4.8	1.2
Transport equipment operatives .....	3	4	--	.3	.8	--
Nonfarm laborers .....	65	62	4	6.5	12.5	.8
Service workers .....	533	151	382	53.6	30.5	75.9
Private household workers .....	300	33	268	30.2	6.7	53.3
Other service workers .....	233	118	115	23.4	23.8	22.9
Farm workers .....	58	44	14	5.8	8.9	2.8
Farmers and farm managers .....	4	3	1	.4	.6	.2
Farm laborers and supervisors .....	54	41	13	5.4	8.3	2.6

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>TOTAL</b>													
Total noninstitutional population <sup>1</sup> .....	162,633	162,909	163,008	163,260	163,469	163,685	163,891	164,106	164,468	164,682	164,898	165,101	165,298
Armed Forces <sup>1</sup> .....	2,094	2,090	2,082	2,078	2,076	2,082	2,090	2,092	2,093	2,092	2,089	2,081	2,086
Civilian noninstitutional population <sup>1</sup> .....	160,539	160,819	160,926	161,182	161,393	161,604	161,801	162,013	162,375	162,589	162,809	163,020	163,211
Civilian labor force .....	102,379	102,505	102,198	102,398	102,476	103,093	103,128	103,494	103,595	103,652	103,999	104,229	104,260
Percent of civilian population .....	63.8	63.7	63.5	63.5	63.5	63.8	63.7	63.9	63.8	63.8	63.9	63.9	63.9
Employed .....	96,496	96,623	96,254	96,495	96,652	97,184	97,004	97,504	97,474	97,608	97,912	97,804	97,953
Percent of total population .....	59.3	59.3	59.0	59.1	59.1	59.4	59.2	59.4	59.3	59.3	59.4	59.2	59.3
Agriculture .....	3,307	3,320	3,215	3,246	3,243	3,267	3,315	3,364	3,294	3,385	3,359	3,270	3,326
Nonagricultural industries .....	93,189	93,303	93,039	93,249	93,409	93,917	93,689	94,140	94,180	94,223	94,553	94,524	94,626
Unemployed .....	5,883	5,882	5,944	5,903	5,824	5,909	6,124	5,990	6,121	6,044	6,087	6,425	6,307
Unemployment rate .....	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0
Not in labor force .....	58,160	58,314	58,728	58,784	58,917	58,511	58,673	58,519	58,780	58,937	58,810	58,791	58,951
<b>Males, 20 years and over</b>													
Total noninstitutional population <sup>1</sup> .....	69,476	69,612	69,663	69,787	69,889	69,995	70,099	70,205	70,380	70,487	70,594	70,695	70,792
Civilian noninstitutional population <sup>1</sup> .....	67,816	67,939	67,997	68,123	68,227	68,319	68,417	68,522	68,697	68,804	68,940	69,047	69,140
Civilian labor force .....	54,349	54,315	54,239	54,288	54,370	54,579	54,597	54,735	54,760	54,709	54,781	54,855	55,038
Percent of civilian population .....	80.1	79.9	79.8	79.7	79.7	79.9	79.8	79.9	79.7	79.5	79.5	79.4	79.6
Employed .....	52,211	52,151	52,049	52,158	52,201	52,325	52,311	52,453	52,443	52,374	52,478	52,279	52,531
Percent of total population .....	75.1	74.9	74.7	74.7	74.7	74.8	74.6	74.7	74.5	74.3	74.3	73.9	74.2
Agriculture .....	2,329	2,350	2,295	2,301	2,305	2,327	2,375	2,377	2,371	2,438	2,427	2,387	2,435
Nonagricultural industries .....	49,882	49,801	49,754	49,857	49,896	49,998	49,936	50,072	50,072	49,936	50,051	49,892	50,096
Unemployed .....	2,138	2,164	2,190	2,130	2,169	2,254	2,286	2,282	2,317	2,335	2,303	2,577	2,507
Unemployment rate .....	3.9	4.0	4.0	3.9	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6
Not in labor force .....	13,467	13,624	13,758	13,835	13,857	13,740	13,820	13,787	13,937	14,095	14,159	14,192	14,102
<b>Females, 20 years and over</b>													
Total noninstitutional population <sup>1</sup> .....	76,440	76,589	76,645	76,782	76,896	77,014	77,127	77,245	77,429	77,547	77,666	77,779	77,890
Civilian noninstitutional population <sup>1</sup> .....	76,332	76,476	76,532	76,670	76,784	76,897	77,006	77,124	77,308	77,426	77,542	77,656	77,766
Civilian labor force .....	38,399	38,574	38,415	38,619	38,653	39,033	39,304	39,239	39,362	39,445	39,659	39,878	39,857
Percent of civilian population .....	50.3	50.4	50.2	50.4	50.3	50.8	51.0	50.9	50.9	50.9	51.1	51.4	51.3
Employed .....	36,197	36,362	36,216	36,411	36,457	36,873	37,000	37,075	37,112	37,248	37,402	37,574	37,604
Percent of total population .....	47.4	47.5	47.3	47.4	47.4	47.9	48.0	48.0	47.9	48.0	48.2	48.3	48.3
Agriculture .....	593	595	572	577	583	585	600	628	572	612	582	540	567
Nonagricultural industries .....	35,604	35,767	35,644	35,834	35,874	36,288	36,400	36,447	36,540	36,636	36,820	37,034	37,037
Unemployed .....	2,202	2,212	2,199	2,208	2,196	2,160	2,304	2,164	2,250	2,197	2,257	2,304	2,254
Unemployment rate .....	5.7	5.7	5.7	5.7	5.7	5.5	5.9	5.5	5.7	5.6	5.7	5.8	5.7
Not in labor force .....	37,933	37,902	38,117	38,051	38,131	37,864	37,702	37,885	37,946	37,981	37,883	37,778	37,909
<b>Both sexes, 16-19 years</b>													
Total noninstitutional population <sup>1</sup> .....	16,717	16,709	16,700	16,692	16,684	16,677	16,665	16,655	16,659	16,648	16,638	16,627	16,616
Civilian noninstitutional population <sup>1</sup> .....	16,391	16,404	16,397	16,389	16,381	16,387	16,377	16,367	16,370	16,360	16,326	16,317	16,305
Civilian labor force .....	9,631	9,616	9,544	9,491	9,453	9,481	9,227	9,520	9,473	9,498	9,559	9,497	9,365
Percent of civilian population .....	58.8	58.6	58.2	57.9	57.7	57.9	56.3	58.2	57.9	58.1	58.6	58.2	57.4
Employed .....	8,088	8,110	7,989	7,926	7,994	7,986	7,693	7,976	7,919	7,986	8,032	7,952	7,818
Percent of total population .....	48.4	48.5	47.8	47.5	47.9	47.9	46.2	47.9	47.5	48.0	48.3	47.8	47.1
Agriculture .....	385	375	348	368	355	355	340	359	351	335	350	344	325
Nonagricultural industries .....	7,703	7,735	7,641	7,558	7,639	7,631	7,353	7,617	7,568	7,651	7,682	7,608	7,493
Unemployed .....	1,543	1,506	1,555	1,565	1,459	1,495	1,534	1,544	1,554	1,512	1,527	1,545	1,547
Unemployment rate .....	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5
Not in labor force .....	6,760	6,788	6,853	6,898	6,928	6,906	7,150	6,847	6,897	6,862	6,767	6,820	6,940

<sup>1</sup> The population and Armed Forces figures are not adjusted for seasonal variations.

NOTE: Detail for the household data shown in tables A-33 through A-42 will not necessarily add to totals, because of the independent seasonal adjustment of the various series.

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-34. Full- and part-time status of the civilian labor force, seasonally adjusted**

[Numbers in thousands]

Full- and part-time employment status	1979												1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>FULL TIME</b>														
Total, 16 years and over:														
Civilian labor force	87,264	87,408	87,412	87,397	87,501	87,749	87,685	88,134	88,394	88,469	88,576	88,627	88,747	
Employed	82,699	82,869	82,775	82,864	82,986	83,132	82,958	83,419	83,598	83,699	83,785	83,581	83,805	
Unemployed	4,565	4,539	4,637	4,533	4,515	4,617	4,727	4,715	4,796	4,770	4,791	5,046	4,942	
Unemployment rate	5.2	5.2	5.3	5.2	5.2	5.3	5.4	5.3	5.4	5.4	5.4	5.7	5.6	
<b>PART TIME</b>														
Total, 16 years and over:														
Civilian labor force	15,147	15,024	14,806	14,962	15,064	15,448	15,535	15,275	15,165	15,158	15,411	15,666	15,551	
Employed	13,810	13,673	13,515	13,573	13,762	14,161	14,163	13,987	13,822	13,906	14,102	14,302	14,168	
Unemployed	1,337	1,351	1,291	1,389	1,302	1,287	1,372	1,288	1,343	1,252	1,309	1,364	1,383	
Unemployment rate	8.8	9.0	8.7	9.3	8.6	8.3	8.8	8.4	8.9	8.3	8.5	8.7	8.9	

NOTE: Persons on part-time schedules for economic reasons are included in the full-time employed category; unemployed persons are allocated by whether seeking full- or part-time work.

**A-35. Employment status by race, sex, and age, seasonally adjusted**

[Numbers in thousands]

Characteristics	1979												1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>WHITE</b>														
Total, 16 years and over:														
Civilian labor force	90,250	90,260	89,996	90,120	90,215	90,659	90,759	91,082	91,147	91,242	91,579	91,852	91,977	
Employed	85,786	85,754	85,497	85,632	85,775	86,120	85,976	86,425	86,454	86,571	86,894	86,895	87,081	
Unemployed	4,464	4,506	4,499	4,488	4,440	4,539	4,783	4,657	4,693	4,671	4,685	4,957	4,896	
Unemployment rate	4.9	5.0	5.0	5.0	4.9	5.0	5.3	5.1	5.1	5.1	5.1	5.4	5.3	
Males, 20 years and over:														
Civilian labor force	48,545	48,460	48,400	48,421	48,525	48,634	48,646	48,727	48,752	48,754	48,811	48,964	49,170	
Employed	46,908	46,789	46,721	46,797	46,831	46,873	46,833	46,920	46,948	46,939	47,025	46,950	47,205	
Unemployed	1,637	1,671	1,679	1,624	1,694	1,761	1,813	1,807	1,804	1,815	1,786	2,014	1,964	
Unemployment rate	3.4	3.4	3.5	3.4	3.5	3.6	3.7	3.7	3.7	3.7	3.7	4.1	4.0	
Females, 20 years and over:														
Civilian labor force	33,151	33,238	33,122	33,286	33,288	33,604	33,879	33,858	33,946	33,979	34,205	34,411	34,444	
Employed	31,489	31,569	31,479	31,617	31,649	31,986	32,126	32,223	32,249	32,310	32,492	32,654	32,668	
Unemployed	1,662	1,669	1,643	1,669	1,639	1,618	1,753	1,635	1,697	1,669	1,713	1,757	1,776	
Unemployment rate	5.0	5.0	5.0	5.0	4.9	4.8	5.2	4.8	5.0	4.9	5.0	5.1	5.2	
Both sexes, 16 to 19 years:														
Civilian labor force	8,554	8,562	8,474	8,413	8,402	8,421	8,234	8,497	8,449	8,509	8,563	8,477	8,363	
Employed	7,389	7,396	7,297	7,218	7,295	7,261	7,017	7,282	7,257	7,322	7,377	7,291	7,207	
Unemployed	1,165	1,166	1,177	1,195	1,107	1,160	1,217	1,215	1,192	1,187	1,186	1,186	1,156	
Unemployment rate	13.6	13.6	13.9	14.2	13.2	13.8	14.8	14.3	14.1	13.9	13.9	14.0	13.8	
<b>BLACK AND OTHER</b>														
Total, 16 years and over:														
Civilian labor force	12,177	12,238	12,191	12,219	12,260	12,386	12,343	12,404	12,512	12,391	12,432	12,453	12,362	
Employed	10,746	10,860	10,767	10,816	10,887	11,023	10,982	11,063	11,076	11,044	11,024	10,979	10,937	
Unemployed	1,431	1,378	1,424	1,403	1,373	1,363	1,361	1,341	1,436	1,347	1,408	1,474	1,424	
Unemployment rate	11.8	11.3	11.7	11.5	11.2	11.0	11.0	10.8	11.5	10.9	11.3	11.8	11.5	
Males, 20 years and over:														
Civilian labor force	5,830	5,852	5,823	5,847	5,889	5,961	5,956	5,989	6,003	5,927	5,954	5,925	5,914	
Employed	5,327	5,340	5,324	5,358	5,414	5,463	5,471	5,510	5,486	5,429	5,439	5,358	5,368	
Unemployed	503	512	499	489	475	498	485	479	517	498	515	567	546	
Unemployment rate	8.6	8.7	8.6	8.4	8.1	8.4	8.1	8.0	8.6	8.4	8.6	9.6	9.2	
Females, 20 years and over:														
Civilian labor force	5,260	5,333	5,296	5,309	5,357	5,398	5,395	5,388	5,476	5,455	5,467	5,493	5,414	
Employed	4,711	4,799	4,739	4,779	4,799	4,857	4,842	4,858	4,920	4,937	4,921	4,944	4,928	
Unemployed	549	534	557	530	558	541	553	530	556	518	546	549	486	
Unemployment rate	10.4	10.0	10.5	10.0	10.4	10.0	10.3	9.8	10.2	9.5	10.0	10.0	9.0	
Both sexes, 16 to 19 years:														
Civilian labor force	1,087	1,053	1,072	1,063	1,014	1,027	992	1,027	1,033	1,009	1,011	1,035	1,034	
Employed	708	721	704	679	674	703	669	695	670	678	664	677	642	
Unemployed	379	332	368	384	340	324	323	332	363	331	347	358	392	
Unemployment rate	34.9	31.5	34.3	36.1	33.5	31.5	32.6	32.3	35.1	32.8	34.3	34.6	37.9	

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-36. Major unemployment indicators, seasonally adjusted**

(Unemployment rates)

Selected categories	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>CHARACTERISTICS</b>													
Total (all civilian workers) .....	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0
Males, 20 years and over .....	3.9	4.0	4.0	3.9	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6
Females, 20 years and over .....	5.7	5.7	5.7	5.7	5.7	5.5	5.9	5.5	5.7	5.6	5.7	5.8	5.7
Both sexes, 16-19 years .....	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5
White .....	4.9	5.0	5.0	5.0	4.9	5.0	5.3	5.1	5.1	5.1	5.1	5.4	5.3
Black and other .....	11.8	11.3	11.7	11.5	11.2	11.0	11.0	10.8	11.5	10.9	11.3	11.8	11.5
Married men, spouse present .....	2.6	2.6	2.7	2.5	2.7	2.8	2.9	2.9	2.9	2.9	2.8	3.4	3.1
Married women, spouse present .....	5.3	5.2	5.2	5.2	5.1	4.9	5.3	4.8	5.2	4.8	5.0	5.2	5.4
Women who head families .....	8.3	8.2	8.3	8.6	9.0	8.1	7.9	7.7	8.4	8.4	8.4	9.2	8.5
Full-time workers .....	5.2	5.2	5.3	5.2	5.2	5.3	5.4	5.3	5.4	5.4	5.4	5.7	5.6
Part-time workers .....	8.8	9.0	8.7	9.3	8.6	8.3	8.8	8.4	8.9	8.3	8.5	8.7	8.9
Unemployed 15 weeks and over <sup>1</sup> .....	1.2	1.3	1.2	1.2	1.1	1.0	1.1	1.1	1.2	1.1	1.2	1.3	1.2
Labor force time lost <sup>2</sup> .....	6.2	6.2	6.4	6.3	6.3	6.4	6.4	6.2	6.4	6.4	6.4	6.7	6.6
<b>OCCUPATION</b>													
White-collar workers .....	3.4	3.3	3.3	3.2	3.4	3.3	3.5	3.3	3.4	3.2	3.3	3.4	3.4
Professional and technical .....	2.4	2.2	2.3	2.1	2.5	2.5	2.5	2.4	2.7	2.4	2.3	2.2	2.3
Managers and administrators, except farm .....	2.0	2.1	2.3	2.2	2.1	2.0	2.3	2.2	2.2	1.9	2.0	1.9	2.2
Sales workers .....	4.2	4.1	4.0	4.0	4.4	3.5	4.0	3.8	3.8	3.7	3.8	4.4	4.5
Clerical workers .....	4.7	4.8	4.5	4.5	4.6	4.5	4.9	4.5	4.7	4.4	4.6	4.8	4.7
Blue-collar workers .....	6.5	6.6	6.9	6.8	6.6	6.8	7.3	7.1	7.2	7.5	7.2	8.0	7.7
Craft and kindred workers .....	4.5	4.5	4.4	4.2	4.3	4.4	4.7	4.3	4.6	4.9	4.4	4.9	4.8
Operatives, except transport .....	7.8	7.8	8.5	8.2	7.7	8.3	8.9	9.0	9.1	9.0	9.0	9.9	9.2
Transport equipment operatives .....	5.0	5.2	5.9	5.4	5.7	5.1	6.2	6.1	5.6	5.2	5.0	6.9	6.7
Nonfarm laborers .....	9.7	10.2	10.6	11.1	10.6	11.0	11.3	11.0	10.7	12.2	12.2	12.3	12.0
Service workers .....	7.3	7.3	7.3	7.2	7.2	7.1	7.1	6.7	6.8	6.6	6.6	6.9	6.9
Farm workers .....	3.4	3.3	3.4	3.6	3.2	4.2	3.9	4.1	4.3	4.5	4.3	4.4	3.9
<b>INDUSTRY</b>													
Nonegricultural private wage and salary workers <sup>3</sup> .....	5.6	5.6	5.7	5.7	5.6	5.7	6.0	5.8	5.9	5.8	5.8	6.2	6.0
Construction .....	10.9	10.1	10.5	10.0	10.0	10.0	10.1	9.6	9.9	10.2	10.3	10.8	10.5
Manufacturing .....	4.9	5.2	5.3	5.4	5.4	5.7	5.9	6.0	6.0	5.9	5.9	6.7	6.4
Durable goods .....	4.2	4.4	4.7	4.4	4.9	5.4	5.4	5.3	5.5	5.6	5.5	6.7	6.3
Nondurable goods .....	5.9	6.4	6.3	6.9	6.3	6.2	6.8	7.1	6.8	6.3	6.4	6.8	6.7
Transportation .....	3.2	3.9	3.0	3.6	3.1	3.8	3.7	4.0	3.8	4.2	4.1	4.4	4.4
Wholesale and retail trade .....	6.5	6.3	6.6	6.4	6.7	6.3	6.5	6.4	6.4	6.5	6.4	6.6	6.4
Finance and service industries .....	4.8	4.8	4.8	4.9	4.7	4.9	5.2	4.7	4.9	4.6	4.7	4.6	4.6
Government workers .....	3.8	4.1	3.7	3.6	3.6	3.6	3.7	3.3	4.0	3.6	3.6	3.8	4.0
Agricultural wage and salary workers .....	8.6	8.0	8.7	9.3	7.8	9.7	9.9	10.0	9.9	10.1	9.4	10.3	9.2

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

as a percent of potentially available labor force hours.

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

<sup>3</sup> Includes mining, not shown separately.

**A-37. Unemployed persons by duration of unemployment, seasonally adjusted**

(Numbers in thousands)

Weeks of unemployment	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>DURATION</b>													
Both sexes, 16 years and over:													
Less than 5 weeks .....	2,779	2,769	2,876	2,823	2,880	2,820	3,168	2,778	2,955	2,919	2,916	3,184	2,995
5 to 14 weeks .....	1,877	1,860	1,884	1,919	1,808	1,934	1,738	2,035	1,963	1,869	1,966	1,907	2,081
15 weeks and over .....	1,239	1,291	1,223	1,212	1,152	1,067	1,185	1,152	1,195	1,191	1,230	1,334	1,286
15 to 26 weeks .....	700	729	687	705	656	615	658	644	678	660	711	795	790
27 weeks and over .....	539	562	536	507	496	452	527	508	517	531	519	539	496
Average (mean) duration, in weeks .....	11.3	11.8	11.0	10.9	10.5	10.1	10.7	10.7	10.5	10.6	10.5	10.5	10.7
Median duration, in weeks .....	5.9	5.8	5.4	5.6	5.6	6.0	4.9	5.8	5.5	5.3	5.5	5.2	5.8
<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 .....	47.1	46.8	48.1	47.4	49.3	48.4	52.0	46.6	48.3	48.8	47.7	49.6	47.1
5 to 14 weeks .....	31.8	31.4	31.5	32.2	31.0	33.2	28.5	34.1	32.1	31.3	32.2	29.7	32.7
15 weeks and over .....	21.0	21.8	20.4	20.4	19.7	18.3	19.5	19.3	19.5	19.9	20.1	20.8	20.2
15 to 26 weeks .....	11.9	12.3	11.5	11.8	11.2	10.6	10.8	10.8	11.1	11.0	11.6	12.4	12.4
27 weeks and over .....	9.1	9.5	9.0	8.5	8.5	7.8	8.7	8.5	8.5	8.9	8.5	8.4	7.8

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-38. Rates of unemployment by sex and age, seasonally adjusted**

Sex and age	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>Total, 16 years and over.....</b>	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0
16 to 19 years .....	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5
16 to 17 years .....	18.5	18.5	18.7	18.9	17.5	17.3	18.5	16.9	18.4	17.3	18.0	19.0	18.7
18 to 19 years .....	14.3	13.5	14.3	15.0	14.4	14.5	15.4	15.6	15.0	14.7	14.5	14.0	15.1
20 to 24 years .....	8.6	8.8	8.6	8.9	8.9	9.1	9.3	9.2	9.6	8.8	9.8	10.1	9.5
25 years and over .....	3.9	3.9	4.0	3.9	3.9	3.9	4.0	3.9	4.0	4.0	3.8	4.2	4.1
25 to 54 years .....	4.1	4.1	4.2	4.0	4.1	4.0	4.2	4.1	4.2	4.3	4.1	4.4	4.5
55 years and over .....	3.0	3.1	3.1	3.1	2.9	3.2	3.1	2.9	3.0	2.7	2.7	3.5	2.8
<b>Males, 16 years and over.....</b>	5.0	5.0	5.1	5.0	4.9	5.1	5.2	5.2	5.2	5.2	5.2	5.7	5.5
16 to 19 years .....	16.1	15.8	16.0	16.1	14.5	15.4	16.3	16.1	15.7	15.8	15.6	16.2	15.6
16 to 17 years .....	19.2	18.9	17.9	18.9	16.8	16.1	18.0	16.7	17.1	17.8	17.9	19.0	18.0
18 to 19 years .....	14.2	13.6	14.1	14.0	14.0	14.8	15.1	15.3	14.4	14.0	13.6	13.9	14.1
20 to 24 years .....	8.1	8.3	8.0	8.2	8.3	8.8	8.8	8.8	9.5	8.4	9.4	10.4	9.9
25 years and over .....	3.2	3.2	3.3	3.1	3.2	3.3	3.4	3.3	3.4	3.5	3.2	3.7	3.6
25 to 54 years .....	3.3	3.3	3.3	3.2	3.2	3.4	3.5	3.6	3.5	3.8	3.4	3.8	3.8
55 years and over .....	2.8	2.8	3.0	2.8	3.1	3.3	3.1	2.8	2.8	2.6	2.6	3.5	2.6
<b>Females, 16 years and over.....</b>	6.8	6.8	6.9	6.9	6.8	6.6	7.0	6.6	6.9	6.6	6.8	6.8	6.8
16 to 19 years .....	15.9	15.5	16.6	16.9	16.5	16.2	17.0	16.4	17.2	16.1	16.4	16.3	17.6
16 to 17 years .....	17.7	18.0	19.6	18.8	18.3	18.6	19.0	17.2	19.8	16.7	18.0	19.1	19.5
18 to 19 years .....	14.5	13.3	14.5	16.0	14.9	14.2	15.7	15.9	15.6	15.5	15.5	14.2	16.2
20 to 24 years .....	9.3	9.5	9.4	9.7	9.7	9.4	9.8	9.6	9.7	9.3	10.2	9.8	9.1
25 years and over .....	5.0	4.9	4.9	4.9	4.8	4.7	4.9	4.6	4.9	4.7	4.7	4.9	4.9
25 to 54 years .....	5.4	5.3	5.3	5.2	5.2	5.0	5.3	5.0	5.2	5.0	5.1	5.2	5.4
55 years and over .....	3.3	3.6	3.2	3.6	2.8	3.1	3.2	2.9	3.4	2.9	2.9	3.4	3.0

**A-39. Unemployed persons by reason for unemployment, seasonally adjusted**

[Numbers in thousands]

Reason for unemployment	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>NUMBER OF UNEMPLOYED</b>													
<b>Both sexes, 16 years and over:</b>													
Job losers .....	2,475	2,457	2,520	2,356	2,449	2,526	2,680	2,632	2,731	2,729	2,728	2,988	2,907
On layoff .....	779	791	839	725	816	797	915	855	929	987	944	1,019	1,031
Other job losers .....	1,696	1,666	1,681	1,631	1,633	1,729	1,765	1,777	1,802	1,742	1,784	1,969	1,876
Job leavers .....	828	864	847	940	857	846	875	825	835	845	800	779	813
Reentrants .....	1,766	1,766	1,778	1,767	1,753	1,762	1,788	1,760	1,762	1,698	1,771	1,797	1,784
New entrants .....	858	808	800	824	781	726	745	801	804	736	858	811	827
<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 .....	41.8	41.7	42.4	40.0	41.9	43.1	44.0	43.7	44.5	45.4	44.3	46.9	45.9
On layoff .....	13.1	13.4	14.1	12.3	14.0	13.6	15.0	14.2	15.2	16.4	15.3	16.0	16.3
Other job losers .....	28.6	28.3	28.3	27.7	28.0	29.5	29.0	29.5	29.4	29.0	29.0	30.9	29.6
Job leavers .....	14.0	14.7	14.2	16.0	14.7	14.4	14.4	13.7	13.6	14.1	13.0	12.2	12.8
Reentrants .....	29.8	30.0	29.9	30.0	30.0	30.1	29.4	29.2	28.7	28.3	28.8	28.2	28.2
New entrants .....	14.5	13.7	13.5	14.0	13.4	12.4	12.2	13.3	13.1	12.3	13.9	12.7	13.1
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers .....	2.4	2.4	2.5	2.3	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.9	2.8
Job leavers .....	.8	.8	.8	.9	.8	.8	.8	.8	.8	.8	.8	.7	.8
Reentrants .....	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7
New entrants .....	.8	.8	.8	.8	.8	.7	.7	.8	.8	.7	.8	.8	.8

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-40. Employed persons by sex and age, seasonally adjusted**

[In thousands]

Sex and age	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>Total, 16 years and over</b> .....	96,496	96,623	96,254	96,495	96,652	97,184	97,004	97,504	97,474	97,608	97,912	97,804	97,952
16 to 19 years .....	8,088	8,110	7,989	7,926	7,994	7,986	7,693	7,976	7,919	7,986	8,032	7,952	7,818
16 to 17 years .....	3,345	3,320	3,275	3,212	3,252	3,242	3,048	3,335	3,251	3,315	3,320	3,247	3,120
18 to 19 years .....	4,747	4,781	4,723	4,699	4,704	4,725	4,623	4,665	4,674	4,694	4,717	4,726	4,722
20 to 24 years .....	13,943	13,914	13,937	13,867	13,859	13,910	13,849	13,949	13,875	13,920	13,837	13,819	13,846
25 years and over .....	74,465	74,575	74,296	74,711	74,864	75,290	75,436	75,616	75,728	75,650	76,030	76,080	76,295
25 to 54 years .....	60,070	60,236	60,092	60,331	60,552	60,986	61,082	61,208	61,302	61,281	61,686	61,799	61,815
55 years and over .....	14,393	14,364	14,241	14,311	14,305	14,304	14,399	14,381	14,417	14,368	14,350	14,292	14,464
<b>Males, 16 years and over</b> .....	56,476	56,449	56,294	56,372	56,477	56,570	56,408	56,714	56,629	56,580	56,734	56,486	56,732
16 to 19 years .....	4,265	4,298	4,245	4,214	4,276	4,245	4,097	4,261	4,186	4,206	4,256	4,207	4,201
16 to 17 years .....	1,777	1,784	1,774	1,745	1,754	1,743	1,632	1,839	1,758	1,755	1,783	1,745	1,713
18 to 19 years .....	2,479	2,509	2,473	2,470	2,489	2,485	2,445	2,452	2,430	2,462	2,477	2,478	2,494
20 to 24 years .....	7,568	7,519	7,593	7,519	7,530	7,510	7,498	7,590	7,531	7,533	7,498	7,441	7,477
25 years and over .....	44,640	44,636	44,418	44,658	44,681	44,806	44,818	44,912	44,924	44,796	44,966	44,883	45,076
25 to 54 years .....	35,760	35,828	35,701	35,857	35,921	36,020	35,962	36,052	36,100	36,020	36,206	36,161	36,136
55 years and over .....	8,868	8,840	8,746	8,802	8,767	8,789	8,831	8,844	8,793	8,782	8,759	8,723	8,904
<b>Females, 16 years and over</b> .....	40,020	40,174	39,960	40,123	40,175	40,614	40,596	40,790	40,845	41,028	41,178	41,318	41,221
16 to 19 years .....	3,823	3,812	3,744	3,712	3,718	3,741	3,596	3,715	3,733	3,780	3,776	3,744	3,617
16 to 17 years .....	1,568	1,536	1,501	1,467	1,498	1,499	1,416	1,496	1,493	1,560	1,537	1,502	1,401
18 to 19 years .....	2,268	2,272	2,250	2,229	2,215	2,240	2,178	2,213	2,244	2,232	2,240	2,248	2,228
20 to 24 years .....	6,375	6,395	6,344	6,348	6,329	6,400	6,351	6,359	6,344	6,387	6,339	6,377	6,369
25 years and over .....	29,825	29,939	29,878	30,053	30,183	30,484	30,618	30,704	30,804	30,854	31,064	31,197	31,225
25 to 54 years .....	24,310	24,408	24,391	24,474	24,631	24,966	25,120	25,156	25,202	25,261	25,480	25,638	25,679
55 years and over .....	5,525	5,524	5,495	5,509	5,538	5,515	5,568	5,537	5,624	5,586	5,591	5,569	5,560

**A-41. Unemployed persons by sex and age, seasonally adjusted**

[In thousands]

Sex and age	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>Total, 16 years and over</b> .....	5,883	5,882	5,944	5,903	5,824	5,909	6,124	5,990	6,121	6,044	6,087	6,425	6,307
16 to 19 years .....	1,543	1,506	1,555	1,565	1,459	1,495	1,534	1,544	1,554	1,512	1,527	1,545	1,547
16 to 17 years .....	759	754	754	747	690	676	690	680	732	692	728	764	716
18 to 19 years .....	794	745	790	829	791	803	841	860	825	811	802	772	841
20 to 24 years .....	1,315	1,346	1,316	1,355	1,359	1,386	1,415	1,413	1,470	1,346	1,505	1,554	1,458
25 years and over .....	3,021	3,025	3,071	2,997	3,005	3,041	3,155	3,036	3,140	3,168	3,040	3,326	3,300
25 to 54 years .....	2,581	2,572	2,606	2,520	2,562	2,567	2,697	2,647	2,698	2,744	2,650	2,818	2,899
55 years and over .....	442	460	456	465	434	478	467	422	449	403	400	512	412
<b>Males, 16 years and over</b> .....	2,958	2,972	2,999	2,941	2,893	3,027	3,083	3,098	3,098	3,124	3,089	3,392	3,282
16 to 19 years .....	820	808	809	811	724	773	797	816	781	789	786	815	776
16 to 17 years .....	422	416	387	407	355	334	358	370	363	380	390	410	377
18 to 19 years .....	410	395	407	403	404	431	436	442	410	402	391	399	411
20 to 24 years .....	664	678	659	674	682	723	724	734	789	692	782	860	817
25 years and over .....	1,463	1,479	1,525	1,451	1,483	1,531	1,575	1,552	1,565	1,642	1,505	1,719	1,680
25 to 54 years .....	1,206	1,219	1,237	1,173	1,201	1,252	1,299	1,327	1,322	1,405	1,282	1,410	1,435
55 years and over .....	251	253	272	258	276	302	283	254	254	237	231	314	242
<b>Females, 16 years and over</b> .....	2,925	2,910	2,945	2,962	2,931	2,882	3,041	2,892	3,023	2,920	2,998	3,034	3,025
16 to 19 years .....	723	698	746	754	735	722	737	728	773	723	741	730	771
16 to 17 years .....	337	338	367	340	335	342	332	310	369	312	338	354	339
18 to 19 years .....	384	350	383	426	387	372	405	418	415	409	411	373	430
20 to 24 years .....	651	668	657	681	677	663	691	679	681	654	723	694	641
25 years and over .....	1,558	1,546	1,546	1,546	1,522	1,510	1,580	1,484	1,575	1,526	1,535	1,607	1,621
25 to 54 years .....	1,375	1,353	1,369	1,347	1,361	1,315	1,398	1,320	1,376	1,339	1,368	1,408	1,465
55 years and over .....	191	207	184	207	158	176	184	168	195	166	169	198	170

**HOUSEHOLD DATA  
SEASONALLY ADJUSTED**

**A-42. Employed persons by selected social and economic categories, seasonally adjusted**

(In thousands)

Selected categories	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>CHARACTERISTICS</b>													
Total, 16 years and over .....	96,496	96,623	96,254	96,495	96,652	97,184	97,004	97,504	97,474	97,608	97,912	97,804	97,953
Married men, spouse present .....	39,291	39,193	38,910	39,045	39,079	39,176	39,180	39,198	39,124	38,845	38,924	38,749	38,917
Married women, spouse present .....	22,522	22,605	22,376	22,547	22,664	22,908	22,869	22,937	22,919	22,940	23,027	23,111	23,178
<b>OCCUPATION</b>													
White-collar workers .....	48,836	48,996	49,061	49,136	49,192	49,536	49,663	49,816	49,738	49,912	49,911	50,313	50,448
Professional and technical .....	14,950	15,012	15,091	15,100	15,010	15,057	15,068	15,141	15,057	15,131	15,272	15,337	15,444
Managers and administrators, except farm .....	10,379	10,392	10,398	10,427	10,534	10,612	10,698	10,659	10,639	10,617	10,535	10,608	10,971
Sales workers .....	6,090	6,055	6,084	6,101	6,103	6,163	6,145	6,181	6,261	6,362	6,346	6,452	6,185
Clerical workers .....	17,417	17,537	17,488	17,508	17,545	17,704	17,752	17,835	17,781	17,802	17,758	17,915	17,848
Blue-collar workers .....	32,176	32,041	31,705	31,904	31,992	32,051	31,849	32,209	32,205	32,110	32,302	31,882	31,754
Craft and kindred workers .....	12,898	12,792	12,703	12,820	12,944	12,876	12,761	12,993	13,001	12,925	13,041	12,814	12,728
Operatives, except transport Transport equipment operatives .....	10,901	10,991	10,770	10,755	10,804	10,884	10,909	10,964	10,967	10,963	11,042	10,678	10,661
Nonfarm laborers .....	3,602	3,569	3,564	3,644	3,605	3,627	3,604	3,617	3,593	3,628	3,635	3,616	3,571
Service workers .....	4,775	4,689	4,668	4,685	4,639	4,664	4,575	4,635	4,644	4,594	4,584	4,774	4,795
Farm workers .....	12,804	12,847	12,907	12,772	12,805	12,766	12,621	12,859	12,937	12,899	12,970	12,979	13,080
Farm workers .....	2,746	2,774	2,659	2,628	2,679	2,678	2,707	2,722	2,695	2,718	2,694	2,660	2,764
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>													
<b>Agriculture:</b>													
Wage and salary workers .....	1,425	1,415	1,379	1,424	1,423	1,419	1,384	1,399	1,381	1,475	1,451	1,428	1,417
Self-employed workers .....	1,558	1,583	1,553	1,519	1,539	1,558	1,614	1,642	1,602	1,622	1,596	1,554	1,648
Unpaid family workers .....	334	314	291	283	291	291	310	325	313	310	310	293	283
<b>Nonagricultural industries:</b>													
Wage and salary workers .....	86,192	86,439	86,105	86,232	86,309	86,454	86,421	86,912	86,982	87,020	87,384	87,578	87,419
Government .....	15,322	15,281	15,359	15,616	15,318	15,393	15,279	15,407	15,423	15,358	15,397	15,414	15,540
Private industries .....	70,870	71,158	70,746	70,616	70,991	71,061	71,142	71,505	71,559	71,662	71,987	72,163	71,879
Private households .....	1,328	1,262	1,172	1,195	1,235	1,219	1,211	1,313	1,261	1,211	1,228	1,132	1,178
Other industries .....	69,542	69,896	69,574	69,421	69,756	69,842	69,931	70,192	70,298	70,451	70,759	71,031	70,702
Self-employed workers .....	6,591	6,542	6,463	6,608	6,629	6,752	6,689	6,731	6,812	6,781	6,737	6,752	6,899
Unpaid family workers .....	455	446	465	460	474	519	450	449	430	417	409	379	397
<b>PERSONS AT WORK<sup>1</sup></b>													
<b>Nonagricultural industries</b>													
Full-time schedules .....	87,543	87,847	86,608	87,785	87,749	88,769	88,855	88,723	88,638	88,617	89,180	89,454	88,985
Part-time for economic reasons .....	72,212	72,529	71,659	72,496	72,243	72,915	73,053	73,159	73,204	72,997	73,137	73,223	73,110
Usually work full-time .....	3,176	3,211	3,279	3,283	3,284	3,274	3,298	3,167	3,315	3,392	3,519	3,513	3,406
Usually work part-time .....	1,246	1,254	1,287	1,273	1,322	1,334	1,401	1,273	1,354	1,413	1,491	1,549	1,380
Part time for noneconomic reasons .....	1,930	1,957	1,992	2,010	1,962	1,940	1,897	1,894	1,961	1,979	2,028	1,964	2,026
Part time for noneconomic reasons .....	12,155	12,107	11,670	12,006	12,222	12,580	12,504	12,397	12,119	12,228	12,524	12,718	12,469

<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.



## A-43. Employment status of male Vietnam-era veterans and nonveterans by age

(Numbers in thousands)

Veteran status and age	Not seasonally adjusted										
	Civilian noninstitutional population		Civilian labor force								
			Total		Employed		Unemployed		Percent of labor force		
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980		Feb. 1979	Feb. 1980
<b>VETERANS<sup>1</sup></b>											
Total, 20 years and over .....	8,476	8,576	8,049	8,106	7,586	7,626	463	480	5.8	5.9	
20 to 24 years .....	624	422	579	379	490	316	89	63	15.4	16.6	
25 to 39 years .....	7,054	7,219	6,786	6,939	6,446	6,546	340	393	5.0	5.7	
25 to 29 years .....	2,090	1,804	1,982	1,716	1,811	1,554	171	162	8.6	9.4	
30 to 34 years .....	3,558	3,609	3,437	3,489	3,307	3,339	130	150	3.8	4.3	
35 to 39 years .....	1,406	1,806	1,367	1,734	1,328	1,653	39	81	2.9	4.7	
40 years and over .....	798	935	684	788	650	764	34	24	5.0	3.0	
<b>NONVETERANS<sup>2</sup></b>											
Total, 25 to 39 years .....	14,242	15,148	13,544	14,371	12,941	13,568	603	803	4.5	5.6	
25 to 29 years .....	6,470	6,932	6,128	6,547	5,786	6,125	342	422	5.6	6.4	
30 to 34 years .....	4,085	4,416	3,888	4,211	3,732	3,998	156	213	4.0	5.1	
35 to 39 years .....	3,687	3,800	3,528	3,613	3,423	3,445	105	168	3.0	4.6	

<sup>1</sup> Vietnam-era veterans are those who served between August 5, 1964 and May 1975.<sup>2</sup> Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 25-39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.



# ESTABLISHMENT DATA EMPLOYMENT

## B-2. Employees on nonagricultural payrolls by industry

[In thousands]

1972 SIC Code	Industry	All employees					Production workers <sup>1</sup>				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>P</sup>	FEB. 1980 <sup>P</sup>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>P</sup>	FEB. 1980 <sup>P</sup>
	<b>TOTAL</b> .....	89,482	87,128	51,005	85,225	85,301	-	-	-	-	-
	<b>PRIVATE SECTOR</b> .....	73,870	71,628	75,054	73,489	73,380	60,358	58,426	61,257	55,743	59,670
	<b>MINING</b> .....	957	910	984	985	987	716	687	734	733	727
	<b>METAL MINING</b> .....	97.6	93.0	100.1	100.6	-	74.8	72.1	76.5	76.8	-
10	Iron ores .....	24.9	24.5	24.5	24.5	-	19.9	19.9	19.6	19.6	-
102	Copper ores .....	21.9	25.6	33.7	33.5	-	24.6	22.7	26.1	26.0	-
11, 12	<b>COAL MINING</b> .....	258.6	254.8	259.2	259.4	-	216.2	214.4	215.9	216.1	-
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b> .....	255.6	251.8	256.2	256.4	-	213.6	211.8	213.2	213.4	-
13	<b>OIL AND GAS EXTRACTION</b> .....	476.4	450.0	501.5	509.7	-	227.5	212.7	244.2	350.7	-
131, 2	Crude petroleum, natural gas, and natural gas liquids .....	201.2	190.6	208.0	210.2	-	95.1	93.2	96.4	96.7	-
138	Oil and gas field services .....	275.1	259.4	293.5	299.4	-	232.4	219.5	247.9	254.0	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b> .....	124.7	112.1	123.3	115.2	-	95.0	87.7	97.2	89.5	-
142	Crushed and broken stone .....	41.2	35.9	40.2	36.9	-	34.6	29.5	33.2	30.3	-
144	Sand and gravel .....	38.7	32.7	37.5	33.8	-	-	-	-	-	-
147	Chemical and fertilizer minerals .....	24.4	23.8	24.9	24.7	-	-	-	-	-	-
	<b>CONSTRUCTION</b> .....	4,644	3,998	4,711	4,250	4,287	3,710	3,106	3,752	3,389	3,321
15	<b>GENERAL BUILDING CONTRACTORS</b> .....	1,218.4	1,166.7	1,222.6	1,224.5	-	1,022.1	884.6	1,021.6	932.1	-
152	Residential building construction .....	690.7	624.5	674.0	620.1	-	522.2	462.8	504.1	456.4	-
153	Operative builders .....	84.0	76.5	82.2	77.4	-	54.2	49.2	51.2	48.5	-
154	Nonresidential building construction .....	543.6	467.7	566.4	527.0	-	445.6	371.5	466.3	427.2	-
16	<b>HEAVY CONSTRUCTION CONTRACTORS</b> .....	657.6	703.1	856.2	747.0	-	744.2	552.4	700.2	587.3	-
161	Highway and street construction .....	289.7	177.5	261.7	201.4	-	248.5	135.5	220.9	160.8	-
162	Heavy construction, except highway .....	608.2	525.6	594.5	545.6	-	495.6	416.9	479.4	426.5	-
17	<b>SPECIAL TRADE CONTRACTORS</b> .....	2,427.7	2,126.4	2,531.9	2,378.8	-	1,942.2	1,667.9	2,030.5	1,869.9	-
171	Plumbing, heating, air conditioning .....	544.5	516.0	566.7	558.5	-	414.9	391.9	433.8	423.5	-
172	Painting, paper hanging, decorating .....	157.4	127.3	160.8	146.7	-	132.0	104.0	133.8	119.1	-
173	Electrical work .....	408.7	386.3	432.5	425.2	-	320.7	291.6	340.5	331.6	-
174	Masonry, stonework, and plastering .....	410.0	342.6	432.1	404.6	-	356.2	291.4	376.6	345.6	-
175	Carpentering and flooring .....	151.0	141.1	152.5	135.8	-	117.6	105.7	117.8	105.5	-
176	Roofing and sheet metal work .....	179.3	141.8	190.9	168.6	-	145.2	111.2	155.8	133.1	-
	<b>MANUFACTURING</b> .....	20,972	20,763	20,902	20,692	20,658	15,010	14,910	14,891	14,654	14,649
24, 25, 32-39	<b>DURABLE GOODS</b> .....	12,690	12,561	12,645	12,524	12,528	9,053	9,016	8,971	8,810	8,825
20-23, 26-31	<b>NONDURABLE GOODS</b> .....	8,282	8,202	8,257	8,168	8,130	5,957	5,894	5,920	5,844	5,824
	<b>DURABLE GOODS</b>										
24	<b>LUMBER AND WOOD PRODUCTS</b> .....	758.4	735.0	729.2	704.2	698.1	646.2	628.6	616.0	593.0	588.3
241	Logging camps and logging contractors .....	90.3	84.0	89.7	82.7	-	74.9	68.2	74.2	67.8	-
242	Sawmills and planing mills .....	221.1	225.5	225.1	220.6	-	206.5	200.8	200.7	195.9	-
2421	Sawmills and planing mills, general .....	190.4	185.1	185.4	181.5	-	170.7	165.4	165.7	161.4	-
2426	Hardwood dimension and flooring .....	32.5	33.6	31.6	21.2	-	28.8	29.4	27.6	27.2	-
243	Millwork, plywood, and structural members .....	224.7	222.9	212.1	206.4	-	189.7	188.2	175.5	172.9	-
2431	Millwork .....	78.0	75.5	73.5	74.2	-	63.6	65.7	55.2	60.1	-
2434	Wood kitchen cabinets .....	51.2	45.6	48.6	46.5	-	43.3	41.4	40.7	38.8	-
2435	Hardwood veneer and plywood .....	27.4	27.6	26.6	26.7	-	24.4	24.7	23.5	23.7	-
2436	Softwood veneer and plywood .....	50.2	45.8	47.2	45.4	-	43.5	43.1	40.6	38.9	-
244	Wooden containers .....	43.6	43.0	41.2	35.8	-	38.4	37.9	35.8	34.8	-
245	Wood buildings and mobile homes .....	82.9	77.9	75.7	65.4	-	65.9	61.9	58.7	52.2	-
2451	Mobile homes .....	57.2	53.6	52.6	45.4	-	47.4	44.9	42.4	38.7	-
249	Miscellaneous wood products .....	85.8	84.7	85.4	82.2	-	72.0	71.5	71.0	69.3	-
25	<b>FURNITURE AND FIXTURES</b> .....	487.3	497.0	486.9	464.0	480.0	398.0	407.8	357.8	394.3	390.5
261	Household furniture .....	325.0	332.1	322.6	320.1	-	273.4	282.2	275.5	271.2	-
2511	Wood household furniture .....	143.4	147.0	143.5	142.5	-	126.8	130.2	127.1	125.9	-
2512	Upholstered household furniture .....	99.9	103.0	99.5	97.6	-	82.2	85.2	82.0	80.6	-
2514	Metal household furniture .....	31.7	33.4	32.0	33.0	-	25.5	27.0	26.0	26.9	-
2515	Mattresses and bedspreads .....	32.2	32.3	32.0	31.8	-	24.9	25.1	24.7	24.5	-
252	Office furniture .....	46.9	48.3	46.6	46.9	-	37.5	35.0	37.1	37.2	-
253	Public building and related furniture .....	25.6	26.2	25.2	24.9	-	19.4	19.8	18.9	18.4	-
254	Partitions and fixtures .....	64.9	63.0	63.3	64.8	-	45.1	47.8	46.4	48.6	-
259	Miscellaneous furniture and fixtures .....	26.9	27.4	27.2	27.3	-	18.6	18.9	18.5	18.9	-

See footnotes at end of table.





**ESTABLISHMENT DATA  
EMPLOYMENT**

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

[In thousands]

1972 SIC Code	Industry	All employees					Production workers <sup>1</sup>				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 p	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 p
<b>TRANSPORTATION EQUIPMENT—Continued</b>											
379	Miscellaneous transportation equipment .....	58.2	72.2	53.3	52.8	-	42.8	55.4	38.4	38.2	-
3792	Travel trailers and campers .....	36.8	50.7	31.3	30.2	-	28.3	40.4	23.5	23.3	-
38	<b>INSTRUMENTS AND RELATED PRODUCTS .....</b>	<b>650.4</b>	<b>677.5</b>	<b>655.8</b>	<b>655.2</b>	<b>700.3</b>	<b>421.1</b>	<b>418.0</b>	<b>422.9</b>	<b>421.2</b>	<b>426.1</b>
381	Engineering and scientific instruments .....	72.3	68.6	75.7	76.2	-	36.5	34.5	38.0	37.9	-
382	Measuring and controlling devices .....	228.2	223.8	232.3	232.1	-	145.9	143.8	148.0	148.1	-
3822	Environmental controls .....	46.7	47.4	46.7	46.6	-	32.6	32.6	32.6	32.6	-
3823	Process control instruments .....	51.1	50.6	52.0	52.1	-	27.0	27.6	27.2	27.5	-
3825	Instruments to measure electricity .....	51.6	87.2	92.7	92.5	-	58.3	56.2	59.0	59.0	-
383	Optical instruments and lenses .....	31.2	29.6	33.1	32.5	-	17.4	16.6	18.2	18.1	-
384	Medical instruments and supplies .....	147.2	144.6	151.1	151.1	-	97.1	97.7	98.4	98.4	-
3841	Surgical and medical instruments .....	62.5	62.5	65.6	65.5	-	41.6	42.2	42.5	42.7	-
3842	Surgical appliances and supplies .....	66.2	64.6	68.2	68.0	-	43.5	42.6	44.8	44.7	-
385	Ophthalmic goods .....	45.1	44.6	45.5	45.8	-	33.0	32.7	33.1	33.3	-
386	Photographic equipment and supplies .....	137.5	136.5	136.1	136.0	-	65.1	65.4	67.4	67.0	-
387	Watches, clocks, and watchcases .....	28.7	25.8	26.0	24.5	-	22.1	22.5	15.8	18.4	-
39	<b>MISCELLANEOUS MANUFACTURING INDUSTRIES .....</b>	<b>452.4</b>	<b>441.2</b>	<b>446.4</b>	<b>436.9</b>	<b>437.1</b>	<b>344.2</b>	<b>322.1</b>	<b>338.7</b>	<b>329.5</b>	<b>331.6</b>
391	Jewelry, silverware, and plated ware .....	60.2	62.4	60.4	57.4	-	43.5	45.5	43.8	41.3	-
3911	Jewelry, precious metal .....	38.6	40.6	38.7	36.5	-	27.8	25.2	28.0	26.2	-
393	Musical instruments .....	24.6	25.5	24.1	23.6	-	20.2	21.2	19.9	19.4	-
394	Toys and sporting goods .....	120.5	107.2	115.7	113.2	-	92.2	75.5	87.4	84.8	-
3942, 4	Dolls, games, toys, and children's vehicles .....	55.8	45.2	55.3	53.0	-	44.3	34.5	35.7	37.4	-
3949	Sporting and athletic goods, nec .....	60.7	58.0	60.4	60.2	-	47.5	45.4	47.7	47.4	-
395	Pens, pencils, office and art supplies .....	41.5	35.8	43.2	43.4	-	37.0	28.7	31.0	30.9	-
396	Costume jewelry and notions .....	61.2	62.0	55.0	56.8	-	49.2	50.6	47.2	45.3	-
3961	Costume jewelry .....	34.0	34.9	32.8	30.5	-	27.5	28.4	26.2	24.5	-
399	Miscellaneous manufactures .....	144.2	142.5	144.0	142.4	-	108.8	106.8	105.4	107.8	-
3993	Signs and advertising displays .....	49.6	48.3	50.2	45.7	-	36.0	34.5	36.7	36.1	-
<b>NONDURABLE GOODS</b>											
20	<b>FOOD AND KINDRED PRODUCTS .....</b>	<b>1,716.3</b>	<b>1,678.0</b>	<b>1,695.9</b>	<b>1,650.1</b>	<b>1,639.1</b>	<b>1,176.2</b>	<b>1,127.1</b>	<b>1,161.5</b>	<b>1,120.3</b>	<b>1,105.7</b>
201	Meat products .....	361.5	356.2	368.2	358.2	-	300.4	294.2	306.7	297.2	-
2011	Meat packing plants .....	165.6	165.5	167.0	164.5	-	134.3	137.3	135.5	134.4	-
2013	Sausages and other prepared meats .....	69.6	69.8	70.1	68.6	-	51.1	51.4	51.5	50.2	-
2016	Poultry dressing plants .....	112.4	103.1	116.5	110.0	-	102.9	92.5	107.1	100.0	-
202	Dairy products .....	183.3	180.6	180.5	178.2	-	97.2	94.7	95.5	94.4	-
2022	Cheese, natural and processed .....	32.2	31.2	32.2	31.3	-	25.2	24.3	24.8	24.1	-
2026	Fluid milk .....	116.4	116.4	115.0	114.5	-	50.5	50.0	50.5	50.3	-
203	Preserved fruits and vegetables .....	244.6	214.5	213.4	156.8	-	200.4	169.5	172.8	156.2	-
2032	Canned specialties .....	25.8	26.7	26.1	25.8	-	18.0	18.3	18.7	18.5	-
2033	Canned fruits and vegetables .....	50.7	66.2	69.1	62.2	-	75.4	51.6	55.8	50.5	-
2037	Frozen fruits and vegetables .....	52.5	47.6	47.7	40.2	-	45.6	40.4	41.2	33.9	-
204	Grain mill products .....	144.9	145.3	145.6	144.8	-	98.5	95.5	95.7	99.2	-
2041	Flour and other grain mill products .....	26.3	26.0	26.8	26.7	-	16.5	16.5	16.8	16.5	-
2048	Prepared feeds, nec .....	59.2	55.5	55.7	55.6	-	38.1	38.3	38.5	38.7	-
205	Bakery products .....	234.5	232.7	234.3	232.2	-	137.2	136.2	136.5	134.8	-
2051	Bread, cake, and related products .....	191.1	150.0	150.5	188.5	-	103.2	101.9	103.0	101.0	-
2052	Cookies and crackers .....	43.5	42.7	43.8	43.7	-	34.1	34.3	33.5	33.8	-
206	Sugar and confectionery products .....	108.8	114.5	114.5	110.9	-	82.9	88.7	88.7	84.8	-
2061-3	Cane and beet sugar .....	29.5	36.0	31.4	30.5	-	21.4	26.8	23.6	22.0	-
2065	Confectionery products .....	58.6	58.7	62.3	59.7	-	47.0	47.4	50.3	48.1	-
207	Fats and oils .....	40.0	41.3	40.5	40.4	-	29.0	30.2	30.0	29.8	-
208	Beverages .....	230.0	224.5	225.7	222.4	-	106.5	104.4	105.4	101.0	-
2082	Malt beverages .....	49.7	48.7	49.9	48.8	-	34.0	32.6	32.5	32.8	-
2086	Bottled and canned soft drinks .....	127.6	132.1	136.5	134.9	-	47.9	46.2	46.6	45.7	-
209	Misc. foods and kindred products .....	168.8	167.0	168.8	166.2	-	123.7	115.3	125.8	122.9	-
21	<b>TOBACCO MANUFACTURES .....</b>	<b>66.2</b>	<b>65.8</b>	<b>66.7</b>	<b>65.0</b>	<b>63.9</b>	<b>52.5</b>	<b>56.1</b>	<b>52.5</b>	<b>51.1</b>	<b>50.4</b>
211	Cigarettes .....	44.1	44.7	43.4	43.3	-	34.2	35.0	33.4	33.5	-
22	<b>TEXTILE MILL PRODUCTS .....</b>	<b>891.5</b>	<b>856.3</b>	<b>892.5</b>	<b>886.7</b>	<b>888.2</b>	<b>777.0</b>	<b>780.5</b>	<b>779.3</b>	<b>774.6</b>	<b>775.7</b>
221	Weaving mills, cotton .....	150.7	150.4	153.4	153.6	-	135.8	135.6	138.2	138.3	-
222	Weaving mills, synthetics .....	124.5	126.2	125.0	124.1	-	111.9	113.1	112.4	111.5	-
223	Weaving and finishing mills, wool .....	21.1	21.4	20.5	20.5	-	17.5	17.5	17.2	17.3	-
224	Narrow fabric mills .....	25.5	26.0	25.4	25.5	-	22.3	22.8	22.3	22.7	-
225	Knitting mills .....	231.1	225.6	231.3	226.6	-	199.7	197.8	200.7	197.2	-
2251	Women's hosiery, except socks .....	30.1	29.9	30.5	30.2	-	26.5	26.6	27.6	27.5	-
2252	Hosiery, nec .....	24.5	24.4	24.6	24.4	-	31.5	31.4	31.5	31.4	-
2253	Knit outerwear mills .....	75.0	73.1	76.0	71.9	-	64.1	62.0	65.0	61.2	-
2254	Knit underwear mills .....	22.4	22.5	23.2	23.0	-	28.9	25.2	28.8	28.8	-

See footnotes at end of table.



**ESTABLISHMENT DATA  
EMPLOYMENT**

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

(In thousands)

1972 SIC Code	Industry	All employees					Production workers <sup>1</sup>				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P
	<b>CHEMICALS AND ALLIED PRODUCTS—Cont'd</b>										
2865	Cyclic crudes and intermediates . . . . .	37.6	37.0	37.7	37.4	-	23.7	23.3	23.5	23.4	-
2861,9	Gum, wood, and industrial organic chemicals, nec. . . . .	128.0	127.8	127.8	127.5	-	62.6	62.2	62.4	62.8	-
287	Agricultural chemicals . . . . .	69.1	66.7	65.5	70.4	-	44.2	42.5	43.8	44.4	-
289	Miscellaneous chemical products . . . . .	50.7	50.4	50.6	50.5	-	51.2	51.1	51.2	50.9	-
29	<b>PETROLEUM AND COAL PRODUCTS . . . . .</b>	<b>213.8</b>	<b>205.8</b>	<b>214.5</b>	<b>212.2</b>	<b>163.6</b>	<b>135.7</b>	<b>132.6</b>	<b>135.4</b>	<b>136.7</b>	<b>104.5</b>
291	Petroleum refining . . . . .	168.5	163.8	172.0	171.7	-	106.2	102.3	107.7	106.7	-
295	Paving and roofing materials . . . . .	32.7	30.9	31.5	30.5	-	26.3	23.6	24.4	23.3	-
30	<b>RUBBER AND MISC. PLASTICS PRODUCTS . . . . .</b>	<b>767.5</b>	<b>771.0</b>	<b>747.5</b>	<b>742.4</b>	<b>738.1</b>	<b>601.1</b>	<b>605.7</b>	<b>562.4</b>	<b>578.7</b>	<b>574.1</b>
301	Tires and inner tubes . . . . .	122.7	128.4	114.5	114.7	-	85.2	93.3	82.8	82.6	-
302	Rubber and plastics footwear . . . . .	23.0	24.8	22.5	22.5	-	20.1	21.7	15.8	19.5	-
303,4	Reclaimed rubber, and rubber and plastics hose and belting . . . . .	23.2	23.5	22.2	22.1	-	17.2	17.7	15.8	15.9	-
306	Fabricated rubber products, nec . . . . .	115.2	116.8	139.9	109.3	-	90.8	92.5	85.7	85.2	-
307	Miscellaneous plastics products . . . . .	482.4	477.5	478.0	473.8	-	383.8	380.5	378.3	375.5	-
31	<b>LEATHER AND LEATHER PRODUCTS . . . . .</b>	<b>242.8</b>	<b>246.2</b>	<b>240.7</b>	<b>235.8</b>	<b>239.4</b>	<b>207.4</b>	<b>210.2</b>	<b>202.5</b>	<b>159.4</b>	<b>202.2</b>
311	Leather tanning and finishing . . . . .	20.2	21.2	15.2	18.9	-	17.0	17.8	16.1	15.8	-
314	Footwear, except rubber . . . . .	148.5	152.1	148.0	147.1	-	127.5	131.8	125.4	125.4	-
3143	Men's footwear, except athletic . . . . .	58.7	61.2	57.1	56.7	-	51.0	53.8	49.2	48.9	-
3144	Women's footwear, except athletic . . . . .	60.7	62.0	62.7	62.5	-	51.8	53.5	52.4	53.2	-
316	Luggage . . . . .	17.4	16.7	16.7	14.4	-	13.6	12.5	12.8	11.2	-
317	Handbags and personal leather goods . . . . .	22.8	31.1	32.4	31.8	-	28.0	26.2	27.5	26.9	-
	<b>TRANSPORTATION AND PUBLIC UTILITIES . . . . .</b>	<b>5,154</b>	<b>5,010</b>	<b>5,254</b>	<b>5,144</b>	<b>5,130</b>	<b>4,315</b>	<b>4,153</b>	<b>4,354</b>	<b>4,288</b>	<b>4,280</b>
40	<b>RAILROAD TRANSPORTATION . . . . .</b>	<b>546.0</b>	<b>525.1</b>	<b>538.1</b>	<b>526.7</b>	-	-	-	-	-	-
4011	Class 1 railroads <sup>2</sup> . . . . .	502.5	488.0	454.6	484.1	-	-	-	-	-	-
41	<b>LOCAL AND INTERURBAN PASSENGER TRANSIT . . . . .</b>	<b>261.2</b>	<b>267.6</b>	<b>274.2</b>	<b>273.8</b>	-	<b>240.6</b>	<b>246.7</b>	<b>252.7</b>	<b>251.6</b>	-
411	Local and suburban transportation . . . . .	72.8	71.1	75.2	75.5	-	67.3	65.8	68.7	68.3	-
412	Taxis . . . . .	64.4	66.1	64.6	65.0	-	-	-	-	-	-
413	Intercity highway transportation . . . . .	36.9	35.2	38.2	37.7	-	34.0	32.4	35.3	34.8	-
415	School buses . . . . .	72.2	82.1	82.2	82.0	-	-	-	-	-	-
42	<b>TRUCKING AND WAREHOUSING . . . . .</b>	<b>1,376.3</b>	<b>1,317.2</b>	<b>1,412.1</b>	<b>1,227.9</b>	-	<b>1,216.8</b>	<b>1,162.5</b>	<b>1,246.6</b>	<b>1,165.0</b>	-
421,3	Trucking and trucking terminals . . . . .	1,285.7	1,227.5	1,312.7	1,232.3	-	1,138.8	1,086.2	1,162.2	1,082.7	-
422	Public warehousing . . . . .	90.6	89.8	99.4	95.6	-	78.0	77.3	86.4	82.3	-
44	<b>WATER TRANSPORTATION . . . . .</b>	<b>225.2</b>	<b>222.2</b>	<b>227.6</b>	<b>219.4</b>	-	-	-	-	-	-
45	<b>TRANSPORTATION BY AIR . . . . .</b>	<b>423.4</b>	<b>417.7</b>	<b>436.9</b>	<b>426.6</b>	-	-	-	-	-	-
451,2	Air transportation . . . . .	377.4	374.2	385.6	390.4	-	-	-	-	-	-
46	<b>PIPE LINES, EXCEPT NATURAL GAS . . . . .</b>	<b>19.4</b>	<b>15.4</b>	<b>19.0</b>	<b>18.7</b>	-	<b>13.8</b>	<b>13.5</b>	<b>13.6</b>	<b>13.3</b>	-
47	<b>TRANSPORTATION SERVICES . . . . .</b>	<b>185.5</b>	<b>175.7</b>	<b>191.6</b>	<b>185.8</b>	-	-	-	-	-	-
48	<b>COMMUNICATION . . . . .</b>	<b>1,207.5</b>	<b>1,272.8</b>	<b>1,337.8</b>	<b>1,332.9</b>	-	<b>986.0</b>	<b>960.7</b>	<b>1,001.1</b>	<b>996.6</b>	-
481	Telephone communication . . . . .	1,045.1	1,017.7	1,065.8	1,061.4	-	765.5	752.2	776.6	772.9	-
483	Radio and television broadcasting . . . . .	192.2	186.2	199.1	155.0	-	154.1	148.0	160.6	160.5	-
49	<b>ELECTRIC, GAS, AND SANITARY SERVICES . . . . .</b>	<b>809.2</b>	<b>787.1</b>	<b>816.4</b>	<b>818.1</b>	-	<b>655.3</b>	<b>642.6</b>	<b>664.6</b>	<b>666.4</b>	-
491	Electric services . . . . .	373.1	361.7	375.8	381.4	-	301.1	291.5	306.5	308.5	-
492	Gas production and distribution . . . . .	168.9	165.1	167.1	167.2	-	137.5	134.7	136.4	136.4	-
493	Combination utility services . . . . .	195.5	192.2	196.7	196.9	-	158.5	157.1	159.2	159.1	-
495	Sanitary services . . . . .	46.7	44.5	47.8	47.6	-	41.4	35.5	41.5	41.6	-
	<b>WHOLESALE AND RETAIL TRADE . . . . .</b>	<b>20,137</b>	<b>19,765</b>	<b>20,532</b>	<b>20,192</b>	<b>20,025</b>	<b>17,700</b>	<b>17,282</b>	<b>18,464</b>	<b>17,712</b>	<b>17,537</b>
50,51	<b>WHOLESALE TRADE . . . . .</b>	<b>5,170</b>	<b>5,066</b>	<b>5,234</b>	<b>5,206</b>	<b>5,215</b>	<b>4,248</b>	<b>4,160</b>	<b>4,302</b>	<b>4,267</b>	<b>4,276</b>
50	<b>WHOLESALE TRADE - DURABLE GOODS . . . . .</b>	<b>2,044</b>	<b>2,564</b>	<b>2,084</b>	<b>2,088</b>	-	<b>2,499</b>	<b>2,427</b>	<b>2,537</b>	<b>2,533</b>	-
501	Motor vehicles and automotive equipment . . . . .	436.2	430.3	435.2	434.3	-	356.0	351.2	353.5	353.0	-
502	Furniture and home furnishing . . . . .	105.4	102.7	107.7	106.5	-	86.0	84.3	88.2	87.2	-
503	Lumber and construction materials . . . . .	185.7	180.1	186.2	184.6	-	154.5	145.1	155.2	153.2	-
504	Sporting goods, toys, and hobby goods . . . . .	64.1	64.6	66.7	64.9	-	52.8	52.2	55.2	53.5	-
505	Metals and minerals, except petroleum . . . . .	152.1	147.1	156.1	155.7	-	124.7	115.5	127.2	126.5	-
506	Electrical goods . . . . .	412.8	401.2	424.5	424.7	-	338.2	325.5	347.6	347.2	-
507	Hardware, plumbing, and heating equipment . . . . .	240.4	236.5	245.3	245.4	-	199.4	196.1	204.1	203.8	-

See footnotes at end of table.



# ESTABLISHMENT DATA EMPLOYMENT

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

(In thousands)

1972 SIC Code	Industry	All employees					Production workers <sup>1</sup>				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>
	<b>WHOLESALE TRADE-DURABLE GOODS—</b>										
	Continued										
508	Machinery, equipment, and supplies .....	1,238.2	1,159.4	1,249.7	1,260.8	-	1,011.1	573.9	1,024.7	1,028.5	-
509	Miscellaneous durable goods .....	207.5	201.1	212.5	211.5	-	175.4	169.3	180.5	179.9	-
51	<b>WHOLESALE TRADE-NONDURABLE GOODS</b>	2,127	2,102	2,150	2,118	-	1,749	1,722	1,765	1,734	-
511	Paper and paper products .....	139.6	136.9	141.7	141.9	-	113.0	110.9	115.0	114.8	-
512	Drugs, proprietaries, and sundries .....	142.2	141.0	146.0	145.6	-	121.8	121.2	123.8	124.5	-
513	Apparel, piece goods, and notions .....	169.3	164.7	172.6	171.2	-	134.4	130.3	137.3	136.2	-
514	Groceries and related products .....	645.0	641.9	644.4	630.7	-	556.1	554.5	554.6	541.8	-
516	Chemicals and allied products .....	116.9	115.2	117.6	118.8	-	84.9	82.6	86.4	86.7	-
517	Petroleum and petroleum products .....	224.6	228.8	225.1	226.7	-	165.4	172.0	164.2	165.3	-
518	Beer, wine, and distilled beverages .....	132.7	132.2	143.2	135.5	-	117.8	113.0	121.8	117.9	-
519	Miscellaneous nondurable goods .....	402.8	389.8	407.3	401.2	-	333.2	322.3	325.2	329.6	-
52-59	<b>RETAIL TRADE</b> .....	14,966	14,699	15,698	14,986	14,610	13,452	13,223	14,162	13,446	13,261
52	<b>BUILDING MATERIALS AND GARDEN</b>										
	SUPPLIES .....	625.0	597.4	624.1	614.1	-	533.5	508.8	541.3	521.9	-
521	Lumber and other building materials .....	333.1	320.0	334.3	326.4	-	285.5	274.2	285.5	277.3	-
525	Hardware stores .....	146.9	142.9	152.5	148.8	-	126.9	123.4	133.2	128.7	-
53	<b>GENERAL MERCHANDISE STORES</b> .....	2,265.4	2,277.1	2,558.3	2,306.6	-	2,111.2	2,223.5	2,399.6	2,145.4	-
531	Department stores .....	1,824.4	1,942.2	2,082.1	1,884.8	-	1,720.6	1,829.1	1,964.4	1,767.3	-
533	Variety stores .....	283.1	290.5	306.6	273.1	-	262.2	270.8	286.2	250.3	-
539	Misc. general merchandise stores .....	147.9	142.4	169.6	148.7	-	128.4	123.6	145.2	127.8	-
54	<b>FOOD STORES</b> .....	2,281.1	2,252.3	2,380.9	2,328.5	-	2,104.5	2,076.9	2,199.8	2,148.0	-
541	Grocery stores .....	2,003.3	1,974.3	2,081.4	2,057.2	-	1,850.5	1,823.4	1,924.2	1,899.5	-
542	Meat markets and freezer provisioners .....	52.3	52.2	52.2	52.5	-	-	-	-	-	-
546	Retail bakeries .....	125.6	124.3	128.8	125.2	-	115.6	114.7	118.9	115.2	-
55	<b>AUTOMOTIVE DEALERS AND SERVICE</b>										
	STATIONS .....	1,827.3	1,872.8	1,788.9	1,773.0	-	1,558.8	1,605.5	1,519.1	1,503.6	-
551,2	New and used car dealers .....	892.8	905.9	868.0	859.0	-	742.6	755.1	717.5	709.0	-
553	Auto and home supply stores .....	259.7	257.3	262.9	256.1	-	226.9	225.0	226.5	223.8	-
554	Gasoline service stations .....	585.6	625.1	571.4	567.8	-	514.1	557.1	496.2	495.9	-
56	<b>APPAREL AND ACCESSORY STORES</b> .....	935.5	933.9	1,061.3	952.0	-	807.4	809.1	927.7	819.6	-
561	Men's and boys' clothing and furnishings .....	142.0	145.4	165.6	147.3	-	120.9	124.4	143.4	125.4	-
562	Women's ready-to-wear stores .....	356.7	352.1	399.2	359.5	-	311.1	308.2	351.8	312.5	-
565	Family clothing stores .....	175.7	173.8	215.9	184.2	-	154.4	153.5	193.3	161.6	-
566	Shoe stores .....	175.0	172.6	185.2	172.9	-	145.7	144.7	155.1	144.5	-
57	<b>FURNITURE AND HOME FURNISHINGS</b>										
	STORES .....	612.5	612.0	629.5	618.2	-	507.9	508.5	523.4	511.4	-
571	Furniture and home furnishings .....	366.2	365.6	374.7	368.2	-	307.1	306.5	312.5	308.2	-
572	Household appliance stores .....	90.1	89.7	91.0	88.9	-	77.0	76.5	78.4	76.1	-
573	Radio, television, and music stores .....	157.2	157.7	163.8	161.2	-	123.8	125.5	131.1	127.1	-
58	<b>EATING AND DRINKING PLACES</b> .....	4,524.9	4,181.5	4,581.6	4,487.8	-	4,169.6	3,840.1	4,218.2	4,119.6	-
59	<b>MISCELLANEOUS RETAIL</b> .....	1,882.7	1,671.2	2,062.3	1,905.9	-	1,659.5	1,650.7	1,632.5	1,676.1	-
591	Drug stores and proprietary stores .....	508.5	506.4	541.8	522.8	-	463.6	462.3	497.1	478.0	-
592	Liquor stores .....	134.5	127.1	147.9	141.5	-	-	-	-	-	-
594	Miscellaneous shopping goods stores .....	571.7	558.1	667.1	575.4	-	489.6	476.3	580.2	492.5	-
596	Nonstore retailers .....	267.1	279.6	287.3	259.8	-	251.2	264.0	272.7	245.2	-
598	Fuel and ice dealers .....	102.5	105.9	107.0	107.2	-	86.9	84.5	90.4	90.7	-
599	Retail stores, nec. .....	244.6	236.4	255.6	236.7	-	206.7	195.5	216.6	200.5	-
	<b>FINANCE, INSURANCE, AND REAL</b>										
	ESTATE <sup>2</sup> .....	4,963	4,829	5,041	5,042	5,046	3,772	3,668	3,613	3,803	3,821
60	<b>BANKING</b> .....	1,488.5	1,455.1	1,512.0	1,520.2	-	1,153.1	1,133.2	1,170.0	1,172.7	-
602	Commercial and stock savings banks .....	1,358.4	1,331.8	1,380.8	1,387.4	-	1,047.2	1,029.9	1,062.4	1,064.6	-
61	<b>CREDIT AGENCIES OTHER THAN BANKS</b> .....	549.1	522.1	565.5	564.5	-	421.4	408.9	432.6	431.5	-
612	Savings and loan associations .....	237.6	228.8	245.9	245.2	-	184.0	178.1	185.9	189.4	-
614	Personal credit institutions .....	210.6	203.6	218.5	218.6	-	160.6	155.2	166.5	166.5	-
62	<b>SECURITY, COMMODITY BROKERS, AND</b>										
	SERVICES .....	205.4	198.1	212.9	214.0	-	-	-	-	-	-
621	Security brokers and dealers .....	164.8	159.5	169.9	171.0	-	-	-	-	-	-
63	<b>INSURANCE CARRIERS</b> .....	1,213.2	1,194.0	1,226.0	1,226.7	-	849.3	833.2	853.6	851.9	-
631	Life insurance .....	523.5	518.2	526.6	525.9	-	312.9	309.7	313.7	313.3	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
EMPLOYMENT**

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

(In thousands)		All employees					Production workers <sup>1</sup>				
1972 SIC Code	Industry	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>
<b>INSURANCE CARRIERS—Continued</b>											
632	Medical service and health insurance .....	137.9	137.4	139.1	139.2	-	110.7	110.6	111.6	111.6	-
633	Fire, marine, and casualty insurance .....	476.7	464.7	487.1	487.6	-	364.5	352.5	366.0	367.8	-
64	<b>INSURANCE AGENTS, BROKERS, AND SERVICE</b> .....	430.7	422.2	438.9	444.5	-	-	-	-	-	-
65	<b>REAL ESTATE</b> .....	940.4	952.4	944.8	924.7	-	-	-	-	-	-
651	Real estate operators and lessors .....	436.9	421.4	444.6	442.8	-	-	-	-	-	-
653	Real estate agents and managers .....	347.3	328.3	348.6	344.0	-	-	-	-	-	-
655	Subdividers and developers .....	131.8	118.5	127.3	122.6	-	-	-	-	-	-
66	<b>COMBINED REAL ESTATE, INSURANCE, ETC.</b> .....	27.0	26.8	26.9	26.8	-	-	-	-	-	-
67	<b>HOLDING AND OTHER INVESTMENT OFFICES</b> .....	108.5	104.1	111.4	110.5	-	-	-	-	-	-
	<b>SERVICES</b> .....	17,043	16,353	17,270	17,084	17,247	15,133	14,489	15,349	15,163	15,335
70	<b>HOTELS AND OTHER LODGING PLACES</b> .....	1,034.0	918.6	951.4	971.6	-	-	-	-	-	-
701	Hotels, motels, and tourist courts .....	585.2	885.0	952.1	934.8	-	911.2	814.7	874.1	856.0	-
72	<b>PERSONAL SERVICES</b> .....	898.2	903.2	892.6	892.1	-	-	-	-	-	-
721	Laundry, cleaning, and garment services .....	353.7	356.3	350.8	350.6	-	315.1	316.5	313.3	312.4	-
723	Beauty shops .....	277.5	279.5	275.8	269.8	-	256.1	257.4	255.5	249.1	-
726	Funeral service and crematories .....	71.7	71.1	72.3	73.1	-	-	-	-	-	-
73	<b>BUSINESS SERVICES</b> .....	2,829.5	2,701.8	2,936.4	2,895.4	-	2,461.3	2,342.8	2,561.4	2,525.4	-
731	Advertising .....	147.2	136.9	151.1	151.6	-	109.1	100.6	113.3	113.9	-
732	Credit reporting and collection .....	75.6	75.9	73.9	72.1	-	-	-	-	-	-
733	Mailing, reproduction, stenographic .....	105.0	104.0	109.8	107.0	-	-	-	-	-	-
734	Services to buildings .....	481.9	456.4	500.1	498.3	-	434.7	406.2	452.7	451.3	-
736	Personnel supply services .....	487.4	457.2	516.3	485.5	-	-	-	-	-	-
737	Computer and data processing services .....	257.6	242.7	272.2	270.5	-	212.3	199.5	226.1	223.9	-
75	<b>AUTO REPAIR, SERVICES, AND GARAGES</b> .....	570.3	556.0	573.6	569.1	-	488.6	478.5	491.6	484.9	-
753	Automotive repair shops .....	356.7	350.4	356.5	354.8	-	303.9	299.3	303.5	301.1	-
76	<b>MISCELLANEOUS REPAIR SERVICES</b> .....	277.9	266.1	290.9	288.3	-	237.9	227.9	250.5	248.3	-
78	<b>MOTION PICTURES</b> .....	213.3	205.8	214.6	207.1	-	190.3	181.9	191.0	183.3	-
781	Motion picture production and services .....	77.8	78.7	86.7	81.0	-	67.9	68.0	75.2	69.3	-
783	Motion picture theaters .....	124.5	115.8	117.3	115.5	-	-	-	-	-	-
79	<b>AMUSEMENT AND RECREATION SERVICES</b> .....	727.3	632.1	651.5	633.7	-	657.6	565.4	586.5	565.2	-
80	<b>HEALTH SERVICES</b> .....	5,040.9	4,915.6	5,148.8	5,180.6	-	4,489.2	4,381.0	4,590.1	4,620.6	-
801	Offices of physicians .....	714.6	654.4	730.5	725.1	-	585.2	570.3	596.8	600.5	-
802	Offices of dentists .....	315.8	307.2	324.5	325.1	-	274.5	267.9	280.5	284.7	-
805	Nursing and personal care facilities .....	978.8	948.2	1,007.0	1,019.1	-	882.0	854.2	906.6	919.0	-
806	Hospitals .....	2,647.5	2,595.1	2,692.0	2,701.2	-	2,418.1	2,370.1	2,463.5	2,475.3	-
81	<b>LEGAL SERVICES</b> .....	462.5	445.2	473.8	472.9	-	397.1	383.1	406.6	404.9	-
82	<b>EDUCATIONAL SERVICES</b> .....	1,052.9	1,044.6	1,125.2	1,055.3	-	-	-	-	-	-
821	Elementary and secondary schools .....	231.5	232.8	248.4	248.0	-	-	-	-	-	-
822	Colleges and universities .....	708.0	698.5	757.2	685.3	-	-	-	-	-	-
83	<b>SOCIAL SERVICES</b> .....	1,043.8	1,001.4	1,036.5	1,034.6	-	-	-	-	-	-
86	<b>MEMBERSHIP ORGANIZATIONS</b> .....	1,578.0	1,527.0	1,612.7	1,566.3	-	-	-	-	-	-
89	<b>MISCELLANEOUS SERVICES</b> .....	539.5	503.7	566.0	574.3	-	780.0	746.5	804.6	809.0	-
891	Engineering and architectural services .....	509.7	482.5	525.7	528.8	-	431.7	406.2	445.4	447.2	-
893	Accounting, auditing, and bookkeeping .....	295.9	292.2	298.0	305.9	-	237.6	224.8	240.8	246.2	-
	<b>GOVERNMENT</b> .....	15,612	15,500	15,915	15,736	15,921	-	-	-	-	-
	<b>FEDERAL GOVERNMENT</b> .....	2,773	2,730	2,770	2,763	2,771	-	-	-	-	-
	Executive .....	2,719.8	2,677.5	2,717.2	2,709.1	-	-	-	-	-	-
	Department of Defense .....	895.4	856.0	885.0	885.1	-	-	-	-	-	-
	Postal Service .....	660.9	653.0	673.5	655.9	-	-	-	-	-	-
	Other executive agencies .....	1,163.4	1,126.5	1,154.7	1,168.1	-	-	-	-	-	-
	Manufacturing activities .....	121.5	123.0	121.5	121.6	-	-	-	-	-	-
	Shipbuilding .....	71.3	71.7	71.6	71.8	-	-	-	-	-	-

See footnotes at end of table.

# ESTABLISHMENT DATA EMPLOYMENT

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

(In thousands)

1972 SIC Code	Industry	All employees					Production workers <sup>1</sup>				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>P</sup>	FEB. 1980 <sup>P</sup>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>P</sup>	FEB. 1980 <sup>P</sup>
	Executive—Continued										
	Transportation and public utilities, except Postal Service .....	51.6	45.0	51.2	51.1	-	-	-	-	-	-
	Services .....	384.4	379.1	380.2	376.9	-	-	-	-	-	
	Hospitals .....	224.6	223.4	225.9	228.6	-	-	-	-	-	
	Legislative .....	39.8	39.0	39.5	39.5	-	-	-	-	-	
	Judicial .....	13.2	13.0	13.2	14.1	-	-	-	-	-	
	<b>STATE AND LOCAL GOVERNMENT .....</b>	<b>12,839</b>	<b>12,770</b>	<b>13,145</b>	<b>12,972</b>	<b>13,150</b>	-	-	-	-	
	State government .....	3,443.9	3,388.4	3,543.6	3,481.2	-	-	-	-	-	
	Hospitals .....	562.1	562.2	564.9	565.6	-	-	-	-	-	
	State education .....	1,378.6	1,351.5	1,482.9	1,415.4	-	-	-	-	-	
	General administration including executive, legislative, and judicial functions .....	511.6	496.6	501.6	496.0	-	-	-	-	-	
	Local government .....	9,395.2	9,381.3	9,601.7	9,491.6	-	-	-	-	-	
	Transportation and public utilities .....	587.2	576.2	596.0	596.2	-	-	-	-	-	
	Hospitals .....	528.5	519.9	535.3	537.2	-	-	-	-	-	
	Local education .....	5,132.2	5,254.2	5,392.3	5,296.6	-	-	-	-	-	
	General administration including executive, legislative, and judicial functions .....	2,786.2	2,694.1	2,735.7	2,721.6	-	-	-	-	-	

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

<sup>2</sup> Beginning January 1978, data relate to line haul railroads with operating revenues of \$50,000,000 or more.

<sup>3</sup> Data for nonoffice sales agents excluded from 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 Central Intelligence and National Security Agencies.

\* Not available.  
p = preliminary.

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES**

**B-3. Women employees on nonagricultural payrolls by industry**

[In thousands]

1972 SIC Code	Industry	176. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
	<b>TOTAL</b> .....	<b>36,952</b>	<b>36,759</b>	<b>37,629</b>	<b>38,026</b>	<b>38,252</b>
	<b>PRIVATE SECTOR</b> .....	<b>29,621</b>	<b>29,380</b>	<b>30,143</b>	<b>30,350</b>	<b>30,580</b>
	<b>MINING</b> .....	<b>91</b>	<b>82</b>	<b>94</b>	<b>95</b>	<b>96</b>
10	METAL MINING .....	8.1	7.2	8.4	8.4	8.5
11, 12	COAL MINING .....	9.2	8.7	9.7	9.7	9.6
13	OIL AND GAS EXTRACTION .....	64.5	58.2	66.7	67.9	68.2
131, 2	Crude petroleum, natural gas, and natural gas liquids .....	41.5	37.4	43.2	43.6	44.1
138	Oil and gas field services .....	23.1	20.8	23.5	24.3	24.1
14	NONMETALLIC MINERALS, EXCEPT FUELS .....	9.0	8.3	9.6	9.4	9.4
142	Crushed and broken stone .....	2.7	2.5	2.8	2.7	2.7
144	Sand and gravel .....	3.0	2.6	3.2	3.2	3.1
-	<b>CONSTRUCTION</b> .....	<b>372</b>	<b>343</b>	<b>388</b>	<b>390</b>	<b>388</b>
15	<b>GENERAL BUILDING CONTRACTORS</b> .....	<b>135.2</b>	<b>124.9</b>	<b>139.5</b>	<b>140.9</b>	<b>140.9</b>
152	Residential building construction .....	81.1	74.7	83.5	84.2	84.4
153	Operative builders .....	17.4	16.7	17.5	17.9	17.4
154	Nonresidential building construction .....	36.7	33.5	38.5	38.8	39.1
16	<b>HEAVY CONSTRUCTION CONTRACTORS</b> .....	<b>53.7</b>	<b>49.0</b>	<b>58.6</b>	<b>56.5</b>	<b>53.2</b>
161	Highway and street construction .....	16.8	13.0	19.8	17.9	15.9
162	Heavy construction, except highway .....	36.9	36.0	38.8	38.6	37.3
17	<b>SPECIAL TRADE CONTRACTORS</b> .....	<b>183.5</b>	<b>169.5</b>	<b>190.0</b>	<b>192.3</b>	<b>193.9</b>
171	Plumbing, heating, air conditioning .....	48.3	45.3	49.3	50.9	51.0
172	Painting, paper hanging, decorating .....	12.2	11.2	12.4	12.8	12.8
173	Electrical work .....	31.5	29.8	32.8	33.1	33.6
174	Masonry, stonework, and plastering .....	22.0	19.5	22.7	22.7	23.5
176	Carpentering and flooring .....	15.7	15.0	16.4	16.8	16.5
176	Roofing and sheet metal work .....	13.0	11.4	13.8	13.7	14.1
-	<b>MANUFACTURING</b> .....	<b>6,464</b>	<b>6,397</b>	<b>6,576</b>	<b>6,545</b>	<b>6,498</b>
24, 25, 32-36	<b>DURABLE GOODS</b> .....	<b>3,083</b>	<b>3,021</b>	<b>3,137</b>	<b>3,133</b>	<b>3,125</b>
20-23, 28-31	<b>NONDURABLE GOODS</b> .....	<b>3,381</b>	<b>3,376</b>	<b>3,439</b>	<b>3,412</b>	<b>3,373</b>
	<b>DURABLE GOODS</b>					
24	<b>LUMBER AND WOOD PRODUCTS</b> .....	<b>113.4</b>	<b>110.8</b>	<b>117.2</b>	<b>113.5</b>	<b>111.0</b>
241	Logging camps and logging contractors .....	5.2	4.7	5.5	5.2	5.2
242	Sawmills and planing mills .....	22.4	21.7	23.0	22.2	22.1
2421	Sawmills and planing mills, general .....	15.3	14.9	15.9	15.2	15.2
243	Millwork, plywood, and structural members .....	46.3	45.7	47.7	46.1	45.2
244	Wooden containers .....	7.4	7.0	7.3	7.1	7.0
245	Wood buildings and mobile homes .....	10.8	10.7	11.3	10.9	9.9
249	Miscellaneous wood products .....	21.4	21.0	22.4	22.0	21.6
25	<b>FURNITURE AND FIXTURES</b> .....	<b>144.4</b>	<b>148.0</b>	<b>144.9</b>	<b>145.7</b>	<b>146.1</b>
251	Household furniture .....	107.2	110.6	107.4	108.1	108.1
2511	Wood household furniture .....	45.0	45.5	45.5	45.6	45.6
2512	Upholstered household furniture .....	36.3	37.4	36.4	36.3	36.3
2515	Mattresses and bedsprings .....	8.7	8.6	8.9	8.8	8.8
252	Office furniture .....	11.3	11.2	11.4	11.4	11.5
253	Public building and related furniture .....	5.3	5.3	5.3	5.3	5.4
254	Partitions and fixtures .....	10.6	10.4	10.9	11.0	11.0
259	Miscellaneous furniture and fixtures .....	10.1	10.5	9.9	9.9	10.1
32	<b>STONE, CLAY, AND GLASS PRODUCTS</b> .....	<b>133.7</b>	<b>131.5</b>	<b>136.0</b>	<b>135.7</b>	<b>135.0</b>
322	Glass and glassware, pressed or blown .....	44.0	45.0	44.3	44.4	44.2
3221	Glass containers .....	24.8	25.4	24.5	24.4	24.1
3229	Pressed and blown glass, nec .....	19.2	19.6	19.8	20.0	20.1
323	Products of purchased glass .....	13.9	12.6	14.6	14.8	14.8
324	Cement, hydraulic .....	1.7	1.6	1.8	1.8	1.7
325	Structural clay products .....	6.7	6.5	6.8	6.7	6.8
326	Pottery and related products .....	16.4	16.6	17.0	17.0	16.4
327	Concrete, gypsum, and plaster products .....	15.4	14.8	15.8	15.8	15.8
329	Misc. nonmetallic mineral products .....	32.6	31.6	32.7	32.4	32.6
33	<b>PRIMARY METAL INDUSTRIES</b> .....	<b>133.5</b>	<b>129.3</b>	<b>133.8</b>	<b>133.0</b>	<b>132.4</b>
331	Blast furnace and basic steel products .....	43.4	40.3	43.1	42.5	41.9
3312	Blast furnaces and steel mills .....	33.8	31.1	33.4	32.7	32.2
332	Iron and steel foundries .....	20.7	20.8	20.1	19.8	19.1

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES**

**B-3. Women employees on nonagricultural payrolls by industry—Continued**

[In thousands]

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
<b>PRIMARY METAL INDUSTRIES —Continued</b>						
3321	Gray iron foundries .....	9.9	10.4	9.2	8.9	8.3
3322	Malleable iron foundries .....	1.6	1.7	1.4	1.4	1.3
3325	Steel foundries, nec .....	4.7	4.5	4.9	4.9	4.9
333	Primary nonferrous metals .....	4.8	4.5	4.9	4.9	5.0
3334	Primary aluminum .....	2.0	1.7	2.0	2.0	2.1
335	Nonferrous rolling and drawing .....	42.9	42.4	43.7	43.8	44.1
3351	Copper rolling and drawing .....	3.8	3.7	3.7	3.7	3.6
3353	Aluminum sheet, plate, and foil .....	4.4	4.3	4.4	4.4	4.3
3357	Nonferrous wire drawing and insulating .....	25.3	25.1	26.2	26.3	26.8
336	Nonferrous foundries .....	16.5	16.7	16.7	16.6	16.8
3361	Aluminum foundries .....	8.1	7.9	8.3	8.4	8.5
34	<b>FABRICATED METAL PRODUCTS</b> .....	361.3	356.3	366.6	367.3	365.3
341	Metal cans and shipping containers .....	13.6	12.8	13.7	13.5	13.6
3411	Metal cans .....	11.8	11.1	11.8	11.6	11.6
342	Cutlery, hand tools, and hardware .....	62.3	63.4	62.0	63.1	62.4
3423, 5	Hand and edge tools, and hand saws and blades .....	17.5	17.4	17.8	17.9	18.0
3429	Hardware, nec .....	37.5	38.6	36.9	37.8	36.9
343	Plumbing and heating, except electric .....	19.5	18.9	19.8	19.8	20.0
344	Fabricated structural metal products .....	73.3	71.7	76.7	76.2	75.6
3441	Fabricated structural metal .....	7.7	7.3	8.1	8.1	8.2
3442	Metal doors, sash, and trim .....	23.4	23.7	25.1	24.5	23.6
3443	Fabricated plate work (boiler shops) .....	16.5	15.8	17.1	17.1	17.5
3444	Sheet metal work .....	15.5	14.9	16.2	16.3	16.0
345	Screw machine products, bolts, etc. ....	26.4	24.9	27.2	27.5	27.5
3451	Screw machine products .....	13.6	12.8	14.1	14.2	14.3
3452	Bolts, nuts, rivets, and washers .....	12.8	12.1	13.1	13.3	13.2
346	Metal forgings and stampings .....	59.3	60.0	59.1	58.5	57.7
3462	Iron and steel forgings .....	4.6	4.3	4.6	4.6	4.6
3465	Automotive stampings .....	14.4	16.1	13.9	13.6	12.8
3469	Metal stampings, nec .....	38.2	37.4	38.6	38.2	38.1
347	Metal services, nec .....	26.5	26.5	26.7	26.9	26.8
3471	Plating and polishing .....	18.2	18.6	18.4	18.5	18.3
3479	Metal coating and allied services .....	8.3	7.9	8.3	8.4	8.5
348	Ordnance and accessories, nec .....	17.2	16.9	17.0	17.1	17.1
349	Misc. fabricated metal products .....	63.2	61.2	64.4	64.7	64.6
3494	Valves and pipe fittings .....	23.3	22.1	23.6	24.0	23.9
3496	Misc. fabricated wire products .....	14.6	14.0	14.9	15.1	15.1
35	<b>MACHINERY, EXCEPT ELECTRICAL</b> .....	473.6	455.3	481.6	484.3	487.6
351	Engines and turbines .....	25.3	25.2	25.5	24.4	24.6
3511	Turbines and turbine generator sets .....	5.8	5.9	5.8	5.9	5.8
3519	Internal combustion engines, nec .....	19.5	19.3	19.7	18.5	18.8
352	Farm and garden machinery .....	26.2	25.5	24.2	26.4	27.0
3523	Farm machinery and equipment .....	20.3	19.2	18.8	20.7	21.1
353	Construction and related machinery .....	44.8	42.4	45.7	44.1	44.6
3531	Construction machinery .....	13.7	13.9	13.3	11.1	11.4
3533	Oil field machinery .....	11.5	10.0	12.2	12.3	12.5
354	Metalworking machinery .....	58.2	54.7	59.6	60.1	60.2
3541	Machine tools, metal cutting types .....	10.0	9.1	10.3	10.5	10.6
3544	Special dies, tools, jigs, and fixtures .....	15.6	15.1	15.5	15.3	15.0
3545	Machine tool accessories .....	14.3	13.4	14.8	14.9	15.0
355	Special industry machinery .....	31.1	30.5	31.9	32.0	32.1
3551	Food products machinery .....	6.6	6.3	6.8	6.8	6.8
3552	Textile machinery .....	5.3	5.1	5.5	5.5	5.5
3555	Printing trades machinery .....	7.3	7.5	7.3	7.4	7.4
356	General industrial machinery .....	62.6	60.6	64.0	64.1	64.1
3561	Pumps and pumping equipment .....	11.1	11.0	11.1	11.2	11.2
3562	Ball and roller bearings .....	14.1	14.0	14.6	14.7	14.7
357	Office and computing machines .....	137.5	129.3	142.6	145.1	147.0
3573	Electronic computing equipment .....	110.2	101.0	115.4	117.2	118.8
358	Refrigeration and service machinery .....	39.0	38.8	39.4	39.1	39.0
3585	Refrigeration and heating equipment .....	26.1	25.4	26.3	26.1	26.0
359	Misc. machinery, except electrical .....	48.8	48.3	48.7	49.0	49.0
3599	Machinery, except electrical, nec .....	37.1	36.6	36.9	37.5	37.5
36	<b>ELECTRIC AND ELECTRONIC EQUIPMENT</b> .....	894.4	868.6	916.3	917.7	923.7
361	Electric distributing equipment .....	44.6	43.7	45.3	45.7	46.0
3612	Transformers .....	19.8	19.5	20.2	20.3	20.3
3613	Switchgear and switchboard apparatus .....	24.9	24.2	25.1	25.4	25.7
362	Electrical industrial apparatus .....	99.3	97.5	98.8	98.6	98.5
3621	Motors and generators .....	55.4	54.8	54.6	54.2	54.1
3622	Industrial controls .....	29.8	29.4	29.7	29.9	30.0
363	Household appliances .....	59.7	58.8	62.7	63.0	62.9
3632	Household refrigerators and freezers .....	10.2	8.9	10.4	10.6	10.8
3633	Household laundry equipment .....	4.9	4.4	5.0	5.0	5.2
3634	Electric housewares and fans .....	26.4	27.7	28.0	28.4	28.3
364	Electric lighting and wiring equipment .....	106.1	104.8	107.1	106.6	107.9
3641	Electric lamps .....	24.4	24.6	24.6	24.1	24.8

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES**

**B-3. Women employees on nonagricultural payrolls by industry—Continued**

[In thousands]

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
<b>ELECTRIC AND ELECTRONIC EQUIPMENT—Continued</b>						
3643	Current-carrying wiring devices .....	48.7	47.2	49.6	50.0	50.8
365	Radio and TV receiving equipment .....	59.4	63.3	62.5	60.3	60.0
3651	Radio and TV receiving sets .....	46.6	48.1	47.6	47.9	47.5
366	Communication equipment .....	196.4	186.9	203.5	205.2	206.9
3661	Telephone and telegraph apparatus .....	77.9	74.1	80.7	81.0	81.9
3662	Radio and TV communication equipment .....	118.5	112.8	122.8	124.2	125.0
367	Electronic components and accessories .....	271.2	255.1	279.0	282.5	284.7
3671-3	Electronic tubes .....	16.7	16.0	16.9	17.1	17.2
3674	Semiconductors and related devices .....	92.0	86.7	95.8	97.3	98.6
3679	Electronic components, nec. ....	111.4	104.8	114.0	115.5	115.6
369	Misc. electrical equipment and supplies .....	57.6	58.5	57.4	55.8	56.8
3694	Engine electrical equipment .....	26.1	28.5	24.8	23.3	23.7
<b>TRANSPORTATION EQUIPMENT .....</b>		<b>319.4</b>	<b>319.4</b>	<b>318.5</b>	<b>316.1</b>	<b>315.8</b>
37	Motor vehicles and equipment .....	139.9	149.2	133.8	130.5	130.3
3711	Motor vehicles and car bodies .....	54.0	58.0	51.9	50.1	52.6
3713	Truck and bus bodies .....	5.6	5.4	5.6	5.4	5.3
3714	Motor vehicle parts and accessories .....	77.9	83.5	73.8	72.6	70.0
372	Aircraft and parts .....	111.5	100.9	115.8	117.1	117.6
3721	Aircraft .....	64.4	58.1	66.3	66.7	66.6
3724	Aircraft engines and engine parts .....	24.5	22.3	26.0	26.6	26.8
3728	Aircraft equipment, nec. ....	22.6	20.5	23.5	23.8	24.2
373	Ship and boat building and repairing .....	23.1	23.7	23.5	23.0	22.4
3731	Ship building and repairing .....	14.9	14.7	15.9	15.8	15.5
374	Railroad equipment .....	6.3	5.9	6.6	6.7	6.7
376	Guided missiles, space vehicles, parts .....	20.6	19.2	21.3	21.5	21.9
3761	Guided missiles and space vehicles .....	17.1	15.9	17.6	17.8	18.2
379	Miscellaneous transportation equipment .....	11.3	14.9	10.4	10.3	10.3
<b>INSTRUMENTS AND RELATED PRODUCTS .....</b>		<b>294.3</b>	<b>287.8</b>	<b>297.1</b>	<b>297.2</b>	<b>297.4</b>
381	Engineering and scientific instruments .....	22.4	21.0	23.1	23.3	23.6
382	Measuring and controlling devices .....	98.8	94.6	100.6	100.1	100.7
3822	Environmental controls .....	23.5	22.9	23.7	23.5	23.5
3823	Process control instruments .....	16.8	16.6	16.9	17.1	17.3
3825	Instruments to measure electricity .....	42.5	39.8	43.3	43.2	43.1
383	Optical instruments and lenses .....	10.8	10.0	11.8	11.7	11.7
384	Medical instruments and supplies .....	79.0	78.9	79.0	80.5	80.4
3841	Surgical and medical instruments .....	36.2	36.2	36.0	37.0	36.9
3842	Surgical appliances and supplies .....	34.6	34.0	35.0	35.4	35.6
385	Ophthalmic goods .....	26.0	25.6	26.3	26.4	26.6
386	Photographic equipment and supplies .....	39.0	38.3	38.3	38.3	38.1
387	Watches, clocks, and watchcases .....	18.3	19.4	18.0	16.9	16.3
<b>MISCELLANEOUS MANUFACTURING INDUSTRIES .....</b>		<b>214.6</b>	<b>213.9</b>	<b>225.3</b>	<b>222.7</b>	<b>211.1</b>
391	Jewelry, silverware, and plated ware .....	28.7	30.7	29.5	30.2	29.0
393	Musical instruments .....	11.1	11.9	10.8	10.7	10.6
394	Toys and sporting goods .....	64.1	59.2	72.9	69.9	61.1
3942, 4	Dolls, games, toys, and children's vehicles .....	34.0	30.3	42.0	38.5	30.8
3949	Sporting and athletic goods, nec. ....	30.1	28.9	30.9	31.4	30.3
395	Pens, pencils, office and art supplies .....	22.9	21.7	23.4	23.7	24.0
396	Costume jewelry and notions .....	36.1	39.3	35.6	35.8	34.9
399	Miscellaneous manufactures .....	51.7	51.1	53.1	52.4	51.5
<b>NONDURABLE GOODS</b>						
<b>FOOD AND KINDRED PRODUCTS .....</b>		<b>504.2</b>	<b>498.1</b>	<b>535.5</b>	<b>513.5</b>	<b>496.0</b>
201	Meat products .....	115.0	112.2	119.5	120.5	118.3
2011	Meat packing plants .....	28.2	27.7	28.8	30.0	29.8
2013	Sausages and other prepared meats .....	21.1	21.5	21.0	21.3	20.8
2016	Poultry dressing plants .....	58.7	56.2	62.0	61.8	60.5
202	Dairy products .....	37.4	37.0	37.8	37.5	37.1
2026	Fluid milk .....	19.2	19.1	19.2	19.2	19.0
203	Preserved fruits and vegetables .....	105.4	98.5	119.4	100.4	88.8
2032	Canned specialties .....	9.0	9.9	9.2	8.8	9.1
2033	Canned fruits and vegetables .....	36.5	27.6	45.8	33.5	25.5
2037	Frozen fruits and vegetables .....	25.8	26.0	27.7	25.2	22.6
204	Grain mill products .....	28.8	28.8	29.1	28.9	29.0
205	Bakery products .....	62.3	62.5	63.2	62.4	62.1
2051	Bread, cake, and related products .....	42.0	42.5	41.9	41.9	41.7
2052	Cookies and crackers .....	20.3	20.0	21.3	20.5	20.4
206	Sugar and confectionery products .....	42.7	45.9	48.1	48.5	46.6
207	Fats and oils .....	5.2	5.3	5.4	5.4	5.4
208	Beverages .....	36.9	35.9	39.3	38.6	38.4
2082	Malt beverages .....	6.2	5.8	6.5	6.5	6.5
2086	Bottled and canned soft drinks .....	17.3	16.7	17.9	17.6	17.6
209	Misc. foods and kindred products .....	70.6	72.0	73.7	71.3	70.3
<b>TOBACCO MANUFACTURES .....</b>		<b>24.2</b>	<b>28.4</b>	<b>27.8</b>	<b>24.0</b>	<b>24.2</b>
211	Cigarettes .....	13.6	13.8	13.7	13.6	13.5

# ESTABLISHMENT DATA

## WOMEN EMPLOYEES

### B-3. Women employees on nonagricultural payrolls by industry—Continued

(In thousands)

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
22	<b>TEXTILE MILL PRODUCTS</b>	<b>423.0</b>	<b>424.6</b>	<b>424.5</b>	<b>427.2</b>	<b>425.8</b>
221	Weaving mills, cotton	65.5	64.5	65.7	66.7	67.1
222	Weaving mills, synthetic	51.5	51.1	51.9	52.0	51.7
223	Weaving and finishing mills, wool	8.3	8.2	8.3	8.4	8.4
224	Narrow fabric mills	15.2	15.5	15.2	15.1	15.0
225	Knitting mills	149.0	150.3	149.2	150.4	149.6
2251	Women's hosiery, except socks	23.4	23.5	23.9	24.0	24.0
2252	Hosiery, nec	25.0	25.3	24.1	25.0	24.9
2253	Knit outerwear mills	52.7	53.6	53.9	53.7	52.9
2254	Knit underwear mills	25.3	24.9	25.1	25.4	25.4
2257	Circular knit fabric mills	12.9	12.3	12.7	12.7	12.9
226	Textile finishing, except wool	23.2	23.1	23.6	23.3	23.2
2261	Finishing plants, cotton	10.2	10.2	10.2	10.2	10.2
2262	Finishing plants, synthetic	6.3	6.1	6.4	6.3	6.4
227	Floor covering mills	24.9	25.5	24.9	25.0	24.4
228	Yarn and thread mills	64.6	65.3	65.2	65.6	65.4
2281	Yarn mills, except wool	41.3	41.3	41.7	42.1	42.1
2282	Throwing and winding mills	12.4	12.7	12.5	12.3	12.1
229	Miscellaneous textile goods	20.8	21.1	20.5	20.7	21.0
23	<b>APPAREL AND OTHER TEXTILE PRODUCTS</b>	<b>1,064.2</b>	<b>1,076.9</b>	<b>1,068.0</b>	<b>1,060.5</b>	<b>1,047.7</b>
231	Men's and boys' suits and coats	66.7	70.1	63.7	64.8	64.7
232	Men's and boys' furnishings	308.2	305.4	311.8	311.4	310.6
2321	Men's and boys' shirts and nightwear	92.4	93.1	93.5	92.6	91.5
2327	Men's and boys' separate trousers	65.6	65.1	66.1	66.3	66.2
2328	Men's and boys' work clothing	84.4	81.4	85.6	87.4	88.2
233	Women's and misses' outerwear	375.5	378.8	375.6	370.0	362.1
2331	Women's and misses' blouses and waists	53.5	54.9	52.7	52.1	50.4
2336	Women's and misses' dresses	147.3	146.8	147.2	145.8	144.2
2337	Women's and misses' suits and coats	53.4	51.4	54.9	49.6	46.5
2339	Women's and misses' outerwear, nec	121.2	125.7	120.8	122.5	121.0
234	Women's and children's undergarments	77.9	78.9	78.6	78.9	77.3
2341	Women's and children's underwear	62.1	62.7	63.0	63.1	61.4
2342	Brassieres and allied garments	15.8	16.2	15.6	15.8	15.9
236	Children's outerwear	56.9	58.5	55.3	55.9	55.1
2361	Children's dresses and blouses	22.5	23.6	22.2	21.9	21.6
238	Misc. apparel and accessories	44.4	45.5	44.8	43.4	42.6
239	Misc. fabricated textile products	121.4	126.4	124.9	122.9	122.2
2391	Curtains and draperies	24.2	24.5	25.3	25.4	25.3
2392	House furnishings, nec	32.7	32.4	34.3	34.7	34.3
2396	Automotive and apparel trimmings	18.5	20.6	19.5	17.0	17.7
26	<b>PAPER AND ALLIED PRODUCTS</b>	<b>163.8</b>	<b>161.1</b>	<b>166.1</b>	<b>165.1</b>	<b>162.6</b>
261, 26	Paper and pulp mills	26.2	24.8	26.8	27.0	26.8
262	Paper mills, except building paper	23.3	22.0	23.6	23.7	23.6
263	Paperboard mills	6.4	6.2	6.5	6.5	6.6
264	Misc. converted paper products	78.8	77.0	79.6	78.7	76.9
265	Paperboard containers and boxes	52.5	53.1	53.2	52.9	52.3
27	<b>PRINTING AND PUBLISHING</b>	<b>485.6</b>	<b>473.9</b>	<b>495.5</b>	<b>500.2</b>	<b>504.3</b>
271	Newspapers	152.5	147.4	156.9	158.5	160.2
272	Periodicals	50.5	49.8	51.0	51.8	51.8
273	Books	55.1	54.3	54.0	55.5	57.0
274	Miscellaneous publishing	26.2	26.6	25.9	26.3	27.1
275	Commercial printing	129.1	126.8	133.0	133.6	134.0
2751	Commercial printing, letterpress	57.7	58.0	59.4	59.5	59.4
2752	Commercial printing, lithographic	65.9	63.6	67.9	68.5	68.9
276	Manifold business forms	15.5	14.7	15.8	16.0	16.1
278	Blankbooks and bookbinding	34.2	32.4	35.4	35.4	35.0
279	Printing trade services	9.0	8.8	9.4	9.4	9.5
28	<b>CHEMICALS AND ALLIED PRODUCTS</b>	<b>271.5</b>	<b>264.3</b>	<b>275.5</b>	<b>276.6</b>	<b>275.7</b>
281	Industrial inorganic chemicals	24.7	23.5	25.2	25.5	25.4
2819	Industrial inorganic chemicals, nec	16.4	15.9	16.5	16.7	16.7
282	Plastics materials and synthetics	46.7	45.2	47.1	46.9	46.7
2821	Plastics materials and resins	11.0	10.4	11.3	11.2	11.3
2824	Organic fibers, noncellulosic	26.6	26.4	26.4	26.3	26.1
283	Drugs	78.5	76.8	79.0	79.9	80.0
2834	Pharmaceutical preparations	66.9	65.5	67.3	68.1	68.3
284	Soap, cleaners, and toilet goods	55.2	54.6	57.2	56.9	56.1
2841	Soap and other detergents	9.1	9.3	9.1	9.1	8.7
2844	Toilet preparations	32.8	32.0	34.6	34.3	34.2
285	Paints and allied products	12.9	12.6	13.1	13.1	13.0
286	Industrial organic chemicals	24.4	23.7	24.5	24.7	24.7
2861,9	Gum, wood, and industrial organic chemicals, nec	19.5	19.1	19.4	19.5	19.6
287	Agricultural chemicals	9.9	9.2	9.9	10.0	10.1
289	Miscellaneous chemical products	19.3	18.7	19.5	19.6	19.7

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES**

**B-3. Women employees on nonagricultural payrolls by industry—Continued**

[In thousands]

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
29	<b>PETROLEUM AND COAL PRODUCTS</b>	26.7	24.9	27.9	27.9	28.1
291	Petroleum refining	21.5	19.9	22.5	22.6	22.9
30	<b>RUBBER AND MISC. PLASTICS PRODUCTS</b>	270.3	272.0	270.3	268.7	263.3
301	Tires and inner tubes	12.0	12.5	11.6	11.5	11.5
302	Rubber and plastics footwear	13.5	14.7	13.3	13.2	13.5
303,4	Reclaimed rubber, and rubber and plastics hose and belting	6.1	6.1	6.0	6.0	5.9
306	Fabricated rubber products, nec	40.6	41.1	39.9	39.3	38.1
307	Miscellaneous plastics products	198.1	197.6	199.5	198.7	194.3
31	<b>LEATHER AND LEATHER PRODUCTS</b>	147.9	152.0	148.2	148.2	145.3
311	Leather tanning and finishing	3.0	3.2	2.8	2.8	2.7
314	Footwear, except rubber	98.0	102.3	96.6	97.1	96.2
3143	Men's footwear, except athletic	36.6	39.4	34.8	35.4	35.5
3144	Women's footwear, except athletic	41.5	42.8	41.7	41.6	41.8
316	Luggage	9.5	9.2	10.0	9.9	9.3
317	Handbags and personal leather goods	23.6	22.6	24.9	24.4	23.2
	<b>TRANSPORTATION AND PUBLIC UTILITIES</b>	1,231	1,185	1,260	1,272	1,271
41	<b>LOCAL AND INTERURBAN PASSENGER TRANSIT</b>	57.3	59.7	64.5	64.9	65.6
411	Local and suburban transportation	10.9	10.0	11.7	11.8	12.0
412	Taxicabs	7.5	7.7	7.5	7.8	7.8
413	Intercity highway transportation	4.8	4.6	5.0	5.0	5.2
415	School buses	31.8	35.0	37.8	37.8	38.2
42	<b>TRUCKING AND WAREHOUSING</b>	155.1	151.8	160.0	163.4	162.5
421,3	Trucking and trucking terminals	138.0	135.3	141.1	143.7	143.5
422	Public warehousing	17.0	16.5	18.9	19.7	19.0
44	<b>WATER TRANSPORTATION</b>	19.4	18.6	19.7	19.9	20.1
45	<b>TRANSPORTATION BY AIR</b>	134.2	129.5	137.4	138.6	139.5
451,2	Air transportation	126.7	122.6	129.7	130.9	131.8
46	<b>PIPE LINES, EXCEPT NATURAL GAS</b>	2.1	2.1	2.2	2.2	2.1
47	<b>TRANSPORTATION SERVICES</b>	85.4	78.9	89.1	90.5	90.1
48	<b>COMMUNICATION</b>	613.9	587.8	619.1	624.4	621.7
481	Telephone communication	537.1	515.6	539.9	543.2	540.5
483	Radio and television broadcasting	59.7	56.2	61.3	59.7	62.8
49	<b>ELECTRIC, GAS, AND SANITARY SERVICES</b>	141.8	135.1	144.9	145.8	146.7
491	Electric services	63.9	60.3	65.7	66.3	67.1
492	Gas production and distribution	35.2	34.0	35.4	35.4	35.1
493	Combination utility services	33.0	31.6	33.7	34.0	34.2
495	Sanitary services	4.8	4.5	5.1	5.1	5.3
	<b>WHOLESALE AND RETAIL TRADE</b>	8,666	8,950	8,798	8,999	9,276
50,51	<b>WHOLESALE TRADE</b>	1,311	1,292	1,339	1,350	1,347
50	<b>WHOLESALE TRADE-DURABLE GOODS</b>	722	702	733	741	741
501	Motor vehicles and automotive equipment	93.7	92.1	94.1	94.2	93.9
502	Furniture and home furnishings	38.3	37.2	38.9	40.2	40.2
503	Lumber and construction materials	31.9	30.2	32.9	33.2	33.0
504	Sporting goods, toys, and hobby goods	22.3	23.3	22.4	22.9	23.1
505	Metals and minerals, except petroleum	28.0	26.9	28.7	28.9	29.0
506	Electrical goods	116.2	113.0	117.5	119.2	120.5
507	Hardware, plumbing, and heating equipment	67.2	65.0	68.4	69.0	70.1
508	Machinery, equipment, and supplies	275.2	263.9	280.6	283.1	281.9
509	Miscellaneous durable goods	49.0	50.7	49.1	49.8	49.3
51	<b>WHOLESALE TRADE-NONDURABLE GOODS</b>	589	590	606	609	606
511	Paper and paper products	40.9	40.3	41.7	41.7	41.7
512	Drugs, proprietaries, and sundries	64.2	62.0	66.5	67.3	67.3
513	Apparel, piece goods, and notions	81.4	79.2	83.9	84.1	83.2
514	Groceries and related products	145.5	150.2	148.6	146.0	147.0
516	Chemicals and allied products	30.1	29.2	30.4	30.6	30.5
517	Petroleum and petroleum products	48.9	48.3	49.4	49.9	50.1
518	Beer, wine, and distilled beverages	20.9	20.2	21.4	21.6	21.9
519	Miscellaneous nondurable goods	118.8	115.3	123.6	125.5	124.0



# ESTABLISHMENT DATA WOMEN EMPLOYEES

## B-3. Women employees on nonagricultural payrolls by industry—Continued

[In thousands]

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
52-59	<b>RETAIL TRADE</b> .....	7,355	7,658	7,459	7,649	7,929
52	<b>BUILDING MATERIALS AND GARDEN SUPPLIES</b> .....	155.2	155.7	158.8	161.9	163.3
521	Lumber and other building materials .....	62.0	61.0	63.8	64.4	64.5
525	Hardware stores .....	52.8	53.9	54.6	55.8	56.9
53	<b>GENERAL MERCHANDISE STORES</b> .....	1,528.1	1,809.7	1,523.9	1,632.6	1,748.3
531	Department stores .....	1,211.8	1,457.0	1,205.0	1,297.7	1,393.1
533	Variety stores .....	219.4	250.2	218.0	228.7	239.7
539	Misc. general merchandise stores .....	96.9	102.5	100.9	106.2	115.5
54	<b>FOOD STORES</b> .....	948.8	950.1	970.2	991.6	1,013.1
541	Grocery stores .....	797.7	786.7	820.2	831.9	841.9
542	Meat markets and freezer provisioners .....	16.9	15.8	17.1	17.3	17.9
546	Retail bakeries .....	74.8	76.7	75.9	78.1	79.2
55	<b>AUTOMOTIVE DEALERS AND SERVICE STATIONS</b> .....	313.7	310.7	317.3	319.2	319.6
551,2	New and used car dealers .....	125.9	124.3	125.5	125.2	124.8
553	Auto and home supply stores .....	46.9	48.9	47.4	47.3	48.8
554	Gasoline service stations .....	124.7	122.6	127.9	130.4	129.9
56	<b>APPAREL AND ACCESSORY STORES</b> .....	649.8	729.2	658.3	691.7	752.2
561	Men's and boys' clothing and furnishings .....	62.2	74.8	61.6	65.3	77.1
562	Women's ready-to-wear stores .....	315.7	351.4	318.1	333.7	355.5
565	Family clothing stores .....	131.6	151.9	134.2	143.3	163.8
566	Shoe stores .....	73.8	76.7	76.3	77.8	81.2
57	<b>FURNITURE AND HOME FURNISHING STORES</b> .....	198.6	199.1	202.8	205.2	208.3
571	Furniture and home furnishings .....	129.2	131.0	130.4	132.3	133.4
572	Household appliance stores .....	24.5	25.2	24.7	24.5	24.7
573	Radio, television, and music stores .....	45.0	42.9	47.7	48.4	50.2
58	<b>EATING AND DRINKING PLACES</b> .....	2,564.3	2,426.9	2,616.5	2,595.3	2,612.1
59	<b>MISCELLANEOUS RETAIL</b> .....	996.8	1,076.8	1,011.4	1,051.5	1,112.4
591	Drug stores and proprietary stores .....	309.4	312.9	314.6	317.8	334.3
592	Liquor stores .....	32.9	32.9	34.5	35.1	35.9
594	Miscellaneous shopping goods stores .....	344.6	393.2	349.1	375.2	412.5
596	Nonstore retailers .....	150.6	173.9	157.0	164.4	164.9
598	Fuel and ice dealers .....	22.6	22.7	22.5	23.3	23.5
599	Retail stores, nec .....	116.3	119.5	114.0	115.7	120.8
	<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	2,886	2,802	2,932	2,940	2,957
60	<b>BANKING</b> .....	1,044.3	1,014.3	1,057.6	1,066.6	1,070.5
602	Commercial and stock savings banks .....	961.0	933.7	973.3	981.5	985.2
61	<b>CREDIT AGENCIES OTHER THAN BANKS</b> .....	360.2	347.0	368.1	370.0	373.3
612	Savings and loan associations .....	173.3	165.8	177.3	179.5	180.4
614	Personal credit institutions .....	122.9	118.5	126.1	126.2	129.0
62	<b>SECURITY, COMMODITY BROKERS, AND SERVICES</b> .....	80.5	76.4	82.9	84.4	84.8
621	Security brokers and dealers .....	63.7	60.5	65.8	66.7	67.2
63	<b>INSURANCE CARRIERS</b> .....	731.0	713.3	739.0	738.8	742.6
631	Life insurance .....	278.0	273.1	280.8	279.4	281.5
632	Medical service and health insurance .....	100.2	99.8	100.7	100.7	101.9
633	Fire, marine, and casualty insurance .....	301.3	289.9	305.1	306.4	307.7
64	<b>INSURANCE AGENTS, BROKERS, AND SERVICE</b> .....	262.9	256.0	266.8	270.2	268.8
65	<b>REAL ESTATE</b> .....	334.7	325.7	343.3	342.1	341.2
651	Real estate operators and lessors .....	132.6	132.0	134.4	133.7	135.2
653	Real estate agents and managers .....	153.9	145.0	159.5	158.5	156.6
655	Subdividers and developers .....	30.9	31.5	31.9	32.4	32.3
66	<b>COMBINED REAL ESTATE, INSURANCE, ETC.</b> .....	17.0	16.7	16.5	17.8	17.7
67	<b>HOLDING AND OTHER INVESTMENT OFFICES</b> .....	55.3	52.8	57.5	57.7	57.7
—	<b>SERVICES</b> .....	9,910	9,621	10,095	10,101	10,094
70	<b>HOTELS AND OTHER LODGING PLACES</b> .....	559.7	496.2	572.5	552.0	536.7
701	Hotels, motels, and tourist courts .....	534.9	477.7	550.5	531.6	514.3

**ESTABLISHMENT DATA  
WOMEN EMPLOYEES**

**B-3. Women employees on nonagricultural payrolls by industry — Continued**

[In thousands]

1972 SIC Code	Industry	AVG. 1979	Dec. 1978	Oct. 1979	Nov. 1979	Dec. 1979
72	<b>PERSONAL SERVICES</b> .....	607.8	614.6	607.7	607.9	606.4
721	Laundry, cleaning, and garment services .....	221.4	224.2	220.6	222.3	220.6
723	Beauty shops .....	249.3	252.3	248.0	247.2	248.0
726	Funeral service and crematories .....	18.9	18.2	19.1	19.0	19.2
73	<b>BUSINESS SERVICES</b> .....	1,213.6	1,184.7	1,267.1	1,263.5	1,270.4
731	Advertising .....	68.3	66.2	70.3	70.7	70.6
732	Credit reporting and collection .....	56.3	58.2	55.5	54.8	54.2
733	Mailing, reproduction, stenographic .....	52.2	52.1	54.8	55.8	55.3
734	Services to buildings .....	175.4	163.5	185.6	185.7	185.8
736	Personnel supply services .....	286.8	286.2	304.7	297.6	309.6
737	Computer and data processing services .....	122.0	113.2	126.6	130.5	129.9
75	<b>AUTO REPAIR, SERVICES, AND GARAGES</b> .....	94.4	92.4	95.0	96.4	94.5
753	Automotive repair shops .....	42.6	41.2	42.6	42.6	41.2
75	<b>MISCELLANEOUS REPAIR SERVICES</b> .....	57.5	53.7	60.2	60.2	60.9
78	<b>MOTION PICTURES</b> .....	80.1	78.6	78.4	78.2	78.5
781	Motion picture production and services .....	22.7	24.0	23.3	24.4	25.1
783	Motion picture theaters .....	51.5	48.7	49.1	48.0	47.6
79	<b>AMUSEMENT AND RECREATION SERVICES</b> .....	282.3	258.0	265.8	247.8	247.3
80	<b>HEALTH SERVICES</b> .....	4,101.1	3,987.2	4,163.2	4,180.3	4,193.7
801	Offices of physicians .....	559.4	545.2	569.5	567.6	569.6
802	Offices of dentists .....	270.6	264.3	273.6	275.3	277.4
806	Nursing and personal care facilities .....	871.8	838.8	888.1	892.9	897.7
806	Hospitals .....	2,135.0	2,084.8	2,163.4	2,172.1	2,175.6
81	<b>LEGAL SERVICES</b> .....	328.5	317.0	334.3	336.8	337.9
82	<b>EDUCATIONAL SERVICES</b> .....	532.6	557.2	576.3	585.3	572.8
821	Elementary and secondary schools .....	144.3	147.5	152.2	156.3	153.3
822	Colleges and universities .....	323.6	347.2	357.4	361.4	351.8
83	<b>SOCIAL SERVICES</b> .....	772.9	747.3	773.4	783.6	785.0
89	<b>MISCELLANEOUS SERVICES</b> .....	287.4	271.1	292.3	296.5	299.1
891	Engineering and architectural services .....	101.5	95.7	104.7	106.5	107.5
893	Accounting, auditing, and bookkeeping .....	128.8	121.5	129.4	130.6	131.7
	<b>GOVERNMENT</b> .....	7,331	7,379	7,486	7,676	7,672
	<b>FEDERAL GOVERNMENT</b> .....	873	858	871	870	876
	<b>STATE AND LOCAL GOVERNMENT</b> .....	6,458	6,521	6,615	6,806	6,796
	State government .....	1,535.2	1,559.2	1,609.8	1,640.9	1,625.2
	Hospitals .....	332.8	325.7	335.4	341.3	343.6
	State education .....	627.8	667.0	703.2	725.3	707.9
	General administration including executive, legislative, and judicial functions .....	384.9	382.4	382.8	384.3	381.8
	Local government .....	4,923.1	4,961.9	5,005.1	5,165.2	5,171.0
	Transportation and public utilities .....	88.0	81.9	90.2	91.0	91.8
	Hospitals .....	416.5	400.2	425.2	432.0	433.2
	Local education .....	3,301.3	3,416.7	3,383.3	3,526.1	3,529.0
	General administration including executive, legislative, and judicial functions .....	918.3	880.9	907.3	916.0	918.1

**ESTABLISHMENT DATA  
SEASONALLY ADJUSTED EMPLOYMENT**

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

(In thousands)

Industry division and group	1979											1980	
	FEB.	MAR.	APP.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN. P	FEB. P
<b>TOTAL</b> .....	88,700	89,039	89,036	89,398	89,626	89,713	89,762	89,803	89,982	90,100	90,241	90,590	91,731
<b>GOODS-PRODUCING</b> .....	26,448	26,627	26,565	26,651	26,674	26,723	26,599	26,593	26,572	26,533	26,655	26,778	26,771
<b>MINING</b> .....	927	940	940	944	949	956	968	973	979	983	991	1,003	1,010
<b>CONSTRUCTION</b> .....	4,486	4,614	4,559	4,648	4,662	4,688	4,674	4,671	4,694	4,714	4,783	4,893	4,861
<b>MANUFACTURING</b> .....	21,025	21,073	21,066	21,059	21,062	21,079	20,957	20,949	20,899	20,836	20,881	20,882	20,900
<b>DURABLE GOODS</b> .....	12,715	12,751	12,752	12,739	12,760	12,786	12,714	12,737	12,650	12,587	12,615	12,600	12,659
Lumber and wood products .....	768	769	761	762	757	753	752	758	760	751	740	732	727
Furniture and fixtures .....	496	493	490	487	485	488	484	487	482	483	483	484	481
Stone, clay, and glass products .....	712	718	714	715	715	711	710	708	709	704	706	707	707
Primary metal industries .....	1,256	1,259	1,260	1,254	1,257	1,256	1,245	1,236	1,226	1,223	1,208	1,206	1,210
Fabricated metal products .....	1,733	1,732	1,732	1,730	1,737	1,730	1,714	1,716	1,723	1,726	1,725	1,711	1,720
Machinery, except electrical .....	2,437	2,450	2,466	2,471	2,484	2,500	2,492	2,496	2,455	2,438	2,444	2,497	2,500
Electric and electronic equipment .....	2,079	2,093	2,101	2,106	2,124	2,131	2,092	2,117	2,125	2,125	2,140	2,149	2,147
Transportation equipment .....	2,094	2,094	2,084	2,077	2,057	2,073	2,079	2,086	2,025	1,994	2,019	1,959	2,016
Instruments and related products .....	682	685	689	688	693	694	695	692	696	694	698	701	702
Miscellaneous manufacturing ind. ....	452	458	455	449	451	450	451	448	449	449	452	454	450
<b>NONDURABLE GOODS</b> .....	8,310	8,322	8,314	8,320	8,303	8,293	8,243	8,212	8,249	8,249	8,266	8,282	8,241
Food and kindred products .....	1,729	1,736	1,728	1,725	1,720	1,707	1,696	1,691	1,707	1,710	1,715	1,706	1,709
Tobacco manufactures .....	68	69	69	70	69	68	64	65	65	60	62	64	65
Textile mill products .....	899	897	892	893	892	892	886	884	887	889	893	890	891
Apparel and other textile products .....	1,327	1,324	1,325	1,324	1,312	1,224	1,302	1,294	1,299	1,292	1,297	1,307	1,307
Paper and allied products .....	711	716	717	714	715	718	717	714	715	714	713	718	717
Printing and publishing .....	1,229	1,232	1,234	1,236	1,242	1,250	1,247	1,245	1,252	1,262	1,263	1,271	1,279
Chemicals and allied products .....	1,108	1,108	1,111	1,114	1,119	1,116	1,111	1,110	1,113	1,114	1,119	1,122	1,120
Petroleum and coal products .....	212	213	213	213	212	212	213	215	217	217	217	219	168
Rubber and misc. plastic products .....	779	780	781	784	775	777	764	751	751	749	745	745	743
Leather and leather products .....	248	247	244	247	247	229	243	243	243	242	242	240	242
<b>SERVICE-PRODUCING</b> .....	62,252	62,412	62,471	62,747	62,952	62,990	63,163	63,210	63,410	63,567	63,586	63,812	63,960
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	5,054	5,116	5,024	5,130	5,190	5,169	5,194	5,180	5,218	5,229	5,223	5,206	5,198
<b>WHOLESALE AND RETAIL TRADE</b> .....	20,016	20,054	20,088	20,129	20,116	20,122	20,126	20,169	20,243	20,308	20,254	20,396	20,505
<b>WHOLESALE TRADE</b> .....	5,118	5,134	5,138	5,156	5,180	5,162	5,185	5,190	5,209	5,235	5,218	5,243	5,268
<b>RETAIL TRADE</b> .....	14,898	14,920	14,950	14,973	14,936	14,960	14,941	14,979	15,034	15,073	15,036	15,153	15,237
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	4,884	4,899	4,915	4,936	4,958	4,972	5,003	4,997	5,018	5,039	5,056	5,083	5,087
<b>SERVICES</b> .....	16,763	16,823	16,880	16,954	17,051	17,092	17,141	17,191	17,257	17,298	17,357	17,415	17,474
<b>GOVERNMENT</b> .....	15,455	15,510	15,564	15,558	15,637	15,635	15,699	15,673	15,674	15,693	15,696	15,712	15,696
<b>FEDERAL</b> .....	2,757	2,757	2,758	2,770	2,788	2,785	2,813	2,762	2,770	2,771	2,771	2,791	2,791
<b>STATE AND LOCAL</b> .....	12,728	12,753	12,806	12,828	12,849	12,850	12,886	12,911	12,904	12,922	12,925	12,921	12,905

p=preliminary.

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

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

(In thousands)

Industry division and group	1978	1979											
	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
<b>TOTAL</b> .....	36,074	36,271	36,385	36,517	36,669	36,789	36,916	37,102	37,262	37,144	37,324	37,512	37,539
<b>GOODS-PRODUCING</b> .....	6,827	6,865	6,877	6,855	6,920	6,939	6,960	6,971	6,907	6,506	6,542	6,548	6,985
<b>MINING</b> .....	83	84	85	87	87	89	91	92	94	94	94	95	97
<b>CONSTRUCTION</b> .....	345	350	353	357	362	367	374	379	380	383	385	389	397
<b>MANUFACTURING</b> .....	6,399	6,431	6,435	6,455	6,471	6,483	6,495	6,500	6,433	6,429	6,463	6,464	6,498
<b>DURABLE GOODS</b> .....	3,012	3,025	3,053	3,069	3,082	3,087	3,102	3,109	3,068	3,082	3,094	3,092	3,116
Lumber and wood products .....	112	112	113	114	114	114	113	113	113	114	115	113	112
Furnitures and fixtures .....	146	146	146	145	145	144	145	146	145	143	142	142	144
Stone, clay, and glass products .....	132	131	132	134	134	134	135	134	133	134	134	134	136
Primary metal industries .....	129	130	131	131	134	134	138	137	135	134	134	133	132
Fabricated metal products .....	355	357	360	361	361	362	363	363	360	359	362	363	364
Machinery, except electrical .....	453	456	460	464	465	473	473	479	478	482	482	482	485
Electric and electronic equipment .....	863	870	877	884	887	892	902	907	898	898	903	904	917
Transportation equipment .....	318	320	326	326	326	326	323	321	307	312	314	313	315
Instruments and related products .....	286	289	291	293	294	295	296	296	296	295	296	295	296
Miscellaneous manufacturing ind. ....	218	218	217	217	218	213	214	213	213	211	212	213	215
<b>NONDURABLE GOODS</b> .....	3,387	3,402	3,386	3,386	3,389	3,396	3,393	3,351	3,365	3,247	3,269	3,372	3,382
Food and kindred products .....	509	512	507	509	508	511	511	502	495	488	501	503	507
Tobacco manufactures .....	26	25	25	25	26	26	25	24	23	24	24	21	22
Textile mill products .....	425	425	424	423	422	422	424	422	422	421	421	424	426
Apparel and other textile products .....	1,081	1,087	1,075	1,071	1,072	1,072	1,062	1,073	1,056	1,049	1,053	1,048	1,052
Paper and allied products .....	161	163	163	165	165	164	164	165	164	164	164	163	162
Printing and publishing .....	470	474	476	477	479	479	482	487	488	491	494	498	500
Chemicals and allied products .....	266	268	268	268	269	271	273	274	271	271	273	276	277
Petroleum and coal products .....	25	25	25	25	26	26	27	27	27	28	28	28	28
Rubber and misc. plastics products .....	271	271	273	273	273	275	275	279	272	263	264	264	262
Leather and leather products .....	153	152	150	150	149	150	150	138	147	148	147	147	146
<b>SERVICE-PRODUCING</b> .....	29,247	29,406	29,508	29,618	29,745	29,850	29,956	30,131	30,355	30,238	30,382	30,564	30,554
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	1,179	1,195	1,205	1,205	1,202	1,214	1,233	1,236	1,243	1,251	1,252	1,267	1,265
<b>WHOLESALE AND RETAIL TRADE</b> ..	8,423	8,526	8,552	8,555	8,627	8,673	8,670	8,684	8,695	8,713	8,744	8,783	8,720
<b>WHOLESALE TRADE</b> .....	1,279	1,286	1,290	1,297	1,297	1,307	1,310	1,317	1,317	1,318	1,322	1,335	1,334
<b>RETAIL TRADE</b> .....	7,144	7,240	7,262	7,258	7,330	7,366	7,360	7,367	7,378	7,395	7,422	7,448	7,396
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	2,802	2,817	2,826	2,837	2,850	2,862	2,880	2,892	2,912	2,916	2,935	2,948	2,957
<b>SERVICES</b> .....	9,640	9,672	9,710	9,754	9,798	9,846	9,898	9,935	10,003	10,015	10,065	10,091	10,114
<b>GOVERNMENT</b> .....	7,203	7,196	7,215	7,223	7,272	7,255	7,275	7,380	7,502	7,343	7,386	7,475	7,488
<b>FEDERAL</b> .....	866	863	862	862	861	866	875	874	891	878	882	880	884
<b>STATE AND LOCAL</b> .....	6,337	6,333	6,353	6,361	6,411	6,389	6,400	6,506	6,611	6,465	6,504	6,595	6,604

<sup>1</sup> The unadjusted data are shown because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

# ESTABLISHMENT DATA SEASONALLY ADJUSTED EMPLOYMENT

## B-6. Production or nonsupervisory workers' on private nonagricultural payrolls by industry division and major manufacturing group, seasonally adjusted

[In thousands]

Industry division and group	1979												1980	
	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN. P	FEB. P	
<b>TOTAL PRIVATE</b> .....	59,883	60,161	60,051	60,326	60,495	60,544	60,475	60,528	60,668	60,746	60,841	61,051	61,220	
<b>GOODS-PRODUCING</b> .....	19,409	19,555	19,475	19,542	19,537	19,560	19,415	19,416	19,371	19,314	19,421	19,484	19,483	
<b>MINING</b> .....	707	707	708	708	709	712	725	730	733	733	739	747	746	
<b>CONSTRUCTION</b> .....	3,574	3,695	3,633	3,722	3,732	3,757	3,734	3,729	3,744	3,752	3,817	3,913	3,875	
<b>MANUFACTURING</b> .....	15,128	15,153	15,134	15,112	15,096	15,090	14,956	14,957	14,894	14,829	14,865	14,824	14,862	
<b>DURABLE GOODS</b> .....	9,138	9,158	9,146	9,119	9,122	9,124	9,044	9,066	8,972	8,908	8,931	8,875	8,939	
Lumber and wood products .....	655	657	649	649	646	643	642	646	649	639	627	618	614	
Furniture and fixtures .....	406	404	401	397	395	398	394	392	394	394	394	394	391	
Stone, clay, and glass products .....	564	569	563	564	565	560	558	557	557	553	554	554	555	
Primary metal industries .....	952	955	995	987	991	988	976	970	960	954	943	940	942	
Fabricated metal products .....	1,317	1,215	1,214	1,210	1,216	1,209	1,291	1,295	1,298	1,300	1,298	1,283	1,296	
Machinery, except electrical .....	1,610	1,615	1,625	1,628	1,632	1,641	1,628	1,637	1,601	1,591	1,590	1,630	1,630	
Electric and electronic equipment .....	1,369	1,378	1,384	1,384	1,393	1,395	1,359	1,375	1,380	1,376	1,388	1,396	1,396	
Transportation equipment .....	1,456	1,455	1,446	1,438	1,417	1,426	1,431	1,433	1,371	1,342	1,371	1,293	1,344	
Instruments and related products .....	421	422	423	421	424	422	421	420	421	418	421	421	427	
Miscellaneous manufacturing ind. ....	348	348	346	341	344	342	344	341	341	341	345	346	343	
<b>NONDURABLE GOODS</b> .....	5,990	5,555	5,988	5,993	5,973	5,966	5,912	5,891	5,922	5,921	5,534	5,949	5,923	
Food and kindred products .....	1,184	1,191	1,187	1,184	1,181	1,170	1,157	1,153	1,169	1,171	1,180	1,173	1,174	
Tobacco manufactures .....	54	55	56	56	55	54	50	52	52	46	48	50	51	
Textile mill products .....	783	781	777	778	777	778	771	769	772	776	778	778	779	
Apparel and other textile products .....	1,137	1,131	1,131	1,133	1,122	1,130	1,110	1,104	1,109	1,102	1,106	1,116	1,116	
Paper and allied products .....	527	542	543	541	541	547	545	543	543	542	542	545	546	
Printing and publishing .....	694	696	696	700	701	707	705	703	708	715	713	717	721	
Chemicals and allied products .....	636	635	636	636	640	639	634	635	637	638	641	643	644	
Petroleum and coal products .....	135	139	140	135	135	138	139	140	140	141	142	142	108	
Rubber and misc. plastics products .....	614	614	614	616	607	609	595	585	585	585	580	582	579	
Leather and leather products .....	212	211	208	210	210	194	206	207	207	205	204	203	205	
<b>SERVICE-PRODUCING</b> .....	40,474	40,606	40,576	40,784	40,958	40,984	41,060	41,112	41,257	41,432	41,420	41,567	41,737	
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	4,268	4,283	4,197	4,293	4,351	4,333	4,348	4,337	4,370	4,380	4,368	4,344	4,345	
<b>WHOLESALE AND RETAIL TRADE</b> .....	17,618	17,648	17,662	17,651	17,689	17,661	17,685	17,721	17,785	17,848	17,802	17,910	17,995	
<b>WHOLESALE TRADE</b> .....	4,206	4,222	4,221	4,237	4,257	4,255	4,256	4,259	4,279	4,295	4,285	4,301	4,324	
<b>RETAIL TRADE</b> .....	13,412	13,426	13,441	13,454	13,422	13,426	13,433	13,462	13,510	13,553	13,513	13,609	13,671	
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	3,716	3,729	3,743	3,756	3,777	3,788	3,804	3,794	3,804	3,814	3,824	3,841	3,860	
<b>SERVICES</b> .....	14,872	14,946	14,974	15,044	15,141	15,182	15,219	15,260	15,334	15,390	15,426	15,472	15,537	

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

p=preliminary.

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

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

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1977				
January.....	73.0	80.2	86.3	80.5
February.....	67.2	84.3	84.6	81.4
March.....	72.4	82.6	84.0	82.8
April.....	71.5	81.7	82.3	84.6
May.....	70.3	76.5	79.1	85.2
June.....	65.1	72.7	77.6	86.6
July.....	70.3	70.3	75.3	84.9
August.....	57.8	70.9	76.7	83.1
September.....	67.2	67.7	79.7	83.1
October.....	64.2	76.2	80.5	82.8
November.....	73.3	79.7	84.0	81.1
December.....	75.3	79.4	82.3	82.0
1978				
January.....	68.3	80.2	83.1	81.4
February.....	69.2	75.6	79.1	83.1
March.....	69.5	77.3	77.6	81.1
April.....	68.0	69.8	73.5	82.0
May.....	57.8	67.2	72.7	81.7
June.....	66.6	66.6	71.2	82.3
July.....	64.5	69.5	73.0	81.4
August.....	60.5	67.2	77.3	78.2
September.....	62.5	71.2	79.7	77.9
October.....	73.0	78.2	82.3	73.5
November.....	75.9	81.1	82.3	76.2
December.....	74.4	82.3	80.5	71.8
1979				
January.....	70.3	76.5	74.1	71.8
February.....	65.1	72.1	67.4	70.6
March.....	60.5	57.8	61.9	63.7
April.....	44.8	55.2	58.1	64.0
May.....	54.7	51.5	50.3	61.9
June.....	57.0	58.4	46.8	58.1
July.....	61.6	56.7	56.1	56.7p
August.....	48.8	52.0	55.8	54.9p
September.....	46.8	52.9	57.6	
October.....	69.8	61.0	60.2p	
November.....	59.9	66.6	62.5p	
December.....	59.0	65.4p		
1980				
January.....	64.2p	62.2p		
February.....	53.8p			
March.....				
April.....				
May.....				
June.....				
July.....				
August.....				
September.....				
October.....				
November.....				
December.....				

<sup>1</sup> Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.  
p = preliminary.







**ESTABLISHMENT DATA  
STATE AND AREA EMPLOYMENT**

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

(In thousands)

State and area	Total			Mining			Construction			Manufacturing		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>GEORGIA—Continued</b>												
1 Savannah <sup>1</sup> .....	85.1	85.2	84.3	(2)	(2)	(2)	5.1	4.5	4.5	16.6	16.4	16.2
<b>HAWAII</b>												
2 Honolulu .....	382.4	407.4	405.2	(2)	(2)	(2)	22.0	23.3	22.3	23.0	22.7	23.2
3 Honolulu .....	315.0	337.4	335.1	(2)	(2)	(2)	18.1	18.4	17.6	16.8	16.4	16.4
<b>IDAHO</b>												
4 Boise City .....	325.3	339.8	330.7	3.8	3.9	4.0	14.5	17.8	15.0	57.5	58.4	57.8
5 Boise City .....	79.4	81.8	(*)	(2)	(2)	(*)	5.3	5.9	(*)	9.1	9.7	(*)
<b>ILLINOIS<sup>1</sup></b>												
6 Bloomington-Normal <sup>1</sup> .....	4,679.3	4,976.9	(*)	29.0	30.4	(*)	152.6	181.6	(*)	1,263.1	1,213.0	(*)
7 Champaign-Urbana-Rantoul <sup>1</sup> .....	47.9	51.4	(*)	(3)	(3)	(*)	1.1	1.5	(*)	7.5	7.9	(*)
8 Chicago-Gary .....	68.5	74.2	(*)	(3)	(3)	(*)	2.0	2.4	(*)	7.3	8.0	(*)
9 Chicago SMSA <sup>1,4</sup> .....	3,400.1	3,499.6	(*)	4.8	5.1	(*)	128.2	149.3	(*)	944.8	926.5	(*)
10 Chicago SMSA <sup>1,4</sup> .....	3,157.2	3,264.2	(*)	4.7	5.0	(*)	102.4	111.6	(*)	846.3	847.4	(*)
11 Davenport-Rock Island-Moline <sup>1</sup> .....	162.8	174.4	(*)	(3)	(3)	(*)	6.7	9.0	(*)	50.1	53.2	(*)
12 Decatur <sup>1</sup> .....	53.5	55.1	(*)	(3)	(3)	(*)	2.2	2.6	(*)	20.1	19.1	(*)
13 Kankakee <sup>1</sup> .....	35.3	36.6	(*)	(3)	(3)	(*)	1.3	1.3	(*)	10.4	9.5	(*)
14 Peoria <sup>1</sup> .....	150.5	126.6	(*)	(3)	(3)	(*)	6.7	8.6	(*)	52.5	16.0	(*)
15 Rockford <sup>1</sup> .....	120.5	126.5	(*)	(3)	(3)	(*)	2.8	4.1	(*)	56.5	59.4	(*)
16 Springfield <sup>1</sup> .....	83.5	89.0	(*)	(3)	(3)	(*)	2.7	3.5	(*)	6.9	5.5	(*)
<b>INDIANA<sup>5</sup></b>												
17 Anderson .....	2,210.0	2,262.6	2,208.7	10.0	10.5	10.2	89.7	110.8	100.9	750.6	716.0	710.0
18 Evansville .....	53.4	50.9	49.1	(2)	(2)	(2)	1.2	1.4	1.2	25.9	22.4	21.8
19 Fort Wayne .....	127.2	131.6	126.9	2.8	2.9	2.8	7.5	9.5	7.1	38.2	37.4	37.2
20 Gary-Hammond-East Chicago <sup>4,5</sup> .....	182.3	175.5	172.2	(2)	(2)	(2)	7.3	8.1	7.3	63.4	52.6	52.1
21 Indianapolis .....	263.3	268.7	263.7	(2)	(2)	(2)	17.4	20.1	19.4	105.4	99.3	97.3
22 Lafayette-West Lafayette <sup>5</sup> .....	523.6	546.1	535.5	(2)	(2)	(2)	19.8	26.0	22.4	133.9	129.0	128.4
23 Muncie .....	57.9	59.8	58.7	(2)	(2)	(2)	1.8	2.6	2.0	12.9	11.8	11.7
24 South Bend .....	50.1	51.6	50.3	(2)	(2)	(2)	1.7	2.0	1.7	14.7	14.1	14.2
25 Terre Haute .....	114.2	116.8	115.7	(2)	(2)	(2)	4.7	5.1	5.0	34.6	33.8	33.6
26 Terre Haute .....	66.3	69.1	67.0	1.4	1.4	1.4	2.9	4.2	3.9	17.7	17.2	17.1
<b>IOWA<sup>1</sup></b>												
27 Cedar Rapids .....	1,098.6	1,141.8	1,116.4	1.9	2.3	1.9	46.7	55.2	47.9	255.9	259.0	258.9
28 Des Moines .....	83.4	87.8	86.7	(2)	(2)	(2)	3.9	4.4	4.1	28.8	29.1	29.2
29 Dubuque .....	179.8	185.3	183.1	(2)	(2)	(2)	7.2	7.8	7.3	26.9	27.4	27.4
30 Sioux City .....	43.8	46.1	45.4	(2)	(2)	(2)	1.5	1.9	1.6	16.2	17.5	17.3
31 Waterloo-Cedar Falls <sup>1</sup> .....	49.6	50.2	49.3	(2)	(2)	(2)	2.2	2.4	2.1	9.5	9.1	9.0
32 Waterloo-Cedar Falls <sup>1</sup> .....	64.9	70.2	69.2	(2)	(2)	(2)	2.7	3.3	3.2	22.4	25.5	25.4
<b>KANSAS<sup>1</sup></b>												
33 Lawrence .....	914.2	967.6	944.9	13.0	14.3	14.3	39.4	51.5	45.8	194.4	202.2	199.8
34 Topeka .....	26.9	29.1	29.3	(3)	(3)	(3)	1.0	1.4	1.3	4.5	4.9	4.7
35 Wichita .....	84.0	87.3	85.8	-1	-2	-2	2.8	3.6	3.4	11.6	10.9	10.9
36 Wichita .....	195.6	211.8	209.6	2.1	2.6	3.1	8.1	10.7	9.6	62.9	69.6	69.0
<b>KENTUCKY<sup>1</sup></b>												
37 Lexington-Fayette .....	1,211.5	1,262.5	1,236.4	53.2	55.2	54.5	56.4	68.1	60.6	297.5	295.2	289.7
38 Louisville .....	144.9	154.5	149.3	(2)	(2)	(2)	6.7	9.4	7.8	32.5	31.7	31.6
39 Owensboro .....	394.2	403.8	391.3	(2)	(2)	(2)	16.3	19.8	15.9	110.9	105.7	104.4
40 Owensboro .....	30.0	30.7	29.6	.7	.8	.7	1.9	2.1	1.9	6.8	6.7	6.6
<b>LOUISIANA<sup>1</sup></b>												
41 Alexandria .....	1,471.7	1,525.8	1,512.1	74.2	75.8	76.6	118.1	127.7	123.7	209.6	214.1	211.0
42 Baton Rouge .....	50.3	51.4	49.8	(2)	(2)	(2)	2.7	2.9	2.5	6.0	5.9	5.7
43 Lafayette .....	186.7	193.7	190.1	.8	.8	.8	22.0	22.9	20.9	25.5	26.2	26.1
44 Lake Charles .....	69.1	75.0	74.5	12.2	12.6	12.6	4.9	7.0	6.8	3.2	3.7	3.5
45 Monroe .....	60.9	65.4	62.7	1.8	1.8	1.8	7.3	9.2	8.5	12.5	12.8	11.2
46 New Orleans .....	49.7	50.6	49.3	.5	.6	.4	3.9	4.2	3.7	8.6	8.1	8.0
47 Shreveport .....	484.7	497.2	494.4	15.6	16.3	16.2	29.5	30.8	30.8	53.2	53.4	53.4
48 Shreveport .....	142.2	148.1	145.5	4.9	4.6	4.5	9.5	11.3	10.5	28.6	28.2	28.0
<b>MAINE<sup>1</sup></b>												
49 Lewiston-Auburn .....	398.1	418.7	406.7	(2)	(2)	(2)	15.7	18.8	16.9	113.2	114.7	113.7
50 Portland .....	34.4	36.5	35.8	(2)	(2)	(2)	1.3	1.7	1.5	12.2	12.3	12.3
51 Portland .....	86.6	92.3	91.2	(2)	(2)	(2)	3.4	4.0	3.5	17.5	17.9	18.2
<b>MARYLAND</b>												
52 Baltimore .....	1,580.8	1,645.8	1,604.0	(2)	(2)	(2)	97.2	103.7	97.5	242.6	247.1	242.8
53 Baltimore .....	880.5	909.1	888.0	(2)	(2)	(2)	46.2	51.7	48.1	164.9	166.2	163.0
<b>MASSACHUSETTS</b>												
54 Boston .....	2,519.5	2,625.6	2,578.6	(2)	(2)	(2)	65.0	81.8	75.7	663.3	668.6	667.1
55 Brockton .....	1,375.5	1,429.4	(*)	(2)	(2)	(*)	33.6	39.7	(*)	285.3	284.6	(*)
56 Fall River .....	55.6	58.9	57.6	(2)	(2)	(2)	1.4	1.8	1.7	12.7	13.1	13.1
57 Lawrence-Haverhill .....	55.8	57.9	(*)	(2)	(2)	(*)	1.3	1.9	(*)	20.9	20.9	(*)
58 Lowell .....	103.7	108.2	105.9	(2)	(2)	(2)	2.2	2.8	2.4	39.8	39.8	39.6
59 Springfield .....	71.9	76.8	(*)	(2)	(2)	(*)	2.1	2.7	(*)	24.8	26.9	(*)
60 Springfield .....	65.0	66.4	65.5	(2)	(2)	(2)	1.4	1.6	1.4	27.1	26.3	26.4
61 Springfield-Chicopee-Holyoke .....	232.4	242.1	235.3	(2)	(2)	(2)	4.9	6.3	5.9	67.7	69.3	68.9

See footnotes at end of table.



**ESTABLISHMENT DATA  
STATE AND AREA EMPLOYMENT**

**B-8 Employees on nonagricultural payrolls for States and selected areas by industry division—Continued**

(In thousands)

State and area	Total			Mining			Construction			Manufacturing		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>MASSACHUSETTS—Continued</b>												
1 Worcester	161.5	168.5	(*)	(2)	(2)	(*)	3.9	4.7	(*)	48.1	48.7	(*)
<b>MICHIGAN</b>												
2 Ann Arbor	(*)	3,626.3	3,507.8	(*)	13.1	13.1	(*)	136.2	118.2	(*)	1,103.5	1,053.3
3 Battle Creek	(*)	141.8	136.9	(*)	(2)	(2)	(*)	2.9	2.4	(*)	44.3	42.6
4 Bay City	(*)	65.7	64.8	(*)	(2)	(2)	(*)	1.8	1.6	(*)	22.1	21.8
5 Detroit	(*)	35.0	34.0	(*)	(2)	(2)	(*)	1.3	1.2	(*)	10.0	10.0
6 Flint	(*)	1,785.1	1,725.3	(*)	1.2	1.2	(*)	60.1	53.6	(*)	558.3	525.0
7 Grand Rapids	(*)	199.6	193.4	(*)	(2)	(2)	(*)	6.1	5.8	(*)	79.4	77.4
8 Jackson	(*)	273.9	264.8	(*)	(2)	(2)	(*)	14.1	12.0	(*)	93.8	92.5
9 Kalamazoo-Portage	(*)	54.6	53.6	(*)	(2)	(2)	(*)	1.9	1.7	(*)	16.1	16.0
10 Lansing-East Lansing	(*)	109.5	110.5	(*)	(2)	(2)	(*)	4.5	4.0	(*)	35.3	34.6
11 Muskegon-Norton Shores-Musk. Hgts.	(*)	198.8	194.3	(*)	(2)	(2)	(*)	6.1	5.3	(*)	43.9	42.6
12 Saginaw	(*)	60.6	60.1	(*)	(2)	(2)	(*)	2.8	2.6	(*)	21.0	21.3
13	(*)	89.9	88.0	(*)	(2)	(2)	(*)	2.6	2.4	(*)	33.2	32.7
<b>MINNESOTA</b>												
14 Duluth-Superior	1,683.0	1,790.1	(*)	16.0	16.8	(*)	66.2	84.3	(*)	362.8	379.9	(*)
15 Minneapolis-St. Paul	60.9	64.4	(*)	(2)	(2)	(*)	2.0	2.3	(*)	8.4	8.7	(*)
16	1,026.5	1,088.0	(*)	(2)	(2)	(*)	37.7	49.0	(*)	235.8	244.1	(*)
<b>MISSISSIPPI</b>												
17 Jackson	818.4	850.3	835.9	8.5	9.7	9.7	40.9	47.0	42.7	233.5	232.4	229.8
18	141.8	149.4	147.2	1.1	1.3	1.3	7.0	7.7	7.0	18.6	19.4	19.3
<b>MISSOURI</b>												
19 Kansas City	1,941.6	2,014.0	1,963.5	7.3	8.0	7.7	72.9	89.4	78.8	459.8	456.1	448.8
20 St. Joseph	623.2	641.8	624.8	.4	.6	.5	23.7	28.7	25.9	127.7	130.0	125.9
21 St. Louis	37.0	37.4	36.6	(3)	(3)	(3)	1.5	2.0	1.9	9.5	9.1	8.9
22 Springfield	990.1	1,002.8	971.9	2.8	3.1	3.0	36.9	45.0	43.3	260.0	251.1	241.1
23	82.0	86.0	84.2	(3)	(3)	(3)	3.3	3.9	3.6	18.1	18.4	18.7
<b>MONTANA</b>												
24 Billings	268.9	288.7	278.1	7.0	7.9	7.8	11.2	14.5	11.6	25.9	26.4	26.3
25 Great Falls	45.3	49.7	48.9	(2)	(2)	(2)	2.0	2.9	3.1	4.1	4.8	4.7
26	29.1	30.2	29.3	(2)	(2)	(2)	1.4	1.6	1.4	1.6	1.7	1.6
<b>NEBRASKA</b>												
27 Lincoln	604.8	632.3	616.3	1.5	1.7	1.4	26.9	31.3	27.3	96.6	100.3	99.1
28 Omaha	96.3	103.8	99.4	(3)	(3)	(3)	4.0	4.7	4.1	14.0	14.1	13.8
29	256.5	267.6	260.9	(3)	(3)	(3)	10.1	10.8	9.4	36.5	37.8	37.3
<b>NEVADA</b>												
30 Las Vegas	359.9	394.7	387.1	4.0	5.0	4.9	24.4	26.2	24.8	18.8	20.1	20.3
31 Reno	200.0	216.8	214.2	.4	.6	.6	14.4	15.6	15.2	6.8	7.2	7.3
32	104.3	117.5	114.2	.6	.8	.8	6.7	6.9	6.3	8.1	8.5	8.6
<b>NEW HAMPSHIRE</b>												
33 Manchester	363.2	386.9	(*)	.3	.4	(*)	17.2	20.7	(*)	112.3	114.4	(*)
34 Nashua	70.8	76.0	(*)	(3)	(3)	(*)	2.9	3.6	(*)	19.0	18.3	(*)
35	56.0	61.3	(*)	(3)	(3)	(*)	2.6	3.2	(*)	25.8	27.7	(*)
<b>NEW JERSEY</b>												
36 Atlantic City	2,951.4	3,064.5	2,993.9	2.4	2.5	2.4	101.2	117.1	102.9	789.4	794.1	783.6
37 Camden	70.2	84.9	83.7	-	-	-	3.4	6.5	5.8	8.2	7.8	7.8
38 Hackensack	323.0	335.5	329.0	.1	.1	.1	11.7	13.7	11.8	70.2	71.5	71.2
39 Jersey City	389.2	399.3	387.6	(2)	(2)	(2)	11.2	13.4	12.1	113.3	112.7	108.7
40 Newark	229.2	233.1	227.5	-	-	-	3.6	4.1	3.9	69.3	70.4	67.6
41 Paterson-Clifton-Passaic	148.4	154.7	151.2	(2)	(2)	(2)	5.5	5.0	4.3	23.1	24.2	23.8
42 Trenton	278.7	290.8	282.9	(2)	(2)	(2)	10.0	10.9	9.3	89.7	90.5	88.0
43 Vineland-Millville-Bridgeton	921.9	955.6	931.9	.9	.9	.9	31.0	36.0	31.3	252.1	256.6	254.7
44	193.3	198.5	194.6	(2)	(2)	(2)	5.4	6.6	6.0	68.5	69.2	68.5
45	161.6	167.7	164.1	(2)	(2)	(2)	2.5	3.1	2.6	37.3	35.7	35.1
46	56.7	59.0	58.3	(2)	(2)	(2)	1.4	1.8	1.4	19.3	19.2	19.2
<b>NEW MEXICO</b>												
47 Albuquerque	442.1	471.5	469.0	25.3	27.7	27.4	32.3	35.6	33.5	33.7	35.3	35.2
48	180.6	191.1	187.5	(2)	(2)	(2)	14.6	15.5	14.5	17.4	18.5	18.3
<b>NEW YORK</b>												
49 Albany-Schenectady-Troy	6,992.8	7,271.6	7,087.9	5.0	6.0	5.5	173.2	207.5	177.8	1,465.6	1,494.2	1,465.5
50 Binghamton	328.9	340.7	334.0	(2)	(2)	(2)	9.2	11.4	9.9	61.0	59.8	58.8
51 Buffalo	115.9	119.3	116.4	(2)	(2)	(2)	3.2	3.8	3.0	42.7	43.1	42.4
52 Elmira	503.1	520.5	506.3	(2)	(2)	(2)	14.0	19.3	17.3	145.2	142.9	138.7
53 Monroe County	37.1	37.7	36.9	(2)	(2)	(2)	1.0	1.1	.9	12.0	12.0	11.8
54 Nassau-Suffolk	328.5	339.7	332.9	(2)	(2)	(2)	8.2	9.3	8.2	132.8	134.1	133.8
55 New York-Northeastern New Jersey	863.9	906.0	885.1	(2)	(2)	(2)	30.0	36.7	32.8	161.3	167.2	165.6
56 New York City	6,497.9	6,683.3	(*)	3.0	3.0	(*)	169.8	187.5	(*)	1,361.7	1,380.5	(*)
57 New York SMSA	4,502.3	4,676.8	4,578.7	1.6	1.7	1.7	108.7	126.8	114.4	755.9	777.0	758.8
58 Poughkeepsie	3,638.5	3,770.8	3,693.6	1.4	1.5	1.5	78.7	90.0	81.6	594.6	609.8	593.2
59 Rochester	3,217.1	3,318.0	3,253.1	1.1	1.2	1.2	64.4	71.6	66.7	506.5	514.4	498.1
60	93.4	98.8	96.5	(2)	(2)	(2)	2.3	2.9	2.5	31.6	32.7	32.5
61	404.1	419.0	409.7	(2)	(2)	(2)	9.9	11.6	10.1	154.3	156.5	155.6

See footnotes at end of table.





**ESTABLISHMENT DATA  
STATE AND AREA EMPLOYMENT**

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

Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services			Government			
JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	
3.4	3.6	3.6	16.7	17.9	17.1	2.4	2.5	2.4	16.6	18.0	17.7	21.4	21.9	21.7	1
14.6	15.3	14.9	57.8	60.9	58.7	15.1	15.6	15.6	50.6	54.0	51.2	49.0	50.1	49.1	2
4.0	4.1	4.0	21.4	22.6	22.1	5.5	5.6	5.6	19.7	19.9	19.6	29.0	29.3	29.2	3
17.9	18.9	18.7	77.6	85.4	81.0	17.1	17.3	17.2	79.5	84.5	82.8	56.6	58.8	57.9	4
111.3	118.4	117.0	466.5	505.4	492.1	90.8	95.5	95.5	319.8	339.1	340.8	397.3	408.1	403.4	5
3.6	3.8	3.7	14.7	15.5	14.7	2.3	2.2	2.3	12.0	13.4	13.4	11.2	11.5	11.3	6
29.8	31.1	30.6	82.7	87.5	85.4	20.3	20.4	20.5	46.9	48.2	47.9	35.8	35.8	35.2	7
20.7	21.6	21.4	77.4	81.7	78.7	17.5	18.0	17.9	54.1	57.2	56.9	46.6	48.5	48.3	8
12.4	13.2	13.2	50.2	55.2	53.4	14.6	15.2	15.3	53.2	58.0	58.2	70.9	73.8	72.4	9
15.0	16.3	15.9	64.3	69.9	67.1	10.7	11.2	11.2	46.4	48.7	48.5	60.2	61.3	60.7	10
3.8	4.2	4.0	18.4	19.7	19.1	3.6	3.8	3.9	13.3	14.1	13.9	12.6	13.0	13.0	11
227.1	237.2	232.2	954.3	1,021.9	971.9	193.4	202.9	202.5	769.0	818.4	802.5	679.1	682.2	680.1	12
14.8	15.8	15.5	56.9	61.1	58.3	9.2	9.6	9.6	47.5	50.3	50.2	43.5	45.0	43.8	13
7.6	7.8	7.6	34.0	36.5	34.9	5.4	5.7	5.7	27.5	29.4	29.0	18.1	18.7	18.7	14
33.1	35.4	34.6	136.7	145.2	138.9	31.1	32.5	32.1	110.8	121.2	117.8	84.2	82.5	82.8	15
47.3	49.6	47.9	208.8	222.0	211.6	46.1	48.4	48.2	174.4	182.9	180.3	117.0	112.8	118.6	16
24.2	25.6	24.9	118.2	128.1	121.3	34.4	36.5	37.1	95.5	101.9	99.2	102.2	103.4	102.4	17
12.9	13.6	13.1	74.7	79.9	75.4	13.0	13.6	13.5	67.9	72.3	71.3	68.2	70.5	69.0	18
20.5	22.0	21.7	67.7	72.0	68.4	10.2	10.6	10.7	57.0	60.0	58.8	46.1	47.0	46.4	19
10.1	10.6	10.6	45.5	49.0	46.7	6.7	7.2	7.1	35.4	37.8	37.1	25.7	26.6	26.5	20
63.5	66.1	65.5	249.1	269.9	258.6	51.9	54.2	54.1	175.0	187.2	189.1	220.2	232.6	230.0	21
22.5	23.0	23.0	91.9	100.6	98.3	22.5	24.2	24.4	65.4	69.8	70.0	83.3	87.7	87.6	22
21.2	22.9	22.6	68.5	72.2	70.9	14.1	14.6	14.5	52.6	54.8	54.8	30.4	30.5	30.2	23
(*)	60.9	60.9	(*)	264.9	257.2	(*)	70.2	69.8	(*)	185.5	184.7	(*)	202.4	201.5	24
(*)	5.3	5.3	(*)	26.4	25.8	(*)	5.4	5.4	(*)	18.8	18.6	(*)	22.1	22.1	25
(*)	36.2	35.8	(*)	147.5	144.1	(*)	44.7	44.5	(*)	107.2	106.0	(*)	82.8	82.2	26
3.3	(*)	(*)	18.3	(*)	(*)	5.4	(*)	(*)	14.2	(*)	(*)	27.2	(*)	(*)	27
269.1	272.5	273.2	975.3	1,012.9	978.6	229.3	237.9	237.5	910.0	986.5	965.4	714.0	728.2	724.8	28
13.3	14.3	14.3	50.0	52.4	51.3	8.3	8.6	8.6	39.7	41.7	40.8	29.4	29.0	29.1	29
8.2	7.4	7.2	11.2	12.5	12.2	1.4	1.5	1.5	8.4	8.9	8.6	7.1	7.1	7.2	30
86.1	85.1	84.1	333.8	345.4	332.1	106.0	109.8	109.4	368.9	389.7	376.7	234.4	246.9	245.1	31
5.4	5.5	5.4	23.2	25.2	24.4	4.6	4.8	4.8	20.3	21.0	21.2	14.2	14.0	13.7	32
16.4	17.0	17.1	44.1	44.5	43.7	12.4	12.5	12.5	34.7	37.0	35.7	55.7	54.8	54.8	33
5.7	6.1	6.1	16.4	16.9	16.3	3.7	4.0	4.1	15.5	15.9	15.9	14.5	15.2	15.8	34
6.2	6.3	6.3	33.1	34.8	33.5	5.0	5.4	5.4	23.3	24.8	24.5	14.9	15.3	15.1	35
12.9	13.4	13.2	51.3	53.1	51.3	9.3	9.4	9.5	40.9	42.8	42.4	38.7	40.4	39.4	36
101.6	100.9	99.6	420.4	435.6	418.9	121.9	126.1	125.5	430.6	454.4	441.3	294.4	307.9	306.0	37
57.5	56.0	55.2	153.2	157.7	152.3	69.0	69.4	69.4	208.5	217.9	209.5	143.2	150.5	150.0	38
62.0	63.2	62.7	203.4	212.8	205.9	44.1	44.9	44.8	200.4	206.3	204.6	121.8	127.5	124.6	39
6.6	6.7	6.6	26.4	28.5	27.5	5.8	6.1	6.1	21.6	23.4	23.3	16.0	17.1	16.7	40
4.1	4.3	4.2	20.0	20.7	19.8	3.4	3.3	3.4	16.2	16.7	16.5	12.0	11.9	11.8	41
7.0	7.1	7.1	26.3	27.5	26.6	5.1	5.3	5.3	18.2	19.4	19.1	19.3	20.7	19.7	42
2.3	2.3	2.3	9.9	10.3	9.8	2.0	2.1	2.1	7.5	7.8	7.8	6.7	6.4	6.4	43
7.0	7.0	6.7	31.7	33.2	31.9	3.8	3.9	3.8	20.4	21.4	21.2	19.0	19.2	19.2	44
13.1	13.5	13.2	79.1	84.2	79.1	20.5	21.2	20.8	74.5	79.4	76.8	59.8	59.6	59.8	45
12.9	13.3	13.0	80.9	85.7	80.9	20.6	21.2	20.8	72.0	76.3	74.0	56.8	56.5	56.8	46
50.8	53.3	53.8	213.4	233.3	223.8	44.3	47.5	47.4	143.1	152.5	152.0	228.9	234.7	234.3	47
8.6	8.9	8.8	30.5	32.9	31.9	5.7	6.2	6.2	21.7	24.2	23.8	44.7	44.9	45.4	48
8.9	9.3	9.3	37.9	39.2	38.3	13.0	13.6	13.7	25.1	27.0	26.7	53.2	56.4	55.7	49
10.1	10.5	10.4	50.2	53.0	51.3	8.8	9.3	9.3	33.7	35.7	35.7	34.2	34.7	34.7	50
13.4	13.9	13.8	63.4	66.5	63.8	10.6	11.4	11.2	46.8	48.4	47.5	58.1	58.3	57.8	51
1.9	1.8	1.9	8.3	9.1	8.8	1.3	1.3	1.3	5.7	6.0	5.9	5.6	5.9	5.9	52
5.0	4.9	5.0	15.9	16.3	15.9	3.3	3.4	3.5	11.7	12.0	11.7	6.7	6.8	6.6	53
84.0	88.1	85.7	378.3	399.5	383.9	75.5	77.5	77.3	270.4	292.7	287.7	314.6	320.1	319.4	54
6.6	7.2	7.2	33.2	32.8	32.8	9.8	10.1	10.0	28.8	28.9	28.8	32.9	35.1	35.1	55
7.9	8.0	7.9	41.1	41.6	40.8	7.7	8.1	8.1	29.2	30.2	30.0	42.1	41.7	42.2	56
26.2	27.3	27.1	96.0	98.2	96.9	19.1	19.6	19.8	68.1	71.8	71.0	66.4	68.1	67.1	57
21.1	22.1	22.1	82.6	83.2	81.8	23.2	24.3	24.4	64.9	72.4	71.9	62.2	64.0	63.9	58

**ESTABLISHMENT DATA  
STATE AND AREA EMPLOYMENT**

**B-8 Employees on nonagricultural payrolls for States and selected areas by industry division—Continued**

(In thousands)

State and area	Total			Mining			Construction			Manufacturing		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
1 TEXAS	5,406.6	5,754.9	5,725.2	191.9	207.2	211.2	379.7	428.7	431.7	991.0	1,042.7	1,039.2
2 Amarillo	73.4	77.3	75.9	(2)	(2)	(2)	4.7	5.4	5.3	6.7	9.4	9.6
3 Austin	222.5	233.9	231.9	(2)	(2)	(2)	12.1	13.2	12.8	27.7	29.4	29.3
4 Beaumont-Port Arthur-Orange	142.8	148.0	130.3	(2)	(2)	(2)	12.9	12.6	10.2	38.8	42.2	29.1
5 Corpus Christi	118.1	122.6	122.2	6.3	6.8	6.9	13.9	14.5	14.4	14.6	15.0	15.2
6 Dallas-Fort Worth	1,327.6	1,427.3	1,409.0	20.0	22.3	22.4	66.6	79.4	77.5	299.5	314.8	312.4
7 El Paso	152.1	157.6	(*)	(2)	(2)	(*)	8.6	8.5	(*)	30.6	31.1	(*)
8 Galveston-Texas City	65.6	68.2	67.1	(2)	(2)	(2)	4.6	5.5	5.4	11.8	12.0	12.0
9 Houston	1,326.2	1,395.0	1,387.6	66.4	69.6	69.7	136.8	139.8	137.9	222.8	231.8	231.9
10 Lubbock	87.1	90.8	90.1	(2)	(2)	(2)	4.3	4.5	4.3	12.5	13.6	13.1
11 San Antonio	368.9	385.6	382.2	1.9	2.0	2.1	22.5	26.2	25.7	46.9	48.3	48.3
12 Waco	67.4	70.7	69.5	(2)	(2)	(2)	3.1	3.4	3.3	16.1	17.2	16.9
13 Wichita Falls	49.8	51.7	51.4	2.8	2.8	2.9	2.3	2.8	2.8	9.2	9.3	9.2
14 UTAH	530.6	574.3	561.1	16.9	18.2	17.8	28.6	33.4	29.6	83.9	91.3	90.4
15 Salt Lake City-Ogden	378.4	409.2	399.6	7.6	7.7	7.4	20.0	23.4	21.0	57.3	61.6	61.3
16 VERMONT	191.2	202.7	199.1	.7	.8	.7	8.0	11.0	9.8	49.0	51.3	50.7
17 Burlington	52.0	56.8	54.3	-	-	-	-	-	-	13.3	14.4	14.4
18 Springfield	14.3	14.7	14.5	-	-	-	-	-	-	6.0	6.0	6.1
19 VIRGINIA	2,052.9	2,128.1	2,098.0	24.2	23.6	23.4	119.9	134.4	124.1	412.3	417.6	414.1
20 Bristol	28.0	28.9	28.2	(2)	(2)	(2)	1.3	1.3	1.2	9.9	9.7	9.6
21 Lynchburg	69.8	73.8	72.6	(2)	(2)	(2)	2.9	3.6	3.4	29.6	29.6	29.6
22 Newport News-Hampton	142.8	149.4	147.8	(2)	(2)	(2)	7.1	7.6	7.3	33.1	34.2	34.0
23 Norfolk-Virginia Beach-Poismouth	281.6	287.5	283.9	(2)	(2)	(2)	17.3	17.5	17.0	29.7	30.1	29.8
24 Northern Virginia	415.6	431.1	424.2	.4	.4	.4	27.4	29.4	27.1	16.2	17.0	16.9
25 Petersburg-Colonial Hgts.-Hopewell	46.5	46.9	46.7	(2)	(2)	(2)	2.2	2.2	2.2	12.5	12.1	12.0
26 Richmond	322.0	328.5	325.6	.3	.4	.4	18.1	18.2	16.5	54.9	56.0	55.9
27 Roanoke	102.9	105.4	103.7	.1	.1	.1	5.3	6.5	5.7	20.8	20.8	20.8
28 WASHINGTON	1,538.2	1,640.8	(*)	3.1	3.1	(*)	98.0	107.0	(*)	291.8	310.4	(*)
29 Seattle-Everett	724.6	792.4	(*)	(2)	(2)	(*)	41.1	49.8	(*)	153.7	171.3	(*)
30 Spokane	123.0	130.9	(*)	(2)	(2)	(*)	5.1	7.0	(*)	17.4	18.5	(*)
31 Tacoma	136.0	141.4	(*)	(2)	(2)	(*)	8.4	8.8	(*)	21.1	22.0	(*)
32 WEST VIRGINIA	(*)	659.7	633.6	(*)	64.3	63.7	(*)	43.4	34.6	(*)	124.8	121.7
33 Charleston	(*)	119.4	116.2	(*)	7.0	6.7	(*)	8.5	7.1	(*)	19.2	18.7
34 Huntington-Ashland	(*)	110.6	107.5	(*)	1.3	1.3	(*)	8.6	7.5	(*)	28.4	27.7
35 Parkersburg-Marietta	(*)	59.7	57.3	(*)	.5	.5	(*)	4.5	3.8	(*)	17.2	17.0
36 Wheeling	(*)	67.3	65.3	(*)	6.2	6.2	(*)	3.7	3.2	(*)	13.4	12.7
37 WISCONSIN	1,872.4	2,011.7	1,952.3	1.8	2.7	2.1	63.5	81.8	72.6	571.0	593.2	583.8
38 Appleton-Oshkosh	122.7	134.1	131.5	(2)	(2)	(2)	5.0	6.7	6.1	48.6	50.5	50.6
39 Eau Claire	45.7	49.3	47.1	(2)	(2)	(2)	1.4	2.0	1.9	9.1	9.1	9.0
40 Green Bay	75.3	79.7	77.7	(2)	(2)	(2)	3.1	3.9	3.3	21.5	21.1	20.9
41 Kenosha	39.2	48.4	47.3	(2)	(2)	(2)	2.3	2.9	2.5	13.1	20.0	19.9
42 La Crosse	41.7	44.6	43.6	(2)	(2)	(2)	1.4	2.1	1.9	11.0	11.0	10.9
43 Madison	159.2	173.9	167.9	(2)	(2)	(2)	6.3	7.9	7.4	19.6	20.6	20.3
44 Milwaukee	663.6	699.6	683.1	(2)	(2)	(2)	19.9	24.3	21.8	216.5	221.1	219.9
45 Racine	69.5	72.3	71.5	(2)	(2)	(2)	1.8	2.2	1.8	31.3	31.8	32.0
46 WYOMING	185.8	212.5	209.0	30.6	34.5	35.1	17.6	21.6	20.1	9.9	10.7	10.4
47 Casper	35.5	41.9	41.0	7.2	8.5	8.5	3.0	4.4	4.2	1.6	1.9	1.9
48 Cheyenne	27.6	28.5	27.5	(2)	(2)	(2)	1.9	2.2	2.0	1.8	1.8	1.8
49 VIRGIN ISLANDS	35.1	36.6	36.7	(3)	(3)	(3)	2.6	2.8	2.8	2.9	3.2	3.1

1 Revised to 1979 benchmark; not strictly comparable with previously published data.  
 2 Combined with services.  
 3 Combined with construction.  
 4 Area included in Chicago-Gary Standard Consolidated Statistical Area.  
 5 Revised to December 1978 benchmark; not strictly comparable with previously published data.  
 6 Revised to March 1978 benchmark; not strictly comparable with previously published data.  
 7 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area.  
 8 Subarea of New York-Northeastern New Jersey.  
 9 Subarea of Rochester Standard Metropolitan Statistical Area.  
 10 Area included in New York and Nassau-Suffolk combined SMSA's.  
 11 Subarea of New York Standard Metropolitan Statistical Area.  
 12 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pennsylvania.

13 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Philadelphia County.  
 14 Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Lackawanna County.  
 15 Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Luzerne County.  
 16 Total includes data for industry divisions not shown separately.  
 17 Subarea of Washington D.C. Standard Metropolitan Statistical Area: Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park cities and Arlington, Fairfax, Loudoun, and Prince William Counties, Virginia.  
 18 Revised to September 1978 benchmark; not strictly comparable with previously published data.  
 p = preliminary.  
 \* Not available.

SOURCE: Cooperating State agencies listed on inside back cover.

**ESTABLISHMENT DATA  
STATE AND AREA EMPLOYMENT**

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

(In thousands)

Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services			Government			
JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	
339.5	358.7	358.2	1,341.3	1,430.4	1,392.3	302.6	321.7	323.1	918.5	981.5	980.2	982.1	984.0	989.3	1
6.9	7.1	7.1	22.3	23.4	22.3	3.8	3.8	3.8	18.1	14.8	14.6	12.9	13.4	13.2	2
6.8	7.1	7.1	47.3	50.5	49.0	13.2	13.7	13.7	38.2	40.1	40.1	77.2	79.9	79.9	3
10.6	11.1	11.1	32.1	32.2	30.6	5.2	5.2	5.2	24.1	24.3	23.8	19.1	20.4	20.3	4
6.8	6.9	6.8	27.7	28.9	28.3	5.1	5.4	5.4	18.2	19.1	19.5	25.5	26.0	25.7	5
85.7	93.5	92.8	355.5	392.9	382.8	97.7	103.8	103.7	228.2	243.6	242.1	174.4	177.0	175.3	6
10.4	10.4	(*)	37.6	40.3	(*)	7.1	7.2	(*)	25.1	26.7	(*)	32.7	33.4	(*)	7
6.1	6.9	6.7	12.5	12.7	12.3	4.4	4.4	4.3	10.6	11.1	10.9	15.6	15.6	15.5	8
95.6	98.9	98.8	326.8	346.2	339.0	78.4	83.4	83.6	249.2	264.9	265.4	150.2	160.4	161.3	9
5.1	5.3	5.2	26.0	26.7	26.3	4.6	4.8	4.8	16.0	16.5	16.8	18.6	19.4	19.6	10
16.8	17.6	17.6	94.2	96.9	95.3	24.4	24.8	24.9	69.8	74.0	73.8	92.4	95.8	94.5	11
3.2	3.1	3.1	15.9	16.7	16.1	3.8	4.3	4.3	13.8	14.6	14.4	11.5	11.4	11.4	12
2.4	2.4	2.4	12.2	13.1	12.8	2.2	2.3	2.3	7.4	7.7	7.7	11.1	11.3	11.3	13
32.3	35.2	34.7	127.5	142.1	135.6	25.2	26.8	26.6	92.4	101.8	100.9	123.6	125.6	125.5	14
25.7	28.6	28.2	95.8	106.2	101.3	20.4	21.9	21.9	63.0	69.8	68.6	88.6	89.9	89.9	15
8.7	9.1	8.9	39.1	42.0	40.7	7.5	7.8	7.8	43.5	43.5	45.3	34.7	37.2	35.2	16
2.2	2.4	2.4	11.4	12.5	11.8	-	-	-	10.9	11.3	11.2	-	-	-	17
.7	.7	.6	2.0	2.2	2.1	-	-	-	2.9	2.8	3.0	-	-	-	18
112.9	115.5	114.2	433.0	456.9	442.4	100.1	104.7	104.2	360.9	374.4	373.9	489.6	501.0	501.7	19
1.1	1.1	1.1	6.8	7.1	6.7	.9	1.0	1.0	3.2	3.6	3.6	4.9	5.1	5.0	20
2.6	2.8	2.7	11.6	12.9	12.4	3.2	3.7	3.5	9.9	11.0	10.8	10.0	10.2	10.2	21
5.0	5.1	5.0	27.4	29.1	28.2	4.8	5.1	5.1	25.0	26.4	26.4	40.4	41.9	41.8	22
19.5	18.9	18.8	67.3	71.3	68.7	14.0	14.7	14.6	52.3	53.3	53.2	81.5	81.7	81.6	23
27.5	28.9	28.9	98.2	101.8	98.6	25.9	26.8	26.4	103.2	109.1	108.5	116.8	117.7	117.4	24
1.4	1.6	1.6	8.5	8.4	8.3	1.3	1.3	1.3	5.6	5.9	5.9	15.0	15.4	15.4	25
19.1	19.6	19.6	76.6	76.2	74.8	25.8	26.8	26.7	54.8	57.0	57.1	72.4	74.3	74.6	26
10.1	10.1	10.0	25.8	26.5	25.5	6.1	6.1	6.2	19.2	19.5	19.3	15.5	15.8	16.1	27
89.7	94.5	(*)	373.3	404.4	(*)	87.8	93.8	(*)	285.4	305.3	(*)	309.1	322.3	(*)	28
48.5	53.2	(*)	177.1	195.7	(*)	50.8	54.6	(*)	136.7	146.6	(*)	116.7	121.2	(*)	29
7.7	7.7	(*)	34.5	37.4	(*)	8.1	8.4	(*)	28.1	29.1	(*)	22.1	22.8	(*)	30
6.7	6.7	(*)	32.9	34.8	(*)	6.7	7.1	(*)	28.5	29.4	(*)	31.7	32.6	(*)	31
(*)	44.6	43.7	(*)	142.5	133.0	(*)	21.8	21.7	(*)	95.9	93.9	(*)	122.4	121.3	32
(*)	9.9	9.9	(*)	29.0	27.7	(*)	5.0	5.0	(*)	19.9	19.9	(*)	20.6	21.0	33
(*)	10.3	10.2	(*)	24.9	24.1	(*)	4.0	3.9	(*)	15.4	15.3	(*)	17.8	17.5	34
(*)	2.7	2.7	(*)	13.4	12.5	(*)	2.1	2.1	(*)	9.1	8.8	(*)	10.3	9.9	35
(*)	3.7	3.7	(*)	16.6	16.0	(*)	2.6	2.6	(*)	13.0	13.1	(*)	8.1	8.0	36
88.1	95.0	90.3	423.5	472.4	447.9	87.2	93.4	93.0	337.7	361.8	358.3	299.6	311.3	304.2	37
4.4	4.9	4.9	25.3	28.9	27.1	4.9	5.2	5.2	19.1	20.5	20.4	15.5	17.4	17.2	38
2.6	2.7	2.6	12.2	13.5	13.1	1.5	1.6	1.5	9.2	9.4	9.5	9.6	11.1	9.5	39
5.6	6.0	5.9	19.2	21.5	20.6	2.3	2.5	2.4	13.8	14.3	14.1	10.0	10.5	10.4	40
1.3	1.4	1.3	8.0	8.7	8.2	1.0	1.0	1.0	7.4	7.9	8.2	6.1	6.6	6.2	41
2.3	2.4	2.4	11.2	12.2	11.6	1.1	1.1	1.1	9.0	9.5	9.6	5.8	6.3	6.1	42
5.9	6.4	6.3	34.2	38.4	35.1	11.4	12.6	12.6	29.1	31.7	31.3	52.7	56.2	55.0	43
33.6	36.5	34.5	148.4	158.7	151.4	37.1	39.0	39.0	131.1	142.5	139.4	77.1	77.5	77.2	44
2.1	2.1	2.0	13.0	13.8	13.2	2.2	2.3	2.3	10.8	11.2	11.2	8.1	8.9	8.9	45
15.6	17.0	17.0	41.0	49.2	47.8	6.7	7.4	7.6	25.7	29.5	29.0	38.7	42.6	42.0	46
2.6	3.0	2.5	9.4	11.9	11.8	1.5	1.6	1.6	5.2	5.1	5.1	4.8	5.5	5.4	47
4.1	4.2	3.8	6.5	7.5	7.3	1.5	1.5	1.5	4.0	4.0	3.8	7.8	7.3	7.3	48
2.1	2.3	2.3	7.3	7.6	7.7	1.4	1.4	1.4	6.1	6.2	6.3	12.7	13.1	13.1	49





# ESTABLISHMENT DATA HOURS AND EARNINGS

## C-2. Gross hours and earnings of production or nonsupervisory workers' on private nonagricultural payrolls by industry

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>p</sup>	FEB. 1980 <sup>p</sup>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>p</sup>	FEB. 1980 <sup>p</sup>
	<b>TOTAL PRIVATE</b> .....	\$219.91	\$210.14	\$229.40	\$225.34	\$226.75	\$6.16	\$5.97	\$6.39	\$6.42	\$6.46
	<b>MINING</b> .....	364.64	347.68	383.25	383.18	383.13	8.48	8.20	8.73	8.87	8.91
	<b>METAL MINING</b> .....	381.92	362.34	409.08	409.52	-	9.27	8.71	9.61	9.94	-
101	Iron ores .....	405.77	378.16	424.35	435.83	-	9.57	8.94	10.35	10.63	-
102	Copper ores .....	405.03	381.60	432.43	434.00	-	9.53	9.00	10.08	10.26	-
	<b>COAL MINING</b> .....	417.18	405.98	428.06	433.67	-	10.23	9.83	10.29	10.35	-
11, 12	<b>BITUMINOUS COAL AND LIGNITE MINING</b> .....	418.40	407.22	429.31	434.52	-	10.26	9.66	10.32	10.38	-
	<b>OIL AND GAS EXTRACTION</b> .....	343.21	325.69	366.72	366.24	-	7.73	7.47	8.06	8.23	-
131, 2	Crude petroleum, natural gas, and natural gas liquids .....	365.20	360.40	376.57	387.39	-	8.80	8.50	9.14	9.38	-
136	Oil and gas field services .....	334.70	311.35	362.67	358.29	-	7.34	7.06	7.70	7.84	-
	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b> .....	310.05	271.83	322.73	298.78	-	6.89	6.55	7.14	7.03	-
142	Crushed and broken stone .....	304.52	255.85	318.45	285.07	-	6.62	6.21	6.79	6.63	-
	<b>CONSTRUCTION</b> .....	341.69	310.71	355.05	331.20	341.87	9.26	8.98	9.57	9.49	9.63
	<b>GENERAL BUILDING CONTRACTORS</b> .....	309.46	281.27	323.39	302.02	-	8.62	8.30	8.86	8.78	-
152	Residential building construction .....	292.24	266.90	306.61	286.96	-	8.24	7.92	8.47	8.44	-
153	Operative builders .....	268.42	238.62	291.98	259.74	-	7.54	7.32	7.87	7.80	-
154	Nonresidential building construction .....	322.87	306.16	345.55	324.32	-	9.17	8.90	9.29	9.24	-
	<b>HEAVY CONSTRUCTION CONTRACTORS</b> .....	347.79	298.55	340.08	314.39	-	8.63	8.27	8.72	8.52	-
161	Highway and street construction .....	344.00	258.83	318.98	278.86	-	8.21	7.25	8.20	7.64	-
162	Heavy construction, except highway .....	349.97	312.54	350.34	327.45	-	8.86	8.61	8.96	8.85	-
	<b>SPECIAL TRADE CONTRACTORS</b> .....	356.92	329.21	374.78	351.54	-	9.86	9.57	10.24	10.16	-
171	Plumbing, heating, air conditioning .....	374.74	354.24	393.72	361.29	-	9.54	9.60	10.28	10.28	-
172	Painting, paper hanging, decorating .....	318.64	297.82	334.53	314.06	-	9.13	8.89	9.45	9.21	-
173	Electrical work .....	417.20	396.66	440.25	427.12	-	10.95	10.55	11.32	11.27	-
174	Masonry, stonework, and plastering .....	330.93	296.72	342.19	319.15	-	9.62	9.29	9.89	9.79	-
175	Carpentering and flooring .....	306.25	280.57	324.19	301.29	-	8.91	8.54	9.21	9.13	-
176	Roofing and sheet metal work .....	282.74	230.89	292.34	251.39	-	8.62	8.13	8.94	8.79	-
	<b>MANUFACTURING</b> .....	268.54	260.25	285.07	276.61	277.11	6.69	6.49	6.97	6.95	6.98
24, 25, 32-39	<b>DURABLE GOODS</b> .....	290.50	283.03	308.26	297.75	299.83	7.12	6.92	7.41	7.37	7.44
20-23, 26-31	<b>NONDURABLE GOODS</b> .....	235.80	226.01	249.77	244.52	242.28	6.00	5.81	6.26	6.28	6.27
	<b>DURABLE GOODS</b>										
	<b>LUMBER AND WOOD PRODUCTS</b> .....	240.16	222.92	245.00	238.08	242.59	6.08	5.79	6.25	6.20	6.36
241	Logging camps and logging contractors .....	315.15	264.99	313.05	289.67	-	8.06	7.28	8.26	7.98	-
242	Sawmills and planing mills .....	224.12	228.27	255.20	247.35	-	6.29	6.05	6.38	6.31	-
2421	Sawmills and planing mills, general .....	268.11	253.04	288.00	259.50	-	6.62	6.39	6.70	6.62	-
2426	Hardwood dimension and flooring .....	173.26	165.92	180.14	180.69	-	4.31	4.19	4.47	4.54	-
243	Millwork, plywood, and structural members .....	224.42	224.65	241.02	238.78	-	5.98	5.79	6.18	6.17	-
2431	Millwork .....	222.71	210.72	236.79	230.18	-	5.74	5.56	6.01	6.01	-
2434	Wood kitchen cabinets .....	208.82	207.81	216.03	217.14	-	5.51	5.44	5.70	5.64	-
2435	Hardwood veneer and plywood .....	190.80	183.81	202.21	190.75	-	4.77	4.63	4.92	4.93	-
2436	Softwood veneer and plywood .....	303.81	291.10	297.22	306.80	-	7.52	7.17	7.74	7.67	-
244	Wooden containers .....	171.14	158.98	180.48	179.41	-	4.48	4.32	4.70	4.81	-
245	Wood buildings and mobile homes .....	211.31	197.27	217.25	211.34	-	5.62	5.29	5.64	5.52	-
2451	Mobile homes .....	205.42	191.66	216.34	210.99	-	5.57	5.28	5.80	5.91	-
249	Miscellaneous wood products .....	199.30	190.79	210.01	206.44	-	4.97	4.83	5.16	5.20	-
	<b>FURNITURE AND FIXTURES</b> .....	195.22	186.52	210.27	202.51	202.61	5.06	4.87	5.27	5.26	5.29
251	Household furniture .....	182.78	173.04	197.51	188.32	-	4.76	4.59	4.95	4.93	-
2511	Wood household furniture .....	172.42	165.25	185.95	176.40	-	4.41	4.27	4.58	4.57	-
2512	Upholstered household furniture .....	191.52	182.65	208.15	197.02	-	5.06	4.91	5.31	5.24	-
2514	Metal household furniture .....	189.20	171.55	204.57	197.11	-	4.94	4.70	5.14	5.16	-
2515	Mattresses and bedspreads .....	202.82	190.53	217.75	207.93	-	5.38	5.22	5.57	5.53	-
252	Office furniture .....	215.57	213.46	226.89	219.96	-	5.43	5.21	5.62	5.64	-
253	Public building and related furniture .....	209.42	214.25	218.44	220.00	-	5.37	5.29	5.62	5.67	-
254	Partitions and fixtures .....	229.85	221.18	255.05	250.86	-	6.15	5.73	6.46	6.40	-
259	Miscellaneous furniture and fixtures .....	214.45	208.98	233.16	229.22	-	5.57	5.40	5.80	5.85	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P
	<b>TOTAL PRIVATE</b> .....	35.7	35.2	35.9	35.1	35.1	-	-	-	-	-
	<b>MINING</b> .....	43.0	42.4	43.5	42.2	42.0	-	-	-	-	-
10	<b>METAL MINING</b> .....	41.2	41.6	41.7	41.2	-	-	-	-	-	-
101	Iron ores .....	42.4	42.3	41.0	41.0	-	-	-	-	-	-
102	Copper ores .....	42.5	42.4	42.5	42.3	-	-	-	-	-	-
11, 12	<b>COAL MINING</b> .....	41.0	41.3	41.6	41.9	-	-	-	-	-	-
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b> .....	41.0	41.3	41.6	41.9	-	-	-	-	-	-
13	<b>OIL AND GAS EXTRACTION</b> .....	44.4	42.6	45.5	44.5	-	-	-	-	-	-
131, 2	Crude petroleum, natural gas, and natural gas liquids .....	41.5	42.4	41.2	41.3	-	-	-	-	-	-
138	Oil and gas field services .....	45.6	44.1	47.1	45.7	-	-	-	-	-	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b> .....	45.0	41.5	45.2	42.5	-	-	-	-	-	-
142	Crushed and broken stone .....	46.0	41.2	46.9	43.6	-	-	-	-	-	-
-	<b>CONSTRUCTION</b> .....	36.9	34.6	37.1	34.5	35.5	-	-	-	-	-
15	<b>GENERAL BUILDING CONTRACTORS</b> .....	35.5	32.5	36.5	34.4	-	-	-	-	-	-
152	Residential building construction .....	35.6	32.7	36.2	34.0	-	-	-	-	-	-
153	Operative builders .....	35.6	32.6	37.1	33.3	-	-	-	-	-	-
154	Nonresidential building construction .....	36.3	34.4	36.8	35.1	-	-	-	-	-	-
16	<b>HEAVY CONSTRUCTION CONTRACTORS</b> .....	40.2	36.1	35.0	36.9	-	-	-	-	-	-
161	Highway and street construction .....	41.9	35.7	38.9	36.5	-	-	-	-	-	-
162	Heavy construction, except highway .....	35.5	36.3	39.1	37.0	-	-	-	-	-	-
17	<b>SPECIAL TRADE CONTRACTORS</b> .....	36.2	34.4	36.6	34.6	-	-	-	-	-	-
171	Plumbing, heating, air conditioning .....	37.7	36.9	38.3	37.1	-	-	-	-	-	-
172	Painting, paper hanging, decorating .....	34.9	31.5	35.4	34.1	-	-	-	-	-	-
173	Electrical work .....	38.1	37.6	38.9	37.9	-	-	-	-	-	-
174	Masonry, stonework, and plastering .....	34.4	31.6	34.6	32.6	-	-	-	-	-	-
175	Carpentering and flooring .....	34.6	32.9	35.2	33.0	-	-	-	-	-	-
178	Roofing and sheet metal work .....	32.8	28.4	32.7	28.6	-	-	-	-	-	-
-	<b>MANUFACTURING</b> .....	40.2	40.1	40.9	39.8	39.7	3.2	3.5	3.4	3.0	2.9
24, 25, 32-39	<b>DURABLE GOODS</b> .....	40.8	40.5	41.6	40.4	40.3	3.5	3.8	3.5	3.1	3.0
20-23, 28-31	<b>NONDURABLE GOODS</b> .....	39.3	38.9	39.9	39.0	38.8	3.1	3.0	3.2	2.9	2.8
	<b>DURABLE GOODS</b>										
24	<b>LUMBER AND WOOD PRODUCTS</b> .....	39.5	38.5	39.2	38.4	38.2	3.5	3.4	3.1	2.7	-
241	Logging camps and logging contractors .....	39.1	36.4	37.9	36.3	-	4.3	3.5	3.5	2.7	-
242	Sawmills and planing mills .....	40.4	35.4	40.0	35.2	-	4.2	4.2	3.5	3.4	-
2421	Sawmills and planing mills, general .....	40.5	39.6	40.0	39.2	-	4.6	4.5	4.1	3.6	-
2426	Hardwood dimension and flooring .....	40.2	35.6	40.3	35.8	-	3.3	3.3	3.4	3.1	-
243	Millwork, plywood, and structural members .....	39.2	38.8	39.0	38.7	-	2.5	3.1	2.6	2.3	-
2431	Millwork .....	38.8	37.9	38.4	38.3	-	1.9	2.0	1.8	1.5	-
2434	Wood kitchen cabinets .....	37.5	35.2	37.9	35.5	-	2.2	2.6	2.1	2.1	-
2435	Hardwood veneer and plywood .....	40.0	39.7	41.1	38.7	-	3.7	3.6	3.8	3.0	-
2436	Softwood veneer and plywood .....	40.4	40.6	38.4	40.0	-	4.6	5.0	3.7	3.6	-
244	Wooden containers .....	38.2	36.8	38.4	37.3	-	2.5	2.8	2.6	2.3	-
245	Wood buildings and mobile homes .....	37.6	36.6	37.2	35.7	-	2.0	1.9	1.8	1.4	-
2451	Mobile homes .....	37.6	36.3	37.3	35.7	-	1.6	1.3	1.6	1.3	-
249	Miscellaneous wood products .....	40.1	39.5	40.7	39.7	-	3.4	3.2	2.3	3.0	-
25	<b>FURNITURE AND FIXTURES</b> .....	38.6	38.3	39.9	38.5	38.3	2.2	2.3	2.5	2.0	-
251	Household furniture .....	38.4	37.7	39.9	38.2	-	2.2	2.3	2.5	1.8	-
2511	Wood household furniture .....	39.1	38.7	40.6	38.6	-	2.7	3.0	2.9	2.2	-
2512	Upholstered household furniture .....	37.7	37.2	39.2	37.6	-	1.5	1.5	2.0	1.3	-
2514	Metal household furniture .....	38.2	36.5	39.8	38.2	-	1.6	1.4	1.7	1.3	-
2516	Mattresses and bedsprings .....	37.7	36.5	39.1	37.6	-	2.5	2.1	2.6	2.3	-
252	Office furniture .....	39.7	40.2	40.3	39.0	-	2.3	2.8	2.5	1.9	-
253	Public building and related furniture .....	39.0	40.5	38.8	38.8	-	2.2	2.3	2.9	2.7	-
254	Partitions and fixtures .....	39.0	38.6	40.1	39.2	-	2.6	2.2	3.0	2.5	-
259	Miscellaneous furniture and fixtures .....	38.5	38.7	40.2	39.2	-	2.2	2.7	2.4	1.9	-

See footnotes at end of table.













ESTABLISHMENT DATA  
HOURS AND EARNINGS

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P
<b>TRANSPORTATION EQUIPMENT—Continued</b>											
376	Guided missiles, space vehicles, parts	42.0	43.5	43.0	41.5	—	4.4	5.1	4.4	4.0	—
3761	Guided missiles and space vehicles	41.5	42.6	43.6	41.6	—	3.8	4.4	2.5	3.3	—
379	Miscellaneous transportation equipment	38.1	37.7	38.4	36.3	—	1.4	1.5	1.7	1.5	—
3792	Travel trailers and campers	36.3	36.2	36.0	34.0	—	1.0	1.1	.9	1.1	—
<b>INSTRUMENTS AND RELATED PRODUCTS</b>											
38	Engineering and scientific instruments	40.8	40.6	41.6	41.1	40.7	2.5	2.6	2.5	2.5	—
381	Measuring and controlling devices	41.2	41.2	43.9	41.5	—	2.5	2.5	4.2	3.4	—
382	Environmental controls	40.1	39.8	41.5	41.2	—	1.7	1.7	2.1	2.2	—
3823	Process control instruments	42.2	41.4	43.5	43.1	—	3.2	3.2	4.0	4.1	—
3825	Instruments to measure electricity	41.8	41.5	42.0	43.2	—	2.2	2.3	2.5	2.1	—
383	Optical instruments and lenses	44.4	44.3	44.9	43.9	—	4.0	3.8	4.2	3.6	—
384	Medical instruments and supplies	39.2	39.2	40.8	39.6	—	2.1	2.3	2.8	2.1	—
3841	Surgical and medical instruments	39.7	39.8	41.5	39.5	—	2.6	3.1	2.1	2.5	—
3842	Surgical appliances and supplies	39.0	39.0	40.6	39.5	—	1.9	1.9	2.9	2.0	—
385	Ophthalmic goods	39.0	39.0	39.7	39.2	—	1.8	1.8	1.9	2.0	—
386	Photographic equipment and supplies	42.2	42.2	41.7	41.3	—	3.0	3.3	2.2	2.8	—
387	Watches, clocks, and watchcases	38.8	38.7	39.6	39.4	—	1.4	1.6	1.6	1.3	—
<b>MISCELLANEOUS MANUFACTURING INDUSTRIES</b>											
39	Jewelry, silverware, and plated ware	38.5	38.5	39.4	38.9	39.2	2.2	1.9	2.6	2.2	—
391	Jewelry, precious metal	37.8	37.8	39.4	38.9	—	2.2	1.9	3.2	2.5	—
3911	Musical instruments	37.8	37.8	39.4	38.9	—	2.2	1.9	3.5	3.3	—
393	Toys and sporting goods	39.8	39.8	39.8	39.6	—	1.7	1.3	1.7	1.4	—
394	Dolls, games, toys, and children's vehicles	38.4	38.0	38.8	38.2	—	1.9	1.7	2.0	1.8	—
3942, 4	Sporting and athletic goods, nec	38.2	37.9	37.7	37.9	—	1.5	1.5	1.4	1.4	—
3949	Pens, pencils, office and art supplies	38.6	38.1	39.7	38.7	—	2.0	1.8	2.5	2.0	—
395	Costume jewelry and notions	40.7	40.0	42.0	39.8	—	2.7	2.0	2.6	2.6	—
396	Costume jewelry	37.7	37.7	38.1	37.4	—	2.0	1.9	2.4	2.4	—
3961	Miscellaneous manufactures	36.7	36.7	36.3	36.1	—	1.6	1.6	1.9	1.5	—
399	Signs and advertising displays	35.5	35.4	40.4	39.8	—	2.7	2.3	3.0	2.4	—
3993		39.2	39.1	40.7	38.4	—	2.5	2.4	3.2	2.1	—
<b>NONDURABLE GOODS</b>											
<b>FOOD AND KINDRED PRODUCTS</b>											
20	Meat products	39.9	39.5	40.3	39.4	38.9	4.0	3.7	4.0	3.7	—
201	Meat packing plants	39.8	39.8	40.0	39.2	—	4.2	4.2	4.4	4.0	—
2011	Sausages and other prepared meats	41.7	42.4	42.2	41.7	—	5.1	5.3	5.5	5.3	—
2013	Poultry dressing plants	40.1	39.9	40.3	38.7	—	4.0	3.6	4.5	3.0	—
2016	Dairy products	37.5	37.0	37.0	36.0	—	3.3	3.0	3.1	2.8	—
202	Cheese, natural and processed	41.4	41.0	41.5	40.8	—	4.0	3.7	3.7	3.9	—
2022	Fluid milk	39.5	38.8	39.8	38.4	—	3.5	2.9	3.4	2.8	—
2026	Preserved fruits and vegetables	42.3	42.1	42.8	41.8	—	4.3	4.2	4.1	4.5	—
203	Canned specialties	35.1	35.2	35.1	39.3	—	3.8	2.8	3.7	3.9	—
2032	Canned fruits and vegetables	41.1	41.4	36.4	37.9	—	5.6	5.6	7.9	8.8	—
2033	Frozen fruits and vegetables	39.0	37.8	39.2	38.8	—	4.3	2.7	2.9	2.6	—
2037	Grain mill products	38.6	38.8	39.4	40.4	—	3.6	2.5	4.0	4.8	—
204	Flour and other grain mill products	43.5	42.6	44.6	43.5	—	6.1	6.5	6.6	6.2	—
2041	Prepared feeds, nec	45.4	42.6	46.5	45.6	—	7.2	6.2	7.4	6.7	—
2048	Bakery products	44.1	44.3	44.7	44.2	—	6.5	7.0	6.6	6.6	—
205	Bread, cake, and related products	38.7	37.6	39.2	38.1	—	3.2	2.8	3.4	2.9	—
2051	Cookies and crackers	38.5	37.4	38.7	37.6	—	3.7	3.1	3.7	3.0	—
2062	Sugar and confectionery products	39.3	38.1	40.6	39.6	—	2.1	1.8	2.4	2.5	—
206	Cane and beet sugar	29.0	28.6	40.1	38.0	—	2.8	3.1	2.2	1.9	—
2061-3	Confectionery products	29.7	29.7	41.1	37.6	—	4.2	4.5	4.8	.5	—
2065	Fats and oils	38.3	37.6	39.4	37.7	—	2.4	2.3	3.1	2.5	—
207	Beverages	42.6	43.6	45.1	44.5	—	5.9	6.1	6.5	5.9	—
208	Malt beverages	40.4	39.5	40.8	39.1	—	3.9	3.4	3.6	3.3	—
2082	Bottled and canned soft drinks	41.8	41.9	41.7	40.7	—	5.4	5.2	5.3	4.8	—
2086	Misc. foods and kindred products	39.7	38.9	39.7	38.9	—	3.5	2.7	3.3	3.0	—
209		37.7	37.2	38.6	37.0	—	3.1	2.8	3.2	2.5	—
<b>TOBACCO MANUFACTURES</b>											
21	Cigarettes	38.0	36.1	39.5	37.4	36.1	1.3	.7	2.4	1.3	—
211		38.2	36.1	40.5	37.6	—	1.2	.2	2.9	1.4	—
<b>TEXTILE MILL PRODUCTS</b>											
22	Weaving mills, cotton	40.3	39.9	41.5	40.9	40.9	3.8	3.4	4.0	3.7	—
221	Weaving mills, synthetics	41.6	42.0	43.2	42.3	—	4.3	4.5	5.1	4.8	—
222	Weaving and finishing mills, wool	41.4	41.4	42.3	41.9	—	3.9	4.1	4.5	4.3	—
223	Narrow fabric mills	40.3	40.8	41.4	40.7	—	2.5	3.6	3.6	3.5	—
224	Knitting mills	40.2	40.1	41.3	40.4	—	2.7	2.7	3.1	3.0	—
225		38.1	36.8	39.1	38.5	—	2.5	2.1	3.0	2.6	—

See footnotes at end of table.



**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P
<b>TEXTILE MILL PRODUCTS—Continued</b>											
2261	Women's hosiery, except socks .....	38.1	37.2	39.3	38.2	-	2.9	2.0	3.5	2.4	-
2262	Hosiery, nec .....	36.8	35.3	37.2	37.1	-	1.8	1.5	1.4	1.8	-
2263	Knit outerwear mills .....	37.3	35.0	35.0	36.0	-	2.0	1.3	2.7	2.3	-
2264	Knit underwear mills .....	36.0	35.9	35.3	36.0	-	1.2	1.3	1.5	1.0	-
2267	Circular knit fabric mills .....	40.5	39.6	42.9	42.4	-	4.3	3.8	5.4	5.2	-
226	Textile finishing, except wool .....	41.2	40.0	43.1	41.8	-	3.6	3.3	4.4	3.7	-
2261	Finishing plants, cotton .....	41.2	40.3	43.2	42.3	-	3.5	3.5	4.4	4.0	-
2262	Finishing plants, synthetics .....	41.7	40.2	43.6	41.3	-	4.1	3.6	4.5	3.2	-
227	Floor covering mills .....	41.4	41.0	42.7	40.6	-	4.4	4.3	4.5	3.6	-
228	Yarn and thread mills .....	40.5	39.8	41.4	41.5	-	3.5	3.3	4.1	3.9	-
2281	Yarn mills, except wool .....	40.9	40.2	42.3	42.4	-	3.8	3.6	4.6	4.4	-
2282	Throwing and winding mills .....	39.3	38.9	38.5	39.1	-	3.1	2.7	2.3	2.3	-
229	Miscellaneous textile goods .....	41.1	41.2	42.0	41.9	-	3.5	4.0	3.6	3.3	-
<b>APPAREL AND OTHER TEXTILE PRODUCTS</b>											
23	Men's and boys' suits and coats .....	35.2	34.6	35.9	35.2	35.3	1.0	.9	1.2	1.0	-
231	Men's and boys' suits and coats .....	35.2	35.2	35.7	35.3	-	.6	.8	.6	.6	-
232	Men's and boys' furnishings .....	36.0	34.6	37.1	36.5	-	1.0	.8	1.4	1.2	-
2321	Men's and boys' shirts and nighwear .....	36.2	35.4	36.8	36.1	-	1.0	.8	1.2	1.0	-
2327	Men's and boys' separate trousers .....	35.0	34.1	36.0	35.9	-	.8	.4	1.2	1.1	-
2328	Men's and boys' work clothing .....	37.2	35.6	38.8	37.8	-	1.2	.8	2.0	1.4	-
233	Women's and misses' outerwear .....	35.2	35.1	35.3	35.1	-	.9	.9	.9	.9	-
2331	Women's and misses' blouses and waists .....	34.0	33.7	33.6	33.7	-	.8	.9	.8	.8	-
2335	Women's and misses' dresses .....	31.6	31.4	31.7	31.6	-	.9	.8	.8	.6	-
2337	Women's and misses' suits and coats .....	32.2	32.1	32.7	32.6	-	.8	.7	.7	.9	-
2339	Women's and misses' outerwear, nec .....	34.8	34.9	35.5	34.6	-	1.0	1.1	1.2	1.2	-
234	Women's and children's undergarments .....	35.7	34.7	36.6	35.4	-	1.0	.6	1.2	1.0	-
2341	Women's and children's underwear .....	35.8	34.6	37.1	36.0	-	1.1	.7	1.3	1.1	-
2342	Brassieres and allied garments .....	35.4	35.3	34.6	33.2	-	.9	.4	.5	.5	-
238	Children's outerwear .....	36.0	35.3	36.2	36.0	-	1.2	.9	1.3	1.2	-
2361	Children's dresses and blouses .....	35.9	36.0	35.7	35.3	-	1.2	1.2	1.0	.8	-
238	Misc. apparel and accessories .....	36.4	35.6	36.6	35.5	-	1.2	1.2	1.1	.8	-
239	Misc. fabricated textile products .....	37.9	36.9	39.1	38.7	-	1.7	1.7	1.5	.9	-
2391	Curtains and draperies .....	37.3	35.2	37.9	35.1	-	1.0	1.0	.8	.5	-
2392	House furnishings, nec .....	38.5	36.6	39.2	37.3	-	2.0	1.5	2.5	1.2	-
2396	Automotive and apparel trimmings .....	38.8	39.0	42.1	37.1	-	2.2	3.3	.6	.4	-
<b>PAPER AND ALLIED PRODUCTS</b>											
26	Paper and pulp mills .....	42.6	42.6	43.5	42.6	42.1	4.8	4.9	4.6	4.4	-
261, 2, 8	Paper and pulp mills .....	45.1	45.4	45.3	44.5	-	6.8	7.0	6.8	6.8	-
262	Paper mills, except building paper .....	45.5	46.0	45.7	45.0	-	6.8	7.3	6.8	6.8	-
263	Paperboard mills .....	43.9	44.3	44.5	43.4	-	7.1	7.0	7.3	7.0	-
264	Misc. converted paper products .....	41.1	40.9	42.3	41.5	-	3.5	3.7	3.6	3.5	-
2641	Paper coating and glazing .....	43.8	43.4	44.6	43.8	-	5.0	5.4	5.0	4.7	-
2642	Envelopes .....	40.3	40.5	41.3	40.1	-	2.9	3.2	3.2	3.3	-
2643	Bags, except textile bags .....	41.3	41.4	42.9	42.0	-	3.4	3.7	3.9	3.4	-
265	Paperboard containers and boxes .....	41.3	41.2	42.6	41.8	-	2.5	3.6	2.4	2.3	-
2651	Folding paperboard boxes .....	41.4	41.3	43.9	42.0	-	3.4	3.5	4.1	3.6	-
2653	Corrugated and solid fiber boxes .....	41.7	41.7	42.2	42.5	-	3.8	4.0	1.1	1.4	-
2654	Sanitary food containers .....	41.4	40.7	43.4	40.9	-	3.2	3.2	3.6	2.5	-
<b>PRINTING AND PUBLISHING</b>											
27	Newspapers .....	37.5	37.1	38.1	37.3	37.0	2.8	2.7	3.1	2.6	-
271	Newspapers .....	34.4	33.6	34.7	33.3	-	2.0	1.7	2.2	1.5	-
272	Periodicals .....	37.5	36.5	36.6	34.4	-	2.2	3.1	2.5	1.5	-
273	Books .....	38.8	38.3	39.1	38.8	-	3.3	3.2	3.4	3.1	-
2731	Book publishing .....	39.0	38.8	38.2	38.2	-	2.3	2.2	2.3	2.0	-
2732	Book printing .....	38.6	37.8	40.0	39.5	-	4.5	4.4	4.7	4.4	-
274	Miscellaneous publishing .....	35.6	35.4	36.8	37.5	-	2.1	2.1	2.2	2.5	-
275	Commercial printing .....	38.5	38.2	39.0	38.2	-	3.2	3.1	3.5	2.9	-
2751	Commercial printing, letterpress .....	38.0	37.9	38.6	37.4	-	2.8	2.6	3.0	2.3	-
2752	Commercial printing, lithographic .....	38.8	38.5	39.2	38.7	-	3.5	3.3	3.6	3.2	-
278	Manifold business forms .....	41.2	41.8	42.9	42.2	-	3.5	4.0	4.6	4.4	-
278	Blankbooks and bookbinding .....	36.7	38.9	39.6	39.3	-	2.1	2.1	2.4	2.7	-
279	Printing trade service .....	38.0	37.5	39.6	38.9	-	3.4	2.7	3.8	4.0	-
<b>CHEMICALS AND ALLIED PRODUCTS</b>											
28	Industrial inorganic chemicals .....	41.8	41.7	42.2	41.6	41.5	3.5	3.5	3.4	3.3	-
281	Industrial inorganic chemicals .....	42.1	42.0	42.9	41.7	-	3.8	3.7	3.7	3.4	-
2819	Industrial inorganic chemicals, nec .....	41.7	41.5	42.6	41.1	-	3.4	2.9	3.5	3.2	-
282	Plastics materials and synthetics .....	42.1	42.0	42.0	41.5	-	3.4	3.4	3.1	3.2	-
2821	Plastics materials and resins .....	42.8	42.8	43.3	42.2	-	4.4	4.5	4.4	4.3	-
2824	Organic fibers, noncellulosic .....	41.7	41.4	41.4	40.9	-	2.6	2.3	2.2	2.4	-
283	Drugs .....	41.1	41.3	42.0	41.4	-	2.7	2.9	3.2	2.9	-
2834	Pharmaceutical preparations .....	40.6	41.0	41.5	40.9	-	2.6	2.8	3.2	2.9	-

See footnotes at end of table.

# ESTABLISHMENT DATA HOURS AND EARNINGS

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

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 P
	<b>CHEMICALS AND ALLIED PRODUCTS—Cont'd</b>										
284	Soap, cleaners, and toilet goods	\$250.75	\$262.61	\$302.17	\$300.58	-	\$7.18	\$7.03	\$7.37	\$7.44	-
2841	Soap and other detergents	404.78	395.08	420.85	416.32	-	9.37	9.22	9.81	9.75	-
2844	Toilet preparations	222.91	212.06	231.02	232.25	-	5.76	5.64	5.75	5.54	-
2842, 3	Polishing, sanitation, and finishing preparations	259.25	250.11	274.88	265.68	-	6.50	6.30	6.77	6.81	-
285	Paints and allied products	278.66	271.42	284.95	286.94	-	6.78	6.62	6.95	7.05	-
286	Industrial organic chemicals	351.02	371.52	358.61	354.55	-	9.01	8.64	9.27	9.24	-
2865	Cyclic crudes and intermediates	359.52	339.29	371.05	365.78	-	8.40	8.24	8.71	8.54	-
2861, 9	Gum, wood, and industrial organic chemicals, nec	401.94	383.64	408.55	404.18	-	9.24	8.86	9.48	9.51	-
287	Agricultural chemicals	312.74	298.64	339.99	322.05	-	7.29	7.06	7.78	7.74	-
289	Miscellaneous chemical products	292.41	281.25	310.70	308.26	-	7.07	6.81	7.38	7.41	-
	<b>PETROLEUM AND COAL PRODUCTS</b>	<b>410.41</b>	<b>385.63</b>	<b>411.87</b>	<b>342.44</b>	<b>\$299.31</b>	<b>9.27</b>	<b>8.61</b>	<b>8.49</b>	<b>9.54</b>	<b>\$8.53</b>
291	Petroleum refining	425.45	412.48	425.50	357.42	-	10.08	9.66	10.15	10.39	-
295	Paving and roofing materials	325.17	299.78	320.41	303.88	-	7.21	6.88	7.31	7.10	-
	<b>RUBBER AND MISC. PLASTICS PRODUCTS</b>	<b>241.28</b>	<b>225.20</b>	<b>252.75</b>	<b>251.88</b>	<b>247.10</b>	<b>5.96</b>	<b>5.82</b>	<b>6.21</b>	<b>6.25</b>	<b>6.24</b>
301	Tires and inner tubes	361.22	375.42	371.54	370.17	-	8.58	8.38	8.04	9.14	-
302	Rubber and plastics footwear	157.28	145.20	175.87	179.49	-	4.12	4.00	4.20	4.41	-
303, 4	Reclaimed rubber, and rubber and plastics hose and belting	253.17	244.67	268.55	269.19	-	6.12	5.91	6.44	6.44	-
306	Fabricated rubber products, nec	228.50	225.05	240.17	227.21	-	5.67	5.49	5.97	5.21	-
307	Miscellaneous plastics products	220.44	214.25	232.64	232.12	-	5.47	5.25	5.72	5.76	-
	<b>LEATHER AND LEATHER PRODUCTS</b>	<b>154.40</b>	<b>145.92</b>	<b>162.63</b>	<b>164.21</b>	<b>164.57</b>	<b>4.23</b>	<b>4.13</b>	<b>4.36</b>	<b>4.45</b>	<b>4.46</b>
31	Leather tanning and finishing	214.23	207.48	232.43	227.18	-	5.55	5.22	5.84	5.84	-
311	Footwear, except rubber	148.06	144.22	156.56	159.78	-	4.09	4.02	4.22	4.33	-
3143	Men's footwear, except athletic	159.22	153.09	166.06	167.44	-	4.28	4.16	4.44	4.55	-
3144	Women's footwear, except athletic	138.34	128.06	149.08	153.50	-	3.93	3.50	4.04	4.16	-
316	Luggage	159.56	152.51	170.20	174.27	-	4.42	4.26	4.60	4.71	-
317	Handbags and personal leather goods	148.34	141.93	150.69	148.87	-	4.02	3.81	4.04	4.17	-
	<b>TRANSPORTATION AND PUBLIC UTILITIES</b>	<b>326.38</b>	<b>312.84</b>	<b>342.00</b>	<b>335.62</b>	<b>326.80</b>	<b>8.18</b>	<b>7.90</b>	<b>8.55</b>	<b>8.54</b>	<b>8.57</b>
	<b>RAILROAD TRANSPORTATION:</b>										
4011	Class I railroads <sup>2</sup>	352.47	375.76	397.11	(*)	-	8.94	8.54	9.20	(*)	-
	<b>LOCAL AND INTERURBAN PASSENGER TRANSIT</b>	<b>206.61</b>	<b>191.65</b>	<b>206.38</b>	<b>205.69</b>	<b>-</b>	<b>5.92</b>	<b>5.67</b>	<b>6.07</b>	<b>6.14</b>	<b>-</b>
411	Local and suburban transportation	285.22	275.65	274.92	265.70	-	6.94	6.84	6.96	6.88	-
413	Intercity highway transportation	335.04	306.81	325.37	351.70	-	8.04	8.57	9.29	10.02	-
	<b>TRUCKING AND WAREHOUSING</b>	<b>232.25</b>	<b>212.42</b>	<b>255.12</b>	<b>238.04</b>	<b>-</b>	<b>8.37</b>	<b>7.97</b>	<b>8.79</b>	<b>8.69</b>	<b>-</b>
421, 3	Trucking and trucking terminals	339.45	319.09	362.79	345.42	-	8.52	8.24	8.98	8.88	-
422	Public warehousing	221.07	217.32	252.35	239.23	-	5.94	5.63	6.17	6.23	-
46	<b>PIPE LINES, EXCEPT NATURAL GAS</b>	<b>355.84</b>	<b>385.52</b>	<b>431.72</b>	<b>440.20</b>	<b>-</b>	<b>9.52</b>	<b>9.05</b>	<b>10.04</b>	<b>10.36</b>	<b>-</b>
	<b>COMMUNICATION</b>	<b>312.43</b>	<b>303.73</b>	<b>328.25</b>	<b>324.66</b>	<b>-</b>	<b>7.85</b>	<b>7.67</b>	<b>8.25</b>	<b>8.24</b>	<b>-</b>
481	Telephone communication	324.41	314.41	339.60	335.41	-	8.07	7.88	8.45	8.47	-
4817	Switchboard operating employees <sup>3</sup>	222.45	215.56	215.28	218.65	-	6.67	6.42	6.90	7.15	-
4818	Line construction employees <sup>4</sup>	439.65	427.55	457.28	442.07	-	9.77	9.48	10.22	10.07	-
483	Radio and television broadcasting	262.05	260.30	274.94	275.80	-	6.86	6.85	7.16	7.22	-
	<b>ELECTRIC, GAS, AND SANITARY SERVICES</b>	<b>343.19</b>	<b>338.44</b>	<b>356.14</b>	<b>354.82</b>	<b>-</b>	<b>8.22</b>	<b>8.02</b>	<b>8.52</b>	<b>8.55</b>	<b>-</b>
491	Electric services	350.65	347.45	367.63	365.85	-	8.33	8.10	8.65	8.69	-
492	Gas production and distribution	310.59	302.22	324.75	322.32	-	7.65	7.41	7.94	7.90	-
493	Combination utility services	375.61	375.24	387.20	386.98	-	9.06	8.85	9.22	9.37	-
495	Sanitary services	278.14	270.40	284.28	284.12	-	6.67	6.50	6.85	6.93	-
	<b>WHOLESALE AND RETAIL TRADE</b>	<b>164.96</b>	<b>158.72</b>	<b>170.42</b>	<b>165.81</b>	<b>170.45</b>	<b>5.06</b>	<b>4.86</b>	<b>5.18</b>	<b>5.34</b>	<b>5.26</b>
50, 51	<b>WHOLESALE TRADE</b>	<b>247.93</b>	<b>227.31</b>	<b>261.19</b>	<b>258.05</b>	<b>258.52</b>	<b>6.39</b>	<b>6.18</b>	<b>6.68</b>	<b>6.72</b>	<b>6.75</b>
	<b>WHOLESALE TRADE-DURABLE GOODS</b>	<b>251.12</b>	<b>240.40</b>	<b>264.12</b>	<b>255.57</b>	<b>-</b>	<b>6.39</b>	<b>6.18</b>	<b>6.67</b>	<b>6.69</b>	<b>-</b>
501	Motor vehicles and automotive equipment	230.06	219.08	245.46	236.46	-	5.96	5.75	6.22	6.19	-
502	Furniture and home furnishings	221.68	207.54	230.55	225.00	-	5.88	5.56	6.02	6.00	-
503	Lumber and construction materials	253.74	239.71	265.56	262.75	-	6.44	6.21	6.74	6.66	-
504	Sporting goods, toys, and hobby goods	242.82	236.33	255.36	255.99	-	6.51	6.27	6.72	6.50	-

See footnotes at end of table.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 p	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 p
	<b>CHEMICALS AND ALLIED PRODUCTS—Cont'd</b>										
284	Soap, cleaners, and toilet goods .....	40.5	40.2	41.0	40.4	-	3.0	3.1	2.8	2.7	-
2841	Soap and other detergents .....	43.2	43.8	42.9	42.7	-	4.5	5.5	4.5	4.3	-
2844	Toilet preparations .....	38.7	37.6	35.9	39.1	-	1.8	1.5	1.7	1.9	-
2842, 3	Polishing, sanitation, and finishing preparations .....	39.9	39.7	40.6	39.6	-	2.6	2.7	2.4	2.0	-
285	Paints and allied products .....	41.1	41.0	41.0	40.7	-	3.0	3.0	2.2	2.3	-
286	Industrial organic chemicals .....	43.4	43.0	43.0	42.7	-	4.2	4.0	3.8	3.9	-
2865	Cyclic crudes and intermediates .....	42.8	42.2	42.6	42.3	-	4.4	4.1	3.5	4.3	-
2861, 9	Gum, wood, and industrial organic chemicals, nec .....	43.5	43.3	43.1	42.5	-	4.2	4.0	3.8	3.8	-
287	Agricultural chemicals .....	42.9	42.3	43.7	42.9	-	4.8	4.6	5.1	4.5	-
289	Miscellaneous chemical products .....	41.5	41.3	42.1	41.6	-	3.5	3.5	3.6	3.3	-
29	<b>PETROLEUM AND COAL PRODUCTS</b> .....	43.8	42.8	43.4	36.0	41.5	4.4	4.2	4.1	3.4	-
291	Petroleum refining .....	43.6	42.7	43.3	34.4	-	3.8	3.8	3.6	2.8	-
295	Paving and roofing materials .....	45.	43.7	45.2	42.8	-	7.2	6.3	6.9	6.3	-
30	<b>RUBBER AND MISC. PLASTICS PRODUCTS</b> .....	40.5	41.1	40.7	40.3	35.6	3.3	3.8	3.1	2.9	-
301	Tires and inner tubes .....	42.1	44.8	41.1	40.5	-	4.2	6.0	2.5	2.5	-
302	Rubber and plastics footwear .....	38.2	37.3	40.9	40.7	-	2.1	1.9	3.2	3.1	-
303, 4	Reclaimed rubber, and rubber and plastics hose and belting .....	41.3	41.4	41.7	41.8	-	4.1	4.3	3.5	3.4	-
306	Fabricated rubber products, nec .....	40.3	41.0	40.5	39.8	-	2.9	3.6	2.7	2.4	-
307	Miscellaneous plastics products .....	40.3	40.5	40.6	40.3	-	3.2	3.3	3.2	3.0	-
31	<b>LEATHER AND LEATHER PRODUCTS</b> .....	36.5	36.2	37.2	36.9	36.9	1.5	1.4	1.6	1.4	-
311	Leather tanning and finishing .....	38.6	39.0	39.8	38.9	-	2.3	2.7	2.7	2.5	-
314	Footwear, except rubber .....	36.2	35.9	37.1	36.9	-	1.3	1.1	1.4	1.2	-
3143	Men's footwear, except athletic .....	37.2	36.8	37.4	36.6	-	1.2	.9	1.3	1.1	-
3144	Women's footwear, except athletic .....	35.2	35.4	36.9	36.9	-	1.5	1.4	1.5	1.4	-
316	Luggage .....	36.1	35.8	37.0	37.0	-	1.7	1.9	2.8	2.5	-
317	Handbags and personal leather goods .....	36.9	36.3	37.3	35.7	-	1.7	1.5	1.7	1.3	-
	<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	39.9	39.6	40.0	39.3	39.3	-	-	-	-	-
	<b>RAILROAD TRANSPORTATION:</b>										
4011	Class I railroads <sup>2</sup> .....	43.9	44.0	42.7	(*)	-	-	-	-	-	-
41	<b>LOCAL AND INTERURBAN PASSENGER TRANSIT</b> .....	34.9	33.8	34.0	33.5	-	-	-	-	-	-
411	Local and suburban transportation .....	41.1	40.3	39.5	39.2	-	-	-	-	-	-
413	Intercity highway transportation .....	37.9	35.8	36.1	35.1	-	-	-	-	-	-
42	<b>TRUCKING AND WAREHOUSING</b> .....	39.7	39.2	40.4	38.9	-	-	-	-	-	-
421, 3	Trucking and trucking terminals .....	39.8	39.2	40.4	38.9	-	-	-	-	-	-
422	Public warehousing .....	38.9	38.6	40.9	38.4	-	-	-	-	-	-
46	<b>PIPE LINES, EXCEPT NATURAL GAS</b> .....	42.0	42.6	43.0	42.5	-	-	-	-	-	-
48	<b>COMMUNICATION</b> .....	39.8	39.6	39.8	39.4	-	-	-	-	-	-
481	Telephone communication .....	40.2	39.9	40.0	39.6	-	-	-	-	-	-
4817	Switchboard operating employees <sup>3</sup> .....	33.5	24.2	21.2	20.2	-	-	-	-	-	-
4818	Line construction employees <sup>4</sup> .....	45.0	45.1	44.7	43.9	-	-	-	-	-	-
483	Radio and television broadcasting .....	38.2	38.0	38.4	38.2	-	-	-	-	-	-
49	<b>ELECTRIC, GAS, AND SANITARY SERVICES</b> .....	41.7	42.2	41.8	41.5	-	-	-	-	-	-
491	Electric services .....	42.1	42.9	42.5	42.1	-	-	-	-	-	-
492	Gas production and distribution .....	40.6	40.8	40.9	40.8	-	-	-	-	-	-
493	Combination utility services .....	41.9	42.4	41.5	41.3	-	-	-	-	-	-
496	Sanitary services .....	41.7	41.6	41.5	41.0	-	-	-	-	-	-
	<b>WHOLESALE AND RETAIL TRADE</b> .....	32.6	32.0	32.9	31.8	31.8	-	-	-	-	-
50, 51	<b>WHOLESALE TRADE</b> .....	38.8	38.4	39.1	38.4	38.3	-	-	-	-	-
50	<b>WHOLESALE TRADE-DURABLE GOODS</b> .....	39.3	38.9	39.6	38.8	-	-	-	-	-	-
501	Motor vehicles and automotive equipment .....	38.6	38.1	39.4	38.2	-	-	-	-	-	-
502	Furniture and home furnishings .....	37.7	37.4	38.3	37.5	-	-	-	-	-	-
503	Lumber and construction materials .....	39.4	38.6	39.4	38.1	-	-	-	-	-	-
504	Sporting goods, toys, and hobby goods .....	37.3	37.1	38.0	37.1	-	-	-	-	-	-

See footnotes at end of table.

# ESTABLISHMENT DATA HOURS AND EARNINGS

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

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings					
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 P	FEB. 1980 P	
	<b>WHOLESALE TRADE-DURABLE GOODS—Continued</b>											
506	Metals and minerals, except petroleum	\$254.80	\$276.36	\$312.70	\$302.99	-	\$7.37	\$7.05	\$7.74	\$7.69	-	
508	Electrical goods	251.94	238.46	275.02	267.15	-	6.51	6.21	6.91	6.85	-	
507	Hardware, plumbing, and heating equipment	235.39	226.18	247.92	244.74	-	6.11	5.85	6.35	6.39	-	
508	Machinery, equipment, and supplies	263.74	258.31	274.62	274.22	-	6.61	6.44	6.90	6.96	-	
508	Miscellaneous nondurable goods	213.64	205.59	222.22	217.88	-	5.45	5.34	5.64	5.63	-	
51	<b>WHOLESALE TRADE-NONDURABLE GOODS</b>	244.10	233.23	256.51	255.51	-	6.35	6.17	6.68	6.77	-	
511	Paper and paper products	277.40	271.91	291.61	285.38	-	7.60	7.47	7.86	7.95	-	
512	Drugs, proprietaries, and sundries	247.87	241.15	263.12	260.03	-	6.54	6.28	6.87	6.59	-	
513	Apparel, piece goods, and notions	218.22	207.64	230.51	225.48	-	5.52	5.26	6.18	6.27	-	
514	Groceries and related products	246.75	234.98	259.85	258.91	-	6.41	6.20	6.66	6.76	-	
518	Chemicals and allied products	295.77	275.32	315.15	317.13	-	7.45	6.97	8.04	8.09	-	
517	Petroleum and petroleum products	305.29	292.47	324.62	325.24	-	7.65	7.22	8.26	8.36	-	
518	Beer, wine, and distilled beverages	274.54	269.31	291.38	280.78	-	7.38	7.22	7.77	7.63	-	
519	Miscellaneous nondurable goods	200.03	191.01	205.50	207.00	-	5.25	5.08	5.47	5.52	-	
52-59	<b>RETAIL TRADE</b>	135.07	133.65	142.51	141.67	\$141.97	4.53	4.47	4.61	4.77	\$4.78	
52	<b>BUILDING MATERIALS AND GARDEN SUPPLIES</b>	187.62	177.26	192.24	187.31	-	4.99	4.83	5.14	5.16	-	
521	Lumber and other building materials	207.50	194.54	212.61	207.74	-	5.24	5.04	5.41	5.41	-	
525	Hardware stores	145.55	139.10	152.05	148.71	-	4.28	4.14	4.42	4.52	-	
53	<b>GENERAL MERCHANDISE STORES</b>	128.92	121.76	134.42	130.25	-	4.37	4.30	4.35	4.67	-	
531	Department stores	133.77	125.48	135.22	134.90	-	4.55	4.23	4.52	4.87	-	
533	Variety stores	108.11	108.36	112.77	108.92	-	3.64	3.67	3.58	3.73	-	
539	Misc. general merchandise stores	103.15	95.88	108.68	105.93	-	3.51	3.40	3.54	3.73	-	
54	<b>FOOD STORES</b>	179.74	172.54	181.45	181.41	-	5.67	5.53	5.78	5.89	-	
541	Grocery stores	186.56	180.37	188.34	188.16	-	5.83	5.65	5.96	6.05	-	
546	Retail bakeries	127.85	113.25	125.75	121.82	-	4.35	4.09	4.51	4.53	-	
55	<b>AUTOMOTIVE DEALERS AND SERVICE STATIONS</b>	200.56	195.11	206.93	206.63	-	5.32	5.07	5.46	5.51	-	
551, 2	New and used car dealers	240.95	226.94	245.07	240.38	-	6.21	5.51	6.30	6.26	-	
553	Auto and home supply stores	156.02	152.54	203.50	211.12	-	4.84	4.64	5.00	5.20	-	
554	Gasoline service stations	140.70	132.86	149.60	151.73	-	4.02	3.84	4.25	4.36	-	
56	<b>APPAREL AND ACCESSORY STORES</b>	116.98	112.57	124.31	119.43	-	4.02	3.95	4.13	4.25	-	
561	Men's and boys' clothing and furnishings	147.93	148.39	159.13	152.64	-	4.58	4.28	4.75	4.80	-	
562	Women's ready-to-wear stores	103.75	98.28	110.40	108.94	-	3.72	3.60	3.82	4.02	-	
565	Family clothing stores	112.13	105.13	117.60	116.56	-	3.88	3.87	4.00	4.11	-	
566	Shoe stores	122.83	114.40	128.90	120.93	-	4.25	4.12	4.34	4.35	-	
57	<b>FURNITURE AND HOME FURNISHINGS STORES</b>	162.34	177.45	193.50	190.55	-	5.18	5.07	5.35	5.46	-	
571	Furniture and home furnishings	186.51	182.35	196.01	193.00	-	5.31	5.24	5.46	5.53	-	
572	Household appliance stores	195.12	187.23	201.27	197.74	-	5.42	5.23	5.56	5.63	-	
573	Radio, television, and music stores	162.74	158.45	180.70	178.54	-	4.69	4.54	5.05	5.19	-	
58	<b>EATING AND DRINKING PLACES</b>	91.08	87.63	92.93	92.05	-	3.45	3.45	3.52	3.64	-	
59	<b>MISCELLANEOUS RETAIL</b>	143.81	138.41	151.80	145.78	-	4.48	4.38	4.60	4.77	-	
591	Drug stores and proprietary stores	129.17	123.41	135.25	135.56	-	4.14	4.02	4.26	4.43	-	
594	Miscellaneous shopping goods stores	125.25	124.61	138.56	134.09	-	4.21	4.14	4.33	4.53	-	
596	Nonstore retailers	177.55	169.32	189.74	185.92	-	5.30	5.10	5.36	5.60	-	
598	Fuel and ice dealers	233.64	247.04	243.54	250.57	-	5.90	5.51	6.15	6.28	-	
599	Retail stores, nec	149.06	135.15	157.05	153.78	-	4.45	4.25	4.58	4.66	-	
	<b>FINANCE, INSURANCE, AND REAL ESTATE</b>	191.66	186.73	195.84	202.15	203.64	5.28	5.13	5.49	5.57	5.61	
60	<b>BANKING</b>	164.58	160.67	171.44	171.48	-	4.52	4.35	4.71	4.75	-	
602	Commercial and stock savings banks	161.54	157.32	168.90	168.12	-	4.45	4.31	4.64	4.67	-	
61	<b>CREDIT AGENCIES OTHER THAN BANKS</b>	172.12	167.54	178.57	184.51	-	4.69	4.59	4.85	4.96	-	
612	Savings and loan associations	165.53	159.76	173.90	176.64	-	4.56	4.45	4.70	4.80	-	
614	Personal credit institutions	167.35	164.78	171.70	180.68	-	4.56	4.45	4.73	4.87	-	
63	<b>INSURANCE CARRIERS</b>	211.12	205.72	219.00	221.78	-	5.66	5.53	5.84	5.53	-	
631	Life insurance	210.92	206.62	220.00	224.47	-	5.67	5.63	5.82	5.97	-	
632	Medical service and health insurance	206.80	201.06	216.55	216.31	-	5.50	5.25	5.77	5.73	-	
633	Fire, marine, and casualty insurance	210.70	206.28	217.71	219.70	-	5.71	5.56	5.90	5.97	-	

See footnotes at end of table.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sub>p</sub>	FEB. 1980 <sub>p</sub>
	<b>WHOLESALE TRADE-DURABLE GOODS—Continued</b>										
505	Metals and minerals, except petroleum .....	40.0	39.2	40.4	39.4	-	-	-	-	-	-
506	Electrical goods .....	38.7	38.4	39.8	39.0	-	-	-	-	-	-
507	Hardware, plumbing, and heating equipment .....	38.4	38.4	38.9	38.3	-	-	-	-	-	-
508	Machinery, equipment, and supplies .....	39.5	39.8	39.8	39.4	-	-	-	-	-	-
509	Miscellaneous durable goods .....	39.2	38.5	39.4	38.7	-	-	-	-	-	-
51	<b>WHOLESALE TRADE-NONDURABLE GOODS</b>	38.2	37.8	38.4	37.8	-	-	-	-	-	-
511	Paper and paper products .....	36.5	36.4	37.1	36.4	-	-	-	-	-	-
512	Drugs, proprietaries, and sundries .....	37.9	38.4	38.3	37.2	-	-	-	-	-	-
513	Apparel, piece goods, and notions .....	36.8	36.2	37.3	36.6	-	-	-	-	-	-
514	Groceries and related products .....	38.5	37.9	38.9	38.2	-	-	-	-	-	-
516	Chemicals and allied products .....	39.7	39.5	39.7	39.2	-	-	-	-	-	-
517	Petroleum and petroleum products .....	39.7	39.9	39.3	40.1	-	-	-	-	-	-
518	Beer, wine, and distilled beverages .....	37.7	37.3	37.5	36.8	-	-	-	-	-	-
519	Miscellaneous nondurable goods .....	38.	37.6	38.3	37.5	-	-	-	-	-	-
52-59	<b>RETAIL TRADE</b> .....	30.7	29.9	31.0	29.7	29.7	-	-	-	-	-
52	<b>BUILDING MATERIALS AND GARDEN SUPPLIES</b> .....	37.6	36.7	37.4	36.3	-	-	-	-	-	-
521	Lumber and other building materials .....	39.6	38.6	39.3	38.4	-	-	-	-	-	-
525	Hardware stores .....	34.1	33.6	34.4	32.9	-	-	-	-	-	-
53	<b>GENERAL MERCHANDISE STORES</b> .....	29.5	27.8	30.9	27.9	-	-	-	-	-	-
531	Department stores .....	29.4	27.7	30.8	27.7	-	-	-	-	-	-
533	Variety stores .....	29.7	28.0	31.5	29.2	-	-	-	-	-	-
539	Misc. general merchandise stores .....	29.4	28.2	30.7	28.4	-	-	-	-	-	-
54	<b>FOOD STORES</b> .....	31.7	31.2	31.4	30.8	-	-	-	-	-	-
541	Grocery stores .....	32.0	31.7	31.6	31.1	-	-	-	-	-	-
546	Retail bakeries .....	29.4	27.7	30.1	29.1	-	-	-	-	-	-
55	<b>AUTOMOTIVE DEALERS AND SERVICE STATIONS</b> .....	37.7	37.3	37.9	37.5	-	-	-	-	-	-
551, 2	New and used car dealers .....	38.8	38.4	38.9	38.4	-	-	-	-	-	-
553	Auto and home supply stores .....	40.5	40.4	40.7	40.6	-	-	-	-	-	-
554	Gasoline service stations .....	35.0	34.6	35.2	34.8	-	-	-	-	-	-
56	<b>APPAREL AND ACCESSORY STORES</b> .....	29.1	28.6	30.1	28.1	-	-	-	-	-	-
561	Men's and boys' clothing and furnishings .....	32.3	32.4	32.5	31.8	-	-	-	-	-	-
562	Women's ready-to-wear stores .....	27.9	27.3	28.9	27.1	-	-	-	-	-	-
565	Family clothing stores .....	28.9	28.2	29.4	26.9	-	-	-	-	-	-
566	Shoe stores .....	28.9	27.7	29.7	27.8	-	-	-	-	-	-
57	<b>FURNITURE AND HOME FURNISHINGS STORES</b> .....	35.2	35.0	35.9	34.9	-	-	-	-	-	-
571	Furniture and home furnishings .....	35.2	34.8	35.9	34.9	-	-	-	-	-	-
572	Household appliance stores .....	36.0	35.6	36.2	35.3	-	-	-	-	-	-
573	Radio, television, and music stores .....	34.7	34.9	35.5	34.4	-	-	-	-	-	-
58	<b>EATING AND DRINKING PLACES</b> .....	26.4	25.4	26.4	25.2	-	-	-	-	-	-
59	<b>MISCELLANEOUS RETAIL</b> .....	32.1	31.6	33.0	31.4	-	-	-	-	-	-
591	Drug stores and proprietary stores .....	31.2	30.7	31.6	30.6	-	-	-	-	-	-
594	Miscellaneous shopping goods stores .....	30.7	30.1	32.0	29.6	-	-	-	-	-	-
596	Nonstore retailers .....	33.5	33.2	35.4	33.2	-	-	-	-	-	-
598	Fuel and ice dealers .....	39.6	41.8	39.6	39.9	-	-	-	-	-	-
599	Retail stores, nec .....	33.5	31.8	34.3	33.0	-	-	-	-	-	-
	<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	36.3	36.4	36.4	36.3	36.3	-	-	-	-	-
60	<b>BANKING</b> .....	36.3	36.6	36.4	36.1	-	-	-	-	-	-
602	Commercial and stock savings banks .....	36.2	36.5	36.4	36.0	-	-	-	-	-	-
61	<b>CREDIT AGENCIES OTHER THAN BANKS</b> .....	36.7	36.5	36.9	37.2	-	-	-	-	-	-
612	Savings and loan associations .....	36.2	35.9	37.0	36.8	-	-	-	-	-	-
614	Personal credit institutions .....	36.7	36.7	36.2	37.1	-	-	-	-	-	-
63	<b>INSURANCE CARRIERS</b> .....	37.3	37.2	37.5	37.4	-	-	-	-	-	-
631	Life insurance .....	37.2	36.7	37.8	37.6	-	-	-	-	-	-
632	Medical service and health insurance .....	37.6	38.3	37.6	38.1	-	-	-	-	-	-
633	Fire, marine, and casualty insurance .....	36.9	37.1	36.9	36.8	-	-	-	-	-	-

See footnotes at end of table.

# ESTABLISHMENT DATA HOURS AND EARNINGS

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

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>p</sup>	FEB. 1980 <sup>p</sup>	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>p</sup>	FEB. 1980 <sup>p</sup>
	<b>SERVICES .....</b>	\$175.27	\$169.45	\$183.68	\$182.63	\$184.60	\$5.36	\$5.23	\$5.60	\$5.65	\$5.68
701	<b>HOTELS AND OTHER LODGING PLACES:</b> Hotels, motels, and tourist courts .....	122.98	116.70	126.65	125.63	-	3.98	3.89	4.16	4.23	-
721	<b>PERSONAL SERVICES:</b> Laundry, cleaning, and garment services .....	141.04	135.83	146.20	146.69	-	4.10	3.96	4.25	4.34	-
723	Beauty shops .....	127.10	116.10	132.92	126.27	-	4.10	3.87	4.18	4.14	-
73	<b>BUSINESS SERVICES .....</b>	178.32	170.66	187.35	188.35	-	5.47	5.30	5.66	5.76	-
731	Advertising .....	271.83	263.66	284.61	284.61	-	7.52	7.33	7.95	7.95	-
734	Services to buildings .....	128.38	124.35	133.38	135.46	-	4.72	4.64	4.85	4.98	-
737	Computer and data processing services .....	221.76	219.25	245.59	245.48	-	6.35	6.04	6.71	6.80	-
75	<b>AUTO REPAIR, SERVICES, AND GARAGES .....</b>	210.00	197.25	220.50	221.49	-	5.60	5.36	5.66	5.97	-
753	Automotive repair shops .....	232.46	220.22	242.12	242.95	-	5.93	5.72	6.25	6.32	-
76	<b>MISCELLANEOUS REPAIR SERVICES .....</b>	260.42	252.53	274.58	269.79	-	6.43	6.22	6.72	6.83	-
78	<b>MOTION PICTURES .....</b>	200.29	195.26	240.40	236.10	-	7.21	7.13	8.71	8.68	-
781	Motion picture production and services .....	355.74	377.48	463.39	466.26	-	10.41	9.96	12.29	12.27	-
79	<b>AMUSEMENT AND RECREATION SERVICES .....</b>	153.00	150.20	157.52	155.01	-	5.00	4.99	5.34	5.39	-
80	<b>HEALTH SERVICES .....</b>	170.61	165.49	176.67	176.76	-	5.17	5.03	5.37	5.45	-
801	Offices of physicians .....	176.25	170.69	183.63	182.41	-	5.39	5.22	5.65	5.63	-
802	Offices of dentists .....	148.55	142.64	151.09	152.40	-	5.14	4.97	5.21	5.21	-
805	Nursing and personal care facilities .....	119.56	118.42	121.66	121.56	-	3.87	3.82	3.95	4.09	-
806	Hospitals .....	167.42	162.25	195.28	198.46	-	5.48	5.32	5.71	5.82	-
81	<b>LEGAL SERVICES .....</b>	229.50	219.41	246.74	245.70	-	6.75	6.53	7.07	7.04	-
89	<b>MISCELLANEOUS SERVICES .....</b>	293.76	287.54	307.75	305.52	-	7.69	7.43	8.12	8.04	-
891	Engineering and architectural services .....	316.52	308.46	331.57	328.04	-	8.20	7.95	8.55	8.61	-
893	Accounting, auditing, and bookkeeping .....	256.22	247.40	265.51	270.27	-	6.69	6.36	7.11	6.93	-

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

<sup>2</sup> Beginning January 1978, data relate to line haul railroads with operating revenues of \$50,000,000 or more.

<sup>3</sup> Data relate to employees in such occupations in the telephone industry as switchboard operators; service assistants; operating room instructors; and pay-station attendants. In 1977, such employees made up 20 percent of the total number of nonsupervisory employees in establishments reporting hours and earnings data.

<sup>4</sup> Data relate to employees in such occupations in the telephone industry as central office craft persons; installation and exchange repair craft persons; line, cable and conduit craft persons; and laborers. In 1977, such employees made up 37 percent of the total number of nonsupervisory employees in establishments reporting hours and earnings data.

<sup>5</sup> Money payments only; tips, not included.

<sup>6</sup> Data for nonoffice sales agents excluded from all series in this division.

\* Not available.

<sup>p</sup> = preliminary.



**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 p	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 p	FEB. 1980 P
	<b>SERVICES</b> .....	32.7	32.4	32.8	32.5	32.5	-	-	-	-	-
701	<b>HOTELS AND OTHER LODGING PLACES:</b> Hotels, motels, and tourist courts .....	30.5	30.0	30.3	29.7	"	-	-	-	-	-
	<b>PERSONAL SERVICES:</b>										
721	Laundry, cleaning, and garment services .....	34.4	34.3	34.4	33.8	-	-	-	-	-	
723	Beauty shops .....	31.0	30.0	31.8	30.5	-	-	-	-	-	
73	<b>BUSINESS SERVICES</b> .....	32.6	32.2	33.1	32.7	-	-	-	-	-	
731	Advertising .....	36.1	36.0	35.8	35.8	-	-	-	-	-	
734	Services to buildings .....	27.2	26.8	27.5	27.2	-	-	-	-	-	
737	Computer and data processing services .....	36.5	36.3	36.6	36.1	-	-	-	-	-	
75	<b>AUTO REPAIR, SERVICES, AND GARAGES</b> .....	37.5	36.8	37.5	37.1	-	-	-	-	-	
753	Automotive repair shops .....	39.2	38.5	38.9	38.6	-	-	-	-	-	
76	<b>MISCELLANEOUS REPAIR SERVICES</b> .....	40.5	40.6	40.8	39.5	-	-	-	-	-	
78	<b>MOTION PICTURES</b> .....	27.4	27.4	27.6	27.2	-	-	-	-	-	
781	Motion picture production and services .....	38.4	37.9	37.4	36.0	-	-	-	-	-	
79	<b>AMUSEMENT AND RECREATION SERVICES</b> .....	20.6	20.1	20.5	20.5	-	-	-	-	-	
80	<b>HEALTH SERVICES</b> .....	33.0	32.9	32.9	32.8	-	-	-	-	-	
801	Offices of physicians .....	32.7	32.7	32.5	32.4	-	-	-	-	-	
802	Offices of dentists .....	28.9	28.7	29.0	28.7	-	-	-	-	-	
805	Nursing and personal care facilities .....	30.9	31.0	30.8	30.7	-	-	-	-	-	
806	Hospitals .....	34.2	34.2	34.2	34.1	-	-	-	-	-	
81	<b>LEGAL SERVICES</b> .....	34.0	33.6	34.9	34.9	-	-	-	-	-	
89	<b>MISCELLANEOUS SERVICES</b> .....	38.2	38.7	37.9	38.0	-	-	-	-	-	
891	Engineering and architectural services .....	38.6	38.8	38.6	38.1	-	-	-	-	-	
893	Accounting, auditing, and bookkeeping .....	38.3	38.9	37.4	35.0	-	-	-	-	-	

# ESTABLISHMENT DATA HOURS AND EARNINGS

## C-3. Employment, hours, and indexes of earnings in the Executive Branch of the Federal Government

[Employment in thousands—includes both supervisory and nonsupervisory employees]

Item	1978				1979								
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
<b>Executive Branch</b>													
Total employment .....	2,691.9	2,694.5	2,694.4	2,681.2	2,677.5	2,686.3	2,688.3	2,697.4	2,720.3	2,770.2	2,783.0	2,789.6	2,697.8
Average weekly hours .....	39.5	39.9	39.9	40.1	39.7	39.7	39.5	39.5	39.4	39.4	39.8	39.5	39.4
Average overtime hours .....	1.3	1.3	1.2	1.5	1.2	1.1	1.1	1.1	1.0	1.0	1.2	1.2	1.4
Indexes (1967=100):													
Average weekly earnings .....	230.0	242.0	242.2	244.3	243.2	242.4	240.6	239.8	238.9	238.6	241.3	242.5	244.6
Average hourly earnings .....	229.5	238.9	239.2	240.0	241.4	240.5	240.0	239.2	238.9	238.6	238.9	241.9	244.6
<b>Department of Defense</b>													
Total employment .....	905.4	905.8	905.3	902.0	896.0	895.0	892.0	890.0	896.6	906.6	908.5	908.5	887.2
Average weekly hours .....	39.7	39.9	40.0	39.8	39.9	39.9	39.9	39.9	39.9	39.9	40.1	40.0	40.0
Average overtime hours .....	1.2	1.0	.8	.9	.8	.9	.9	.8	.8	.8	.8	.9	1.2
Indexes (1967=100):													
Average weekly earnings .....	223.3	232.5	233.7	234.1	234.7	234.7	235.2	234.4	235.2	233.6	233.4	234.5	238.0
Average hourly earnings .....	226.7	234.9	235.4	237.1	237.1	237.1	237.6	236.8	237.6	236.0	234.6	236.2	239.8
<b>Postal Service</b>													
Total employment .....	651.9	646.9	651.4	651.4	653.0	655.2	655.4	655.0	659.5	663.2	665.4	665.4	659.0
Average weekly hours .....	39.7	41.5	41.2	42.6	41.2	41.0	40.2	40.2	39.8	39.6	40.6	39.9	40.0
Average overtime hours .....	1.8	2.3	1.9	3.1	2.6	1.8	1.6	1.7	1.3	1.3	1.8	1.5	1.9
Indexes (1967=100):													
Average weekly earnings .....	259.3	278.7	275.9	289.4	280.8	276.9	271.5	271.8	268.1	274.0	281.2	283.0	286.2
Average hourly earnings .....	252.1	259.5	258.5	262.2	263.1	260.7	260.7	261.0	260.1	267.1	267.4	273.8	276.2
<b>Other Agencies</b>													
Total employment .....	1,134.6	1,141.8	1,137.7	1,127.8	1,128.5	1,136.1	1,140.9	1,152.4	1,164.2	1,200.4	1,209.1	1,215.7	1,151.6
Average weekly hours .....	39.1	39.0	39.0	38.8	38.7	38.8	38.8	38.8	38.8	38.8	39.2	38.9	38.7
Average overtime hours .....	1.2	1.1	1.0	1.0	.9	1.0	1.0	1.0	1.1	1.0	1.2	1.2	1.4
Indexes (1967=100):													
Average weekly earnings .....	218.3	229.1	231.4	227.7	229.9	229.7	227.7	226.7	226.0	223.3	226.6	227.1	228.4
Average hourly earnings .....	216.6	228.0	230.2	227.7	230.4	229.7	227.7	226.7	226.0	223.3	224.3	226.5	229.0

NOTE: The hours and earnings averages presented in this table have been computed using data collected by the Office of Personnel Management from agencies with 2500 or more employees in the Executive Branch of the Federal Government; the data cover both salaried workers and hourly paid wage-board employees. Since these averages relate to hours and earnings of all workers both super-

visory and nonsupervisory, they are not comparable to similar data presented in table C-2 which relate only to production or nonsupervisory workers. The total employment levels shown include all workers in the Executive Branch regardless of the size of the agency.

## C-4. Average hourly earnings excluding overtime of production workers on manufacturing payrolls by industry

Major industry group	Average hourly earnings excluding overtime <sup>1</sup>				
	AVG. 1979	JAN. 1979	DEC. 1979	JAN. 1980 <sup>P</sup>	FEB. 1980 <sup>P</sup>
<b>MANUFACTURING</b>	<b>\$6.42</b>	<b>\$6.22</b>	<b>\$6.69</b>	<b>\$6.70</b>	<b>\$6.74</b>
<b>DURABLE GOODS</b>	<b>6.82</b>	<b>6.61</b>	<b>7.11</b>	<b>7.10</b>	<b>7.17</b>
Lumber and wood products .....	5.83	5.55	6.01	5.98	-
Furniture and fixtures .....	4.92	4.73	5.11	5.19	-
Stone, clay, and glass products .....	6.49	6.25	6.77	6.76	-
Primary metal industries .....	8.57	8.20	8.91	8.91	-
Fabricated metal products .....	6.54	6.33	6.83	6.79	-
Machinery, except electrical .....	6.95	6.75	7.26	7.20	-
Electric and electronic equipment .....	6.10	5.90	6.40	6.45	-
Transportation equipment .....	8.11	7.87	8.56	8.44	-
Instruments and related products .....	5.98	5.80	6.27	6.37	-
Miscellaneous manufacturing industries .....	4.89	4.80	5.06	5.16	-
<b>NONDURABLE GOODS</b>	<b>5.78</b>	<b>5.60</b>	<b>6.02</b>	<b>6.06</b>	<b>6.05</b>
Food and kindred products .....	5.98	5.81	6.25	6.23	-
Tobacco manufactures .....	6.58	6.30	6.83	6.95	-
Textile mill products .....	4.47	4.32	4.65	4.65	-
Apparel and other textile products .....	4.18	4.12	4.32	4.31	-
Paper and allied products .....	6.74	6.43	7.11	7.10	-
Printing and publishing .....	6.66	6.45	6.90	6.96	-
Chemicals and allied products .....	7.25	7.02	7.61	7.64	-
Petroleum and coal products .....	8.52	8.55	9.06	9.12	-
Rubber and misc. plastics products .....	5.73	5.56	5.98	6.02	-
Leather and leather products .....	4.14	4.05	4.26	4.37	-

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

<sup>P</sup> preliminary.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

**C-5. Gross and spendable average weekly earnings of production or nonsupervisory workers<sup>1</sup>  
on private nonagricultural payrolls by industry division, in current and 1967 dollars**

Industry	Gross average weekly earnings			Spendable average weekly earnings <sup>2</sup>					
				Worker with no dependents			Married worker with 3 dependents		
	AVG. 1979	Dec. 1979	Jan. 1980 <sup>D</sup>	AVG. 1979	Dec. 1979	Jan. 1980 <sup>D</sup>	AVG. 1979	Dec. 1979	Jan. 1980 <sup>D</sup>
<b>TOTAL PRIVATE:</b>									
Current dollars .....	\$219.91	\$229.40	\$225.34	\$178.00	\$184.84	\$181.96	\$194.82	\$202.08	\$199.00
1967 dollars .....	101.02	99.74	96.59	81.76	80.37	77.99	89.49	87.86	85.30
<b>MINING:</b>									
Current dollars .....	364.64	383.25	383.18	275.11	286.43	286.39	302.92	316.48	316.43
1967 dollars .....	167.50	166.63	164.24	126.37	124.53	122.76	139.15	137.60	135.63
<b>CONSTRUCTION:</b>									
Current dollars .....	341.69	355.05	331.20	260.45	268.98	253.75	286.20	295.93	278.56
1967 dollars .....	156.95	154.37	141.96	119.64	116.95	108.77	131.47	128.67	119.40
<b>MANUFACTURING:</b>									
Current dollars .....	268.94	285.07	276.61	212.43	223.38	217.64	232.07	244.31	237.89
1967 dollars .....	123.54	123.94	118.56	97.58	97.12	93.29	106.60	106.22	101.97
<b>TRANSPORTATION AND PUBLIC UTILITIES:</b>									
Current dollars .....	326.38	342.00	335.62	250.67	260.65	256.57	275.04	286.43	281.78
1967 dollars .....	149.92	148.70	143.86	115.14	113.33	109.57	126.34	124.53	120.78
<b>WHOLESALE AND RETAIL TRADE:</b>									
Current dollars .....	164.96	170.42	169.81	137.60	141.68	141.23	154.97	158.77	158.36
1967 dollars .....	75.77	74.10	72.79	63.21	61.60	60.54	71.19	69.03	67.88
<b>FINANCE, INSURANCE, AND REAL ESTATE:</b>									
Current dollars .....	191.66	199.84	202.19	157.41	163.37	165.09	172.91	179.20	181.03
1967 dollars .....	88.04	86.89	86.67	72.31	71.03	70.76	79.43	77.91	77.60
<b>SERVICES:</b>									
Current dollars .....	175.27	183.68	183.63	145.31	151.60	151.56	162.04	167.69	167.66
1967 dollars .....	80.51	79.86	78.71	66.75	65.91	64.96	74.43	72.91	71.86
<b>CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS (CPI-W, All items, 1967=100)</b> .....	<b>217.7</b>	<b>230.0</b>	<b>233.3</b>						

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

p=preliminary (applicable to earnings data only).

<sup>2</sup> Spendable earnings are calculated by taking the average weekly pay for all production or nonsupervisory jobs, both full-time and part-time, and then deducting social security and Federal income taxes applicable to a single worker or to a married worker with three dependents who earned this amount (see Explanatory Notes for the establishment data in the back of this publication). A technical note on the calculation and uses of the spendable earnings series is available on request.

# ESTABLISHMENT DATA HOURS AND EARNINGS

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

[1967=100]

Industry division and group	AVG. 1979	FEB. 1979	DEC. 1979	JAN. <sup>p</sup> 1980	FEB. <sup>p</sup> 1980
	Hours				
<b>TOTAL PRIVATE</b> .....	125.4	120.4	128.6	122.2	122.0
<b>GOODS-PRODUCING</b> ....	109.6	104.8	110.9	104.2	103.9
<b>MINING</b> .....	154.5	146.9	161.2	158.3	156.4
<b>CONSTRUCTION</b> .....	132.7	105.0	134.6	114.7	114.2
<b>MANUFACTURING</b> ...	103.9	103.3	105.0	100.5	100.2
<b>DURABLE GOODS</b> .....	107.2	107.6	108.4	103.3	103.3
Lumber and wood products.....	113.0	108.4	106.8	100.8	99.9
Furniture and fixtures.....	106.6	107.2	110.0	105.0	103.6
Stone, clay, and glass products.....	111.9	104.5	110.2	101.9	101.0
Primary metal industries.....	97.1	99.1	92.1	91.1	90.7
Fabricated metal products.....	106.4	106.4	109.2	103.6	103.4
Machinery, except electrical.....	116.0	118.1	117.9	116.6	116.5
Electric and electronic equipment.....	107.4	106.7	112.1	108.5	107.8
Transportation equipment.....	99.4	103.4	102.4	90.3	92.2
Instruments and related products.....	128.1	128.3	131.3	125.1	129.5
Miscellaneous manufacturing industries.....	100.5	97.4	100.7	96.3	97.4
<b>NONDURABLE GOODS</b> .....	99.0	97.1	100.0	96.5	95.8
Food and kindred products.....	96.5	90.3	96.5	90.9	88.9
Tobacco manufactures.....	70.0	67.0	72.9	67.1	63.9
Textile mill products.....	90.2	89.4	93.1	91.1	91.2
Apparel and other textile products.....	88.8	88.7	88.8	86.2	87.9
Paper and allied products.....	102.4	99.6	104.7	102.2	100.7
Printing and publishing.....	103.8	101.7	108.2	104.8	104.8
Chemicals and allied products.....	108.3	106.9	105.4	107.6	107.7
Petroleum and coal products.....	124.9	117.3	123.8	109.8	85.5
Rubber and misc. plastics products.....	148.4	152.8	144.3	141.9	138.4
Leather and leather products.....	65.3	64.8	65.2	63.5	64.5
<b>SERVICE-PRODUCING</b> ...	126.5	131.3	140.8	134.7	134.7
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	114.2	111.2	116.5	111.9	111.8
<b>WHOLESALE AND RETAIL TRADE</b> .....	130.3	124.4	137.1	127.1	125.9
<b>WHOLESALE TRADE</b> .....	132.5	128.3	135.1	131.7	131.6
<b>RETAIL TRADE</b> .....	129.4	122.9	137.9	125.3	123.7
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	145.9	142.8	147.9	147.1	147.7
<b>SERVICES</b> .....	152.6	146.7	155.1	152.0	153.5

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

p=preliminary.

**ESTABLISHMENT DATA  
HOURS AND EARNINGS**

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

[1967=100]

Industry division and group	AVG. 1975	FEB. 1975	DEC. 1979	JAN. 1980 <sup>p</sup>	FEB. 1980 <sup>p</sup>
	Payrolls				
<b>TOTAL PRIVATE</b> .....	<b>288.5</b>	<b>269.6</b>	<b>306.3</b>	<b>292.6</b>	<b>294.0</b>
<b>GOODS-PRODUCING</b> .....	<b>261.5</b>	<b>241.1</b>	<b>275.2</b>	<b>256.5</b>	<b>257.5</b>
<b>MINING</b> .....	<b>411.0</b>	<b>378.4</b>	<b>441.5</b>	<b>440.1</b>	<b>436.9</b>
<b>CONSTRUCTION</b> .....	<b>298.7</b>	<b>230.1</b>	<b>313.2</b>	<b>264.5</b>	<b>267.5</b>
<b>MANUFACTURING</b> .....	<b>246.1</b>	<b>238.6</b>	<b>258.9</b>	<b>247.2</b>	<b>247.9</b>
<b>DURABLE GOODS</b> .....	<b>254.8</b>	<b>249.7</b>	<b>266.1</b>	<b>254.1</b>	<b>256.3</b>
Lumber and wood products .....	<b>290.5</b>	<b>266.9</b>	<b>282.3</b>	<b>264.0</b>	<b>268.5</b>
Furniture and fixtures .....	<b>221.9</b>	<b>227.2</b>	<b>245.3</b>	<b>237.5</b>	<b>235.3</b>
Stone, clay, and glass products .....	<b>271.6</b>	<b>243.8</b>	<b>277.6</b>	<b>253.2</b>	<b>254.7</b>
Primary metal industries .....	<b>260.8</b>	<b>259.5</b>	<b>256.0</b>	<b>252.6</b>	<b>253.9</b>
Fabricated metal products .....	<b>243.6</b>	<b>237.7</b>	<b>261.1</b>	<b>245.4</b>	<b>247.4</b>
Machinery, except electrical .....	<b>266.6</b>	<b>264.9</b>	<b>282.9</b>	<b>279.3</b>	<b>280.3</b>
Electric and electronic equipment .....	<b>244.5</b>	<b>235.9</b>	<b>268.2</b>	<b>260.6</b>	<b>260.7</b>
Transportation equipment .....	<b>246.7</b>	<b>251.3</b>	<b>265.4</b>	<b>239.6</b>	<b>237.1</b>
Instruments and related products .....	<b>277.2</b>	<b>271.0</b>	<b>255.1</b>	<b>297.8</b>	<b>300.7</b>
Miscellaneous manufacturing industries .....	<b>215.4</b>	<b>205.5</b>	<b>223.6</b>	<b>217.3</b>	<b>220.0</b>
<b>NONDURABLE GOODS</b> .....	<b>221.2</b>	<b>219.6</b>	<b>243.3</b>	<b>235.6</b>	<b>233.6</b>
Food and kindred products .....	<b>229.5</b>	<b>208.6</b>	<b>240.1</b>	<b>228.3</b>	<b>224.4</b>
Tobacco manufactures .....	<b>206.6</b>	<b>152.8</b>	<b>226.2</b>	<b>208.8</b>	<b>201.3</b>
Textile mill products .....	<b>204.3</b>	<b>195.9</b>	<b>220.6</b>	<b>217.2</b>	<b>217.6</b>
Apparel and other textile products .....	<b>185.5</b>	<b>182.1</b>	<b>152.1</b>	<b>188.5</b>	<b>192.1</b>
Paper and allied products .....	<b>232.7</b>	<b>236.7</b>	<b>272.7</b>	<b>265.5</b>	<b>261.9</b>
Printing and publishing .....	<b>218.7</b>	<b>208.8</b>	<b>236.8</b>	<b>230.5</b>	<b>230.4</b>
Chemicals and allied products .....	<b>264.8</b>	<b>252.1</b>	<b>279.0</b>	<b>275.2</b>	<b>275.8</b>
Petroleum and coal products .....	<b>327.2</b>	<b>258.5</b>	<b>326.4</b>	<b>268.8</b>	<b>238.5</b>
Rubber and misc. plastics products .....	<b>322.0</b>	<b>324.8</b>	<b>326.2</b>	<b>322.9</b>	<b>314.7</b>
Leather and leather products .....	<b>122.5</b>	<b>129.9</b>	<b>137.5</b>	<b>136.6</b>	<b>139.3</b>
<b>SERVICE-PRODUCING</b> .....	<b>311.7</b>	<b>294.2</b>	<b>333.1</b>	<b>323.8</b>	<b>325.4</b>
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	<b>288.6</b>	<b>272.4</b>	<b>308.0</b>	<b>295.5</b>	<b>296.2</b>
<b>WHOLESALE AND RETAIL TRADE</b> .....	<b>292.5</b>	<b>274.4</b>	<b>315.4</b>	<b>301.0</b>	<b>299.4</b>
<b>WHOLESALE TRADE</b> .....	<b>294.2</b>	<b>276.7</b>	<b>313.6</b>	<b>307.7</b>	<b>308.5</b>
<b>RETAIL TRADE</b> .....	<b>291.6</b>	<b>273.2</b>	<b>316.4</b>	<b>297.3</b>	<b>294.2</b>
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	<b>258.4</b>	<b>286.6</b>	<b>314.3</b>	<b>317.1</b>	<b>321.0</b>
<b>SERVICES</b> .....	<b>357.1</b>	<b>337.7</b>	<b>379.5</b>	<b>375.3</b>	<b>381.1</b>

# ESTABLISHMENT DATA SEASONALLY ADJUSTED HOURS

**C-7. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry division and major manufacturing group, seasonally adjusted**

Industry	1979											1980	
	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN. p	FEB. p
<b>TOTAL PRIVATE</b> .....	35.7	35.9	35.3	35.7	35.6	35.6	35.6	35.7	35.6	25.7	25.7	35.6	35.4
<b>MINING</b> .....	43.1	43.1	42.9	42.8	42.0	41.6	42.2	43.1	43.1	43.2	43.9	44.2	43.5
<b>CONSTRUCTION</b> .....	36.6	37.1	35.5	27.1	37.2	26.8	37.2	37.5	36.6	36.8	37.1	37.4	36.7
<b>MANUFACTURING</b> .....	40.6	40.6	39.1	40.2	40.1	40.2	40.1	40.2	40.2	40.1	40.2	40.3	40.1
<i>Overtime hours</i> .....	3.7	3.7	2.7	3.5	3.4	3.3	3.2	3.2	3.2	3.3	3.2	3.2	3.1
<b>DURABLE GOODS</b> .....	41.4	41.4	39.5	40.9	40.7	40.7	40.7	40.7	40.8	40.6	40.7	40.9	40.6
<i>Overtime hours</i> .....	4.1	4.0	2.7	3.8	3.6	3.5	3.3	3.3	3.3	3.4	3.3	3.3	3.1
Lumber and wood products .....	39.6	40.0	39.1	39.4	39.4	39.3	39.5	39.7	39.4	38.9	39.0	39.8	38.9
Furniture and fixtures .....	38.8	39.1	38.1	38.5	38.5	38.4	38.3	38.6	38.8	38.9	39.0	39.1	39.0
Stone, clay, and glass products .....	41.6	42.0	41.2	41.7	41.6	41.4	41.3	41.5	41.3	41.5	41.6	41.3	40.8
Primary metal industries .....	42.2	42.0	41.8	41.4	41.2	41.3	41.0	41.0	41.1	40.7	40.6	40.7	40.6
Fabricated metal products .....	41.3	41.3	39.1	40.7	40.7	40.8	40.6	40.7	40.9	40.7	41.0	40.9	40.8
Machinery, except electrical .....	42.5	42.4	40.5	42.0	42.0	41.9	41.6	41.9	41.6	41.6	41.6	41.6	41.4
Electric and electronic equipment .....	40.7	40.7	39.0	40.4	40.3	40.2	39.8	40.3	40.3	40.6	40.5	40.5	40.3
Transportation equipment .....	42.7	42.2	37.9	41.5	40.8	40.5	41.7	40.6	41.3	40.6	41.0	41.3	41.2
Instruments and related products .....	41.2	41.2	40.3	40.8	40.6	40.7	40.5	40.6	40.7	41.0	40.8	41.6	40.9
Miscellaneous manufacturing ind .....	39.0	39.0	37.6	38.6	38.9	39.3	39.1	39.1	39.1	39.1	39.2	39.4	39.6
<b>NONDURABLE GOODS</b> .....	39.2	39.4	38.6	39.2	39.2	39.2	39.2	39.3	39.3	39.4	39.4	39.5	39.3
<i>Overtime hours</i> .....	3.2	3.3	2.7	3.0	3.0	3.0	3.0	3.1	3.0	3.2	3.1	3.1	3.0
Food and kindred products .....	35.8	40.0	39.6	39.8	39.8	39.8	39.7	40.0	39.9	40.0	39.9	39.9	39.5
Tobacco manufactures .....	36.9	38.0	37.6	38.9	37.6	38.5	38.0	38.6	38.2	37.8	38.8	38.5	36.8
Textile mill products .....	40.1	40.3	38.8	40.0	40.1	40.1	40.1	40.6	40.8	41.1	41.0	41.7	41.2
Apparel and other textile products .....	35.4	35.4	34.2	35.2	35.2	35.3	35.3	35.3	35.3	35.3	35.6	35.9	35.8
Paper and allied products .....	42.7	42.8	41.8	42.6	42.5	42.5	42.6	42.4	42.6	42.7	42.9	42.8	42.6
Printing and publishing .....	37.7	37.7	37.1	37.4	37.4	37.5	37.7	37.5	37.4	37.6	37.4	37.9	37.4
Chemicals and allied products .....	42.0	41.9	41.7	41.9	41.7	41.9	42.0	41.7	41.7	41.9	41.7	41.9	41.8
Petroleum and coal products .....	43.6	44.0	43.9	43.7	43.3	43.6	43.7	44.1	43.7	44.4	42.5	36.5	42.8
Rubber and misc. plastics products .....	41.2	41.3	39.7	40.9	40.7	40.6	40.2	40.3	40.3	40.0	39.9	40.6	39.6
Leather and leather products .....	26.4	36.3	35.6	36.1	36.4	36.6	36.5	37.0	36.5	36.7	36.9	37.4	37.4
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	40.0	40.0	39.2	39.8	39.8	39.7	39.9	39.9	39.9	40.2	39.8	39.7	39.4
<b>WHOLESALE AND RETAIL TRADE</b> .....	32.5	32.7	32.8	32.6	32.6	32.6	32.5	32.6	32.6	32.7	32.6	32.4	32.2
<b>WHOLESALE TRADE</b> .....	38.7	39.0	38.7	39.0	38.8	38.8	38.7	38.7	38.8	38.9	38.9	38.7	38.6
<b>RETAIL TRADE</b> .....	30.6	30.7	30.9	30.6	30.6	30.6	30.5	30.7	30.6	30.7	30.6	30.4	30.2
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	36.4	36.4	36.5	36.1	36.2	36.3	36.1	36.4	36.2	36.5	36.4	36.2	36.3
<b>SERVICES</b> .....	32.6	32.8	32.7	32.7	32.7	32.8	32.7	32.7	32.6	32.7	32.9	32.7	32.7

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

**ESTABLISHMENT DATA  
SEASONALLY ADJUSTED**

**C-8. Indexes of aggregate weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry division and major manufacturing group, seasonally adjusted**

(1967=100)

Industry division and group	1979											1980	
	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN. <sup>P</sup>	FEB. <sup>P</sup>
<b>TOTAL PRIVATE</b> .....	124.7	125.7	123.6	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.6	126.7	126.4
<b>GOODS-PRODUCING</b> .....	110.2	111.3	106.8	111.3	110.1	109.6	109.4	109.7	109.0	108.7	109.6	110.4	109.5
<b>MINING</b> .....	152.5	152.5	152.0	151.6	152.5	148.4	156.7	157.4	158.1	158.4	162.2	165.2	162.4
<b>CONSTRUCTION</b> .....	126.7	132.7	124.9	133.7	134.4	132.9	134.5	135.4	132.7	133.7	127.1	141.7	137.7
<b>MANUFACTURING</b> .....	105.8	106.0	102.0	104.7	104.3	104.4	103.3	103.4	103.1	102.5	102.9	102.9	102.6
<b>DURABLE GOODS</b> .....	109.5	110.1	105.0	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.6	105.3	105.4
Lumber and wood products .....	114.9	116.4	112.4	112.3	112.7	111.9	112.3	113.6	113.3	110.1	108.3	108.9	105.8
Furniture and fixtures .....	109.1	109.4	105.8	105.9	105.3	105.9	104.5	104.8	105.9	106.2	106.4	106.7	105.6
Stone, clay, and glass products .....	112.8	114.9	111.5	112.1	113.0	111.5	110.8	111.2	110.6	110.4	110.8	110.0	108.9
Primary metal industries .....	100.3	100.2	99.7	97.9	97.9	97.8	95.9	95.3	94.6	93.1	91.8	91.7	91.8
Fabricated metal products .....	108.7	108.6	102.7	106.6	107.1	106.7	104.8	105.4	106.1	105.8	106.4	104.9	105.7
Machinery, except electrical .....	117.4	117.5	112.0	117.4	117.6	118.0	116.2	117.7	114.3	113.6	113.5	116.4	115.8
Electric and electronic equipment .....	107.8	108.5	104.4	108.2	108.6	108.5	104.7	107.2	107.6	108.1	108.8	109.4	108.9
Transportation equipment .....	106.5	105.9	94.2	102.6	95.4	100.3	102.6	100.1	97.4	93.7	96.7	91.9	95.2
Instruments and related products .....	129.4	129.7	127.2	128.1	128.4	128.1	127.2	127.2	127.8	127.8	128.1	130.7	130.3
Miscellaneous manufacturing ind .....	101.7	101.7	97.5	98.7	100.3	100.7	100.8	99.9	99.9	99.9	101.4	102.2	101.8
<b>NONDURABLE GOODS</b> .....	99.8	100.1	97.8	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.0	99.6	98.5
Food and kindred products .....	97.0	98.1	96.8	97.0	96.8	95.9	94.6	95.0	96.1	96.5	97.0	96.4	95.5
Tobacco manufactures .....	70.0	72.4	72.5	76.5	72.6	72.0	66.7	70.5	69.9	61.1	65.4	67.6	65.9
Textile mill products .....	90.3	90.6	86.7	89.5	89.6	89.8	89.0	89.8	90.6	91.8	91.8	93.3	92.3
Apparel and other textile products .....	90.3	89.9	86.6	85.5	88.7	89.5	88.0	87.5	87.9	87.3	88.4	89.9	89.7
Paper and allied products .....	101.8	103.0	100.8	102.3	102.1	102.2	103.1	102.2	102.7	102.8	102.2	103.6	103.3
Printing and publishing .....	103.1	103.4	101.7	102.1	103.3	104.4	104.7	103.9	104.3	105.9	105.1	107.1	106.2
Chemicals and allied products .....	108.5	108.1	107.7	108.3	108.4	106.8	106.2	107.6	107.9	108.6	108.6	109.5	109.4
Petroleum and coal products .....	123.9	125.0	125.7	124.2	123.1	122.0	124.2	126.2	125.1	128.0	126.2	106.0	94.5
Rubber and misc. plastics products .....	154.0	154.4	148.4	152.4	150.4	150.5	145.6	143.5	143.5	142.5	140.9	143.9	139.6
Leather and leather products .....	66.6	66.1	63.9	65.4	66.0	61.3	64.9	66.1	65.2	64.9	65.0	65.5	66.2
<b>SERVICE-PRODUCING</b> .....	134.8	135.8	135.2	135.9	136.5	136.7	136.6	137.2	137.5	138.5	138.4	138.1	138.2
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	113.3	112.7	109.2	112.4	115.0	114.2	115.2	114.9	115.8	116.9	115.4	114.5	113.6
<b>WHOLESALE AND RETAIL TRADE</b> .....	129.3	130.2	130.6	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	130.9	130.8
<b>WHOLESALE TRADE</b> .....	120.8	122.3	121.2	122.8	122.8	122.7	122.4	122.5	123.4	124.2	124.1	123.8	124.2
<b>RETAIL TRADE</b> .....	128.7	129.2	130.2	129.8	128.9	128.9	128.5	129.6	129.7	130.5	129.7	129.8	129.5
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	144.1	144.6	145.5	144.5	145.7	146.5	146.2	147.1	146.7	148.3	148.3	148.1	149.3
<b>SERVICES</b> .....	149.5	151.1	151.0	151.7	152.6	153.5	153.4	153.8	154.1	155.2	156.5	156.0	156.6

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

<sup>P</sup>preliminary.

# ESTABLISHMENT DATA SEASONALLY ADJUSTED

## C-9. Hourly Earnings Index and average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, seasonally adjusted

Industry	1979												1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P	
Hourly Earnings Index <sup>2</sup> (1967=100)														
TOTAL PRIVATE (in current dollars) . . . . .	224.0	225.2	226.8	227.5	229.0	230.9	232.2	234.3	234.9	237.3	239.5	240.3	242.7	
MINING . . . . .	253.7	256.1	264.1	262.7	264.7	266.7	265.6	266.1	268.0	271.6	273.2	274.2	275.5	
CONSTRUCTION . . . . .	216.7	216.5	218.1	220.4	220.4	222.1	223.1	224.4	224.0	225.8	227.6	225.4	230.7	
MANUFACTURING . . . . .	227.2	228.7	231.0	232.3	233.9	235.4	236.9	238.7	240.0	242.1	244.3	244.9	247.3	
TRANSPORTATION AND PUBLIC UTILITIES . . . . .	241.7	243.1	241.7	243.7	246.4	251.3	252.6	255.6	255.8	258.9	260.7	260.5	262.0	
WHOLESALE AND RETAIL TRADE . . . . .	218.1	219.4	220.9	221.0	222.6	223.8	225.4	227.0	227.4	229.5	231.3	234.5	235.4	
FINANCE, INSURANCE, AND REAL ESTATE . . . . .	204.2	204.8	207.5	207.0	208.0	210.8	211.5	214.4	213.1	216.2	218.5	219.5	220.9	
SERVICES . . . . .	222.2	223.3	225.0	224.3	225.7	227.0	228.4	231.5	232.3	234.7	237.7	238.1	239.2	
TOTAL PRIVATE (in 1967 dollars) <sup>3</sup> . . . . .	107.8	107.3	107.0	106.3	105.8	105.6	105.1	104.9	104.1	104.1	103.8	102.7	-	
Average hourly earnings														
TOTAL PRIVATE . . . . .	\$6.00	\$6.04	\$6.04	\$6.09	\$6.13	\$6.18	\$6.22	\$6.26	\$6.28	\$6.33	\$6.39	\$6.42	\$6.45	
MINING . . . . .	8.23	8.28	8.56	8.43	8.49	8.49	8.57	8.50	8.57	8.71	8.76	8.84	8.93	
CONSTRUCTION . . . . .	9.06	9.03	9.11	9.20	9.19	9.27	9.32	9.39	9.38	9.45	9.53	9.45	9.67	
MANUFACTURING . . . . .	6.51	6.56	6.56	6.65	6.68	6.72	6.74	6.78	6.82	6.86	6.91	6.92	6.97	
TRANSPORTATION AND PUBLIC UTILITIES . . . . .	7.92	7.96	7.91	7.99	8.09	8.21	8.30	8.37	8.39	8.48	8.53	8.52	8.57	
WHOLESALE AND RETAIL TRADE . . . . .	4.93	4.96	4.99	5.00	5.03	5.07	5.10	5.12	5.14	5.19	5.23	5.30	5.31	
FINANCE, INSURANCE, AND REAL ESTATE . . . . .	5.14	5.16	5.22	5.21	5.23	5.30	5.32	5.40	5.38	5.45	5.51	5.53	5.55	
SERVICES . . . . .	5.22	5.24	5.27	5.26	5.31	5.35	5.39	5.45	5.46	5.52	5.58	5.60	5.62	
Average weekly earnings														
TOTAL PRIVATE:														
Current dollars . . . . .	214.20	216.84	213.21	217.41	218.23	220.01	221.43	223.48	223.57	225.98	228.12	228.55	228.33	
1967 dollars <sup>3</sup> . . . . .	103.13	103.31	100.57	101.55	100.85	100.60	100.24	100.04	99.10	99.16	98.88	97.67	-	
Real spendable earnings (married worker with 3 dependents, 1967 dollars) <sup>3, 4</sup> . . . . .	91.66	91.68	89.44	90.09	89.43	89.12	88.73	88.44	87.61	87.53	87.17	86.08	-	

<sup>1</sup> For coverage of series, see footnote 1, table B-2.

<sup>2</sup> The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: Fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

<sup>3</sup> The CPI-W is used to deflate these series to 1967 dollars.

<sup>4</sup> See footnote 2, table C-5.

N.A.=not available.

p=preliminary.

## C-10. Hours of wage and salary workers<sup>1</sup> in nonagricultural establishments, by industry division

Industry division	Millions of hours (Annual rate) <sup>2</sup>			Percent change		
	DECEMBER 1979	JANUARY p1980	FEBRUARY p1980	Feb. 1980 to Feb. 1980	Dec. 1979 to Jan. 1980	Jan. 1980 to Feb. 1980
TOTAL . . . . .	170,552	171,023	170,716	1.7	0.3	-0.2
PRIVATE SECTOR . . . . .	139,732	139,714	139,609	1.8	0.0	-0.1
MINING . . . . .	2,254	2,282	2,271	8.5	1.2	-0.5
CONSTRUCTION . . . . .	9,320	9,119	9,189	8.6	-2.2	0.8
MANUFACTURING . . . . .	43,507	43,678	43,540	-1.5	0.4	-0.3
DURABLE GOODS . . . . .	26,589	26,659	26,683	-1.9	0.3	0.1
NONDURABLE GOODS . . . . .	16,918	17,019	16,857	-0.9	0.6	-0.9
TRANSPORTATION AND PUBLIC UTILITIES . . . . .	10,815	10,781	10,686	0.8	-0.3	-0.9
WHOLESALE AND RETAIL TRADE . . . . .	34,519	34,540	34,525	1.4	0.1	0.0
FINANCE, INSURANCE, AND REAL ESTATE . . . . .	9,592	9,615	9,602	3.7	-0.2	-0.1
SERVICES . . . . .	29,724	29,699	29,795	4.4	-0.1	0.3
GOVERNMENT . . . . .	30,820	31,309	31,107	1.6	1.6	-0.6

<sup>1</sup> 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 for Surveys and Studies*, BLS Bulletin 1910—Chapter 30, Productivity Measures: Private Economy and Major Sectors.

<sup>2</sup> "Annual rate" refers to total hours paid for 1 week in the month, expressed as a seasonally adjusted annual equivalent.



**PRODUCTIVITY  
SEASONALLY ADJUSTED**

**C-11. Indexes of output and compensation per hour, unit costs, and prices,  
private business sector, seasonally adjusted**

[1967 = 100]

Item	Annual average		Quarterly indexes										
			1977			1978				1979			
	1978	1979	II	III	IV	I	II	III	IV	I	II	III	IV
<b>PRIVATE BUSINESS SECTOR:</b>													
Output per hour of all persons	119.2	118.1	117.9	119.4	118.8	118.4	119.0	119.7	119.8	118.9	118.2	117.8	r117.6
Output	140.7	r144.1	132.8	135.2	136.1	136.9	140.3	141.8	144.0	144.4	143.4	143.8	r144.7
Hours	118.1	r121.9	112.6	113.2	114.5	115.6	117.9	118.4	120.2	121.5	121.3	122.0	r123.0
Compensation per hour	231.2	252.8	210.8	215.3	218.5	224.2	228.5	233.6	238.4	244.8	250.3	255.6	r260.1
Real compensation per hour	118.3	116.3	116.7	117.6	117.9	118.7	118.1	118.2	118.0	118.0	116.9	115.8	114.2
Unit labor costs	194.0	r214.0	178.8	180.2	183.8	189.4	192.1	195.2	199.0	205.9	211.7	217.0	r221.1
Unit nonlabor payments	174.3	r184.6	164.7	167.9	168.6	164.8	173.9	177.0	181.3	180.8	183.7	185.6	r189.0
Implicit price deflator	187.2	203.8	173.9	176.0	178.6	180.9	185.8	188.9	192.9	197.2	202.0	206.1	210.0
<b>NONFARM BUSINESS SECTOR:</b>													
Output per hour of all persons	116.8	115.5	115.8	116.7	116.3	116.0	116.5	117.3	117.6	116.6	115.4	115.0	r115.1
Output	141.5	r144.9	133.4	135.6	136.4	137.3	141.1	142.7	145.0	145.5	144.2	144.6	r145.5
Hours	121.1	125.4	115.2	116.2	117.3	118.4	121.1	121.6	123.4	124.8	124.9	125.7	r126.3
Compensation per hour	227.3	247.6	207.3	211.2	214.8	220.6	224.6	229.4	234.3	240.2	244.8	249.9	r255.4
Real compensation per hour	116.3	113.9	114.7	115.4	115.9	116.8	116.1	116.1	116.0	115.8	114.3	113.2	r112.2
Unit labor costs	194.5	214.3	179.0	180.9	184.7	190.2	192.7	195.6	199.3	206.0	212.1	217.3	r221.8
Unit nonlabor payments	169.9	178.8	163.2	167.1	166.0	161.1	169.2	173.0	176.1	174.3	177.6	180.5	183.3
Implicit price deflator	186.1	202.2	173.6	176.2	178.3	180.2	184.7	187.8	191.4	195.1	200.3	204.7	r208.6
<b>MANUFACTURING:</b>													
Output per hour of all persons	128.0	130.2	127.3	128.4	127.8	125.7	127.2	129.2	129.8	129.0	130.0	131.1	130.6
Output	134.5	139.8	128.1	129.9	130.8	130.1	133.4	135.9	138.5	140.1	139.7	139.9	139.5
Hours	105.1	107.4	100.6	101.1	102.3	103.4	104.8	105.2	106.7	108.5	107.5	106.7	r106.8
Compensation per hour	229.5	250.5	209.7	214.1	217.5	223.2	226.6	231.4	236.5	242.4	248.2	253.0	r258.2
Real compensation per hour	117.5	115.2	116.1	117.0	117.4	118.1	117.1	117.0	117.1	116.9	115.9	114.6	r113.4
Unit labor costs	179.4	192.4	164.7	166.7	170.2	177.5	178.1	179.1	182.2	187.9	190.9	193.0	197.6
<b>DURABLE GOODS</b>													
Output per hour of all persons	121.3	122.4	121.6	122.3	121.7	118.9	120.9	122.5	122.8	121.8	122.7	122.7	r122.3
Output	129.6	135.0	122.2	124.4	125.5	124.4	128.3	131.3	134.5	136.2	135.4	134.6	134.0
Hours	106.9	110.3	100.5	101.7	103.2	104.6	106.1	107.2	109.5	111.8	110.3	109.7	r109.5
Compensation per hour	230.8	251.7	211.6	215.9	219.4	224.5	227.9	232.5	237.9	243.8	249.5	254.3	r259.1
Real compensation per hour	118.1	115.8	117.1	118.0	118.4	118.9	117.8	117.6	117.7	117.5	116.5	115.2	r113.8
Unit labor costs	190.4	205.6	174.0	176.6	180.3	188.8	188.5	189.9	193.7	200.1	203.3	207.3	r211.8
<b>NONDURABLE GOODS</b>													
Output per hour of all persons	139.0	143.3	136.6	138.5	137.9	136.9	137.5	140.3	141.4	141.1	142.1	145.2	144.6
Output	142.3	147.6	137.6	138.8	139.3	139.3	141.6	143.2	145.1	146.3	146.9	148.5	148.6
Hours	102.4	103.0	100.7	100.2	101.1	101.7	103.0	102.1	102.6	103.7	103.4	102.3	r102.8
Compensation per hour	226.1	246.5	206.6	210.6	213.8	220.1	223.6	228.1	232.4	238.0	244.1	248.9	254.8
Real compensation per hour	115.7	113.4	114.4	115.1	115.3	116.5	115.5	115.4	115.0	114.8	114.0	112.7	111.9
Unit labor costs	162.7	r172.1	151.2	152.1	155.1	160.7	162.6	162.6	164.3	168.7	171.8	171.4	r176.2
<b>NONFINANCIAL CORPORATIONS:</b>													
Output per all-employee hour	117.9	p117.5	116.5	117.4	116.7	116.7	117.8	118.4	118.8	118.1	117.3	117.2	N.A.
Output	150.0	p154.7	140.4	142.7	143.4	144.7	149.7	151.4	154.2	155.1	154.1	154.3	N.A.
Hours	127.2	p131.7	120.5	121.5	122.9	124.1	127.1	127.8	129.8	131.3	131.4	131.7	N.A.
Compensation per hour	224.8	p244.7	205.7	209.5	212.8	218.5	222.3	226.9	231.3	237.4	242.1	247.1	N.A.
Real compensation per hour	115.0	p112.6	113.8	114.5	114.8	115.7	114.9	114.8	114.5	114.5	113.1	112.0	N.A.
Total unit costs	193.3	p210.3	180.5	182.4	186.3	190.8	191.6	194.0	196.8	202.3	208.0	213.2	N.A.
Unit labor costs	190.6	p208.3	176.6	178.4	182.3	187.3	188.7	191.5	194.8	201.0	206.4	210.8	N.A.
Unit nonlabor costs	201.8	p216.6	192.4	194.8	198.7	201.5	200.8	201.6	203.1	206.5	213.2	220.5	N.A.
Unit profits	127.2	p128.4	123.3	130.9	122.2	107.1	129.2	132.7	138.7	130.3	129.2	127.5	N.A.
Implicit price deflator	183.5	p198.2	172.0	174.7	176.8	178.3	182.3	184.9	188.2	191.6	196.3	200.4	N.A.

p=preliminary.  
r=revised.

**PRODUCTIVITY  
SEASONALLY ADJUSTED**

**C-12. Percent changes from preceding quarter and year in productivity, hourly compensation, unit costs, and prices, private business sector, seasonally adjusted at annual rate**

Item	Quarterly percent change						Annual percent change					
	II 1978	III 1978	IV 1978	I 1979	II 1979	III 1979	III 1977	IV 1977	I 1978	II 1978	III 1978	IV 1978
	to III 1978	to IV 1978	to I 1979	to II 1979	to III 1979	to IV 1979	to III 1977	to IV 1977	to I 1979	to II 1979	to III 1979	to IV 1979
<b>PRIVATE BUSINESS SECTOR:</b>												
Output per hour of all persons	2.4	0.3	-3.0	-2.2	-1.3	r-0.6	0.2	0.8	0.4	-0.6	-1.6	r-1.8
Output	4.2	6.4	1.2	-2.9	1.1	r 2.7	4.8	5.8	5.5	2.2	1.4	r 0.5
Hours	1.7	6.1	4.4	-0.7	2.4	r 3.3	4.6	5.0	5.1	2.8	3.0	r 2.3
Compensation per hour	9.2	8.5	11.1	9.3	8.8	r 7.2	8.5	9.1	9.2	9.5	9.4	r 9.1
Real compensation per hour	0.3	-0.7	0.1	-3.8	-3.6	r-5.4	0.4	0.1	-0.6	-1.0	-2.0	r-3.2
Unit labor costs	6.6	8.1	14.6	11.8	10.3	r 7.8	8.3	8.3	8.7	10.2	11.2	r11.1
Unit nonlabor payments	7.4	9.9	-1.0	6.5	4.1	r 7.7	5.4	7.5	9.7	5.6	4.8	r 4.3
Implicit price deflator	6.9	8.7	9.3	10.1	8.3	7.8	7.4	8.0	9.0	8.7	9.1	8.9
<b>NONFARM BUSINESS SECTOR:</b>												
Output per hour of all persons	2.7	0.8	-3.2	-4.1	-1.4	r-0.5	0.5	1.1	0.5	-1.0	-2.0	r-2.0
Output	4.5	6.8	1.2	-3.6	1.2	r 2.5	5.2	6.3	5.9	2.2	1.3	r 0.3
Hours	1.8	5.9	4.6	0.5	2.6	r 1.9	4.7	5.2	5.4	3.2	3.4	2.4
Compensation per hour	8.8	8.8	10.4	7.9	8.5	r 9.2	8.7	9.1	8.9	9.0	8.9	r 9.0
Real compensation per hour	0.0	-0.4	-0.6	-5.0	-3.9	r-3.6	0.6	0.1	-0.8	-1.5	-2.5	-3.3
Unit labor costs	6.0	8.0	14.0	12.5	10.1	r 8.6	8.1	7.9	8.3	10.1	11.1	r11.3
Unit nonlabor payments	9.4	7.3	-4.0	7.8	6.6	6.4	3.5	6.1	8.2	5.0	4.3	4.1
Implicit price deflator	7.0	7.8	8.1	11.0	9.0	r 7.9	6.6	7.3	8.3	8.5	9.0	9.0
<b>MANUFACTURING:</b>												
Output per hour of all persons	6.3	2.0	-2.4	2.9	3.5	r-1.3	0.6	1.6	2.6	2.2	1.5	0.6
Output	7.6	8.1	4.6	-0.9	0.4	r-1.1	4.6	5.9	7.7	4.8	3.0	0.7
Hours	1.3	5.9	7.1	-3.7	-2.9	r 0.3	4.0	4.3	4.9	2.6	1.5	0.1
Compensation per hour	8.7	9.3	10.3	9.8	8.1	r 8.4	8.1	8.7	8.6	9.5	9.4	r 9.2
Real compensation per hour	-0.1	0.0	-0.6	-3.4	-4.3	r-4.3	0.0	-0.3	-1.1	-1.0	-2.1	r-3.1
Unit labor costs	2.2	7.1	13.0	6.7	4.4	r 9.9	7.4	7.1	5.9	7.2	7.8	8.5
<b>DURABLE GOODS</b>												
Output per hour of all persons	5.1	1.2	-3.2	2.9	-0.1	r-1.2	0.2	0.9	2.4	1.5	0.2	r-0.4
Output	9.6	10.0	5.3	-2.5	-2.3	-1.8	5.6	7.1	9.5	5.5	2.5	-0.4
Hours	4.3	8.7	8.8	-5.2	-2.2	r-0.6	5.4	6.1	6.9	4.0	2.3	r 0.0
Compensation per hour	8.3	9.6	10.3	9.7	8.0	r 7.8	7.7	8.4	8.6	9.5	9.4	r 8.9
Real compensation per hour	-0.4	0.4	-0.6	-3.5	-4.4	r-4.8	-0.3	-0.5	-1.1	-1.1	-2.1	r-3.3
Unit labor costs	3.1	8.3	13.9	6.6	8.0	r 9.1	7.5	7.4	6.0	7.9	9.2	9.4
<b>NONDURABLE GOODS</b>												
Output per hour of all persons	8.2	3.4	-0.9	2.7	9.0	r-1.7	1.3	2.6	3.1	3.3	3.5	r 2.2
Output	4.8	5.3	3.4	1.5	4.6	r 0.1	3.2	4.1	5.1	3.7	3.7	2.4
Hours	-3.2	1.8	4.4	-1.2	-4.1	r 1.8	1.9	1.5	1.9	0.4	0.2	r 0.2
Compensation per hour	8.3	7.8	10.0	10.6	8.1	r 9.9	8.3	8.7	8.1	9.2	9.1	9.6
Real compensation per hour	-0.4	-1.3	-0.9	-2.6	-4.3	-3.0	0.3	-0.3	-1.5	-1.3	-2.3	-2.7
Unit labor costs	0.1	4.2	11.0	7.7	-0.9	r11.7	7.0	6.0	4.9	5.7	5.4	r 7.3
<b>NONFINANCIAL CORPORATIONS:</b>												
Output per all-employee hour	2.0	1.1	-2.1	-2.8	-0.2	N.A.	0.8	1.8	1.3	-0.5	-1.0	N.A.
Output	4.6	7.6	2.5	-2.6	0.6	N.A.	6.1	7.5	7.2	2.9	1.9	N.A.
Hours	2.5	6.4	4.6	0.3	0.9	N.A.	5.2	5.6	5.8	3.4	3.0	N.A.
Compensation per hour	8.4	8.1	11.0	8.0	8.6	N.A.	8.3	8.7	8.7	8.9	8.9	N.A.
Real compensation per hour	-0.4	-1.0	0.0	-4.9	-3.8	N.A.	0.2	-0.3	-1.0	-1.6	-2.5	N.A.
Total unit costs	5.1	5.9	11.7	11.8	10.2	N.A.	6.4	5.6	6.1	8.6	9.9	N.A.
Unit labor costs	6.2	6.9	13.4	11.2	8.8	N.A.	7.4	6.8	7.3	9.4	10.1	N.A.
Unit nonlabor costs	1.7	2.9	6.8	13.5	14.6	N.A.	3.5	2.2	2.5	6.2	9.4	N.A.
Unit profits	11.4	19.5	-22.1	-3.4	-5.3	N.A.	1.4	13.6	21.7	0.0	-3.9	N.A.
Implicit price deflator	5.7	7.3	7.6	10.2	8.6	N.A.	5.8	6.4	7.5	7.7	8.4	N.A.

p=preliminary.  
r=revised.

**ESTABLISHMENT DATA  
STATE AND AREA HOURS AND EARNINGS**

**C-13. Gross hours and earnings of production workers on manufacturing payrolls by State and selected areas**

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>ALABAMA</b> <sup>1</sup>	\$233.04	\$261.25	\$256.63	40.6	41.8	40.8	\$5.74	\$6.25	\$6.29
Birmingham	273.91	308.16	297.08	40.4	41.7	40.2	6.78	7.39	7.39
Mobile	291.58	322.14	330.22	41.3	42.0	41.8	7.06	7.67	7.90
<b>ALASKA</b>	374.13	(*)	(*)	40.1	(*)	(*)	9.33	(*)	(*)
<b>ARIZONA</b>	254.56	290.50	283.31	40.6	41.5	40.3	6.27	7.00	7.03
Phoenix	255.60	292.45	276.74	40.7	42.2	40.4	6.28	6.93	6.85
Tucson	232.85	265.98	254.41	39.6	40.3	39.2	5.88	6.60	6.49
<b>ARKANSAS</b> <sup>1</sup>	193.27	217.46	217.40	38.5	39.9	39.6	5.02	5.45	5.49
Fayetteville-Springdale	182.00	196.71	204.42	40.0	39.5	40.4	4.55	4.98	5.06
Fort Smith	196.46	225.72	221.87	38.0	39.6	39.2	5.17	5.70	5.66
Little Rock-North Little Rock	224.22	249.64	251.06	39.2	40.2	39.6	5.72	6.21	6.34
Pine Bluff	272.16	303.31	294.17	42.0	42.6	41.2	6.48	7.06	7.14
<b>CALIFORNIA</b>	270.80	301.51	288.86	40.0	40.8	39.3	6.77	7.39	7.35
Anahelm-Santa Ana-Garden Grove	248.06	276.14	267.87	40.8	41.4	40.1	6.08	6.67	6.68
Bakersfield	273.60	324.81	314.41	38.0	40.5	39.4	7.20	8.02	7.98
Fresno	239.17	268.32	265.10	38.7	39.0	38.7	6.18	6.88	6.85
Los Angeles-Long Beach	254.97	285.36	273.74	40.6	41.0	39.5	6.28	6.96	6.93
Modesto	264.14	288.86	275.66	39.9	40.8	38.5	6.62	7.08	7.16
Oxnard-Simi Valley-Ventura	229.89	258.59	252.29	39.5	39.6	38.4	5.82	6.53	6.57
Riverside-San Bernardino-Ontario	276.40	306.68	299.02	40.0	40.3	39.5	6.91	7.61	7.57
Sacramento	285.48	312.42	311.56	39.0	39.2	38.8	7.32	7.97	8.03
Salinas-Seaside-Monterey	260.60	256.26	270.45	38.1	35.2	36.4	6.84	7.28	7.43
San Diego	252.20	279.40	269.81	38.8	39.8	38.6	6.50	7.02	6.99
San Francisco-Oakland	316.18	349.74	341.82	38.7	40.2	39.2	8.17	8.70	8.72
San Jose	282.61	314.47	313.43	40.2	41.0	40.6	7.03	7.67	7.72
Santa Barbara-Santa Maria-Lompoc	227.86	256.32	257.69	37.6	38.2	37.4	6.06	6.71	6.89
Santa Rosa	231.87	263.84	254.88	36.4	38.8	37.1	6.37	6.80	6.87
Stockton	291.21	308.90	310.06	39.3	39.3	39.1	7.41	7.86	7.93
Vallejo-Fairfield-Napa	279.72	306.54	296.00	37.8	39.1	37.9	7.40	7.84	7.81
<b>COLORADO</b> <sup>1</sup>	261.09	274.82	273.62	39.8	39.6	39.2	6.56	6.94	6.98
Denver-Boulder	254.44	276.59	275.02	39.2	39.4	38.9	6.49	7.02	7.07
<b>CONNECTICUT</b>	265.17	291.72	290.11	42.7	42.9	42.6	6.21	6.80	6.81
Bridgeport	278.52	304.59	306.42	44.0	43.7	43.9	6.33	6.97	6.98
Hartford	295.99	336.68	321.10	43.4	44.3	43.1	6.82	7.60	7.45
New Britain	277.01	309.58	303.20	43.9	44.1	43.5	6.31	7.02	6.97
New Haven-West Haven	260.41	285.91	281.11	41.4	41.8	41.4	6.29	6.84	6.79
Stamford	262.26	287.32	284.26	42.3	44.0	43.8	6.20	6.53	6.49
Waterbury	229.15	249.37	247.28	42.2	42.7	41.7	5.43	5.84	5.93
<b>DELAWARE</b> <sup>1</sup>	279.89	313.40	294.86	39.7	41.4	39.9	7.05	7.57	7.39
Wilmington	312.03	337.77	334.92	39.8	40.5	40.4	7.84	8.34	8.29
<b>DISTRICT OF COLUMBIA:</b>									
Washington SMSA	277.68	312.26	(*)	39.0	40.5	(*)	7.12	7.71	(*)
<b>FLORIDA</b> <sup>1</sup>	214.08	236.97	232.97	40.7	41.5	40.8	5.26	5.71	5.71
Fort Lauderdale-Hollywood	199.50	228.06	225.60	39.9	42.0	41.7	5.00	5.43	5.41
Jacksonville	255.84	275.26	274.72	41.6	40.9	40.4	6.15	6.73	6.80
Miami	190.88	201.50	200.70	40.7	39.9	39.9	4.69	5.05	5.03
Orlando	221.82	249.90	246.33	40.7	42.0	41.4	5.45	5.95	5.95
Pensacola	278.63	312.94	260.35	42.8	44.2	37.3	6.51	7.08	6.98
Tampa-St. Petersburg	223.41	249.21	247.78	40.4	42.6	42.5	5.53	5.85	5.83
West Palm Beach-Boca Raton	255.71	264.60	262.50	45.5	42.0	42.0	5.62	6.30	6.25
<b>GEORGIA</b> <sup>1</sup>	200.70	220.04	222.86	39.2	40.3	40.3	5.12	5.46	5.53
Atlanta	225.98	247.92	254.02	37.6	38.2	39.2	6.01	6.49	6.48
Savannah	271.51	297.77	311.32	41.2	41.3	43.0	6.59	7.21	7.24
<b>HAWAII</b>	240.38	264.26	251.92	37.5	39.9	37.6	6.41	6.62	6.70
Honolulu	239.76	260.52	243.40	37.0	39.0	35.9	6.48	6.68	6.78
<b>IDAHO</b>	244.19	267.86	254.00	36.5	37.1	36.6	6.69	7.22	6.94
Boise City	222.05	251.67	222.14	35.7	38.6	35.6	6.22	6.52	6.24

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE AND AREA HOURS AND EARNINGS**

**C-13. Gross hours and earnings of production workers on manufacturing payrolls by State and selected areas—Continued**

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>ILLINOIS</b> .....	\$273.78	\$312.57	(*)	39.0	41.4	(*)	\$7.02	\$7.54	(*)
Bloomington—Normal .....	259.78	301.97	(*)	40.9	44.5	(*)	6.36	6.78	(*)
Champaign—Urbana—Rantoul .....	259.48	288.05	(*)	38.3	41.2	(*)	6.77	6.99	(*)
Chicago SMSA .....	266.19	291.64	(*)	39.1	40.6	(*)	6.81	7.18	(*)
Davenport—Rock Island—Moline .....	306.90	343.89	(*)	36.9	39.6	(*)	8.33	8.68	(*)
Decatur .....	327.26	308.36	(*)	42.2	39.3	(*)	7.76	7.85	(*)
Peoria .....	325.78	330.44	(*)	37.3	40.1	(*)	8.72	8.23	(*)
Rockford .....	290.00	318.50	(*)	41.3	42.8	(*)	7.03	7.43	(*)
Springfield .....	340.30	326.43	(*)	44.4	41.9	(*)	7.66	7.78	(*)
<b>INDIANA</b> .....	311.71	331.29	\$328.43	40.8	40.9	40.2	7.64	8.10	\$8.17
Gary—Hammond—East Chicago .....	412.76	424.76	(*)	41.4	40.3	(*)	9.97	10.54	(*)
Indianapolis .....	313.66	348.01	(*)	41.6	42.7	(*)	7.54	8.15	(*)
<b>IOWA</b> <sup>1</sup> .....	298.55	362.10	334.06	40.4	42.6	40.2	7.39	8.50	8.31
Cedar Rapids .....	311.52	339.47	342.27	42.5	42.7	42.1	7.33	7.95	8.13
Des Moines .....	305.75	344.00	345.14	38.9	40.0	39.9	7.86	8.60	8.65
Dubuque .....	341.48	416.98	414.51	39.8	40.8	41.0	8.58	10.22	10.11
Sioux City .....	279.13	304.30	300.37	41.6	41.8	40.7	6.71	7.28	7.38
Waterloo—Cedar Falls .....	376.48	581.58	420.65	41.2	53.9	41.2	9.16	10.79	10.21
<b>KANSAS</b> .....	259.64	298.03	289.17	39.7	41.8	40.5	6.54	7.13	7.14
Topeka .....	289.20	282.50	300.85	43.1	39.4	40.6	6.71	7.17	7.41
Wichita .....	269.78	323.90	314.65	39.5	42.9	40.6	6.83	7.55	7.75
<b>KENTUCKY</b> <sup>1</sup> .....	256.24	280.19	272.83	39.3	40.2	39.2	6.52	6.97	6.96
Louisville .....	297.31	333.98	314.03	39.8	42.6	39.7	7.47	7.84	7.51
<b>LOUISIANA</b> <sup>1</sup> .....	278.10	300.00	297.43	41.2	41.9	40.8	6.75	7.16	7.29
Baton Rouge .....	351.22	387.62	396.63	43.2	43.7	43.3	8.13	8.87	9.16
New Orleans .....	264.26	303.54	311.41	40.1	42.1	42.6	6.59	7.21	7.31
Shreveport .....	232.66	274.03	269.60	39.5	40.9	40.0	5.89	6.70	6.74
<b>MAINE</b> <sup>1</sup> .....	209.20	234.03	234.90	40.0	40.7	40.5	5.23	5.75	5.80
Lewiston—Auburn .....	168.14	189.42	193.05	37.7	38.5	39.0	4.46	4.92	4.95
Portland .....	205.88	226.08	223.41	39.9	40.3	40.4	5.16	5.61	5.53
<b>MARYLAND</b> .....	271.20	297.60	295.00	40.0	40.6	40.3	6.78	7.33	7.32
Baltimore .....	287.65	315.59	311.66	40.4	41.2	40.9	7.12	7.66	7.62
<b>MASSACHUSETTS</b> .....	236.87	261.53	(*)	40.7	40.8	(*)	5.82	6.41	(*)
Boston .....	258.62	283.30	(*)	40.6	40.4	(*)	6.37	7.01	(*)
Brockton .....	183.11	197.06	(*)	37.6	39.1	(*)	4.87	5.04	(*)
Fall River .....	164.93	185.34	(*)	35.7	36.2	(*)	4.62	5.12	(*)
Lawrence—Haverhill .....	236.16	271.77	(*)	41.0	42.2	(*)	5.76	6.44	(*)
Lowell .....	200.06	219.14	(*)	38.4	39.7	(*)	5.21	5.52	(*)
New Bedford .....	200.82	212.95	(*)	39.3	38.3	(*)	5.11	5.56	(*)
Springfield—Chicopee—Holyoke .....	239.51	260.37	(*)	41.8	42.2	(*)	5.73	6.17	(*)
Worcester .....	245.78	273.57	(*)	41.1	41.2	(*)	5.98	6.64	(*)
<b>MICHIGAN</b> <sup>1</sup> .....	(*)	375.40	363.79	(*)	42.0	40.3	(*)	8.94	9.03
Ann Arbor .....	(*)	431.21	407.06	(*)	45.4	42.7	(*)	9.50	9.53
Battle Creek .....	(*)	369.81	368.20	(*)	41.5	41.2	(*)	8.91	8.94
Bay City .....	(*)	363.28	319.14	(*)	43.7	39.4	(*)	8.31	8.10
Detroit .....	(*)	416.75	392.62	(*)	42.7	40.8	(*)	9.76	9.62
Flint .....	(*)	424.26	420.23	(*)	41.7	41.3	(*)	10.17	10.18
Grand Rapids .....	(*)	314.21	305.88	(*)	41.3	40.0	(*)	7.61	7.65
Jackson .....	(*)	342.70	342.71	(*)	42.8	42.3	(*)	8.01	8.10
Kalamazoo—Portage .....	(*)	340.22	336.87	(*)	41.0	40.3	(*)	8.30	8.36
Lansing—East Lansing .....	(*)	369.66	362.56	(*)	39.2	38.2	(*)	9.43	9.49
Muskegon—Norton Shores—Muskegon Heights .....	(*)	318.45	317.06	(*)	40.3	40.2	(*)	7.91	7.89
Saginaw .....	(*)	404.56	398.89	(*)	40.0	38.6	(*)	10.11	10.33
<b>MINNESOTA</b> .....	274.32	290.56	(*)	40.4	40.3	(*)	6.79	7.21	(*)
Duluth—Superior .....	251.66	267.93	(*)	39.2	39.0	(*)	6.42	6.87	(*)
Minneapolis—St. Paul .....	294.89	313.65	(*)	40.9	41.0	(*)	7.21	7.65	(*)
<b>MISSISSIPPI</b> <sup>1</sup> .....	191.75	205.82	207.50	39.7	40.2	39.6	4.83	5.12	5.24
Jackson .....	214.49	238.69	231.43	40.7	42.7	41.4	5.27	5.59	5.59

See footnotes at end of table.

**ESTABLISHMENT DATA**  
**STATE AND AREA HOURS AND EARNINGS**

**C-13. Gross hours and earnings of production workers on manufacturing payrolls by State and selected areas—Continued**

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>MISSOURI</b> <sup>1</sup>	\$257.14	\$287.34	\$279.70	39.5	40.7	39.9	\$6.51	\$7.06	\$7.01
Kansas City <sup>1</sup>	289.02	331.68	319.98	39.7	41.1	40.3	7.28	8.07	7.54
St. Joseph <sup>1</sup>	228.98	258.41	248.82	38.1	38.8	37.7	6.01	6.66	6.60
St. Louis	300.03	328.72	317.52	40.6	41.4	40.5	7.39	7.94	7.84
Springfield <sup>1</sup>	221.34	248.40	245.52	38.9	40.0	39.6	5.69	6.21	6.20
<b>MONTANA</b> <sup>1</sup>	346.48	389.40	386.32	42.1	44.3	44.0	8.23	8.79	8.78
<b>NEBRASKA</b> <sup>1</sup>	259.79	290.79	287.58	41.5	42.7	41.2	6.26	6.81	6.98
Lincoln <sup>1</sup>	245.12	274.11	270.57	38.3	39.9	39.1	6.40	6.87	6.92
Omaha <sup>1</sup>	269.53	296.21	294.86	40.9	40.8	39.9	6.59	7.26	7.39
<b>NEVADA</b>	260.88	288.41	277.99	37.7	39.4	39.6	6.92	7.32	7.02
Las Vegas	331.11	378.56	(*)	39.0	41.6	(*)	8.49	9.10	(*)
<b>NEW HAMPSHIRE</b>	208.64	228.63	(*)	40.2	40.9	(*)	5.19	5.59	(*)
Manchester	179.80	195.71	(*)	38.5	39.3	(*)	4.67	4.98	(*)
Nashua	226.64	253.91	(*)	40.4	41.9	(*)	5.61	6.06	(*)
<b>NEW JERSEY</b>	269.80	295.25	285.10	41.7	42.3	41.2	6.47	6.98	6.92
Atlantic City	193.42	217.56	209.37	38.3	39.7	38.7	5.05	5.48	5.41
Camden <sup>2</sup>	255.56	286.33	272.43	40.5	41.8	40.6	6.31	6.85	6.71
Hackensack <sup>3</sup>	251.08	273.49	262.08	42.7	42.8	41.6	5.88	6.39	6.30
Jersey City <sup>3</sup>	269.78	284.14	282.40	41.0	41.3	40.4	6.58	6.88	6.99
New Brunswick—Perth Amboy—Sayreville <sup>3</sup>	286.53	313.24	308.56	40.7	41.0	40.6	7.04	7.64	7.60
Newark <sup>3</sup>	274.75	300.14	293.16	42.4	43.0	42.0	6.48	6.98	6.98
Paterson—Clifton—Passaic <sup>3</sup>	250.51	274.63	271.75	41.0	41.8	41.3	6.11	6.57	6.58
Trenton	267.15	293.13	281.47	40.6	40.6	39.7	6.58	7.22	7.09
<b>NEW MEXICO</b> <sup>1</sup>	198.90	228.10	222.83	39.0	40.3	39.3	5.10	5.66	5.67
Albuquerque <sup>1</sup>	203.04	231.09	223.00	38.6	40.9	39.4	5.26	5.65	5.66
<b>NEW YORK</b>	255.76	275.77	275.71	39.9	40.2	39.9	6.41	6.86	6.91
Albany—Schenectady—Troy	269.72	302.52	292.84	39.9	41.9	40.9	6.76	7.22	7.16
Binghamton	231.49	262.70	260.82	40.9	42.1	41.4	5.66	6.24	6.30
Buffalo	346.09	367.00	359.45	41.9	41.8	40.8	8.26	8.78	8.81
Elmira	251.83	275.00	272.97	40.1	40.5	40.5	6.28	6.79	6.74
Monroe County <sup>4</sup>	349.75	367.84	368.68	42.6	41.8	41.8	8.21	8.80	8.82
Nassau—Suffolk <sup>5</sup>	233.05	261.79	260.95	39.5	40.4	39.9	5.90	6.48	6.54
New York—Northeastern New Jersey	241.59	262.51	(*)	39.8	40.2	(*)	6.07	6.53	(*)
New York and Nassau—Suffolk <sup>3</sup>	218.50	238.32	240.52	38.0	38.5	38.3	5.75	6.19	6.28
New York SMSA <sup>5</sup>	215.27	232.79	234.98	37.7	38.1	37.9	5.71	6.11	6.20
New York City <sup>6</sup>	213.18	227.63	229.40	37.4	37.5	37.3	5.70	6.07	6.15
Poughkeepsie	252.29	272.48	267.49	41.7	41.6	40.9	6.05	6.55	6.54
Rochester	327.54	344.03	344.87	42.1	41.7	41.5	7.78	8.25	8.31
Rockland County <sup>6</sup>	241.59	272.30	273.24	40.4	41.7	41.4	5.98	6.53	6.60
Syracuse	286.54	311.12	307.13	42.2	42.1	41.9	6.79	7.39	7.33
Utica—Rome	242.17	267.49	264.80	40.7	40.9	40.0	5.95	6.54	6.62
Westchester County <sup>6</sup>	227.03	271.15	271.74	39.9	42.5	42.0	5.69	6.38	6.47
<b>NORTH CAROLINA</b> <sup>1</sup>	183.38	207.47	205.49	39.1	40.6	39.9	4.69	5.11	5.15
Asheville <sup>1</sup>	186.81	206.32	201.60	40.7	41.1	40.0	4.59	5.02	5.04
Charlotte—Gastonia <sup>1</sup>	185.65	210.67	212.28	39.5	41.8	41.3	4.70	5.04	5.14
Greensboro—Winston-Salem—High Point <sup>1</sup>	193.66	230.01	225.12	38.5	41.0	40.2	5.03	5.61	5.60
Raleigh—Durham <sup>1</sup>	207.24	234.84	229.12	39.4	40.7	39.3	5.26	5.77	5.83
<b>NORTH DAKOTA</b>	218.69	238.01	233.58	38.3	38.7	36.9	5.71	6.15	6.33
Fargo—Moorhead	232.98	252.13	238.43	37.7	37.8	35.8	6.18	6.67	6.66
<b>OHIO</b> <sup>1</sup>	323.67	343.51	329.66	42.2	42.2	40.8	7.67	8.14	8.08
Akron <sup>1</sup>	321.10	345.24	337.43	42.7	42.0	41.2	7.52	8.22	8.19
Canton	334.32	333.33	333.26	42.0	40.6	40.2	7.96	8.21	8.29
Cincinnati <sup>1</sup>	299.29	324.95	312.64	41.8	42.7	41.3	7.12	7.61	7.57
Cleveland <sup>1</sup>	343.73	351.48	334.56	43.4	42.5	40.8	7.96	8.27	8.20
Columbus <sup>1</sup>	276.76	304.63	296.27	40.7	41.0	40.2	6.80	7.43	7.37
Dayton <sup>1</sup>	334.19	364.46	346.09	42.9	43.7	41.9	7.79	8.34	8.26
Toledo <sup>1</sup>	339.83	353.63	341.42	42.8	41.8	40.5	7.94	8.46	8.43
Youngstown—Warren <sup>1</sup>	364.01	387.69	375.48	40.9	40.3	39.4	8.90	9.62	9.53

See footnotes at end of table.

**ESTABLISHMENT DATA**  
**STATE AND AREA HOURS AND EARNINGS**

**C-13. Gross hours and earnings of production workers on manufacturing payrolls by State and selected areas—Continued**

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>OKLAHOMA</b> <sup>1</sup>	\$250.67	\$291.58	\$289.98	40.3	41.3	40.9	\$6.22	\$7.06	\$7.09
Oklahoma City <sup>1</sup>	247.78	320.50	310.25	39.9	44.7	42.5	6.21	7.17	7.30
Tulsa <sup>1</sup>	270.14	306.34	291.73	40.5	40.9	39.8	6.67	7.49	7.33
<b>OREGON</b>	273.31	317.38	(*)	36.2	38.8	(*)	7.55	8.18	(*)
Eugene—Springfield	289.71	334.63	(*)	35.9	38.2	(*)	8.07	8.76	(*)
Jackson County	286.14	303.85	(*)	37.6	37.1	(*)	7.61	8.19	(*)
Portland	253.77	313.95	(*)	35.1	39.0	(*)	7.23	8.05	(*)
<b>PENNSYLVANIA</b>	269.20	291.34	285.32	40.0	39.8	39.3	6.73	7.32	7.26
Allentown—Bethlehem—Easton	260.16	293.75	293.72	38.6	38.6	38.8	6.74	7.61	7.57
Altoona	225.61	245.94	251.70	38.5	39.1	39.7	5.86	6.29	6.34
Delaware Valley <sup>7</sup>	276.29	298.33	292.73	40.1	40.7	40.1	6.89	7.33	7.30
Erie	281.06	301.81	307.97	41.7	41.4	41.9	6.74	7.29	7.35
Harrisburg	257.00	282.76	274.03	40.6	41.4	40.9	6.33	6.83	6.70
Johnstown	277.50	318.30	311.89	39.7	39.2	38.6	6.99	8.12	8.08
Lancaster	237.58	262.48	260.94	40.2	41.4	40.9	5.91	6.34	6.38
Northeast Pennsylvania	187.46	211.31	213.18	36.4	37.4	37.4	5.15	5.65	5.70
Philadelphia SMSA	272.68	296.93	289.84	40.1	40.9	40.2	6.80	7.26	7.21
Pittsburgh	321.98	352.08	353.60	39.8	40.1	40.0	8.09	8.78	8.84
Reading	239.23	269.30	266.47	38.4	39.2	38.9	6.23	6.87	6.85
Scranton <sup>8</sup>	196.61	221.03	220.13	38.4	39.4	39.1	5.12	5.61	5.63
Wilkes-Barre—Hazleton <sup>9</sup>	178.88	202.78	206.85	34.6	35.7	36.1	5.17	5.68	5.73
Williamsport	242.61	260.80	272.96	40.1	39.1	40.2	6.05	6.67	6.79
York	249.42	259.95	265.51	41.5	42.2	41.1	6.01	6.16	6.46
<b>RHODE ISLAND</b>	195.42	212.13	215.17	39.4	39.8	39.7	4.96	5.33	5.42
Providence—Warwick—Pawtucket	197.31	210.94	213.98	39.7	39.8	39.7	4.97	5.30	5.39
<b>SOUTH CAROLINA</b> <sup>1</sup>	199.43	222.14	224.22	40.7	41.6	41.6	4.90	5.34	5.39
Charleston—North Charleston <sup>1</sup>	228.80	249.29	245.81	41.3	40.8	40.1	5.54	6.11	6.13
Columbia <sup>1</sup>	196.21	214.52	219.10	39.8	40.4	40.8	4.93	5.31	5.37
Greenville—Spartanburg <sup>1</sup>	197.72	220.96	221.49	40.6	41.3	41.4	4.87	5.35	5.35
<b>SOUTH DAKOTA</b> <sup>1</sup>	220.90	259.62	253.02	41.6	42.7	42.1	5.31	6.08	6.01
Rapid City <sup>1</sup>	169.05	209.65	211.94	34.5	35.0	35.5	4.90	5.99	5.97
Sioux Falls <sup>1</sup>	306.43	348.21	340.28	44.8	47.7	47.0	6.84	7.30	7.24
<b>TENNESSEE</b> <sup>1</sup>	214.09	235.30	232.85	39.5	40.5	39.6	5.42	5.81	5.88
Chattanooga <sup>1</sup>	219.49	239.62	241.92	40.2	41.6	42.0	5.46	5.76	5.76
Knoxville <sup>1</sup>	243.38	275.26	272.96	41.0	40.9	40.2	6.18	6.73	6.79
Memphis <sup>1</sup>	240.95	267.97	258.30	39.5	41.1	39.8	6.10	6.52	6.49
Nashville—Davidson <sup>1</sup>	229.65	242.99	238.85	39.8	39.9	38.9	5.77	6.09	6.14
<b>TEXAS</b> <sup>1</sup>	255.63	282.41	273.50	40.9	41.9	40.7	6.25	6.74	6.72
Amarillo <sup>1</sup>	244.59	263.07	267.46	39.9	39.5	39.8	6.13	6.66	6.72
Austin <sup>1</sup>	190.22	208.92	228.00	40.3	41.7	42.3	4.72	5.01	5.39
Beaumont—Port Arthur—Orange <sup>1</sup>	350.40	398.61	372.78	40.0	43.0	41.1	8.76	9.27	9.07
Corpus Christi <sup>1</sup>	275.18	276.32	291.20	39.2	38.7	40.0	7.02	7.14	7.28
Dallas—Fort Worth <sup>1</sup>	237.55	267.74	262.03	40.4	41.9	41.2	5.88	6.39	6.36
El Paso	186.44	211.43	(*)	39.5	42.8	(*)	4.72	4.94	(*)
Galveston—Texas City <sup>1</sup>	389.53	412.15	377.12	42.9	41.8	38.6	9.08	9.86	9.77
Houston <sup>1</sup>	328.37	348.44	355.89	43.9	43.5	44.1	7.48	8.01	8.07
Lubbock <sup>1</sup>	195.09	226.92	235.11	40.9	42.1	43.7	4.77	5.39	5.38
San Antonio <sup>1</sup>	179.72	205.13	204.93	38.9	40.7	41.4	4.62	5.04	4.95
Waco <sup>1</sup>	207.58	236.70	238.21	38.8	40.6	41.0	5.35	5.83	5.81
Wichita Falls <sup>1</sup>	217.17	252.76	257.50	39.2	40.9	41.2	5.54	6.18	6.25
<b>UTAH</b> <sup>1</sup>	238.34	260.04	252.21	39.2	39.7	37.7	6.08	6.55	6.69
Salt Lake City—Ogden <sup>1</sup>	227.15	244.16	229.64	39.3	39.7	37.4	5.78	6.15	6.14
<b>VERMONT</b>	219.22	242.76	243.28	40.9	42.0	41.8	5.36	5.78	5.82
Burlington	243.07	263.77	264.12	42.2	43.1	42.6	5.76	6.12	6.20
Springfield	264.56	300.60	292.81	43.3	45.0	44.5	6.11	6.68	6.58
<b>VIRGINIA</b>	214.18	235.76	236.61	39.3	40.3	39.7	5.45	5.85	5.96
Bristol	198.60	217.79	221.03	37.9	39.1	39.4	5.24	5.57	5.61
Lynchburg	222.46	222.83	233.63	40.3	39.3	39.8	5.52	5.67	5.87
Norfolk—Virginia Beach—Portsmouth	246.97	270.34	259.85	41.3	41.4	40.1	5.98	6.53	6.48
Northern Virginia <sup>10</sup>	236.81	262.44	258.46	39.8	40.5	39.4	5.95	6.48	6.56
Petersburg-Colonial Heights-Hopewell	248.71	280.90	278.91	37.4	39.9	38.9	6.65	7.04	7.17

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE AND AREA HOURS AND EARNINGS**

**C-13. Gross hours and earnings of production workers on manufacturing payrolls, by State and selected areas—Continued**

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>VIRGINIA—Continued</b>									
Richmond .....	\$268.00	\$307.35	\$307.22	40.0	41.2	40.8	\$6.70	\$7.46	\$7.53
Roanoke .....	195.82	227.10	223.20	39.4	41.9	40.0	4.97	5.42	5.58
<b>WASHINGTON</b>	299.51	339.99	(*)	38.3	38.9	(*)	7.82	8.74	(*)
Seattle—Everett*	314.24	351.60	(*)	38.7	40.0	(*)	8.12	8.79	(*)
Spokane .....	272.84	306.54	(*)	39.6	39.1	(*)	6.89	7.84	(*)
Tacoma .....	321.20	334.40	(*)	40.1	38.0	(*)	8.01	8.80	(*)
<b>WEST VIRGINIA</b>	278.87	301.41	307.97	39.5	39.4	40.1	7.06	7.65	7.68
Charleston .....	315.78	336.60	346.10	42.5	41.3	41.8	7.43	8.15	8.28
Huntington—Ashland .....	304.50	335.82	332.09	39.7	38.6	39.3	7.67	8.70	8.45
Parkersburg—Marietta .....	295.08	327.85	328.84	40.7	41.5	40.9	7.25	7.90	8.04
Wheeling .....	289.52	324.39	330.40	40.1	39.9	41.3	7.22	8.13	8.00
<b>WISCONSIN</b>	286.60	320.41	312.87	40.9	41.6	40.5	7.01	7.71	7.73
Appleton—Oshkosh .....	285.53	313.83	308.51	42.2	42.2	41.2	6.77	7.44	7.48
Eau Claire .....	278.64	306.26	306.42	40.1	40.5	39.7	6.94	7.56	7.71
Green Bay .....	290.93	333.58	319.79	41.1	43.1	41.1	7.08	7.75	7.78
Kenosha .....	300.19	418.25	361.53	39.1	45.6	40.4	7.67	9.17	8.96
La Crosse .....	222.02	282.19	296.53	39.6	42.0	39.8	5.61	6.71	6.77
Madison .....	277.42	325.24	319.55	39.4	40.3	39.4	7.05	8.07	8.10
Milwaukee .....	317.14	348.08	344.87	41.2	41.5	40.9	7.70	8.38	8.43
Racine .....	301.42	355.72	338.24	41.1	43.6	41.6	7.34	8.17	8.13
<b>WYOMING</b>	239.14	264.99	238.73	37.9	39.2	34.8	6.31	6.76	6.86
Casper .....	295.28	350.67	299.37	38.7	40.4	36.2	7.63	8.68	8.27
Cheyenne .....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
<b>VIRGIN ISLANDS</b>	256.45	284.14	300.03	39.1	41.3	41.1	6.61	6.86	7.30

<sup>1</sup> Revised to 1979 benchmark; not strictly comparable with previously published data.

<sup>2</sup> Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area.

<sup>3</sup> Subarea of New York-Northeastern New Jersey.

<sup>4</sup> Subarea of Rochester Standard Metropolitan Statistical Area.

<sup>5</sup> Area included in New York and Nassau-Suffolk combined SMSA's.

<sup>6</sup> Subarea of New York Standard Metropolitan Statistical Area.

<sup>7</sup> Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pennsylvania.

<sup>8</sup> Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Lackawanna County.

<sup>9</sup> Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Luzerne County.

<sup>10</sup> Subarea of Washington, D.C. Standard Metropolitan Statistical Area: Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park cities, and Arlington, Fairfax, Loudoun, and Prince William Counties, Virginia.

p = preliminary.

\* Not available.

SOURCE: Cooperating State agencies listed on inside back cover.

















**ESTABLISHMENT DATA  
LABOR TURNOVER**

**D-2. Labor turnover rates, by industry—Continued**

1972 SIC Code	Industry	Accession rates						Separation rates					
		Total		New hires		Recalls		Total		Quits		Layoffs	
		Dec. 1979	Jan. 1980 <sup>P</sup>	Dec. 1979	Jan. 1980 <sup>P</sup>	Dec. 1979	Jan. 1980 <sup>P</sup>	Dec. 1979	Jan. 1980 <sup>P</sup>	Dec. 1979	Jan. 1980 <sup>P</sup>	Dec. 1979	Jan. 1980 <sup>P</sup>
	<b>PAPER AND ALLIED PRODUCTS—Continued</b>												
263	Paperboard mills	1.1	—	0.6	—	0.4	—	1.2	—	0.3	—	0.4	—
264	Misc. converted paper products	2.2	—	1.4	—	.6	—	3.3	—	.9	—	1.7	—
265	Paperboard containers and boxes	3.9	—	1.2	—	.5	—	3.2	—	.9	—	1.6	—
2651	Folding paperboard boxes	1.9	—	1.2	—	.6	—	3.4	—	.9	—	1.7	—
2653	Corrugated and solid fiber boxes	1.7	—	1.2	—	.3	—	2.5	—	.9	—	1.0	—
27	<b>PRINTING AND PUBLISHING</b>	2.7	3.4	2.1	2.8	.5	0.5	2.9	3.3	1.6	1.8	.7	0.8
271	Newspapers	2.9	—	2.7	—	.1	—	3.0	—	2.3	—	.1	—
272	Periodicals	2.1	—	1.9	—	.2	—	2.0	—	1.5	—	.1	—
273	Books	4.0	—	2.0	—	1.7	—	2.6	—	1.1	—	.9	—
274	Miscellaneous publishing	2.8	—	2.2	—	.4	—	2.8	—	1.7	—	.4	—
275	Commercial printing	2.3	—	1.7	—	.5	—	2.7	—	1.1	—	1.1	—
2751	Commercial printing, letterpress	2.3	—	1.7	—	.6	—	3.1	—	1.2	—	1.5	—
2752	Commercial printing, lithographic	2.2	—	1.7	—	.4	—	2.6	—	1.0	—	.9	—
276	Blankbooks and bookbinding	2.9	—	2.3	—	.6	—	3.9	—	1.5	—	1.7	—
28	<b>CHEMICALS AND ALLIED PRODUCTS</b>	1.1	1.6	.8	1.2	.2	.3	1.3	1.7	.5	.7	.4	.4
281	Industrial inorganic chemicals	.9	—	.7	—	.2	—	1.3	—	.4	—	.3	—
2810	Industrial inorganic chemicals, nec	1.0	—	.7	—	.2	—	1.1	—	.4	—	.2	—
282	Plastics materials and synthetics	.9	—	.6	—	.1	—	.9	—	.3	—	.2	—
2821	Plastics materials and resins	1.2	—	.9	—	.1	—	1.1	—	.5	—	.3	—
2824	Organic fibers, noncellulosic	.5	—	.4	—	( <sup>1</sup> )	—	.6	—	.2	—	( <sup>1</sup> )	—
283	Drugs	1.0	—	.8	—	.1	—	.9	—	.4	—	.2	—
2834	Pharmaceutical preparations	1.1	—	.9	—	.1	—	.9	—	.4	—	.2	—
284	Soap, cleaners, and toilet goods	1.6	—	1.1	—	.3	—	2.4	—	.7	—	1.2	—
2841	Soap and other detergents	1.4	—	.6	—	.5	—	1.7	—	.3	—	1.1	—
2844	Toilet preparations	1.8	—	1.4	—	.3	—	3.6	—	1.1	—	1.9	—
285	Paints and allied products	1.1	—	.9	—	.1	—	1.5	—	.7	—	.3	—
286	Industrial organic chemicals	.8	—	.6	—	.1	—	.9	—	.3	—	.1	—
287	Agricultural chemicals	2.0	—	1.6	—	.4	—	1.7	—	.9	—	.3	—
289	Miscellaneous chemical products	1.4	—	1.1	—	.2	—	1.8	—	.6	—	.6	—
29	<b>PETROLEUM AND COAL PRODUCTS</b>	1.2	1.7	1.0	1.4	.1	.2	2.1	2.3	.5	.7	1.2	.6
291	Petroleum refining	.9	—	.8	—	.1	—	1.1	—	.3	—	.5	—
295	Paving and roofing materials	2.2	—	1.8	—	.3	—	7.1	—	1.6	—	4.8	—
30	<b>RUBBER AND MISC. PLASTICS PRODUCTS</b>	2.7	4.5	1.6	2.7	.8	1.5	4.4	5.2	1.6	1.9	2.1	2.2
301	Tires and inner tubes	.8	—	.3	—	.3	—	1.4	—	.2	—	.6	—
302	Rubber and plastics footwear	5.5	—	4.0	—	1.2	—	7.0	—	3.7	—	2.3	—
303,4	Reclaimed rubber, and rubber and plastics hose and belting	1.4	—	.9	—	.3	—	2.5	—	.9	—	1.2	—
306	Fabricated rubber products, nec	1.9	—	.9	—	.7	—	3.9	—	.9	—	2.2	—
307	Miscellaneous plastics products	3.2	—	2.0	—	1.0	—	5.2	—	2.0	—	2.5	—
31	<b>LEATHER AND LEATHER PRODUCTS</b>	3.8	7.0	2.5	4.2	1.0	2.6	5.9	7.4	2.4	3.2	2.8	3.1
311	Leather tanning and finishing	2.6	—	1.8	—	.7	—	5.1	—	1.5	—	2.8	—
314	Footwear, except rubber	4.4	—	2.8	—	1.2	—	4.8	—	2.4	—	1.7	—
3143	Men's footwear, except athletic	3.4	—	2.3	—	.9	—	3.8	—	2.2	—	1.0	—
3144	Women's footwear, except athletic	5.4	—	3.1	—	1.8	—	4.4	—	2.5	—	1.0	—
	<b>NONMANUFACTURING:</b>												
—	<b>MINING</b>	3.8	5.9	2.9	4.3	.6	1.1	4.3	5.1	2.3	2.9	1.2	1.0
10	<b>METAL MINING</b>	1.6	3.3	1.3	1.4	( <sup>1</sup> )	.9	1.5	3.7	.8	1.0	.2	1.5
101	Iron ores	.8	—	.4	—	.1	—	1.4	—	.3	—	.5	—
102	Copper ores	1.0	—	.9	—	( <sup>1</sup> )	—	.7	—	.3	—	( <sup>1</sup> )	—
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b>	1.3	2.2	.5	.6	.2	.6	3.2	2.5	.4	.5	2.3	1.2
13	<b>OIL AND GAS EXTRACTION</b>	6.0	8.7	4.8	7.2	.9	1.2	5.1	6.5	4.0	4.9	.2	.2
131,2	Crude petroleum, natural gas, and natural gas liquids	2.0	—	1.5	—	.4	—	1.4	—	1.0	—	.1	—
138	Oil and gas field services	8.9	—	7.1	—	1.3	—	7.6	—	6.1	—	.3	—
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>	1.9	3.8	1.3	2.0	.5	1.5	5.6	5.9	1.1	1.3	3.6	3.7
142	Crushed and broken stone	1.7	—	.8	—	.7	—	6.7	—	1.1	—	4.9	—
144	Sand and gravel	1.7	—	1.1	—	.4	—	8.8	—	1.2	—	6.1	—
—	<b>COMMUNICATION:</b>												
481	Telephone communication	.4	—	.3	—	( <sup>1</sup> )	—	.7	—	.3	—	.2	—

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

<sup>P</sup> preliminary.

# ESTABLISHMENT DATA LABOR TURNOVER

## D-2. Labor turnover rates, by industry—Continued

1972 SIC Code	Industry	Accession rates						Separation rates					
		Total		New hires		Recalls		Total		Quits		Layoffs	
		1978	1979	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979
<b>PAPER AND ALLIED PRODUCTS—Continued</b>													
263	Paperboard mills	2.0	1.8	1.5	1.3	0.3	0.3	1.9	1.9	0.9	0.9	0.3	0.4
264	Misc. converted paper products	3.5	3.5	2.8	2.8	.6	.6	3.4	3.6	1.8	1.9	.7	.8
265	Paperboard containers and boxes	3.7	3.4	2.9	2.6	.6	.7	3.6	3.8	1.8	1.7	.8	1.1
2651	Folding paperboard boxes	3.4	3.3	2.7	2.5	.6	.7	3.4	3.4	1.6	1.6	.8	1.0
2653	Corrugated and solid fiber boxes	3.2	3.0	2.7	2.4	.3	.4	3.0	3.3	1.7	1.7	.4	.7
27	<b>PRINTING AND PUBLISHING</b>												
271	Newspapers	3.5	3.7	3.2	3.4	.2	.1	3.2	3.5	2.5	2.8	.2	.2
272	Periodicals	2.9	2.9	2.6	2.7	.2	.2	2.5	2.6	1.7	1.9	.3	.2
273	Books	3.6	3.7	2.7	2.7	.6	.9	3.3	3.5	1.9	1.9	.8	1.0
274	Miscellaneous publishing	3.5	3.6	2.8	2.9	.6	.5	3.2	3.5	1.8	2.1	.8	.7
275	Commercial printing	3.4	3.3	2.7	2.6	.6	.6	3.2	3.2	1.6	1.7	.9	.8
2751	Commercial printing, letterpress	3.5	3.4	2.7	2.5	.7	.8	3.4	3.4	1.8	1.8	1.0	.9
2752	Commercial printing, lithographic	3.3	3.4	2.7	2.7	.5	.5	3.0	3.1	1.5	1.6	.9	.8
278	Blankbooks and bookbinding	4.8	5.0	4.1	4.3	.5	.6	4.3	5.0	2.6	3.0	.8	1.1
28	<b>CHEMICALS AND ALLIED PRODUCTS</b>												
281	Industrial inorganic chemicals	1.5	1.4	1.2	1.1	.2	.2	1.4	1.3	.6	.6	.2	.2
2819	Industrial inorganic chemicals, nec	1.4	1.4	1.1	1.1	.1	.1	1.2	1.2	.6	.6	.2	.2
282	Plastics materials and synthetics	1.3	1.3	.9	1.0	.2	.1	1.3	1.2	.6	.6	.2	.2
2821	Plastics materials and resins	1.5	1.7	1.2	1.5	.1	.1	1.5	1.6	.7	.8	.3	.2
2824	Organic fibers, noncellulosic	.9	.7	.6	.5	.1	.1	.9	.8	.5	.4	.1	.1
283	Drugs	1.7	1.7	1.3	1.3	.2	.2	1.5	1.5	.8	.8	.3	.3
2834	Pharmaceutical preparations	1.7	1.7	1.4	1.4	.2	.2	1.6	1.6	.8	.8	.3	.3
284	Soap, cleaners, and toilet goods	2.8	2.8	2.0	2.0	.6	.6	2.6	2.8	1.1	1.3	.9	.8
2841	Soap and other detergents	2.0	1.8	1.3	1.1	.6	.7	1.9	2.0	.6	.6	.7	.9
2844	Toilet preparations	3.3	3.5	2.2	2.5	.8	.7	3.2	3.3	1.2	1.6	1.1	.9
285	Paints and allied products	2.4	2.5	2.0	2.1	.2	.2	2.3	2.5	1.3	1.4	.4	.4
286	Industrial organic chemicals	1.2	1.2	.9	1.0	.1	.1	1.2	1.2	.5	.6	.1	.1
287	Agricultural chemicals	3.1	3.2	2.4	2.5	.6	.6	2.9	2.7	1.4	1.4	1.0	.7
289	Miscellaneous chemical products	2.2	2.3	1.7	1.7	.3	.4	2.1	2.4	1.1	1.1	.4	.6
29	<b>PETROLEUM AND COAL PRODUCTS</b>												
291	Petroleum refining	1.5	1.8	1.3	1.6	( <sup>1</sup> )	.1	1.4	1.4	.5	.5	.3	.4
295	Paving and roofing materials	5.1	4.9	3.7	3.7	1.1	1.0	5.2	5.0	2.4	2.4	1.7	1.5
30	<b>RUBBER AND MISC. PLASTICS PRODUCTS</b>												
301	Tires and inner tubes	2.0	1.6	1.0	.9	.5	.3	2.0	2.0	.6	.6	.6	.7
302	Rubber and plastics footwear	7.3	7.7	6.3	6.3	.6	.8	7.6	8.4	5.6	5.3	.8	1.4
303,4	Reclaimed rubber, and rubber and plastics hose and belting	3.6	3.1	2.7	2.4	.5	.4	3.5	3.4	1.9	1.8	.8	.9
306	Fabricated rubber products, nec	4.0	3.7	3.0	2.7	.6	.7	3.8	4.5	2.0	2.0	.7	1.4
307	Miscellaneous plastics products	5.9	5.9	4.9	4.8	.7	.8	5.8	6.1	3.5	3.5	1.0	1.3
31	<b>LEATHER AND LEATHER PRODUCTS</b>												
311	Leather tanning and finishing	4.8	5.6	3.5	3.2	1.2	2.3	5.6	6.6	2.6	2.6	2.1	3.0
314	Footwear, except rubber	7.7	7.1	5.7	5.1	1.5	1.5	8.1	7.8	5.1	4.6	1.7	2.1
3143	Men's footwear, except athletic	6.9	6.1	5.7	4.8	.8	.9	7.3	6.8	5.4	4.6	.8	1.1
3144	Women's footwear, except athletic	7.9	7.5	5.4	4.9	1.9	2.0	8.4	8.3	4.9	4.5	2.2	2.6
<b>NONMANUFACTURING:</b>													
<b>MINING</b>													
10	<b>METAL MINING</b>												
101	Iron ores	2.6	2.4	1.7	1.0	.5	.6	2.3	2.4	.7	.5	.8	.7
102	Copper ores	1.5	2.2	1.0	1.8	.2	.2	1.8	1.5	.6	.6	.5	.3
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b>												
13	<b>OIL AND GAS EXTRACTION</b>												
131, 2	Crude petroleum, natural gas, and natural gas liquids	2.3	2.5	1.6	1.9	.4	.4	1.9	1.8	1.1	1.0	.2	.1
138	Oil and gas field services	9.9	10.4	8.1	8.3	.7	1.3	8.5	9.0	6.5	6.6	.5	.7
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>												
142	Crushed and broken stone	4.3	4.1	2.8	2.8	1.4	1.1	4.0	3.7	1.7	1.8	1.7	1.4
144	Sand and gravel	5.2	4.9	3.5	3.2	1.5	1.4	4.6	4.9	2.1	2.0	1.8	1.9
-	<b>COMMUNICATION:</b>												
481	Telephone communication	1.3	1.2	1.0	1.1	( <sup>1</sup> )	( <sup>1</sup> )	1.0	1.0	.4	.4	.1	.2

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

p=preliminary.



**ESTABLISHMENT DATA**  
**SEASONALLY ADJUSTED LABOR TURNOVER**

**D-3. Labor turnover rates in manufacturing, 1970 to date, seasonally adjusted**

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total accessions</b>												
1970	4.4	4.4	4.0	4.0	4.1	4.1	4.1	3.9	3.9	3.8	3.7	3.8
1971	3.8	3.7	3.7	3.8	3.8	3.8	3.8	4.0	4.0	3.9	4.0	4.2
1972	4.3	4.3	4.4	4.4	4.4	4.3	4.3	4.5	4.5	4.6	4.7	4.9
1973	5.0	5.2	5.1	4.9	4.8	4.7	4.6	4.6	4.8	4.8	5.0	4.7
1974	4.7	4.6	4.5	4.6	4.5	4.3	4.3	4.1	4.0	3.8	3.3	3.1
1975	3.0	3.1	3.2	3.7	3.6	3.8	4.1	4.0	3.9	3.8	3.8	3.8
1976	4.2	4.1	4.2	4.0	4.0	3.8	3.9	3.8	3.8	3.7	3.8	3.9
1977	4.0	4.4	4.1	3.9	4.0	4.0	4.0	3.9	3.9	4.0	4.1	4.3
1978	4.1	3.9	4.0	4.1	4.0	4.0	4.0	4.0	4.1	4.3	4.4	4.5
1979	4.3	4.2	4.0	3.9	4.0	4.0	3.9	3.7	3.8	4.1	3.9	4.0
1980	p4.1											
<b>New hires</b>												
1970	3.3	3.2	2.9	2.8	2.7	2.8	2.8	2.7	2.6	2.5	2.4	2.4
1971	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.7	2.9
1972	3.0	3.1	3.2	3.2	3.3	3.2	3.2	3.3	3.4	3.6	3.7	4.0
1973	4.0	4.2	4.1	4.0	4.0	3.8	3.7	3.7	3.8	3.9	4.1	3.8
1974	3.8	3.7	3.6	3.5	3.5	3.3	3.3	3.1	3.0	2.7	2.3	1.9
1975	1.6	1.6	1.5	1.7	1.8	1.9	2.3	2.3	2.4	2.3	2.4	2.5
1976	2.6	2.7	2.9	2.8	2.7	2.7	2.7	2.6	2.5	2.4	2.5	2.6
1977	2.7	2.8	2.9	2.9	3.0	2.8	2.8	2.8	2.8	2.9	2.9	3.2
1978	3.0	2.9	3.0	3.1	3.0	3.0	3.0	3.0	3.1	3.3	3.4	3.5
1979	3.3	3.3	3.1	3.0	3.0	3.0	2.8	2.7	2.8	2.9	3.0	3.0
1980	p2.9											
<b>Total separations</b>												
1970	5.0	5.2	4.9	5.2	5.0	4.8	4.5	4.8	4.8	5.0	4.7	4.4
1971	4.3	4.1	4.0	4.1	4.2	4.1	4.2	4.6	4.3	4.1	4.1	4.1
1972	4.2	4.1	4.2	4.2	4.2	4.5	4.5	4.2	4.3	4.1	4.3	4.4
1973	4.6	4.7	4.8	4.6	4.6	4.7	4.9	4.6	4.5	4.7	4.8	4.8
1974	5.1	5.0	4.9	4.7	4.6	4.5	4.5	4.8	4.4	4.8	5.2	4.9
1975	5.2	5.1	4.6	4.6	4.6	4.3	4.0	3.9	3.9	3.8	3.8	3.5
1976	3.6	3.6	3.8	3.9	3.8	3.9	4.0	3.9	3.9	3.8	3.7	3.7
1977	3.9	4.1	3.7	3.7	3.8	3.7	4.0	3.8	3.9	3.8	3.8	3.9
1978	3.7	3.9	3.8	4.0	4.0	4.0	3.8	3.9	3.7	3.9	4.0	4.0
1979	4.1	4.0	3.9	3.9	4.0	4.1	4.0	4.3	3.9	3.9	4.1	4.0
1980	p4.2											
<b>Quits</b>												
1970	2.4	2.5	2.3	2.3	2.1	2.2	2.1	2.0	2.0	1.9	1.8	1.9
1971	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
1972	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.5	2.6
1973	2.8	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.9	2.9	2.7
1974	2.7	2.8	2.7	2.6	2.6	2.5	2.5	2.4	2.2	2.0	1.8	1.7
1975	1.4	1.3	1.2	1.2	1.3	1.4	1.4	1.5	1.4	1.5	1.6	1.5
1976	1.6	1.7	1.8	1.8	1.7	1.7	1.8	1.7	1.7	1.6	1.6	1.7
1977	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	2.0
1978	1.9	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.2
1979	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9
1980	p2.0											
<b>Layoffs</b>												
1970	1.5	1.7	1.8	1.9	1.9	1.9	1.5	1.9	1.9	2.2	2.0	1.7
1971	1.7	1.5	1.5	1.5	1.6	1.5	1.5	2.0	1.7	1.5	1.4	1.3
1972	1.2	1.2	1.1	1.2	1.2	1.4	1.4	1.1	1.0	1.0	.9	.9
1973	.9	.8	.9	.8	.9	.9	1.2	1.0	.9	.8	1.0	1.1
1974	1.4	1.3	1.2	1.1	1.1	1.1	1.1	1.4	1.3	1.8	2.5	2.5
1975	2.9	3.0	2.7	2.6	2.5	2.2	1.7	1.6	1.7	1.5	1.5	1.3
1976	1.2	1.0	1.2	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.3	1.2
1977	1.3	1.5	1.1	1.1	1.1	1.1	1.3	1.2	1.1	1.1	1.0	1.0
1978	.9	1.0	1.0	1.0	1.0	1.0	.8	1.0	.8	.9	.9	.9
1979	.9	.9	.9	1.1	1.0	1.1	1.2	1.5	1.2	1.1	1.3	1.2
1980	p1.3											

p=preliminary.

# ESTABLISHMENT DATA STATE AND AREA LABOR TURNOVER

## D-4. Labor turnover rates in manufacturing for selected States and areas

[ Per 100 employees ]

State and area	Accession rates						Separation rates					
	Total		New hires		Recalls		Total		Quits		Layoffs	
	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>
<b>ALABAMA:</b>												
Birmingham .....	2.3	1.3	1.3	0.6	0.7	0.5	3.0	2.0	0.9	0.6	1.3	0.8
Mobile .....	5.6	4.6	2.1	1.5	3.5	2.9	6.8	5.6	1.6	1.1	4.6	4.1
<b>ALASKA</b> .....	12.9	2.7	3.0	.8	9.9	1.7	28.1	6.1	2.9	.9	25.0	5.0
<b>ARIZONA</b> .....	4.1	3.2	3.7	2.8	.4	.3	4.0	3.4	2.5	1.8	.5	.5
Phoenix .....	4.2	3.3	3.7	2.8	.4	.4	4.0	3.3	2.5	1.8	.4	.4
<b>ARKANSAS</b> .....	4.3	3.1	3.4	2.0	.6	1.0	5.1	4.7	2.9	1.9	1.2	2.2
Fort Smith .....	3.2	2.8	2.1	1.5	.4	.8	5.1	4.8	3.3	1.4	1.0	2.9
Little Rock—North Little Rock .....	3.1	4.2	2.8	2.2	.2	1.9	3.6	6.6	1.8	2.0	.9	3.5
Pine Bluff .....	3.1	2.2	2.7	2.0	.3	.2	2.2	2.1	1.4	1.1	.1	.1
<b>COLORADO</b> .....	4.1	(*)	3.6	(*)	.2	(*)	4.5	(*)	2.9	(*)	.8	(*)
Denver—Boulder .....	3.8	(*)	3.5	(*)	.2	(*)	4.1	(*)	2.5	(*)	.7	(*)
<b>CONNECTICUT</b> .....	2.5	1.9	2.1	1.4	.2	.3	2.3	2.1	1.2	.9	.5	.6
Hartford .....	2.4	1.7	2.2	1.4	.1	.1	2.3	1.7	1.4	.9	.5	.4
<b>DELAWARE</b> .....	6.6	1.2	1.0	.6	5.5	.3	7.2	6.4	.7	.5	6.0	5.3
Wilmington .....	6.7	1.0	.7	.4	5.9	.3	7.4	6.4	.6	.3	6.4	5.5
<b>FLORIDA</b> .....	5.7	3.8	4.2	3.1	1.3	.6	4.4	3.8	2.8	2.3	.7	.7
Fort Lauderdale—Hollywood .....	5.8	3.8	5.4	3.3	.3	.4	5.1	4.4	4.0	3.1	.3	.5
Jacksonville .....	4.0	2.3	2.3	1.7	1.5	.6	3.9	3.2	1.5	1.8	1.6	.9
Miami .....	4.0	2.6	3.6	2.3	.4	.2	4.0	3.4	2.8	2.1	.4	.6
Orlando .....	4.9	4.0	4.1	3.3	.7	.6	3.4	3.0	2.4	2.1	.3	.2
Pensacola .....	.9	.6	.7	.5	.1	(1)	1.2	1.0	.7	.7	.2	.2
Tampa—St. Petersburg .....	4.8	4.6	4.3	3.6	.5	.9	5.4	5.0	3.6	2.6	.8	1.7
West Palm Beach—Boca Raton .....	5.9	2.7	4.8	2.4	1.0	.3	3.5	2.6	2.5	1.9	.1	.1
<b>GEORGIA</b> <sup>2</sup> .....	3.0	1.9	2.4	1.3	.3	.3	3.5	2.5	2.0	1.4	.7	.5
Atlanta .....	2.6	2.0	2.2	1.2	.2	.6	3.6	2.2	1.8	1.0	1.0	.7
<b>HAWAII</b> <sup>3</sup> .....	3.7	1.9	1.8	1.4	.6	.3	2.3	1.7	1.0	.7	.9	.5
<b>IDAHO</b> <sup>4</sup> .....	2.3	2.5	1.6	1.0	.5	1.5	6.2	4.8	1.5	1.1	2.7	3.1
<b>ILLINOIS:</b>												
Chicago SMSA .....	2.7	1.9	2.1	1.4	.3	.3	3.5	2.5	1.5	1.0	1.0	.8
<b>INDIANA</b> <sup>5</sup> .....	1.8	2.0	1.0	.6	.4	.8	4.3	3.4	.8	.5	2.8	2.3
Indianapolis <sup>6</sup> .....	1.9	1.9	1.1	.7	.3	.8	3.2	2.5	1.0	.7	1.4	.9
<b>IOWA</b> .....	2.5	2.1	1.7	1.2	.5	.7	3.4	4.2	1.1	.9	1.7	2.9
Cedar Rapids .....	2.1	1.7	.9	.7	.7	.8	2.4	2.0	.8	.6	.9	1.1
Des Moines .....	2.7	1.9	1.4	1.0	.1	.2	3.2	2.4	1.3	.7	.2	.6
<b>KANSAS</b> .....	4.3	2.5	3.4	2.0	.6	.4	3.9	2.8	2.3	1.5	.8	.7
Topeka .....	4.4	4.3	2.3	3.0	2.0	1.2	2.7	3.2	1.4	.9	.9	1.6
Wichita .....	4.7	2.1	4.1	1.9	.4	.1	3.4	2.3	2.3	1.4	.1	.1
<b>KENTUCKY</b> .....	3.2	2.2	1.8	1.1	.8	.9	3.5	2.4	1.3	.7	1.3	1.2
Louisville .....	1.6	1.6	.7	.6	.2	.5	2.2	1.6	.6	.4	.6	.4
<b>LOUISIANA</b>												
New Orleans .....	4.0	2.3	3.6	2.0	.3	.2	4.8	4.2	2.9	2.4	.8	.7
<b>MAINE</b> .....	4.3	3.1	3.0	2.3	1.0	.6	5.3	4.1	2.2	1.5	2.2	1.7
Portland .....	3.2	2.2	2.5	1.9	.3	.1	3.3	2.7	2.1	1.7	.3	.6
<b>MARYLAND</b> .....	2.2	1.8	1.4	1.0	.6	.6	3.1	4.4	1.0	.7	1.4	3.2
Baltimore .....	1.9	1.7	1.1	.9	.6	.7	2.7	4.4	.8	.5	1.3	3.3
<b>MASSACHUSETTS</b> .....	2.8	(*)	2.2	(*)	.3	(*)	3.4	(*)	1.7	(*)	1.0	(*)
Boston .....	2.4	(*)	2.1	(*)	.2	(*)	3.0	(*)	1.3	(*)	1.0	(*)
<b>MICHIGAN</b> .....	1.4	1.4	.6	.4	.6	.7	2.5	3.5	.5	.4	1.6	2.6
Detroit .....	1.1	.9	.4	.2	.5	.5	2.0	2.4	.4	.3	1.3	1.8
Flint .....	.6	.9	(1)	.1	.5	.5	.4	5.9	.1	.1	.1	5.3
Grand Rapids .....	2.2	2.0	1.0	.7	.8	1.1	3.7	4.1	.9	.7	2.2	2.9
Lansing—East Lansing .....	.4	.7	.1	.1	.1	.5	1.8	.9	1.1	.1	.4	.4

See footnotes at end of table.

**ESTABLISHMENT DATA  
STATE AND AREA LABOR TURNOVER**

**D-4. Labor turnover rates in manufacturing for selected States and areas—Continued**

[ Per 100 employees ]

State and area	Accession rates						Separation rates					
	Total		New hires		Recalls		Total		Quits		Layoffs	
	Nov. 1979	Dec. 1979 <sup>p</sup>	Nov. 1979	Dec. 1979 <sup>p</sup>	Nov. 1979	Dec. 1979 <sup>p</sup>	Nov. 1979	Dec. 1979 <sup>p</sup>	Nov. 1979	Dec. 1979 <sup>p</sup>	Nov. 1979	Dec. 1979 <sup>p</sup>
MINNESOTA	3.2	2.2	2.6	1.7	0.4	0.4	4.0	4.0	2.0	1.5	1.3	2.0
Minneapolis—St. Paul	2.8	2.0	2.3	1.6	.3	.3	3.4	3.1	1.8	1.5	1.0	1.2
MISSISSIPPI:												
Jackson	3.2	1.7	2.3	1.4	.7	.2	3.3	2.8	1.9	1.5	.9	.8
MISSOURI	2.4	1.9	1.8	1.2	.5	.5	3.3	2.6	1.3	1.0	1.3	1.1
Kansas City	2.3	1.8	1.9	1.5	.4	.2	2.8	2.5	1.3	1.1	.8	.8
St. Louis	2.0	1.3	1.3	.8	.6	.4	2.5	2.2	.7	.6	1.2	1.2
MONTANA	2.0	1.9	1.6	.8	.3	.3	5.8	2.8	1.6	.8	3.1	1.5
NEBRASKA	3.0	2.1	2.7	1.8	( <sup>1</sup> )	.2	3.7	2.8	2.3	1.7	.8	.6
NEVADA	4.9	4.0	4.7	3.8	.1	( <sup>1</sup> )	5.4	5.5	3.5	3.2	.5	1.1
NEW HAMPSHIRE	4.2	3.8	3.8	2.7	.2	1.0	4.3	5.4	2.9	2.0	.6	2.8
NEW JERSEY:												
Camden <sup>7</sup>	1.8	2.2	1.3	1.4	.3	.5	3.0	4.1	.8	.7	1.4	2.7
Hackensack	3.4	2.7	2.7	2.0	.6	.6	3.6	4.1	1.5	1.5	1.1	1.8
Jersey City	2.8	2.0	1.8	.9	.8	1.0	4.4	4.0	1.3	.7	2.3	2.8
Newark	2.6	2.1	2.0	1.4	.3	.2	3.3	2.5	1.2	.9	1.3	.9
New Brunswick—Perth Amboy—Sayreville	4.0	2.4	3.3	2.0	.6	.3	3.9	3.9	1.9	1.3	1.0	1.1
Paterson—Clifton—Passaic	3.8	1.9	2.4	1.6	1.2	.2	4.5	5.0	1.3	1.2	2.6	3.1
Trenton	2.2	2.0	1.4	1.1	.6	.7	3.8	2.7	.7	.7	2.4	1.5
NEW YORK	2.8	2.2	1.8	1.2	.9	.8	3.9	4.1	1.1	.8	2.1	2.7
Albany—Schenectady—Troy	2.1	2.1	1.1	.8	.6	.8	2.5	3.0	.8	.5	1.0	1.5
Binghamton	1.4	2.8	1.1	.9	.2	1.8	4.0	1.5	1.2	.8	2.1	.2
Buffalo	2.0	1.2	.9	.5	.8	.5	2.7	3.0	.5	.3	1.7	2.2
Elmira	2.2	1.2	1.5	.7	.3	.1	3.2	2.1	.8	.4	1.6	.8
Monroe County <sup>8</sup>	1.3	1.1	1.0	.8	.1	.1	1.7	1.5	.6	.4	.7	.7
Nassau—Suffolk <sup>9</sup>	4.0	2.4	3.3	1.9	.6	.4	4.1	3.4	2.1	1.5	1.1	1.2
New York and Nassau—Suffolk	3.6	2.6	2.4	1.6	1.1	.9	4.5	5.6	1.4	1.1	2.4	3.6
New York SMSA <sup>9</sup>	3.5	2.7	2.1	1.5	1.3	1.1	4.6	6.1	1.2	1.0	2.7	4.3
New York City <sup>10</sup>	3.7	2.8	2.2	1.6	1.4	1.2	5.0	6.8	1.3	1.0	3.0	4.8
Rochester	1.6	1.4	1.2	.9	.2	.3	2.4	2.3	.8	.5	1.1	1.3
Syracuse	1.9	1.5	1.3	.8	.3	.5	3.1	2.8	.8	.6	1.7	1.4
Utica—Rome	1.6	1.4	1.1	.9	.3	.3	2.5	2.1	.8	.7	1.2	.9
Westchester County <sup>10</sup>	2.5	1.8	1.5	1.4	.6	.3	2.1	2.3	.9	.8	.6	1.0
NORTH CAROLINA	3.3	2.1	2.8	1.6	.3	.3	3.8	2.6	2.2	1.5	.8	.5
Charlotte—Gastonia	4.6	2.9	4.0	2.5	.4	.3	4.5	3.3	3.2	2.2	.3	.2
Greensboro—Winston-Salem—High Point	3.2	1.9	2.7	1.5	.2	.1	2.0	2.2	.6	1.3	.4	.3
NORTH DAKOTA	4.4	3.5	3.9	2.8	.4	.3	11.0	8.3	4.2	2.7	6.3	5.2
Fargo—Moorhead	3.6	2.7	3.0	2.2	.5	.2	11.3	8.1	2.3	2.1	8.3	5.6
OHIO	1.8	1.5	1.0	.7	(*)	(*)	3.3	2.6	.6	.5	2.0	1.6
Akron	1.0	1.0	.5	.5	(*)	(*)	1.8	1.7	.4	.4	1.0	1.0
Canton	2.7	2.0	1.3	.7	(*)	(*)	3.1	2.1	.6	.4	1.6	.9
Cincinnati	2.2	1.6	1.3	1.1	(*)	(*)	2.4	1.6	.7	.4	.8	.4
Cleveland	1.8	1.6	1.2	1.0	(*)	(*)	2.8	2.2	.8	.6	1.3	.9
Columbus	2.4	1.4	1.6	.8	(*)	(*)	2.8	1.7	.8	.5	1.4	.6
Dayton	1.5	.8	1.2	.6	(*)	(*)	2.8	2.0	.6	.3	1.5	.9
Toledo	1.8	1.1	.6	.7	(*)	(*)	3.5	2.6	.4	.3	2.5	1.7
Youngstown—Warren	1.5	1.9	.5	.3	(*)	(*)	3.6	3.2	.3	.2	2.6	2.4
OKLAHOMA	5.7	3.3	4.7	2.8	.7	.4	5.4	3.9	3.6	2.7	.8	.5
Oklahoma City	5.9	3.4	5.3	2.8	.4	.5	5.7	3.9	4.2	2.7	.5	.6
Tulsa <sup>11</sup>	5.1	3.2	4.7	3.0	.2	.2	5.1	3.9	3.1	2.4	.6	.5
OREGON <sup>5</sup>	3.0	2.2	2.2	1.6	.6	.5	4.9	3.9	1.7	1.2	2.4	2.1
Eugene—Springfield <sup>5</sup>	1.5	1.4	1.1	1.0	.3	.2	3.4	3.2	1.0	1.0	1.6	1.5
Portland <sup>5</sup>	3.8	2.8	2.9	2.2	.8	.5	4.7	3.4	1.9	1.3	2.1	1.4
PENNSYLVANIA	2.3	1.9	1.3	.9	.8	.9	3.0	3.1	.8	.6	1.6	2.0
Allentown—Bethlehem—Easton	2.1	1.2	1.3	.8	.5	.3	2.7	2.6	.7	.5	1.7	1.7
Alltoona	2.2	1.4	.9	.6	1.3	.6	2.7	2.0	.8	.7	1.5	1.0
Erie	1.6	1.3	.9	.5	.4	.5	2.7	3.3	.6	.5	1.5	2.3
Harrisburg	2.0	2.1	1.4	1.2	.4	.5	2.6	3.6	1.0	1.1	1.1	1.8
Johnstown	2.5	1.5	.5	.5	2.0	1.0	2.3	1.9	.5	.4	1.6	1.2
Lancaster	2.8	2.0	2.4	1.7	.3	.3	2.7	2.5	1.6	1.4	.7	.6

See footnotes at end of table.

# ESTABLISHMENT DATA STATE AND AREA LABOR TURNOVER

## D-4. Labor turnover rates in manufacturing for selected States and areas—Continued

[ Per 100 employees ]

State and area	Accession rates						Separation rates					
	Total		New hires		Recalls		Total		Quits		Layoffs	
	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>	Nov. 1979	Dec. 1979 <sup>P</sup>
<b>PENNSYLVANIA—Continued</b>												
Northeast Pennsylvania .....	2.8	2.2	1.3	0.8	1.2	1.2	4.1	5.0	1.0	0.5	2.4	4.0
Philadelphia SMSA .....	2.2	1.8	1.6	1.0	.5	.6	3.1	3.0	1.0	.7	1.4	1.7
Pittsburgh .....	2.0	2.0	.7	.5	1.0	1.3	2.2	3.9	.4	.3	1.3	3.1
Reading .....	2.3	2.2	1.7	1.4	.5	.7	2.8	2.5	1.1	1.0	1.3	1.0
Scranton .....	2.2	1.6	1.2	.9	1.0	.6	2.5	4.0	.8	.3	1.4	3.3
Wilkes-Barre—Hazleton .....	2.5	2.7	1.2	.8	1.0	1.7	4.4	5.8	1.0	.5	2.8	4.8
Williamsport .....	1.3	1.0	.7	.3	.5	.5	2.1	1.2	.3	.3	1.4	.6
York .....	2.7	2.1	2.2	1.6	.5	.4	3.5	2.8	1.8	1.0	1.2	1.4
<b>RHODE ISLAND</b>												
Providence—Warwick—Pawtucket .....	3.8	2.7	3.1	2.0	.4	.5	6.3	5.0	2.6	1.5	2.6	2.7
Providence—Warwick—Pawtucket .....	3.8	2.7	3.1	2.0	.4	.5	6.5	4.9	2.7	1.6	2.8	2.7
<b>SOUTH CAROLINA</b>												
Charleston—North Charleston .....	2.9	2.0	2.5	1.6	.2	.1	3.2	2.7	1.9	1.3	.5	.6
Charleston—North Charleston .....	3.3	1.6	2.8	1.4	.3	.1	4.7	2.3	2.0	1.3	1.5	.4
Columbia .....	2.6	1.3	2.4	1.2	.1	( <sup>1</sup> )	5.1	4.9	1.7	1.3	2.5	3.1
Greenville—Spartanburg .....	3.7	2.4	3.4	2.2	.1	.1	3.9	2.9	2.5	1.7	.5	.2
<b>SOUTH DAKOTA</b>												
Sioux Falls .....	3.8	3.2	3.2	2.7	.2	.3	4.0	3.4	2.5	1.6	.8	1.1
Sioux Falls .....	3.4	3.0	2.9	2.2	.4	.8	5.5	1.9	2.0	1.1	2.7	.5
<b>TENNESSEE:</b>												
Memphis .....	2.0	1.4	1.2	.9	.6	.4	3.4	2.6	1.1	.9	1.6	1.1
<b>TEXAS:</b>												
Dallas—Fort Worth .....	4.5	(*)	4.2	(*)	.2	(*)	4.4	(*)	3.1	(*)	.4	(*)
Houston .....	3.8	(*)	3.5	(*)	.1	(*)	3.5	(*)	2.4	(*)	.2	(*)
San Antonio .....	5.5	(*)	5.0	(*)	.2	(*)	4.3	(*)	3.1	(*)	.3	(*)
<b>UTAH<sup>4</sup></b>												
Salt Lake City—Ogden .....	4.9	3.4	4.5	3.0	.2	.2	4.0	4.1	2.6	2.6	.5	.6
Salt Lake City—Ogden .....	5.2	3.2	4.9	3.1	.1	.1	4.2	3.9	2.8	2.6	.4	.7
<b>VERMONT</b>												
Burlington .....	2.7	2.3	1.9	1.6	.6	.6	3.6	3.9	1.4	1.0	1.4	2.3
Burlington .....	1.7	1.3	1.5	1.1	.1	( <sup>1</sup> )	1.8	2.1	.9	.6	.6	1.1
Springfield .....	2.5	2.4	1.7	1.3	.8	1.1	3.6	2.2	1.2	.7	1.8	.8
<b>VIRGINIA</b>												
Richmond .....	2.7	1.9	2.1	1.1	.5	.5	3.2	3.3	1.4	.9	1.0	1.8
Richmond .....	2.1	1.5	1.5	1.1	.2	.1	1.6	1.2	.7	.5	.3	.1
<b>WASHINGTON:</b>												
Seattle—Everett .....	2.6	1.7	2.0	1.2	.4	.4	3.4	3.3	1.2	1.0	1.4	1.7
Seattle—Everett .....	2.6	1.7	2.0	1.2	.4	.4	3.4	3.3	1.2	1.0	1.4	1.7
<b>WISCONSIN</b>												
Milwaukee .....	2.2	1.8	1.4	1.1	.4	.4	3.6	2.7	1.0	.6	1.9	1.5
Milwaukee .....	2.2	1.8	1.4	1.1	.3	.3	3.0	2.7	.9	.6	1.2	1.3
<b>WYOMING</b>												
.....	5.0	5.5	4.1	5.1	.8	.3	11.3	7.3	5.8	3.3	4.8	2.7

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

<sup>2</sup> Excludes agricultural chemicals, and miscellaneous manufacturing.

<sup>3</sup> Excludes canned fruits, vegetables, preserves, jams, and jellies.

<sup>4</sup> Excludes canning and preserving, and sugar.

<sup>5</sup> Excludes canning and preserving.

<sup>6</sup> Excludes canning and preserving, and newspapers.

<sup>7</sup> Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area.

<sup>8</sup> Subarea of Rochester Standard Metropolitan Statistical Area.

<sup>9</sup> Area included in New York and Nassau-Suffolk combined SMSA's.

<sup>10</sup> Subarea of New York Standard Metropolitan Statistical Area.

<sup>11</sup> Excludes new-hire rate for transportation equipment.

<sup>12</sup> Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area.

<sup>13</sup> Excludes canning and preserving, printing and publishing.

<sup>P</sup> preliminary.

\* Not available.

SOURCE: Cooperating State agencies listed on inside back cover.

# STATE AND AREA UNEMPLOYMENT DATA

## E-1. Labor force and unemployment by State and selected metropolitan areas

(Numbers in thousands)

State and area	Labor force			Unemployment					
	JAN. 1979	DEC. 1979	JAN. 1980P	Number			Percent of labor force		
				JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>ALABAMA</b> .....	1,572.3	1,632.0	1,605.9	107.0	118.0	125.2	6.8	7.2	7.8
Birmingham .....	367.2	383.4	375.6	22.8	25.1	25.8	6.2	6.6	6.9
Huntsville .....	130.9	137.2	135.1	8.9	9.7	10.6	6.8	7.1	7.8
Mobile .....	174.2	179.5	176.5	12.6	12.6	13.1	7.2	7.0	7.4
Montgomery .....	114.4	119.9	118.4	6.4	6.5	7.3	5.6	5.4	6.1
Tuscaloosa .....	50.9	51.1	52.2	3.4	3.0	3.9	6.7	5.9	7.5
<b>ALASKA</b> .....	167.7	173.5	N.A.	18.7	15.5	N.A.	11.2	9.0	N.A.
<b>ARIZONA</b> .....	1,030.1	1,094.4	1,094.8	58.1	56.8	65.5	5.6	5.2	6.0
Phoenix .....	629.9	670.5	671.4	30.0	31.2	35.7	4.8	4.7	5.3
Tucson .....	185.2	197.6	196.7	9.6	8.6	9.8	5.2	4.3	5.0
<b>ARKANSAS</b> .....	902.4	933.7	905.6	74.3	61.9	63.4	8.2	6.6	7.0
Fayetteville-Springdale .....	71.5	76.4	73.6	4.4	3.8	3.9	6.2	5.0	5.3
Fort Smith <sup>1</sup> .....	80.5	82.5	80.3	7.2	6.3	6.2	8.9	7.7	7.8
Little Rock-North Little Rock .....	175.7	184.2	177.9	8.7	8.7	7.6	4.9	4.7	4.3
Pine Bluff .....	36.1	37.3	35.4	2.7	1.9	2.0	7.6	5.1	5.6
<b>CALIFORNIA</b> <sup>2</sup> .....	10,835.1	11,195.4	11,064.7	782.0	674.7	726.5	7.2	6.0	6.6
Anaheim-Santa Ana-Garden Grove .....	1,037.9	1,095.9	1,073.7	48.8	42.9	44.9	4.7	3.9	4.2
Bakersfield .....	170.5	178.9	176.6	15.4	16.0	14.1	9.1	8.9	8.0
Fresno .....	248.4	263.5	258.3	23.2	23.2	22.7	9.3	8.8	8.8
Los Angeles-Long Beach <sup>2</sup> .....	3,541.0	3,599.0	3,599.0	229.0	164.0	218.0	6.5	4.6	6.1
Modesto .....	123.8	130.7	126.7	16.0	15.5	15.4	12.9	11.8	12.1
Oxnard-Simi Valley-Ventura .....	216.3	223.3	220.7	17.8	16.7	15.7	8.3	7.5	7.1
Riverside-San Bernardino-Ontario .....	565.7	583.5	580.1	38.2	38.4	36.7	6.7	6.6	6.3
Sacramento .....	449.3	470.1	463.0	38.4	34.1	33.6	8.5	7.3	7.3
Salinas-Seaside-Monterey .....	120.4	127.5	121.7	13.5	12.7	13.7	11.2	9.9	11.3
San Diego .....	719.6	747.5	739.1	51.4	47.0	45.5	7.1	6.3	6.2
San Francisco-Oakland .....	1,587.3	1,619.4	1,593.1	99.2	88.5	85.2	6.3	5.5	5.3
San Jose .....	682.3	727.8	720.1	38.7	36.9	38.8	5.7	5.1	5.4
Santa Barbara-Santa Maria-Lompoc .....	142.1	146.6	145.1	10.4	8.7	9.0	7.3	5.9	6.2
Santa Rosa .....	123.3	130.3	127.4	10.0	9.2	8.9	8.1	7.0	7.0
Stockton .....	152.1	161.9	153.7	19.2	18.8	17.8	12.6	11.6	11.6
Vallejo-Fairfield-Napa .....	119.3	124.0	123.2	8.8	8.3	8.6	7.3	6.7	7.0
<b>COLORADO</b> .....	1,317.0	1,416.1	1,414.6	71.5	69.9	67.8	5.4	4.9	4.8
Denver-Boulder .....	785.0	846.4	846.8	38.1	39.4	37.2	4.9	4.7	4.4
<b>CONNECTICUT</b> .....	1,542.5	1,602.8	1,583.7	86.3	79.9	96.3	5.6	5.0	6.1
Bridgeport .....	187.9	194.0	192.7	10.8	9.5	12.6	5.7	4.9	6.5
Hartford .....	371.6	388.3	379.3	18.9	18.7	19.0	5.1	4.8	5.0
New Britain .....	69.8	73.9	74.1	4.0	3.7	4.4	5.8	5.0	6.0
New Haven-West Haven .....	202.0	204.9	203.6	11.2	10.2	13.1	5.5	5.0	6.4
Stamford .....	116.8	122.2	120.3	4.9	4.7	4.9	4.2	3.8	4.0
Waterbury .....	106.9	110.6	111.7	7.1	6.6	9.6	6.7	5.9	8.6
<b>DELAWARE</b> .....	268.9	275.7	282.0	24.1	20.4	26.4	8.9	7.4	9.4
Wilmington <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>DISTRICT OF COLUMBIA</b> .....	N.A.	N.A.	311.5	N.A.	N.A.	20.0	N.A.	N.A.	6.4
Washington SMSA <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>FLORIDA</b> <sup>2</sup> .....	3,780.1	3,763.7	3,756.5	285.1	194.3	212.5	7.5	5.2	5.7
Fort Lauderdale-Hollywood .....	400.9	397.1	397.1	28.0	18.0	19.8	7.0	4.5	5.0
Jacksonville .....	293.1	288.4	285.3	21.1	14.1	15.7	7.2	4.9	5.5
Miami .....	692.1	706.5	707.0	53.3	35.5	38.0	7.7	5.0	5.4
Orlando .....	297.0	305.4	303.3	21.3	14.4	15.9	7.2	4.7	5.3
Pensacola .....	106.0	105.1	103.1	8.7	5.9	6.0	8.2	5.6	5.8
Tampa-St. Petersburg .....	575.8	575.7	573.1	40.1	27.8	31.8	7.0	4.8	5.6
West Palm Beach-Boca Raton .....	223.5	223.9	222.9	16.7	10.8	11.6	7.5	4.8	5.2
<b>GEORGIA</b> .....	2,290.6	2,348.2	2,312.6	123.5	119.0	117.1	5.4	5.1	5.1
Albany .....	47.7	49.7	49.3	2.7	3.0	2.8	5.7	6.0	5.7
Atlanta .....	921.6	951.3	935.2	47.3	44.1	43.9	5.1	4.6	4.7
Augusta .....	119.8	121.9	121.0	6.7	6.2	6.5	5.6	5.1	5.4
Columbus <sup>1</sup> .....	84.1	85.0	84.3	5.6	5.5	5.5	6.7	6.5	6.5
Macon .....	97.1	97.4	95.5	5.8	4.9	4.5	6.0	5.1	4.8
Savannah .....	87.8	85.9	85.3	5.3	4.7	4.4	6.1	5.4	5.1

See footnotes at end of table.

# STATE AND AREA UNEMPLOYMENT DATA

## E-1. Labor force and unemployment by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Labor force			Unemployment					
				Number			Percent of labor force		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>HAWAII</b> .....	391.5	405.4	406.5	26.8	22.7	21.9	6.8	5.6	5.4
Honolulu .....	307.3	319.4	320.0	20.5	16.9	16.3	6.7	5.3	5.1
<b>IDAHO</b> .....	405.8	417.1	412.1	35.0	25.5	32.6	8.6	6.1	7.9
Boise City .....	87.3	89.3	88.5	5.1	4.1	5.2	5.9	4.6	5.9
<b>ILLINOIS</b> <sup>2</sup> .....	5,262.5	5,473.8	5,428.0	302.5	338.6	425.9	5.7	6.2	7.8
Bloomington—Normal .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Champaign—Urbana—Rantoul .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Chicago .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Davenport—Rock Island—Moline <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Decatur .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peoria .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Rockford .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Springfield .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>INDIANA</b> .....	2,561.9	2,648.2	2,603.5	165.3	204.0	241.0	6.5	7.7	9.3
Anderson .....	N.A.	N.A.	60.8	N.A.	N.A.	9.8	N.A.	N.A.	16.0
Evansville <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Fort Wayne .....	N.A.	N.A.	194.3	N.A.	N.A.	16.5	N.A.	N.A.	8.5
Gary—Hammond—East Chicago .....	N.A.	N.A.	301.6	N.A.	N.A.	31.1	N.A.	N.A.	10.3
Indianapolis .....	N.A.	N.A.	593.7	N.A.	N.A.	42.5	N.A.	N.A.	7.2
Lafayette—West Lafayette .....	N.A.	N.A.	59.5	N.A.	N.A.	4.2	N.A.	N.A.	7.1
Muncie .....	N.A.	N.A.	57.0	N.A.	N.A.	6.2	N.A.	N.A.	10.8
South Bend .....	N.A.	N.A.	142.2	N.A.	N.A.	12.1	N.A.	N.A.	8.5
Terre Haute .....	N.A.	N.A.	84.9	N.A.	N.A.	6.8	N.A.	N.A.	8.0
<b>IOWA</b> .....	1,366.2	1,402.0	N.A.	76.2	59.1	N.A.	5.6	4.2	N.A.
Cedar Rapids .....	85.4	89.6	N.A.	3.9	3.3	N.A.	4.5	3.7	N.A.
Des Moines .....	182.2	183.2	N.A.	9.3	7.3	N.A.	5.1	4.0	N.A.
Dubuque .....	44.6	45.6	N.A.	3.2	2.4	N.A.	7.1	5.3	N.A.
Sioux City <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Waterloo—Cedar Falls .....	66.9	70.1	N.A.	4.0	2.6	N.A.	6.0	3.6	N.A.
<b>KANSAS</b> .....	1,145.3	1,206.1	1,201.0	44.6	43.2	44.5	3.9	3.6	3.7
Topeka .....	95.2	98.9	97.8	4.9	4.8	5.1	5.1	4.8	5.2
Wichita .....	219.5	236.8	234.4	8.4	8.0	7.5	3.8	3.4	3.2
<b>KENTUCKY</b> .....	1,533.4	1,568.8	1,615.0	111.5	90.8	118.6	7.3	5.8	7.3
Lexington—Fayette .....	N.A.	N.A.	173.4	N.A.	N.A.	8.0	N.A.	N.A.	4.6
Louisville <sup>1</sup> .....	N.A.	N.A.	426.4	N.A.	N.A.	28.8	N.A.	N.A.	6.7
Owensboro .....	N.A.	N.A.	40.2	N.A.	N.A.	3.1	N.A.	N.A.	7.6
<b>LOUISIANA</b> .....	1,622.0	1,674.6	1,710.1	116.0	104.2	143.3	7.1	6.2	8.4
Alexandria .....	65.7	66.2	67.0	5.8	5.3	7.4	8.9	8.1	11.0
Baton Rouge .....	200.1	205.5	208.5	13.8	12.6	17.1	6.9	6.1	8.2
Lafayette .....	68.8	74.6	76.1	3.3	3.0	4.2	4.8	4.1	5.5
Lake Charles .....	67.7	71.4	72.1	5.0	4.3	5.4	7.4	6.0	7.5
Monroe .....	53.4	53.6	54.4	4.6	3.9	5.6	8.7	7.3	10.2
New Orleans .....	463.9	471.4	483.4	27.6	24.9	34.5	6.0	5.3	7.1
Shreveport .....	148.0	152.3	154.4	9.6	8.7	11.7	6.5	5.7	7.5
<b>MAINE</b> .....	465.9	486.0	N.A.	35.0	34.2	N.A.	7.5	7.0	N.A.
Lewiston—Auburn .....	37.3	38.9	N.A.	2.4	2.4	N.A.	6.5	6.1	N.A.
Portland .....	84.7	88.8	N.A.	4.7	4.6	N.A.	5.6	5.2	N.A.
<b>MARYLAND</b> .....	2,032.5	2,121.2	N.A.	130.6	136.5	N.A.	6.4	6.4	N.A.
Baltimore .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>MASSACHUSETTS</b> <sup>2</sup> .....	2,901.7	2,851.8	2,829.6	219.0	144.1	181.5	7.5	5.1	6.4
Boston .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Brockton .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Fall River <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Lawrence—Haverhill <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Lowell .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
New Bedford .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Springfield—Chicopee—Holyoke .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Worcester .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>MICHIGAN</b> <sup>2</sup> .....	4,249.8	4,322.9	4,265.7	340.7	368.0	438.5	8.0	8.5	10.3
Ann Arbor .....	137.4	146.6	139.7	7.5	11.3	9.2	5.4	7.7	6.6

See footnotes at end of table.

# STATE AND AREA UNEMPLOYMENT DATA

## E-1. Labor force and unemployment by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Labor force			Unemployment					
				Number			Percent of labor force		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>MICHIGAN—Continued</b>									
Battle Creek	79.9	79.0	78.8	6.0	5.7	6.6	7.5	7.2	8.4
Bay City	50.6	52.1	52.0	3.9	5.0	6.2	7.6	9.6	12.0
Detroit	2,032.0	2,063.9	2,026.4	150.8	184.9	214.7	7.4	9.0	10.6
Flint	221.0	224.0	224.4	19.9	20.3	29.6	9.0	9.0	13.2
Grand Rapids	301.8	310.2	303.9	18.4	17.2	19.5	6.1	5.6	6.4
Jackson	67.2	67.9	67.5	4.7	5.1	6.0	7.0	7.5	8.9
Kalamazoo—Portage	130.6	134.7	133.4	8.7	7.4	8.6	6.7	5.5	6.4
Lansing—East Lansing	229.7	236.3	236.3	15.6	14.6	20.4	6.8	6.2	8.6
Muskegon—Norton Shores—Muskegon Heights	74.9	75.0	75.4	7.5	6.6	8.0	10.0	8.8	10.6
Saginaw	102.3	103.9	103.0	7.2	10.1	11.4	7.0	9.7	11.0
<b>MINNESOTA</b>	1,979.3	2,078.7	N.A.	101.3	101.6	N.A.	5.1	4.9	N.A.
Duluth—Superior <sup>1</sup>	115.1	N.A.	N.A.	7.4	N.A.	N.A.	6.4	N.A.	N.A.
Minneapolis—St. Paul	1,070.8	1,126.4	N.A.	40.0	41.7	N.A.	3.7	3.7	N.A.
<b>MISSISSIPPI</b>	955.4	984.0	978.7	65.7	61.1	66.7	6.9	6.2	6.8
Jackson	140.6	148.9	147.3	6.5	5.9	6.4	4.6	4.0	4.4
<b>MISSOURI</b>	2,230.9	2,297.8	2,229.1	129.2	110.4	142.6	5.8	4.8	6.4
Kansas City <sup>1</sup>	679.2	698.8	679.3	33.1	30.0	35.1	4.9	4.3	5.2
St. Joseph	43.6	44.7	43.3	2.6	2.6	3.0	6.0	5.8	7.0
St. Louis <sup>1</sup>	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Springfield	100.1	104.7	101.4	4.9	4.2	5.2	4.9	4.0	5.2
<b>MONTANA</b>	348.9	364.3	349.0	28.0	19.0	26.3	8.0	5.2	7.5
Billings	53.2	56.1	55.6	3.2	2.1	3.1	6.1	3.7	5.5
Great Falls	33.5	33.1	32.6	3.1	1.9	2.7	9.3	5.6	8.2
<b>NEBRASKA</b>	740.2	764.4	N.A.	27.7	28.4	N.A.	3.7	3.7	N.A.
Lincoln	107.8	114.3	N.A.	3.4	3.7	N.A.	3.2	3.2	N.A.
Omaha <sup>1</sup>	273.2	281.0	N.A.	12.3	12.8	N.A.	4.5	4.6	N.A.
<b>NEVADA</b>	340.3	365.8	363.0	17.6	18.4	22.0	5.2	5.0	6.1
Las Vegas	188.2	200.9	200.5	9.7	11.0	12.6	5.2	5.5	6.3
Reno	98.1	108.3	106.6	4.2	4.5	5.7	4.3	4.2	5.4
<b>NEW HAMPSHIRE</b>	428.3	449.4	N.A.	14.8	17.7	N.A.	3.5	3.9	N.A.
Manchester	77.3	81.6	N.A.	2.9	3.5	N.A.	3.7	4.3	N.A.
Nashua	67.8	73.8	N.A.	2.3	2.5	N.A.	3.4	3.4	N.A.
<b>NEW JERSEY</b>	3,505.1	3,590.4	3,570.4	261.9	214.3	258.1	7.5	6.0	7.2
Atlantic City	85.8	99.7	100.0	10.2	8.1	10.6	11.9	8.1	10.6
Jersey City	252.7	252.2	250.3	28.7	22.2	25.9	11.3	8.8	10.4
Long Branch—Asbury Park	222.6	226.4	223.6	19.7	15.7	18.7	8.8	6.9	8.4
Newark	955.0	978.6	978.4	63.7	53.6	65.4	6.7	5.5	6.7
New Brunswick—Perth Amboy—Sayreville	321.5	332.1	328.3	18.4	15.7	19.6	5.7	4.7	6.0
Paterson—Clifton—Passaic	220.2	229.7	220.2	19.4	17.0	19.4	8.8	7.7	8.8
Trenton	159.8	162.2	165.5	9.7	7.4	10.6	6.0	4.5	6.4
Vineland—Millville—Bridgeton	61.6	61.6	63.3	7.5	5.8	6.6	12.2	9.5	10.4
<b>NEW MEXICO</b>	516.4	544.7	542.6	36.0	36.2	45.9	7.0	6.6	8.5
Albuquerque	195.7	205.9	205.8	12.6	13.5	17.3	6.4	6.5	8.4
<b>NEW YORK<sup>2</sup></b>	7,980.1	8,110.9	8,048.7	617.2	565.1	673.2	7.7	7.0	8.4
Albany—Schenectady—Troy	381.5	387.9	385.0	24.0	23.8	26.3	6.3	6.1	6.8
Binghamton <sup>1</sup>	N.A.	N.A.	140.8	N.A.	N.A.	8.8	N.A.	N.A.	6.3
Buffalo	584.5	601.1	597.1	47.1	53.8	63.9	8.1	9.0	10.7
Elmira	41.1	41.4	41.1	2.9	3.0	3.6	7.0	7.2	8.7
Nassau—Suffolk	1,292.8	1,327.4	1,313.8	89.2	83.6	92.2	6.9	6.3	7.0
New York	3,618.6	3,635.8	3,627.7	300.2	245.3	312.5	8.3	6.7	8.6
New York City <sup>2</sup>	3,013.0	3,007.0	3,004.0	265.0	216.0	280.0	8.8	7.2	9.3
Poughkeepsie	106.8	109.0	108.8	5.9	5.7	6.5	5.5	5.3	5.9
Rochester	471.7	485.0	479.7	27.5	29.1	33.2	5.8	6.0	6.9
Syracuse	308.1	316.9	311.5	20.1	21.4	24.5	6.5	6.7	7.9
Utica—Rome	138.6	141.4	140.1	10.0	10.3	11.4	7.2	7.2	8.2
<b>NORTH CAROLINA</b>	2,637.5	2,701.4	2,691.1	129.6	129.5	158.0	4.9	4.8	5.9
Asheville	81.4	83.0	81.4	3.7	3.4	4.0	4.5	4.1	4.9
Charlotte—Gastonia	338.4	342.9	340.1	13.8	12.2	14.8	4.1	3.5	4.4

See footnotes at end of table.

# STATE AND AREA UNEMPLOYMENT DATA

## E-1. Labor force and unemployment by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Labor force			Unemployment					
				Number			Percent of labor force		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
<b>NORTH CAROLINA—Continued</b>									
Greensboro—Winston-Salem—High Point .....	416.9	424.5	423.6	18.5	17.0	23.0	4.4	4.0	5.4
Raleigh—Durham .....	277.5	293.5	294.0	8.4	9.6	13.0	3.0	3.3	4.4
<b>NORTH DAKOTA</b> .....	273.7	286.9	282.4	16.7	11.3	15.7	6.1	3.9	5.6
Fargo—Moorehead <sup>1</sup> .....	67.6	70.1	N.A.	3.3	2.8	N.A.	4.9	4.0	N.A.
<b>OHIO<sup>2</sup></b> .....	4,982.3	5,082.0	4,994.0	330.1	266.5	349.0	6.6	5.2	7.0
Akron .....	N.A.	N.A.	304.5	N.A.	N.A.	22.6	N.A.	N.A.	7.4
Canton .....	N.A.	N.A.	184.2	N.A.	N.A.	12.8	N.A.	N.A.	6.9
Cincinnati <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Cleveland .....	N.A.	N.A.	923.5	N.A.	N.A.	52.3	N.A.	N.A.	5.7
Columbus .....	N.A.	N.A.	535.3	N.A.	N.A.	25.5	N.A.	N.A.	4.8
Dayton .....	N.A.	N.A.	386.0	N.A.	N.A.	24.8	N.A.	N.A.	6.4
Toledo <sup>1</sup> .....	N.A.	N.A.	368.5	N.A.	N.A.	33.6	N.A.	N.A.	9.1
Youngstown—Warren .....	N.A.	N.A.	236.5	N.A.	N.A.	21.8	N.A.	N.A.	9.2
<b>OKLAHOMA</b> .....	1,237.4	1,301.8	1,296.4	52.1	45.8	47.8	4.2	3.5	3.7
Oklahoma City .....	375.7	401.8	401.3	14.7	12.1	12.9	3.9	3.0	3.2
Tulsa .....	298.4	312.7	310.8	12.4	11.3	11.5	4.2	3.6	3.7
<b>OREGON</b> .....	1,189.0	1,229.3	N.A.	98.2	93.4	N.A.	8.3	7.6	N.A.
Eugene—Springfield .....	124.3	126.1	N.A.	11.5	11.2	N.A.	9.3	8.9	N.A.
Portland <sup>1</sup> .....	576.8	600.7	N.A.	37.0	33.6	N.A.	6.4	5.6	N.A.
Salem .....	109.1	115.8	N.A.	8.3	8.9	N.A.	7.6	7.7	N.A.
<b>PENNSYLVANIA<sup>2</sup></b> .....	5,272.7	5,331.4	5,331.5	375.8	353.6	413.7	7.1	6.6	7.8
Allentown—Bethlehem—Easton <sup>1</sup> .....	N.A.	N.A.	302.3	N.A.	N.A.	21.6	N.A.	N.A.	7.1
Altoona .....	57.3	59.0	59.5	5.2	5.0	5.7	9.0	8.4	9.6
Erie .....	125.4	125.9	126.0	9.5	9.4	10.6	7.6	7.5	8.4
Harrisburg .....	216.8	215.8	217.7	12.0	10.0	13.2	5.5	4.6	6.1
Johnstown .....	108.5	109.3	111.3	10.0	9.8	11.4	9.2	8.9	10.2
Lancaster .....	175.1	176.3	176.4	8.4	7.4	9.1	4.8	4.2	5.2
Northeast Pennsylvania .....	282.4	286.0	287.4	26.3	26.4	29.9	9.3	9.2	10.4
Philadelphia <sup>1</sup> .....	N.A.	N.A.	2,121.3	N.A.	N.A.	137.4	N.A.	N.A.	6.5
Pittsburgh .....	1,007.5	1,013.1	1,015.2	63.6	57.9	75.3	6.3	5.7	7.4
Reading .....	148.5	153.5	154.9	8.1	8.0	10.3	5.4	5.2	6.7
Williamsport .....	52.7	52.5	52.3	4.5	5.8	6.3	8.5	11.0	12.0
York .....	171.1	173.3	175.4	9.0	8.6	12.3	5.3	5.0	7.0
<b>RHODE ISLAND</b> .....	438.3	452.1	459.4	32.0	29.7	35.0	7.3	6.6	7.6
Providence—Warwick—Pawtucket <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>SOUTH CAROLINA</b> .....	1,261.5	1,307.4	1,285.4	66.0	64.5	75.0	5.2	4.9	5.8
Charleston—North Charleston .....	148.3	155.1	152.2	7.9	7.4	8.7	5.3	4.8	5.7
Columbia .....	168.5	177.2	172.4	6.4	6.6	7.1	3.8	3.7	4.1
Greenville—Spartanburg .....	254.5	263.9	258.1	9.9	10.5	11.9	3.9	4.0	4.6
<b>SOUTH DAKOTA</b> .....	313.5	327.0	319.2	15.5	12.6	15.9	5.0	3.9	5.0
Sioux Falls .....	61.0	60.7	61.0	2.6	2.0	2.9	4.3	3.3	4.7
<b>TENNESSEE</b> .....	1,925.0	1,993.7	1,962.0	139.0	122.6	139.2	7.2	6.2	7.1
Chattanooga <sup>1</sup> .....	190.7	195.5	193.7	11.5	12.2	13.5	6.0	6.3	7.0
Knoxville .....	281.7	285.8	283.4	11.1	10.2	12.4	5.5	5.0	6.1
Memphis <sup>1</sup> .....	373.6	388.8	379.2	25.0	21.6	22.2	6.7	5.6	5.9
Nashville—Davidson .....	391.8	415.1	408.4	18.9	20.1	21.3	4.8	4.8	5.2
<b>TEXAS<sup>2</sup></b> .....	6,126.6	6,327.4	6,345.5	270.9	225.5	327.2	4.4	3.6	5.2
Amarillo .....	86.6	90.1	89.2	3.5	2.3	3.4	4.0	2.5	3.9
Austin .....	238.5	249.6	250.1	7.3	6.4	9.6	3.1	2.6	3.8
Beaumont—Port Arthur—Orange .....	162.9	163.0	161.7	10.6	7.2	11.8	6.5	4.4	7.3
Corpus Christi .....	135.5	140.4	143.0	6.3	5.7	8.7	4.6	4.1	6.1
Dallas—Fort Worth .....	1,466.2	1,521.1	1,508.5	54.6	52.2	63.1	3.7	3.4	4.2
El Paso .....	166.6	170.0	171.9	12.8	11.0	15.7	7.7	6.5	9.1
Galveston—Texas City .....	78.9	80.6	81.3	4.4	3.1	5.3	5.5	3.8	6.5
Houston .....	1,387.4	1,447.4	1,459.7	47.6	37.7	61.3	3.4	2.6	4.2
Lubbock .....	98.9	103.6	102.6	3.5	2.6	4.3	3.5	2.5	4.1
San Antonio .....	400.8	413.9	418.3	22.1	17.6	26.5	5.5	4.3	6.3
Waco .....	76.4	79.2	79.2	3.1	2.4	3.8	4.1	3.0	4.8
Wichita Falls .....	58.7	60.0	60.2	2.1	1.5	2.2	3.7	2.4	3.6

See footnotes at end of table.



# STATE AND AREA UNEMPLOYMENT DATA

## E-1. Labor force and unemployment by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Labor force			Unemployment					
				Number			Percent of labor force		
	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P	JAN. 1979	DEC. 1979	JAN. 1980P
UTAH .....	550.8	598.0	591.0	26.9	25.8	35.2	4.9	4.3	6.0
Salt Lake City—Ogden .....	366.9	399.5	395.6	16.7	17.0	21.7	4.6	4.3	5.5
VERMONT .....	235.3	245.0	239.6	14.3	12.8	15.7	6.1	5.2	6.5
VIRGINIA .....	2,431.4	2,496.0	2,476.5	133.1	125.0	134.1	5.5	5.0	5.4
Lynchburg .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Newport News—Hampton .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Norfolk—Virginia Beach—Portsmouth <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Petersburg—Colonial Heights—Hopewell .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Richmond .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Roanoke .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
WASHINGTON .....	1,795.8	1,917.1	1,932.0	145.9	140.6	183.8	8.1	7.3	9.5
Seattle—Everett .....	789.9	855.9	855.6	45.3	47.7	57.7	5.7	5.6	6.7
Spokane .....	136.3	153.5	153.7	11.7	11.6	15.1	8.6	7.5	9.8
Tacoma .....	169.5	176.7	179.1	13.7	14.1	17.9	8.1	8.0	10.0
WEST VIRGINIA .....	727.4	767.0	N.A.	62.8	56.5	N.A.	8.6	7.4	N.A.
Charleston .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Huntington—Ashland <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Parkersburg—Marietta <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Wheeling <sup>1</sup> .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
WISCONSIN .....	2,283.7	2,420.4	2,377.5	129.0	119.3	130.4	5.7	4.9	5.5
AppletonOshkosh .....	143.1	N.A.	152.7	7.7	N.A.	7.6	5.4	N.A.	5.0
Eau Claire .....	54.7	N.A.	56.8	3.6	N.A.	4.2	6.7	N.A.	7.4
Green Bay .....	85.8	N.A.	88.2	5.4	N.A.	5.1	6.3	N.A.	5.7
Kenosha .....	56.3	N.A.	63.2	6.4	N.A.	2.7	11.3	N.A.	4.3
La Crosse .....	44.3	N.A.	46.2	2.4	N.A.	2.3	5.4	N.A.	5.0
Madison .....	170.7	N.A.	179.8	7.2	N.A.	7.0	4.2	N.A.	3.9
Milwaukee .....	705.7	N.A.	729.4	31.0	N.A.	31.2	4.4	N.A.	4.3
Racine .....	86.5	N.A.	88.2	4.9	N.A.	4.0	5.7	N.A.	4.6
WYOMING .....	204.0	228.6	221.7	7.7	7.3	9.4	3.8	3.2	4.2

<sup>1</sup> Includes interstate portion of area located in adjacent State.

<sup>2</sup> Data are obtained directly from the Current Population Survey. (See "Explanatory Notes" for State and Area Unemployment Data in Employment and Earnings, monthly.)

NOTE: Estimates for 1979 have been benchmarked to 1979 Current Population Survey annual averages. Except in the 10 States and 2 areas designated by footnote 2, estimates for 1980 are pro-

visional and will be revised when new benchmark information becomes available. Data refer to place of residence.

p=preliminary.

N.A.=not available.

SOURCE: Current Population Survey and Cooperating State Employment Security Agencies listed on inside back cover.

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 National Technical Information Service. When ordering, please specify "CETA Area Employment and Unemployment," "State, County, and Selected City Employment and Unemployment," and "Unemployment Rates for State and Local Governments." A complete set of price schedules and publications is available from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield Virginia, 22161.

# Explanatory Notes

## Introduction

The statistics in this periodical are estimated 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 about 65,000 households, representing 629 areas in 1,133 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 obtained 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 and weekly earnings, and labor turnover for the Nation, States, and metropolitan areas. The employment, hours, and earnings series are based on payroll reports from a sample of establishments employing over 30 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. Based on a somewhat smaller sample, labor turnover data relate to actions occurring during the entire 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 employer characteristics such as detailed industrial classifications can be reliably derived only from establishment reports.

Data from these two sources differ from each other because of differences in definition 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 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, and unpaid workers who worked 15 hours or more during the survey week in family-operated enterprises. Employment in both agricultural and nonagricultural in-

dustries is included. The payroll survey covers only wage and salary employees on the payrolls of nonagricultural establishments.

*Multiple jobholding.* The household approach 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 persons 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 dispute, 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. Reprints of this article are available upon request from the Bureau of Labor Statistics.

#### 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.

### COMPARABILITY OF THE 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, regardless of 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, 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*. Reprints of this article may be obtained upon request.

*Agricultural employment estimates of the Department of Agriculture.* The principal differences in coverage are the inclusion of persons under 16 in the Statistical Research Service (SRS) 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 impact on differences in level and trend of the two series.

#### COMPARABILITY OF THE 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 annual sample surveys of manufacturing establishments and the censuses of business establishments. The major reasons for some 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. Beginning in January 1972, coverage was expanded to include employees of small firms and selected nonprofit activities who had not been covered previously. 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. 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.

## 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. This report is available from BLS upon request.

These monthly surveys of the population are conducted with 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. Separate statistics are also collected and published for 14 and 15 year olds. 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, members of the Armed Forces, and persons under 14 years of age are not covered in the regular monthly enumerations and are excluded from the population and labor force statistics shown in this report. Data on members of the Armed Forces, who are

included as part of the categories "total noninstitutional population" and "total labor force," are, however, obtained from the Department of Defense.

Each month, 65,000 occupied units are eligible for interview. About 2,800 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 or 5 percent. In addition to the 65,000 occupied units, there are 12,000 sample units in an average month which are visited but found to be vacant or otherwise not to be enumerated. Part of the sample is changed each month. The rotation plan provides for three-fourths of the sample to be common from 1 month to the next and one-half to be common with the same month a year earlier.

Beginning in September 1975, the sample was enlarged by 9,000 households in order to provide greater reliability for smaller States and thus permit the publication of annual statistics for all 50 States and the District of Columbia. These supplementary households were added to the national 47,000 household sample in January 1978.

Over the period November 1978 to April 1979 the sample was again enlarged by 9,000 households. This was done to permit the publication of reliable quarterly estimates for the 50 States and the District of Columbia. These supplementary households were added to the 56,000 household sample in January 1980.

## CONCEPTS

*Employed persons* comprise (a) all those who during the survey week did any work at all as paid employees, in their own business, profession, or 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 dispute, or personal reasons, whether or not they were paid by their employers for the time off, and whether or not they were seeking other jobs.

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, temporarily in the United States, who are not living on the premises of an Embassy.

Excluded are persons whose only activity consisted of work around the house (such as home housework, and painting or repairing own home) or volunteer work for religious, charitable, and similar organizations.

*Unemployed persons* comprise all persons who did not work during the survey week, who made specific efforts to find a job within the past 4 weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who did not work at all, were available for work, and (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 wage or salary job within 30 days.

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.

Unemployed persons by 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.

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 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 wage or salary 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 pick-up point.

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

*The unemployment rate* 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, marital status, race, occupation, industry, etc. The job-loser, job-leaver, reentrant, and new entrant rates are each calculated as a percent of the civilian

labor force; the sum of the rates for the four groups thus equals the total unemployment rate.

*Participation rates* represent the proportion of the noninstitutional population that is in the labor force. Two types of participation rates are published. The total labor force participation rate, which is the ratio of the total labor force and the total noninstitutional population; and the civilian labor force participation rate, which is the ratio of the civilian labor force and the civilian noninstitutional population. 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.

*Not in labor force* includes all civilians 16 years and over 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, and "other." The "other" group includes for the most part retired persons, those reported as too old to work, the voluntarily idle, and seasonal workers for whom the survey week fell in an "off" season and who were not reported as unemployed. Persons doing only incidental unpaid family work (less than 15 hours) are also classified as not in the labor force.

For persons not in the labor force, data on previous work experience, intentions to seek work again, desire for a job at the time of interview, and reasons for not looking for work are compiled 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, the detailed not-in-labor force questions were asked of persons in the first and fifth months in the sample, 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 civilian job lasting 2 weeks or more. The occupation and industry groups used in the CPS are defined as in the 1970 Census of Population. 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 blood or marriage.

*Hours of work* statistics relate to the actual number of hours worked during the survey week. For example, a person who normally works 40 hours a week but who was off on the Columbus Day holiday would be reported as working 32 hours even though he/she was 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. However, all the hours are credited to the major job.

The distribution of employment by hours worked relate to persons "at work" during the survey week. At work data differ from data on total employment because the latter include persons in the zero-hour worked category, "with a job but not at work." Included in this latter group are persons who were on vacation, ill, involved in a labor dispute, or otherwise absent from their jobs for voluntary, noneconomic reasons.

Persons who worked 35 hours or more in the survey week are designated as working "full-time." Correspondingly, 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 other 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. "Other reasons" include: Labor dispute, bad weather, own illness, vacation, demands of home housework, school, no desire for full-time work, and full-time worker only during the peak season. Persons on full-time schedules include, in addition to those working 35 hours or more, those who worked from 1-34 hours for noneconomic reasons and usually work full time.

*Full- and part-time labor force.* The *full-time labor force* consists of persons working on full-time schedules, persons involuntarily working part time (part time for economic reasons), 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. Persons with a job but not at work during the survey week are classified according to whether they usually work full or part time.

*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: (1) That unemployed persons looking for full-time work lost an average of 37.5 hours (2) that 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) that persons on part time for economic reasons lost the difference between 37.5 hours and the actual number of hours they worked.

*Race.* White and "black and other" are terms used to describe the race of workers. The "black and other category," includes all persons who identified themselves in the enumeration process to be other than white. At the time of the 1970 Census of Population, 89 percent of the black and other population group were black; the remainder were American Indians, Alaskan Natives, and Asian and Pacific Islanders. The term "black" is used in this volume when the relevant data are provided exclusively for the black population.

*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 other Hispanic origin or descent. According to the 1970 Census of population, approximately 96 percent of their population is white.

*Major activity: going to school and major activity: other* are terms used to describe whether the activity of young persons during the reference week is primarily one of going to school or not. Statistics on major activity are published every month in table A-7 for 16-21 year-olds by employment status, race, and sex, and, if unemployed, whether seeking full- or part-time work.

*Vietnam-era veterans* are those who served in the Armed Forces of the United States between August 5, 1964, and May 7, 1975. Tables for veterans in this volume are limited to males in the civilian noninstitutional population, i.e., veterans in institutions and females are excluded.

*Nonveterans* are males who never served in the Armed Forces.

*Poverty areas* classification consists of all Census geographical divisions in which 20 percent or more of the residents were poor according to the 1970 Decennial Census. Persons were classified as poor or non-poor by using income thresholds adopted by a Federal interagency committee in 1969. These thresholds vary by family size, composition, and residence (farm-nonfarm). 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 areas encompassed by Standard Metropolitan Statistical Areas (SMSA's). The metropolitan area total is based on the number of

SMSA's as defined in the 1970 Decennial Census and does not include any subsequent additions or changes. Nonmetropolitan areas refer to the total of all areas outside SMSA's. The nonmetropolitan total is disaggregated into farm and nonfarm components.

## HISTORIC COMPARABILITY

### Raised lower age limit

Beginning with data for 1967, the lower age limit for official statistics on persons in the labor force was raised from 14 to 16 years. A detailed discussion of this and other definitional changes introduced at that time, including estimates of their effect on the various series is contained in "New Definitions for Employment and Unemployment" by Robert L. Stein in the February 1967 issue of *Employment and Earnings* and *Monthly Report on the Labor Force*. Reprints may be obtained upon request.

### Noncomparability of labor force levels

Before the changes introduced in 1967, the labor force data were not comparable for three earlier periods: (1) Beginning 1953, as a result of the introduction of data from the 1950 census into the estimation procedure, population levels were raised by about 600,000; labor force, total employment, and agricultural employment by about 350,000, primarily affecting the figures for totals and males; other categories were relatively unaffected; (2) beginning 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 in nonagricultural employment; other labor force categories were not appreciably affected; (3) beginning 1962, the introduction of figures from the 1960 census reduced the population by about 50,000, labor force and employment by about 200,000; unemployment totals were virtually unchanged. In addition, beginning 1972, information from the 1970 census was introduced into the estimation procedures, producing an increase in the civilian noninstitutional population of 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. A subsequent population adjustment based on the 1970 census was introduced in March 1973. This adjustment affected the white and black and other groups but had little effect on totals. The adjustment resulted in the reduction of nearly 300,000 in the white population and an increase of the same magnitude in the black and other population. Civilian labor force and total employment figures were affected to a lesser degree; the white labor force was reduced by 150,000, and the black and other labor force rose by about 210,000. Unemployment levels and rates were not significantly affected.

Beginning in January 1974, the 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 population estimates had its greatest impact on estimates of 20-24 year-old males—particularly those of the black and other population—but had little effect on 16 and over totals. 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 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 males and 46,000 females. 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 1978, the introduction of an expansion of the sample and revisions in the estimation procedures resulted in an increase of roughly a quarter of a million in the overall civilian labor force and employment totals; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indica-

tion 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 determined by the interviewer as before. The purpose of this change is 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. Although any impact of this change is still unknown, it is possible that it has caused a break in the time series for some racial statistics.

Beginning in 1979, the first stage ratio estimation method was changed in the CPS estimation procedure. The new procedure is described in the Estimating Methods section. The reasoning behind the change and an indication of the differences appear in "Change in the Estimation Procedure for the Current Population Survey beginning in January 1979" in the February 1979 issue of *Employment and Earnings*. Differences between the old and new procedures exist only for metropolitan and nonmetropolitan estimates, not for the total U.S.

### Changes in the occupational classification system

Beginning with 1971, the comparability of occupational employment data was affected as a result of changes in census occupational classifications introduced into the Current Population Survey (CPS). These changes stemmed from an exhaustive review of the classification system to be used for the 1970 Census of Population. This review, the most comprehensive since the 1940 census, was to reduce the size of large groups, to be more specific about general and "not elsewhere classified" groups, and to provide information on emerging significant occupations. Differences in March 1970 employment levels tabulated on both the 1960 and 1970 classification systems ranged from a drop of 650,000 in operatives to an increase of 570,000 in service workers, much of which resulted from a shift between these two groups; the nonfarm laborers group increased by 420,000, and changes in other groups amounted to 220,000 or less.

An additional major group was created by splitting the operatives category into two: Operatives, except transport, and transport equipment operatives. Separate data for these two groups first became available in January 1972. At the same time, several changes in titles, as well as in order of presentation, were introduced; for example, the title of the managers, officials, and proprietors group was changed to "managers and administrators, except farm," since only proprietors performing managerial duties are included in the category.

Apart from the effects of revisions in the occupational classification system beginning in 1971, comparability of occupational employment data was further affected in December 1971, when a question eliciting information on major activities or duties was added to the monthly CPS questionnaire in order to determine more precisely the occupational classification of individuals. This change resulted in several dramatic occupational shifts, particularly from managers and administrators to other groups. Thus, meaningful comparisons of occupational levels cannot always be made for 1972 and subsequent years with earlier periods. However, revisions in the occupational classification system as well as in the CPS questionnaire are believed to have had but a negligible impact on unemployment rates.

Additional information on changes in the occupational classification system of the CPS appears in "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*.

### Changes in 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, occasionally the sample is expanded in terms of number of sample areas and number of sample persons. In 1953, a rotation plan was introduced in which a sample unit would be interviewed for 4 months, leave the sample for eight months, and then return to the sample for another 4 months. When Alaska and Hawaii achieved statehood, three more sample areas were added to the sample 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 non-contiguous 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 with the existing design. A coverage improvement sample composed of approximately 450 sample household units which represent 237,000 occupied mobile homes and 600,000 new construction housing units, was included in computing the estimates beginning in October 1978 in order to provide coverage of mobile homes and new construction housing units that previously had no chance for selection in the CPS sample. A recent change was introduced in January 1980, when another supplemental sample of 9,000 households selected in 32 States and the District of Columbia to provide more reliable quarterly average estimates for States, was added to the existing sample.

The following table provides a description of some aspects of the CPS sample design in use during the referenced data collection periods. For a more detailed account of the history of the CPS sample design, see *The Current Population Survey: Design and Methodology*, Technical Paper No. 40, Bureau of the Census, U.S. Department of Commerce, or *Concepts and Methods used in Labor Force Statistics Derived from the Current Population Survey*, BLS Report 463.

### 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. There are not subsequent adjustments to independent benchmark data on labor force, employment, or unemployment. Therefore, revisions of the historical data are not an inherent feature of this statistical program.

The CPS estimation procedure involves weighting the data from each sample person. The basic weight, which is the inverse of the probability of the person being in the sample, is a rough measure of the number of actual persons that the sample person represents. In States supplemented in the 1978 and 1980 expansions, almost all sample persons within the same sample area have the same basic weight, but the weight may differ across sample areas. The basic weight is the same for almost all sample persons in unsupplemented States. The basic weights are then adjusted for noninterview, 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 respondent for other reasons. This adjustment is made separately by combinations of sample areas within each State and the District of Columbia, and within these, for six groups—two race categories (white, and

Time period	Number of sample areas <sup>1</sup>	Households eligible		Households visited not eligible <sup>2</sup>
		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 .....	330	33,500	1,500	6,000
Jan. 1960 to Feb. 1963 .....	333 <sup>3</sup>	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 present .....	629	62,200	2,800	12,000

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

<sup>2</sup> These are housing units which were visited, but were found

to be vacant or otherwise not eligible for interview.

<sup>3</sup> Three sample areas were added in 1960 to represent Alaska and Hawaii after statehood.

black and other) within three residence categories. For sample areas which are Standard Metropolitan Statistical Areas (SMSA's), these residence categories are the central cities, and the urban and the rural balance of the SMSA's. For other sample areas, the residence categories are urban, rural nonfarm, and rural farm. The proportion of sample households not interviewed varies from 4 to 5 percent depending on weather, vacations, 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 latter 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 629 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 procedure is performed at two geographic levels: First, by the four census regions (Northeast, North Central, South and West), and secondly, for each of the 46 States which contains nonsample areas. The procedure corrects for the differences that existed at the time of the 1970 census between the distribution by race and residence of the population in the sample areas and the known race-residence distribution in the portions of the census region or State represented by these areas. The regional adjustment is performed by metropolitan-nonmetropolitan residence and race, while the State adjustment is done by urban-rural status and race.

b. *Second-stage ratio estimate.* In this stage, the sample proportion in the categories described below are adjusted to the distribution of independent current estimates of the population in the same categories. The second-stage ratio estimate is done in order to increase the reliability of the estimates and is done 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 for the State. The second step involves "nonwhite" persons only, and is an adjustment to independent estimates of 40 age-sex-race categories across the whole Nation. (The race categories used are black and other minority races.) The third adjustment is applied to all sample persons and is a weighting to nationwide independent population estimates within 68 age-sex-race groups. The entire second-stage ratio estimation procedure is iterated six times, each time beginning at the weights developed the previous time. This iteration ensures that the sample estimates both of State population and of national age-sex-race categories, will be virtually equal to the independent population estimates.

The independent 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 from the April 1, 1970 census through the latest available July 1 estimate, 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 640 of that series. Descriptions of the age estimates methodology are available on request from the Chief of the Population Division, U.S. Bureau of the Census, Washington, D.C. 20233.

Prior to January 1974, the independent national controls used for the age-sex-race groups in both the second and third steps of the second-stage ratio estimation procedure were prepared by carrying forward the most recent census data (1970) after taking account of subsequent aging of the population, births, deaths, and migration between the United States and other countries. Beginning in 1974, the "inflation-deflation" method of deriving independent population controls was introduced into the CPS estimation procedures. These independent controls are prepared by inflating the most recent census counts to include the estimated net census undercount 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. The actual percent change over time in the population in any age group is preserved.

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. Almost all estimates of month-to-month change are improved by this procedure, and most estimates of levels 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. 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 errors.** The full extent of nonsampling error is unknown, but special studies have been conducted to qualify 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 vary by rotation group. A description of these effects appears in the article "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. Overall undercoverage as compared to the level of the decennial census, is about 5 percent. It is known that the CPS undercoverage varies with age, sex, and race. Generally, undercoverage is larger for males than for females and larger for black and other races than for whites. Ratio estimation to independent age-sex-race 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 group. Further, the independent population controls us-

ed have not been adjusted for undercoverage in the 1970 census, which was estimated at 2.5 percent of the population, with differentials by age, sex, and race similar to those observed in the CPS.

Additional information on nonsampling error in the CPS appears in the paper, "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 paper "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 and up-to-date discussion of various sources of errors, 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 enables 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 were required. First, the standard errors in this report 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. Secondly, instead of computing an individual standard error for each estimate, generalized sets of standard errors were 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 of an estimate rather than the precise standard error.

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

Tables C through G provide generalized standard errors for monthly level and month-to-month change for estimated totals, unemployment rates, and percentages. Table H contains factors for use with table G 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 tables 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 two consecutive months. Estimates of change for nonconsecutive months are subject to higher standard errors. Table I contains factors for use with tables C, E, G and H to compute approximate standard errors, as described below, for levels, labor force participation rates,



and percentages as pertaining to 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 1956-1966 period they should be multiplied by 1.22.

**Table A. Standard errors of 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 . . . . .	223	171
Employed . . . . .	236	180
Unemployed . . . . .	107	111
Males, 20 years and over:		
Civilian labor force . . . . .	124	107
Employed . . . . .	135	118
Unemployed . . . . .	68	71
Females, 20 years and over:		
Civilian labor force . . . . .	168	129
Employed . . . . .	167	131
Unemployed . . . . .	64	67
Both sexes, 16-19 years:		
Civilian labor force . . . . .	80	85
Employed . . . . .	84	94
Unemployed . . . . .	56	69
Black and other, 16 years and over:		
Civilian labor force . . . . .	78	60
Employed . . . . .	85	65
Unemployed . . . . .	54	57
Males, 20 years and over:		
Civilian labor force . . . . .	44	38
Employed . . . . .	49	43
Unemployed . . . . .	33	35
Females, 20 years and over:		
Civilian labor force . . . . .	62	48
Employed . . . . .	62	49
Unemployed . . . . .	34	36
Both sexes, 16-19 years:		
Civilian labor force . . . . .	33	37
Employed . . . . .	30	35
Unemployed . . . . .	29	32

*Standard errors for estimated totals.* Tables C and D 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 the tables showed that 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 C shows that the standard error on an estimate

of 12,000,000 is about 150,000. The 68 percent confidence interval as shown by these data is from 11,850,000 to 12,150,000. 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 column one of table D the standard error on a month-to-month change of 400,000 when the monthly level is approximately 12,000,000 is about 111,000.

*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 on 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 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 or the annual average base is less than 35,000.

Tables E and F 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 percentages can be obtained through the use of the standard errors in table G and the factors in table H. First obtain the standard error from table G for the specific percentage and base. The generalized standard error is then calculated by multiplying the standard error from table G by the appropriate factor from table H. When the numerator and denominator of the percentage are in different categories, use the factor indicated by the numerator of the percentage.

*Illustration.* For example, assume that the tables show that 3.6 percent of a total of 90,771,000 employed persons are employed in agriculture. First the standard error on an estimate of 3.6 percent with a base of 90,771,000 is obtained from table G (0.09 percentage point). The appropriate factor from table H for the numerator of the percentage, agricultural employment, is 1.26. The generalized standard error on the estimated 3.6 percent is then approximately  $0.09 \times 1.26 = 0.1$  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 I 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 I to obtain the approximate standard error for the average or change.

*Illustration.* For an example, suppose that one is interested in the year-to-year change of a monthly unemployment rate. Let us assume that the tables show that for a certain month the unemployment rate is 6.9 percent based on a total of 95,676,000 in the civilian labor force, and that a year prior to this the unemployment rate was 6.1 percent based on a total of 94,254,000 in the civilian labor force for the month. First, the standard error on the average of the two estimates, 6.5 percent with a base of 94,965,000, is obtained from table E (0.11 percentage point). The appropriate factor then from table I is 1.40. The approximate standard error on the change of 0.8 percentage point is then given by  $0.11 \times 1.40 = 0.15$  percentage point.

**Table B. Standard errors of unemployment rates for major characteristics**

Selected categories	Standard error of—		Selected categories	Standard error of—	
	Monthly level	Consecutive month change		Monthly level	Consecutive month change
Total (all civilian workers) . . . . .	.11	.11	<b>OCCUPATION—Continued</b>		
Males, 20 years and over . . . . .	.13	.13	Blue collar workers—Continued		
Females, 20 years and over . . . . .	.17	.18	Operatives, except transport . . . . .	.35	.40
Both sexes, 16-19 years . . . . .	.55	.65	Transport equipment operatives . . . . .	.49	.55
White workers . . . . .	.11	.11	Nonfarm laborers . . . . .	.62	.71
Black (and other) workers . . . . .	.45	.47	Service workers . . . . .	.31	.34
Married men, spouse present . . . . .	.12	.13	Farm workers . . . . .	.55	.62
Married women, spouse present . . . . .	.21	.22			
Full-time workers . . . . .	.11	.12	<b>INDUSTRY</b>		
Part-time workers . . . . .	.32	.40	Nonagricultural private wage and salary workers . . . . .	.12	.13
Unemployed 15 weeks and over . . . . .	.06	.07	Construction . . . . .	.58	.66
<b>OCCUPATION</b>			Manufacturing . . . . .	.22	.24
White-collar workers . . . . .	.12	.13	Durable goods . . . . .	.27	.30
Professional and technical . . . . .	.18	.20	Nondurable goods . . . . .	.36	.40
Managers and administrators, except farm . . . . .	.19	.21	Transportation and public utilities . . . . .	.31	.35
Sales workers . . . . .	.37	.41	Wholesale and retail trade . . . . .	.25	.28
Clerical workers . . . . .	.23	.26	Finance and service industries . . . . .	.17	.19
Blue-collar workers . . . . .	.20	.22	Government workers . . . . .	.21	.23
Craft and kindred workers . . . . .	.27	.30	Agricultural wage and salary workers . . . . .	1.09	1.24

**Table C. Standard errors for estimates of monthly level (in thousands)**

Estimated monthly level	Characteristics <sup>1</sup>								
	Agricultural employment	Labor force data other than unemployment and agricultural employment data						Unemployment	
		Total or white	Black and other	Total or white, 16-19 years	Black and other, 16-19 years	Total or white males only, or females only	Black and other males only, or females only	Total or white	Black and other
50 . . . . .	13	10	10	10	10	9	9	10	11
100 . . . . .	18	14	14	14	14	13	13	14	15
500 . . . . .	41	32	32	32	28	30	29	31	33
1,000 . . . . .	57	45	44	44	33	42	40	44	46
2,000 . . . . .	81	64	60	60	13	59	52	62	63
4,000 . . . . .	113	90	79	77	—	82	60	87	83
6,000 . . . . .	137	109	88	84	—	99	53	106	93
8,000 . . . . .	—	125	90	84	—	113	16	122	—
10,000 . . . . .	—	139	87	76	—	124	—	135	—
15,000 . . . . .	—	166	36	—	—	146	—	163	—
20,000 . . . . .	—	188	—	—	—	161	—	182	—
30,000 . . . . .	—	219	—	—	—	177	—	—	—
40,000 . . . . .	—	249	—	—	—	178	—	—	—
50,000 . . . . .	—	253	—	—	—	164	—	—	—
60,000 . . . . .	—	260	—	—	—	131	—	—	—
70,000 . . . . .	—	260	—	—	—	49	—	—	—
80,000 . . . . .	—	254	—	—	—	—	—	—	—
100,000 . . . . .	—	221	—	—	—	—	—	—	—
120,000 . . . . .	—	143	—	—	—	—	—	—	—

<sup>1</sup> When determining the standard error of an estimate for a group which is a subset of the age, sex, race groups listed, use the standard error for the next larger group, e.g., when determining the standard error on the estimated number of employed persons age 20 to 54 years use the column for total employed.

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

(In thousands)

Estimated monthly level	Type of characteristic <sup>1</sup>							
	Labor force data other than unemployment and agriculture employment data							
	Total or white	Black and other	Total, or white, 16-19 years	Black and other, 16-19 years	Unemployment			
					Total or white	Both sexes 16-19 years, or part-time labor force <sup>2</sup>	Black and other	Black and other, 16-19 years
50 .....	8	8	12	12	11	12	12	12
100 .....	11	11	17	17	16	17	16	17
500 .....	24	23	37	33	35	39	36	34
1,000 .....	34	33	52	37	48	55	49	39
2,000 .....	47	45	70	—	68	77	65	—
4,000 .....	66	58	89	—	93	107	80	—
6,000 .....	81	65	96	—	110	129	—	—
8,000 .....	93	68	93	—	123	147	—	—
10,000 .....	103	65	78	—	132	162	—	—
15,000 .....	123	33	—	—	145	191	—	—
20,000 .....	130	—	—	—	146	211	—	—
30,000 .....	163	—	—	—	—	—	—	—
40,000 .....	179	—	—	—	—	—	—	—
50,000 .....	189	—	—	—	—	—	—	—
60,000 .....	194	—	—	—	—	—	—	—
70,000 .....	195	—	—	—	—	—	—	—
80,000 .....	191	—	—	—	—	—	—	—
100,000 .....	179	—	—	—	—	—	—	—
120,000 .....	119	—	—	—	—	—	—	—

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

<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.

**Table E. Standard errors of unemployment rates**

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate									
	1	2	5	10	15	20	25	30	35	50
50 .....	2.05	2.88	4.49	6.18	7.36	8.25	8.93	9.46	9.85	10.36
100 .....	1.45	2.04	3.18	4.37	5.20	5.83	6.32	6.69	6.97	7.33
500 .....	.65	.91	1.42	1.96	2.33	2.61	2.82	2.99	3.12	3.28
1,000 .....	.46	.65	1.01	1.38	1.65	1.84	2.00	2.12	2.21	2.32
2,000 .....	.32	.46	.71	.98	1.17	1.31	1.42	1.50	1.56	1.64
4,000 .....	.23	.32	.50	.69	.83	.92	1.00	1.06	1.10	1.16
6,000 .....	.19	.26	.41	.57	.67	.75	.82	.86	.90	.94
10,000 .....	.15	.21	.32	.44	.52	.59	.63	.67	.70	.73
20,000 .....	.11	.15	.23	.31	.37	.41	.45	.47	.49	.51
60,000 .....	.06	.08	.12	.17	.20	.23	.25	.26	.27	.28
100,000 .....	.04	.06	.10	.13	.16	.18	.19	.20	.21	.22

**Table F. Standard errors of month-to-month change in unemployment rates**

Monthly base of unemployment rate (In thousands)	Monthly unemployment rate									
	1	2	5	10	15	20	25	30	35	50
50 .....	2.32	3.28	5.12	7.10	8.52	9.64	10.05	11.39	11.97	12.55
100 .....	1.64	2.32	3.62	5.02	6.02	6.81	7.11	8.05	8.39	8.87
500 .....	.74	1.04	1.62	2.25	2.69	3.04	3.17	3.58	3.73	3.93
1,000 .....	.52	.73	1.15	1.59	1.90	2.15	2.24	2.52	2.62	2.74
2,000 .....	.37	.52	.81	1.12	1.34	1.51	1.57	1.76	1.83	1.89
4,000 .....	.26	.37	.57	.79	.94	1.06	1.10	1.22	1.26	1.26
6,000 .....	.21	.30	.47	.64	.76	.86	.89	.97	1.00	—
10,000 .....	.16	.13	.36	.49	.59	.65	.67	.72	—	—
20,000 .....	.11	.15	.24	.33	.39	.44	.48	.51	—	—
60,000 .....	.06	.09	.13	.18	.21	.22	.23	—	—	—
100,000 .....	.05	.07	.10	.13	.14	.14	—	—	—	—

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

Monthly base of percentages (In thousands or 99)	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 .....	2.03	2.85	4.44	6.12	7.28	8.15	8.83	9.34	9.72	10.19
100 .....	1.43	2.02	3.14	4.32	5.15	5.77	6.24	6.61	6.88	7.21
500 .....	.64	.90	1.41	1.93	2.30	2.58	2.79	2.95	3.07	3.22
1,000 .....	.45	.64	.99	1.37	1.63	1.82	1.97	2.09	2.17	2.28
2,000 .....	.32	.45	.70	.97	1.15	1.29	1.40	1.48	1.54	1.61
4,000 .....	.23	.32	.50	.68	.81	.91	.99	1.04	1.09	1.14
6,000 .....	.19	.26	.41	.56	.66	.74	.81	.85	.89	.93
10,000 .....	.14	.20	.31	.43	.51	.58	.62	.66	.69	.73
20,000 .....	.10	.14	.22	.31	.36	.41	.44	.47	.49	.51
40,000 .....	.07	.10	.16	.22	.26	.29	.31	.33	.34	.36
60,000 .....	.06	.08	.13	.18	.21	.24	.25	.27	.28	.29
80,000 .....	.05	.07	.11	.15	.18	.20	.22	.23	.24	.25
100,000 .....	.05	.06	.10	.14	.16	.18	.20	.21	.22	.23
160,000 .....	.04	.05	.08	.11	.13	.14	.16	.17	.17	.18

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

**Table H. Factors to be used with Table G to compute approximate standard errors for percentages and month-to-month changes in percentages**

Type of characteristic	Factor		Type of 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 data and unemployment data:			Total or white:		
Total .....	1.00	.74	Total .....	.97	1.08
Males only .....	.93	.84	Both sexes, 16-19 years .....	.97	1.21
Females only .....	.86	.75	Black and other:		
Both sexes, 16-19 years .....	1.00	1.18	Total .....	1.04	1.13
Part-time labor force .....	1.00	1.18	Both sexes, 16-19 years .....	1.04	1.24

**Table I. Factors to be used with Tables C, E, G, H to compute the approximate standard errors of level, rates and percentages for year-to-year change of monthly estimates, quarterly averages, change in quarterly averages, yearly averages and change in yearly averages**

Type of characteristic	Factors				
	Year-to-year change of monthly estimate	Quarterly averages	Change in quarterly averages	Yearly averages	Change in yearly averages
<b>Agricultural employment:</b>					
Total or male .....	1.30	.89	.80	.72	.70
Female or teenagers (16-19 years).....	1.30	.83	.80	.58	.70
Part time .....	1.40	.74	.80	.46	.70
<b>Labor force data other than agricultural employment data and unemployment data:</b>					
Total or white .....	1.30	.88	.88	.67	.70
Black and other or teenagers (16-19 years).....	1.30	.82	.88	.57	.70
Part time .....	1.40	.74	.88	.46	.60
<b>Unemployment:</b>					
Total .....	1.40	.76	.88	.50	.65
Part time .....	1.40	.69	.88	.39	.54

# Establishment data (B, C, and D tables)

## COLLECTION

Payroll reports provide current information on wage and salary employment, hours, earnings, and labor turnover in nonagricultural establishments, by industry and geographic location.

### Federal-State cooperation

Under cooperative arrangements with State agencies, the respondent fills out a single employment or labor turnover reporting form, which is then used for national, State, and area estimates. This eliminates duplicate reporting on the part of respondents and, together with the use of nearly identical techniques at the national and State levels, insures maximum comparability of estimates.

State agencies mail the forms to the establishments and examine the returns for consistency, accuracy, and completeness. The States use the information to prepare State and area series and then send the establishment data to the BLS (Washington Office) for use in preparing the national series.

### Shuttle schedules

Two types of data collection schedules are used: Form BLS 790—Report on Employment, Payroll, and Hours; and Form DL 1219—Monthly Report on Labor Turnover. 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 increases 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. Form DL 1219 provides for the collection of information on the total number of accessions and separations, by type, during the calendar month, and total employment during the pay period which includes the 12th of the month.

## CONCEPTS

### Industrial classification

Establishments reporting on Form BLS 790 and Form DL 1219 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, earnings, and labor turnover for the Nation and for most 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 sectors.

### 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 in households. Salaried officers of corporations are included. Government employment covers only civilian employees; military personnel are excluded. Employees of the Central Intelligence and National Security Agencies are also excluded.

Persons on establishment payrolls who are on paid sick leave (when pay is received directly from the firm), on paid holiday or 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, or on strike for the entire period or who were hired but have not yet reported during the period.

### 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. For Federal Government, hours and earnings relate to all employees, both supervisory and nonsupervisory. Terms are defined below. When the pay period reported is longer than 1 week, figures are reduced to a weekly basis.

*Production and related workers* include working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), and 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, laborers, etc., whether working at the site of construction or 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, vacations, 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 non-supervisory workers. Included are hours paid for holidays and 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 includes 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.

*Gross average hourly and weekly 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 the production worker, construction worker, or nonsupervisory employee definitions.

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

Long-term trends of gross 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.

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

*Average overtime hours.* The overtime hours represent that portion of the gross 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, gross 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 stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on gross hours.

*Railroads 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. Gross 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. Gross average weekly earnings are derived by multiplying average weekly hours by average hourly earnings.

*Spendable average weekly earnings.* Spendable average weekly earnings in current dollars are obtained by deducting estimated Federal social security and income taxes from average weekly earnings. The amount of income tax liability depends on the number of dependents supported by the worker, the worker's marital status and level of gross income. To reflect these variables, the Bureau calculates two sets of spendable earnings series based on the assumptions that the worker earned the gross average weekly earnings and was taxed at the rates applicable to either (1) a single worker with no dependents, or (2) a married worker with three dependents who files a joint return. The computations are based on gross average weekly earnings for all production or nonsupervisory workers in the industry division excluding other income and income earned by other family members.

The series reflect the spendable earnings of only those workers, with no dependents or three dependents, whose gross weekly pay approximates the average earnings indicated for all production and nonsupervisory workers. It does not reflect, for example, the average earnings of all married workers with three dependents; such workers, in fact, have higher gross average earnings than workers with no dependents.

Since part-time as well as full-time workers are included, and since the proportion of part-time workers has been rising, the series understates the increase in earnings for full-time workers. As noted, "fringe benefits" are not included in the earnings. For a more complete discussion of the uses and limitations of these series, see the article by Paul Ryscavage, "Two Divergent Measures of Purchasing Power," in the *Monthly Labor Review* for August 1979. Reprints of this article are available upon request from the Bureau of Labor Statistics.

"Real" earnings, or earnings in constant dollars, are computed by dividing the earnings averages for the current month by the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and then multiplying by 100. This is done for gross average weekly earnings and for spendable average weekly earnings. The level of earnings is thus adjusted for changes in the purchasing power of the dollar since the base period (1967).

*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. Prior to January 1956, these data were based on the application of adjustment factors to gross average hourly earnings (as described in the *Monthly Labor Review*, May 1950, pp. 537-40). Both methods are based on an assumption that earnings due to overtime are paid for at 1½ times the straight-time rates. No adjustment is made for other premium payment provisions, such as holiday work, late-shift work, and overtime rates other than time and one-half.

*Indexes of aggregate weekly payrolls and hours.* The indexes of aggregate weekly payrolls and hours are prepared by dividing the current month's aggregate by the average of the 12 monthly figures for 1967. For basic industries, the hours aggregates are the product of average weekly hours and production-worker or nonsupervisory-worker employment, and the payroll aggregates are the product of hour aggregates and average hourly earnings. At all higher levels of industry aggregation, hour and payroll aggregates are the sum of the component aggregates.

*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 172 unpublished seasonally adjusted employment series (two-digit nonmanufacturing 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 1974 issue of *Employment and Earnings*.

### Labor turnover

Labor turnover is the gross movement of wage and salary workers into and out of employed status with respect to individual establishments. This movement, which relates to a calendar month, is divided into two broad types: *Accessions* (new hires and rehires) and *separations* (terminations of employment initiated by either employer or employee). Each type of action is cumulated for a calendar month and expressed as a rate per 100 employees. The data relate to all employees, whether full- or part-time, permanent or temporary, including executive, office, sales, other salaried personnel, and production workers.

*Accessions* are the total number of permanent and temporary additions to the employment roll, including both new and rehired employees.

*New hires* are temporary or permanent additions to the employment roll of persons who have never before been employed in the establishment (except employees transferring from another establishment of the same company) or of former employees not recalled by the employer.

*Recalls* are permanent or temporary additions to the employment roll of persons specifically recalled to a job in the same establishment of the company following a period of layoff lasting more than 7 consecutive days. (The collection of recalls, as a separate item, began January 1976.)

*Other accessions* are all additions to the employment roll which are not classified as new hires or recalls. These include transfers from other establishments of the company and former employees returning from military leave or other absences without pay who have been counted as separations. Data on other accessions are not published separately but are included in total accessions.

*Separations* are terminations of employment during the calendar month and are classified according to cause—quits, layoffs, and other separations—defined as follows:

*Quits* are terminations of employment initiated by employees, failure to report after being hired (if counted as new hires previously), and unauthorized absences, if, on the last day of the month, the person has been absent more than 7 consecutive calendar days.

*Layoffs* are suspensions without pay lasting or expected to last more than 7 consecutive calendar days, initiated by the employer without prejudice to the worker.

*Other separations*, which are not published separately but are included in total separations, are terminations of employment because of discharge, permanent disability, death, retirement, transfer to another establishment of the company, and entrance into the Armed Forces for a period expected to last more than 30 consecutive calendar days.

### Relationship of labor turnover to employment series

Month-to-month changes in total employment in manufacturing industries reflected by labor turnover rates are not strictly comparable with the changes shown in the Bureau's employment series for the following reasons: (1) Accessions and separations are computed for the entire calendar month; the employment reports refer to the pay period which includes the 12th of the month; and (2) employees on strike are not counted as turnover actions although such employees are excluded from the employment estimates if the work stoppage extends through the report period.

## 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, small bias correction factors are applied to selected employment estimates each month. The size of the bias correction factors is determined from past experience. Other features of the general procedures are described in table J.

### Size and regional stratification

A number of industries are stratified by size of establishment and/or by region, and the stratified production- or nonsupervisory worker-data are used to weight the hours and earnings 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 J, may be a whole industry or a size stratum, a region stratum, or a size stratum of a region within an industry. The labor turnover estimates are stratified by industry only.

### Benchmark adjustments

Employment estimates are compared periodically with comprehensive counts of employment which provide "benchmarks" for the various nonagricultural industries, and appropriate adjustments are made as indicated. The industry estimates are currently projected from March 1978 levels. Normally, benchmark adjustments are made annually.

The primary sources of benchmark information are employment data, by industry, compiled quarterly by States agencies from reports of establishments covered under State unemployment insurance laws. These tabulations cover more than nine-tenths of the total nonagricultural employment in the United States. Benchmark data for the residual are obtained 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 1978 benchmark adjustment is shown in table K.

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 current employment statistics program is known as "sampling proportionate to average size of establish-



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

Item	Basic estimating cell (industry, region, size, or region/size cell)	Aggregate industry levels (divisions, groups and, where stratified, individual cells)
<b>Monthly data</b>		
All employees . . . . .	All-employees 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.
Gross 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.
Gross 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.
Gross average weekly earnings . . . . .	Product of gross average weekly hours and average hourly earnings.	Product of gross average weekly hours and average hourly earnings.
Labor turnover rates . . . . .	The number of particular actions (e.g., quits) in reporting establishments divided by total employment in those firms. The result is multiplied by 100.	Average, weighted by employment, of the rates for component cells.
<b>Annual average data</b>		
All employees, women employees, and production or nonsupervisory workers . . . . .	Sum of monthly estimates divided by 12.	Sum of monthly estimates divided by 12.
Gross 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.

See footnotes at end of table.

**Table J. Summary of methods for computing industry statistics on employment, hours, earnings, and labor turnover—Continued**

Item	Basic estimating cell (industry, region, size, or region/size cell)	Aggregate industry levels (divisions, groups and, where stratified, individual cells)
Annual average data—Continued		
Gross 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.
Gross average weekly earnings .....	Product of gross average weekly hours and average hourly earnings.	Product of gross average weekly hours and average hourly earnings.
Labor turnover rates .....	Annual average aggregate (of each labor turnover action) divided by annual average employment.	Annual average aggregate (of each labor turnover action) divided by annual average employment.

<sup>1</sup> The estimates result from multiplying the product shown by bias adjustment factors to compensate for the under representation of newly formed enterprises in the sample and other bias sources.

<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 com-

pensate 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.

ment." 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 large 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 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 employment and labor turnover statistics programs, with their 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 L 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 M shows the approximate coverage, in terms of employment, of the labor turnover sample.

**Table K. Comparison of nonagricultural employment benchmarks and estimates for March 1978**

Industry division	Benchmark March 1978	Estimate March 1978	Percent difference
Total .....	84,455	83,897	0.7
Mining .....	699	686	1.9
Construction .....	3,733	3,675	1.6
Manufacturing .....	20,122	19,995	.6
Transportation and public utilities .....	4,804	4,759	.9
Wholesale and retail trade .....	18,878	18,801	.4
Finance, insurance, and real estate .....	4,623	4,577	1.0
Services .....	15,870	15,678	1.2
Government .....	15,726	15,726	0

**Table L. Approximate size and coverage of BLS employment and payrolls sample, March 1978<sup>1</sup>**

Industry division	Number of establishments in sample	Employees	
		Number reported	Percent of total
Total .....	161,800	33,453,000	40
Mining .....	2,100	268,000	38
Construction .....	15,800	636,000	17
Manufacturing .....	45,800	11,268,000	56
Transportation and public utilities:			
Railroad transportation (ICC) .....	39	471,000	81
Other transportation and public utilities ..	7,200	2,093,000	49
Wholesale and retail trade .....	39,500	3,232,000	17
Finance, insurance, and real estate .....	10,600	1,701,000	37
Services .....	23,900	3,104,000	20
Government:			
Federal <sup>2</sup> .....	4,600	2,725,000	100
State and local .....	12,300	7,955,000	61

<sup>1</sup> Since a few establishments do not report payroll and hour 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 3,700 reports covering about 55 percent of employment in Federal establishments.

**Table M. Approximate size and coverage of BLS labor turnover sample, March 1978**

Industry	Employees	
	Number reported	Percent of total
Total .....	10,222,690	47
Manufacturing .....	9,345,940	46
Mining <sup>1</sup> .....	186,560	21
Telephone communication....	698,990	72

<sup>1</sup> June 1978 data used due to strike in March.

### Reliability of the employment estimates

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 cumulate 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 N presents the average percent revisions of the five most recent benchmarks (excluding the March 1973 adjustment) for major industry divisions. Detailed descriptions of individual benchmark revisions are available from the Bureau upon request.

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

(In percent)

Industry division	Average benchmark revision in estimates of employment <sup>1</sup>	Relative errors <sup>2</sup> (in percent)	
		Average weekly hours	Average hourly earnings
Total nonagricultural employment .....	0.2	—	—
Total private .....	.3	0.1	0.2
Mining .....	1.3	.5	.5
Contract construction .....	1.3	.2	.3
Manufacturing .....	.3	.1	.1
Durable .....	.3	.1	.1
Nondurable goods .....	.5	.1	.1
Transportation and public utilities .....	.4	.7	.4
Trade .....	.2	.1	.2
Wholesale .....	.9	.2	.3
Retail .....	.2	.2	.2
Finance, insurance, and real estate .....	.5	.2	.4
Services .....	.7	.4	.8
Government <sup>3</sup> .....	.1	—	—

<sup>1</sup> The average percent revision in employment for the 1969-71, 1974, and 1978 benchmarks.

<sup>2</sup> Relative errors relate to March 1971 data.

<sup>3</sup> Estimates for government are based on a total count for Federal Government and samples for State and local government benchmarked to a quinquennial census of government conducted by the Bureau of the Census.

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 relative errors of the estimates. (A relative error is a standard error expressed as a percent of the estimate.) Relative errors for major industries are presented in table N and for individual industries with the specified number of employees in table O. 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:

$$RMSE = \sqrt{(Standard\ Deviation)^2 + (Bias)^2}$$

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 O.

**Table O. 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 errors <sup>2</sup> (in percent)	
		Average weekly hours	Average hourly earnings
50,000	2,100	0.9	1.5
100,000	4,400	.7	1.1
200,000	7,100	.5	.9
500,000	15,200	.4	.8
1,000,000	17,100	.3	.5
2,000,000	28,500	.3	.5

<sup>1</sup> Assuming 12-month intervals between benchmark revisions.  
<sup>2</sup> Relative errors relate to March 1971 data.

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 P 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, earnings, and labor turnover data are collected and prepared by State agencies in cooperation with BLS. The area statistics relate to metropolitan areas. Definitions for all areas are published each year in the issue of *Employment and Earnings* that contains State and area annual averages (usually the May issue). Changes in definitions are noted as they occur. Additional industry detail may be obtained from the State agencies listed on the inside back cover of each issue. 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.

For the States and the areas shown in the B and C sections of this periodical, all the annual average data for the detailed industry statistics currently published by each cooperating State agency are presented (from the earliest date of availability of each series) in a summary volume published annually by the BLS.

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

Category	Root-mean-square error of—	
	Monthly level	Month-to-month change
<b>INDUSTRY DIVISIONS</b>		
Total nonagricultural employment	83,000	75,000
Mining	8,000	5,000
Contract construction	32,000	30,000
Manufacturing	32,000	36,000
Durable two-digit industries	3,700	3,500
Nondurable two-digit industries	2,500	2,500
Transportation and public utilities	20,000	15,000
Wholesale and retail trade	29,000	27,000
Finance, insurance, and real estate	8,000	8,000
Services	35,000	35,000
Government	43,000	37,000
<b>DETAILED INDUSTRIES: SIZE OF EMPLOYMENT ESTIMATE</b>		
50,000	300	400
100,000	700	700
200,000	1,100	1,100
500,000	3,900	4,100
1,000,000	3,800	3,900
2,000,000	6,000	6,100

NOTE: Division level data are based on differences from January 1972 through June 1979. Detailed industry data are based on differences from August 1978 through June 1979.

### PRODUCTIVITY DATA

Tables C-10, C-11, and C-12 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.

#### Definitions

*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 labor input, or labor productivity, measure changes in the volume of goods and services produced per unit of labor.

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

Manufacturing data have been revised to reflect revisions in the Federal Reserve Board Index of Industrial Production. 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.

## State and area unemployment data (E tables)

### FEDERAL-STATE COOPERATIVE PROGRAM

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

### ESTIMATING METHODS

Labor force and unemployment in 10 large States: New York, California, Illinois, Ohio, New Jersey, Pennsylvania, Michigan, Texas, Massachusetts, and Florida; and two areas: Los Angeles-Long Beach metropolitan area and New York City, are sufficiently reliable to be used directly from the CPS. For a description of the CPS concepts see "Household Data," above.

Monthly employment and unemployment estimates in the remaining 40 States and 214 labor market areas are prepared in several stages.

1. *Preliminary estimate—employment:* The total employment estimate is based primarily 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 residences as used in the CPS. Factors for adjusting from place of work to place of residence have been developed for the major categories of employment by class of worker and industry on the basis of employment relationships which existed at the time of the 1970 Decennial Census. These factors are applied to the payroll employment estimates for the current period to obtain adjusted employment estimates.

2. *Preliminary estimate-unemployment:* In the current month, the estimate of unemployment is an aggregate of the estimates for each of three building block categories: (1) Persons who were previously employed in industries covered by State unemployment insurance (UI) laws; (2) those previously employed in industries not covered by these laws; and (3) those who were either entering the 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 unemployment 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 non-covered 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) proportion of the working age population that is considered "youth." The composite estimate of total entrants is defined as:

$$U = A(X + E) + BX, \text{ where}$$

**U** = total entrant unemployment

**E** = total employment

**X** = total experienced unemployment

**A, B** = synthetic factors incorporating seasonal variation and an assumed relationship between the proportion of youths in the working population and the historical relationship of entrants to the experienced unemployed (B factor) or the experienced labor force (A factor).

3. *Correction factors for employment and unemployment* are then applied at the State level to the UI-based estimates obtained above for each of the 40 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).

4. *Substate adjustment for additivity.* Independent estimates of employment and unemployment are prepared both for the State (obtained directly from the CPS in the 10 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 substate estimates of employment and unemployment add to the independent State totals. In California and New York, which also have substate areas taken directly from the CPS, the additivity adjustment for the remaining areas is applied to the State total minus the direct CPS area.

5. *Benchmark correction procedures.* Once each year monthly estimates prepared by State employment security agencies using UI-based estimating procedures are adjusted, or benchmarked, by BLS to the annual average CPS estimates for the 40 States for which monthly

CPS estimates are not available. This adjustment is necessary because the State-prepared estimates are not as reliable as the CPS annual averages due to differences in State UI laws, the structural limitations of the UI-based estimating method, and errors in the UI data.

The 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 second-stage estimates are forced into agreement with CPS annual averages. In the 10 States which use CPS estimates monthly, no benchmark correction is required, as the average of the 12 monthly State CPS estimates will equal the CPS annual averages.

## Seasonal adjustment

Over a 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 data are published regularly in *Employment and Earnings*.

The seasonal adjustment programs used for these series are based on an adaption of the standard ratio-to-moving average method. They provide for "moving" adjustment factors to take account of changing seasonal patterns. A detailed description of the methods is given in the two publications, *BLS Seasonal Factor Method*, (1966) and *X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15, Bureau of the Census (1967).

Beginning in January 1980, the 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 new 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, September 1979. 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 essentially places more emphasis on recent data, provides better seasonal adjustments than does the X-11 method alone.

The second change is that seasonal factors are now being calculated for use during the first 6 months of the year rather than for the entire year. In July of each year, the BLS will calculate and publish (in *Employment and Earnings*) a new set of seasonal factors for use in the second half, based on the experience through June. Revisions of historical data for the most recent 5 years will continue to be made once a year, at the beginning of each calendar year.

All civilian 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 (males and females under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. In order to provide seasonally adjusted total employment and civilian labor force estimates, the appropriate series are aggregated. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unemployment (the sum of 4 seasonally adjusted sex-age components) by the civilian labor force (the sum of 12 seasonally adjusted sex-age components).

Revised seasonally adjusted data for selected labor force series based on the experience through December 1979, new seasonal adjustment factors to be used to calculate the overall unemployment rate for the first 6 months of 1980, and a description of the current seasonal adjustment methodology are published in the January 1980 issue of *Employment and Earnings*. Revised seasonally adjusted data covering the entire 5-year revision period for a broader range of labor force series appear in the February 1980 issue of this publication. Many additional series, which are either components or aggregates of the series presented, are available from the BLS upon request.

For establishment data, seasonally adjusted series for all employees, women employees, production or nonsupervisory workers, hours, and earnings, are computed using the *BLS Seasonal Factor Method*. 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 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 1967 base. For total private, total goods-producing, total private service-producing, 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 1967 base.

The seasonally adjusted establishment data for Federal Government are based on a series which excludes the Christmas temporary help employed by the Postal Service in December. The employment of these workers constitutes the only significant seasonal change in Federal Government employment during the winter months. Furthermore, the volume of such employment may change substantially from year to year because of administrative decisions by the Postal Service. Hence, it was considered desirable to exclude this group from the data upon which the seasonally adjusted series is based.

For labor turnover rates, seasonal adjustment factors are applied

directly to the component series. These series are then aggregated to obtain total levels (total accessions and total separations). These factors are derived by the *Census X-11 Method* using the trading day option. As a result, these series are adjusted for the number of times each day of the week occurs in a given month, as well as for the month of the year.

The revised seasonally adjusted series for the establishment data reflect experience through June 1979. Seasonal factors to be used for current adjustment appear in the October 1979 issue of *Employment and Earnings*.

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

<b>REGION I - BOSTON</b> John Fitzgerald Kennedy Federal Bldg. Government Center - Room 1603 A Boston, Mass. 02203	<b>REGION II - NEW YORK</b> 1515 Broadway—Suite 3400 New York, N.Y. 10036	<b>REGION III - PHILADELPHIA</b> 3535 Market Street P.O. Box 13309 (Zip 19101) Philadelphia, Pa.	<b>REGION IV - ATLANTA</b> 1371 Peachtree Street, N.E. Atlanta, Ga. 30309
<b>REGION V - CHICAGO</b> 230 S. Dearborn Street Chicago, Ill. 60604	<b>REGION VI - DALLAS</b> 555 Griffin Sq., 2nd Fl. Dallas, Tex. 75202	<b>REGIONS VII &amp; VIII - KANSAS CITY</b> 911 Walnut Street Kansas City, Mo. 64106	<b>REGIONS IX &amp; X - SAN FRANCISCO</b> 450 Golden Gate Avenue, Box 36017 San Francisco, Calif. 94102

## COOPERATING STATE AGENCIES

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

BLS  
Region

IV ALABAMA	-Department of Industrial Relations, Industrial Relations Building, Room 427 Montgomery 36130
X ALASKA	-Employment Security Division, Department of Labor, P.O. Box 3-7000, Juneau 99802
IX ARIZONA	-Department of Economic Security, P.O. Box 6123, Phoenix 85005
VI ARKANSAS	-Employment Security Division, Department of Labor, P.O. Box 2981, Little Rock 72203
IX CALIFORNIA	-Employment Development Department, P.O. Box 1679, Sacramento 95808 (CES).
VIII COLORADO	-Division of Employment and Training, 1278 Lincoln Street, Denver 80203
I CONNECTICUT	-Employment Security Division, Labor Department, 200 Folly Brook Boulevard, Wethersfield 06109
III DELAWARE	-Department of Labor, University Plaza Office Complex, Bldg. D, Chapman Rd., Route 273, Newark 19713
III DIST. OF COL.	-Office of Administration and Management Services, D.C. Department of Manpower, Suite 1000, 605 G Street, N. W., Washington 20001
IV FLORIDA	-Department of Labor and Employment Security, Caldwell Building, Tallahassee 32304
IV GEORGIA	-Department of Labor, 254 Washington Street, S.W., Atlanta 30334
IX HAWAII	-Department of Labor and Industrial Relations, P.O. Box 3680, Honolulu 96811
X IDAHO	-Department of Employment, P.O. Box 35, Boise 83707
V ILLINOIS	-Bureau of Employment Security, 910 South Michigan Street, 15th 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	-Division of Employment, Department of Human Resources, 401 Topeka Avenue, Topeka 66603
IV KENTUCKY	-Department of Human Resources, 275 E. Main Street, 2nd Floor West, Frankfort 40601
VI LOUISIANA	-Department of Labor, P.O. Box 44094--Capitol Station, Baton Rouge 70804
I MAINE	-Employment Security Commission, Department of Manpower Affairs, 20 Union Street, Augusta 04330
III MARYLAND	-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	-Employment Security Commission, 7310 Woodward Avenue, Detroit 48202
V MINNESOTA	-Department of Economic Security, 390 North Robert Street, Room 517 St. Paul 55101
IV MISSISSIPPI	-Employment Security Commission, P.O. Box 1699, Jackson 39205
VII MISSOURI	-Division of Employment Security, Department of Labor and Industrial Relations, P.O. Box 59, Jefferson City 65101
VIII MONTANA	-Employment Security Division, 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, P.O. Box 602, Carson City 89713
I NEW HAMPSHIRE	-Department of Employment Security, 32 South Main Street, Concord 03301
II NEW JERSEY	-Department of Labor and Industry, John Fitch Plaza, Room 202, Trenton 08625
VI NEW MEXICO	-Employment Services Division, Department of Human Services, P.O. Box 1928, Albuquerque 87103
II NEW YORK	-Division of Research and Statistics, N.Y. State Department of Labor, State Campus--Building 12, Albany 12201
IV NORTH CAROLINA	-Employment Security Commission, P.O. Box 25903, Raleigh 27611
VIII NORTH DAKOTA	-Employment Security Bureau, P.O. Box 1537, Bismarck 58505
V OHIO	-Division of Research and Statistics, Bureau of Employment Services, 145 S. Front St., Columbus 43216
VI OKLAHOMA	-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	-Department of Labor and Industry, Seventh and Forster Streets, Harrisburg 17121
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, Room 519, Cordell Hull Office Building, Nashville 37219
VI TEXAS	-Employment Commission, TEC Building, 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 Security, P.O. Box 488, Montpelier 05602
III VIRGINIA	-Division of Research and Statistics, Department of Labor and Industry, P.O. Box 12064, Richmond 23241 (CES). Employment Commission, P.O. Box 1358, Richmond 23211 (LAUS and LTS)
X WASHINGTON	-Employment Security Department, 1007 South Washington Street, Olympia 98501
III WEST VIRGINIA	-Department 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 82601