



U.S. DEPARTMENT OF LABOR
Ray Marshall, Secretary

BUREAU OF LABOR STATISTICS
Janet L. Norwood, Acting Commissioner

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

Employment and Earnings may be ordered through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Subscription price per year \$18 domestic, and \$22.50 foreign. Single copy \$1.50 domestic, and \$1.90 foreign. Prices are subject to change by the U.S. Government Printing Office. Send correspondence on circulation and subscription matters (including address changes) to the Superintendent of Documents.

Communications on editorial matters should be addressed to: Chester L. Green, 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) 523-1364.

The Secretary of Labor has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through February 28, 1981. Controlled circulation postage paid at Washington, D.C., and Baltimore, Md.

Unless identified as copyrighted, articles and tabulations in this publication are in the public domain and may be reproduced without permission of the Federal Government. Please credit *Employment and Earnings*, Bureau of Labor Statistics.

Library of Congress Catalog Number 70-11379

CALENDAR OF SPECIAL FEATURES								
Features	Jan.	Feb.	Mar.	Apr.	May	Jul.	Oct.	Dec.
Household data								
Annual averages	x							
Revised seasonally adjusted series		x						
Quarterly averages:								
Seasonally adjusted data								
Persons not in labor force								
Persons of Hispanic origin	x			x		x	x	
Vietnam-Era veterans and nonveterans								
Poverty-nonpoverty area data								
Family relationship data								
Establishment data								
National annual averages:								
Industry divisions (preliminary)	x							
Industry detail (final)			x					
National data adjusted to new benchmarks							(1)	
Revised seasonally adjusted series							(2)	
State and area annual averages					x			
Area definitions					x			

¹ The issue that introduces new benchmarks varies. The October 1978 issue marks the introduction of March 1977 benchmarks and conversion to the 1972 SIC.

² Revised data introduced October 1978.

Employment and Earnings

Vol. 25 No. 12 December 1978

Editors: Chester L. Green, Gloria P. Green, Marc Weinstein

CONTENTS

Page

List of statistical tables	3
Employment and unemployment developments, November 1978	5
Charts	7
Statistical tables:	
Not seasonally adjusted—	
Household data	19
Establishment data:	
Employment	51
Hours and earnings	85
Labor turnover	116
State and area unemployment data	125
Seasonally adjusted series—	
Household data	43
Establishment data:	
Employment	69
Hours and earnings	106
Productivity	108
Labor turnover	121
Explanatory notes	131

MONTHLY HOUSEHOLD DATA

Page

Employment Status

A- 1: Employment status of the noninstitutional population 16 years and over, 1947 to date.	19
A- 2: Employment status of the noninstitutional population 16 years and over by sex, 1967 to date	20
A- 3: Employment status of the noninstitutional population by sex, age, and race	21
A- 4: Labor force by sex, age, and race	23
A- 5: Employment status of black workers by sex and age	25
A- 6: Employment status of the noninstitutional population by race, sex, and age	26
A- 7: Employment status of the noninstitutional population 16-21 years of age by race and sex	27
A- 8: Full- and part-time status of the civilian labor force by sex, age, and race	28
A- 9: Employment status of the noninstitutional population by family relationship	29

Characteristics of the Unemployed

A-10: Unemployed persons by marital status, sex, age, and race	29
A-11: Unemployed persons by occupation of last job and sex	30
A-12: Unemployed persons by industry of last job and sex	30
A-13: Unemployed persons by reason for unemployment, sex, age, and race	31
A-14: Unemployed persons by reason for unemployment, duration, sex, and age	31
A-15: Unemployed jobseekers by the jobsearch methods used, sex, age, and race	32
A-16: Unemployed jobseekers by the jobsearch methods used, sex, and reason for unemployment	32
A-17: Unemployed persons by duration of unemployment	33
A-18: Unemployed persons by duration, sex, age, race, and marital status	33
A-19: Unemployed persons by duration, occupation, and industry of last job	34

Characteristics of the Employed

A-20: Employed persons by sex and age	34
A-21: Employed persons by occupation, sex, and age	35
A-22: Employed persons by occupation, sex, and race	36
A-23: Employed persons by class of worker, age, and sex	37
A-24: Employed persons by industry and occupation	37
A-25: Employed persons with a job but not at work by reason, pay status, and sex	38
A-26: Persons at work by type of industry and hours of work	38
A-27: Persons at work 1-34 hours by usual status and reason for working less than 35 hours	39
A-28: Nonagricultural workers-by industry and full- or part-time status	39
A-29: Persons at work in nonagricultural industries by full- or part-time status, sex, age, race, and marital status	40
A-30: Persons at work in nonfarm occupations by full- or part-time status and sex	41

Characteristics of 14 and 15 year-olds

A-31: Employment status of 14-15 year-olds by sex and race	42
A-32: Employed 14-15 year-olds by sex, class of worker, and occupation	42

Seasonally Adjusted Employment and Unemployment Data

A-33: Employment status of the noninstitutional population by sex and age, seasonally adjusted	43
A-34: Full- and part-time status of the civilian labor force, seasonally adjusted	44
A-35: Employment status by race, sex, and age, seasonally adjusted	44
A-36: Major unemployment indicators, seasonally adjusted	45
A-37: Unemployed persons by duration of unemployment, seasonally adjusted	45
A-38: Rates of unemployment by sex and age, seasonally adjusted	46
A-39: Unemployed persons by reason for unemployment, seasonally adjusted	46
A-40: Employed persons by sex and age, seasonally adjusted	47
A-41: Unemployed persons by sex and age, seasonally adjusted	47
A-42: Employed persons by selected social and economic categories, seasonally adjusted	48

Characteristics of Vietnam-Era Veterans and Nonveterans

A-43: Employment status of male Vietnam-era veterans and nonveterans 20 to 39 years of age	49
---	----

MONTHLY ESTABLISHMENT DATA

Page

Employment—National

B- 1: Employees on nonagricultural payrolls, by industry division, 1919 to date	51
B- 2: Employees on nonagricultural payrolls, by industry	52
B- 3: Women employees on nonagricultural payrolls, by industry	61
B- 4: Employees on nonagricultural payrolls, by industry, seasonally adjusted	69
B- 5: Women employees on nonagricultural payrolls, by industry, seasonally adjusted	70
B- 6: Production or nonsupervisory workers on private nonagricultural payrolls, seasonally adjusted	71
B- 7: Indexes of diffusion: Percent of industries in which employment increased	72

Employment—State and Area

B- 8: Employees on nonagricultural payrolls for States and selected areas, by industry division	74
---	----

Hours and Earnings—National

C- 1: Gross hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls, 1957 to date	85
C- 2: Gross hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls, by industry	86
C- 3: Employment, hours, and indexes of earnings in the Executive Branch of the Federal Government	102
C- 4: Average hourly earnings excluding overtime of production workers on manufacturing payrolls, by industry	102
C- 5: Gross and spendable average weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls, in current and 1967 dollars	103
C- 6: Indexes of aggregate weekly hours and payrolls of production or nonsupervisory workers on private nonagricultural payrolls	104
C- 7: Average weekly hours of production or nonsupervisory workers on private nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted	106
C- 8: Indexes of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by industry division and major manufacturing group, seasonally adjusted	107
C- 9: Average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls, seasonally adjusted	108
C-10: Hours of wage and salary workers in nonagricultural establishments, by industry division	108
C-11: Indexes of output and compensation per hour, unit costs, and prices, private business sector, seasonally adjusted	109
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	110

Hours and Earnings—State and Area

C-13: Gross hours and earnings of production workers on manufacturing payrolls, by State and selected areas	111
---	-----

Labor Turnover—National

D- 1: Labor turnover rates in manufacturing, 1969 to date	116
D- 2: Labor turnover rates, by industry	117
D- 3: Labor turnover rates in manufacturing, 1969 to date, seasonally adjusted	121

Labor Turnover—State and Area

D- 4: Labor turnover rates in manufacturing for selected States and areas	122
---	-----

MONTHLY STATE AND AREA UNEMPLOYMENT DATA

E- 1: Labor force and unemployment by State and selected metropolitan areas	125
---	-----

Employment and Unemployment Developments, November 1978

Employment rose sharply in November and unemployment was unchanged. The Nation's overall unemployment rate was 5.8 percent, the same as in October but down slightly from the rates prevailing early this year.

Total employment—as measured by the monthly survey of households—advanced by 540,000 in November to 95.7 million. Over the past year, total employment has grown by 3.3 million.

Nonfarm payroll employment—as measured by the monthly survey of establishments—rose by 465,000 in November to 87.0 million. Payroll jobs have increased by 3.5 million from the year-ago level.

Unemployment

Both the unemployment rate of 5.8 percent and the number of unemployed persons, 5.9 million, were unchanged from October levels. The November rate was almost a full percentage point lower than a year earlier and 0.4 point below the first quarter 1978 average.

Unemployment rates for adult men (4.0 percent), adult women (5.8 percent), and teenagers (16.2 percent) were also little changed from October. Likewise, joblessness among black (11.8 percent) and white workers (5.0 percent) and most other groups showed little or no movement in November. However, virtually all worker categories have shared in the improvement over the past year. (See tables A-33 and A-36.)

The median duration of unemployment declined from 6.1 weeks in October—where it had held for several months—to 5.5 weeks in November. Median duration was 7 weeks in November 1977. (See table A-37.)

Total employment and the labor force

Total employment registered a strong gain November, rising by 540,000 to 95.7 million. Nearly all of the over-the-month increase was among adult men, whose employment level had remained fairly steady since early summer. Over the year, total employment has risen by 3.3 million, with adult women accounting for over half of the increase.

The employment-population ratio—the proportion of the total noninstitutional population that is employed—

reached a record high of 59.1 percent, continuing a generally upward trend which has reflected to a great extent the increased jobholding among adult women and teenagers. (See table A-33.)

There was substantial growth in the civilian labor force in November, as it increased 580,000 to 101.6 million. The labor force has risen by 2.6 million since last November, with adult women accounting for about 60 percent of this advance. The civilian labor force participation rate jumped to an all-time high of 63.6 percent in November, after holding at 63.3 percent during 4 of the prior 5 months. This percentage was 0.7 percentage point above the year-earlier level.

Industry payroll employment

Nonagricultural payroll employment rose by 465,000 in November to 87.0 million, the second consecutive month of substantial growth. Employment increased in 80 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment. Nonfarm jobs have increased by 3.5 million over the past year. (See tables B-4 and B-7.)

Over-the-month employment gains were recorded in every major industry group. Manufacturing posted the largest advance for the second straight month, following 5 months of sluggishness. The November gain in factory employment (160,000) was split proportionately between the durable and nondurable goods industries. Within durable goods, employment rose in every industry, but the strength was once again concentrated in the major metals and metal-using industries, led by primary and fabricated metals and transportation equipment. In nondurables, food processing and printing and publishing registered the largest increases, but much of the latter resulted from striking workers returning to their jobs.

Elsewhere in the goods sector, construction jobs increased by 40,000 in November, the second month of employment growth following a pause late in the summer, and mining employment continued to expand with a pickup of 10,000.

In the service-producing sector, the largest employment increases occurred in services (95,000) and trade (65,000). The government increase (45,000) occurred entirely in the

State and local jurisdictions. There was also continued growth in the other two industries in the sector—transportation and public utilities and finance, insurance, and real estate.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged up 0.1 hour to 35.9 hours in November. At 40.6 hours, the manufacturing workweek increased 0.2 hour, while factory overtime, at 3.7 hours, was up 0.1 hour over the month. Both the total private and manufacturing workweeks were little changed from year-earlier levels. (See table C-7.)

Substantial over-the-month employment growth coupled with the small increase in hours, caused the index of aggregate hours of production or nonsupervisory workers on pri-

vate nonagricultural payrolls to jump a full percentage point in November to 122.4 (1967=100). The index was 4.3 percent higher than the year-earlier level. (See table C-8.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased 0.7 percent in November and 8.7 percent from a year ago (seasonally adjusted). Average weekly earnings were up 1.0 percent over the month; weekly earnings have risen by 8.4 percent since November 1977.

Before adjustment for seasonality, average hourly earnings edged up by 1 cent to \$5.87, 47 cents above last November; average weekly earnings were \$210.15, 22 cents below their October level but \$16.29 higher than a year earlier. (See tables C-1 and C-9.)

CHARTS

	<i>Page</i>
1. Labor force and employment, 1959-78	7
2. Major unemployment indicators, 1959-78	8
3. Civilian labor force participation rates by sex and age, 1959-78	8
4. Total employment by sex and age, 1959-78	9
5. Employment-population ratios by sex and age, 1959-78	10
6. Payroll employment in goods-and service-producing industries, 1959-78	10
7. Nonagricultural payroll employment by industry, 1959-78	11
8. Persons at work full and part time in nonagricultural industries, 1959-78	12
9. Employment in nonfarm occupations, 1959-78	13
10. Unemployment rates by sex and age, 1959-78	14
11. Unemployment rates by race, 1959-78	14
12. Unemployment rates by major occupational groups, 1959-78	15
13. Duration of unemployment, 1959-78	16
14. Average weekly hours in nonagricultural industries, 1959-78	17
15. Average weekly earnings in nonagricultural industries, 1959-78	17
16. Total private gross and spendable weekly earnings, 1959-78	18
17. Labor turnover rates in manufacturing, 1959-78	18

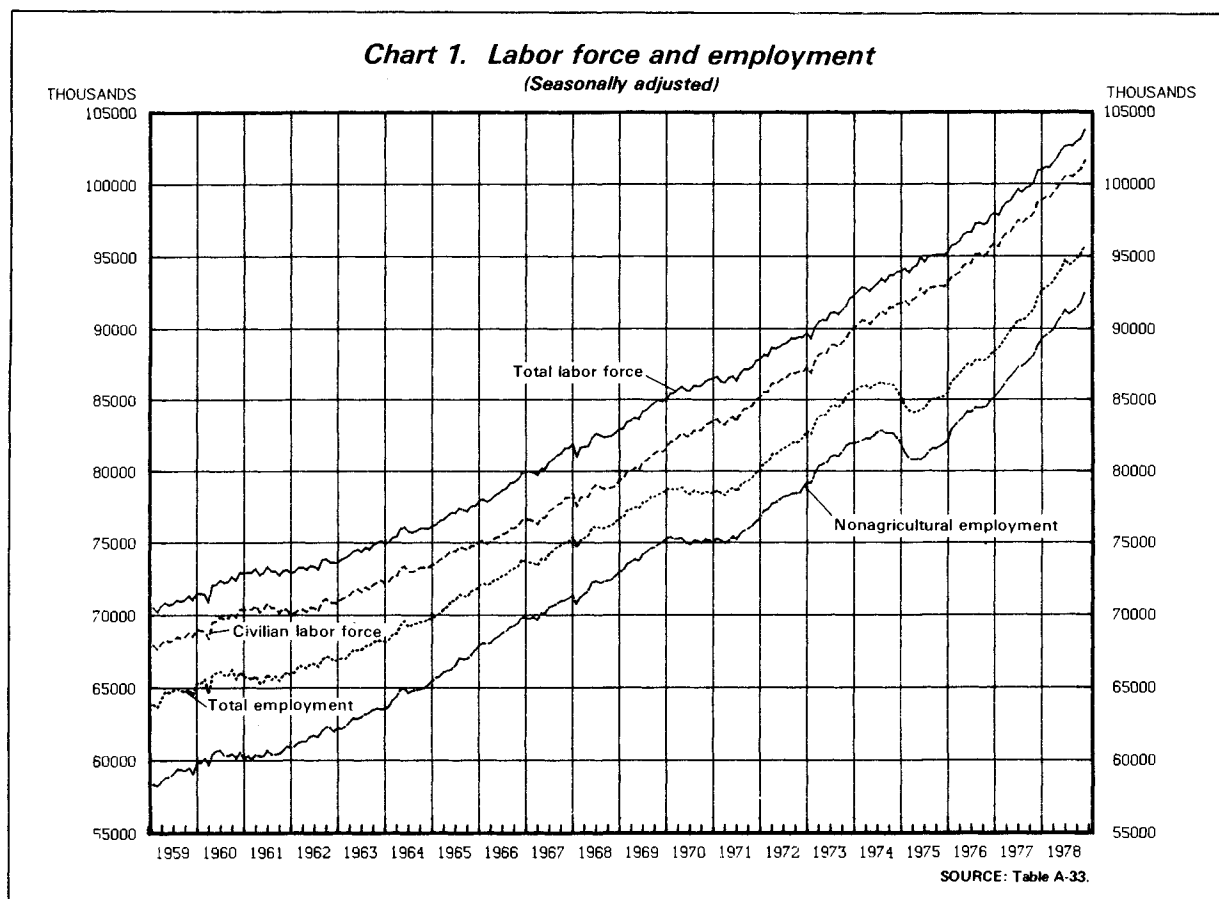
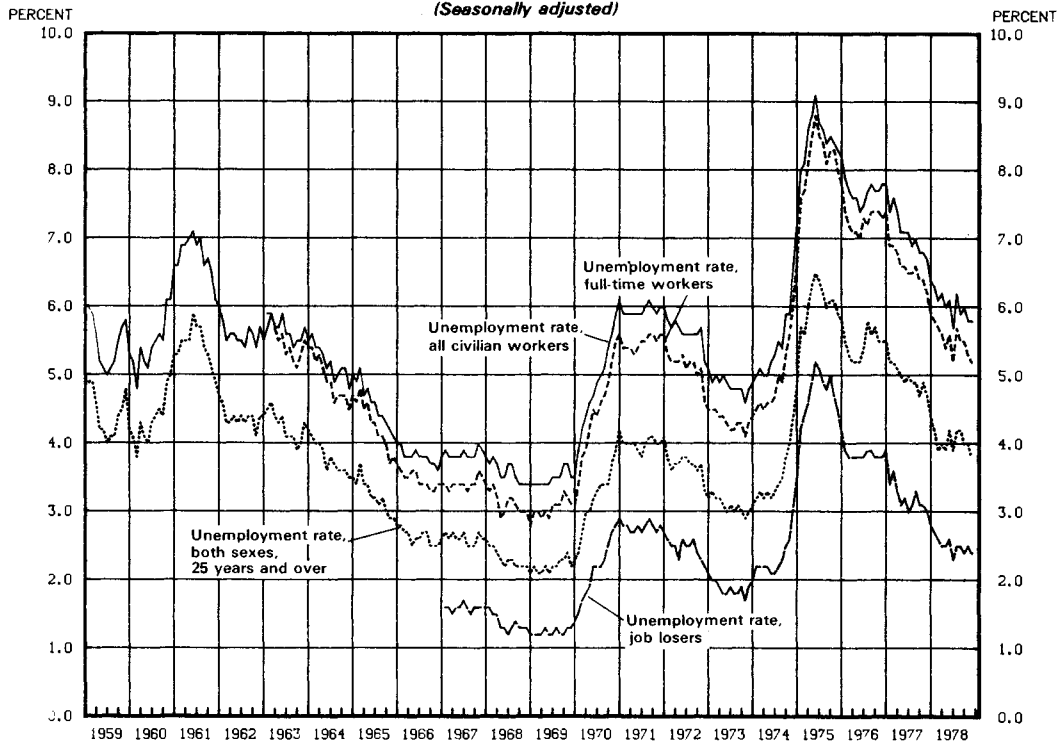
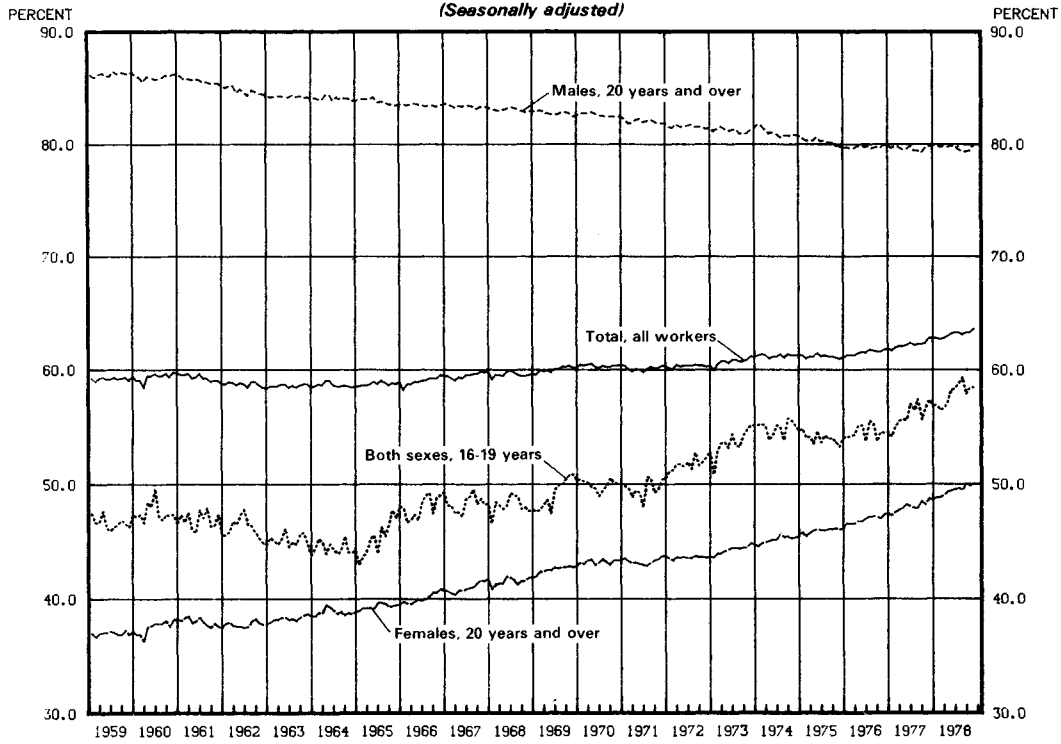


Chart 2. Major unemployment indicators
(Seasonally adjusted)



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

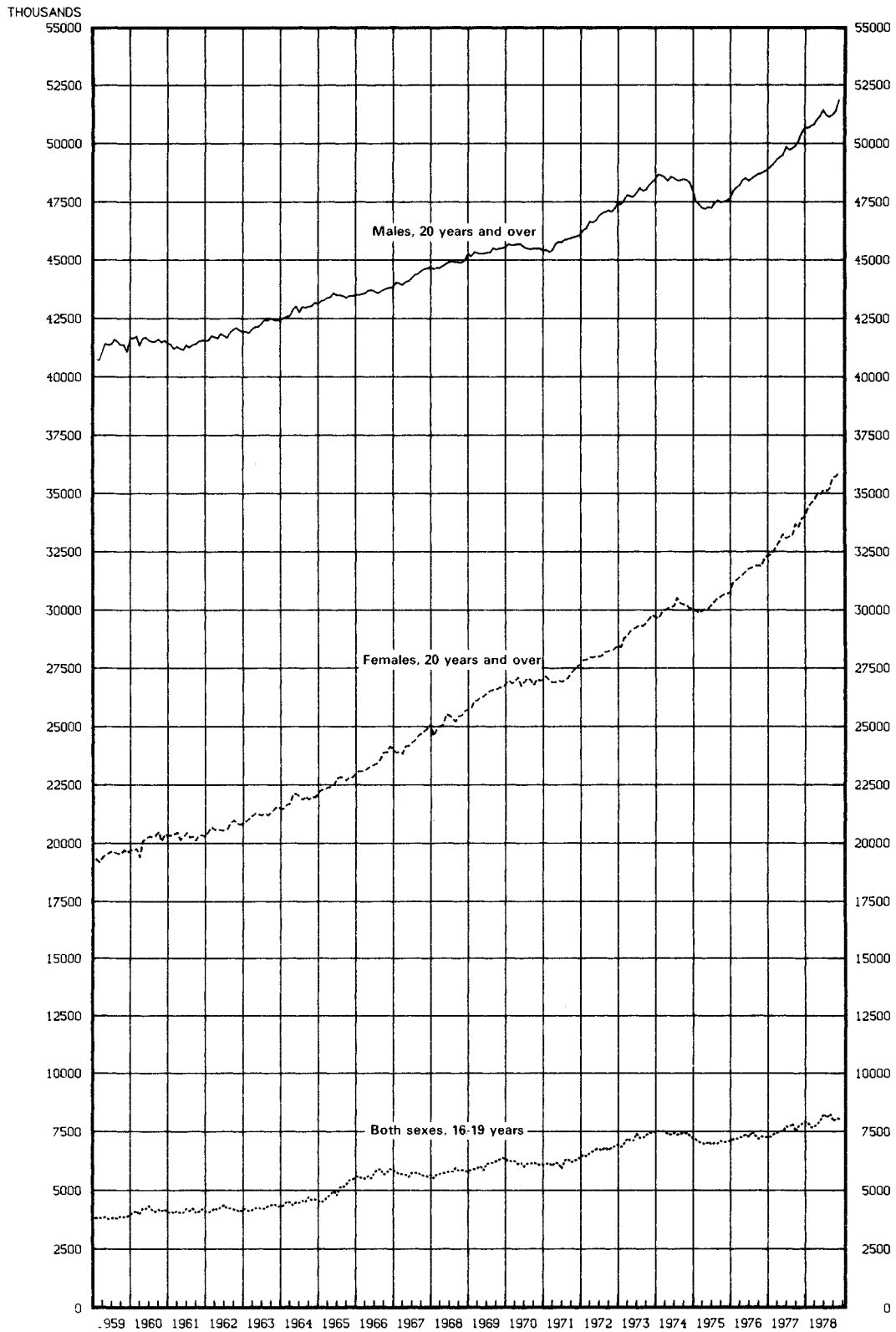
Chart 3. Civilian labor force participation rates by sex and age
(Seasonally adjusted)



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)

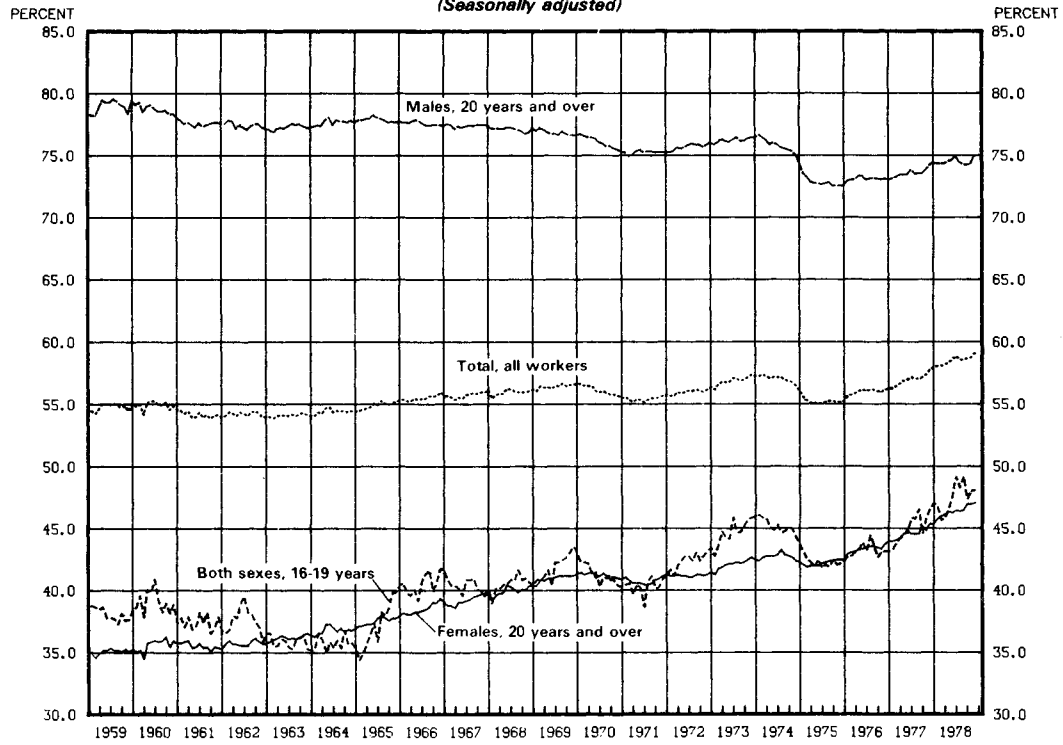


Chart 6. Payroll employment in goods and service-producing industries
(Seasonally adjusted)

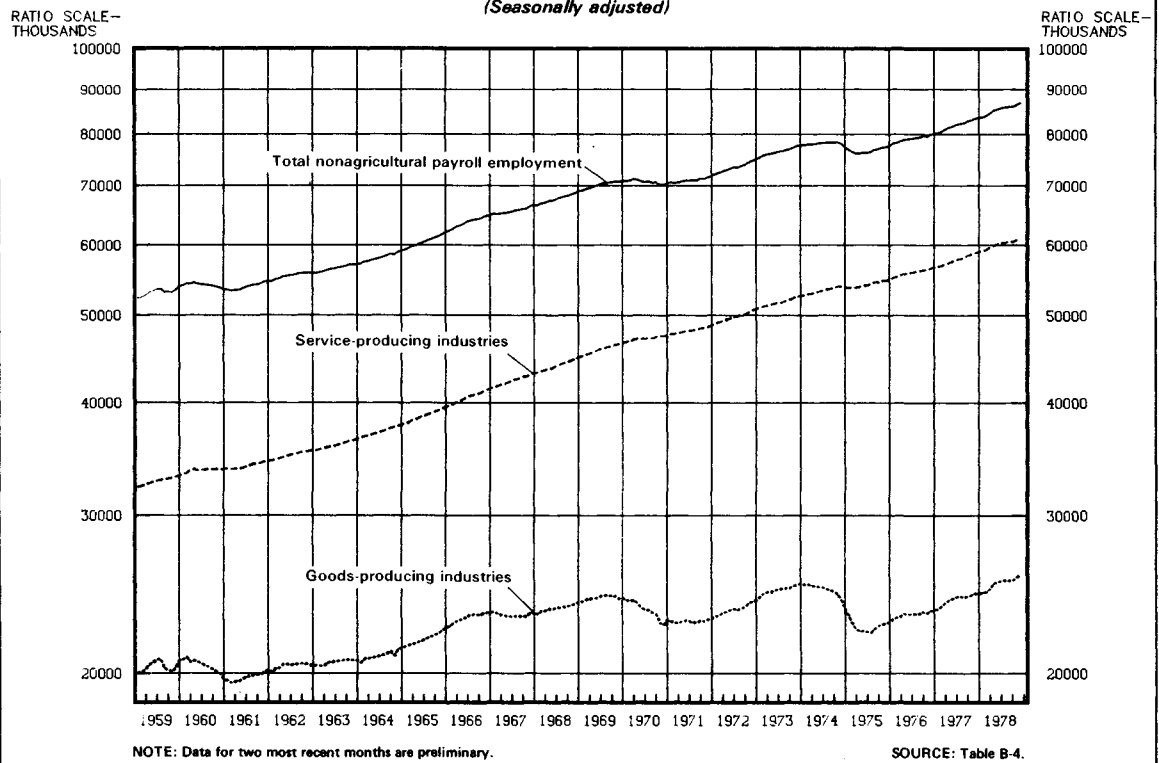
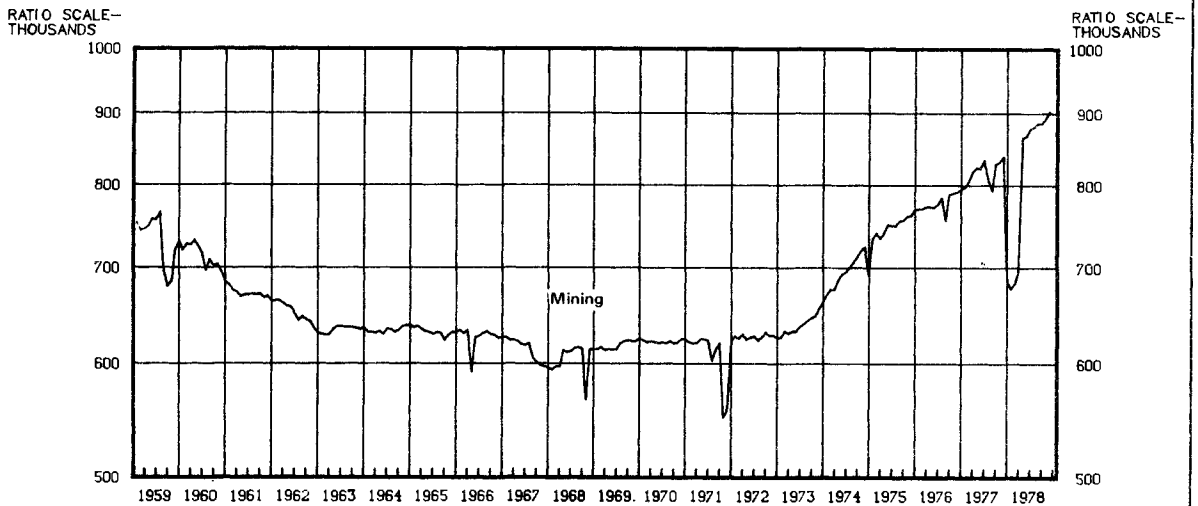
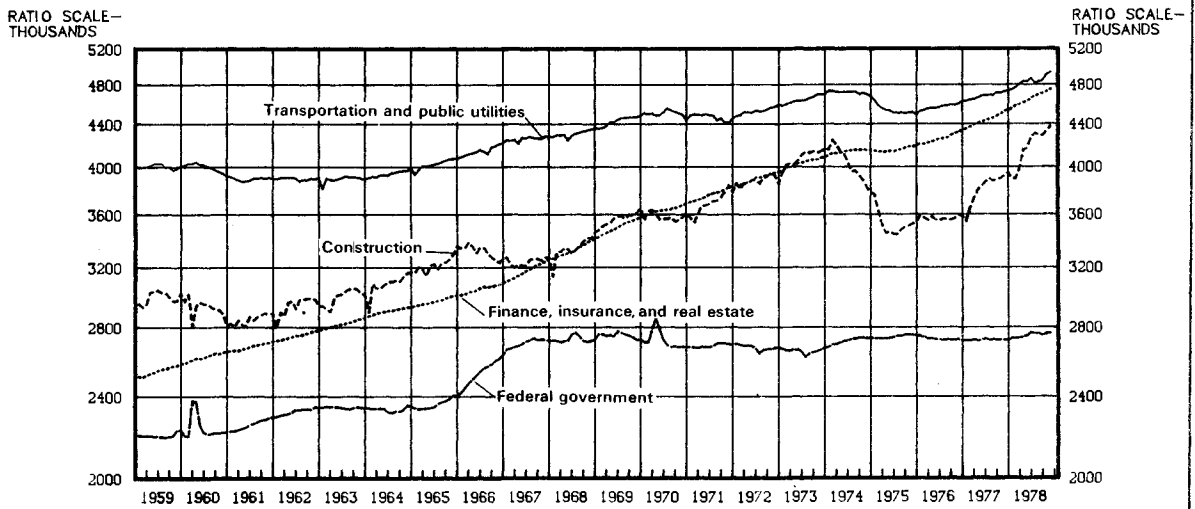
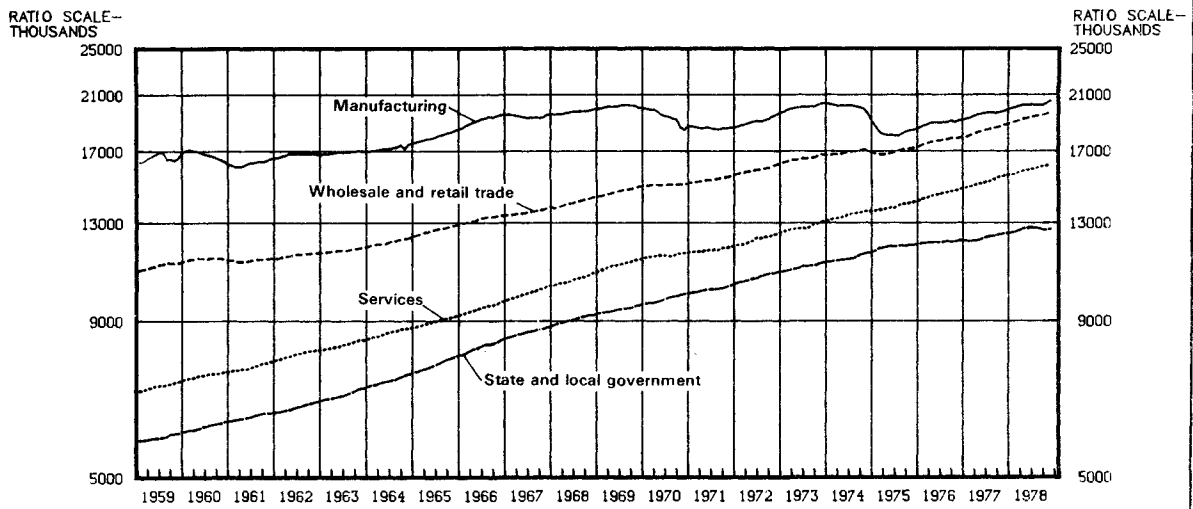


Chart 7. Nonagricultural payroll employment by industry

(Seasonally adjusted)

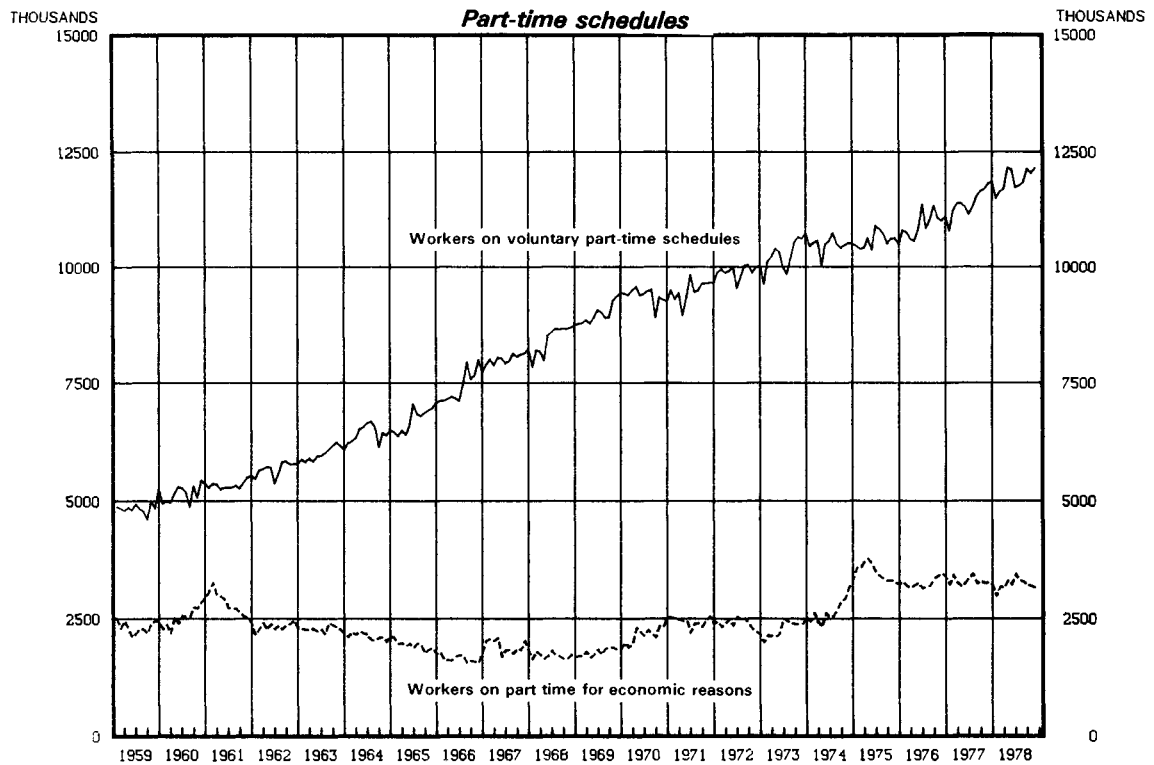
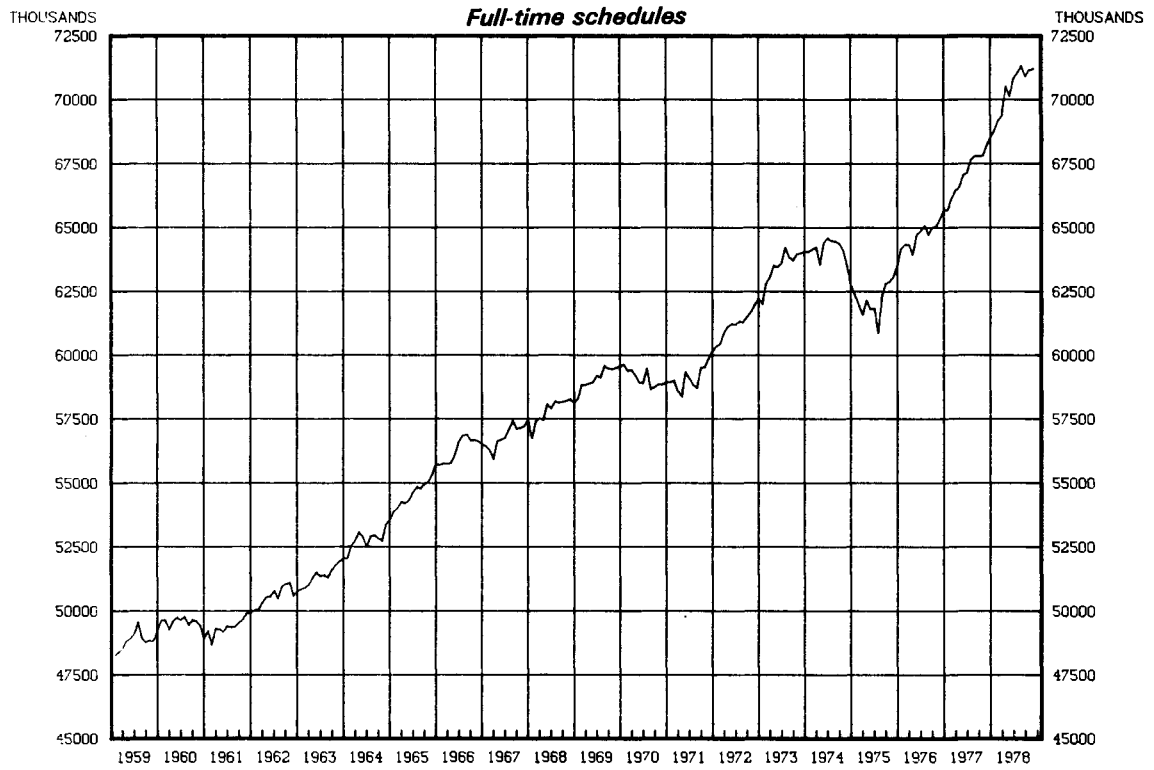


NOTE: Data for two most recent months are preliminary.

SOURCE: Table B-4.

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

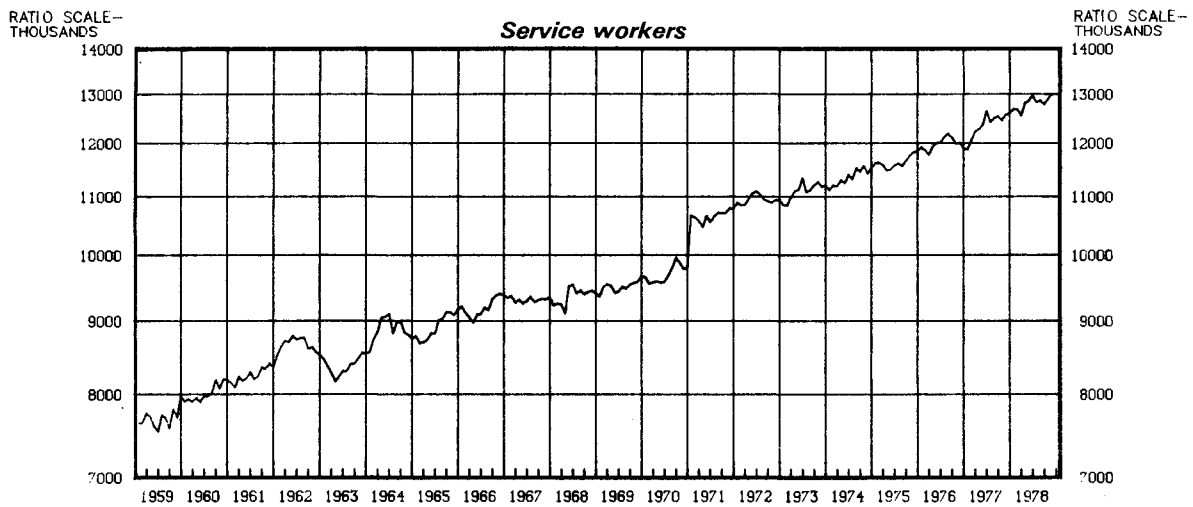
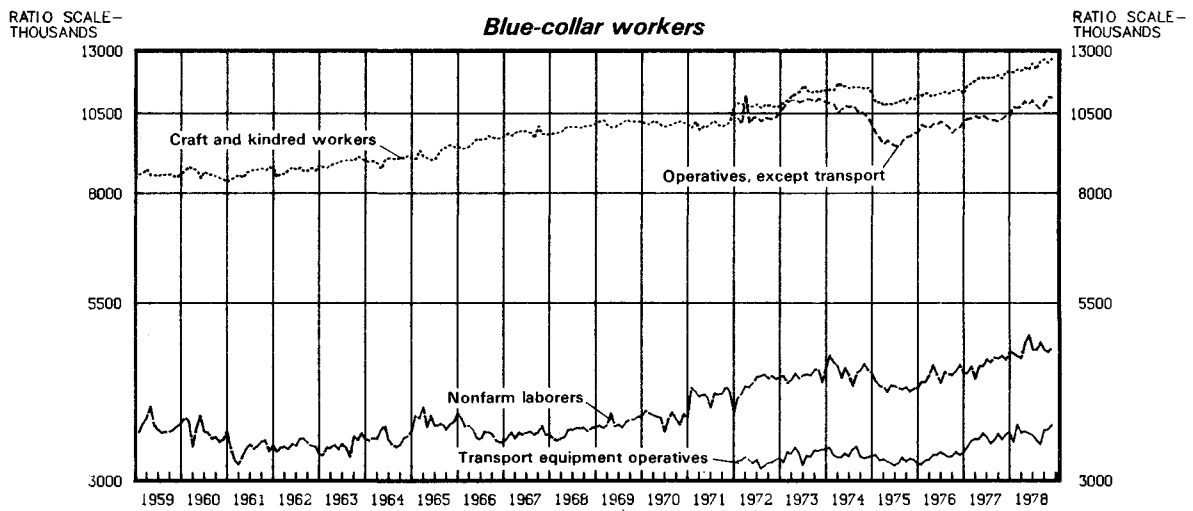
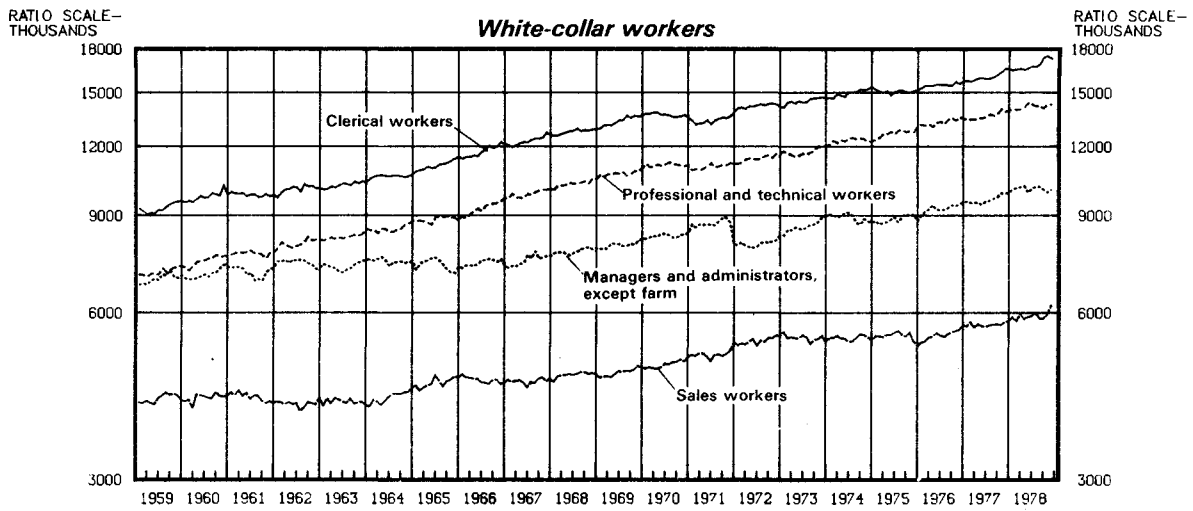
(Seasonally adjusted)



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)

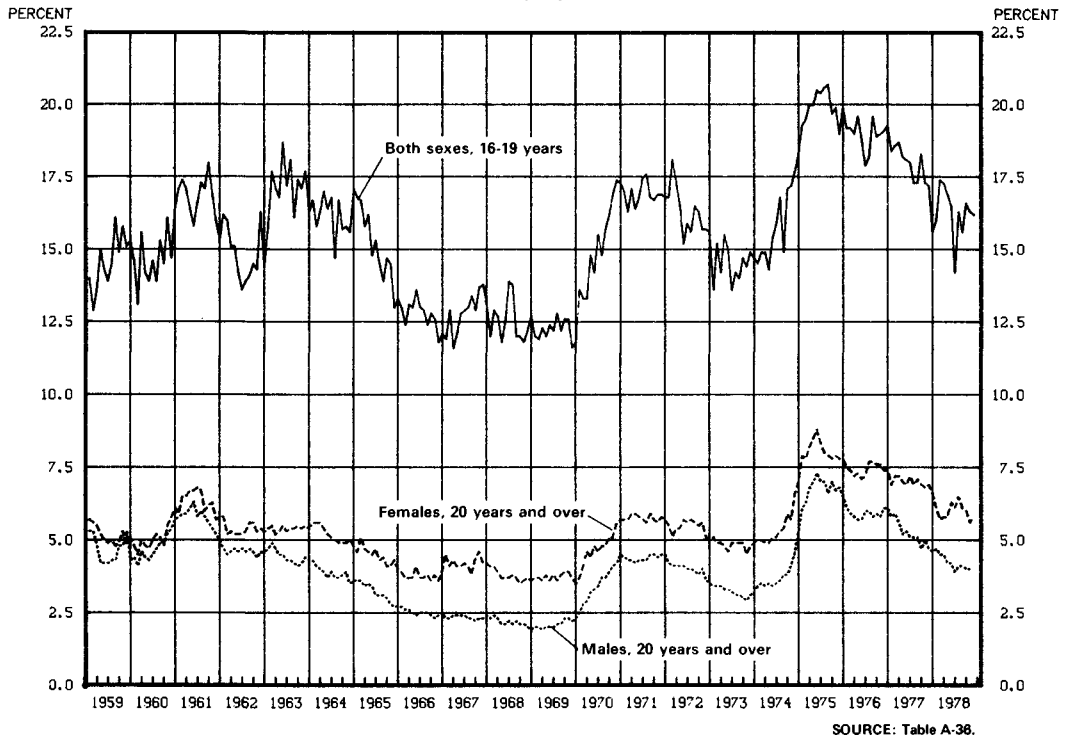
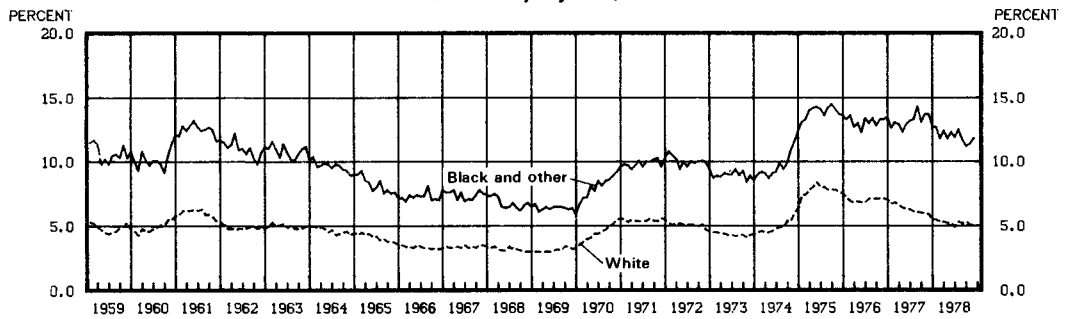
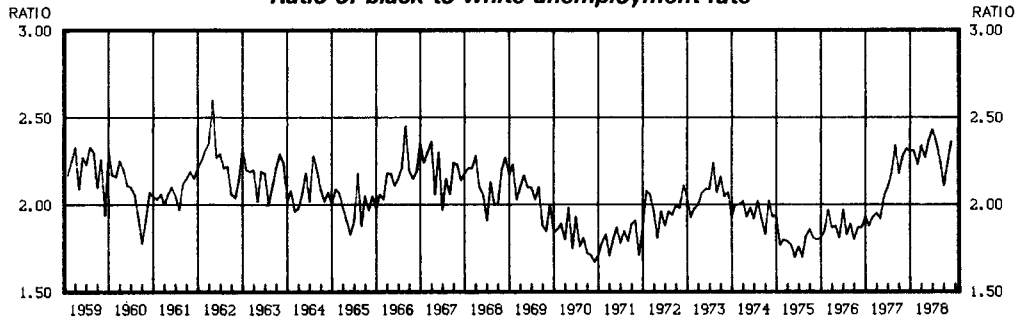


Chart 11. Unemployment rates by race
(Seasonally adjusted)

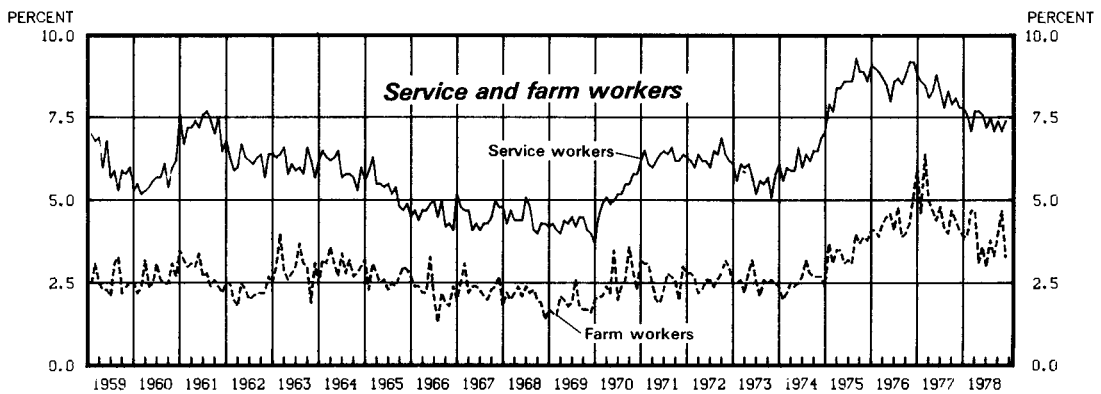
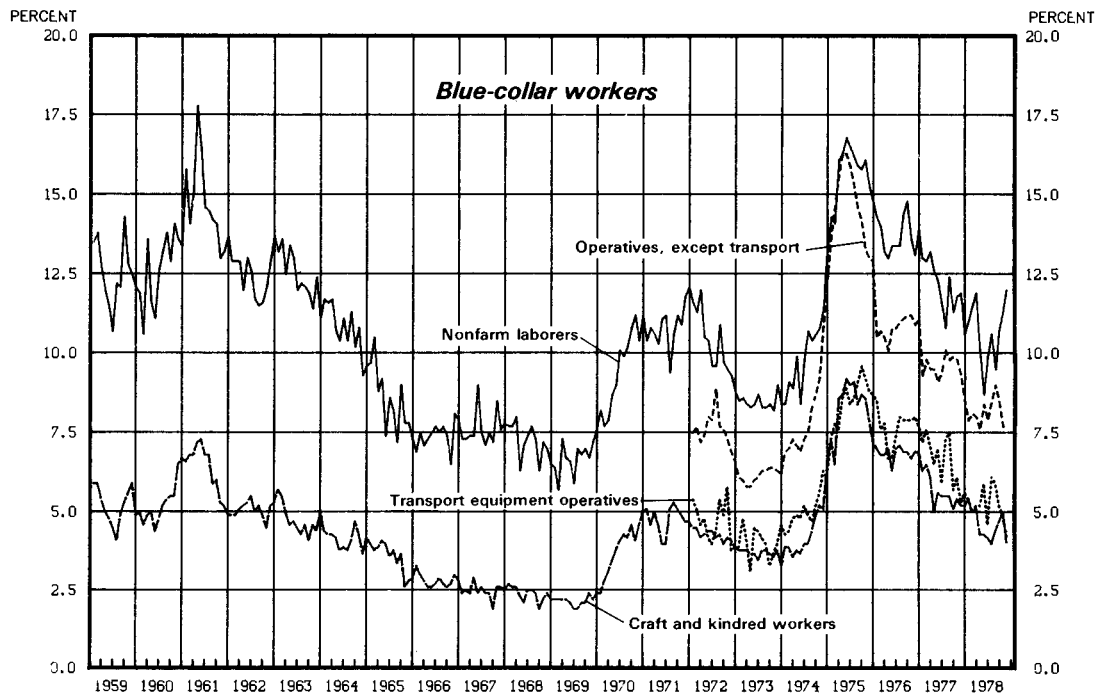
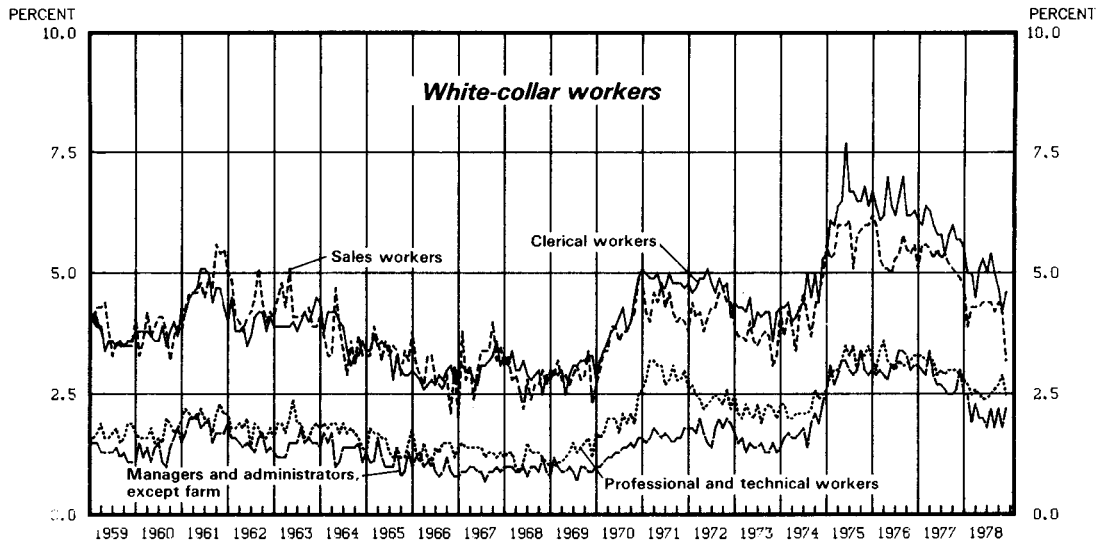


Ratio of black to white unemployment rate



SOURCE: Table A-35.

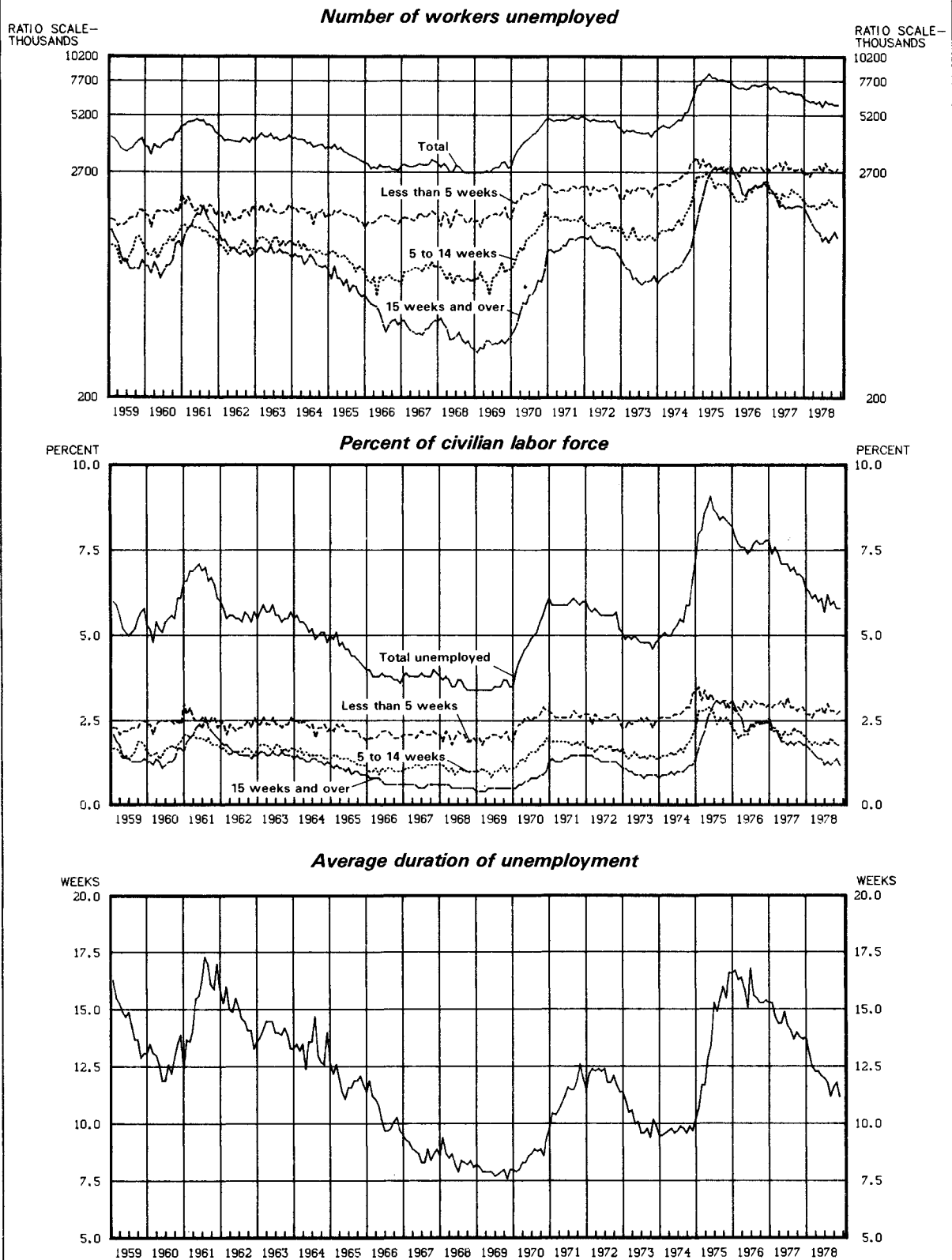
Chart 12. Unemployment rates by major occupational groups
(Seasonally adjusted)



SOURCE: Table A-36.

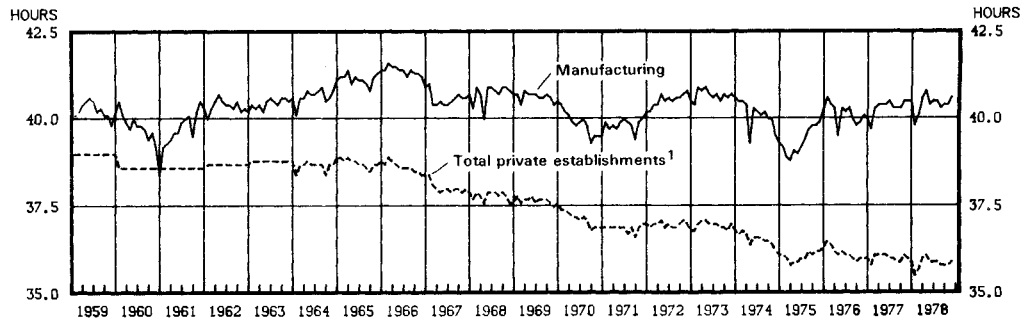
Chart 13. Duration of unemployment

(Seasonally adjusted)

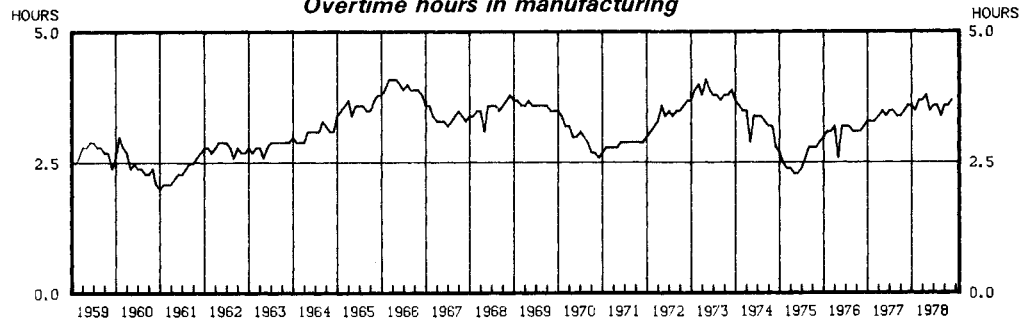


SOURCE: Table A-37.

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



Overtime hours in manufacturing

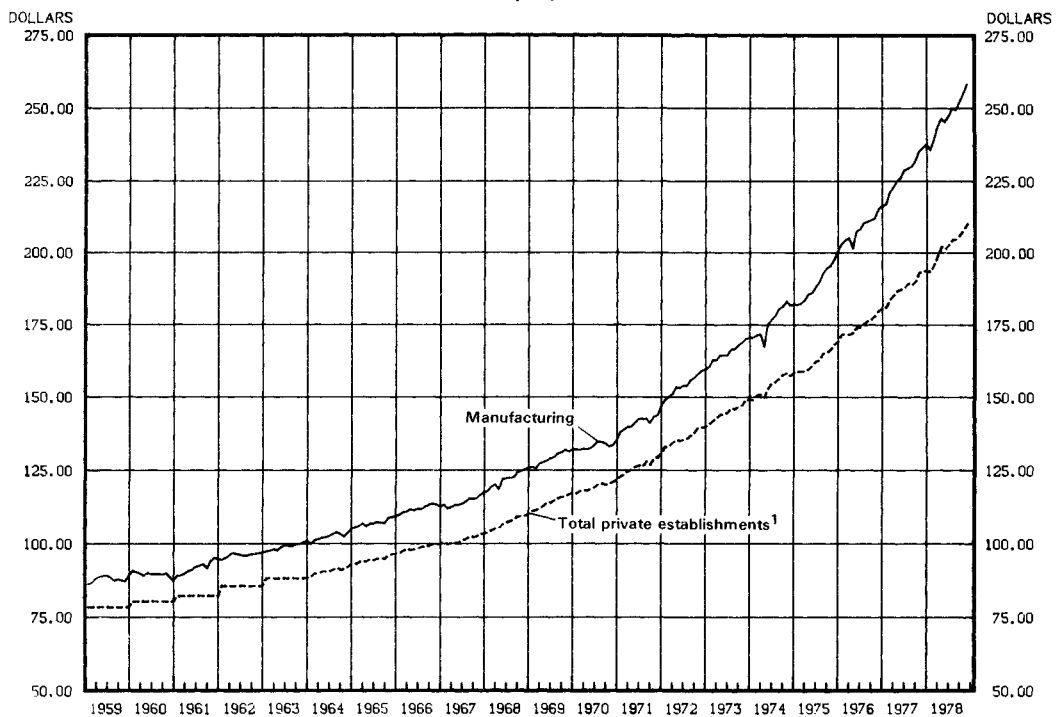


¹Annual averages prior to 1964.

NOTE: Data for two most recent months are preliminary.

SOURCE: Table C-7.

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

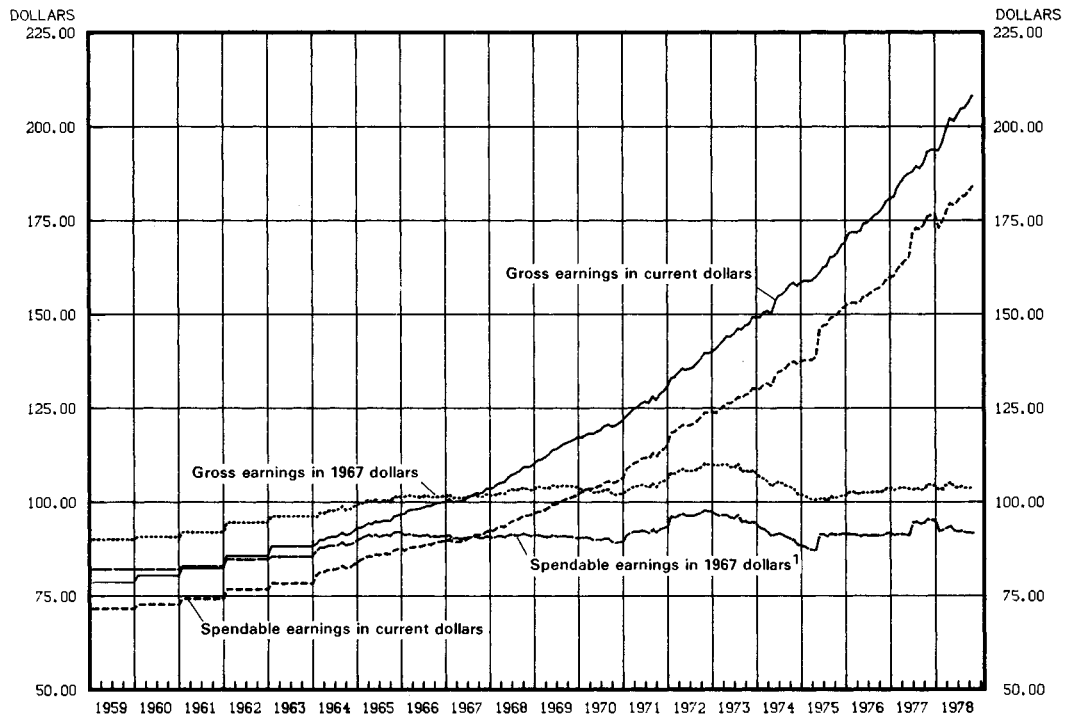


¹Annual averages prior to 1964.

NOTE: Data for two most recent months are preliminary.

SOURCE: Tables C-7 and C-8.

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

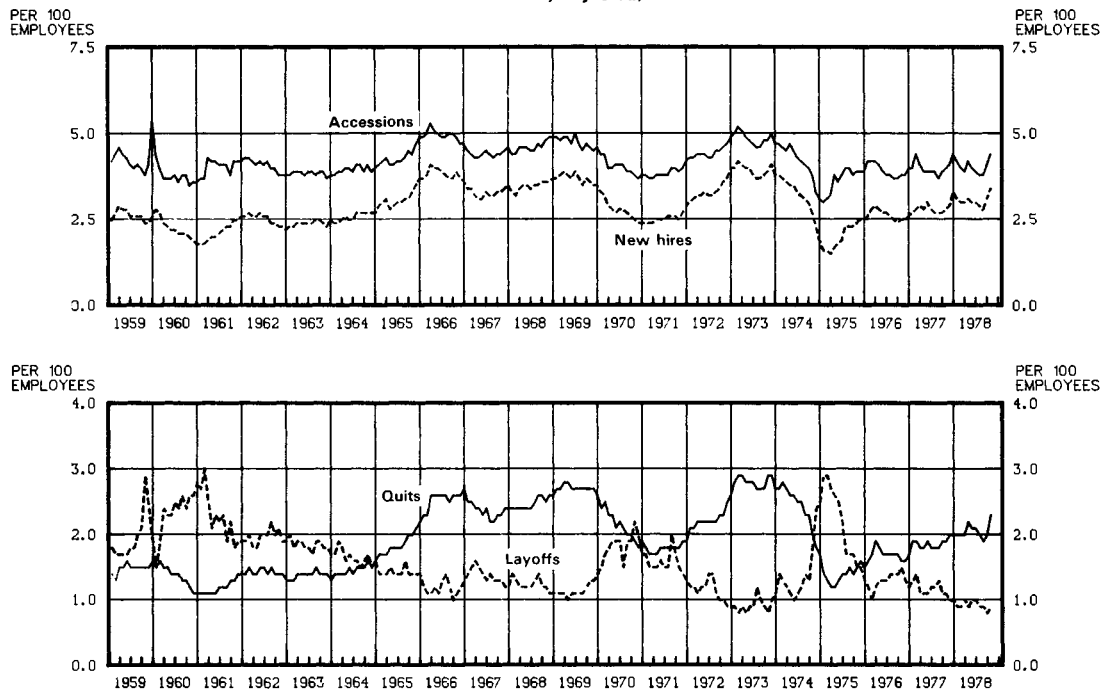


¹ Married worker with three dependents.

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	
Annual averages										
TOTAL										
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 ¹	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 ¹	145,775	88,991	61.0	86,542	81,702	3,472	78,230	4,840	5.6	56,785
1973 ¹	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
Monthly data, seasonally adjusted ²										
1977:										
November..	159,522	101,009	63.3	98,877	92,214	3,357	88,857	6,663	6.7	58,512
December..	159,736	101,048	63.3	98,919	92,609	3,323	89,286	6,310	6.4	58,689
1978:										
January..	159,937	101,227	63.3	99,106	92,880	3,354	89,526	6,226	6.3	58,710
February..	160,128	101,217	63.2	99,093	93,003	3,243	89,761	6,090	6.1	58,911
March....	160,313	101,535	63.3	99,413	93,266	3,310	89,956	6,147	6.2	58,777
April....	160,504	101,902	63.5	99,784	93,801	3,274	90,527	5,983	6.0	58,602
May.....	160,713	102,374	63.7	100,261	94,112	3,235	90,677	6,150	6.1	58,340
June.....	160,928	102,670	63.8	100,572	94,818	3,472	91,346	5,754	5.7	58,258
July.....	161,148	102,734	63.8	100,618	94,425	3,387	91,038	6,193	6.2	58,414
August...	161,348	102,672	63.6	100,550	94,582	3,360	91,221	5,968	5.9	58,677
September	161,570	102,993	63.7	100,870	94,868	3,411	91,457	6,002	6.0	58,577
October..	161,829	103,184	63.8	101,062	95,192	3,380	91,811	5,870	5.8	58,645
November.	162,033	103,764	64.0	101,647	95,735	3,265	92,470	5,912	5.8	58,269

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

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

NOTE: "1978 seasonally-adjusted household data shown in tables A-1, A-2, and A-33-43 for periods prior to November may differ slightly from those previously published. These estimates are derived with new computer procedures which maintain more precision in calculations than did the procedures previously used."

**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	
Annual averages										
MALES										
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 ¹	69,864	55,671	79.7	53,265	50,630	2,839	47,791	2,635	4.9	14,193
1973 ¹	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	55,166	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	16,341
1977.....	75,981	59,467	78.3	57,449	53,861	2,639	51,222	3,588	6.2	16,514
Monthly data, seasonally adjusted²										
1977:										
November..	76,439	60,112	78.6	58,097	54,745	2,685	52,060	3,352	5.8	16,328
December..	76,541	60,236	78.7	58,225	55,012	2,702	52,310	3,213	5.5	16,306
1978:										
January..	76,630	60,209	78.6	58,206	54,974	2,748	52,226	3,232	5.6	16,427
February..	76,725	60,149	78.4	58,142	54,897	2,566	52,331	3,245	5.6	16,577
March....	76,811	60,285	78.5	58,264	55,013	2,614	52,400	3,271	5.6	16,526
April....	76,901	60,260	78.4	58,263	55,208	2,575	52,632	3,056	5.2	16,641
May.....	77,000	60,439	78.5	58,447	55,445	2,638	52,808	3,001	5.1	16,561
June.....	77,102	60,569	78.6	58,596	55,868	2,777	53,091	2,728	4.7	16,532
July.....	77,206	60,490	78.3	58,500	55,534	2,736	52,798	2,965	5.1	16,717
August...	77,301	60,448	78.2	58,455	55,529	2,705	52,824	2,926	5.0	16,854
September	77,407	60,458	78.1	58,465	55,504	2,752	52,752	2,961	5.1	16,949
October..	77,546	60,706	78.3	58,714	55,702	2,711	52,991	3,013	5.1	16,840
November..	77,643	61,071	78.7	59,084	56,134	2,597	53,537	2,950	5.0	16,571
Annual averages										
FEMALES										
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	27,607	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 ¹	75,911	33,320	43.9	33,277	31,072	633	30,439	2,205	6.6	42,591
1973 ¹	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	42,683
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	42,789
1977.....	82,577	40,067	48.5	39,952	36,685	605	36,080	3,267	8.2	42,510
Monthly data, seasonally adjusted²										
1977:										
November..	83,082	40,898	49.2	40,780	37,469	672	36,797	3,311	8.1	42,185
December..	83,195	40,812	49.1	40,694	37,597	621	36,976	3,097	7.6	42,383
1978:										
January..	83,301	41,017	49.2	40,900	37,906	605	37,301	2,994	7.3	42,284
February..	83,403	41,068	49.2	40,951	38,107	676	37,430	2,845	6.9	42,335
March....	83,501	41,252	49.4	41,130	38,253	696	37,556	2,877	7.0	42,250
April....	83,603	41,641	49.8	41,520	38,593	699	37,894	2,927	7.1	41,962
May.....	83,714	41,936	50.1	41,815	38,667	597	38,069	3,148	7.5	41,778
June.....	83,826	42,100	50.2	41,975	38,950	694	38,255	3,026	7.2	41,726
July.....	83,941	42,245	50.3	42,119	38,891	651	38,240	3,228	7.7	41,696
August...	84,047	42,225	50.2	42,095	39,053	655	38,397	3,042	7.2	41,823
September	84,162	42,535	50.5	42,405	39,364	659	38,705	3,041	7.2	41,628
October..	84,283	42,477	50.4	42,347	39,490	669	38,821	2,857	6.7	41,806
November..	84,390	42,692	50.6	42,563	39,601	668	38,933	2,962	7.0	41,698

¹ See footnote 1, table A-1.

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	November 1978										
	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					
MALES											
16 years and over	60,710	78.2	58,723	55,976	2,747	4.7	16,933	282	4,509	1,760	10,382
16 to 21 years	8,608	67.5	7,936	6,860	1,076	13.6	4,145	19	3,767	28	330
16 to 19 years	5,091	60.2	4,799	4,021	778	16.2	3,370	15	3,109	12	234
16 to 17 years	2,019	47.9	1,996	1,591	405	20.3	2,195	11	2,067	5	112
18 to 19 years	3,072	72.3	2,803	2,429	373	13.3	1,176	4	1,042	7	122
20 to 64 years	53,665	89.9	51,970	50,055	1,914	3.7	6,035	102	1,400	1,258	3,275
20 to 24 years	8,813	86.6	8,058	7,413	645	8.0	1,365	9	1,064	36	257
25 to 54 years	37,662	94.6	36,723	35,626	1,096	3.0	2,155	53	333	675	1,093
25 to 29 years	8,491	95.1	8,121	7,746	376	4.6	436	8	203	47	179
30 to 34 years	7,610	96.4	7,364	7,153	211	2.9	288	7	78	71	132
35 to 39 years	6,173	96.3	5,979	5,845	134	2.2	236	6	19	82	130
40 to 44 years	5,262	95.8	5,172	5,042	130	2.5	229	9	14	73	133
45 to 49 years	5,085	93.1	5,053	4,942	112	2.2	376	7	17	138	214
50 to 54 years	5,041	89.5	5,034	4,900	134	2.7	590	17	3	263	306
55 to 64 years	7,189	74.1	7,188	7,016	172	2.4	2,515	40	4	547	1,924
55 to 59 years	4,431	83.2	4,430	4,345	85	1.9	893	18	4	295	576
60 to 64 years	2,758	63.0	2,758	2,671	87	3.2	1,622	22	--	252	1,348
65 years and over	1,954	20.6	1,954	1,900	55	2.8	7,528	165	--	490	6,873
65 to 69 years	1,161	30.9	1,161	1,118	44	3.7	2,596	51	--	172	2,372
70 years and over	793	13.9	793	782	11	1.4	4,932	113	--	318	4,501
White											
16 years and over	53,957	78.8	52,360	50,282	2,078	4.0	14,484	224	3,627	1,399	9,233
16 to 21 years	7,553	69.6	7,024	6,236	788	11.2	3,299	19	3,010	19	251
16 to 19 years	4,502	62.7	4,272	3,687	585	13.7	2,673	15	2,463	9	187
16 to 17 years	1,820	51.2	1,801	1,476	325	18.1	1,736	11	1,628	3	94
18 to 19 years	2,682	74.1	2,471	2,211	259	10.5	937	4	835	5	93
20 to 64 years	47,695	90.5	46,329	44,883	1,447	3.1	5,030	78	1,165	993	2,795
20 to 24 years	7,664	87.4	7,074	6,618	456	6.4	1,102	8	882	27	185
25 to 54 years	33,489	95.2	32,715	31,869	845	2.6	1,691	34	280	506	873
25 to 34 years	14,236	96.3	13,735	13,294	441	3.2	554	8	235	79	231
35 to 44 years	10,184	96.7	9,944	9,743	201	2.0	347	6	25	111	205
45 to 54 years	9,070	92.0	9,035	8,831	204	2.3	790	19	20	316	436
55 to 64 years	6,541	74.5	6,540	6,396	145	2.2	2,237	36	4	459	1,738
55 to 59 years	4,022	83.8	4,020	3,959	62	1.5	778	17	4	239	517
60 to 64 years	2,520	63.3	2,520	2,437	83	3.3	1,459	19	--	220	1,220
65 years and over	1,759	20.6	1,759	1,712	47	2.7	6,781	131	--	398	6,252
Black and other											
16 years and over	6,753	73.4	6,362	5,694	669	10.5	2,449	58	882	361	1,148
16 to 21 years	1,055	55.5	912	624	288	31.6	846	--	757	10	79
16 to 19 years	588	45.8	527	333	193	36.7	697	--	647	4	47
16 to 17 years	199	30.2	195	116	79	40.7	458	--	439	2	18
18 to 19 years	390	62.0	332	218	114	34.4	239	--	208	2	29
20 to 64 years	5,970	85.6	5,641	5,172	468	8.3	1,004	25	235	265	480
20 to 24 years	1,149	81.3	984	795	189	19.2	264	1	182	9	72
25 to 54 years	4,173	90.0	4,009	3,758	251	6.3	463	19	53	169	221
25 to 34 years	1,866	91.6	1,750	1,604	147	8.4	171	6	45	39	80
35 to 44 years	1,251	91.4	1,206	1,143	63	5.2	118	8	8	45	57
45 to 54 years	1,056	85.8	1,052	1,011	41	3.9	175	5	--	86	84
55 to 64 years	648	70.0	648	620	28	4.3	278	4	--	88	186
55 to 59 years	409	78.1	409	386	24	5.8	115	1	--	56	58
60 to 64 years	238	59.4	238	234	4	1.7	163	3	--	32	128
65 years and over	195	20.7	195	188	7	3.8	747	33	--	92	621

HOUSEHOLD DATA

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

(Numbers in thousands)

Sex, age, and race	November 1978										
	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					
FEMALES											
16 years and over	43,065	51.0	42,936	40,054	2,882	6.7	41,325	32,094	4,372	1,090	3,770
16 to 21 years	7,229	57.9	7,177	6,182	995	13.9	5,264	1,299	3,607	18	339
16 to 19 years	4,414	53.3	4,393	3,692	701	16.0	3,867	606	3,027	12	222
16 to 17 years	1,834	44.9	1,832	1,507	326	17.8	2,247	170	1,991	2	84
18 to 19 years	2,580	61.4	2,561	2,185	376	14.7	1,619	436	1,036	10	138
20 to 64 years	37,536	60.0	37,428	35,286	2,142	5.7	25,054	21,567	1,338	524	1,627
20 to 24 years	6,985	68.7	6,917	6,283	635	9.2	3,178	2,028	905	22	224
25 to 54 years	25,941	62.4	25,899	24,561	1,339	5.2	15,647	14,160	427	257	804
25 to 29 years	6,061	66.6	6,033	5,612	421	7.0	3,034	2,697	175	24	138
30 to 34 years	4,993	61.6	4,986	4,713	273	5.5	3,110	2,846	116	18	130
35 to 39 years	4,268	63.3	4,265	4,034	231	5.4	2,474	2,248	67	39	121
40 to 44 years	3,649	62.8	3,648	3,483	165	4.5	2,162	1,979	37	45	102
45 to 49 years	3,519	61.0	3,519	3,374	145	4.1	2,245	2,038	16	45	146
50 to 54 years	3,450	56.8	3,450	3,345	105	3.0	2,622	2,352	17	87	166
55 to 64 years	4,611	42.5	4,611	4,443	169	3.7	6,229	5,379	6	245	599
55 to 59 years	2,917	49.9	2,917	2,809	108	3.7	2,932	2,569	3	116	243
60 to 64 years	1,694	33.9	1,694	1,633	61	3.6	3,297	2,809	3	129	356
65 years and over	1,115	8.2	1,115	1,076	39	3.5	12,404	9,921	7	555	1,921
65 to 69 years	694	14.7	694	670	24	3.4	4,018	3,390	1	98	530
70 years and over	421	4.8	421	406	15	3.6	8,386	6,532	6	457	1,391
White											
16 years and over	37,263	50.6	37,161	34,979	2,182	5.9	36,326	28,835	3,480	838	3,173
16 to 21 years	6,353	60.3	6,311	5,566	745	11.8	4,185	1,063	2,886	8	227
16 to 19 years	3,926	56.3	3,909	3,378	531	13.6	3,043	485	2,404	6	148
16 to 17 years	1,662	48.5	1,661	1,392	269	16.2	1,762	142	1,554	1	65
18 to 19 years	2,264	63.9	2,248	1,986	262	11.7	1,281	343	850	5	83
20 to 64 years	32,377	59.6	32,292	30,671	1,621	5.0	21,985	19,184	1,071	383	1,349
20 to 24 years	5,999	69.7	5,946	5,497	449	7.5	2,611	1,698	727	14	172
25 to 54 years	22,256	61.8	22,223	21,185	1,039	4.7	13,749	12,568	337	184	661
25 to 29 years	9,383	63.6	9,355	8,830	525	5.6	5,372	4,901	229	30	211
30 to 34 years	6,783	62.5	6,780	6,463	317	4.7	4,071	3,764	80	52	175
35 to 44 years	6,090	58.6	6,089	5,852	237	3.2	4,306	3,902	28	102	274
55 to 64 years	4,122	42.3	4,122	3,988	134	3.2	5,625	4,919	6	164	517
55 to 59 years	2,608	49.8	2,608	2,523	85	3.3	2,632	2,334	3	87	207
60 to 64 years	1,515	33.6	1,515	1,466	49	3.2	2,994	2,585	3	97	309
65 years and over	960	7.8	960	930	30	3.1	11,298	9,166	6	450	1,676
Black and other											
16 years and over	5,802	53.7	5,775	5,075	700	12.1	4,999	3,259	891	252	597
16 to 21 years	876	44.8	866	616	250	28.9	1,079	236	721	10	112
16 to 19 years	488	37.2	484	314	170	35.1	823	120	623	6	74
16 to 17 years	171	26.1	171	115	56	33.0	485	28	437	--	19
18 to 19 years	316	48.3	313	199	114	36.3	339	93	186	5	55
20 to 64 years	5,159	62.7	5,136	4,615	521	10.1	3,068	2,382	267	141	278
20 to 24 years	986	63.5	972	786	186	19.1	567	330	177	7	52
25 to 54 years	3,685	66.0	3,676	3,375	300	8.2	1,898	1,592	90	73	143
25 to 29 years	1,672	68.4	1,664	1,454	210	10.2	772	642	61	12	57
30 to 34 years	1,133	66.8	1,132	1,054	79	7.0	564	462	24	31	47
35 to 44 years	880	61.0	880	827	53	6.0	561	488	5	30	39
55 to 64 years	489	44.8	489	454	35	7.2	604	460	--	62	83
55 to 59 years	309	50.8	309	287	23	7.3	300	235	--	29	36
60 to 64 years	180	37.2	180	167	13	7.0	304	225	--	32	47
65 years and over	155	12.3	155	146	9	5.7	1,107	756	1	105	245

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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
MALES								
16 years and over	59,725	60,710	78.1	78.2	57,710	58,723	77.5	77.6
16 to 19 years	5,144	5,091	60.6	60.2	4,820	4,799	59.0	58.7
16 to 17 years	2,074	2,019	48.9	47.9	2,041	1,996	48.5	47.6
18 to 19 years	3,070	3,072	72.3	72.3	2,779	2,803	70.2	70.4
20 to 24 years	8,539	8,813	85.3	86.6	7,791	8,058	84.1	85.5
25 to 54 years	36,994	37,662	94.6	94.6	36,054	36,723	94.5	94.5
25 to 34 years	15,662	16,101	95.6	95.7	15,046	15,485	95.4	95.5
35 to 44 years	11,067	11,435	96.1	96.1	10,782	11,151	96.0	96.0
45 to 54 years	10,265	10,126	91.8	91.3	10,226	10,087	91.8	91.3
55 to 64 years	7,104	7,189	74.2	74.1	7,102	7,188	74.2	74.1
55 to 59 years	4,362	4,431	83.2	83.2	4,360	4,430	83.2	83.2
60 to 64 years	2,742	2,758	63.3	63.0	2,742	2,758	63.3	63.0
65 years and over	1,943	1,954	20.9	20.6	1,943	1,954	20.9	20.6
White								
16 years and over	53,276	53,957	78.9	78.8	51,628	52,360	78.4	78.3
16 to 19 years	4,562	4,502	63.2	62.7	4,298	4,272	61.8	61.5
16 to 17 years	1,886	1,820	52.5	51.2	1,859	1,801	52.1	50.9
18 to 19 years	2,675	2,682	73.8	74.1	2,439	2,471	71.9	72.5
20 to 24 years	7,467	7,664	86.3	87.4	6,872	7,074	85.3	86.5
25 to 54 years	32,987	33,489	95.3	95.2	32,198	32,715	95.2	95.1
25 to 34 years	13,902	14,236	96.2	96.3	13,390	13,735	96.1	96.1
35 to 44 years	9,839	10,184	96.6	96.7	9,598	9,944	96.6	96.6
45 to 54 years	9,245	9,070	92.7	92.0	9,210	9,035	92.7	92.0
55 to 64 years	6,491	6,541	74.9	74.5	6,489	6,540	74.9	74.5
55 to 59 years	3,975	4,022	84.0	83.8	3,974	4,020	84.0	83.8
60 to 64 years	2,515	2,520	63.9	63.3	2,515	2,520	63.9	63.3
65 years and over	1,770	1,759	21.2	20.6	1,770	1,759	21.2	20.6
Black and other								
16 years and over	6,449	6,753	72.1	73.4	6,083	6,362	70.9	72.2
16 to 19 years	582	588	45.8	45.8	522	527	43.1	43.0
16 to 17 years	188	199	28.8	30.2	182	195	28.2	29.8
18 to 19 years	395	390	63.6	62.0	340	332	60.1	58.1
20 to 24 years	1,072	1,149	78.5	81.3	919	984	75.8	78.9
25 to 54 years	4,008	4,173	89.3	90.0	3,855	4,009	88.9	89.6
25 to 34 years	1,761	1,866	90.6	91.6	1,655	1,750	90.1	91.1
35 to 44 years	1,227	1,251	92.1	91.4	1,184	1,206	91.8	91.1
45 to 54 years	1,020	1,056	84.0	85.8	1,016	1,052	84.0	85.7
55 to 64 years	613	648	68.0	70.0	613	648	68.0	70.0
55 to 59 years	387	409	76.2	78.1	386	409	76.2	78.1
60 to 64 years	226	238	57.4	59.4	226	238	57.4	59.4
65 years and over	173	195	19.0	20.7	173	195	19.0	20.7

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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
FEMALES								
16 years and over	41,227	43,065	49.6	51.0	41,109	42,936	49.6	51.0
16 to 19 years	4,231	4,414	50.9	53.3	4,213	4,393	50.8	53.2
16 to 17 years	1,723	1,834	41.9	44.9	1,722	1,832	41.9	44.9
18 to 19 years	2,508	2,580	59.7	61.4	2,490	2,561	59.5	61.3
20 to 24 years	6,759	6,985	67.6	68.7	6,694	6,917	67.4	68.5
25 to 34 years	24,641	25,941	60.3	62.4	24,607	25,899	60.3	62.3
25 to 34 years	10,275	11,055	61.3	64.3	10,244	11,018	61.2	64.2
35 to 44 years	7,471	7,916	61.5	63.1	7,468	7,913	61.5	63.1
45 to 54 years	6,896	6,969	57.7	58.9	6,895	6,968	57.7	58.9
55 to 64 years	4,487	4,611	41.9	42.5	4,487	4,611	41.9	42.5
55 to 59 years	2,854	2,917	49.6	49.9	2,853	2,917	49.6	49.9
60 to 64 years	1,633	1,694	33.0	33.9	1,633	1,694	33.0	33.9
65 years and over	1,109	1,115	8.4	8.2	1,109	1,115	8.4	8.2
White								
16 years and over	35,755	37,263	49.3	50.6	35,660	37,161	49.2	50.6
16 to 19 years	3,793	3,926	54.1	56.3	3,777	3,909	54.0	56.2
16 to 17 years	1,587	1,662	45.9	48.5	1,586	1,661	45.9	48.5
18 to 19 years	2,206	2,264	62.0	63.9	2,191	2,248	61.9	63.7
20 to 24 years	5,832	5,999	68.6	69.7	5,781	5,946	68.4	69.5
25 to 34 years	21,157	22,256	59.6	61.8	21,128	22,223	59.6	61.8
25 to 34 years	8,707	9,383	60.3	63.6	8,683	9,355	60.3	63.5
35 to 44 years	6,392	6,783	60.9	62.5	6,389	6,780	60.9	62.5
45 to 54 years	6,058	6,090	57.5	58.6	6,057	6,089	57.5	58.6
55 to 64 years	3,997	4,122	41.5	42.3	3,997	4,122	41.5	42.3
55 to 59 years	2,528	2,608	48.9	49.8	2,528	2,608	48.9	49.8
60 to 64 years	1,468	1,515	32.9	33.6	1,468	1,515	32.9	33.6
65 years and over	976	960	8.2	7.8	976	960	8.2	7.8
Black and other								
16 years and over	5,472	5,802	52.2	53.7	5,449	5,775	52.1	53.6
16 to 19 years	438	488	33.7	37.2	435	484	33.6	37.0
16 to 17 years	136	171	20.8	26.1	136	171	20.8	26.1
18 to 19 years	302	316	46.8	48.3	299	313	46.6	48.0
20 to 24 years	926	986	61.6	63.5	913	972	61.3	63.2
25 to 34 years	3,485	3,685	64.5	66.0	3,479	3,676	64.5	65.9
25 to 34 years	1,567	1,672	67.2	68.4	1,561	1,664	67.1	68.3
35 to 44 years	1,080	1,133	65.5	66.8	1,079	1,132	65.5	66.7
45 to 54 years	838	880	59.0	61.0	838	880	59.0	61.0
55 to 64 years	490	489	46.1	44.8	490	489	46.1	44.8
55 to 59 years	325	309	55.4	50.8	325	309	55.4	50.8
60 to 64 years	165	180	34.6	37.2	165	180	34.6	37.2
65 years and over	132	155	10.9	12.3	132	155	10.9	12.3

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

(Numbers in thousands)

Sex and age	November 1978						
	Civilian labor force						Not in labor force
	Total	Employed			Unemployed		
		Total	Agri- culture	Nonagri- cultural indus- tries	Number	Percent of labor force	
TOTAL							
16 years and over	10,338	9,091	238	8,853	1,247	12.1	6,457
16 to 19 years	877	542	7	534	336	38.3	1,354
16 to 17 years	309	183	--	184	125	40.6	850
18 to 19 years	569	359	8	350	210	37.0	504
20 to 24 years	1,676	1,327	31	1,296	349	20.8	713
25 to 54 years	6,472	5,984	150	5,834	488	7.5	1,973
25 to 34 years	2,860	2,575	59	2,516	285	10.0	742
35 to 44 years	1,991	1,865	36	1,829	126	6.3	579
45 to 54 years	1,622	1,545	55	1,490	77	4.7	652
55 to 64 years	998	939	28	910	60	6.0	787
55 to 59 years	623	580	16	564	43	6.9	370
60 to 64 years	376	359	13	346	16	4.4	417
65 years and over	314	299	21	278	15	4.8	1,629
Males							
16 years and over	5,398	4,785	213	4,572	613	11.4	2,140
16 to 19 years	458	283	7	275	176	38.4	622
16 to 17 years	165	91	--	91	74	44.8	415
18 to 19 years	293	192	7	184	101	34.5	207
20 to 24 years	846	668	30	638	178	21.0	215
25 to 54 years	3,361	3,135	132	3,003	226	6.7	412
25 to 34 years	1,448	1,316	50	1,267	131	9.0	144
35 to 44 years	1,028	968	32	936	60	5.8	103
45 to 54 years	887	851	50	801	35	3.9	165
55 to 64 years	564	539	26	511	26	4.6	250
55 to 59 years	354	332	14	318	22	6.2	105
60 to 64 years	211	207	13	194	3	1.4	144
65 years and over	169	162	17	144	7	4.1	640
Females							
16 years and over	4,940	4,306	25	4,281	634	12.8	4,317
16 to 19 years	419	259	--	259	160	38.2	732
16 to 17 years	144	92	--	93	51	35.8	435
18 to 19 years	276	167	1	166	109	39.4	297
20 to 24 years	830	659	1	658	171	20.6	498
25 to 54 years	3,111	2,849	18	2,831	262	8.4	1,561
25 to 34 years	1,412	1,259	9	1,249	154	10.9	598
35 to 44 years	963	897	4	893	66	6.9	476
45 to 54 years	735	694	5	689	42	5.6	487
55 to 64 years	434	400	2	399	34	7.8	537
55 to 59 years	269	248	2	246	21	8.0	265
60 to 64 years	165	152	--	152	13	7.6	273
65 years and over	145	137	4	134	8	5.6	989

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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
TOTAL								
Total noninstitutional population	159,522	162,033	67,948	69,182	74,768	76,110	16,806	16,741
Total labor force	100,952	103,775	54,581	55,619	36,996	38,651	9,375	9,505
Percent of population	63.3	64.0	80.3	80.4	49.5	50.8	55.8	56.8
Civilian labor force	98,819	101,659	52,890	53,924	36,896	38,543	9,033	9,192
Employed	92,473	96,029	50,578	51,955	34,405	36,362	7,490	7,712
Agriculture	3,181	3,100	2,283	2,277	548	534	350	289
Nonagricultural industries	89,292	92,929	48,295	49,678	33,857	35,827	7,140	7,424
Unemployed	6,346	5,625	2,312	1,969	2,491	2,181	1,543	1,479
Percent of labor force	6.4	5.5	4.4	3.7	6.8	5.7	17.1	16.1
Not in labor force	58,570	58,258	13,367	13,563	37,772	37,458	7,431	7,237
White								
Total noninstitutional population	140,095	142,031	60,276	61,266	65,583	66,620	14,236	14,145
Total labor force	89,031	91,220	48,714	49,454	31,962	33,337	8,355	8,429
Percent of population	63.6	64.2	80.8	80.7	48.7	50.0	58.7	59.6
Civilian labor force	87,267	89,521	47,330	48,088	31,882	33,252	8,075	8,182
Employed	82,451	85,261	45,538	46,595	30,008	31,601	6,905	7,066
Agriculture	2,941	2,814	2,086	2,035	515	502	340	277
Nonagricultural industries	79,510	82,447	43,451	44,559	29,494	31,099	6,565	6,788
Unemployed	4,836	4,260	1,792	1,494	1,874	1,651	1,170	1,116
Percent of labor force	5.5	4.8	3.8	3.1	5.9	5.0	14.5	13.6
Not in labor force	51,064	50,811	11,562	11,811	33,620	33,283	5,881	5,716
Black and other								
Total noninstitutional population	19,427	20,002	7,672	7,916	9,186	9,490	2,570	2,597
Total labor force	11,921	12,555	5,867	6,165	5,034	5,314	1,020	1,076
Percent of population	61.4	62.8	76.5	77.9	54.8	56.0	39.7	41.4
Civilian labor force	11,522	12,137	5,560	5,836	5,014	5,291	957	1,010
Employed	10,022	10,768	5,041	5,360	4,397	4,761	585	647
Agriculture	240	286	197	242	33	33	10	12
Nonagricultural industries	9,782	10,482	4,844	5,119	4,364	4,728	575	635
Unemployed	1,510	1,369	520	475	617	530	373	363
Percent of labor force	13.1	11.3	9.3	8.1	12.3	10.0	38.9	36.0
Not in labor force	7,506	7,447	1,805	1,751	4,152	4,175	1,549	1,521

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

(Numbers in thousands)

Employment status	November 1978								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
TOTAL									
Total noninstitutional population	25,245	12,753	12,493	21,389	10,851	10,538	3,857	1,901	1,955
Total labor force	15,836	8,608	7,229	13,905	7,553	6,353	1,931	1,055	876
Percent of population	62.7	67.5	57.9	65.0	69.6	60.3	50.1	55.5	44.8
Civilian labor force	15,113	7,936	7,177	13,335	7,024	6,311	1,778	912	866
Employed	13,042	6,860	6,182	11,802	6,236	5,566	1,239	624	616
Agriculture	463	366	97	434	337	97	29	30	--
Nonagricultural industries	12,579	6,493	6,085	11,369	5,899	5,469	1,210	594	616
Unemployed	2,072	1,076	995	1,533	788	745	539	288	250
Looking for full-time work	1,163	596	566	829	437	392	334	159	175
Looking for part-time work	909	480	429	704	351	353	205	129	76
Percent of labor force	13.7	13.6	13.9	11.5	11.2	11.8	30.3	31.6	28.9
Not in labor force	9,409	4,145	5,264	7,483	3,289	4,185	1,926	846	1,079
Major activity: going to school									
Civilian labor force	4,804	2,482	2,322	4,277	2,214	2,063	527	266	259
Employed	3,954	2,003	1,951	3,642	1,865	1,777	312	138	174
Agriculture	156	125	31	158	126	32	--	--	--
Nonagricultural industries	3,798	1,878	1,920	3,484	1,738	1,745	314	140	174
Unemployed	850	479	371	635	349	286	215	130	85
Looking for full-time work	108	60	47	57	33	25	50	28	23
Looking for part-time work	743	419	324	578	317	261	165	102	62
Percent of labor force	17.7	19.3	16.0	14.9	15.8	13.9	40.8	48.4	33.0
Not in labor force	7,374	3,767	3,607	5,896	3,010	2,886	1,478	757	721
Major activity: other									
Civilian labor force	10,309	5,454	4,855	9,058	4,810	4,248	1,251	644	607
Employed	9,088	4,857	4,231	8,160	4,371	3,789	927	485	442
Agriculture	307	242	65	276	210	65	32	31	--
Nonagricultural industries	8,781	4,615	4,166	7,885	4,161	3,724	896	454	442
Unemployed	1,221	597	624	898	439	459	324	159	165
Looking for full-time work	1,055	536	519	771	404	367	284	132	152
Looking for part-time work	167	62	105	127	35	92	40	27	13
Percent of labor force	11.8	11.0	12.9	9.9	9.1	10.8	25.9	24.6	27.2
Not in labor force	2,035	378	1,657	1,587	289	1,298	448	89	359

HOUSEHOLD DATA

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

(Numbers in thousands)

Race, sex, and age	November 1978								
	Full-time labor force				Part-time labor force				
	Total	Employed		Unemployed (looking for full-time work)		Total	Employed on voluntary part time ¹	Unemployed (looking for part-time work)	
		Full-time schedules ¹	Part time for economic reasons	Number	Percent of full-time labor force			Number	Percent of part-time labor force
TOTAL									
Both sexes, 16 years and over.....	85,488	78,201	3,173	4,114	4.8	16,170	14,655	1,516	9.4
16 to 21 years.....	8,954	7,097	695	1,163	13.0	6,159	5,250	909	14.8
16 to 19 years.....	4,220	3,117	414	690	16.3	4,971	4,182	790	15.9
16 to 17 years.....	645	365	102	179	27.7	3,183	2,632	551	17.3
18 to 19 years.....	3,575	2,752	312	511	14.3	1,788	1,550	238	13.3
20 years and over.....	81,268	75,085	2,759	3,424	4.2	11,199	10,473	726	6.5
20 to 24 years.....	17,729	11,045	619	1,065	8.4	2,247	2,032	215	9.6
25 years and over.....	60,539	64,040	2,141	2,359	3.4	8,952	8,440	511	5.7
25 to 54 years.....	56,585	52,854	1,657	2,073	3.7	6,038	5,675	362	6.0
55 years and over.....	11,954	11,185	484	286	2.4	2,914	2,765	149	5.1
Males, 16 years and over.....	53,323	49,828	1,376	2,119	4.0	5,400	4,772	628	11.6
16 to 21 years.....	4,932	4,000	336	596	12.1	3,004	2,523	480	16.0
16 to 19 years.....	2,324	1,777	199	348	15.0	2,474	2,044	430	17.4
20 years and over.....	50,998	48,051	1,177	1,771	3.5	2,925	2,728	198	6.8
20 to 24 years.....	7,130	6,270	295	566	7.9	928	848	80	8.6
25 years and over.....	43,868	41,781	882	1,206	2.7	1,998	1,879	119	6.0
25 to 54 years.....	35,934	34,228	666	1,042	2.9	789	734	55	7.0
55 years and over.....	7,934	7,554	216	164	2.1	1,209	1,146	63	5.2
Females, 16 years and over.....	32,166	28,374	1,797	1,995	6.2	10,770	9,883	888	8.2
16 to 21 years.....	4,022	3,097	359	566	14.1	3,155	2,726	429	13.6
16 to 19 years.....	1,896	1,340	215	342	18.0	2,497	2,138	359	14.4
20 years and over.....	30,269	27,034	1,582	1,653	5.5	8,274	7,745	528	6.4
20 to 24 years.....	5,598	4,776	324	499	8.9	1,319	1,183	136	10.3
25 years and over.....	24,671	22,259	1,259	1,153	4.7	6,955	6,562	393	5.7
25 to 54 years.....	20,650	18,628	591	1,031	5.0	5,250	4,942	307	5.8
55 years and over.....	4,020	3,631	267	122	3.0	1,705	1,620	86	5.0
White									
Males, 16 years and over.....	47,590	44,844	1,139	1,607	3.4	4,770	4,299	471	9.9
16 to 21 years.....	4,351	3,630	284	437	10.0	2,673	2,322	351	13.1
16 to 19 years.....	2,067	1,623	175	269	13.0	2,205	1,890	316	14.3
20 years and over.....	45,524	43,221	964	1,339	2.9	2,565	2,410	155	6.0
20 to 24 years.....	6,246	5,606	241	399	6.4	829	771	57	6.9
25 years and over.....	39,277	37,616	722	939	2.4	1,736	1,638	98	5.6
25 to 54 years.....	32,043	30,695	545	803	2.5	672	629	42	6.3
55 years and over.....	7,234	6,921	177	136	1.9	1,065	1,009	56	5.3
Females, 16 years and over.....	27,392	24,468	1,467	1,458	5.3	9,769	9,045	724	7.4
16 to 21 years.....	3,464	2,763	309	392	11.3	2,847	2,494	353	12.4
16 to 19 years.....	1,652	1,222	192	238	14.4	2,257	1,964	293	13.0
20 years and over.....	25,740	23,246	1,274	1,220	4.7	7,512	7,081	431	5.7
20 to 24 years.....	4,784	4,177	267	340	7.1	1,162	1,053	109	9.4
25 years and over.....	20,956	19,069	1,006	881	4.2	6,350	6,028	322	5.1
25 to 54 years.....	17,371	15,791	799	781	4.5	4,852	4,594	258	5.3
55 years and over.....	3,584	3,278	208	99	2.8	1,498	1,433	64	4.3
Black and other									
Males, 16 years and over.....	5,732	4,983	238	511	8.9	630	473	157	25.0
16 to 21 years.....	581	370	52	159	27.4	331	202	129	39.0
16 to 19 years.....	258	154	24	79	30.7	269	155	114	42.5
20 years and over.....	5,475	4,829	213	432	7.9	361	318	43	11.9
20 to 24 years.....	884	664	54	167	18.8	100	77	23	22.7
25 years and over.....	4,590	4,165	159	266	5.8	262	241	21	8.0
25 to 54 years.....	3,891	3,533	120	238	6.1	117	104	13	11.1
55 years and over.....	699	632	39	27	3.9	144	137	8	5.6
Females, 16 years and over.....	4,773	3,906	330	537	11.2	1,002	838	164	16.3
16 to 21 years.....	558	334	50	175	31.3	306	232	76	24.6
16 to 19 years.....	244	118	22	104	42.6	240	174	66	27.6
20 years and over.....	4,529	3,789	308	433	9.6	762	664	97	12.8
20 to 24 years.....	815	599	57	159	19.6	157	130	27	17.0
25 years and over.....	3,715	3,191	252	274	7.4	605	534	71	11.7
25 to 54 years.....	3,278	2,837	152	250	7.6	398	347	50	12.6
55 years and over.....	437	354	60	24	5.5	207	187	20	9.7

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

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

[Numbers in thousands]

Family relationship	November 1978									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over	101,659	63.6	96,029	5,629	5.5	58,258	32,375	8,881	2,850	14,151
Husbands ¹	40,824	81.7	39,895	929	2.3	9,143	111	250	1,220	7,561
With employed wife	20,739	92.2	20,364	376	1.8	1,742	24	134	394	1,189
With unemployed wife	1,166	93.9	1,091	75	6.4	76	1	--	24	51
With wife not in labor force	17,303	71.8	16,916	387	2.2	6,783	48	82	721	5,933
Wives	23,724	49.6	22,482	1,242	5.2	24,086	22,221	311	257	1,297
With employed husband	21,455	55.9	20,364	1,091	5.1	16,915	15,865	267	124	659
With unemployed husband	451	53.8	376	75	16.6	387	362	12	5	8
With husband not in labor force	1,818	21.1	1,742	76	4.2	6,783	5,994	32	128	630
Relatives in husband-wife families	13,843	60.5	12,272	1,570	11.3	9,020	1,308	6,094	369	1,248
16-19 years	6,522	55.6	5,622	900	13.8	5,218	167	4,771	14	266
20-24 years	4,717	74.5	4,289	428	9.1	1,613	148	1,217	37	212
25 years and over	2,604	54.3	2,361	242	9.3	2,189	993	106	318	770
Women who head families	4,912	58.7	4,529	382	7.8	3,449	2,793	120	154	383
Relatives in female-headed families	3,985	55.1	3,305	680	17.1	3,251	799	1,490	261	700
16-19 years	1,318	48.6	953	365	27.7	1,394	75	1,169	10	141
20-24 years	1,175	70.2	972	202	17.2	499	115	278	18	88
25 years and over	1,492	52.4	1,380	113	7.6	1,358	609	43	233	471
Persons not living in families ²	14,371	60.7	13,546	826	5.7	9,309	5,143	616	589	2,962

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

² 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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
Total, 16 years and over	3,120	2,747	5.4	4.7	3,226	2,882	7.8	6.7
Married, spouse present	1,194	886	3.0	2.2	1,461	1,318	6.3	5.5
Widowed, divorced, or separated	319	309	7.3	6.6	606	503	8.0	6.3
Single (never married)	1,607	1,552	12.0	11.1	1,159	1,061	11.3	9.9
White, 16 years and over	2,407	2,078	4.7	4.0	2,429	2,182	6.8	5.9
Married, spouse present	985	746	2.7	2.0	1,201	1,112	5.8	5.1
Widowed, divorced, or separated	226	220	6.3	5.8	440	357	7.3	5.5
Single (never married)	1,196	1,113	10.2	9.2	787	713	9.0	7.9
Black and other, 16 years and over	713	669	11.7	10.5	797	700	14.6	12.1
Married, spouse present	208	140	5.9	4.0	260	206	10.8	8.3
Widowed, divorced, or separated	93	90	11.5	9.8	166	146	10.9	9.1
Single (never married)	412	439	23.4	23.0	371	348	24.5	20.5
Total, 20 to 64 years of age	2,213	1,914	4.3	3.7	2,435	2,142	6.8	5.7
Married, spouse present	1,093	823	2.9	2.2	1,357	1,232	6.0	5.3
Widowed, divorced, or separated	300	290	7.3	6.5	557	462	8.1	6.3
Single (never married)	820	800	9.4	8.5	523	448	8.2	6.6
White, 20 to 64 years of age	1,712	1,447	3.8	3.1	1,828	1,621	5.9	5.0
Married, spouse present	902	690	2.6	2.0	1,121	1,038	5.6	4.9
Widowed, divorced, or separated	211	203	6.3	5.7	394	321	7.2	5.5
Single (never married)	599	552	8.0	6.9	311	262	5.9	4.8
Black and other, 20 to 64 years of age	501	468	9.3	8.3	608	521	12.5	10.1
Married, spouse present	191	133	5.7	3.9	235	194	10.1	8.1
Widowed, divorced, or separated	89	87	11.5	10.1	163	140	11.4	9.4
Single (never married)	221	248	17.8	18.0	210	187	18.7	14.9

HOUSEHOLD DATA

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

Occupation	Thousands of persons		Unemployment rates					
			Total		Males		Females	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
Total, 16 years and over	6,346	5,629	6.4	5.5	5.4	4.7	7.8	6.7
White-collar workers	1,984	1,602	4.1	3.2	2.8	2.1	5.3	4.2
Professional and technical	395	350	2.7	2.3	1.9	1.8	3.7	3.0
Managers and administrators, except farm	314	236	3.1	2.3	2.4	2.0	5.2	3.2
Sales workers	293	199	4.8	3.1	4.0	2.2	5.8	4.2
Clerical workers	982	818	5.6	4.5	4.4	3.2	5.9	4.8
Blue-collar workers	2,344	2,088	7.1	6.1	6.4	5.5	10.4	8.7
Craft and kindred workers	604	487	4.8	3.7	4.6	3.7	7.9	4.5
Carpenters and other construction craft	284	255	7.1	6.3	7.1	6.2	(1)	(1)
All other	320	232	3.7	2.5	3.3	2.5	8.2	3.4
Operatives, except transport	996	865	8.7	7.2	7.1	5.5	10.9	9.6
Transport equipment operatives	192	154	5.1	4.0	5.0	3.9	7.2	4.8
Nonfarm laborers	552	583	11.2	11.3	11.2	11.6	10.9	8.5
Construction laborers	136	195	13.3	18.3	13.5	18.4	(1)	(1)
All other	416	388	10.6	9.5	10.6	9.6	11.2c	8.2
Service workers	1,049	1,032	7.7	7.4	6.1	6.1	8.6	8.1
Private household	63	74	4.8	5.9	(1)	(1)	4.8	5.8
All other	986	957	8.0	7.5	6.2	6.1	9.3	8.5
Farm workers	135	104	4.8	3.9	3.7	2.5	9.8	10.0
No previous work experience	834	803	--	--	--	--	--	--
16 to 19 years	603	588	--	--	--	--	--	--
20 to 24 years	144	138	--	--	--	--	--	--
25 years and over	82	77	--	--	--	--	--	--

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

c=corrected.

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

Industry	Percent distribution		Unemployment rates					
			Total		Males		Females	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
Total, 16 years and over	100.0	100.0	6.4	5.5	5.4	4.7	7.8	6.7
Nonagricultural private wage and salary workers	72.1	71.5	6.4	5.4	5.4	4.6	7.7	6.5
Mining	.3	.4	2.5	2.5	2.6	3.0	(1)	--
Construction	7.2	8.1	9.8	9.3	9.7	9.5	11.1	6.0
Manufacturing	20.8	19.9	6.1	4.9	4.6	3.7	9.3	7.6
Durable goods	11.1	10.7	5.5	4.5	4.6	3.7	8.5	6.9
Lumber and wood products	.8	.7	7.6	6.0	7.0	5.7	(1)	7.5
Furniture and fixtures	.7	.8	8.4	7.6	7.3	8.7	11.0	5.2
Stone, clay, and glass products	.8	.6	6.5	4.8	4.8	3.8	12.7	8.0
Primary metal industries	1.2	.9	5.7	4.0	5.9	3.3	3.8	8.3
Fabricated metal products	1.3	1.1	5.6	4.3	4.8	3.5	8.4	7.2
Machinery, except electrical equipment	1.7	1.3	4.4	2.9	3.5	2.4	7.8	4.8
Electrical equipment	1.9	2.0	5.6	4.9	3.6	3.0	8.2	7.5
Transportation equipment	1.5	1.6	4.4	3.9	4.0	3.7	6.5	5.1
Automobiles	.7	1.0	3.3	4.2	3.1	4.4	4.6	3.2
Other transportation equipment	.8	.6	5.8	3.6	5.3	2.9	9.8	7.8
Instruments and related products	.5	.2	6.1	2.5	5.0	3.5	7.5	1.4
Other durable goods industries	.8	1.2	7.0	8.5	3.6	5.1	10.9	12.4
Nondurable goods	9.7	9.3	6.8	5.6	4.6	3.8	9.9	8.3
Food and kindred products	2.9	2.4	9.6	6.7	7.0	5.3	15.9	9.8
Textile mill products	.9	1.0	6.2	5.9	4.9	4.8	7.7	7.0
Apparel and other textile products	2.2	2.1	9.6	8.5	6.5	7.7	10.4	8.8
Paper and allied products	.5	.6	4.4	4.4	3.0	2.5	8.7	10.5
Printing and publishing	.9	1.1	4.2	4.5	2.6	3.0	6.6	6.7
Chemicals and allied products	.7	.5	4.0	2.4	3.2	1.4	6.2	5.1
Rubber and plastics products	.9	1.0	7.5	6.9	4.2	3.6	13.1	12.0
Other nondurable goods industries	.6	.5	6.2	4.5	4.6	3.4	8.5	6.2
Transportation and public utilities	3.4	2.9	4.2	3.0	4.3	2.7	3.9	3.9
Railroads and railway express	.3	.1	3.3	1.3	3.4	1.2	(1)	(1)
Other transportation	2.2	1.8	5.5	4.0	5.8	4.2	4.0	3.2
Communication and other public utilities	.9	.9	2.8	2.4	2.3	1.2	3.8	4.5
Wholesale and retail trade	20.4	20.3	7.0	6.2	5.7	5.0	8.6	7.4
Finance, insurance, and real estate	2.6	3.2	3.4	3.5	2.0c	2.7	4.4	4.0
Service industries	17.4	16.6	6.8	5.5	6.2	4.6	7.2	6.1
Professional services	7.6	6.7	5.3	3.8	4.7	2.6	5.5	4.4
All other service industries	9.8	9.9	8.9	7.8	7.6	6.3	10.0	9.1
Agricultural wage and salary workers	2.5	2.3	10.8	9.1	9.0	7.0	18.5	16.0
All other classes of workers	12.3	12.0	3.1	2.7	2.5	2.3	3.9	3.2
No previous work experience	13.1	14.3	--	--	--	--	--	--

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

c=corrected.

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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
UNEMPLOYMENT LEVEL												
Total unemployed, in thousands.....	6,346	5,629	2,312	1,969	2,491	2,181	1,543	1,479	4,836	4,260	1,510	1,369
Job losers.....	2,733	2,236	1,477	1,162	963	779	293	294	2,122	1,681	611	555
On layoff.....	636	633	340	329	225	246	71	58	540	504	95	129
Other job losers.....	2,097	1,603	1,137	833	738	533	222	236	1,582	1,177	516	426
Job leavers.....	890	822	311	302	398	343	182	177	753	681	138	141
Reentrants.....	1,889	1,770	431	431	998	917	460	422	1,370	1,362	519	407
New entrants.....	833	802	93	74	132	142	608	586	590	536	243	266
PERCENT DISTRIBUTION												
Total unemployed.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers.....	43.1	39.8	63.9	59.1	38.6	35.7	19.0	20.0	43.9	39.4	40.4	40.5
On layoff.....	10.0	11.3	14.7	16.7	9.0	11.3	4.6	4.0	11.2	11.8	6.3	9.4
Other job losers.....	33.1	28.5	49.2	42.4	29.6	24.4	14.4	16.0	32.7	27.6	34.1	31.1
Job leavers.....	14.0	14.6	13.4	15.3	16.0	15.7	11.8	12.0	15.6	16.0	9.1	10.3
Reentrants.....	29.8	31.4	18.6	21.9	40.1	42.0	29.8	28.5	28.3	32.0	34.3	29.8
New entrants.....	13.1	14.2	4.0	3.7	5.3	6.5	39.4	39.6	12.2	12.6	16.1	19.4
UNEMPLOYMENT RATE												
Total unemployment rate.....	6.4	5.5	4.4	3.7	6.8	5.7	17.1	16.1	5.5	4.8	13.1	11.3
Job loser rate ¹	2.7	2.2	2.8	2.1	2.6	2.0	3.3	3.2	2.4	1.9	5.3	4.6
On layoff.....	.9	.8	.6	.6	1.1	.9	2.0	1.9	.9	.8	1.2	1.2
Other job losers.....	1.9	1.7	.8	.8	2.7	2.4	5.1	4.6	1.6	1.5	4.5	3.4
Job leaver rate ¹.....	.9	.8	.6	.6	1.1	.9	2.0	1.9	.9	.8	1.2	1.2
Reentrant rate ¹	1.9	1.7	.8	.8	2.7	2.4	5.1	4.6	1.6	1.5	4.5	3.4
New entrant rate ¹.....	.8	.8	.2	.1	.4	.4	6.7	6.4	.7	.6	2.1	2.2

¹ 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	November 1978						
	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
Total, 16 years and over.....	5,629	100.0	49.0	32.0	19.0	10.7	8.4
Job losers.....	2,236	100.0	46.6	29.8	23.5	12.3	11.3
On layoff.....	633	100.0	65.6	22.3	12.2	7.7	4.4
Other job losers.....	1,603	100.0	39.2	32.8	28.0	14.0	14.0
Job leavers.....	822	100.0	50.7	31.6	17.6	11.6	6.1
Reentrants.....	1,770	100.0	49.9	35.7	14.4	7.7	6.7
New entrants.....	802	100.0	51.7	30.2	18.1	11.9	6.2
Males, 20 years and over.....	1,969	100.0	42.7	31.7	25.6	12.1	13.6
Job losers.....	1,162	100.0	43.9	30.1	26.1	11.2	14.9
On layoff.....	329	100.0	63.5	24.0	12.5	7.0	5.5
Other job losers.....	833	100.0	36.1	32.5	31.3	12.7	18.6
Job leavers.....	302	100.0	39.1	34.1	26.8	15.6	11.3
Reentrants.....	431	100.0	45.1	32.8	22.1	11.4	10.7
New entrants.....	74	100.0	(1)	(1)	(1)	(1)	(1)
Females, 20 years and over.....	2,181	100.0	49.9	31.9	18.3	11.4	6.8
Job losers.....	779	100.0	44.7	30.6	24.8	16.3	8.5
On layoff.....	246	100.0	60.7	25.1	14.2	10.1	4.0
Other job losers.....	533	100.0	37.2	33.1	29.7	19.2	10.5
Job leavers.....	343	100.0	51.7	31.1	17.2	13.1	4.1
Reentrants.....	917	100.0	53.5	33.3	13.2	6.5	6.7
New entrants.....	142	100.0	50.0	32.4	17.6	12.0	5.6
Both sexes, 16 to 19 years.....	1,479	100.0	56.1	32.5	11.4	7.7	3.8
Job losers.....	294	100.0	62.7	26.8	10.5	5.8	4.7
On layoff.....	58	100.0	(1)	(1)	(1)	(1)	(1)
Other job losers.....	236	100.0	54.7	33.1	12.3	6.8	5.5
Job leavers.....	177	100.0	68.9	28.2	2.8	1.7	1.1
Reentrants.....	422	100.0	46.9	43.6	9.5	6.4	3.1
New entrants.....	586	100.0	55.5	28.3	16.2	11.6	4.6

¹ 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	November 1978								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total jobseekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	5,629	4,886	23.9	5.5	72.5	29.5	12.6	6.2	1.50
16 to 19 years	1,479	1,396	14.6	2.0	78.4	22.7	10.0	6.0	1.34
20 to 24 years	1,280	1,142	26.7	6.1	72.9	33.7	10.0	6.0	1.56
25 to 34 years	1,281	1,056	32.2	9.0	67.7	34.9	17.1	4.7	1.66
35 to 44 years	660	562	24.7	6.4	73.3	29.7	13.9	6.2	1.54
45 to 54 years	495	404	28.0	5.7	69.3	29.5	11.1	6.4	1.50
55 to 64 years	341	248	22.2	4.4	64.5	26.6	16.9	14.9	1.50
65 years and over	93	79	19.0	6.3	62.0	24.1	20.3	3.8	1.35
Males, 16 years and over	2,747	2,324	24.5	5.0	72.0	27.2	15.1	8.1	1.52
16 to 19 years	778	732	13.8	1.6	78.8	20.1	11.9	6.3	1.33
20 to 24 years	645	557	28.7	6.3	74.0	29.4	11.5	8.3	1.58
25 to 34 years	587	443	37.5	8.1	61.6	37.5	21.7	7.0	1.73
35 to 44 years	264	207	27.5	8.2	73.9	30.0	17.9	8.7	1.66
45 to 54 years	245	203	26.1	5.4	67.5	27.6	15.8	9.9	1.52
55 to 64 years	172	131	18.3	2.3	66.4	19.1	19.8	18.3	1.44
65 years and over	55	51	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Females, 16 years and over	2,882	2,562	23.5	5.9	73.0	31.6	10.3	4.5	1.49
16 to 19 years	701	664	15.5	2.4	77.9	25.8	7.8	5.7	1.35
20 to 24 years	635	585	24.8	6.2	72.0	37.8	8.5	3.8	1.53
25 to 34 years	694	614	28.3	9.4	72.0	33.2	13.8	3.1	1.60
35 to 44 years	396	355	23.1	5.1	73.2	29.6	11.5	4.8	1.47
45 to 54 years	249	201	29.4	6.0	71.1	31.8	7.0	3.0	1.48
55 to 64 years	169	117	20.5	6.8	61.5	34.2	13.7	11.1	1.54
65 years and over	39	27	(1)	(1)	(1)	(1)	(1)	(1)	(1)
White, 16 years and over	4,260	3,656	21.7	4.9	72.9	30.0	12.7	6.4	1.49
Males	2,078	1,752	22.5	3.9	71.9	27.7	15.6	8.3	1.50
Females	2,182	1,904	21.0	5.8	73.8	32.1	10.1	4.7	1.48
Black and other, 16 years and over	1,369	1,230	30.7	7.2	71.5	28.0	12.2	5.7	1.55
Males	669	572	30.6	8.4	72.2	25.7	13.6	7.7	1.58
Females	700	658	30.5	6.1	70.8	30.1	10.9	4.0	1.52

¹ 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	November 1978								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total jobseekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	5,629	4,886	23.9	5.5	72.5	29.5	12.6	6.2	1.50
Job losers	2,236	1,614	33.1	7.3	72.1	31.8	14.9	6.1	1.65
Job leavers	822	821	24.7	6.1	73.7	34.1	11.7	4.6	1.55
Reentrants	1,770	1,657	18.8	5.3	69.7	28.1	12.7	7.2	1.42
New entrants	802	793	15.3	1.6	78.4	23.0	8.8	5.9	1.33
Males, 16 years and over	2,747	2,324	24.5	5.0	72.0	27.2	15.1	8.1	1.52
Job losers	1,341	983	33.9	7.1	71.9	28.2	15.6	6.8	1.63
Job leavers	402	397	23.7	4.0	72.8	33.8	13.6	7.1	1.55
Reentrants	647	591	15.7	3.9	70.6	22.3	19.0	10.3	1.42
New entrants	358	353	14.2	2.0	73.4	25.5	9.3	9.3	1.34
Females, 16 years and over	2,882	2,562	23.5	5.9	73.0	31.6	10.3	4.5	1.49
Job losers	895	631	32.0	7.6	72.3	37.6	13.8	5.1	1.68
Job leavers	420	424	25.7	8.0	74.3	34.4	9.9	2.4	1.55
Reentrants	1,123	1,066	20.5	5.9	69.0	31.3	9.2	5.5	1.41
New entrants	444	440	16.4	1.4	82.5	20.9	8.2	3.2	1.32

NOTE: See note, 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	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
Total, 16 years and over	6,346	5,629	100.0	100.0	4,758	4,114	100.0	100.0
Less than 5 weeks	2,781	2,757	43.8	49.0	1,914	1,871	40.2	45.5
5 to 14 weeks	1,997	1,800	31.5	32.0	1,474	1,319	31.0	32.1
5 to 10 weeks	1,485	1,347	23.4	23.9	1,118	973	23.5	23.7
11 to 14 weeks	512	453	8.1	8.0	357	347	7.5	8.4
15 weeks and over	1,568	1,072	24.7	19.0	1,370	924	28.8	22.5
15 to 26 weeks	768	601	12.1	10.7	649	506	13.6	12.3
27 weeks and over	800	472	12.6	8.4	721	417	15.2	10.1
27 to 51 weeks	378	201	6.0	3.6	339	178	7.1	4.3
52 weeks and over	422	270	6.6	4.8	381	239	8.0	5.8
Average (mean) duration, in weeks	13.3	10.9	--	--	14.9	12.2	--	--
Median duration, in weeks	6.6	5.2	--	--	7.3	6.0	--	--

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			Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
	Nov. 1978	Nov. 1978	Nov. 1978	Nov. 1978	Nov. 1978			Nov. 1978	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
Total, 16 years and over	5,629	2,757	1,800	601	472	10.9	5.2	43.8	49.0	24.7	19.0
16 to 21 years	2,072	1,138	668	187	78	7.9	4.6	52.8	54.9	14.8	12.8
16 to 19 years	1,479	830	480	114	56	7.7	4.5	55.4	56.1	12.7	11.4
20 to 24 years	1,280	646	416	137	82	9.7	5.0	43.5	50.5	23.3	17.1
25 to 34 years	1,281	591	411	165	113	11.4	5.8	40.2	46.2	26.4	21.7
35 to 44 years	660	305	216	77	62	11.4	5.9	41.9	46.2	30.3	21.1
45 to 54 years	495	202	149	64	61	16.6	7.7	35.1	40.7	34.6	29.2
55 to 64 years	341	148	86	35	72	17.7	7.2	34.5	43.4	36.3	31.4
65 years and over	93	36	42	10	6	10.9	6.8	34.2	38.2	43.8	17.0
Males, 16 years and over	2,747	1,289	869	296	293	12.3	5.8	39.7	46.9	27.2	21.4
16 to 21 years	1,076	607	340	88	41	7.6	4.4	49.6	56.4	16.3	12.0
16 to 19 years	778	449	245	58	26	7.3	4.3	51.8	57.7	14.2	10.8
20 to 24 years	645	315	213	65	53	10.2	5.3	40.6	48.9	24.0	18.2
25 to 34 years	587	238	192	89	67	13.9	7.1	33.9	40.6	31.8	26.6
35 to 44 years	264	119	76	31	39	14.3	6.4	35.8	44.9	36.2	26.5
45 to 54 years	245	91	66	27	61	21.7	8.9	30.5	37.2	38.7	35.9
55 to 64 years	172	60	51	16	44	21.6	9.1	30.4	35.1	38.8	35.1
65 years and over	55	16	26	9	3	11.6	8.4	33.4	(1)	41.2	(1)
Females, 16 years and over	2,882	1,468	930	305	179	9.5	4.9	47.8	50.9	22.3	16.8
16 to 21 years	995	531	328	99	37	8.3	4.7	56.3	53.4	13.2	12.7
16 to 19 years	701	381	235	55	30	8.0	4.6	59.4	54.3	11.2	12.1
20 to 24 years	635	330	203	72	29	9.2	4.8	46.5	52.1	22.5	15.9
25 to 34 years	694	353	219	75	46	9.3	4.9	46.2	50.9	21.3	17.6
35 to 44 years	396	186	140	46	23	9.5	5.6	46.3	47.1	25.9	17.5
45 to 54 years	249	110	83	37	20	11.6	6.9	38.3	44.1	31.8	22.6
55 to 64 years	169	88	34	19	28	13.6	4.8	38.9	51.9	33.7	27.7
65 years and over	39	20	15	1	3	9.9	4.9	(1)	(1)	(1)	(1)
White, 16 years and over:	4,260	2,183	1,342	409	326	10.2	4.9	44.7	51.2	23.9	17.3
Males	2,078	1,024	657	200	197	11.5	5.2	41.7	49.3	25.6	19.1
Females	2,182	1,158	685	209	130	9.0	4.7	47.7	53.1	22.2	15.5
Black and other, 16 years and over:	1,369	574	458	192	145	12.9	7.3	40.9	42.0	27.4	24.6
Males	669	264	212	96	96	15.1	8.1	33.1	39.5	32.7	28.8
Females	700	310	246	96	49	10.8	6.6	47.9	44.3	22.6	20.7
Males, 16 years and over:	886	382	269	102	132	14.2	6.8	35.8	43.2	30.5	26.4
Married, spouse present	886	382	269	102	132	14.2	6.8	35.8	43.2	30.5	26.4
Widowed, divorced, or separated	309	146	89	35	40	15.1	5.8	37.0	47.2	34.9	24.1
Single (never married)	1,552	760	511	159	121	10.7	5.2	43.2	49.0	23.3	18.1
Females, 16 years and over:	1,318	649	435	146	87	9.8	5.2	47.8	49.3	21.7	17.7
Married, spouse present	1,318	649	435	146	87	9.8	5.2	47.8	49.3	21.7	17.7
Widowed, divorced, or separated	503	243	173	51	36	9.8	5.4	44.4	48.4	26.4	17.3
Single (never married)	1,061	576	323	107	56	9.0	4.6	49.5	54.2	20.9	15.3

¹ 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		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			Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
	Nov. 1978	Nov. 1978	Nov. 1978	Nov. 1978	Nov. 1978			Nov. 1978	Nov. 1978	Nov. 1977	Nov. 1978
OCCUPATION											
White-collar workers	1,602	701	519	211	172	12.5	6.4	40.7	43.7	28.5	23.9
Professional and managerial	586	223	175	103	85	15.1	7.9	33.7	38.1	31.5	32.1
Sales workers	199	92	74	19	14	9.6	5.6	46.7	46.3	25.4	16.4
Clerical workers	818	386	270	89	73	11.3	5.7	44.0	47.2	27.4	19.8
Blue-collar workers	2,088	1,061	655	196	176	10.5	4.9	44.2	50.8	23.7	17.8
Craft and kindred workers	487	247	153	43	43	11.2	4.9	42.3	50.7	29.1	17.8
Operatives, except transport	865	427	274	80	84	10.4	5.2	46.1	49.4	23.4	19.0
Transport equipment operatives	154	71	48	21	14	11.6	5.7	40.3	46.4	26.8	22.5
Nonfarm laborers	583	316	180	51	36	9.9	4.6	44.1	54.2	17.5	14.9
Service workers	1,032	516	356	88	72	10.0	5.0	45.7	50.0	21.1	15.5
INDUSTRY¹											
Agriculture	130	79	36	13	3	6.3	4.1	63.0	60.6	7.5	11.7
Construction	486	275	151	25	34	9.3	4.4	43.4	56.6	25.8	12.3
Manufacturing	1,128	531	354	134	109	11.3	5.7	43.9	47.1	25.8	21.5
Durable goods	605	255	199	85	65	12.4	7.0	42.3	42.2	27.7	24.9
Nondurable goods	524	276	155	49	44	9.9	4.7	45.7	52.7	23.7	17.7
Transportation and public utilities	184	79	51	25	29	16.8	6.2	40.8	42.8	30.6	29.2
Wholesale and retail trade	1,153	584	372	116	82	9.9	4.9	44.8	50.7	25.1	17.1
Finance and service industries	1,486	688	508	163	128	11.2	5.7	42.1	46.3	23.6	19.5
Public administration	163	54	56	25	27	15.8	9.4	38.6	33.5	26.9	32.1
No previous work experience	803	416	242	95	50	10.3	4.8	45.4	51.8	25.7	18.1

¹ Includes wage and salary workers only.

A-20. Employed persons by sex and age

[In thousands]

Age and type of industry	Total		Males		Females	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
All industries	92,473	96,029	54,590	55,976	37,884	40,054
16 to 19 years	7,490	7,712	4,012	4,021	3,478	3,692
16 to 17 years	3,044	3,098	1,664	1,591	1,380	1,507
18 to 19 years	4,446	4,614	2,348	2,429	2,098	2,185
20 to 24 years	13,072	13,696	7,077	7,413	5,996	6,283
25 to 54 years	57,856	60,187	34,781	35,626	23,076	24,561
25 to 34 years	23,831	25,223	14,330	14,998	9,501	10,324
35 to 44 years	17,491	18,404	10,465	10,887	7,027	7,517
45 to 54 years	16,535	16,561	9,986	9,842	6,549	6,719
55 to 64 years	11,157	11,458	6,877	7,016	4,280	4,443
55 to 59 years	6,953	7,154	4,229	4,345	2,723	2,809
60 to 64 years	4,204	4,304	2,647	2,671	1,557	1,633
65 years and over	2,898	2,976	1,845	1,900	1,053	1,076
Nonagricultural industries	89,292	92,929	52,010	53,470	37,282	39,459
16 to 19 years	7,140	7,424	3,715	3,792	3,425	3,632
16 to 17 years	2,866	2,957	1,510	1,481	1,356	1,476
18 to 19 years	4,274	4,467	2,205	2,311	2,069	2,156
20 to 24 years	12,718	13,304	6,772	7,095	5,946	6,209
25 to 54 years	56,235	58,585	33,533	34,364	22,700	24,221
25 to 34 years	23,307	24,616	13,926	14,419	9,381	10,197
35 to 44 years	16,982	17,928	10,071	10,524	6,911	7,404
45 to 54 years	15,945	16,041	9,536	9,421	6,408	6,619
55 to 64 years	10,625	10,552	6,426	6,598	4,199	4,353
55 to 59 years	6,643	6,869	3,972	4,126	2,672	2,743
60 to 64 years	3,981	4,082	2,454	2,472	1,527	1,610
65 years and over	2,576	2,665	1,564	1,621	1,012	1,044
Agriculture	3,181	3,100	2,580	2,506	601	595
16 to 19 years	350	289	297	229	53	60
16 to 17 years	177	142	153	111	24	31
18 to 19 years	173	147	143	118	29	29
20 to 24 years	355	392	304	318	50	73
25 to 54 years	1,623	1,602	1,247	1,263	376	340
25 to 34 years	523	606	404	479	120	127
35 to 44 years	509	476	393	363	116	113
45 to 54 years	590	520	449	421	140	100
55 to 64 years	532	506	451	417	81	89
55 to 59 years	309	285	258	218	51	66
60 to 64 years	223	222	193	199	30	23
65 years and over	322	311	281	278	41	32

A-21. Employed persons by occupation, sex, and age
 [In thousands]

Occupation	Total		Males, 20 years and over		Females, 20 years and over		Males, 18-19 years		Females, 18-19 years	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
	TOTAL	92,473	96,029	50,578	51,955	34,405	36,362	4,012	4,021	3,478	3,692
White-collar workers	46,689	48,355	21,951	22,230	22,274	23,595	640	647	1,825	1,883
Professional and technical	14,224	14,642	8,097	8,223	5,981	6,225	71	106	76	88
Health workers	2,555	2,663	895	545	1,647	1,693	2	3	10	22
Teachers, except college	3,241	3,217	936	917	2,280	2,271	9	10	17	19
Other professional and technical	8,428	8,762	6,266	6,361	2,054	2,261	60	93	49	47
Managers and administrators, except farm	9,995	10,148	7,664	7,670	2,227	2,393	53	49	49	36
Salaried workers	8,172	8,451	6,235	6,336	1,837	2,033	53	47	47	36
Self-employed workers in retail trade	888	818	614	586	274	232	--	1	--	--
Self-employed workers, except retail trade	934	878	816	748	116	128	1	1	2	--
Sales workers	5,786	6,174	2,975	3,139	2,165	2,380	247	227	399	428
Retail trade	3,159	3,298	951	1,000	1,631	1,691	203	195	374	411
Other industries	2,627	2,876	2,024	2,138	534	689	44	32	25	17
Clerical workers	16,684	17,392	3,214	3,199	11,901	12,597	269	265	1,300	1,331
Stenographers, typists, and secretaries	4,654	4,833	69	77	4,210	4,392	6	4	369	360
Other clerical workers	12,030	12,559	3,145	3,122	7,691	8,205	263	261	931	971
Blue-collar workers	30,554	32,110	22,870	23,845	5,086	5,526	2,195	2,269	403	470
Craft and kindred workers	12,100	12,650	11,060	11,427	565	698	430	472	45	53
Carpenters	1,228	1,263	1,122	1,185	6	4	98	73	2	1
Construction craft, except carpenters	2,492	2,501	2,374	2,365	28	30	91	99	--	7
Mechanics and repairers	3,316	3,366	3,142	3,151	52	43	124	167	--	5
Metal craft	1,172	1,270	1,110	1,200	24	33	35	38	2	--
Blue-collar worker supervisors, not elsewhere classified	1,612	1,705	1,452	1,510	146	179	10	13	4	3
All other	2,280	2,546	1,860	2,016	309	409	73	82	38	39
Operatives, except transport	10,507	11,206	5,649	6,122	3,940	4,114	654	680	264	290
Durable goods manufacturing	4,796	5,128	3,007	3,176	1,476	1,594	217	256	96	102
Nondurable goods manufacturing	3,313	3,648	1,208	1,460	1,868	1,916	126	138	111	134
Other industries	2,398	2,429	1,435	1,486	595	603	310	286	57	54
Transport equipment operatives	3,556	3,669	3,108	3,167	238	304	202	174	8	24
Drivers, motor vehicles	3,003	3,167	2,622	2,708	217	285	158	152	6	22
All other	553	501	486	458	21	20	45	21	1	2
Nonfarm laborers	4,391	4,585	3,053	3,129	344	410	909	944	86	102
Construction	882	871	716	717	14	19	151	132	2	3
Manufacturing	1,004	1,067	747	780	107	139	136	133	15	15
Other industries	2,505	2,647	1,590	1,631	223	252	622	679	70	85
Service workers	12,557	12,978	3,794	3,918	6,628	6,848	920	913	1,216	1,299
Private household workers	1,240	1,178	30	16	965	917	22	10	223	235
Service workers, except private household	11,317	11,800	3,763	3,902	5,663	5,931	898	904	992	1,064
Food service workers	4,099	4,292	738	758	2,116	2,249	562	556	682	728
Protective service workers	1,321	1,413	1,201	1,256	102	132	13	21	5	4
All other	5,897	6,095	1,824	1,888	3,445	3,550	323	327	305	332
Farm workers	2,674	2,586	1,964	1,962	417	393	257	191	35	40
Farmers and farm managers	1,470	1,458	1,349	1,325	101	122	20	9	--	2
Farm laborers and supervisors	1,204	1,128	615	637	317	271	237	181	35	38
Paid workers	923	905	599	606	113	123	187	146	25	30
Unpaid family workers	280	223	17	31	204	148	50	35	10	8

HOUSEHOLD DATA

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

(Percent distribution)

Occupation and race	Total		Males		Females	
	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978	Nov. 1977	Nov. 1978
TOTAL						
Total, 16 years and over (thousands)	92,473	96,029	54,590	55,976	37,884	40,054
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	50.5	50.4	41.4	40.9	63.6	63.6
Professional and technical	15.4	15.2	15.0	14.9	16.0	15.8
Managers and administrators, except farm	10.8	10.6	14.1	13.8	6.0	6.1
Sales workers	6.3	6.4	5.9	6.0	6.8	7.0
Clerical workers	18.0	18.1	6.4	6.2	34.8	34.8
Blue-collar workers	33.0	33.4	45.9	46.7	14.5	15.0
Craft and kindred workers	13.1	13.2	21.0	21.3	1.6	1.9
Operatives, except transport	11.4	11.7	11.5	12.2	11.1	11.0
Transport equipment operatives	3.8	3.8	6.1	6.0	.6	.8
Nonfarm laborers	4.7	4.8	7.3	7.3	1.1	1.3
Service workers	13.6	13.5	8.6	8.6	20.7	20.3
Private household workers	1.3	1.2	.1	(1)	3.1	2.9
Other service workers	12.2	12.3	8.5	8.6	17.6	17.5
Farm workers	2.9	2.7	4.1	3.8	1.2	1.1
Farmers and farm managers	1.6	1.5	2.5	2.4	.3	.3
Farm laborers and supervisors	1.3	1.2	1.6	1.5	.9	.8
White						
Total, 16 years and over (thousands)	82,451	85,261	49,220	50,282	33,231	34,979
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	52.2	52.1	42.9	42.5	66.1	65.9
Professional and technical	15.8	15.7	15.5	15.4	16.2	16.1
Managers and administrators, except farm	11.6	11.3	15.0	14.6	6.4	6.5
Sales workers	6.7	6.8	6.3	6.4	7.4	7.5
Clerical workers	18.2	18.3	6.1	6.0	36.1	35.9
Blue-collar workers	32.5	33.0	45.1	45.9	14.0	14.5
Craft and kindred workers	13.5	13.7	21.5	21.9	1.7	1.9
Operatives, except transport	11.0	11.2	11.2	11.7	10.5	10.4
Transport equipment operatives	3.7	3.7	5.8	5.6	.7	.8
Nonfarm laborers	4.4	4.5	6.6	6.7	1.1	1.3
Service workers	12.2	12.1	7.9	7.7	18.7	18.5
Private household workers	1.0	.9	.1	.1	2.3	2.1
Other service workers	11.2	11.2	7.8	7.7	16.3	16.3
Farm workers	3.0	2.8	4.2	3.9	1.3	1.2
Farmers and farm managers	1.7	1.7	2.7	2.6	.3	.3
Farm laborers and supervisors	1.3	1.1	1.5	1.3	1.0	.8
Black and other						
Total, 16 years and over (thousands)	10,022	10,768	5,370	5,694	4,652	5,075
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	36.1	36.6	27.7	26.6	45.9	47.8
Professional and technical	12.2	11.7	10.2	10.0	14.5	13.5
Managers and administrators, except farm	4.7	4.9	6.0	6.3	3.2	3.3
Sales workers	2.4	3.1	2.5	2.7	2.4	3.7
Clerical workers	16.8	16.9	9.0	7.6	25.8	27.3
Blue-collar workers	37.2	36.7	53.7	53.0	18.1	18.3
Craft and kindred workers	9.7	8.8	16.9	15.4	1.3	1.4
Operatives, except transport	14.7	15.7	14.3	16.5	15.2	14.9
Transport equipment operatives	5.0	5.1	8.9	8.9	.4	.8
Nonfarm laborers	7.9	7.1	13.6	12.3	1.2	1.3
Service workers	24.7	24.5	15.6	16.6	35.3	33.3
Private household workers	4.2	3.7	.2	--	8.8	7.9
Other service workers	20.5	20.8	15.4	16.6	26.5	25.5
Farm workers	1.9	2.2	3.1	3.7	.7	.5
Farmers and farm managers	.4	.4	.7	.7	(1)	.1
Farm laborers and supervisors	1.6	1.8	2.4	3.0	.6	.4

¹ Less than 0.05 percent.

HOUSEHOLD DATA

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

[In thousands]

Age and sex	November 1978								
	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					
Total, 16 years and over	86,168	1,361	15,604	69,203	6,341	419	1,298	1,561	241
16 to 19 years	7,295	290	508	6,496	111	18	226	20	43
16 to 17 years	2,895	206	159	2,530	48	13	113	4	25
18 to 19 years	4,400	84	349	3,967	63	4	113	16	18
20 to 24 years	12,929	72	1,561	11,297	345	29	273	98	20
25 to 34 years	23,115	182	4,529	18,404	1,431	70	311	253	42
35 to 44 years	16,326	126	3,476	12,724	1,490	112	160	271	45
45 to 54 years	14,580	234	3,132	11,214	1,354	106	149	324	47
55 to 64 years	9,798	254	2,074	7,470	1,095	58	117	355	35
55 to 59 years	6,202	126	1,334	4,742	624	43	70	194	21
60 to 64 years	3,596	128	740	2,728	471	15	47	161	14
65 years and over	2,125	203	324	1,598	515	26	62	240	9
Males, 16 years and over	48,902	160	7,717	41,025	4,541	27	1,020	1,419	66
16 to 19 years	3,715	58	212	3,444	67	10	178	16	35
16 to 17 years	1,445	42	56	1,347	29	6	91	2	17
18 to 19 years	2,270	16	157	2,097	38	3	86	13	18
20 to 24 years	6,862	16	637	6,209	221	11	211	91	17
25 to 34 years	13,436	11	2,178	11,246	983	--	247	224	8
35 to 44 years	9,472	10	1,765	7,700	1,052	--	123	240	--
45 to 54 years	8,422	13	1,641	6,767	1,000	--	113	307	1
55 to 64 years	5,761	26	1,091	4,644	835	2	91	323	3
55 to 59 years	3,638	14	703	2,921	489	--	49	168	--
60 to 64 years	2,123	12	388	1,723	346	3	42	155	2
65 years and over	1,234	26	195	1,014	383	4	57	219	2
Females, 16 years and over	37,267	1,202	7,888	28,178	1,800	392	278	142	175
16 to 19 years	3,580	232	296	3,052	44	8	48	4	8
16 to 17 years	1,450	164	103	1,182	19	7	22	1	8
18 to 19 years	2,130	68	193	1,870	25	1	26	3	--
20 to 24 years	6,067	57	924	5,087	124	18	63	7	3
25 to 34 years	9,680	171	2,351	7,158	448	70	64	29	34
35 to 44 years	6,854	116	1,714	5,024	438	112	37	31	45
45 to 54 years	6,158	220	1,491	4,447	355	107	35	18	46
55 to 64 years	4,037	228	983	2,826	261	56	26	32	32
55 to 59 years	2,564	113	631	1,821	136	43	21	25	20
60 to 64 years	1,473	116	352	1,005	125	13	5	6	12
65 years and over	890	177	129	584	131	22	5	21	6

A-24. Employed persons by industry and occupation

[In thousands]

Industry	November 1978											
	White-collar workers				Blue-collar workers				Service workers		Farm workers	
	Total employed	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
Total, 16 years and over:	3,100	68	32	6	89	37	26	49	204	--	3	2,586
Agriculture	864	136	75	2	97	238	232	52	23	--	10	--
Mining	6,154	154	718	19	443	3,473	269	179	871	--	28	--
Manufacturing	22,023	2,215	1,507	478	2,546	4,229	8,777	783	1,067	--	421	--
Durable goods	13,148	1,470	828	201	1,477	2,796	5,128	376	634	--	238	--
Nondurable goods	8,874	745	679	276	1,070	1,434	3,648	407	433	--	183	--
Transportation and public utilities	6,373	511	567	50	1,480	1,328	168	1,572	485	--	213	--
Wholesale and retail trade	19,535	402	3,654	4,174	3,417	1,484	987	737	1,230	--	3,451	--
Wholesale trade	3,727	135	773	876	721	345	193	376	270	--	38	--
Retail trade	15,808	267	2,881	3,298	2,696	1,139	794	361	960	--	3,412	--
Finance, insurance, and real estate	5,520	297	1,073	1,269	2,471	88	7	4	61	--	251	--
Services	27,516	9,949	1,876	176	5,050	1,459	710	228	526	1,178	6,363	--
Private households	1,402	11	--	--	9	10	3	12	123	1,178	56	--
Other service industries	26,114	9,938	1,876	176	5,041	1,449	707	216	403	--	6,307	--
Public administration	4,944	909	647	1	1,797	314	32	65	117	--	1,061	--

HOUSEHOLD DATA

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 ¹			
	Nov. 1977				Nov. 1978		Paid absences ²		Unpaid absences^{2}
			Nov. 1977	Nov. 1978			Nov. 1977	Nov. 1978
Total, 16 years and over	3,577	3,918	3,470	3,759	1,614	1,745	1,473	1,557
Vacation	1,182	1,502	1,156	1,470	891	1,062	180	253
Illness	1,388	1,411	1,356	1,370	577	559	647	703
Bad weather	68	101	50	75	--	--	--	--
Industrial dispute	144	61	144	59	--	--	--	--
All other reasons	795	843	763	785	146	124	645	601
Males, 16 year and over	2,189	2,300	2,091	2,172	1,098	1,113	747	781
Vacation	832	956	808	968	662	723	85	144
Illness	802	753	776	722	354	316	338	341
All other reasons ³	555	552	506	482	82	74	324	295
Females, 16 years and over	1,388	1,618	1,379	1,587	516	631	726	777
Vacation	350	506	348	503	229	338	96	110
Illness	586	658	580	648	222	243	310	361
All other reasons ³	452	453	452	437	65	50	320	307

¹ Excludes private household.

³ Includes bad weather and industrial dispute, not shown separately.

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

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

Hours of work	November 1978					
	Thousands of persons			Percent distribution		
	All industries	Nonagricultural industries	Agriculture	All industries	Nonagricultural industries	Agriculture
Total, 16 years and over	92,111	89,170	2,941	100.0	100.0	100.0
1-34 hours	22,378	21,495	882	24.3	24.1	30.0
1-4 hours	765	723	42	.8	.8	1.4
5-14 hours	4,442	4,225	217	4.8	4.7	7.4
15-29 hours	11,363	10,922	441	12.3	12.2	15.0
30-34 hours	5,808	5,625	182	6.3	6.3	6.2
35 hours and over	69,734	67,675	2,060	75.7	75.9	70.0
35-39 hours	6,433	6,300	133	7.0	7.1	4.5
40 hours	37,709	37,218	491	40.9	41.7	16.7
41 hours and over	25,592	24,157	1,436	27.8	27.1	48.8
41 to 48 hours	10,387	10,101	286	11.3	11.3	9.7
49 to 59 hours	8,794	8,397	398	9.5	9.4	13.5
60 hours and over	6,411	5,659	752	7.0	6.3	25.6
Average hours, total at work	38.7	38.6	43.7	--	--	--
Average hours, workers on full-time schedules	43.2	43.0	50.8	--	--	--

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	November 1978					
	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	22,378	6,730	15,646	21,495	6,362	15,131
Economic reasons	3,174	1,373	1,801	2,977	1,241	1,736
Slack work	1,435	945	490	1,276	822	454
Material shortages or repairs to plant and equipment	81	81	--	79	79	--
New job started during week	227	227	--	225	225	--
Job terminated during week	120	120	--	115	115	--
Could find only part-time work	1,311	--	1,311	1,282	--	1,282
Other reasons	19,206	5,360	13,846	18,518	5,122	13,396
Does not want, or unavailable for, full-time work	11,749	--	11,749	11,384	--	11,384
Vacation	858	858	--	836	836	--
Illness	1,948	1,739	209	1,897	1,713	184
Bad weather	672	672	--	540	540	--
Industrial dispute	28	28	--	27	27	--
Legal or religious holiday	476	476	--	475	475	--
Full time for this job	1,318	--	1,318	1,299	--	1,299
All other reasons	2,155	1,585	570	2,061	1,531	530
Average hours:						
Economic reasons	21.3	23.1	20.0	21.4	23.3	20.1
Other reasons	20.6	26.2	18.4	20.6	26.3	18.4
Worked 30 to 34 hours:						
Economic reasons	871	510	361	815	460	355
Other reasons	4,937	2,838	2,099	4,810	2,756	2,054

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

(Numbers in thousands)

Industry	November 1978							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 ¹	89,170	2,977	13,396	72,797	48,640	10,101	14,056	38.6	43.0
Wage and salary workers	82,817	2,633	12,266	67,918	46,497	9,541	11,880	38.3	42.5
Construction	4,719	192	252	4,275	3,138	493	644	38.8	40.7
Manufacturing	20,801	510	696	19,595	12,881	3,504	3,210	41.3	42.6
Durable goods	12,363	187	287	11,889	7,701	2,195	1,993	41.9	42.7
Nondurable goods	8,438	323	410	7,705	5,181	1,308	1,216	40.6	42.4
Transportation and public utilities	5,816	128	460	5,228	3,536	656	1,036	41.0	43.4
Wholesale and retail trade	16,940	766	4,592	11,582	7,128	1,924	2,530	36.1	43.7
Finance, insurance, and real estate	4,944	69	559	4,316	3,224	493	599	38.5	41.2
Service industries	24,077	897	5,446	17,734	12,740	1,874	3,120	36.0	42.4
Private households	1,311	157	721	433	310	38	85	23.5	42.8
All other industries	22,766	740	4,725	17,301	12,430	1,836	3,035	36.7	42.4
Public administration	4,730	60	241	4,429	3,412	463	554	39.9	41.3
Self-employed workers	5,934	322	963	4,649	2,008	543	2,098	42.1	48.9
Unpaid family workers	419	22	167	230	134	17	79	35.4	46.2

¹ 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	November 1978							
	Total at work	On part time for economic reasons	On voluntary part time				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
TOTAL								
Both sexes, 16 years and over	89,170	2,977	13,396	72,797	48,640	24,157	38.6	43.0
16 to 21 years	12,232	668	4,935	6,629	4,998	1,631	30.1	40.9
16 to 19 years	7,235	400	3,933	2,902	2,222	680	26.4	40.7
16 to 17 years	2,885	101	2,463	321	263	58	18.4	38.0
18 to 19 years	4,351	299	1,469	2,583	1,962	621	31.7	41.0
20 years and over	81,935	2,577	9,463	69,895	46,418	23,477	39.6	43.1
20 to 24 years	12,871	591	1,905	10,375	7,388	2,987	37.4	41.8
25 years and over	69,064	1,987	7,558	59,519	39,029	20,490	40.1	43.3
25 to 44 years	40,980	1,174	3,852	35,954	23,230	12,724	40.6	43.4
45 to 64 years	25,589	695	2,480	22,414	15,036	7,378	40.3	43.1
65 years and over	2,495	118	1,226	1,151	764	387	28.9	43.0
Males, 16 years and over	51,298	1,229	4,200	45,869	27,297	18,572	41.6	44.3
16 to 21 years	6,319	312	2,329	3,678	2,553	1,125	31.7	41.8
16 to 19 years	3,698	186	1,875	1,635	1,175	460	28.0	41.6
16 to 17 years	1,442	57	1,190	195	157	38	19.5	37.6
18 to 19 years	2,256	131	686	1,439	1,017	422	33.5	42.1
20 years and over	47,601	1,041	2,324	44,236	26,124	18,112	42.6	44.4
20 to 24 years	6,861	269	791	5,801	3,707	2,094	39.2	42.8
25 years and over	40,740	772	1,534	38,434	22,416	16,018	43.2	44.6
25 to 44 years	24,053	472	473	23,108	13,150	9,958	43.9	44.8
45 to 64 years	15,171	239	405	14,527	8,747	5,780	43.3	44.3
65 years and over	1,515	61	656	798	517	281	30.7	42.7
Females, 16 years and over	37,872	1,748	9,196	26,928	21,343	5,585	34.5	40.7
16 to 21 years	5,914	356	2,606	2,952	2,446	506	28.3	39.7
16 to 19 years	3,538	213	2,057	1,268	1,048	220	24.7	39.5
16 to 17 years	1,443	44	1,274	125	104	21	17.3	38.5
18 to 19 years	2,095	169	784	1,142	943	199	29.8	39.6
20 years and over	34,334	1,535	7,138	25,661	20,297	5,364	35.5	40.8
20 to 24 years	6,010	321	1,114	4,575	3,680	895	35.4	40.5
25 years and over	28,324	1,214	6,024	21,086	16,615	4,471	35.4	40.8
25 to 44 years	16,927	701	3,380	12,846	10,080	2,766	35.8	40.8
45 to 64 years	10,417	456	2,074	7,867	6,289	1,598	35.8	40.8
65 years and over	980	56	570	354	248	106	26.1	43.6
RACE								
White	79,130	2,445	12,166	64,519	42,004	22,515	38.7	43.2
Males	46,056	1,018	3,770	41,268	23,827	17,441	41.8	44.5
Females	33,074	1,427	8,396	23,251	18,177	5,074	34.4	40.9
Black and other	10,040	532	1,230	8,278	6,635	1,643	37.4	41.1
Males	5,242	211	430	4,601	3,470	1,131	39.4	42.1
Females	4,798	321	800	3,677	3,166	511	35.1	39.9
MARITAL STATUS								
Males, 16 years and over:								
Married, spouse present	35,811	558	1,190	34,063	19,398	14,665	43.5	44.8
Widowed, divorced, or separated	4,000	155	215	3,630	2,218	1,412	41.7	43.9
Single (never married)	11,487	516	2,794	8,177	5,682	2,495	35.4	42.3
Females, 16 years and over:								
Married, spouse present	21,374	911	5,222	15,241	12,247	2,994	34.5	40.5
Widowed, divorced, or separated	7,173	376	1,083	5,714	4,388	1,326	36.9	41.2
Single (never married)	9,325	461	2,891	5,973	4,708	1,265	32.4	40.8

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

[Numbers in thousands]

Occupational group and sex	November 1978								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over	89,660	3,016	13,490	73,154	48,840	10,145	14,169	38.5	40.0
White-collar workers	46,666	969	6,958	38,739	25,385	4,871	8,483	39.2	43.4
Professional and technical	14,204	231	1,707	12,266	7,870	1,565	2,831	40.1	43.6
Managers and administrators, except farm	9,780	85	420	9,275	4,261	1,385	3,629	46.1	47.5
Sales workers	5,896	215	1,578	4,103	2,415	590	1,098	36.3	44.0
Clerical workers	16,786	438	3,254	13,094	10,837	1,331	926	35.5	40.0
Blue-collar workers	30,551	1,258	2,283	27,010	17,940	4,453	4,617	39.9	42.6
Craft and kindred workers	12,000	363	467	11,170	7,189	1,832	2,149	41.2	42.8
Operatives, except transport	10,693	491	639	9,563	6,654	1,714	1,195	39.9	42.1
Transport equipment operatives	3,490	152	379	2,959	1,620	451	888	41.2	45.3
Nonfarm laborers	4,369	252	799	3,318	2,478	455	385	35.5	40.9
Service workers	12,443	789	4,249	7,405	5,515	821	1,069	32.5	42.2
Private household	1,132	141	624	367	265	33	69	23.4	42.9
Other service workers	11,310	647	3,625	7,038	5,249	789	1,000	33.4	42.2
Males, 16 years and over	51,629	1,252	4,240	46,137	27,440	7,166	11,531	41.6	41.4
White-collar workers	22,159	232	1,501	20,426	10,864	2,927	6,635	43.7	45.8
Professional and technical	8,086	91	523	7,472	4,361	950	2,161	42.9	44.9
Managers and administrators, except farm	7,488	38	179	7,271	3,009	1,114	3,148	47.6	48.5
Sales workers	3,245	57	395	2,793	1,437	434	922	41.8	45.4
Clerical workers	3,339	46	404	2,889	2,057	429	403	38.6	41.7
Blue-collar workers	24,823	878	1,599	22,346	14,303	3,773	4,270	40.6	43.0
Craft and kindred workers	11,282	341	355	10,586	6,776	1,734	2,076	41.5	42.9
Operatives, except transport	6,488	194	341	5,953	3,768	1,200	985	41.3	43.2
Transport equipment operatives	3,173	124	220	2,829	1,526	444	859	42.5	45.4
Nonfarm laborers	3,880	217	684	2,979	2,233	395	351	35.6	40.9
Service workers	4,647	142	1,140	3,365	2,273	466	626	36.4	43.6
Private household	23	4	9	10	7	2	1	25.2	43.3
Other service workers	4,624	138	1,131	3,355	2,266	464	625	36.5	43.6
Females, 16 years and over	38,032	1,764	9,250	27,018	21,400	2,979	2,639	34.4	37.6
White-collar workers	24,508	737	5,457	18,314	14,520	1,944	1,850	35.2	40.7
Professional and technical	6,118	140	1,184	4,794	3,509	615	670	36.5	41.5
Managers and administrators, except farm	2,292	47	241	2,004	1,252	270	482	41.2	44.2
Sales workers	2,651	158	1,182	1,311	979	157	175	29.5	41.1
Clerical workers	13,446	392	2,850	10,204	8,780	902	522	34.8	39.5
Blue-collar workers	5,728	380	684	4,664	3,637	680	347	36.9	40.6
Craft and kindred workers	718	21	112	585	413	98	74	37.6	41.7
Operatives, except transport	4,205	296	298	3,611	2,886	515	210	37.7	40.2
Transport equipment operatives	317	28	159	130	94	7	29	28.4	43.2
Nonfarm laborers	488	34	115	339	243	61	35	34.3	41.3
Service workers	7,796	647	3,109	4,040	3,243	355	442	30.2	41.2
Private household	1,109	138	614	357	258	31	68	23.4	42.9
Other service workers	6,687	508	2,494	3,685	2,986	324	375	31.3	41.0

HOUSEHOLD DATA

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

(Numbers in thousands)

Employment status	November 1978								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
Civilian noninstitutional population	8,081	4,114	3,967	6,768	3,454	3,314	1,313	660	653
Civilian labor force	1,432	750	683	1,348	702	646	85	47	37
Employed	1,238	629	609	1,187	595	593	50	34	16
Agriculture	102	87	15	99	86	14	2	1	1
Nonagricultural industries	1,136	542	594	1,088	509	579	48	33	16
Unemployed	195	121	74	160	107	53	34	13	21
Unemployment rate	13.6	16.1	10.8	11.9	15.2	8.2	40.0	(1)	(1)
Not in labor force	6,649	3,364	3,285	5,420	2,752	2,669	1,229	613	616
Keeping house	46	14	32	42	10	31	4	3	1
Going to school	6,477	3,285	3,192	5,278	2,691	2,586	1,199	594	605
Unable to work	5	3	2	4	3	2	1	--	--
All other reasons	121	63	58	97	47	50	24	16	9

¹ 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	November 1978					
	Thousands of persons			Percent distribution		
	Both sexes	Males	Females	Both sexes	Males	Females
CLASS OF WORKER						
Total	1,238	629	609	100.0	100.0	100.0
Nonagricultural industries	1,136	542	594	91.8	86.4	97.5
Wage and salary workers	1,042	472	570	84.2	75.3	93.6
Private household workers	438	87	351	35.4	13.9	57.6
Government workers	47	27	20	3.8	4.3	3.3
Other wage and salary workers	557	358	199	45.0	57.1	32.7
Self-employed workers	89	66	22	7.2	10.5	3.6
Unpaid family workers	5	3	2	.4	.5	.3
Agriculture	102	87	15	8.2	13.9	2.5
Wage and salary workers	64	55	9	5.2	8.8	1.5
Self-employed workers	7	5	2	.6	.8	.3
Unpaid family workers	30	26	4	2.4	4.1	.7
OCCUPATION						
Total	1,238	629	609	100.0	100.0	100.0
White-collar workers	281	187	94	22.7	29.8	15.4
Professional and technical	13	8	4	1.1	1.3	.7
Managers and administrators, except farm	1	1	--	.1	.2	--
Sales workers	206	157	49	16.6	25.0	8.0
Clerical workers	62	21	41	5.0	3.3	6.7
Blue-collar workers	182	173	9	14.7	27.5	1.5
Craft and kindred workers	12	11	1	1.0	1.8	.2
Operatives, except transport	46	45	1	3.7	7.2	.2
Transport equipment operatives	4	4	--	.3	.6	--
Nonfarm laborers	120	113	8	9.7	18.0	1.3
Service workers	682	189	493	55.1	30.1	81.0
Private household workers	395	42	353	31.9	6.7	58.0
Other service workers	286	147	139	23.1	23.4	22.8
Farm workers	92	79	13	7.4	12.6	2.1
Farmers and farm managers	7	4	3	.6	.6	.5
Farm laborers and supervisors	86	75	10	6.9	11.9	1.6

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
TOTAL													
Total noninstitutional population ¹	159,522	159,736	159,937	160,128	160,313	160,504	160,713	160,928	161,148	161,348	161,570	161,829	162,033
Armed Forces ¹	2,132	2,129	2,121	2,124	2,122	2,118	2,113	2,098	2,116	2,122	2,123	2,122	2,117
Civilian noninstitutional population ¹	157,389	157,608	157,816	158,004	158,190	158,386	158,601	158,830	159,032	159,226	159,447	159,707	159,916
Civilian labor force	98,877	98,919	99,106	99,093	99,413	99,784	100,261	100,572	100,618	100,550	100,870	101,062	101,647
Percent of civilian population	62.8	62.8	62.8	62.7	62.8	63.0	63.2	63.3	63.3	63.1	63.3	63.3	63.6
Employed	92,214	92,609	92,880	93,003	93,266	93,801	94,112	94,818	94,425	94,582	94,868	95,192	95,735
Percent of total population	57.8	58.0	58.1	58.1	58.2	58.4	58.6	58.9	58.6	58.6	58.7	58.8	59.1
Agriculture	3,357	3,323	3,354	3,243	3,310	3,274	3,235	3,472	3,387	3,360	3,411	3,380	3,265
Nonagricultural industries	88,857	89,286	89,526	89,761	89,956	90,527	90,677	91,346	91,038	91,221	91,457	91,811	92,470
Unemployed	6,663	6,310	6,226	6,090	6,147	5,983	6,150	5,754	6,193	5,968	6,002	5,870	5,912
Unemployment rate	6.7	6.4	6.3	6.1	6.2	6.0	6.1	5.7	6.2	5.9	6.0	5.8	5.8
Not in labor force	58,512	58,689	58,710	58,911	58,777	58,602	58,340	58,258	58,414	58,677	58,577	58,645	58,269
Males, 20 years and over													
Total noninstitutional population ¹	67,948	68,052	68,148	68,240	68,327	68,419	68,519	68,623	68,729	68,827	68,937	69,081	69,182
Civilian noninstitutional population ¹	66,257	66,364	66,467	66,556	66,645	66,740	66,845	66,947	67,039	67,127	67,236	67,382	67,486
Civilian labor force	53,971	53,122	53,152	53,141	53,241	53,263	53,414	53,521	53,391	53,306	53,387	53,559	53,993
Percent of civilian population	79.9	80.0	80.0	79.8	79.9	79.8	79.9	79.9	79.6	79.4	79.4	79.5	80.0
Employed	50,459	50,688	50,672	50,759	50,833	51,038	51,182	51,433	51,213	51,134	51,229	51,396	51,853
Percent of total population	74.3	74.5	74.4	74.4	74.5	74.6	74.7	74.9	74.5	74.3	74.3	74.4	75.0
Agriculture	2,330	2,346	2,394	2,283	2,289	2,295	2,328	2,437	2,420	2,358	2,422	2,361	2,323
Nonagricultural industries	48,129	48,342	48,279	48,476	48,544	48,743	48,854	48,996	48,793	48,777	48,807	49,036	49,529
Unemployed	2,512	2,434	2,480	2,383	2,409	2,225	2,232	2,089	2,178	2,171	2,158	2,163	2,140
Unemployment rate	4.7	4.6	4.7	4.5	4.5	4.2	4.2	3.9	4.1	4.1	4.0	4.0	4.0
Not in labor force	13,286	13,242	13,315	13,415	13,404	13,477	13,431	13,426	13,648	13,821	13,849	13,823	13,493
Females, 20 years and over													
Total noninstitutional population ¹	74,768	74,883	74,991	75,095	75,196	75,300	75,412	75,527	75,643	75,753	75,873	75,998	76,110
Civilian noninstitutional population ¹	74,669	74,783	74,892	74,996	75,093	75,198	75,310	75,422	75,537	75,645	75,764	75,889	76,001
Civilian labor force	36,451	36,418	36,595	36,654	36,849	37,117	37,265	37,439	37,542	37,461	37,953	37,880	38,049
Percent of civilian population	48.8	48.7	48.9	48.9	49.1	49.4	49.5	49.6	49.7	49.5	50.1	49.9	50.1
Employed	33,923	34,009	34,348	34,570	34,722	34,948	34,931	35,137	35,110	35,193	35,688	35,742	35,837
Percent of total population	45.4	45.4	45.8	46.0	46.2	46.4	46.3	46.5	46.4	46.5	47.0	47.0	47.1
Agriculture	589	543	517	604	628	623	527	623	587	579	592	588	574
Nonagricultural industries	33,334	33,466	33,831	33,965	34,094	34,325	34,404	34,514	34,523	34,613	35,096	35,155	35,263
Unemployed	2,528	2,409	2,247	2,085	2,127	2,169	2,333	2,302	2,432	2,269	2,265	2,137	2,212
Unemployment rate	6.9	6.6	6.1	5.7	5.8	5.8	6.3	6.1	6.5	6.1	6.0	5.6	5.8
Not in labor force	38,218	38,365	38,297	38,342	38,244	38,081	38,045	37,983	37,995	38,184	37,811	38,009	37,952
Both sexes, 16-19 years													
Total noninstitutional population ¹	16,806	16,802	16,798	16,794	16,790	16,785	16,782	16,779	16,776	16,768	16,760	16,750	16,741
Civilian noninstitutional population ¹	16,463	16,460	16,457	16,453	16,452	16,449	16,446	16,461	16,455	16,455	16,446	16,436	16,429
Civilian labor force	9,455	9,379	9,359	9,297	9,323	9,404	9,583	9,611	9,685	9,782	9,530	9,623	9,605
Percent of civilian population	57.4	57.0	56.9	56.5	56.7	57.2	58.3	58.4	58.9	59.5	57.9	58.5	58.5
Employed	7,832	7,912	7,860	7,675	7,711	7,815	7,999	8,248	8,102	8,254	7,951	8,053	8,045
Percent of total population	46.6	47.1	46.8	45.7	45.5	46.6	47.7	49.2	48.3	49.2	47.4	48.1	48.1
Agriculture	438	434	443	355	353	357	380	412	380	423	397	432	367
Nonagricultural industries	7,394	7,478	7,417	7,320	7,318	7,456	7,619	7,836	7,722	7,831	7,554	7,621	7,678
Unemployed	1,623	1,467	1,499	1,622	1,612	1,589	1,584	1,363	1,583	1,528	1,579	1,570	1,560
Unemployment rate	17.2	15.6	16.0	17.4	17.3	16.9	16.5	14.2	16.3	15.6	16.6	16.3	16.2
Not in labor force	7,008	7,081	7,098	7,156	7,129	7,045	6,863	6,850	6,770	6,673	6,916	6,613	6,824

¹ 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-43 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	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
FULL TIME													
Total, 16 years and over:													
Civilian labor force	83,908	83,996	84,375	84,449	84,536	84,820	84,972	86,061	86,019	86,013	85,805	86,177	86,414
Employed	78,693	79,058	79,485	79,658	79,818	80,262	80,221	81,551	81,112	81,287	81,071	81,595	81,882
Unemployed	5,215	4,938	4,891	4,791	4,718	4,558	4,750	4,511	4,907	4,726	4,734	4,582	4,532
Unemployment rate	6.2	5.9	5.8	5.7	5.6	5.4	5.6	5.2	5.7	5.5	5.5	5.3	5.2
PART TIME													
Total, 16 years and over:													
Civilian labor force	14,900	14,870	14,761	14,706	14,824	14,974	15,152	14,396	14,650	14,637	15,030	14,989	15,180
Employed	13,470	13,541	13,442	13,447	13,402	13,536	13,754	13,130	13,362	13,382	13,712	13,617	13,819
Unemployed	1,430	1,329	1,319	1,259	1,422	1,438	1,398	1,266	1,289	1,255	1,318	1,371	1,361
Unemployment rate	9.6	8.9	8.9	8.6	9.6	9.6	9.2	8.8	8.8	8.6	8.8	9.1	9.0

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	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
WHITE													
Total, 16 years and over:													
Civilian labor force	87,292	87,193	87,425	87,360	87,532	87,945	88,209	88,624	88,521	88,672	88,813	89,120	89,460
Employed	82,181	82,391	82,650	82,697	82,880	83,386	83,590	84,270	83,862	84,042	84,141	84,569	84,957
Unemployed	5,111	4,802	4,775	4,663	4,652	4,559	4,619	4,353	4,659	4,630	4,672	4,551	4,502
Unemployment rate	5.9	5.5	5.5	5.3	5.3	5.2	5.2	4.9	5.3	5.2	5.3	5.1	5.0
Males, 20 years and over:													
Civilian labor force	47,417	47,507	47,440	47,440	47,528	47,555	47,670	47,818	47,727	47,711	47,666	47,814	48,140
Employed	45,452	45,592	45,546	45,599	45,643	45,859	45,942	46,175	46,009	45,994	45,925	46,088	46,502
Unemployed	1,965	1,915	1,894	1,842	1,885	1,696	1,728	1,643	1,718	1,717	1,741	1,725	1,638
Unemployment rate	4.1	4.0	4.0	3.9	4.0	3.6	3.6	3.4	3.6	3.6	3.7	3.6	3.4
Females, 20 years and over:													
Civilian labor force	31,445	31,381	31,612	31,615	31,701	31,984	32,027	32,260	32,347	32,204	32,624	32,703	32,785
Employed	29,536	29,545	29,875	30,021	30,149	30,345	30,307	30,540	30,536	30,486	30,908	31,094	31,103
Unemployed	1,909	1,836	1,737	1,594	1,552	1,640	1,720	1,720	1,812	1,719	1,716	1,609	1,681
Unemployment rate	6.1	5.9	5.5	5.0	4.9	5.1	5.4	5.3	5.6	5.3	5.3	4.9	5.1
Both sexes, 16 to 19 years:													
Civilian labor force	8,430	8,305	8,373	8,304	8,303	8,405	8,512	8,545	8,446	8,756	8,523	8,603	8,535
Employed	7,193	7,254	7,229	7,077	7,088	7,182	7,341	7,555	7,317	7,562	7,308	7,386	7,352
Unemployed	1,237	1,051	1,144	1,227	1,215	1,223	1,171	990	1,129	1,194	1,215	1,217	1,183
Unemployment rate	14.7	12.7	13.7	14.8	14.6	14.6	13.8	11.6	13.4	13.6	14.3	14.1	13.9
BLACK AND OTHER													
Total, 16 years and over:													
Civilian labor force	11,551	11,761	11,725	11,784	11,870	11,816	11,934	11,980	11,998	11,976	12,057	12,078	12,144
Employed	9,966	10,271	10,238	10,390	10,402	10,418	10,468	10,553	10,496	10,578	10,707	10,705	10,705
Unemployed	1,585	1,490	1,487	1,394	1,469	1,398	1,467	1,427	1,502	1,398	1,350	1,373	1,438
Unemployment rate	13.7	12.7	12.7	11.8	12.4	11.8	12.3	11.9	12.5	11.7	11.2	11.4	11.8
Males, 20 years and over:													
Civilian labor force	5,541	5,649	5,678	5,662	5,699	5,673	5,743	5,732	5,685	5,671	5,745	5,794	5,810
Employed	4,985	5,137	5,124	5,173	5,216	5,172	5,238	5,283	5,206	5,161	5,271	5,306	5,302
Unemployed	556	512	554	489	483	501	505	448	478	509	474	488	508
Unemployment rate	10.0	9.1	9.8	8.6	8.5	8.8	8.8	7.8	8.4	9.0	8.2	8.4	8.7
Females, 20 years and over:													
Civilian labor force	4,988	5,065	5,051	5,087	5,144	5,128	5,138	5,187	5,164	5,256	5,292	5,249	5,260
Employed	4,358	4,485	4,503	4,576	4,560	4,589	4,580	4,602	4,566	4,708	4,769	4,719	4,719
Unemployed	630	580	548	512	585	539	558	585	598	548	523	530	541
Unemployment rate	12.6	11.5	10.9	10.1	11.4	10.5	10.9	11.3	11.6	10.4	9.9	10.1	10.3
Both sexes, 16 to 19 years:													
Civilian labor force	1,022	1,047	996	1,035	1,027	1,015	1,053	1,062	1,149	1,049	1,021	1,035	1,074
Employed	623	649	611	642	626	657	649	668	724	709	668	680	685
Unemployed	399	398	385	393	401	358	404	394	425	340	353	355	389
Unemployment rate	39.0	38.0	38.7	38.0	39.0	35.3	38.4	37.1	37.0	32.4	34.6	34.3	36.2

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-36. Major unemployment indicators, seasonally adjusted

[Unemployment rates]

Selected categories	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
CHARACTERISTICS													
Total (all civilian workers)	6.7	6.4	6.3	6.1	6.2	6.0	6.1	5.7	6.2	5.9	6.0	5.8	5.8
Males, 20 years and over	4.7	4.6	4.7	4.5	4.5	4.2	4.2	3.9	4.1	4.1	4.0	4.0	4.0
Females, 20 years and over	6.9	6.6	6.1	5.7	5.8	5.8	6.3	6.1	6.5	6.1	6.0	5.6	5.8
Both sexes, 16-19 years	17.2	15.6	16.0	17.4	17.3	16.9	16.5	14.2	16.3	15.6	16.6	16.3	16.2
White	5.9	5.5	5.5	5.3	5.3	5.2	5.2	4.9	5.3	5.2	5.3	5.1	5.0
Black and other	13.7	12.7	12.7	11.8	12.4	11.8	12.3	11.9	12.5	11.7	11.2	11.4	11.8
Married men, spouse present	3.3	3.2	2.9	2.9	3.0	2.8	2.9	2.7	2.7	2.8	2.7	2.7	2.5
Married women, spouse present	6.5	6.2	5.6	5.2	5.1	5.0	5.9	5.6	5.6	5.8	5.6	5.3	5.6
Women who head families	9.3	8.1	7.9	7.6	8.6	10.0	9.3	8.8	10.1	8.2	7.9	7.6	7.7
Full-time workers	6.2	5.9	5.8	5.7	5.6	5.4	5.6	5.2	5.7	5.5	5.5	5.3	5.2
Part-time workers	9.6	8.9	8.9	8.6	8.6	9.6	9.2	8.8	8.8	8.6	8.8	9.1	9.0
Unemployed 15 weeks and over ¹	1.8	1.8	1.7	1.6	1.5	1.4	1.4	1.2	1.3	1.2	1.3	1.4	1.2
Labor force time lost ²	7.3	7.0	6.8	6.6	6.6	6.3	6.6	6.4	6.8	6.6	6.5	6.3	6.3
OCCUPATION													
White-collar workers	4.2	4.0	3.6	3.5	3.5	3.5	3.6	3.5	3.7	3.5	3.5	3.3	3.3
Professional and technical	2.9	2.8	2.7	2.5	2.6	2.5	2.4	2.4	2.5	2.6	2.7	2.9	2.5
Managers and administrators, except farm	3.0	2.5	2.5	1.9	2.3	2.0	2.0	1.8	2.2	1.8	2.2	1.8	2.2
Sales workers	4.9	4.7	3.9	4.3	4.4	4.3	4.4	4.4	4.4	4.2	4.4	4.2	3.2
Clerical workers	5.7	5.5	5.0	5.0	4.5	5.1	5.3	5.0	5.4	5.0	4.7	4.2	4.6
Blue-collar workers	7.6	7.2	7.1	7.1	7.1	6.5	6.6	6.5	6.9	7.0	7.0	6.9	6.6
Craft and kindred workers	5.2	5.2	5.4	5.0	5.1	4.3	4.3	4.2	4.0	4.4	4.7	5.0	4.0
Operatives, except transport	9.3	8.5	7.9	8.1	8.0	7.7	8.4	7.9	8.5	9.0	8.5	7.7	7.7
Transport equipment operatives	5.3	5.6	5.4	5.0	5.2	5.2	5.9	4.6	6.1	5.9	5.2	4.9	4.2
Nonfarm laborers	11.9	10.6	11.0	11.5	11.9	10.0	8.7	9.9	10.6	9.5	10.7	11.3	12.0
Service workers	7.8	7.8	7.6	7.1	7.7	7.7	7.6	7.2	7.5	7.1	7.4	7.1	7.4
Farm workers	4.1	3.9	3.9	4.7	4.7	3.1	3.6	3.0	3.8	3.3	4.0	4.7	3.3
INDUSTRY													
Nonagricultural private wage and salary workers ³	6.7	6.3	6.2	6.1	6.0	5.9	5.9	5.6	6.0	5.9	5.9	5.7	5.7
Construction	11.2	10.8	11.7	11.5	11.3	9.5	9.2	9.3	9.5	9.1	10.7	11.5	10.6
Manufacturing	6.5	5.7	5.6	5.7	5.4	5.3	5.6	5.6	5.6	5.7	5.5	5.3	5.3
Durable goods	6.0	5.6	5.2	5.0	4.8	4.4	5.0	4.8	5.1	5.5	5.0	4.8	4.8
Nondurable goods	7.2	5.9	6.1	6.5	6.2	6.5	6.4	6.7	6.4	5.9	6.3	6.0	5.9
Transportation	4.7	4.9	4.3	3.2	3.7	3.8	3.8	3.7	4.1	3.8	3.6	3.6	3.4
Wholesale and retail trade	7.4	7.3	7.1	7.1	7.3	7.2	6.8	6.3	6.9	6.6	6.8	6.8	6.5
Finance and service industries	6.0	5.5	5.4	5.1	5.1	5.2	5.3	4.7	5.4	5.2	5.1	4.6	5.0
Government workers	4.3	4.3	4.2	3.5	3.7	3.8	4.1	4.0	4.1	3.6	3.8	4.0	3.9
Agricultural wage and salary workers	9.3	9.6	9.0	10.1	10.0	7.7	7.7	8.0	10.1	8.3	8.6	9.8	7.8

¹ Unemployment as a percent of civilian labor force.

as a percent of potentially available labor force hours.

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

³ Includes mining, not shown separately.

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

[Numbers in thousands]

Weeks of unemployment	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
DURATION													
Both sexes, 16 years and over:													
Less than 5 weeks	2,851	2,628	2,700	2,586	2,820	2,790	2,932	2,727	3,025	2,822	2,786	2,709	2,825
5 to 14 weeks	2,037	1,937	1,861	1,820	1,877	1,784	1,803	1,916	1,854	1,988	1,928	1,824	1,837
15 weeks and over	1,829	1,797	1,688	1,568	1,463	1,384	1,358	1,231	1,292	1,215	1,293	1,370	1,251
15 to 26 weeks	936	941	865	857	766	716	680	651	665	631	687	763	724
27 weeks and over	893	856	824	671	697	668	678	580	627	584	606	607	527
Average (mean) duration, in weeks	13.7	13.8	13.1	12.5	12.3	12.3	12.1	12.0	11.8	11.2	11.6	11.8	11.2
Median duration, in weeks	7.0	7.1	6.6	7.0	6.2	5.8	5.2	5.8	5.9	6.0	5.9	6.1	5.5
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	42.4	41.3	43.2	43.3	45.8	46.8	48.1	46.4	49.0	46.8	46.4	45.9	47.8
5 to 14 weeks	30.3	30.4	29.8	30.5	30.5	30.0	29.6	32.6	30.0	33.0	32.1	30.9	31.1
15 weeks and over	27.2	28.2	27.0	26.2	23.8	23.2	22.3	21.0	20.9	20.2	21.5	23.2	21.2
15 to 26 weeks	13.9	14.8	13.8	15.0	12.4	12.0	11.2	11.1	10.8	10.5	11.4	12.9	12.2
27 weeks and over	13.3	13.5	13.2	11.2	11.3	11.2	11.1	9.9	10.2	9.7	10.1	10.3	8.9

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

Sex and age	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Total, 16 years and over	6.7	6.4	6.3	6.1	6.2	6.0	6.1	5.7	6.2	5.9	6.0	5.8	5.8
16 to 19 years	17.2	15.6	16.0	17.4	17.3	16.9	16.5	14.2	16.3	15.6	16.6	16.3	16.2
16 to 17 years	19.0	17.8	18.2	20.8	20.4	19.9	19.3	16.7	20.1	18.9	19.2	19.0	19.0
18 to 19 years	15.9	13.7	14.5	15.0	15.2	14.4	14.5	12.9	13.6	13.3	14.3	14.2	14.3
20 to 24 years	10.4	10.2	10.5	10.1	10.3	10.0	9.0	9.2	9.9	9.0	9.3	8.7	9.1
25 years and over	4.7	4.4	4.2	3.9	4.0	3.9	4.2	3.9	4.2	4.2	4.0	4.0	3.8
25 to 54 years	4.8	4.6	4.3	4.1	4.2	4.1	4.5	4.1	4.4	4.4	4.2	4.2	4.1
55 years and over	4.1	4.0	3.5	3.3	3.1	3.2	3.2	3.0	3.2	3.0	3.3	3.1	3.0
Males, 16 years and over	5.8	5.5	5.6	5.6	5.6	5.2	5.1	4.7	5.1	5.0	5.1	5.1	5.0
16 to 19 years	16.4	15.3	14.9	17.2	17.1	16.6	15.3	12.6	15.4	14.7	15.8	16.5	15.9
16 to 17 years	18.2	16.7	17.2	21.1	21.0	19.9	18.4	16.1	18.8	17.7	19.1	20.2	19.9
18 to 19 years	15.0	13.9	13.4	14.3	14.3	13.4	12.9	11.3	13.0	12.4	12.6	13.5	12.9
20 to 24 years	9.8	9.8	10.5	10.3	10.1	9.1	7.9	8.1	8.9	8.7	8.6	8.6	8.6
25 years and over	3.8	3.6	3.5	3.4	3.5	3.3	3.5	3.1	3.3	3.4	3.4	3.4	3.1
25 to 54 years	3.9	3.6	3.6	3.4	3.5	3.3	3.6	3.2	3.3	3.5	3.4	3.5	3.3
55 years and over	3.7	3.7	3.2	3.2	3.2	3.3	3.3	3.0	3.4	2.9	3.0	3.0	2.6
Females, 16 years and over	8.1	7.6	7.3	6.9	7.0	7.1	7.5	7.2	7.7	7.2	7.2	6.7	7.0
16 to 19 years	18.1	16.1	17.4	17.7	17.5	17.2	17.9	16.0	17.4	16.7	17.4	16.1	16.6
16 to 17 years	20.1	19.2	19.5	20.4	19.6	19.9	20.3	17.4	21.6	20.3	19.3	17.7	18.0
18 to 19 years	16.8	13.5	15.8	15.7	16.1	15.6	16.1	14.8	14.4	14.4	16.1	15.0	15.8
20 to 24 years	11.1	10.8	10.5	9.8	10.4	11.0	10.3	10.4	11.0	9.2	10.1	8.7	9.8
25 years and over	6.0	5.7	5.2	4.7	4.7	4.8	5.3	5.2	5.6	5.3	5.0	4.9	4.9
25 to 54 years	6.3	6.0	5.5	5.1	5.2	5.2	5.8	5.6	6.0	5.8	5.3	5.3	5.2
55 years and over	4.8	4.4	3.8	3.3	3.0	2.9	3.1	3.1	2.9	3.3	3.9	3.4	3.7

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

(Numbers in thousands)

Reason for unemployment	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
NUMBER OF UNEMPLOYED													
Both sexes, 16 years and over:													
Job losers	2,969	2,748	2,698	2,540	2,493	2,475	2,577	2,340	2,552	2,553	2,397	2,538	2,428
On layoff	780	687	768	709	660	593	683	606	714	770	719	640	777
Other job losers	2,189	2,061	1,930	1,831	1,833	1,882	1,894	1,733	1,839	1,783	1,677	1,898	1,651
Job leavers	881	877	856	898	862	872	819	849	869	841	852	799	814
Reentrants	1,891	1,886	1,821	1,796	1,911	1,734	1,772	1,760	1,883	1,733	1,927	1,710	1,772
New entrants	901	820	914	868	923	925	901	810	880	893	805	793	870
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	44.7	43.4	42.9	41.6	40.3	41.2	42.5	40.6	41.3	42.4	40.1	43.5	41.3
On layoff	11.7	10.9	12.2	11.6	10.7	9.9	11.3	10.5	11.5	12.8	12.0	11.0	13.2
Other job losers	33.0	32.6	30.7	30.0	29.6	31.3	31.2	30.1	29.7	29.6	28.0	32.5	28.1
Job leavers	13.3	13.9	13.6	14.7	13.9	14.5	13.5	14.7	14.0	14.0	14.3	13.7	13.8
Reentrants	28.5	29.8	28.9	29.4	30.9	28.9	29.2	30.6	30.4	28.8	32.2	29.3	30.1
New entrants	13.6	13.0	14.5	14.2	14.9	15.4	14.8	14.1	14.2	14.8	13.5	13.6	14.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	3.0	2.8	2.7	2.6	2.5	2.5	2.6	2.3	2.5	2.5	2.4	2.5	2.4
Job leavers	.9	.9	.9	.9	.9	.9	.8	.8	.9	.8	.8	.8	.8
Reentrants	1.9	1.9	1.8	1.8	1.9	1.7	1.8	1.7	1.9	1.7	1.9	1.7	1.7
New entrants	.9	.8	.9	.9	.9	.9	.9	.8	.9	.9	.8	.8	.9

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

[In thousands]

Sex and age	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Total, 16 years and over	92,214	92,609	92,880	93,003	93,266	93,801	94,112	94,818	94,425	94,582	94,868	95,192	95,735
16 to 19 years	7,832	7,912	7,860	7,675	7,711	7,815	7,999	8,248	8,102	8,254	7,951	8,053	8,045
16 to 17 years	3,215	3,237	3,213	3,133	3,126	3,213	3,313	3,380	3,277	3,405	3,280	3,300	3,269
18 to 19 years	4,610	4,664	4,657	4,585	4,575	4,636	4,678	4,832	4,749	4,839	4,723	4,755	4,778
20 to 24 years	13,055	13,139	13,183	13,200	13,219	13,404	13,472	13,597	13,485	13,597	13,651	13,758	13,685
25 years and over	71,309	71,551	71,913	72,176	72,315	72,561	72,579	72,953	72,855	72,637	73,250	73,446	74,000
25 to 54 years	57,255	57,530	57,909	58,221	58,325	58,477	58,388	58,723	58,742	58,649	59,156	59,343	59,550
55 years and over	14,006	14,039	14,003	13,984	13,984	14,107	14,100	14,268	14,116	14,068	14,088	14,152	14,386
Males, 16 years and over	54,745	55,012	54,974	54,897	55,013	55,208	55,445	55,868	55,534	55,529	55,504	55,702	56,134
16 to 19 years	4,286	4,324	4,302	4,138	4,180	4,170	4,264	4,436	4,321	4,394	4,275	4,305	4,281
16 to 17 years	1,809	1,825	1,788	1,709	1,746	1,727	1,800	1,820	1,753	1,834	1,766	1,747	1,736
18 to 19 years	2,473	2,492	2,514	2,461	2,436	2,483	2,447	2,580	2,519	2,567	2,544	2,555	2,554
20 to 24 years	7,142	7,172	7,135	7,139	7,206	7,325	7,381	7,407	7,304	7,355	7,348	7,427	7,486
25 years and over	43,320	43,530	43,556	43,649	43,611	43,708	43,781	44,024	43,881	43,718	43,872	43,997	44,363
25 to 54 years	34,617	34,828	34,930	34,996	34,982	35,060	35,051	35,162	35,159	35,011	35,193	35,243	35,462
55 years and over	8,698	8,734	8,649	8,637	8,653	8,662	8,702	8,835	8,724	8,709	8,675	8,767	8,891
Females, 16 years and over	37,469	37,597	37,906	38,107	38,253	38,593	38,667	38,950	38,891	39,053	39,364	39,490	39,601
16 to 19 years	3,546	3,588	3,558	3,537	3,531	3,645	3,735	3,813	3,781	3,860	3,676	3,748	3,764
16 to 17 years	1,406	1,412	1,425	1,424	1,380	1,486	1,513	1,560	1,524	1,571	1,514	1,553	1,533
18 to 19 years	2,137	2,172	2,143	2,124	2,139	2,153	2,231	2,252	2,230	2,272	2,179	2,200	2,224
20 to 24 years	5,913	5,967	6,048	6,061	6,012	6,079	6,092	6,190	6,181	6,243	6,303	6,332	6,199
25 years and over	27,989	28,021	28,357	28,527	28,704	28,853	28,799	28,930	28,974	28,919	29,378	29,449	29,637
25 to 54 years	22,638	22,702	22,979	23,226	23,343	23,417	23,337	23,561	23,583	23,638	23,963	24,100	24,088
55 years and over	5,308	5,305	5,354	5,347	5,331	5,445	5,397	5,433	5,392	5,359	5,413	5,384	5,495

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

[In thousands]

Sex and age	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Total, 16 years and over	6,663	6,310	6,226	6,090	6,147	5,983	6,150	5,754	6,193	5,968	6,002	5,870	5,912
16 to 19 years	1,623	1,467	1,499	1,622	1,612	1,589	1,584	1,363	1,583	1,528	1,579	1,570	1,560
16 to 17 years	756	701	717	821	759	798	792	678	826	795	779	776	767
18 to 19 years	871	740	791	806	817	782	793	718	750	744	785	785	796
20 to 24 years	1,519	1,499	1,547	1,477	1,513	1,489	1,332	1,374	1,476	1,338	1,401	1,304	1,375
25 years and over	3,493	3,319	3,155	2,941	2,968	2,933	3,195	2,998	3,200	3,156	3,082	3,069	2,954
25 to 54 years	2,909	2,772	2,633	2,476	2,560	2,489	2,744	2,539	2,692	2,723	2,572	2,621	2,530
55 years and over	605	585	503	471	449	462	467	448	467	441	487	457	449
Males, 16 years and over	3,352	3,213	3,232	3,245	3,271	3,056	3,001	2,728	2,965	2,926	2,961	3,013	2,950
16 to 19 years	840	779	752	862	862	831	769	639	787	755	803	850	810
16 to 17 years	403	365	371	457	463	429	406	350	406	395	416	441	431
18 to 19 years	438	401	389	410	408	384	364	328	376	362	368	400	379
20 to 24 years	777	775	840	816	812	736	632	657	715	705	692	697	700
25 years and over	1,714	1,640	1,601	1,519	1,562	1,491	1,589	1,424	1,492	1,529	1,523	1,545	1,420
25 to 54 years	1,392	1,315	1,298	1,238	1,262	1,196	1,296	1,144	1,190	1,278	1,241	1,276	1,201
55 years and over	337	339	289	286	284	296	295	275	306	256	269	267	237
Females, 16 years and over	3,311	3,097	2,994	2,845	2,877	2,927	3,148	3,026	3,228	3,042	3,041	2,857	2,962
16 to 19 years	783	688	747	760	750	758	815	724	796	773	776	720	750
16 to 17 years	353	336	346	364	336	369	386	328	420	400	363	335	336
18 to 19 years	433	339	402	396	409	398	429	390	374	382	417	389	417
20 to 24 years	742	724	707	661	701	752	700	717	762	633	708	607	675
25 years and over	1,779	1,679	1,554	1,422	1,425	1,442	1,606	1,573	1,709	1,627	1,558	1,523	1,535
25 to 54 years	1,517	1,457	1,335	1,238	1,278	1,293	1,448	1,394	1,502	1,445	1,331	1,345	1,329
55 years and over	268	246	214	185	165	165	172	174	161	185	218	190	212

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

[In thousands]

Selected categories	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
CHARACTERISTICS													
Total, 16 years and over	92,214	92,609	92,880	93,003	93,266	93,801	94,112	94,818	94,425	94,582	94,868	95,192	95,735
Married men, spouse present	38,531	38,682	38,645	38,666	38,465	38,628	38,626	38,711	38,642	38,467	38,726	38,748	38,941
Married women, spouse present	21,278	21,416	21,638	21,738	21,674	21,847	21,694	21,718	21,766	21,667	22,175	22,132	22,266
OCCUPATION													
White-collar workers	46,251	46,316	46,548	46,555	46,834	46,789	46,895	47,209	47,192	47,236	47,456	47,777	47,907
Professional and technical Managers and administrators, except farm	13,918	13,981	14,057	14,016	14,060	14,158	14,399	14,365	14,239	14,255	14,105	14,333	14,327
Sales workers	9,894	9,939	10,067	10,134	10,169	10,212	9,933	10,107	10,182	10,174	10,056	9,948	10,048
Clerical workers	5,804	5,796	5,913	5,811	5,985	5,861	5,911	5,931	6,017	5,872	5,872	5,959	6,193
Blue-collar workers	16,635	16,600	16,510	16,594	16,621	16,558	16,652	16,806	16,754	16,935	17,422	17,536	17,340
Craft and kindred workers	30,603	30,807	30,943	31,198	31,040	31,655	31,543	31,683	31,225	31,483	31,738	31,864	32,157
Operatives, except transport Transport equipment operatives	12,116	12,153	12,111	12,220	12,169	12,302	12,218	12,467	12,229	12,559	12,640	12,502	12,663
Nonfarm laborers	10,423	10,424	10,755	10,738	10,766	10,974	10,846	11,006	10,841	10,702	10,823	11,120	11,117
Farm workers	3,525	3,555	3,432	3,643	3,541	3,560	3,534	3,512	3,452	3,404	3,577	3,583	3,636
Service workers	4,539	4,675	4,644	4,597	4,563	4,819	4,946	4,698	4,703	4,817	4,698	4,658	4,741
Unpaid family workers	12,590	12,617	12,704	12,703	12,572	12,830	12,883	12,992	12,838	12,884	12,800	12,920	13,018
Unpaid family workers	2,809	2,805	2,872	2,769	2,788	2,687	2,697	2,896	2,803	2,809	2,875	2,833	2,713
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,405	1,405	1,387	1,345	1,389	1,408	1,434	1,482	1,364	1,423	1,442	1,421	1,422
Self-employed workers	1,590	1,605	1,604	1,587	1,527	1,539	1,573	1,669	1,652	1,617	1,655	1,666	1,563
Unpaid family workers	368	346	342	314	389	283	255	336	348	317	298	323	286
Nonagricultural industries:													
Wage and salary workers	82,281	82,692	82,915	83,078	83,124	83,649	84,049	84,513	84,016	84,406	84,842	85,252	85,665
Government	15,415	15,422	15,267	15,237	15,154	15,305	15,203	15,223	15,129	15,283	15,413	15,421	15,450
Private industries	66,866	67,270	67,648	67,841	67,970	68,344	68,846	69,290	68,887	69,123	69,429	69,831	70,215
Private households	1,403	1,436	1,421	1,383	1,293	1,388	1,393	1,368	1,394	1,369	1,370	1,297	1,356
Other industries	65,463	65,834	66,226	66,458	66,677	66,956	67,453	67,921	67,493	67,754	68,059	68,534	68,860
Self-employed workers	6,082	6,182	6,259	6,267	6,427	6,468	6,289	6,198	6,206	6,221	6,200	6,271	6,360
Unpaid family workers	467	442	439	488	500	506	520	468	496	440	471	441	442
PERSONS AT WORK¹													
Nonagricultural industries	83,347	83,662	83,304	84,055	84,285	86,043	85,528	86,051	86,205	86,469	86,310	86,441	86,557
Full-time schedules	68,240	68,574	68,812	69,215	69,417	70,550	70,157	70,861	71,095	71,338	70,939	71,192	71,230
Part-time for economic reasons	3,285	3,220	2,986	3,194	3,163	3,327	3,243	3,458	3,330	3,294	3,231	3,207	3,171
Usually work full-time	1,255	1,247	1,043	1,128	1,226	1,224	1,211	1,433	1,385	1,391	1,311	1,171	1,310
Usually work part-time	2,030	1,973	1,943	2,065	1,938	2,103	2,032	2,025	1,945	1,903	1,920	2,036	1,861
Part-time for noneconomic reasons	11,822	11,868	11,506	11,646	11,704	12,166	12,128	11,732	11,780	11,837	12,140	12,042	12,156

¹ 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 20 to 39 years of age

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1977	Oct. 1978	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
VETERANS¹									
Total, 20 to 34 years:									
Civilian noninstitutional population ²	6,821	6,391	6,363	6,821	6,482	6,461	6,440	6,391	6,363
Civilian labor force	6,467	6,077	6,073	6,464	6,147	6,175	6,102	6,070	6,066
Employed	6,065	5,823	5,795	6,026	5,834	5,786	5,801	5,760	5,762
Unemployed	402	254	278	438	314	389	301	310	303
Unemployment rate	6.2	4.2	4.6	6.8	5.1	6.3	4.9	5.1	5.0
20 to 24 years:									
Civilian noninstitutional population ²	1,028	676	664	1,028	751	736	722	676	664
Civilian labor force	916	596	593	919	686	671	622	593	594
Employed	797	546	529	789	608	578	557	534	524
Unemployed	119	50	64	130	78	93	65	58	70
Unemployment rate	13.0	8.4	10.8	14.1	11.4	13.9	10.5	9.8	11.8
25 to 29 years:									
Civilian noninstitutional population ²	2,894	2,203	2,175	2,894	2,337	2,297	2,256	2,203	2,175
Civilian labor force	2,720	2,089	2,079	2,716	2,185	2,172	2,157	2,090	2,076
Employed	2,566	1,976	1,956	2,543	2,045	2,014	2,000	1,945	1,939
Unemployed	154	113	123	173	140	158	157	145	138
Unemployment rate	5.7	5.4	5.5	6.4	6.4	7.3	7.3	6.9	6.6
30 to 34 years:									
Civilian noninstitutional population ²	2,899	3,512	3,524	2,899	3,394	3,428	3,462	3,512	3,524
Civilian labor force	2,831	3,392	3,401	2,829	3,277	3,333	3,324	3,387	3,395
Employed	2,702	3,301	3,310	2,694	3,181	3,194	3,244	3,281	3,300
Unemployed	129	91	91	135	96	138	80	106	95
Unemployment rate	4.6	2.7	2.7	4.8	2.9	4.1	2.4	3.1	2.8
35 to 39 years:									
Civilian noninstitutional population ²	739	1,263	1,299	739	1,135	1,167	1,199	1,263	1,299
Civilian labor force	719	1,230	1,258	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Employed	695	1,191	1,229	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Unemployed	24	39	29	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Unemployment rate	3.3	3.2	2.3	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
NONVETERANS									
Total, 20 to 34 years:									
Civilian noninstitutional population ²	17,900	18,733	18,808	17,900	18,518	18,583	18,654	18,733	18,808
Civilian labor force	16,061	16,936	17,040	16,192	16,752	16,770	16,885	16,936	17,159
Employed	15,054	16,084	16,127	15,081	15,771	15,805	15,909	15,945	16,154
Unemployed	1,007	852	913	1,111	981	965	976	992	1,005
Unemployment rate	6.3	5.0	5.4	6.9	5.9	5.8	5.8	5.9	5.9
20 to 24 years:									
Civilian noninstitutional population ²	8,237	8,441	8,451	8,237	8,413	8,417	8,426	8,441	8,451
Civilian labor force	6,876	7,152	7,182	7,011	7,111	7,167	7,200	7,259	7,319
Employed	6,281	6,654	6,641	6,361	6,512	6,586	6,608	6,667	6,728
Unemployed	595	498	541	650	599	582	592	591	591
Unemployment rate	8.7	7.0	7.5	9.3	8.4	8.1	8.2	8.1	8.1
25 to 29 years:									
Civilian noninstitutional population ²	5,491	6,295	6,338	5,491	6,116	6,172	6,227	6,295	6,338
Civilian labor force	5,206	5,980	6,001	5,187	5,833	5,845	5,869	5,900	5,972
Employed	4,941	5,737	5,749	4,904	5,579	5,565	5,624	5,636	5,703
Unemployed	265	243	252	283	255	280	245	265	269
Unemployment rate	5.1	4.1	4.2	5.5	4.4	4.8	4.2	4.5	4.5
30 to 34 years:									
Civilian noninstitutional population ²	4,172	3,997	4,019	4,172	3,989	3,994	4,001	3,997	4,019
Civilian labor force	3,979	3,804	3,857	3,994	3,808	3,758	3,816	3,777	3,868
Employed	3,832	3,693	3,737	3,816	3,681	3,655	3,677	3,642	3,722
Unemployed	147	111	120	178	127	103	139	135	145
Unemployment rate	3.7	2.9	3.1	4.5	3.3	2.7	3.6	3.6	3.8
35 to 39 years:									
Civilian noninstitutional population ²	3,554	3,645	3,654	3,554	3,623	3,635	3,645	3,645	3,654
Civilian labor force	3,413	3,508	3,495	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Employed	3,295	3,414	3,406	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Unemployed	118	94	89	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Unemployment rate	3.5	2.7	2.5	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

¹ Vietnam-Era veterans are those who served between August 5, 1964, and May 7, 1975.

appear in the unadjusted and seasonally adjusted columns.

² Since seasonal variations are not present in the population figures, identical numbers

N.A. = not available.

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

B-1. Employees on nonagricultural payrolls, by industry division 1919 to date

Year and month	Total	Goods-producing				Service-producing									
		Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale and retail trade			Finance, insurance, and real estate	Services	Government		
								Total	Wholesale trade	Retail trade			Total	Federal	State and local
1919	27,078	12,828	1,133	1,036	10,659	14,250	3,711	4,514	-	-	1,096	2,253	2,676	-	-
1920	27,340	12,760	1,239	863	10,658	14,580	3,998	4,467	-	-	1,160	2,352	2,603	-	-
1925	28,766	12,489	1,089	1,461	9,939	16,277	3,826	5,576	-	-	1,218	2,857	2,800	-	-
1926	29,806	12,911	1,185	1,570	10,156	16,895	3,942	5,784	-	-	1,290	3,033	2,846	-	-
1927	29,962	12,738	1,114	1,623	10,001	17,224	3,895	5,908	-	-	1,352	3,154	2,915	-	-
1928	29,986	12,618	1,050	1,621	9,947	17,368	3,828	5,874	-	-	1,420	3,251	2,995	-	-
1929	31,324	13,301	1,087	1,512	10,702	18,023	3,916	6,123	-	-	1,494	3,425	3,065	533	2,532
1930	29,409	11,958	1,009	1,387	9,562	17,451	3,685	5,797	-	-	1,460	3,361	3,148	526	2,622
1931	26,635	10,272	873	1,229	8,170	16,363	3,254	5,284	-	-	1,392	3,169	3,264	560	2,704
1932	23,615	8,647	731	985	6,931	14,968	2,816	4,683	-	-	1,326	2,918	3,225	559	2,666
1933	23,699	8,965	744	824	7,397	14,734	2,672	4,755	-	-	1,280	2,861	3,166	565	2,601
1934	25,940	10,261	883	877	8,501	15,679	2,750	5,281	-	-	1,304	3,045	3,299	652	2,647
1935	27,039	10,893	897	927	9,069	16,146	2,786	5,431	-	-	1,320	3,128	3,481	753	2,728
1936	29,068	11,933	946	1,160	9,827	17,135	2,973	5,809	-	-	1,373	3,312	3,668	826	2,842
1937	31,011	12,936	1,015	1,127	10,794	18,075	3,134	6,265	-	-	1,417	3,503	3,756	833	2,923
1938	29,194	11,401	891	1,070	9,440	17,793	2,863	6,179	-	-	1,410	3,458	3,883	829	3,054
1939	30,603	12,297	854	1,165	10,278	18,306	2,936	6,426	1,762	4,664	1,447	3,502	3,995	905	3,090
1940	32,361	13,221	925	1,311	10,985	19,140	3,038	6,750	1,835	4,914	1,485	3,665	4,202	996	3,206
1941	36,539	15,963	957	1,814	13,192	20,574	3,274	7,210	1,960	5,250	1,525	3,905	4,660	1,340	3,320
1942	40,106	18,470	992	2,198	15,280	21,636	3,460	7,118	1,906	5,212	1,509	4,066	5,483	2,213	3,270
1943	42,434	20,114	925	1,587	17,602	22,320	3,647	6,982	1,822	5,160	1,481	4,130	6,080	2,905	3,174
1944	41,864	19,328	892	1,108	17,328	22,536	3,829	7,058	1,845	5,213	1,461	4,145	6,043	2,928	3,116
1945	40,374	17,507	836	1,147	15,524	22,867	3,906	7,314	1,949	5,365	1,481	4,222	5,944	2,808	3,137
1946	41,652	17,248	862	1,683	14,703	24,404	4,061	8,376	2,291	6,085	1,675	4,697	5,595	2,254	3,341
1947	43,857	18,509	955	2,009	15,545	25,348	4,166	8,955	2,471	6,484	1,728	5,025	5,474	1,892	3,582
1948	44,866	18,774	994	2,198	15,582	26,092	4,189	9,272	2,605	6,667	1,800	5,181	5,650	1,863	3,787
1949	43,754	17,565	930	2,194	14,441	26,189	4,001	9,264	2,602	6,662	1,828	5,240	5,856	1,908	3,948
1950	45,197	18,506	901	2,364	15,241	26,691	4,034	9,386	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1951	47,819	19,959	929	2,637	16,393	27,860	4,226	9,742	2,727	7,015	1,956	5,547	6,389	2,302	4,087
1952	48,793	20,198	898	2,668	16,632	28,595	4,248	10,004	2,812	7,192	2,035	5,699	6,609	2,420	4,188
1953	50,202	21,074	866	2,659	17,549	29,128	4,290	10,247	2,854	7,393	2,111	5,835	6,645	2,305	4,340
1954	48,990	19,751	791	2,646	16,314	29,239	4,084	10,235	2,867	7,368	2,200	5,969	6,751	2,188	4,563
1955	50,641	20,513	792	2,839	16,882	30,128	4,141	10,535	2,926	7,609	2,298	6,240	6,914	2,187	4,727
1956	52,369	21,104	822	3,039	17,243	31,265	4,244	10,858	3,018	7,840	2,389	6,497	7,277	2,209	5,069
1957	52,853	20,964	828	2,962	17,174	31,889	4,241	10,886	3,028	7,858	2,438	6,708	7,616	2,217	5,399
1958	51,324	19,513	751	2,817	15,945	31,811	3,976	10,750	2,980	7,770	2,481	6,765	7,839	2,191	5,648
1959	53,268	20,411	732	3,004	16,675	32,857	4,011	11,127	3,082	8,045	2,549	7,087	8,083	2,233	5,850
1960	54,189	20,437	712	2,926	16,796	33,755	4,004	11,391	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1961	53,999	19,854	672	2,859	16,326	34,142	3,903	11,337	3,133	8,204	2,688	7,620	8,594	2,279	6,315
1962	55,549	20,451	650	2,948	16,853	35,098	3,906	11,566	3,198	8,368	2,754	7,982	8,890	2,340	6,550
1963	56,653	20,640	635	3,010	16,995	36,013	3,903	11,778	3,248	8,530	2,830	8,277	9,225	2,358	6,868
1964	58,283	21,005	634	3,097	17,274	37,278	3,951	12,160	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	60,765	21,926	632	3,232	18,062	38,839	4,036	12,716	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	63,901	23,158	627	3,317	19,214	40,743	4,158	13,245	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	65,803	23,308	613	3,248	19,447	42,495	4,268	13,606	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	67,892	23,732	606	3,350	19,776	44,160	4,318	14,099	3,779	10,320	3,337	10,567	11,839	2,737	9,102
1969	70,384	24,361	619	3,575	20,167	46,023	4,442	14,705	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	70,880	23,578	623	3,588	19,367	47,302	4,515	15,040	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	71,214	22,935	609	3,704	18,623	48,278	4,476	15,352	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	73,675	23,668	628	3,889	19,151	50,007	4,541	15,949	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	76,790	24,893	642	4,097	20,154	51,897	4,656	16,607	4,277	12,329	4,046	12,857	13,732	2,663	11,068
1974	78,265	24,794	697	4,020	20,077	53,471	4,725	16,987	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	76,945	22,600	752	3,525	18,323	54,345	4,542	17,060	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	79,382	23,352	779	3,576	18,997	56,030	4,582	17,755	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	82,256	24,288	809	3,833	19,647	57,968	4,696	18,492	4,697	13,795	4,452	15,249	15,079	2,727	12,352
Nov	84,276	24,880	841	4,062	19,977	59,396	4,760	19,088	4,780	14,308	4,521	15,537	15,490	2,716	12,774
Dec	84,464	24,568	682	3,896	19,990	59,896	4,773	19,568	4,797	14,771	4,533	15,540	15,482	2,724	12,758
1978:															
Jan	82,724	24,018	669	3,507	19,842	58,706	4,706	18,806	4,768	14,038	4,526	15,316	15,352	2,711	12,641
Feb	82,962	23,996	668	3,464	19,864	58,966	4,720	18,615	4,780	13,835	4,550	15,482	15,599	2,720	12,879
Mar	83,897	24,356	686	3,675	19,995	59,541	4,759	18,801	4,815	13,986	4,577	15,678	15,726	2,725	13,001
Apr	85,075	24,973	858	4,014	20,101	60,102	4,808	19,053	4,843	14,210	4,609	15,866	15,766	2,739	13,027
May	85,796	25,262	870	4,183	20,209	60,534	4,842	19,267	4,870	14,397	4,642	15,975	15,808	2,756	13,052
June	86,799	25,839	895	4,462	20,482	60,960	4,920	19,499	4,934	14,565	4,712	16,138	15,691	2,802	12,889
July	85,925	25,712	900	4,572	20,240	60,213	4,856	19,469	4,930	14,539	4,746	16,213	14,929	2,815	12,114
Aug	86,134	25,997	902	4,633	20,462	60,137	4,870	19,519	4,930	14,589	4,754	16,235	14,759	2,793	11,966
Sept	86,688	26,131	894	4,586	20,651	60,557	4,908	19,634	4,932	14,702	4,724	16,159	15,132	2,744	12,388
Oct	87,298	26,156	898	4,598	20,660	61,142	4,950	19,709	4,971	14,738	4,732	16,181	15,570	2,753	12,817
Nov	87,798	26,162	905	4,529	20,728	61,636	4,971	19,975	4,998	14,977	4,745	16,213	15,732	2,756	12,976

¹ Data include Alaska and Hawaii beginning 1969. This inclusion has resulted in an increase of 212,000 (0.4 percent) in the nonagricultural total for the March 1969 benchmark month.

p = preliminary.

ESTABLISHMENT DATA EMPLOYMENT

B-2. Employees on nonagricultural payrolls, by industry

[In thousands]

1972 SIC Code	Industry	All employees					Production workers ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	TOTAL	83, 891	84, 276	86, 688	87, 298	87, 798					
	PRIVATE SECTOR	68, 560	68, 786	71, 556	71, 728	72, 066	56, 241	56, 449	58, 637	58, 745	59, 055
	MINING	837	841	894	898	905	638	640	676	679	685
	METAL MINING	81.7	82.8	96.9	96.6	-	59.2	60.3	75.1	74.6	-
101	Iron ores	9.7	9.3	25.6	25.3	-	5.4	5.1	20.9	20.6	-
102	Copper ores	35.6	36.4	34.3	34.2	-	26.7	27.6	26.2	26.2	-
11, 12	COAL MINING	246.3	248.0	242.9	246.4	-	210.8	212.6	201.7	205.1	-
12	BITUMINOUS COAL AND LIGNITE MINING	242.8	244.6	239.7	243.3	-	207.7	209.6	198.9	202.4	-
13	OIL AND GAS EXTRACTION	387.6	390.2	427.7	428.0	-	270.9	272.1	297.4	297.2	-
131, 2	Crude petroleum, natural gas, and natural gas liquids	170.9	171.6	180.5	180.0	-	87.2	87.2	88.0	86.8	-
138	Oil and gas field services	216.7	218.6	247.2	248.0	-	183.7	184.9	209.4	210.4	-
14	NONMETALLIC MINERALS, EXCEPT FUELS	121.6	120.0	126.8	127.1	-	96.6	95.2	102.2	101.8	-
142	Crushed and broken stone	42.7	41.8	44.8	44.6	-	35.6	34.7	37.9	37.6	-
144	Sand and gravel	36.5	36.1	38.6	38.9	-	-	-	-	-	-
147	Chemical and fertilizer minerals	23.6	23.5	23.5	23.7	-	-	-	-	-	-
	CONSTRUCTION	4, 139	4, 062	4, 586	4, 598	4, 529	3, 285	3, 212	3, 699	3, 715	3, 641
	GENERAL BUILDING CONTRACTORS	1, 179.1	1, 156.0	1, 289.4	1, 296.2	-	924.7	900.7	1, 016.8	1, 027.1	-
152	Residential building construction	616.7	605.6	690.9	607.0	-	474.9	463.2	536.8	545.6	-
153	Operative builders	78.6	78.9	84.6	83.0	-	53.9	53.3	56.2	55.7	-
154	Nonresidential building construction	483.8	471.5	513.9	516.2	-	395.9	384.2	423.8	425.8	-
	HEAVY CONSTRUCTION CONTRACTORS	878.9	844.0	996.0	986.9	-	698.8	670.2	824.2	818.0	-
161	Highway and street construction	292.8	271.1	345.0	343.1	-	252.6	231.2	301.8	299.7	-
162	Heavy construction, except highway	586.1	572.9	651.0	643.8	-	446.2	439.0	522.4	518.3	-
	SPECIAL TRADE CONTRACTORS	2, 081.3	2, 062.0	2, 300.8	2, 315.2	-	1, 661.2	1, 641.3	1, 858.2	1, 869.8	-
171	Plumbing, heating, air conditioning	496.3	497.7	544.4	544.9	-	377.0	377.5	420.1	420.0	-
172	Painting, paper hanging, decorating	135.9	132.9	154.0	155.3	-	114.8	112.0	131.2	131.9	-
173	Electrical work	355.2	352.7	386.7	388.8	-	276.7	274.1	305.1	306.5	-
174	Masonry, stonework, and plastering	332.0	330.4	370.1	377.7	-	286.8	283.9	322.9	329.8	-
175	Carpentering and flooring	128.8	125.2	137.3	139.3	-	101.5	97.8	108.4	110.2	-
176	Roofing and sheet metal work	148.9	149.2	169.5	173.8	-	121.1	121.8	140.3	144.2	-
	MANUFACTURING	19, 992	19, 977	20, 651	20, 660	20, 728	14, 396	14, 387	14, 877	14, 880	14, 950
24, 25, 32-39	DURABLE GOODS	11, 794	11, 816	12, 345	12, 408	12, 473	8, 476	8, 503	8, 871	8, 928	8, 993
20-23, 26-31	NONDURABLE GOODS	8, 198	8, 161	8, 306	8, 252	8, 255	5, 920	5, 884	6, 006	5, 952	5, 957
	DURABLE GOODS										
	LUMBER AND WOOD PRODUCTS	748.8	741.3	764.5	760.7	755.4	641.1	635.0	655.5	652.1	644.4
241	Logging camps and logging contractors	89.1	86.4	93.9	92.9	-	73.5	70.9	77.4	77.1	-
242	Sawmills and planing mills	235.5	233.8	241.2	240.6	-	210.2	209.2	216.1	215.1	-
2421	Sawmills and planing mills, general	195.9	194.4	200.9	200.1	-	175.1	174.2	180.7	179.4	-
2426	Hardwood dimension and flooring	32.8	32.8	33.6	33.8	-	29.1	29.1	29.5	29.7	-
243	Millwork, plywood, and structural members	213.5	212.1	217.4	214.9	-	181.7	180.8	184.0	181.7	-
2431	Millwork	77.7	77.0	78.3	77.5	-	64.3	63.8	64.7	64.0	-
2434	Wood kitchen cabinets	47.5	47.3	48.5	47.7	-	40.2	40.1	40.5	39.5	-
2435	Hardwood veneer and plywood	25.9	26.2	26.2	26.2	-	23.0	23.4	23.5	23.4	-
2436	Softwood veneer and plywood	47.1	46.9	48.0	47.5	-	41.7	41.5	42.0	41.8	-
244	Wooden containers	41.7	42.0	42.5	42.9	-	36.8	37.1	37.7	38.0	-
245	Wood buildings and mobile homes	87.9	85.7	84.7	83.4	-	71.3	69.1	69.1	67.7	-
2451	Mobile homes	60.2	58.6	57.8	57.3	-	50.0	48.3	49.2	48.7	-
249	Miscellaneous wood products	81.1	81.3	84.8	86.0	-	67.6	67.9	71.2	72.5	-
	FURNITURE AND FIXTURES	478.0	480.9	488.7	491.4	491.8	393.4	396.7	402.1	404.3	405.3
251	Household furniture	325.3	327.1	329.4	331.4	-	276.7	279.0	280.0	281.8	-
2511	Wood household furniture	145.1	146.4	145.8	146.3	-	128.2	129.2	129.0	129.3	-
2512	Upholstered household furniture	101.1	101.3	104.3	104.9	-	84.6	84.9	86.4	87.3	-
2514	Metal household furniture	29.4	30.3	29.3	30.0	-	23.5	24.4	23.4	24.1	-
2515	Mattresses and bedsprings	32.2	32.1	33.3	33.4	-	25.1	25.1	26.2	26.0	-
252	Office furniture	42.0	42.7	45.1	45.4	-	33.9	34.6	36.8	36.9	-
253	Public building and related furniture	23.9	24.0	25.0	25.0	-	18.2	18.3	19.0	18.9	-
254	Partitions and fixtures	61.0	60.7	63.2	63.7	-	46.8	46.3	48.2	48.7	-
259	Miscellaneous furniture and fixtures	25.8	26.4	26.0	25.9	-	17.8	18.5	18.1	18.0	-

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
32	STONE, CLAY, AND GLASS PRODUCTS	685.4	687.9	708.8	712.0	712.7	546.9	551.4	564.4	566.8	567.4
321	Flat glass	21.9	21.9	18.9	21.4	-	17.6	17.7	14.4	16.7	-
322	Glass and glassware, pressed or blown	134.7	137.9	139.0	138.9	-	116.6	119.7	119.7	119.2	-
3221	Glass containers	75.4	78.1	78.4	77.8	-	67.4	70.1	69.5	68.7	-
3229	Pressed and blown glass, nec	59.3	59.8	60.6	61.1	-	49.2	49.6	50.2	50.5	-
323	Products of purchased glass	44.4	44.8	47.9	48.7	-	33.4	33.7	34.7	35.8	-
324	Cement, hydraulic	30.9	31.2	32.1	32.1	-	24.6	24.8	25.5	25.5	-
325	Structural clay products	52.4	52.0	52.2	52.2	-	42.1	41.7	41.1	41.3	-
326	Pottery and related products	47.5	47.7	47.8	48.5	-	40.1	40.3	40.4	40.7	-
327	Concrete, gypsum, and plaster products	206.3	204.3	216.2	214.9	-	161.9	159.9	170.9	169.5	-
3271	Concrete block and brick	23.6	23.3	24.9	24.9	-	16.3	15.9	17.7	17.7	-
3272	Concrete products, nec	71.2	70.2	73.2	73.2	-	56.2	55.2	57.6	57.4	-
3273	Ready-mixed concrete	91.0	90.2	96.7	95.7	-	72.8	72.2	78.1	77.2	-
329	Misc. nonmetallic mineral products	134.6	135.3	142.0	142.7	-	100.5	103.5	107.5	107.8	-
3291	Abrasive products	26.6	26.6	28.5	28.9	-	18.6	18.5	19.5	19.9	-
3292	Asbestos products	21.8	21.7	22.4	22.7	-	16.9	16.8	17.4	17.7	-
3296	Mineral wool	28.2	30.0	30.9	30.7	-	-	-	-	-	-
33	PRIMARY METAL INDUSTRIES	1,181.7	1,174.0	1,223.3	1,220.1	1,233.6	923.4	916.3	963.0	961.9	975.9
331	Blast furnace and basic steel products	545.3	537.5	561.4	558.6	-	424.5	417.5	444.3	442.1	-
3312	Blast furnaces and steel mills	462.5	455.8	477.7	474.8	-	361.7	355.5	380.0	377.4	-
3317	Steel pipe and tubes	29.4	28.7	29.8	29.8	-	22.6	22.1	23.1	23.3	-
332	Iron and steel foundries	236.6	235.4	242.3	241.1	-	194.6	193.1	197.7	197.6	-
3321	Gray iron foundries	150.0	150.4	153.0	151.1	-	125.2	125.7	126.8	125.9	-
3322	Malleable iron foundries	22.9	20.8	22.9	23.2	-	19.0	16.7	18.7	19.0	-
3325	Steel foundries, nec	53.8	54.2	55.6	55.7	-	42.9	43.2	44.6	44.8	-
333	Primary nonferrous metals	65.8	67.0	68.6	68.3	-	51.2	52.0	53.6	53.4	-
3334	Primary aluminum	32.3	33.1	34.7	34.5	-	26.0	26.7	28.2	28.0	-
335	Nonferrous rolling and drawing	197.9	197.1	209.5	210.1	-	143.8	143.5	153.5	154.0	-
3351	Copper rolling and drawing	29.2	28.2	33.2	33.4	-	22.4	21.4	25.8	25.8	-
3353	Aluminum sheet, plate, and foil	33.1	32.9	37.3	37.6	-	24.1	24.3	27.9	28.2	-
3357	Nonferrous wire drawing and insulating	81.7	82.1	82.5	83.3	-	60.4	60.9	61.2	61.9	-
336	Nonferrous foundries	93.1	93.8	95.3	95.8	-	77.2	77.9	78.6	79.5	-
3361	Aluminum foundries	51.7	52.2	52.0	52.6	-	43.6	44.1	43.5	44.3	-
34	FABRICATED METAL PRODUCTS	1,614.9	1,617.9	1,674.7	1,684.3	1,691.4	1,227.3	1,230.7	1,272.0	1,281.9	1,288.3
341	Metal cans and shipping containers	77.5	75.2	79.7	77.1	-	65.3	63.0	67.0	64.8	-
3411	Metal cans	64.3	62.2	65.8	63.2	-	54.6	52.6	55.7	53.4	-
342	Cutlery, hand tools, and hardware	181.1	182.5	187.5	189.2	-	140.9	142.5	145.9	147.6	-
3423.5	Hand and edge tools, and hand saws and blades	58.7	59.2	63.9	64.3	-	45.6	46.1	50.1	50.6	-
3429	Hardware, nec	106.6	107.4	107.4	108.5	-	83.7	84.7	83.8	84.9	-
343	Plumbing and heating, except electric	70.1	70.7	71.2	71.4	-	52.4	53.0	52.9	53.5	-
3432	Plumbing fittings and brass goods	25.5	26.5	26.5	26.5	-	20.8	21.0	21.5	21.6	-
3433	Heating equipment, except electric	33.6	33.9	34.1	34.5	-	23.9	24.3	23.9	24.4	-
344	Fabricated structural metal products	490.2	488.9	510.9	513.5	-	348.8	348.1	363.9	365.6	-
3441	Fabricated structural metal	99.8	100.3	102.6	103.6	-	71.3	72.1	73.9	74.9	-
3442	Metal doors, sash, and trim	85.2	84.1	86.7	87.0	-	66.1	65.0	65.5	65.7	-
3443	Fabricated plate work (boiler shops)	141.7	141.9	147.5	148.0	-	93.1	93.2	96.4	96.9	-
3444	Sheet metal work	98.0	98.1	103.6	104.3	-	72.7	72.7	77.6	78.1	-
3446	Architectural metal work	32.1	32.0	33.6	33.8	-	22.8	22.9	24.5	24.4	-
345	Screw machine products, bolts, etc.	101.9	103.0	108.6	109.8	-	80.1	80.9	85.3	86.4	-
3451	Screw machine products	48.1	48.6	52.2	52.9	-	39.7	40.0	43.2	43.7	-
3452	Bolts, nuts, rivets, and washers	53.8	54.4	56.4	56.9	-	40.4	40.9	42.1	42.7	-
346	Metal forgings and stampings	296.8	298.0	302.8	305.2	-	241.3	242.8	245.0	247.8	-
3462	Iron and steel forgings	50.6	51.2	54.7	55.1	-	40.7	41.3	43.6	44.0	-
3465	Automotive stampings	116.1	116.8	116.5	118.2	-	98.4	99.6	98.1	99.9	-
3469	Metal stampings, nec	119.3	119.2	120.5	121.1	-	93.9	93.6	94.8	95.5	-
347	Metal services, nec	94.5	95.2	97.5	98.8	-	77.9	78.5	80.1	81.4	-
3471	Plating and polishing	66.1	67.0	69.2	70.3	-	55.0	55.8	57.6	58.6	-
3479	Metal coating and allied services	28.4	28.2	28.3	28.5	-	22.9	22.7	22.5	22.8	-
348	Ordnance and accessories, nec	57.2	57.6	59.2	59.2	-	39.9	40.4	41.4	41.6	-
3483	Ammunition, exc. for small arms, nec	23.9	24.3	24.5	24.5	-	16.9	17.4	17.1	17.1	-
349	Misc. fabricated metal products	245.6	246.8	257.3	260.1	-	180.7	181.5	190.5	193.2	-
3494	Valves and pipe fittings	96.9	97.8	100.2	100.2	-	65.1	65.8	68.1	68.0	-
3496	Misc. fabricated wire products	48.8	49.0	52.5	53.2	-	37.6	37.8	40.6	41.3	-
35	MACHINERY, EXCEPT ELECTRICAL	2,212.2	2,234.5	2,365.3	2,382.0	2,401.7	1,448.8	1,468.9	1,555.7	1,570.7	1,587.1
351	Engines and turbines	128.0	123.9	135.4	136.1	-	82.1	79.3	88.1	89.3	-
3511	Turbines and turbine generator sets	44.5	44.7	45.4	45.1	-	23.5	23.6	24.1	24.0	-
3519	Internal combustion engines, nec	83.5	79.2	90.0	91.0	-	58.6	55.7	64.0	65.3	-
352	Farm and garden machinery	165.2	164.9	162.1	163.9	-	113.6	113.4	113.4	115.0	-
3523	Farm machinery and equipment	149.4	148.2	146.4	148.2	-	103.2	102.0	102.6	104.3	-
353	Construction and related machinery	359.3	363.8	394.0	397.2	-	238.8	243.0	263.6	266.4	-
3531	Construction machinery	159.7	163.2	175.1	176.2	-	109.2	112.4	119.9	120.9	-

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
MACHINERY, EXCEPT ELECTRICAL—Continued											
3532	Mining machinery.....	34.7	32.9	35.7	36.0	--	22.0	21.1	22.9	23.1	
3533	Oil field machinery.....	68.1	69.9	77.8	78.4	--	46.3	47.4	54.2	55.0	
3535	Conveyers and conveying equipment.....	30.2	30.4	32.4	32.7	--	18.3	18.3	19.1	19.3	
3537	Industrial trucks and tractors.....	35.0	35.7	39.4	39.8	--	24.1	24.7	27.3	27.6	
354	Metalworking machinery.....	327.0	331.3	344.8	347.6	--	237.0	241.4	252.2	254.1	
3541	Machine tools, metal cutting types.....	64.8	65.5	70.7	71.2	--	41.7	42.6	46.0	46.2	
3542	Machine tools, metal forming types.....	23.1	23.0	24.2	24.2	--	15.2	15.1	16.0	15.9	
3544	Special dies, tools, jigs, and fixtures.....	124.9	127.8	128.1	129.7	--	99.7	102.6	102.9	104.2	
3545	Machine tool accessories.....	60.5	60.6	64.3	64.8	--	43.0	43.1	45.9	46.0	
3546	Power driven hand tools.....	32.3	32.9	33.4	33.5	--	24.0	24.5	25.0	25.2	
355	Special industry machinery.....	191.6	194.1	200.4	200.3	--	120.4	122.3	125.5	125.7	
3551	Food products machinery.....	44.4	44.5	46.0	45.9	--	27.6	27.8	28.3	28.3	
3552	Textile machinery.....	29.5	30.9	31.2	30.6	--	21.0	22.0	22.0	21.6	
3555	Printing trades machinery.....	32.7	33.2	36.7	36.8	--	19.3	19.5	21.7	21.7	
356	General industrial machinery.....	297.3	301.0	313.8	315.3	--	199.0	202.3	209.7	210.9	
3561	Pumps and pumping equipment.....	61.1	61.3	61.5	61.3	--	38.3	38.4	38.0	38.0	
3562	Ball and roller bearings.....	56.4	57.8	58.6	59.1	--	42.9	44.3	45.1	45.5	
3563	Air and gas compressors.....	28.0	28.2	29.7	30.3	--	16.7	16.8	17.2	17.8	
3564	Blowers and fans.....	35.1	36.2	37.3	37.6	--	22.5	23.4	23.9	23.8	
3566	Speed changers, drives, and gears.....	24.4	24.7	25.8	25.9	--	16.9	17.1	17.7	17.8	
3568	Power transmission equipment, nec.....	22.5	22.4	22.4	22.7	--	16.3	16.3	16.3	16.6	
357	Office and computing machines.....	322.8	327.5	359.8	361.9	--	146.6	149.7	165.0	167.1	
3573	Electronic computing equipment.....	250.5	253.9	281.3	283.7	--	103.3	105.4	117.3	119.6	
358	Refrigeration and service machinery.....	172.6	176.3	185.7	188.0	--	120.9	124.2	130.9	132.7	
3585	Refrigeration and heating equipment.....	119.6	122.6	128.5	130.3	--	84.4	87.1	90.9	92.3	
359	Misc. machinery, except electrical.....	248.4	251.7	269.3	271.7	--	190.4	193.3	207.3	209.5	
3592	Carburetors, pistons, rings, valves.....	37.0	37.8	39.8	40.1	--	29.3	30.0	31.4	31.7	
3599	Machinery, except electrical, nec.....	211.4	213.9	229.5	231.6	--	161.1	163.3	175.9	177.8	
36	ELECTRIC AND ELECTRONIC EQUIPMENT	1,909.8	1,922.3	1,994.0	2,006.0	2,018.0	1,260.4	1,271.1	1,309.6	1,318.0	1,331.2
361	Electric distributing equipment.....	120.8	121.2	121.0	121.4	--	86.3	86.8	86.8	87.1	
3612	Transformers.....	55.1	55.4	57.1	57.2	--	38.7	39.1	40.7	40.8	
3613	Switchgear and switchboard apparatus.....	65.7	65.8	63.9	64.2	--	47.6	47.7	46.1	46.3	
362	Electrical industrial apparatus.....	234.4	236.4	244.9	245.7	--	168.5	169.5	175.7	176.2	
3621	Motors and generators.....	126.8	128.1	131.3	132.2	--	96.1	96.5	98.6	99.4	
3622	Industrial controls.....	65.0	65.4	68.4	68.4	--	42.0	42.3	44.6	44.3	
363	Household appliances.....	184.7	186.2	183.3	182.1	--	144.6	146.2	144.4	144.0	
3632	Household refrigerators and freezers.....	43.6	44.7	43.7	42.1	--	34.0	35.1	34.0	32.7	
3633	Household laundry equipment.....	21.3	21.8	22.4	22.1	--	16.3	16.8	17.4	17.3	
3634	Electric housewares and fans.....	55.8	55.7	53.4	54.0	--	44.1	43.8	43.2	43.6	
364	Electric lighting and wiring equipment.....	208.7	210.5	220.0	220.3	--	159.3	160.9	166.8	167.4	
3641	Electric lamps.....	38.1	38.6	38.7	38.9	--	33.4	34.0	33.9	34.1	
3643	Current-carrying wiring devices.....	83.5	84.4	91.5	91.7	--	59.4	59.0	64.9	65.0	
3644	Noncurrent-carrying wiring devices.....	23.9	24.0	22.9	23.2	--	17.7	17.9	16.6	16.9	
3645	Residential lighting fixtures.....	24.2	24.1	25.3	25.1	--	19.0	19.0	19.5	19.5	
365	Radio and TV receiving equipment.....	130.6	130.9	124.8	126.2	--	97.3	98.0	93.1	94.5	
3651	Radio and TV receiving sets.....	101.5	100.7	99.1	99.8	--	73.6	73.3	72.7	73.3	
366	Communication equipment.....	468.9	472.8	496.7	500.6	--	229.3	232.0	242.7	244.8	
3661	Telephone and telegraph apparatus.....	150.9	151.6	151.2	152.9	--	102.8	103.5	104.7	105.7	
3662	Radio and TV communication equipment.....	318.0	321.2	345.5	347.7	--	126.5	128.5	138.0	139.1	
367	Electronic components and accessories.....	407.3	408.6	444.7	449.4	--	256.1	257.1	279.5	282.2	
3671-3	Electronic tubes.....	41.0	41.4	43.3	43.5	--	26.4	26.8	28.6	28.3	
3674	Semiconductors and related devices.....	150.4	150.8	167.2	170.2	--	71.9	71.9	78.6	80.5	
3679	Electronic components, nec.....	157.9	158.6	172.6	173.7	--	111.4	112.2	122.8	123.4	
369	Misc. electrical equipment and supplies.....	154.4	155.7	158.6	160.3	--	119.0	120.6	120.4	121.8	
3691	Storage batteries.....	27.8	28.2	29.0	29.5	--	22.4	22.9	22.9	23.6	
3694	Engine electrical equipment.....	76.3	77.6	79.5	80.5	--	61.1	62.3	63.0	63.0	
37	TRANSPORTATION EQUIPMENT	1,885.4	1,878.8	1,993.1	2,011.7	2,026.3	1,306.3	1,303.2	1,380.8	1,399.6	1,416.1
371	Motor vehicles and equipment.....	982.6	977.3	996.9	1,006.4	--	767.9	765.2	778.6	789.9	
3711	Motor vehicles and car bodies.....	465.4	457.3	461.4	464.1	--	351.0	344.8	344.5	348.7	
3713	Truck and bus bodies.....	49.4	49.0	53.6	53.5	--	39.2	39.0	43.6	43.3	
3714	Motor vehicle parts and accessories.....	440.6	443.8	450.3	457.3	--	356.5	360.3	365.5	373.0	
3715	Truck trailers.....	27.2	27.2	31.6	31.5	--	21.2	21.1	25.0	24.9	
372	Aircraft and parts.....	464.1	461.9	546.1	552.6	--	231.0	229.1	287.2	292.5	
3721	Aircraft.....	254.1	249.5	316.1	320.5	--	108.6	104.3	150.9	154.3	
3724	Aircraft engines and engine parts.....	122.3	124.5	133.6	134.5	--	68.0	70.2	74.8	75.7	
3728	Aircraft equipment, nec.....	87.7	87.9	96.4	97.6	--	54.4	54.6	61.5	62.5	
373	Ship and boat building and repairing.....	226.1	226.9	215.2	216.9	--	180.4	182.6	172.3	174.3	
3731	Ship building and repairing.....	179.5	180.4	167.6	168.6	--	142.3	144.6	133.3	134.5	
3732	Boat building and repairing.....	46.6	46.5	47.6	48.3	--	38.1	38.0	39.0	39.8	
374	Railroad equipment.....	50.0	50.0	58.8	60.4	--	36.6	36.4	45.1	46.4	
376	Guided missiles, space vehicles, parts.....	76.1	77.5	83.3	83.0	--	23.9	24.3	26.0	25.3	
3761	Guided missiles and space vehicles.....	57.7	59.1	63.3	63.0	--	16.1	16.5	17.7	17.0	

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	TRANSPORTATION EQUIPMENT—Continued										
379	Miscellaneous transportation equipment	68.4	67.6	76.3	75.7	—	51.8	51.4	58.8	58.2	—
3792	Travel trailers and campers	46.3	45.5	51.0	50.1	—	36.4	36.1	41.1	40.2	—
38	INSTRUMENTS AND RELATED PRODUCTS	621.7	625.6	662.9	665.1	672.0	379.2	382.6	407.2	407.9	417.6
381	Engineering and scientific instruments	64.4	65.2	68.3	69.6	—	30.7	31.2	33.9	34.7	—
382	Measuring and controlling devices	201.9	204.0	219.1	218.3	—	127.6	129.3	139.4	139.2	—
3822	Environmental controls	48.1	48.4	48.6	48.9	—	33.4	33.7	33.5	33.6	—
3823	Process control instruments	46.7	46.9	48.4	49.1	—	24.7	24.9	25.2	26.3	—
3825	Instruments to measure electricity	73.2	73.3	85.8	85.1	—	45.4	45.5	54.9	54.4	—
383	Optical instruments and lenses	26.2	26.4	28.4	28.7	—	15.1	15.5	16.1	16.3	—
384	Medical instruments and supplies	129.4	131.5	143.4	144.3	—	86.5	88.3	95.5	95.7	—
3841	Surgical and medical instruments	50.6	51.6	58.4	58.8	—	33.7	34.7	38.8	38.7	—
3842	Surgical appliances and supplies	61.8	62.6	66.8	67.2	—	41.7	42.2	44.9	45.2	—
385	Ophthalmic goods	41.7	41.1	42.0	41.5	—	30.9	30.5	30.9	30.7	—
386	Photographic equipment and supplies	128.4	128.5	132.0	133.3	—	65.3	65.5	68.3	68.6	—
387	Watches, clocks, and watchcases	29.7	28.9	29.7	29.4	—	23.1	22.3	23.1	22.7	—
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	455.7	452.9	469.4	474.2	469.9	349.2	346.9	360.6	364.6	359.9
391	Jewelry, silverware, and plated ware	62.6	63.6	63.3	63.6	—	46.2	47.0	46.8	47.3	—
3911	Jewelry, precious metal	40.4	41.2	40.3	40.1	—	29.1	29.8	29.3	29.2	—
393	Musical instruments	23.5	23.7	25.9	26.0	—	18.8	19.1	21.3	21.2	—
394	Toys and sporting goods	127.4	122.0	124.1	125.0	—	98.8	93.7	96.6	98.0	—
3942, 4	Dolls, games, toys, and children's vehicles	63.9	57.8	63.3	64.4	—	48.7	43.0	48.7	50.0	—
3949	Sporting and athletic goods, nec	63.5	64.2	60.8	60.6	—	50.1	50.7	47.9	48.0	—
395	Pens, pencils, office and art supplies	35.3	35.1	34.9	35.2	—	25.4	25.4	25.3	25.4	—
396	Costume jewelry and notions	63.8	66.2	71.0	73.5	—	51.7	53.9	57.6	59.5	—
3961	Costume jewelry	34.3	36.4	40.0	42.0	—	28.3	30.0	32.8	34.3	—
399	Miscellaneous manufactures	143.1	142.3	150.2	150.9	—	108.3	107.8	113.0	113.2	—
3993	Signs and advertising displays	50.6	50.5	53.7	53.9	—	36.2	36.1	38.9	38.8	—
	NONDURABLE GOODS										
20	FOOD AND KINDRED PRODUCTS	1,750.6	1,709.4	1,790.4	1,734.9	1,707.0	1,197.6	1,159.5	1,241.0	1,188.1	1,161.7
201	Meat products	357.2	357.9	362.0	361.5	—	295.2	295.9	299.6	300.0	—
2011	Meat packing plants	172.3	172.2	171.7	170.8	—	139.2	139.2	138.6	138.3	—
2013	Sausages and other prepared meats	69.9	69.7	69.1	68.6	—	51.2	51.0	50.7	50.4	—
2016	Poultry dressing plants	101.1	101.9	107.2	107.7	—	92.4	93.1	97.9	98.5	—
202	Dairy products	189.2	188.9	191.8	190.0	—	98.5	98.2	101.0	99.4	—
2022	Cheese, natural and processed	31.3	31.2	32.0	31.7	—	24.3	24.1	25.1	24.9	—
2026	Fluid milk	122.7	122.9	122.7	121.8	—	52.7	52.9	53.1	52.4	—
203	Preserved fruits and vegetables	257.9	228.8	301.1	242.4	—	212.7	184.5	257.5	199.7	—
2032	Canned specialties	28.1	28.4	29.9	28.8	—	19.8	20.0	21.3	20.4	—
2033	Canned fruits and vegetables	107.7	84.0	150.9	93.6	—	90.6	67.7	134.3	78.0	—
2037	Frozen fruits and vegetables	47.0	44.8	42.3	42.8	—	40.8	38.9	37.2	37.5	—
204	Grain mill products	145.5	144.6	146.3	146.8	—	99.0	98.2	99.4	100.0	—
2041	Flour and other grain mill products	24.4	24.6	24.7	24.8	—	16.2	16.2	15.6	15.6	—
2048	Prepared feeds, nec	61.2	61.1	62.1	62.3	—	37.7	37.9	39.5	39.7	—
205	Bakery products	235.0	233.8	229.3	228.8	—	136.4	135.5	133.6	133.3	—
2051	Bread, cake, and related products	194.7	194.4	188.5	188.4	—	104.3	104.3	101.0	101.1	—
2052	Cookies and crackers	40.3	39.4	40.8	40.4	—	32.1	31.2	32.6	32.2	—
206	Sugar and confectionery products	122.7	116.8	109.5	117.6	—	97.1	92.4	84.1	92.1	—
2061-3	Cane and beet sugar	41.8	36.5	31.5	38.1	—	33.5	29.1	23.0	29.3	—
2065	Confectionery products	61.2	60.6	57.4	58.9	—	49.7	49.5	46.0	47.7	—
207	Fats and oils	42.5	43.2	39.7	40.4	—	30.6	31.3	28.3	29.1	—
208	Beverages	231.4	229.3	232.9	230.1	—	108.5	107.1	109.6	107.8	—
2082	Malt beverages	51.2	50.4	50.2	49.4	—	34.4	33.8	33.6	33.2	—
2086	Bottled and canned soft drinks	134.6	133.8	140.3	138.3	—	48.6	47.8	50.7	49.1	—
209	Misc. foods and kindred products	169.2	166.1	177.8	177.3	—	119.6	116.4	127.9	126.7	—
21	TOBACCO MANUFACTURES	79.5	77.4	78.0	78.7	77.3	64.4	62.4	62.9	63.9	62.8
211	Cigarettes	49.5	49.5	49.0	49.2	—	38.8	38.7	38.1	38.4	—
22	TEXTILE MILL PRODUCTS	917.5	920.6	913.6	911.9	912.5	798.5	801.5	795.6	794.3	795.7
221	Weaving mills, cotton	159.5	159.7	152.0	152.6	—	143.4	143.8	136.4	137.3	—
222	Weaving mills, synthetics	124.4	124.7	121.1	121.3	—	111.3	111.6	108.3	108.4	—
223	Weaving and finishing mills, wool	20.1	20.3	20.7	20.8	—	16.7	16.9	17.3	17.4	—
224	Narrow fabric mills	25.6	26.0	26.1	26.1	—	22.3	22.7	22.8	22.8	—
225	Knitting mills	240.1	240.4	245.4	242.9	—	207.3	207.3	212.1	209.7	—
2251	Women's hosiery, except socks	28.4	28.7	30.2	30.7	—	25.1	25.4	26.9	27.4	—
2252	Hosiery, nec	35.0	35.2	35.4	35.2	—	31.7	32.0	32.2	32.0	—
2253	Knit outerwear mills	79.0	78.5	78.6	76.6	—	67.6	67.0	67.2	65.0	—
2254	Knit underwear mills	35.1	35.5	37.9	37.7	—	30.3	30.5	32.4	32.4	—

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
TEXTILE MILL PRODUCTS—Continued											
2257	Circular knit fabric mills	36.8	36.7	36.9	37.0	—	30.7	30.6	31.1	31.1	—
226	Textile finishing, except wool	80.1	81.3	79.7	78.3	—	67.7	68.9	67.7	66.3	—
2261	Finishing plants, cotton	32.7	33.5	33.2	33.4	—	27.2	28.0	27.8	28.1	—
2262	Finishing plants, synthetics	30.1	30.4	29.9	28.5	—	25.8	26.0	25.6	24.2	—
227	Floor covering mills	61.4	61.4	63.0	63.5	—	49.7	49.9	51.3	52.0	—
228	Yarn and thread mills	134.2	134.2	134.2	135.1	—	122.4	122.3	122.3	123.0	—
2281	Yarn mills, except wool	87.8	88.2	89.4	90.0	—	81.3	81.6	82.7	83.2	—
2282	Throwing and winding mills	22.2	22.5	21.8	21.9	—	19.8	20.1	19.4	19.5	—
229	Miscellaneous textile goods	72.1	72.6	71.4	71.3	—	57.7	58.0	57.4	57.4	—
23	APPAREL AND OTHER TEXTILE PRODUCTS	1,333.8	1,333.7	1,325.8	1,327.4	1,327.9	1,142.7	1,143.4	1,142.1	1,142.4	1,142.5
231	Men's and boys' suits and coats	91.0	89.9	89.2	88.6	—	79.7	78.7	78.3	77.6	—
232	Men's and boys' furnishings	379.8	378.6	370.0	376.4	—	328.0	327.3	320.6	318.0	—
2321	Men's and boys' shirts and nightwear	106.1	104.5	105.3	105.8	—	92.1	90.7	91.8	91.9	—
2327	Men's and boys' separate trousers	88.1	88.5	84.5	84.2	—	77.3	77.8	74.3	74.0	—
2328	Men's and boys' work clothing	100.5	100.5	93.7	92.5	—	85.1	85.3	79.7	78.5	—
233	Women's and misses' outerwear	424.8	426.0	426.5	431.0	—	365.0	366.7	369.5	373.0	—
2331	Women's and misses' blouses and waists	56.9	57.4	59.0	59.7	—	49.8	50.2	52.0	52.5	—
2335	Women's and misses' dresses	159.1	159.2	159.3	160.7	—	140.2	140.1	140.9	142.3	—
2337	Women's and misses' suits and coats	67.9	66.4	67.5	66.9	—	57.8	56.7	58.2	57.7	—
2339	Women's and misses' outerwear, nec.	140.9	143.0	140.7	143.7	—	117.2	119.7	118.4	120.5	—
234	Women's and children's undergarments	97.2	97.2	94.7	93.9	—	83.4	83.3	80.8	80.1	—
2341	Women's and children's underwear	76.5	76.3	75.3	74.8	—	66.7	66.5	65.4	65.0	—
2342	Brassieres and allied garments	20.7	20.9	19.4	19.1	—	16.7	16.8	15.4	15.1	—
236	Children's outerwear	68.2	67.8	68.6	68.4	—	57.7	57.2	58.6	58.3	—
2361	Children's dresses and blouses	26.4	26.6	25.2	25.5	—	23.5	23.8	22.6	22.7	—
238	Misc. apparel and accessories	63.4	63.0	61.7	61.4	—	54.9	54.3	53.3	52.9	—
239	Misc. fabricated textile products	189.9	191.8	195.1	196.6	—	157.1	159.1	163.6	164.9	—
2391	Curtains and draperies	31.0	31.7	30.9	30.9	—	27.0	27.7	27.1	27.1	—
2392	House furnishings, nec.	51.5	52.6	52.6	52.8	—	42.4	43.4	44.0	44.2	—
2396	Automotive and apparel trimmings	36.4	35.7	37.5	38.1	—	30.2	29.8	31.4	31.9	—
26	PAPER AND ALLIED PRODUCTS	698.5	697.0	702.9	697.1	705.8	524.0	522.8	528.2	524.5	534.9
261, 26	Paper and pulp mills	206.8	205.4	200.4	192.2	—	158.1	156.3	150.2	142.6	—
262	Paper mills, except building paper	178.4	177.1	174.0	165.9	—	135.7	134.0	129.6	121.9	—
263	Paperboard mills	66.2	66.1	67.1	67.3	—	52.0	51.9	52.7	52.9	—
264	Misc. converted paper products	212.0	211.7	216.9	217.2	—	149.4	149.5	156.3	157.6	—
2641	Paper coating and glazing	54.9	55.0	57.6	57.1	—	26.6	26.8	32.6	33.2	—
2642	Envelopes	24.0	24.2	24.0	24.4	—	18.9	19.3	18.9	19.3	—
2643	Bags, except textile bags	48.4	48.0	49.5	49.9	—	38.6	38.3	38.9	38.9	—
265	Paperboard containers and boxes	213.5	213.8	218.5	220.4	—	164.5	165.1	169.0	171.4	—
2651	Folding paperboard boxes	42.0	41.8	43.1	43.4	—	33.3	33.1	34.3	34.7	—
2653	Corrugated and solid fiber boxes	105.9	106.4	109.3	110.2	—	77.9	78.5	81.0	82.1	—
2654	Sanitary food containers	32.8	32.7	33.0	33.3	—	27.1	27.1	27.3	27.7	—
27	PRINTING AND PUBLISHING	1,150.9	1,155.4	1,179.5	1,184.1	1,202.6	652.3	653.7	658.6	662.5	678.2
271	Newspapers	398.8	401.1	399.6	401.6	—	168.6	169.3	156.9	157.8	—
272	Periodicals	76.0	76.3	79.5	79.9	—	14.9	15.0	13.9	14.0	—
273	Books	97.6	98.8	100.2	100.0	—	48.1	49.4	49.4	49.4	—
2731	Book publishing	67.5	68.2	70.1	70.0	—	22.8	23.4	24.1	24.2	—
2732	Book printing	30.1	30.6	30.1	30.0	—	25.3	26.0	25.3	25.2	—
274	Miscellaneous publishing	44.3	44.3	46.7	46.4	—	23.9	24.3	28.4	28.3	—
275	Commercial printing	370.0	371.0	383.2	386.1	—	275.3	274.6	283.4	286.0	—
2751	Commercial printing, letterpress	161.1	161.3	167.3	167.7	—	120.3	120.4	124.4	124.8	—
2752	Commercial printing, lithographic	186.7	186.9	195.1	197.4	—	136.8	135.7	141.9	143.8	—
276	Manifold business forms	42.5	42.6	45.4	45.7	—	30.3	30.4	32.8	33.0	—
278	Blankbooks and bookbinding	59.1	58.8	62.0	62.4	—	48.3	48.2	51.1	51.4	—
279	Printing trade services	39.2	39.1	39.2	39.5	—	29.1	29.0	28.6	28.7	—
28	CHEMICALS AND ALLIED PRODUCTS	1,075.9	1,073.9	1,093.8	1,092.7	1,095.2	615.3	613.0	626.9	624.8	625.6
281	Industrial inorganic chemicals	163.4	163.7	165.3	165.0	—	94.4	94.3	92.6	91.7	—
2819	Industrial inorganic chemicals, nec.	106.4	106.4	109.5	109.2	—	58.9	58.7	60.4	60.1	—
282	Plastics materials and synthetics	211.9	211.7	214.2	213.8	—	140.8	140.6	145.7	145.5	—
2821	Plastics materials and resins	82.8	83.0	84.1	84.1	—	51.3	51.2	51.7	51.9	—
2824	Organic fibers, noncellulosic	94.8	94.4	94.9	94.9	—	66.2	65.8	68.0	68.0	—
283	Drugs	181.5	181.7	184.3	184.7	—	88.9	89.0	87.0	87.7	—
2834	Pharmaceutical preparations	144.8	145.1	147.2	147.3	—	68.2	68.5	66.3	67.2	—
284	Soap, cleaners, and toilet goods	132.7	130.8	139.0	138.7	—	81.1	79.5	86.0	86.0	—
2841	Soap and other detergents	40.5	40.6	41.0	41.1	—	26.0	26.0	26.2	26.4	—
2842, 3	Polishing, sanitation, and finishing preparations	36.6	36.5	37.8	38.2	—	20.1	20.1	21.3	21.7	—
2844	Toilet preparations	55.6	53.7	60.2	59.4	—	35.0	33.4	38.5	37.9	—
285	Paints and allied products	66.6	66.2	70.7	69.8	—	34.9	34.4	37.3	36.5	—
286	Industrial organic chemicals	165.5	165.7	163.9	163.6	—	84.5	84.7	85.3	84.7	—

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	CHEMICALS AND ALLIED PRODUCTS—Cont'd										
2865	Cyclic crudes and intermediates	35.6	35.7	35.8	35.8		21.6	21.7	22.2	22.3	
2861,9	Gum, wood, and industrial organic chemicals, nec.	129.9	130.0	128.1	127.8		62.9	63.0	63.1	62.4	
287	Agricultural chemicals	67.2	67.2	68.3	68.7		40.8	40.8	42.6	42.1	
289	Miscellaneous chemical products	87.1	86.9	88.1	88.4	—	49.9	49.7	50.4	50.6	—
	PETROLEUM AND COAL PRODUCTS	206.0	205.4	211.8	212.2	211.6	135.8	134.8	139.2	139.1	139.8
291	Petroleum refining	160.2	160.9	163.2	163.5	—	101.3	101.5	102.7	103.1	—
295	Paving and roofing materials	34.3	33.1	36.9	37.0	—	26.7	25.6	29.1	28.7	—
	RUBBER AND MISC. PLASTICS PRODUCTS	730.8	733.0	758.2	763.1	767.5	572.4	574.3	594.8	599.2	605.0
301	Tires and inner tubes	128.9	129.0	126.2	126.4	—	94.1	94.3	91.7	91.5	—
302	Rubber and plastics footwear	23.0	23.1	23.8	24.1	—	20.0	20.1	23.8	21.1	—
303,4	Reclaimed rubber, and rubber and plastics hose and belting	24.2	24.1	22.1	22.4	—	18.6	18.3	16.4	16.7	—
306	Fabricated rubber products, nec.	112.8	112.7	113.1	113.1	—	87.7	88.2	88.9	89.0	—
307	Miscellaneous plastics products	441.9	444.1	473.0	477.1	—	352.0	353.4	377.0	380.9	—
	LEATHER AND LEATHER PRODUCTS	254.6	255.3	252.2	250.1	247.5	217.1	219.0	216.3	213.6	210.3
311	Leather tanning and finishing	22.5	22.6	21.5	21.3	—	19.2	19.3	18.1	18.0	—
314	Footwear, except rubber	156.2	157.1	156.6	154.3	—	135.3	137.1	136.7	133.6	—
3143	Men's footwear, except athletic	64.7	65.0	63.0	62.2	—	57.1	57.5	55.6	54.8	—
3144	Women's footwear, except athletic	60.5	60.7	62.7	61.4	—	51.3	52.1	54.5	52.6	—
316	Luggage	17.8	17.6	18.0	17.9	—	13.8	13.5	13.9	13.9	—
317	Handbags and personal leather goods	33.5	33.0	31.3	31.4	—	27.8	27.4	26.3	26.4	—
	TRANSPORTATION AND PUBLIC UTILITIES	4,749	4,760	4,908	4,950	4,971	4,033	4,035	4,117	4,152	4,172
	RAILROAD TRANSPORTATION	547.9	546.7	527.7	551.4	—	—	—	—	—	—
4011	Class I railroads: %*	505.9	504.9	490.7	508.5	—	—	—	—	—	—
	LOCAL AND INTERURBAN PASSENGER TRANSIT	265.1	264.2	263.0	266.0	—	244.5	242.9	243.0	246.3	—
411	Local and suburban transportation	72.6	72.9	72.7	72.1	—	66.7	66.8	67.4	66.9	—
412	Taxicabs	68.4	68.2	66.3	67.2	—	—	—	—	—	—
413	Intercity highway transportation	37.0	36.2	38.6	37.0	—	33.7	32.9	35.5	33.9	—
415	School buses	74.9	75.0	71.2	75.4	—	—	—	—	—	—
	TRUCKING AND WAREHOUSING	1,240.1	1,242.0	1,290.2	1,299.0	—	1,098.4	1,101.1	1,143.2	1,152.0	—
421,3	Trucking and trucking terminals	1,154.0	1,153.1	1,204.8	1,211.0	—	1,024.1	1,023.9	1,069.6	1,075.6	—
422	Public warehousing	86.1	88.9	85.4	88.0	—	74.3	77.2	73.6	76.4	—
	WATER TRANSPORTATION	195.8	195.1	208.5	208.1	—	—	—	—	—	—
	TRANSPORTATION BY AIR	386.8	388.3	396.4	396.1	—	—	—	—	—	—
451,2	Air transportation	345.2	346.3	352.0	351.3	—	—	—	—	—	—
	PIPE LINES, EXCEPT NATURAL GAS	18.8	18.8	19.0	18.9	—	13.7	13.6	13.8	13.6	—
	TRANSPORTATION SERVICES	158.5	159.3	171.6	173.2	—	—	—	—	—	—
	COMMUNICATION	1,188.8	1,193.8	1,250.4	1,254.8	—	905.8	908.6	945.6	948.6	—
481	Telephone communication	960.1	964.4	1,006.6	1,010.3	—	720.5	722.6	747.4	749.2	—
483	Radio and television broadcasting	169.9	170.9	178.9	179.8	—	133.7	135.0	141.6	142.8	—
	ELECTRIC, GAS, AND SANITARY SERVICES	747.0	752.2	781.1	782.2	—	615.7	619.8	638.0	637.9	—
491	Electric services	340.0	341.7	359.4	362.4	—	276.8	278.0	290.2	292.5	—
492	Gas production and distribution	154.8	157.5	161.6	160.4	—	126.5	129.3	132.4	131.1	—
493	Combination utility services	188.4	188.9	190.3	190.2	—	156.9	156.7	155.1	154.7	—
495	Sanitary services	41.0	41.3	44.7	44.3	—	36.6	36.9	39.6	39.1	—
	WHOLESALE AND RETAIL TRADE	18,799	19,088	19,634	19,709	19,975	16,569	16,851	17,310	17,364	17,622
	WHOLESALE TRADE	4,769	4,780	4,932	4,971	4,998	3,931	3,941	4,069	4,093	4,119
	WHOLESALE TRADE - DURABLE GOODS	2,745	2,757	2,885	2,902	—	2,262	2,273	2,374	2,383	—
501	Motor vehicles and automotive equipment	402.8	404.3	423.4	426.0	—	330.6	332.5	347.7	349.2	—
502	Furniture and home furnishing	95.8	97.1	100.0	100.6	—	78.3	79.1	80.8	81.7	—
503	Lumber and construction materials	169.1	169.2	177.4	178.1	—	140.9	141.0	148.7	149.0	—
504	Sporting goods, toys, and hobby goods	62.6	63.1	61.7	62.7	—	52.1	52.4	51.3	52.0	—
505	Metals and minerals, except petroleum	131.5	132.1	139.9	140.7	—	106.8	106.8	113.8	114.3	—
506	Electrical goods	377.7	381.6	401.3	403.8	—	312.6	315.8	330.4	333.3	—
507	Hardware, plumbing, and heating equipment	222.8	223.5	234.2	236.8	—	185.7	186.6	194.6	196.4	—

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	WHOLESALE TRADE-DURABLE GOODS—										
	Continued										
508	Machinery, equipment, and supplies	1,093.8	1,099.1	1,153.6	1,158.5	--	898.0	902.9	944.3	944.1	
509	Miscellaneous durable goods	188.4	186.5	193.6	194.3	--	157.2	155.9	162.5	163.1	
51	WHOLESALE TRADE-NONDURABLE GOODS ..	2,024	2,023	2,047	2,069	--	1,669	1,668	1,695	1,710	
511	Paper and paper products	128.2	128.8	132.6	134.1	--	104.7	105.7	107.7	108.6	
512	Drugs, proprietaries, and sundries	133.1	132.9	137.7	138.6	--	113.7	113.5	117.6	118.5	
513	Apparel, piece goods, and notions	158.2	158.6	160.0	161.0	--	125.1	125.6	127.6	128.2	
514	Groceries and related products	620.4	618.8	622.7	624.4	--	534.9	533.2	544.0	544.7	
516	Chemical and allied products	115.1	115.3	116.5	116.6	--	80.8	81.2	83.5	83.6	
517	Petroleum and petroleum products	226.4	226.7	224.9	222.4	--	177.1	176.9	171.1	168.9	
518	Beer, wine, and distilled beverages	125.7	126.5	133.7	133.3	--	106.4	107.3	113.5	113.3	--
519	Miscellaneous nondurable goods	354.3	352.4	357.6	364.1	--	292.6	291.1	295.4	301.6	--
52-59	RETAIL TRADE	14,030	14,308	14,702	14,738	14,977	12,638	12,910	13,241	13,271	13,503
52	BUILDING MATERIALS AND GARDEN										
	SUPPLIES	574.1	577.6	596.0	597.8	--	489.2	492.6	509.9	512.0	--
521	Lumber and other building materials	309.4	310.2	322.4	321.5	--	265.2	266.0	278.2	277.4	--
525	Hardware stores	138.9	141.5	141.4	142.8	--	119.7	122.1	120.8	122.3	--
53	GENERAL MERCHANDISE STORES	2,245.6	2,418.7	2,311.3	2,357.0	--	2,076.8	2,244.9	2,157.5	2,197.7	--
531	Department stores	1,828.1	1,971.4	1,869.5	1,903.2	--	1,699.6	1,840.2	1,756.7	1,788.7	--
533	Variety stores	282.3	304.3	296.6	302.4	--	262.5	282.6	276.8	279.1	--
539	Misc. general merchandise stores	135.2	143.0	145.2	151.4	--	114.7	122.1	124.0	129.9	--
54	FOOD STORES	2,140.6	2,161.9	2,206.2	2,236.2	--	1,974.7	1,995.8	2,035.4	2,061.5	--
541	Grocery stores	1,875.8	1,891.0	1,943.8	1,967.7	--	1,734.4	1,749.4	1,796.4	1,817.0	--
542	Meat markets and freezer provisioners	49.3	51.0	45.4	47.7	--	--	--	--	--	--
546	Retail bakeries	115.8	116.6	118.1	118.7	--	106.3	107.1	108.4	109.1	--
55	AUTOMOTIVE DEALERS AND SERVICE										
	STATIONS	1,817.1	1,818.8	1,875.0	1,876.7	--	1,569.0	1,570.1	1,610.6	1,612.3	--
551.2	New and used car dealers	859.3	860.9	891.9	895.9	--	719.1	720.3	745.0	749.0	--
553	Auto and home supply stores	244.8	246.5	255.8	253.6	--	216.0	217.0	223.2	220.6	--
554	Gasoline service stations	638.0	637.7	649.0	649.8	--	571.4	571.5	575.8	576.6	--
56	APPAREL AND ACCESSORY STORES	870.8	899.1	870.7	891.5	--	755.3	782.7	751.7	768.7	--
561	Men's and boys' clothing and furnishings	137.1	142.3	135.9	140.0	--	116.7	121.9	115.9	119.2	--
562	Women's ready-to-wear stores	323.7	335.3	322.0	331.5	--	282.2	293.2	279.4	288.5	--
565	Family clothing stores	155.1	160.9	157.7	159.6	--	137.7	143.5	139.8	140.5	--
566	Shoe stores	167.3	170.9	170.9	173.6	--	141.4	144.8	142.9	145.2	--
57	FURNITURE AND HOME FURNISHINGS										
	STORES	575.6	589.0	593.2	599.1	--	481.9	495.4	491.5	497.4	--
571	Furniture and home furnishings	352.7	356.4	358.2	360.0	--	299.2	302.7	301.1	303.3	--
572	Household appliance stores	85.2	87.5	88.7	89.6	--	73.2	75.6	75.5	76.3	--
573	Radio, television, and music stores	137.7	145.1	146.3	149.5	--	109.5	117.1	114.9	117.8	--
58	EATING AND DRINKING PLACES	4,053.2	4,033.2	4,474.4	4,371.0		3,752.5	3,735.2	4,121.3	4,027.7	
59	MISCELLANEOUS RETAIL	1,752.9	1,809.3	1,775.2	1,809.0		1,538.4	1,593.6	1,563.4	1,593.4	
591	Drug stores and proprietary stores	486.4	492.3	503.0	502.6	--	441.3	447.3	457.9	457.4	--
592	Liquor stores	112.6	115.7	120.7	122.2	--	--	--	--	--	--
594	Miscellaneous shopping goods stores	494.8	514.9	497.4	511.0	--	424.8	444.9	427.6	438.6	--
596	Nonstore retailers	278.1	297.5	278.8	289.5	--	256.7	275.9	260.0	271.0	--
598	Fuel and ice dealers	101.2	104.8	97.2	100.5	--	85.1	88.8	81.9	85.0	--
599	Retail stores, nec.	226.7	232.3	225.0	229.9	--	192.0	196.7	189.2	194.3	--
	FINANCE, INSURANCE, AND REAL										
	ESTATE	4,503	4,521	4,724	4,732	4,745	3,422	3,435	3,595	3,599	3,617
60	BANKING	1,367.6	1,372.7	1,430.3	1,434.2	--	1,072.6	1,077.2	1,115.9	1,118.1	--
602	Commercial and stock savings banks	1,247.3	1,252.0	1,305.5	1,309.1	--	975.6	979.9	1,014.3	1,061.1	--
61	CREDIT AGENCIES OTHER THAN BANKS	478.7	479.2	504.2	505.8	--	367.2	367.4	387.8	389.7	--
612	Savings and loan associations	201.0	202.5	216.8	218.3	--	157.8	159.1	169.4	170.7	--
614	Personal credit institutions	191.4	191.2	198.7	198.5	--	143.7	143.4	150.8	151.2	--
62	SECURITY, COMMODITY BROKERS, AND										
	SERVICES	181.2	181.3	191.6	193.0	--	--	--	--	--	--
621	Security brokers and dealers	148.3	148.4	157.2	158.3	--	--	--	--	--	--
63	INSURANCE CARRIERS	1,157.7	1,164.1	1,200.5	1,203.5	--	806.8	811.3	839.0	842.8	--
631	Life insurance	520.4	521.5	520.3	520.5	--	310.2	310.9	310.7	312.2	--

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 ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	INSURANCE CARRIERS—Continued										
632	Medical service and health insurance	133.5	134.9	139.6	140.0		108.8	109.9	112.4	112.9	
633	Fire, marine, and casualty insurance	436.8	440.3	468.1	470.0		330.0	335.4	356.4	357.7	
64	INSURANCE AGENTS, BROKERS, AND SERVICE	376.0	376.9	398.4	401.2						
65	REAL ESTATE	816.0	820.2	868.1	864.7						
651	Real estate operators and lessors	415.3	417.6	433.9	431.4						
653	Real estate agents and managers	273.3	275.9	295.1	296.0						
655	Subdividers and developers	104.5	103.8	114.5	112.2						
66	COMBINED REAL ESTATE, INSURANCE, ETC.	29.0	29.6	30.4	29.8						
67	HOLDING AND OTHER INVESTMENT OFFICES	96.4	96.8	100.5	100.0						
	SERVICES	15,541	15,537	16,159	16,181	16,213	13,898	13,889	14,363	14,356	14,368
70	HOTELS AND OTHER LODGING PLACES	949.9	920.0	991.3	942.3		—	—	—	—	
701	Hotels, motels, and tourist courts	911.5	885.1	951.3	909.6		838.1	812.5	874.8	837.2	
72	PERSONAL SERVICES	891.5	895.1	895.6	900.7		—	—	—	—	
721	Laundry, cleaning, and garment services	355.9	356.4	352.4	355.3		317.7	317.7	314.6	316.6	
723	Beauty shops	279.4	280.0	281.7	282.2		255.7	256.6	260.5	259.7	
726	Funeral service and crematories	68.4	68.6	70.5	70.2		—	—	—	—	
73	BUSINESS SERVICES	2,429.0	2,436.7	2,613.1	2,633.7		2,115.2	2,121.9	2,275.4	2,293.6	
731	Advertising	133.1	134.0	144.7	145.6		98.4	99.0	106.3	107.2	
732	Credit reporting and collection	84.3	84.1	86.9	87.6		—	—	—	—	
733	Mailing, reproduction, stenographic	96.0	96.2	102.8	104.7		—	—	—	—	
734	Services to buildings	430.5	433.3	458.2	457.5		386.3	390.2	411.9	410.8	
736	Personnel supply services	397.2	381.3	427.6	428.1		—	—	—	—	
737	Computer and data processing services	191.6	193.2	213.6	217.3		156.5	157.9	175.3	179.5	
75	AUTO REPAIR, SERVICES, AND GARAGES	500.1	503.9	520.9	524.2		430.5	433.8	448.3	450.1	
753	Automotive repair shops	307.6	307.9	320.6	322.2		262.1	262.0	274.6	274.7	
76	MISCELLANEOUS REPAIR SERVICES	243.1	242.3	243.3	246.4		209.6	209.2	207.8	210.5	
78	MOTION PICTURES	224.1	221.2	228.5	221.1		197.2	196.0	200.8	195.6	
781	Motion picture production and services	89.9	90.6	85.7	86.7		77.2	79.1	73.1	75.7	
783	Motion picture theaters	123.9	120.3	132.6	124.1		—	—	—	—	
79	AMUSEMENT AND RECREATION SERVICES	655.0	618.6	733.8	664.3		591.8	555.8	669.8	597.9	
80	HEALTH SERVICES	4,626.8	4,639.9	4,804.8	4,817.8		4,136.4	4,145.6	4,279.7	4,275.7	
801	Offices of physicians	656.7	660.1	688.2	689.7		545.6	548.8	564.4	567.3	
802	Offices of dentists	283.1	284.5	288.1	288.1		251.9	252.2	251.0	250.5	
805	Nursing and personal care facilities	868.4	869.7	917.7	918.2		787.3	786.8	828.5	827.6	
806	Hospitals	2,487.9	2,492.1	2,562.5	2,570.2		2,260.5	2,265.3	2,338.1	2,330.0	
81	LEGAL SERVICES	401.5	402.8	426.7	429.2		349.3	350.7	368.7	370.2	
82	EDUCATIONAL SERVICES	1,095.8	1,113.9	978.6	1,068.3		—	—	—	—	
821	Elementary and secondary schools	233.6	236.8	226.5	232.9		—	—	—	—	
822	Colleges and universities	761.3	774.4	651.3	731.3		—	—	—	—	
83	SOCIAL SERVICES	860.5	873.3	949.2	956.6		—	—	—	—	
86	MEMBERSHIP ORGANIZATIONS	1,502.7	1,512.4	1,520.3	1,532.8		—	—	—	—	
89	MISCELLANEOUS SERVICES	797.8	802.3	866.2	870.1		665.0	669.3	717.3	718.9	
891	Engineering and architectural services	432.8	435.0	469.0	470.2		366.1	367.9	396.3	395.9	
893	Accounting, auditing, and bookkeeping	253.3	254.5	271.9	275.0		204.9	206.6	215.7	218.3	
	GOVERNMENT	15,331	15,490	15,132	15,570	15,732	—	—	—	—	
	FEDERAL GOVERNMENT	2,714	2,716	2,744	2,753	2,756	—	—	—	—	
	Executive	2,662.5	2,664.3	2,691.9	2,700.8	—	—	—	—	—	
	Department of Defense	907.8	909.8	905.4	905.8	—	—	—	—	—	
	Postal Service	649.2	650.2	651.9	653.2	—	—	—	—	—	
	Other executive agencies	1,105.5	1,104.3	1,134.6	1,141.8	—	—	—	—	—	
	Manufacturing activities	140.0	139.9	139.8	140.2	—	—	—	—	—	
	Shipbuilding	70.3	70.7	71.5	72.4	—	—	—	—	—	

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 worker ¹				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. ^p 1978 ^p	Nov. ^p 1978 ^p	Oct. 1977	Nov. 1977	Sept. 1978	Oct. ^p 1978 ^p	Nov. ^p 1978 ^p
	Executive—Continued										
	Transportation and public utilities, except										
	Postal Service	37.3	37.6	37.7	37.6	—	—	—	—	—	—
	Services	374.3	373.9	386.7	379.5	—	—	—	—	—	—
	Hospitals	228.6	229.8	236.6	232.7	—	—	—	—	—	—
	Legislative	38.9	39.1	39.3	38.9	—	—	—	—	—	—
	Judicial	12.5	12.5	13.0	13.0	—	—	—	—	—	—
	STATE AND LOCAL GOVERNMENT	12,617	12,774	12,388	12,817	12,976					
	State government	3,435.1	3,460.0	3,349.8	3,475.9	—	—	—	—	—	—
	Hospitals	546.3	548.4	553.2	555.2	—	—	—	—	—	—
	State education	1,440.6	1,466.2	1,298.2	1,438.6	—	—	—	—	—	—
	General administration including executive, legislative, and judicial functions	878.9	878.5	910.9	898.0	—	—	—	—	—	—
	Local government	9,182.0	9,313.5	9,038.0	9,340.8	—	—	—	—	—	—
	Transportation and public utilities	548.6	553.7	571.5	572.1	—	—	—	—	—	—
	Hospitals	494.5	494.9	515.5	515.8	—	—	—	—	—	—
	Local education	5,184.1	5,289.0	4,837.0	5,212.0	—	—	—	—	—	—
	General administration including executive, legislative, and judicial functions	2,633.1	2,646.4	2,761.4	2,711.4	—	—	—	—	—	—

¹ 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.

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

³ Data for nonoffice sales agents excluded from non-supervisory count for all series in this division.

⁴ Prepared by the U.S. Civil Service Commission. Data relate to civilian employment only and exclude Central Intelligence and National Security Agencies.

^p preliminary.

* Not available.

** Revised data for Class I railroads (SIC 4011) July and August 1978 all employees are: 486.3 and 448.1.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
	TOTAL	32, 716	33, 552	34, 351	34, 468	35, 251
	PRIVATE SECTOR	26, 464	26, 776	27, 817	28, 083	28, 302
	MINING	67	67	78	78	78
10	METAL MINING	6. 0	5. 8	7. 5	7. 5	7. 3
11, 12	COAL MINING	6. 6	7. 0	8. 1	8. 1	8. 2
13	OIL AND GAS EXTRACTION	46. 6	46. 3	53. 8	54. 5	54. 5
131, 2	Crude petroleum, natural gas, and natural gas liquids	31. 0	30. 5	35. 1	35. 3	35. 0
138	Oil and gas field services	15. 6	15. 8	18. 7	19. 2	19. 5
14	NONMETALLIC MINERALS, EXCEPT FUELS	7. 8	7. 6	3. 3	8. 3	8. 4
142	Crushed and broken stone	2. 4	2. 4	2. 7	2. 7	2. 7
144	Sand and gravel	2. 4	2. 3	2. 6	2. 6	2. 6
	CONSTRUCTION	313	313	341	343	341
15	GENERAL BUILDING CONTRACTORS	111. 4	113. 0	123. 8	124. 0	122. 6
152	Residential building construction	65. 9	67. 0	75. 0	75. 3	73. 7
153	Operative builders	15. 3	15. 8	16. 6	16. 8	17. 0
154	Nonresidential building construction	30. 2	30. 2	32. 2	31. 9	31. 9
16	HEAVY CONSTRUCTION CONTRACTORS	50. 7	51. 4	55. 4	56. 1	55. 6
161	Highway and street construction	13. 4	13. 3	16. 0	16. 6	16. 5
162	Heavy construction, except highway	37. 3	38. 1	39. 4	39. 5	39. 1
17	SPECIAL TRADE CONTRACTORS	150. 8	148. 5	162. 1	163. 2	162. 6
171	Plumbing, heating, air conditioning	42. 2	41. 9	45. 8	45. 9	45. 7
172	Painting, paper hanging, decorating	9. 0	9. 3	10. 5	10. 5	10. 3
173	Electrical work	27. 0	26. 9	28. 9	29. 2	29. 0
174	Masonry, stonework, and plastering	17. 7	17. 2	18. 7	18. 5	18. 4
175	Carpentering and flooring	12. 2	11. 7	12. 4	12. 7	12. 5
176	Roofing and sheet metal work	9. 8	10. 0	11. 1	11. 2	11. 3
	MANUFACTURING	5, 958	6, 043	6, 088	6, 250	6, 333
24, 25, 32-39	DURABLE GOODS	2, 664	2, 715	2, 840	2, 880	2, 937
20-23, 26-31	NONDURABLE GOODS	3, 294	3, 328	3, 248	3, 370	3, 396
	DURABLE GOODS					
24	LUMBER AND WOOD PRODUCTS	99. 2	100. 6	107. 1	108. 6	108. 8
241	Logging camps and logging contractors	4. 7	4. 9	5. 3	5. 4	5. 2
242	Sawmills and planing mills	20. 5	20. 6	21. 7	22. 2	22. 4
2421	Sawmills and planing mills, general	14. 7	14. 6	15. 4	15. 6	15. 6
243	Millwork, plywood, and structural members	38. 7	39. 5	42. 5	42. 6	43. 2
244	Wooden containers	7. 2	7. 1	7. 3	7. 3	7. 1
245	Wood buildings and mobile homes	9. 6	9. 8	10. 2	10. 4	10. 4
249	Miscellaneous wood products	18. 5	18. 7	20. 1	20. 7	20. 5
25	FURNITURE AND FIXTURES	130. 0	134. 0	136. 2	139. 9	143. 4
251	Household furniture	99. 1	102. 6	102. 1	105. 0	108. 3
2511	Wood household furniture	41. 9	43. 1	43. 4	44. 0	44. 8
2512	Upholstered household furniture	34. 5	35. 2	35. 3	37. 4	37. 9
2515	Mattresses and bedsprings	8. 2	8. 2	8. 7	8. 7	8. 8
252	Office furniture	9. 1	9. 2	9. 8	10. 1	10. 3
253	Public building and related furniture	4. 6	4. 7	4. 8	4. 8	4. 8
254	Partitions and fixtures	8. 4	8. 7	9. 5	9. 9	10. 2
259	Miscellaneous furniture and fixtures	8. 8	8. 8	10. 0	10. 1	9. 8
32	STONE, CLAY, AND GLASS PRODUCTS	126. 4	127. 5	130. 4	131. 8	132. 2
322	Glass and glassware, pressed or blown	46. 9	47. 6	47. 5	48. 0	47. 3
3221	Glass containers	28. 4	28. 1	28. 3	28. 2	27. 4
3229	Pressed and blown glass, nec	18. 5	19. 5	19. 2	19. 8	19. 9
323	Products of purchased glass	10. 9	10. 9	11. 4	11. 6	11. 9
324	Cement, hydraulic	1. 5	1. 4	1. 7	1. 7	1. 7

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
STONE, CLAY, AND GLASS PRODUCTS—Continued						
325	Structural clay products	6.5	6.4	6.2	6.4	6.4
326	Pottery and related products	16.7	17.3	16.7	17.0	17.6
327	Concrete, gypsum, and plaster products	13.2	13.2	14.5	14.6	14.6
329	Misc. nonmetallic mineral products	27.8	27.8	29.4	29.5	29.8
PRIMARY METAL INDUSTRIES						
33	.....	110.0	112.8	121.0	121.6	124.1
331	Blast furnace and basic steel products	34.8	34.9	39.6	39.8	39.2
3312	Blast furnaces and steel mills	26.9	27.0	31.3	31.5	30.8
332	Iron and steel foundries	15.3	17.1	18.4	17.5	19.4
3321	Gray iron foundries	8.5	9.0	9.7	9.3	10.0
3322	Malleable iron foundries	1.4	1.5	1.6	1.5	1.6
3325	Steel foundries, nec	3.6	3.8	4.4	4.3	4.5
333	Primary nonferrous metals	4.2	4.5	4.6	4.6	4.5
3334	Primary aluminum	1.4	1.4	1.7	1.7	1.6
335	Nonferrous rolling and drawing	36.3	36.8	38.3	39.1	40.0
3351	Copper rolling and drawing	3.3	3.3	3.8	3.7	3.7
3353	Aluminum sheet, plate, and foil	4.0	4.1	4.3	4.6	4.6
3357	Nonferrous wire drawing and insulating	22.5	22.3	22.2	22.6	23.3
336	Nonferrous foundries	14.6	14.7	15.2	15.5	16.1
3361	Aluminum foundries	6.8	6.5	7.1	7.2	7.2
FABRICATED METAL PRODUCTS						
34	.....	317.4	322.6	333.1	337.3	343.4
341	Metal cans and shipping containers	13.2	13.1	13.3	13.3	13.2
3411	Metal cans	11.7	11.5	11.7	11.6	11.5
342	Cutlery, hand tools, and hardware	58.5	59.8	61.5	61.9	62.8
3423, 5	Hand and edge tools, and hand saws and blades	15.7	16.0	16.8	16.8	16.9
3429	Hardware, nec	36.0	36.9	37.7	38.0	38.7
343	Plumbing and heating, except electric	15.2	15.0	16.1	16.7	17.4
344	Fabricated structural metal products	64.5	65.9	68.4	69.2	69.6
3441	Fabricated structural metal	6.8	7.0	7.0	7.1	7.2
3442	Metal doors, sash, and trim	23.2	24.2	23.2	23.3	23.4
3443	Fabricated plate work (boiler shops)	13.8	13.8	15.1	15.3	15.2
3444	Sheet metal work	12.2	12.4	13.7	13.9	14.1
345	Screw machine products, bolts, etc.	20.6	21.0	22.2	22.3	23.1
3451	Screw machine products	10.4	10.7	11.4	11.5	12.0
3452	Bolts, nuts, rivets, and washers	10.2	10.3	10.8	10.8	11.1
346	Metal forgings and stampings	54.0	55.7	54.8	55.7	57.9
3462	Iron and steel forgings	3.7	3.7	3.8	4.2	4.2
3465	Automotive stampings	13.9	15.0	14.5	14.3	15.8
3469	Metal stampings, nec	34.1	34.7	34.3	35.0	35.8
347	Metal services, nec	22.5	23.0	23.6	24.2	24.2
3471	Plating and polishing	16.9	17.3	17.1	17.7	17.6
3479	Metal coating and allied services	5.6	5.7	6.5	6.5	6.6
348	Ordnance and accessories, nec	15.5	15.5	16.2	16.3	16.1
349	Misc. fabricated metal products	53.4	53.3	57.0	57.7	59.1
3494	Valves and pipe fittings	20.0	19.5	20.7	20.8	21.2
3496	Misc. fabricated wire products	11.4	11.4	12.4	12.9	13.0
MACHINERY, EXCEPT ELECTRICAL						
35	.....	387.9	391.6	433.9	434.0	441.9
351	Engines and turbines	19.2	20.2	22.2	22.2	22.8
3511	Turbines and turbine generator sets	5.8	5.7	6.2	6.1	6.2
3519	Internal combustion engines, nec	13.4	14.5	16.0	16.1	16.6
352	Farm and garden machinery	22.0	21.8	22.4	21.9	23.3
3523	Farm machinery and equipment	18.0	17.9	18.0	17.6	18.4
353	Construction and related machinery	37.5	37.4	41.7	41.9	41.9
3531	Construction machinery	13.5	13.4	14.7	14.6	14.4
3533	Oil field machinery	8.2	8.3	9.2	9.2	9.2
354	Metalworking machinery	46.9	47.5	51.8	51.8	52.5
3541	Machine tools, metal cutting types	7.3	7.4	8.3	8.4	8.3
3544	Special dies, tools, jigs, and fixtures	12.5	12.7	14.1	14.3	14.5
3545	Machine tool accessories	11.5	11.7	12.9	12.9	13.1
355	Special industry machinery	27.0	27.2	29.4	29.8	29.9
3551	Food products machinery	5.8	5.8	5.9	6.0	6.2
3552	Textile machinery	5.9	5.9	5.7	5.8	5.9
3555	Printing trades machinery	5.2	5.3	6.9	7.0	6.9
356	General industrial machinery	52.6	52.8	56.9	57.0	58.4
3561	Pumps and pumping equipment	10.5	10.3	10.7	10.8	10.9
3562	Ball and roller bearings	12.7	12.7	13.4	13.2	13.7
357	Office and computing machines	104.5	105.9	125.4	125.9	128.6
3573	Electronic computing equipment	78.6	79.8	96.9	97.4	99.3

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
MACHINERY, EXCEPT ELECTRICAL—Continued						
358	Refrigeration and service machinery	33.5	33.4	37.2	36.5	36.7
3585	Refrigeration and heating equipment	22.3	21.9	24.6	23.7	23.6
359	Misc. machinery, except electrical	44.7	45.4	46.9	47.0	47.8
3599	Machinery, except electrical, nec	35.8	36.5	37.7	37.6	37.5
ELECTRIC AND ELECTRONIC EQUIPMENT						
36	Electric distributing equipment	775.4	788.3	810.3	823.1	836.3
361	Transformers	43.1	43.2	42.5	42.9	43.0
3612	Switchgear and switchboard apparatus	19.5	19.4	19.9	19.9	20.2
3613	Electrical industrial apparatus	23.6	23.8	22.6	23.0	22.8
362	Motors and generators	85.0	86.4	91.9	92.2	93.7
3621	Industrial controls	46.7	47.5	50.7	50.8	52.0
3622	Household appliances	27.2	27.6	29.0	29.3	29.4
363	Household refrigerators and freezers	60.0	62.3	63.0	62.2	62.7
3632	Household laundry equipment	10.7	11.3	13.8	11.9	11.2
3633	Household electric housewares and fans	4.8	4.5	5.4	4.9	4.7
3634	Electric lighting and wiring equipment	27.2	28.4	25.9	27.1	28.5
364	Electric lamps	92.7	93.9	96.2	98.8	101.6
3641	Current-carrying wiring devices	24.1	24.4	23.7	23.9	24.5
3643	Radio and TV receiving equipment	40.1	40.3	42.8	43.9	45.3
365	Radio and TV receiving sets	68.1	71.3	62.0	64.2	67.2
3651	Communication equipment	53.2	54.8	47.3	49.2	50.9
366	Telephone and telegraph apparatus	164.9	166.7	175.0	177.0	179.3
3661	Radio and TV communication equipment	68.4	69.8	71.8	71.9	72.7
3662	Electronic components and accessories	96.5	96.9	103.2	105.1	106.6
367	Electronic tubes	210.8	212.4	226.3	231.1	233.2
3671-3	Semiconductors and related devices	15.4	15.6	16.7	16.5	16.6
3674	Electronic components, nec	71.8	72.4	78.0	79.4	80.1
3679	Misc. electrical equipment and supplies	83.5	84.8	90.6	93.4	94.5
369	Engine electrical equipment	50.8	52.1	53.4	54.7	55.6
3694	Engine electrical equipment	25.0	26.0	27.0	27.6	28.2
TRANSPORTATION EQUIPMENT						
37	Motor vehicles and equipment	256.5	269.4	286.9	285.0	299.8
371	Motor vehicles and car bodies	114.7	125.8	129.5	125.8	138.2
3711	Truck and bus bodies	41.8	49.4	50.5	46.7	55.2
3713	Motor vehicle parts and accessories	4.9	5.4	5.4	5.7	5.8
3714	Aircraft and parts	66.3	69.3	71.7	71.3	75.1
372	Aircraft	81.1	82.0	93.6	94.7	96.9
3721	Aircraft engines and engine parts	48.3	48.5	56.3	57.6	58.7
3724	Aircraft equipment, nec	17.5	18.0	20.2	19.9	20.6
3728	Ship and boat building and repairing	15.3	15.5	17.1	17.2	17.6
373	Ship building and repairing	22.9	22.7	21.5	21.7	22.3
3731	Railroad equipment	15.2	14.9	14.1	14.2	14.6
374	Guided missiles, space vehicles, parts	5.0	5.0	5.1	5.1	5.1
376	Guided missiles and space vehicles	15.2	15.1	16.1	16.3	16.2
3761	Miscellaneous transportation equipment	12.5	12.4	12.9	13.0	12.9
379	Miscellaneous transportation equipment	11.9	12.9	15.3	15.6	15.7
INSTRUMENTS AND RELATED PRODUCTS						
38	Engineering and scientific instruments	255.0	257.5	276.3	280.5	282.5
381	Measuring and controlling devices	17.8	18.1	19.8	20.8	21.1
382	Environmental controls	82.8	84.2	92.5	93.0	93.7
3822	Process control instruments	23.7	24.0	24.8	23.7	24.3
3823	Instruments to measure electricity	14.4	14.8	15.8	15.7	15.8
3825	Optical instruments and lenses	31.9	32.1	38.1	39.5	39.2
383	Medical instruments and supplies	8.7	8.9	9.5	9.7	9.8
384	Surgical and medical instruments	68.8	69.0	75.1	77.0	77.7
3841	Surgical appliances and supplies	29.1	29.6	32.5	33.4	33.5
3842	Ophthalmic goods	31.6	31.8	34.0	34.7	35.2
385	Photographic equipment and supplies	23.0	22.9	23.1	23.4	23.8
386	Watches, clocks, and watchcases	35.3	35.1	37.7	37.7	37.2
387	Watches, clocks, and watchcases	18.6	19.3	18.6	18.9	19.2
MISCELLANEOUS MANUFACTURING INDUSTRIES						
39	Jewelry, silverware, and plated ware	206.1	210.5	204.7	217.9	224.9
391	Musical instruments	26.5	27.2	26.6	30.0	30.2
393	Toys and sporting goods	10.4	11.1	11.5	12.0	12.3
394	Dolls, games, toys, and children's vehicles	68.3	69.9	62.3	64.6	68.2
3942, 4	Sporting and athletic goods, nec	37.5	38.3	32.1	35.5	38.4
3949	Pens, pencils, office and art supplies	30.8	31.6	30.2	29.1	29.8
395	Costume jewelry and notions	18.4	18.5	18.6	18.9	18.9
396	Miscellaneous manufactures	34.6	35.1	34.3	39.7	42.1
399	Miscellaneous manufactures	47.9	48.7	51.4	52.7	53.2

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

(In thousands)

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
NONDURABLE GOODS						
20	FOOD AND KINDRED PRODUCTS	527.7	541.6	489.7	526.7	536.9
201	Meat products	106.1	107.3	110.5	111.1	111.5
2011	Meat packing plants	26.2	26.3	27.4	27.5	27.6
2013	Sausages and other prepared meats	19.8	20.5	20.4	20.4	20.5
2016	Poultry dressing plants	53.4	53.7	55.7	56.3	56.3
202	Dairy products	37.9	37.9	39.8	39.7	39.1
2026	Fluid milk	20.1	20.1	20.5	20.5	20.0
203	Preserved fruits and vegetables	148.2	155.0	98.9	130.2	138.8
2032	Canned specialties	9.7	10.0	8.9	9.8	10.7
2033	Canned fruits and vegetables	83.1	86.7	38.5	67.4	70.3
2037	Frozen fruits and vegetables	20.5	22.9	17.3	17.5	21.1
204	Grain mill products	27.6	28.2	28.4	29.0	28.8
205	Bakery products	62.3	63.3	60.8	60.8	61.5
2051	Bread, cake, and related products	42.3	42.9	42.0	41.8	42.0
2052	Cookies and crackers	20.0	20.4	18.8	19.0	19.5
206	Sugar and confectionery products	36.2	39.2	35.4	37.7	41.8
207	Fats and oils	4.9	4.9	5.1	5.1	4.8
208	Beverages	35.1	35.4	35.9	36.2	35.5
2082	Malt beverages	5.7	5.5	5.8	5.8	5.8
2086	Bottled and canned soft drinks	15.5	15.5	16.8	17.0	16.8
209	Misc. foods and kindred products	69.4	70.4	74.9	76.9	75.1
21	TOBACCO MANUFACTURES	28.5	30.0	23.3	27.1	29.2
211	Cigarettes	15.4	15.6	15.4	15.1	15.0
22	TEXTILE MILL PRODUCTS	428.8	430.0	421.2	430.9	432.9
221	Weaving mills, cotton	67.7	68.1	63.7	65.0	65.1
222	Weaving mills, synthetics	50.6	50.5	58.3	48.1	48.9
223	Weaving and finishing mills, wool	7.8	7.7	7.7	7.8	8.0
224	Narrow fabric mills	14.7	14.8	14.9	15.2	15.4
225	Knitting mills	153.0	153.2	154.9	160.1	159.6
2251	Women's hosiery, except socks	21.4	21.5	21.9	22.9	23.3
2252	Hosiery, nec	25.1	25.1	25.9	26.3	26.0
2253	Knit outerwear mills	55.7	56.1	54.8	57.7	56.9
2254	Knit underwear mills	24.8	24.7	27.6	27.8	28.1
2257	Circular knit fabric mills	15.3	15.2	14.1	14.8	14.9
226	Textile finishing, except wool	24.2	24.4	23.1	23.2	23.6
2261	Finishing plants, cotton	9.9	9.9	10.0	10.2	10.2
2262	Finishing plants, synthetic	6.6	6.8	6.4	6.1	6.5
227	Floor covering mills	24.1	24.4	24.8	25.4	25.5
228	Yarn and thread mills	65.6	65.5	63.1	64.9	65.6
2281	Yarn mills, except wool	40.2	40.4	40.4	40.8	41.3
2282	Throwing and winding mills	12.9	12.0	11.9	12.2	12.4
229	Miscellaneous textile goods	21.1	21.4	20.7	21.2	21.2
23	APPAREL AND OTHER TEXTILE PRODUCTS	1,064.9	1,075.7	1,020.0	1,067.9	1,076.6
231	Men's and boys' suits and coats	70.1	70.1	67.0	69.8	69.2
232	Men's and boys' furnishings	318.6	319.8	296.1	311.8	312.6
2321	Men's and boys' shirts and nightwear	94.6	93.7	88.1	92.5	92.4
2327	Men's and boys' separate trousers	72.7	72.7	67.8	69.7	69.6
2328	Men's and boys' work clothing	82.3	83.6	70.9	78.0	79.1
233	Women's and misses' outerwear	362.3	363.1	346.4	362.5	366.0
2331	Women's and misses' blouses and waists	49.8	49.5	48.9	50.8	52.1
2335	Women's and misses' dresses	140.8	140.3	130.7	137.4	138.9
2337	Women's and misses' suits and coats	55.9	56.3	51.4	55.4	55.7
2339	Women's and misses' outerwear, nec	115.8	117.0	115.4	118.9	119.3
234	Women's and children's undergarments	83.1	83.9	78.2	81.1	82.2
2341	Women's and children's underwear	66.6	67.0	62.7	65.5	66.4
2342	Brassieres and allied garments	16.5	16.9	15.5	15.6	15.8
236	Children's outerwear	57.3	58.5	58.5	58.9	58.9
2361	Children's dresses and blouses	22.2	23.5	22.8	21.9	22.5
238	Misc. apparel and accessories	47.5	48.8	45.2	48.0	48.3
239	Misc. fabricated textile products	113.2	118.7	115.4	123.1	126.2
2391	Curtains and draperies	23.5	24.3	21.8	24.7	24.7
2392	House furnishings, nec	30.4	32.6	31.5	33.3	33.5
2396	Automotive and apparel trimmings	16.3	18.2	16.0	17.7	19.4
26	PAPER AND ALLIED PRODUCTS	154.5	154.6	158.7	160.6	160.5
261, 26	Paper and pulp mills	25.7	25.4	27.4	26.3	25.6

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
PAPER AND ALLIED PRODUCTS—Continued						
262	Paper mills, except building paper	23.2	22.9	24.8	23.7	23.0
263	Paperboard mills	5.3	5.2	6.1	6.0	5.9
264	Misc converted paper products	72.5	72.7	74.3	76.0	76.0
265	Paperboard containers and boxes	51.0	51.3	50.9	52.3	53.0
PRINTING AND PUBLISHING						
27	.....	427.0	429.8	451.3	455.4	454.2
271	Newspapers	134.0	134.6	143.6	144.6	141.9
272	Periodicals	43.2	43.7	47.3	47.9	47.9
273	Books	51.8	51.1	54.2	53.4	52.1
274	Miscellaneous publishing	25.3	25.5	24.4	25.1	25.7
275	Commercial printing	108.0	110.0	113.5	115.6	118.2
2751	Commercial printing, letterpress	50.4	51.4	52.1	53.3	54.7
2752	Commercial printing, lithographic	52.5	53.5	56.6	57.5	58.6
276	Manifold business forms	13.0	13.3	13.8	13.9	14.2
278	Blankbooks and bookbinding	30.4	30.3	32.2	32.5	32.3
279	Printing trade services	7.6	7.6	8.2	8.2	8.2
CHEMICALS AND ALLIED PRODUCTS						
28	.....	248.5	248.6	259.4	260.8	260.9
281	Industrial inorganic chemicals	21.1	20.9	22.7	22.8	22.6
2819	Industrial inorganic chemicals, nec	14.5	14.4	15.7	15.7	15.5
282	Plastics materials and synthetics	43.8	42.9	44.5	44.8	44.3
2821	Plastics materials and resins	9.5	9.3	10.4	10.4	10.3
2824	Organic fibers, noncellulosic	26.4	25.9	25.9	26.0	25.7
283	Drugs	72.4	72.2	73.9	73.9	73.5
2834	Pharmaceutical preparations	61.9	61.7	62.9	62.9	62.4
284	Soap, cleaners, and toilet goods	50.8	52.4	54.4	56.0	57.2
2841	Soap and other detergents	8.8	8.7	9.1	9.3	9.5
2844	Toilet preparations	30.6	32.2	33.2	34.5	35.3
285	Paints and allied products	11.2	11.3	12.3	12.6	12.6
286	Industrial organic chemicals	23.3	23.2	24.1	23.8	23.5
2861,9	Gum, wood, and industrial organic chemicals, nec	19.0	18.7	19.7	19.3	19.0
287	Agricultural chemicals	8.7	8.6	9.3	9.0	9.3
289	Miscellaneous chemical products	17.2	17.1	18.2	17.9	17.9
PETROLEUM AND COAL PRODUCTS						
29	.....	24.4	23.9	25.5	25.3	25.0
291	Petroleum refining	19.6	19.1	20.5	20.3	20.0
RUBBER AND MISC. PLASTICS PRODUCTS						
30	.....	236.5	243.3	253.7	260.1	265.7
301	Tires and inner tubes	12.6	12.5	11.9	12.1	12.2
302	Rubber and plastics footwear	13.0	14.0	11.8	13.5	13.3
303,4	Reclaimed rubber, and rubber and plastics hose and belting	6.0	6.1	5.9	5.9	6.0
306	Fabricated rubber products, nec	38.6	38.5	38.3	39.0	39.1
307	Miscellaneous plastics products	166.3	172.2	185.8	189.6	195.1
LEATHER AND LEATHER PRODUCTS						
31	.....	152.7	150.3	144.7	155.1	154.1
311	Leather tanning and finishing	3.0	3.1	3.0	3.2	3.1
314	Footwear, except rubber	102.4	100.6	99.4	106.0	104.6
3143	Men's footwear, except athletic	39.4	39.3	37.3	39.7	40.0
3144	Women's footwear, except athletic	42.9	41.1	41.7	44.4	43.6
316	Luggage	9.2	9.2	8.8	9.9	10.0
317	Handbags and personal leather goods	24.3	23.8	20.5	22.1	22.2
TRANSPORTATION AND PUBLIC UTILITIES						
41	.....	1,043	1,060	1,111	1,118	1,137
LOCAL AND INTERURBAN PASSENGER TRANSIT						
411	Local and suburban transportation	31.0	50.3	33.2	33.4	53.6
412	Taxicabs	7.5	7.7	9.3	9.3	9.6
413	Taxicabs	6.6	6.9	7.1	7.1	7.3
413	Intercity highway transportation	5.2	5.0	4.9	4.9	4.8
415	School buses	9.9	28.5	9.7	9.9	29.4
TRUCKING AND WAREHOUSING						
42	.....	128.6	130.1	137.7	139.4	139.3
421,3	Trucking and trucking terminals	115.2	115.2	123.3	124.2	123.8
422	Public warehousing	13.4	14.9	14.4	15.2	15.5
44	WATER TRANSPORTATION	17.6	17.2	18.1	18.2	18.0

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
45	TRANSPORTATION BY AIR	115.9	113.1	123.5	122.1	122.0
451,2	Air transportation	109.6	106.9	116.3	114.8	115.0
46	PIPE LINES, EXCEPT NATURAL GAS	2.0	2.1	1.9	1.9	2.0
47	TRANSPORTATION SERVICES	67.7	68.1	74.5	76.0	75.9
48	COMMUNICATION	534.0	535.5	567.9	572.4	572.7
481	Telephone communication	472.2	473.6	500.8	504.7	505.0
483	Radio and television broadcasting	47.5	48.0	52.3	52.8	52.8
49	ELECTRIC, GAS, AND SANITARY SERVICES	126.6	124.6	134.8	134.8	132.8
491	Electric services	56.2	55.7	59.9	59.9	59.6
492	Gas production and distribution	31.7	30.8	33.7	33.7	33.0
493	Combination utility services	30.5	29.9	31.8	31.7	30.9
495	Sanitary services	3.8	3.8	4.5	4.6	4.5
	WHOLESALE AND RETAIL TRADE	7,757	7,871	8,184	8,239	8,348
50,51	WHOLESALE TRADE	1,151	1,159	1,211	1,216	1,227
50	WHOLESALE TRADE-DURABLE GOODS	616	618	662	667	669
501	Motor vehicles and automotive equipment	82.8	82.2	88.4	88.5	89.5
502	Furniture and home furnishings	32.2	32.4	34.3	34.6	34.8
503	Lumber and construction materials	26.2	26.3	28.1	28.8	28.8
504	Sporting goods, toys, and hobby goods	20.9	21.3	22.1	21.3	21.3
505	Metals and minerals, except petroleum	23.4	23.2	24.9	25.2	25.5
506	Electrical goods	97.6	99.1	107.7	109.8	110.9
507	Hardware, plumbing, and heating equipment	57.1	57.4	62.2	62.9	63.2
508	Machinery, equipment, and supplies	230.0	229.7	248.1	249.6	248.5
509	Miscellaneous durable goods	45.8	46.1	45.9	46.0	46.8
51	WHOLESALE TRADE-NONDURABLE GOODS	535	541	549	549	558
511	Paper and paper products	36.8	37.7	38.1	38.0	38.4
512	Drugs, proprietaries, and sundries	54.8	55.8	57.3	57.5	58.9
513	Apparel, piece goods, and notions	73.6	74.0	75.1	77.3	77.6
514	Groceries and related products	145.2	147.9	146.6	142.1	143.5
516	Chemicals and allied products	27.1	26.8	29.5	29.2	29.3
517	Petroleum and petroleum products	44.5	44.3	47.1	47.7	47.4
518	Beer, wine, and distilled beverages	18.5	18.5	19.4	19.6	19.6
519	Miscellaneous nondurable goods	98.7	99.3	102.5	103.0	102.6
52-59	RETAIL TRADE	6,606	6,712	6,973	7,023	7,121
52	BUILDING MATERIALS AND GARDEN SUPPLIES	137.8	137.9	141.3	142.9	143.5
521	Lumber and other building materials	52.7	54.4	57.9	59.0	58.6
525	Hardware stores	46.4	46.1	48.7	48.7	48.8
53	GENERAL MERCHANDISE STORES	1,452.3	1,485.7	1,528.1	1,530.8	1,565.9
531	Department stores	1,146.0	1,178.4	1,213.2	1,212.5	1,240.4
533	Variety stores	216.6	218.2	220.4	222.7	230.3
539	Misc. general merchandise stores	89.7	89.1	94.5	95.6	95.2
54	FOOD STORES	845.1	864.4	887.9	892.0	902.9
541	Grocery stores	704.1	717.9	748.3	754.4	759.3
542	Meat markets and freezer provisioners	14.1	14.1	13.2	13.5	13.4
546	Retail bakeries	69.8	74.2	68.0	67.3	70.9
55	AUTOMOTIVE DEALERS AND SERVICE STATIONS	278.1	277.5	301.5	301.5	302.2
551,2	New and used car dealers	110.7	111.4	120.1	120.7	120.9
553	Auto and home supply stores	40.0	39.2	45.2	44.7	45.3
554	Gasoline service stations	113.6	113.1	121.5	122.2	122.0
56	APPAREL AND ACCESSORY STORES	562.5	575.1	576.9	582.2	593.9
561	Men's and boys' clothing and furnishings	56.4	56.1	58.6	59.0	58.0
562	Women's ready-to-wear stores	267.7	275.3	274.1	275.2	284.2
565	Family clothing stores	112.5	113.1	113.6	116.9	117.0
566	Shoe stores	61.9	64.3	66.0	66.5	69.2

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

[In thousands]

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
57	FURNITURE AND HOME FURNISHING STORES	173.0	175.7	181.8	181.7	184.2
571	Furniture and home furnishings	118.2	119.2	123.1	122.9	124.0
572	Household appliance stores	22.2	22.6	23.6	23.1	23.9
573	Radio, television, and music stores	32.6	33.9	35.1	35.7	36.3
58	EATING AND DRINKING PLACES	2,296.4	2,326.0	2,461.9	2,487.3	2,500.1
59	MISCELLANEOUS RETAIL	860.5	869.4	893.9	904.3	928.6
591	Drug stores and proprietary stores	274.3	275.5	291.7	295.3	298.8
592	Liquor stores	22.4	22.1	25.2	25.9	26.6
594	Miscellaneous shopping goods stores	282.0	284.4	282.4	286.5	298.3
596	Nonstore retailers	142.5	144.8	150.3	152.4	156.5
598	Fuel and ice dealers	21.1	21.0	21.0	20.8	21.2
599	Retail stores, nec	99.8	103.0	103.7	103.3	105.7
	FINANCE, INSURANCE, AND REAL ESTATE	2,538	2,538	2,718	2,731	2,723
60	BANKING	933.9	930.3	991.2	996.8	993.4
602	Commercial and stock savings banks	858.1	855.4	911.7	917.4	914.4
61	CREDIT AGENCIES OTHER THAN BANKS	300.6	301.4	323.5	325.5	326.1
612	Savings and loan associations	143.1	143.5	156.9	157.6	157.7
614	Personal credit institutions	105.0	105.5	111.8	112.8	113.3
62	SECURITY, COMMODITY BROKERS, AND SERVICES	68.0	67.7	72.6	73.4	73.5
621	Security brokers and dealers	54.7	54.3	58.3	59.1	59.1
63	INSURANCE CARRIERS	664.4	663.8	711.3	713.1	711.9
631	Life insurance	267.6	266.2	273.7	273.5	271.5
632	Medical service and health insurance	96.0	95.9	100.7	100.8	100.8
633	Fire, marine, and casualty insurance	256.7	257.9	286.7	289.0	290.3
64	INSURANCE AGENTS, BROKERS, AND SERVICE	225.5	225.8	240.6	242.3	242.2
65	REAL ESTATE	281.6	285.1	310.3	311.1	307.9
651	Real estate operators and lessors	120.0	123.8	134.7	134.3	133.2
653	Real estate agents and managers	118.3	117.9	130.0	131.0	129.1
655	Subdividers and developers	27.3	27.5	28.3	28.4	28.4
66	COMBINED REAL ESTATE, INSURANCE, ETC	16.8	16.8	19.0	19.1	18.9
67	HOLDING AND OTHER INVESTMENT OFFICES	46.7	46.8	49.4	50.0	49.3
	SERVICES	8,788	8,884	9,297	9,324	9,342
70	HOTELS AND OTHER LODGING PLACES	569.2	531.0	584.0	588.3	542.6
701	Hotels, motels, and tourist courts	528.4	508.2	545.1	546.1	521.7
72	PERSONAL SERVICES	581.1	588.1	591.7	589.5	599.4
721	Laundry, cleaning, and garment services	221.0	221.1	220.7	218.4	220.1
723	Beauty shops	242.4	246.2	245.5	246.5	250.0
726	Funeral service and crematories	17.3	17.3	18.2	18.3	18.2
73	BUSINESS SERVICES	973.8	989.5	1,071.0	1,087.5	1,099.3
731	Advertising	57.2	57.5	65.3	65.5	65.9
732	Credit reporting and collection	61.4	61.9	64.9	64.9	65.2
733	Mailing, reproduction, stenographic	42.7	45.0	46.9	47.8	50.1
734	Services to buildings	145.3	146.0	161.0	164.0	163.7
736	Personnel supply services	217.3	223.6	230.8	236.8	242.3
737	Computer and data processing services	87.1	88.4	99.2	99.2	100.4
75	AUTO REPAIR, SERVICES, AND GARAGES	76.8	77.7	84.4	84.7	85.8
753	Automotive repair shops	36.5	35.9	38.1	38.0	38.8
76	MISCELLANEOUS REPAIR SERVICES	43.0	43.5	45.8	46.0	46.8

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

(In thousands)

1972 SIC Code	Industry	Aug. 1977	Sept. 1977	July 1978	Aug. 1978	Sept. 1978
78	MOTION PICTURES	88.4	84.3	87.0	88.9	84.8
781	Motion picture production and services	27.2	25.4	23.3	24.4	24.3
783	Motion picture theaters	55.5	53.3	58.4	59.0	55.0
79	AMUSEMENT AND RECREATION SERVICES	293.7	282.2	309.5	309.8	285.3
80	HEALTH SERVICES	3,739.1	3,743.3	3,889.2	3,896.9	3,900.8
801	Offices of physicians	514.8	513.7	538.8	540.6	538.5
802	Offices of dentists	245.2	245.9	246.3	245.1	247.3
805	Nursing and personal care facilities	769.3	770.0	810.0	816.9	816.1
806	Hospitals	1,990.6	1,992.6	2,059.5	2,059.9	2,063.1
81	LEGAL SERVICES	284.7	282.3	306.2	307.2	302.9
82	EDUCATIONAL SERVICES	390.7	495.8	429.6	423.8	495.8
821	Elementary and secondary schools	83.1	132.9	122.0	120.2	142.1
822	Colleges and universities	256.3	309.0	254.0	250.0	298.1
83	SOCIAL SERVICES	620.7	626.6	704.2	706.2	703.0
89	MISCELLANEOUS SERVICES	231.4	232.1	257.6	259.5	256.7
891	Engineering and architectural services	80.6	80.6	91.5	92.1	90.4
893	Accounting, auditing, and bookkeeping	102.8	104.3	113.2	113.9	114.5
	GOVERNMENT	6,252	6,776	6,534	6,385	6,949
	FEDERAL GOVERNMENT	871	841	897	886	865
	STATE AND LOCAL GOVERNMENT	5,381	5,935	5,637	5,499	6,084
	State government	1,410.0	1,473.6	1,416.9	1,401.6	1,469.8
-	Hospitals	318.7	319.5	312.7	311.0	310.8
-	State education	505.6	574.2	485.7	479.8	570.8
-	General administration including executive, legislative, and judicial functions	396.5	395.4	421.5	414.6	400.3
-	Local government	3,970.6	4,461.0	4,220.4	4,097.8	4,614.0
-	Transportation and public utilities	65.3	66.1	76.8	77.1	77.9
-	Hospitals	380.1	380.7	397.8	396.7	396.4
-	Local education	2,403.7	2,996.1	2,537.0	2,426.2	3,052.1
-	General administration including executive, legislative, and judicial functions	924.2	825.9	1,004.1	994.3	896.0

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	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Nov. ^P
TOTAL	83,549	83,719	83,871	84,188	84,726	85,418	85,618	85,996	86,033	86,149	86,163	86,567	87,034
GOODS-PRODUCING	24,617	24,626	24,648	24,724	24,927	25,313	25,341	25,473	25,501	25,463	25,471	25,664	25,878
MINING	840	687	678	684	698	867	869	879	882	887	887	894	904
CONSTRUCTION	3,928	3,955	3,905	3,901	3,999	4,164	4,175	4,278	4,317	4,298	4,298	4,338	4,380
MANUFACTURING	19,849	19,984	20,065	20,139	20,230	20,282	20,297	20,316	20,302	20,278	20,286	20,432	20,594
DURABLE GOODS	11,746	11,851	11,917	11,986	12,041	12,076	12,093	12,109	12,138	12,146	12,166	12,302	12,398
Lumber and wood products	745	756	754	756	752	751	745	747	743	743	744	748	759
Furniture and fixtures	475	481	484	487	491	491	489	486	485	481	480	484	486
Stone, clay, and glass products	680	685	689	691	692	699	700	701	698	692	692	699	704
Primary metal industries	1,180	1,180	1,186	1,193	1,189	1,192	1,197	1,197	1,199	1,205	1,214	1,220	1,240
Fabricated metal products	1,608	1,617	1,625	1,638	1,639	1,646	1,652	1,645	1,643	1,646	1,650	1,666	1,681
Machinery, except electrical	2,232	2,251	2,259	2,271	2,289	2,309	2,311	2,332	2,345	2,351	2,358	2,389	2,399
Electric and electronic equipment	1,903	1,912	1,923	1,935	1,951	1,951	1,952	1,962	1,977	1,975	1,972	1,986	1,998
Transportation equipment	1,860	1,895	1,917	1,928	1,944	1,936	1,942	1,929	1,937	1,941	1,943	1,992	2,006
Instruments and related products	623	628	632	635	639	644	649	654	660	661	662	663	669
Miscellaneous manufacturing ind.	440	446	448	452	455	457	456	456	451	451	451	455	456
NONDURABLE GOODS	8,103	8,133	8,148	8,153	8,189	8,206	8,204	8,207	8,164	8,132	8,120	8,130	8,196
Food and kindred products	1,693	1,700	1,706	1,705	1,718	1,715	1,701	1,702	1,688	1,670	1,665	1,667	1,690
Tobacco manufactures	71	74	74	74	76	74	75	76	73	69	70	71	71
Textile mill products	918	917	917	917	916	911	913	908	909	903	907	908	910
Apparel and other textile products	1,318	1,320	1,318	1,315	1,319	1,330	1,326	1,325	1,307	1,309	1,309	1,308	1,312
Paper and allied products	693	697	699	699	703	706	709	709	710	698	697	693	702
Printing and publishing	1,152	1,156	1,159	1,163	1,171	1,174	1,180	1,186	1,187	1,188	1,178	1,181	1,199
Chemicals and allied products	1,073	1,076	1,079	1,081	1,081	1,085	1,093	1,091	1,091	1,089	1,088	1,089	1,094
Petroleum and coal products	205	206	207	208	209	210	207	209	207	209	209	210	211
Rubber and misc. plastic products	726	734	737	738	744	748	747	749	749	746	744	752	760
Leather and leather products	254	253	252	253	252	253	253	252	243	251	253	251	247
SERVICE-PRODUCING	58,932	59,093	59,223	59,464	59,799	60,105	60,277	60,523	60,532	60,686	60,692	60,903	61,156
TRANSPORTATION AND PUBLIC UTILITIES	4,736	4,749	4,758	4,782	4,817	4,847	4,847	4,881	4,827	4,846	4,855	4,920	4,946
WHOLESALE AND RETAIL TRADE	18,830	18,911	18,991	19,071	19,169	19,252	19,335	19,412	19,469	19,523	19,546	19,640	19,705
WHOLESALE TRADE	4,761	4,783	4,802	4,828	4,854	4,872	4,885	4,905	4,901	4,905	4,917	4,946	4,978
RETAIL TRADE	14,069	14,128	14,189	14,243	14,315	14,380	14,450	14,507	14,568	14,618	14,629	14,694	14,727
FINANCE, INSURANCE, AND REAL ESTATE	4,535	4,547	4,563	4,591	4,605	4,623	4,637	4,670	4,690	4,707	4,719	4,737	4,759
SERVICES	15,568	15,618	15,597	15,670	15,773	15,866	15,896	15,963	15,989	16,074	16,127	16,149	16,245
GOVERNMENT	15,263	15,268	15,314	15,350	15,435	15,517	15,562	15,597	15,557	15,536	15,445	15,457	15,501
FEDERAL	2,727	2,723	2,736	2,736	2,739	2,745	2,753	2,772	2,765	2,765	2,752	2,767	2,767
STATE AND LOCAL	12,536	12,545	12,578	12,614	12,696	12,772	12,809	12,825	12,792	12,771	12,693	12,690	12,734

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	1977				1978								
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TOTAL	33,558	33,658	33,842	34,013	34,167	34,313	34,531	34,755	34,921	35,077	35,099	35,170	35,256
GOODS-PRODUCING	6,268	6,300	6,346	6,388	6,432	6,458	6,510	6,545	6,568	6,592	6,584	6,587	6,594
MINING	67	67	68	66	68	68	68	73	73	75	77	77	78
CONSTRUCTION	309	311	313	316	320	320	326	328	329	334	337	338	337
MANUFACTURING	5,892	5,922	5,965	6,006	6,044	6,070	6,116	6,144	6,166	6,183	6,170	6,172	6,179
DURABLE GOODS	2,669	2,692	2,716	2,746	2,773	2,794	2,819	2,831	2,848	2,862	2,870	2,875	2,887
Lumber and wood products	98	100	102	103	104	105	105	105	106	107	106	106	106
Furnitures and fixtures	132	134	135	137	139	140	141	141	142	141	142	141	141
Stone, clay, and glass products	125	125	127	127	129	130	130	130	130	129	129	130	130
Primary metal industries ^c	113	113	113	113	114	114	115	115	117	120	121	122	124
Fabricated metal products	318	321	323	327	329	332	334	336	339	339	336	337	338
Machinery, except electrical	390	397	402	407	412	414	419	426	429	433	437	437	441
Electric and electronic equipment	774	782	789	795	800	807	813	813	815	818	823	823	821
Transportation equipment	262	262	264	269	274	276	281	280	284	285	286	286	291
Instruments and related products	257	257	257	261	264	266	268	271	273	277	279	281	282
Miscellaneous manufacturing ind.	200	201	204	207	208	210	213	214	213	213	211	212	213
NONDURABLE GOODS	3,223	3,230	3,249	3,260	3,271	3,276	3,297	3,313	3,318	3,321	3,300	3,297	3,292
Food and kindred products	471	466	474	478	482	482	484	485	480	485	482	469	467
Tobacco manufactures	26	26	26	28	27	27	28	27	28	27	27	24	25
Textile mill products	426	428	430	428	430	430	431	429	430	429	430	428	429
Apparel and other textile products	1,063	1,062	1,065	1,067	1,066	1,065	1,069	1,078	1,076	1,074	1,059	1,064	1,064
Paper and allied products	152	153	153	154	155	156	157	159	161	160	159	159	158
Printing and publishing	430	432	434	434	438	440	446	447	451	452	452	456	455
Chemicals and allied products	245	245	246	247	248	249	252	253	256	256	258	257	257
Petroleum and coal products	24	24	24	24	24	24	24	25	25	25	25	25	25
Rubber and misc. plastics products	236	240	244	248	249	251	254	257	258	260	260	262	258
Leather and leather products	150	154	153	152	152	152	152	153	153	153	148	153	154
SERVICE-PRODUCING	27,290	27,358	27,496	27,625	27,735	27,855	28,021	28,210	28,353	28,485	28,515	28,583	28,662
TRANSPORTATION AND PUBLIC UTILITIES	1,055	1,059	1,064	1,071	1,075	1,086	1,094	1,104	1,102	1,115	1,117	1,127	1,131
WHOLESALE AND RETAIL TRADE ..	7,846	7,856	7,903	7,947	8,006	8,050	8,098	8,138	8,188	8,225	8,258	8,303	8,322
WHOLESALE TRADE	1,154	1,155	1,162	1,170	1,176	1,184	1,196	1,207	1,210	1,217	1,215	1,216	1,222
RETAIL TRADE	6,692	6,701	6,741	6,777	6,830	6,866	6,902	6,931	6,978	7,008	7,043	7,087	7,100
FINANCE, INSURANCE, AND REAL ESTATE	2,536	2,556	2,576	2,589	2,602	2,618	2,631	2,646	2,658	2,679	2,696	2,709	2,720
SERVICES	8,875	8,897	8,938	8,986	9,003	9,035	9,109	9,144	9,176	9,220	9,260	9,315	9,333
GOVERNMENT	6,978	6,990	7,015	7,032	7,049	7,066	7,089	7,178	7,229	7,246	7,184	7,129	7,156
FEDERAL	853	856	856	847	855	856	858	863	882	874	879	880	877
STATE AND LOCAL	6,125	6,134	6,159	6,185	6,194	6,210	6,231	6,315	6,347	6,372	6,305	6,249	6,279

¹ 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. c=corrected.

ESTABLISHMENT DATA
SEASONALLY ADJUSTED EMPLOYMENT

B-6. Production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted

[In thousands]

Industry division and group	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Nov. ^P
TOTAL PRIVATE	55,969	56,095	56,114	56,348	56,744	57,263	57,428	57,653	57,704	57,771	57,861	58,125	58,542
GOODS-PRODUCING	17,985	17,976	17,954	18,016	18,198	18,541	18,565	18,660	18,675	18,619	18,629	18,795	18,999
MINING	639	502	493	494	509	655	659	663	667	668	671	676	684
CONSTRUCTION	3,083	3,099	3,021	3,023	3,122	3,288	3,303	3,401	3,439	3,419	3,422	3,462	3,494
MANUFACTURING	14,263	14,375	14,440	14,499	14,567	14,598	14,603	14,596	14,569	14,532	14,536	14,657	14,821
DURABLE GOODS	8,429	8,515	8,569	8,620	8,661	8,676	8,685	8,683	8,694	8,693	8,706	8,818	8,916
Lumber and wood products	639	646	650	650	647	646	639	641	637	636	636	641	648
Furniture and fixtures	391	397	399	401	405	405	404	400	398	394	395	398	400
Stone, clay, and glass products	544	549	553	551	552	558	557	558	554	549	548	554	560
Primary metal industries	921	922	929	937	933	934	939	939	942	947	953	960	981
Fabricated metal products	1,221	1,228	1,234	1,247	1,247	1,251	1,257	1,250	1,245	1,245	1,248	1,264	1,278
Machinery, except electrical	1,462	1,477	1,483	1,493	1,507	1,517	1,516	1,533	1,547	1,544	1,550	1,577	1,579
Electric and electronic equipment	1,252	1,258	1,267	1,276	1,288	1,284	1,283	1,284	1,293	1,293	1,290	1,300	1,312
Transportation equipment	1,284	1,312	1,326	1,332	1,342	1,337	1,344	1,327	1,328	1,336	1,337	1,372	1,395
Instruments and related products	380	384	386	388	391	394	397	402	407	405	406	406	415
Miscellaneous manufacturing ind.	335	342	342	345	349	350	349	349	343	344	343	346	348
NONDURABLE GOODS	5,834	5,860	5,871	5,879	5,906	5,922	5,918	5,913	5,875	5,839	5,830	5,839	5,905
Food and kindred products	1,142	1,151	1,156	1,158	1,168	1,167	1,154	1,152	1,142	1,124	1,122	1,122	1,145
Tobacco manufactures	57	59	59	59	60	59	60	61	58	54	56	57	57
Textile mill products	800	798	799	798	798	794	795	792	791	785	790	791	794
Apparel and other textile products	1,130	1,131	1,132	1,131	1,134	1,144	1,140	1,137	1,121	1,127	1,124	1,124	1,129
Paper and allied products	519	523	523	525	527	530	535	535	535	523	522	521	531
Printing and publishing	651	653	656	658	663	664	668	668	669	667	657	660	675
Chemicals and allied products	614	617	618	620	620	624	628	628	628	623	624	623	626
Petroleum and coal products	134	135	136	136	137	137	135	136	135	136	137	137	139
Rubber and misc. plastics products	569	575	576	578	583	586	586	587	587	584	581	589	599
Leather and leather products	218	218	216	216	216	217	217	217	209	216	217	215	210
SERVICE-PRODUCING	37,984	38,119	38,160	38,332	38,546	38,722	38,863	38,993	39,035	39,152	39,232	39,330	39,543
TRANSPORTATION AND PUBLIC UTILITIES	4,015	4,024	4,028	4,044	4,067	4,094	4,086	4,109	4,051	4,066	4,064	4,127	4,151
WHOLESALE AND RETAIL TRADE	16,607	16,676	16,737	16,812	16,894	16,952	17,079	17,106	17,165	17,214	17,228	17,287	17,367
WHOLESALE TRADE	3,925	3,943	3,958	3,982	4,007	4,020	4,026	4,043	4,040	4,042	4,053	4,069	4,103
RETAIL TRADE	12,682	12,733	12,779	12,830	12,887	12,932	13,053	13,063	13,125	13,172	13,175	13,218	13,264
FINANCE, INSURANCE, AND REAL ESTATE	3,445	3,453	3,472	3,494	3,500	3,516	3,523	3,546	3,565	3,579	3,591	3,603	3,628
SERVICES	13,917	13,966	13,923	13,982	14,085	14,160	14,175	14,232	14,254	14,293	14,349	14,313	14,397

¹ 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 employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1975				
January.....	18.0	13.1	11.9	15.7
February.....	21.2	12.8	12.8	16.9
March.....	26.5	20.1	18.6	18.3
April.....	41.0	36.6	29.4	20.9
May.....	51.5	43.0	48.3	27.0
June.....	43.0	53.2	57.3	41.0
July.....	56.1	61.6	67.2	54.1
August.....	73.3	73.5	69.2	64.5
September.....	67.4	77.3	75.9	74.1
October.....	68.3	70.6	80.5	79.7
November.....	60.5	74.4	84.0	82.3
December.....	71.5	78.2	83.7	86.3
1976				
January.....	78.2	85.8	87.2	85.2
February.....	72.4	84.9	85.8	84.0
March.....	69.5	81.4	82.0	85.2
April.....	70.1	72.4	75.6	78.8
May.....	58.1	67.2	68.3	82.6
June.....	57.8	65.1	71.2	79.9
July.....	58.4	57.8	63.1	78.5
August.....	49.1	64.0	65.1	77.6
September.....	64.8	53.8	66.3	80.2
October.....	47.1	65.1	73.3	80.8
November.....	67.4	64.2	78.8	80.8
December.....	66.6	81.4	81.4	82.6
1977				
January.....	76.2	83.1	88.1	78.8
February.....	66.0	86.3	87.8	80.5
March.....	74.7	81.1	85.2	80.2
April.....	68.0	79.4	79.4	84.6
May.....	64.8	76.2	75.9	84.0
June.....	71.2	68.0	72.1	83.1
July.....	59.3	63.4	69.8	82.6
August.....	51.7	58.7	74.1	83.7
September.....	60.8	62.5	72.1	82.6
October.....	60.5	73.8	77.9	81.1
November.....	73.8	75.3	82.0	81.1
December.....	72.1	79.7	83.1	80.8
1978				
January.....	69.8	80.2	85.5	80.5
February.....	70.3	80.2	79.9	79.1
March.....	70.1	75.9	77.9	77.6
April.....	62.8	67.4	68.9	77.6p
May.....	56.4	63.7	67.7	79.4p
June.....	67.2	62.5	59.6	
July.....	54.9	57.0	59.9p	
August.....	51.7	49.7	70.9p	
September.....	57.6	58.7p		
October.....	70.3p	76.5p		
November.....	79.9p			
December.....				

¹ 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

(In thousands)

State and area	Total			Mining			Construction			Manufacturing		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
1 ALABAMA	1,277.9	1,298.9	1,302.3	14.2	16.2	16.3	78.4	81.1	80.3	357.3	358.5	357.5
2 Birmingham	333.0	343.7	345.4	8.5	9.4	9.5	22.4	24.1	23.8	65.1	67.8	68.1
3 Huntsville	111.2	113.3	113.5	(1)	(1)	(1)	4.4	4.2	4.2	32.5	33.8	34.0
4 Mobile	140.7	143.1	141.9	(1)	(1)	(1)	11.0	11.8	11.1	29.7	29.6	29.2
5 Montgomery	97.1	98.6	98.8	(1)	(1)	(1)	6.6	6.4	6.2	15.2	15.5	15.6
6 Tuscaloosa	49.8	48.0	48.1	.9	1.0	1.0	3.6	3.8	3.7	10.2	8.7	8.7
7 ALASKA	161.6	165.1	161.2	4.4	5.2	5.1	18.9	16.6	15.3	10.0	12.3	10.7
8 ARIZONA	814.4	856.1	871.1	18.9	20.0	20.1	52.8	66.2	67.7	114.7	123.3	124.7
9 Phoenix	495.0	524.0	533.9	.6	.6	.6	32.2	41.7	42.7	85.8	90.7	91.7
10 Tucson	151.8	158.8	162.4	5.3	5.7	5.8	9.7	12.6	12.9	12.9	15.5	15.8
11 ARKANSAS	710.8	737.3	734.2	4.6	5.1	5.2	40.2	41.1	41.7	214.4	218.0	217.1
12 Fayetteville-Springdale	57.4	58.8	59.0	(1)	(1)	(1)	3.0	3.1	3.1	17.8	17.9	18.1
13 Fort Smith	62.5	66.1	65.4	.7	.8	.8	2.8	3.1	3.1	22.7	24.5	24.0
14 Little Rock-North Little Rock	167.3	169.2	169.2	(1)	(1)	(1)	9.3	10.1	10.2	31.4	30.4	30.4
15 Pine Bluff	29.2	29.7	29.8	(1)	(1)	(1)	1.1	1.2	1.3	6.3	6.1	6.1
16 CALIFORNIA	8,650.0	9,175.9	9,224.0	35.5	36.1	36.1	379.7	434.7	434.7	1,719.6	1,865.0	1,845.8
17 Anaheim-Santa Ana-Garden Grove	687.3	727.1	738.5	2.2	2.4	2.4	43.3	46.2	46.5	176.4	191.1	191.8
18 Bakersfield	112.9	116.4	117.3	9.2	9.7	9.8	5.2	6.0	6.0	9.3	9.7	9.5
19 Fresno	167.6	173.2	173.6	.8	.8	.8	9.0	10.4	10.2	22.9	24.1	23.8
20 Los Angeles-Long Beach	3,249.0	3,392.3	3,412.6	11.4	11.6	11.6	103.3	111.6	111.3	815.3	861.1	867.1
21 Modesto	82.7	91.2	85.2	.1	.1	.1	5.2	5.9	5.9	20.7	26.7	19.8
22 Oxnard-Simi Valley-Ventura	126.2	131.9	131.7	2.2	2.2	2.2	5.7	6.0	6.0	19.7	21.2	20.7
23 Riverside-San Bernardino-Ontario	372.2	388.3	395.7	2.5	2.3	2.2	18.3	21.1	21.1	57.5	62.0	62.4
24 Sacramento	358.7	374.9	373.4	.4	.4	.4	18.9	22.0	21.9	25.0	30.2	25.6
25 Salinas-Seaside-Monterey	82.9	84.1	85.1	.7	.7	.7	3.3	3.4	3.5	10.0	10.2	10.7
26 San Diego	551.0	585.3	581.5	.8	.8	.8	34.7	37.5	38.2	79.9	86.9	87.5
27 San Francisco-Oakland	1,411.8	1,438.9	1,442.4	2.0	1.9	1.9	63.3	66.6	67.1	192.8	199.1	193.7
28 San Jose	541.4	583.5	584.4	.1	.1	.1	23.1	25.1	24.8	173.3	201.8	198.1
29 Santa Barbara-Santa Maria-Lompoc	105.2	106.3	107.2	1.0	1.1	1.1	4.1	4.5	4.5	13.9	14.3	14.6
30 Santa Rosa	76.8	79.2	79.8	.3	.3	.3	4.7	5.0	4.8	11.5	12.2	12.5
31 Stockton	110.8	117.7	114.3	.1	.1	.1	4.8	5.3	5.2	20.0	24.8	20.4
32 Vallejo-Fairfield-Napa	91.1	94.6	95.2	.2	.2	.2	4.3	4.6	4.6	9.4	10.6	10.4
33 COLORADO	1,090.4	1,138.3	1,147.0	25.3	26.9	26.9	68.6	75.0	75.2	158.9	165.1	168.9
34 Denver-Boulder	691.5	717.8	723.5	12.9	14.7	14.7	41.7	45.4	45.2	107.5	113.8	114.6
35 CONNECTICUT	1,301.7	1,342.3	1,345.8	(3)	(3)	(3)	47.4	48.9	49.0	406.1	415.7	417.7
36 Bridgeport	155.0	155.9	158.6	(3)	(3)	(3)	4.5	5.3	5.2	61.3	63.0	63.6
37 Hartford	354.5	361.9	364.7	(3)	(3)	(3)	11.4	11.0	11.0	83.8	87.9	88.2
38 New Britain	57.6	58.1	58.6	(3)	(3)	(3)	1.9	1.9	1.9	28.1	28.1	28.3
39 New Haven-West Haven	175.5	181.5	181.1	(3)	(3)	(3)	6.2	6.7	6.6	44.1	44.0	44.4
40 Stamford	98.9	102.7	102.6	(3)	(3)	(3)	4.6	4.8	4.8	28.9	29.2	29.2
41 Waterbury	84.5	86.8	86.0	(3)	(3)	(3)	2.9	2.9	2.9	32.8	32.9	32.9
42 DELAWARE	241.9	243.5	243.8	(1)	(1)	(1)	16.1	15.9	16.0	70.0	70.2	69.9
43 Wilmington	214.0	215.3	215.7	(1)	(1)	(1)	15.1	14.8	14.8	65.4	66.0	66.0
44 DISTRICT OF COLUMBIA	576.3	577.1	577.4	(1)	(1)	(1)	14.9	15.6	15.5	15.0	15.0	14.9
45 Washington SMSA	1,397.7	1,422.2	1,426.9	(1)	(1)	(1)	76.0	78.0	78.6	50.3	51.6	51.2
46 FLORIDA	2,871.9	2,987.5	3,014.7	8.6	8.9	8.9	178.8	209.5	207.8	376.9	405.5	409.4
47 Fort Lauderdale-Hollywood	254.6	265.6	268.2	(1)	(1)	(1)	19.9	20.6	21.1	31.0	33.4	33.7
48 Jacksonville	265.2	271.2	270.7	(1)	(1)	(1)	14.8	15.0	14.8	31.7	33.7	33.8
49 Miami	613.5	630.3	633.9	(1)	(1)	(1)	26.7	33.1	32.6	88.6	92.4	93.0
50 Orlando	223.8	232.5	232.7	(1)	(1)	(1)	12.7	14.3	14.2	27.8	30.9	31.3
51 Pensacola	89.4	91.8	91.6	(1)	(1)	(1)	6.2	7.1	7.4	13.3	12.9	12.8
52 Tampa-St. Petersburg	441.5	457.6	460.3	(1)	(1)	(1)	27.9	32.4	33.2	61.3	64.8	65.5
53 West Palm Beach-Boca Raton	154.3	158.8	161.4	(1)	(1)	(1)	11.4	13.0	13.2	21.1	22.3	22.7
54 GEORGIA	1,920.8	1,947.2	1,955.3	7.0	7.5	7.4	92.4	99.5	99.1	497.2	507.2	507.0
55 Albany	38.3	40.2	40.4	(1)	(1)	(1)	3.2	3.9	3.9	9.6	10.1	10.4
56 Atlanta	799.5	802.8	807.0	(1)	(1)	(1)	33.7	35.1	34.9	132.7	134.1	134.3
57 Augusta	115.2	120.1	121.0	(1)	(1)	(1)	7.5	6.7	6.7	36.3	36.4	36.5
58 Columbus	79.7	80.5	80.4	(1)	(1)	(1)	5.0	5.3	5.1	20.7	20.5	20.7
59 Macon	94.3	95.9	95.7	(1)	(1)	(1)	4.4	4.5	4.7	16.1	16.3	15.9
60 Savannah	79.7	80.2	78.7	(1)	(1)	(1)	5.5	5.1	5.0	16.3	16.8	16.4

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)

Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services			Government			
OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	
66.3	69.6	69.5	261.0	266.8	267.3	56.5	57.9	57.9	180.1	182.8	182.3	264.1	266.0	271.2	1
24.9	26.8	26.8	81.3	83.2	83.5	22.7	23.7	23.7	58.4	59.0	59.4	49.7	49.7	50.6	2
2.5	2.6	2.6	21.1	21.8	21.8	3.1	3.2	3.2	16.2	16.4	16.2	31.4	31.3	31.5	3
10.6	11.0	11.0	34.4	35.2	35.0	6.6	6.6	6.7	26.1	26.3	26.1	22.3	22.6	22.8	4
4.5	4.8	4.8	24.1	24.6	24.3	5.6	5.8	5.7	17.2	17.8	17.7	23.9	23.7	24.5	5
1.8	1.8	1.7	9.2	9.3	9.4	1.6	1.6	1.7	5.6	5.4	5.4	16.9	16.4	16.5	6
15.4	15.9	14.8	27.3	28.4	28.1	7.9	8.0	7.8	25.4	26.4	26.0	52.3	52.3	53.4	7
41.5	44.9	45.2	195.8	206.2	209.2	45.7	48.2	48.5	156.4	159.5	161.7	188.6	187.8	194.0	8
25.3	27.6	27.8	128.6	134.8	137.5	35.0	36.8	36.9	94.7	98.2	100.8	92.8	93.6	95.9	9
7.8	8.0	8.1	34.5	36.3	36.8	6.8	7.2	7.3	30.7	32.0	32.1	44.1	41.5	43.6	10
38.6	41.8	41.4	152.6	162.2	161.4	29.8	30.7	30.5	99.0	102.5	101.7	131.6	135.9	135.2	11
2.9	3.0	3.0	13.6	14.5	14.5	2.0	2.2	2.2	7.0	7.7	7.7	11.1	10.4	10.4	12
2.9	3.2	3.2	13.2	13.8	13.7	2.2	2.4	2.3	10.6	11.0	10.9	7.4	7.3	7.4	13
11.4	11.7	11.9	39.1	39.7	39.7	12.1	12.2	12.2	29.9	30.9	30.8	34.1	34.2	34.0	14
3.6	3.5	3.6	5.9	5.8	5.8	1.2	1.3	1.3	4.5	4.8	4.7	6.6	7.0	7.0	15
481.4	509.8	507.1	2,005.6	2,160.5	2,176.0	504.8	533.4	533.3	1,766.2	1,900.8	1,906.1	1,757.2	1,735.6	1,784.9	16
20.8	23.1	23.4	166.0	180.4	182.4	40.3	43.9	44.3	134.6	147.9	148.0	103.7	92.1	99.7	17
6.9	7.4	7.3	28.8	29.9	29.9	4.1	4.3	4.3	18.3	19.2	19.3	31.1	30.2	31.2	18
9.4	9.7	9.7	45.2	48.3	47.7	8.9	9.3	9.4	30.4	31.5	31.4	41.0	39.1	40.6	19
178.9	189.8	189.9	752.9	785.2	788.3	197.8	204.8	204.7	699.4	736.1	738.4	490.0	492.1	501.3	20
3.6	3.8	3.7	20.3	21.1	21.8	2.6	2.7	2.7	14.3	15.2	15.3	15.9	15.7	15.9	21
5.2	5.5	5.5	29.0	32.5	32.3	5.1	5.1	5.1	22.2	22.2	22.4	37.1	37.2	37.5	22
20.4	21.5	21.8	89.3	94.2	94.7	14.8	15.4	15.5	76.0	78.1	79.5	93.4	93.7	98.5	23
18.7	19.7	19.6	81.2	84.2	85.0	17.0	18.7	18.8	61.1	64.6	64.8	136.4	135.1	137.3	24
4.9	5.0	5.0	21.3	22.4	22.1	3.6	3.8	3.8	16.1	17.1	16.9	23.0	21.5	22.4	25
24.7	25.9	25.9	127.0	137.1	137.0	30.6	32.6	32.8	114.1	128.2	120.8	139.2	136.3	138.5	26
120.4	124.4	124.4	324.4	330.9	332.6	122.0	127.0	127.4	296.2	307.3	307.5	290.7	281.7	287.8	27
18.8	19.6	19.4	104.4	111.4	111.8	21.7	22.5	22.6	116.7	123.6	124.7	83.3	79.4	82.9	28
3.8	3.8	3.8	25.4	26.2	26.1	4.5	4.5	4.5	26.5	27.7	27.6	26.0	24.2	25.0	29
4.0	4.2	4.2	17.8	19.1	19.2	4.1	4.4	4.4	14.6	15.3	15.2	19.8	18.7	19.2	30
7.9	8.2	7.9	25.8	26.6	27.4	4.5	4.7	4.7	20.3	21.2	21.3	27.4	26.8	27.3	31
3.8	4.0	3.9	17.5	19.4	19.3	3.0	3.1	3.1	16.4	16.5	17.2	36.5	36.2	36.5	32
64.0	70.2	70.8	274.1	282.7	282.0	62.9	67.0	67.1	211.6	229.9	228.2	224.8	221.3	227.9	33
44.2	48.3	48.7	174.7	177.2	177.3	45.1	47.5	47.5	140.4	149.1	149.0	124.9	122.0	126.5	34
57.0	58.2	58.4	274.7	282.4	283.9	91.1	94.9	94.9	246.1	262.1	260.7	179.4	180.2	181.2	35
5.6	5.7	5.7	31.9	32.9	32.8	6.4	6.4	6.4	28.6	28.2	28.3	16.7	14.4	16.5	36
14.5	15.2	15.1	74.6	75.1	76.0	52.6	55.5	55.2	65.7	68.5	69.0	51.9	48.8	50.3	37
1.4	1.4	1.4	9.6	9.9	9.9	1.5	1.6	1.6	8.4	8.8	9.0	6.6	6.5	6.4	38
14.7	14.8	14.9	37.4	38.4	38.3	9.6	9.9	9.9	40.3	44.0	43.5	23.3	23.6	23.6	39
3.4	3.5	3.5	23.0	23.4	23.4	6.6	7.0	6.9	22.3	23.8	23.4	10.2	11.1	11.4	40
3.0	3.1	3.1	15.4	15.9	15.7	2.9	3.1	3.1	16.3	17.9	16.9	11.1	11.0	11.5	41
12.5	12.4	12.4	52.2	52.3	52.9	11.2	11.2	11.1	39.0	41.3	41.0	40.9	40.2	40.5	42
11.4	11.5	11.5	42.9	43.0	43.4	9.9	10.0	9.9	34.7	36.8	36.5	34.6	33.2	33.6	43
25.5	25.9	25.8	64.9	65.8	66.1	33.1	33.1	32.7	151.5	152.4	152.9	271.4	269.3	269.5	44
63.5	64.6	64.6	271.3	278.2	279.9	81.2	83.5	82.6	334.3	343.7	343.9	521.1	522.6	526.1	45
182.3	183.1	183.9	742.8	765.6	771.1	200.5	210.9	212.2	621.1	645.4	651.3	560.9	558.6	570.1	46
13.3	13.4	13.6	71.9	76.0	76.9	21.6	22.3	22.5	57.4	58.2	58.6	39.5	41.7	41.8	47
21.4	22.0	22.0	69.6	69.9	69.8	27.7	28.9	28.7	48.3	49.0	48.8	51.7	52.7	52.8	48
59.6	62.1	62.2	161.7	160.9	162.2	45.0	46.2	46.7	143.9	146.3	148.0	88.0	89.3	89.2	49
11.3	11.3	11.5	61.5	61.1	61.1	15.3	16.5	16.8	57.5	60.5	60.1	37.7	37.9	37.7	50
4.4	4.5	4.4	20.3	21.0	20.7	3.6	3.7	3.6	16.5	17.2	17.0	25.1	25.4	25.7	51
25.9	25.9	25.9	124.0	126.8	126.8	32.6	34.6	34.8	95.7	97.2	97.8	74.1	75.9	76.3	52
6.8	6.9	6.9	39.8	40.3	40.7	12.1	12.9	13.1	37.1	37.4	38.2	26.0	26.0	26.6	53
119.9	125.5	125.1	438.5	445.5	446.5	99.9	102.0	101.8	284.0	286.8	286.8	382.0	373.2	381.5	54
1.7	1.9	1.9	8.7	8.8	8.7	1.8	1.8	1.8	4.8	4.8	4.8	8.5	8.9	8.9	55
71.8	75.1	75.3	223.8	225.0	225.8	56.6	57.5	57.7	146.6	146.0	146.0	134.3	130.0	133.1	56
3.8	3.9	3.9	20.6	25.2	25.3	4.2	4.3	4.3	14.5	15.2	15.2	28.3	28.4	29.1	57
3.1	3.2	3.2	16.8	17.3	17.2	4.8	5.0	5.0	10.9	11.0	10.7	18.3	18.2	18.4	58
4.4	4.4	4.4	18.7	19.1	19.1	5.6	5.6	5.6	15.1	15.5	15.6	30.1	30.4	30.3	59
7.3	8.0	7.2	18.5	18.7	18.6	3.8	3.9	3.9	13.1	12.8	12.8	15.3	14.9	14.7	60

**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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
1 HAWAII	352.1	359.4	362.8	(1)	(1)	(1)	17.2	20.4	20.6	21.6	23.0	22.5
2 Honolulu	292.0	297.6	301.6	(1)	(1)	(1)	14.0	17.3	17.6	15.7	16.8	16.4
3 IDAHO	318.4	341.1	341.7	3.7	3.9	3.8	21.0	23.1	22.6	55.6	60.1	59.6
4 Boise City	73.3	83.7	84.5	(1)	(1)	(1)	6.0	7.0	7.1	8.1	9.5	9.5
5 ILLINOIS	4,659.2	4,750.7	4,778.4	27.7	26.6	26.7	188.2	196.9	193.3	1,242.5	1,246.5	1,250.7
6 Bloomington—Normal	50.6	52.0	52.2	(3)	(3)	(3)	1.4	1.5	1.4	8.3	8.8	8.8
7 Champaign—Urbana—Rantoul	66.9	66.6	68.9	(3)	(3)	(3)	2.9	3.4	3.2	6.5	6.6	6.7
8 Chicago—Gary	3,391.0	3,450.5	(*)	4.7	4.5	(*)	138.3	156.6	(*)	946.0	956.2	(*)
9 Chicago SMSA ⁴	3,142.3	3,205.1	3,219.2	4.6	4.4	4.4	123.1	139.4	137.9	846.5	857.2	860.1
10 Davenport—Rock Island—Moline	157.0	158.9	159.8	(3)	(3)	(3)	7.3	7.3	7.2	47.8	48.3	48.8
11 Decatur	56.4	56.0	57.5	(3)	(3)	(3)	4.3	4.4	4.3	18.2	18.6	18.8
12 Peoria	149.2	153.8	154.5	(3)	(3)	(3)	9.1	9.9	9.9	50.8	53.2	53.2
13 Rockford	114.4	122.2	122.7	(3)	(3)	(3)	3.8	4.0	3.9	49.4	56.2	56.6
14 Springfield	85.4	84.6	84.9	(3)	(3)	(3)	5.0	5.0	5.0	9.7	8.4	8.3
15 INDIANA	2,128.2	2,205.3	2,207.4	9.0	9.6	9.5	97.0	107.1	107.7	718.8	744.4	741.9
16 Anderson	53.0	53.7	53.2	(1)	(1)	(1)	1.2	1.3	1.3	26.5	26.2	25.9
17 Evansville	118.2	120.6	121.2	2.4	2.4	2.4	6.9	7.4	7.5	36.6	37.3	37.9
18 Fort Wayne	165.1	171.3	171.6	(1)	(1)	(1)	6.8	7.5	7.3	60.4	62.3	62.4
19 Gary—Hammond—East Chicago ⁴	248.7	255.0	254.5	(1)	(1)	(1)	15.2	16.4	15.7	99.5	102.6	103.6
20 Indianapolis	491.4	504.3	502.4	(1)	(1)	(1)	20.6	20.9	20.4	127.3	129.0	129.0
21 Lafayette—West Lafayette	55.9	58.1	58.5	(1)	(1)	(1)	2.0	2.2	2.2	12.0	12.9	13.1
22 Muncie	50.1	49.4	50.3	(1)	(1)	(1)	2.1	2.3	2.2	14.8	14.5	14.5
23 South Bend	105.7	108.7	108.8	(1)	(1)	(1)	4.5	5.0	5.0	32.4	33.6	33.6
24 Terre Haute	62.0	63.2	63.3	1.2	1.3	1.4	2.7	2.6	2.6	16.8	17.1	16.9
25 IOWA	1,087.8	1,101.5	1,110.2	2.6	2.5	2.4	59.7	60.6	60.0	243.6	247.5	248.6
26 Cedar Rapids	80.7	82.9	82.9	(1)	(1)	(1)	3.9	4.2	4.1	28.1	29.7	29.7
27 Des Moines	170.9	171.2	173.2	(1)	(1)	(1)	8.2	7.6	7.6	24.8	23.9	24.7
28 Dubuque	43.6	43.7	44.3	(1)	(1)	(1)	1.8	2.0	2.1	16.8	16.5	16.8
29 Sioux City	53.8	52.0	52.6	(1)	(1)	(1)	4.7	4.1	4.1	11.1	9.9	9.9
30 Waterloo—Cedar Falls	64.8	63.8	63.8	(1)	(1)	(1)	3.0	2.5	2.5	22.4	21.7	21.3
31 KANSAS	874.7	901.2	902.4	12.4	13.4	13.3	46.5	47.1	47.1	170.8	186.3	187.7
32 Topeka	82.3	84.6	84.2	.2	.2	.2	3.8	3.9	3.7	11.0	11.3	11.3
33 Wichita	177.5	189.0	190.8	1.9	2.1	2.1	10.2	9.8	9.8	49.4	60.9	61.8
34 KENTUCKY	1,194.8	1,251.3	1,258.8	56.4	58.9	57.4	71.6	79.3	76.9	286.8	296.0	296.7
35 Lexington—Fayette	134.0	142.8	144.1	(1)	(1)	(1)	7.0	9.2	8.6	29.8	32.4	32.7
36 Louisville	380.2	400.1	403.3	(1)	(1)	(1)	18.9	22.2	22.0	110.0	110.0	111.9
37 Owensboro	29.2	30.3	30.5	.6	.8	.8	2.0	2.4	2.6	7.5	7.2	7.1
38 LOUISIANA	1,343.9	1,365.1	1,368.7	65.7	68.1	67.7	104.2	107.1	106.5	206.7	205.6	207.7
39 Alexandria	48.1	48.1	48.2	(1)	(1)	(1)	3.1	3.2	3.0	6.4	6.0	6.0
40 Baton Rouge	177.7	182.0	182.2	.9	.9	.9	22.6	23.8	23.9	24.3	24.4	24.3
41 Lafayette	57.6	58.9	59.3	9.4	10.0	9.9	4.8	5.3	5.4	3.4	3.7	3.7
42 Lake Charles	53.1	54.4	54.6	1.4	1.5	1.6	5.4	6.1	6.0	11.7	12.0	12.1
43 Monroe	46.3	47.9	48.5	.4	.3	.3	4.1	5.6	5.6	7.8	8.0	8.1
44 New Orleans	445.9	460.6	459.0	14.2	14.3	14.3	26.2	26.8	26.4	51.8	52.6	52.9
45 Shreveport	133.6	139.2	139.6	4.6	4.8	4.8	8.6	9.9	10.1	28.5	28.7	28.8
46 MAINE	398.4	411.6	410.5	(1)	(1)	(1)	23.2	22.6	22.3	108.7	111.9	113.2
47 Lewiston—Auburn	33.4	34.6	34.7	(1)	(1)	(1)	1.3	1.6	1.4	12.4	12.5	12.6
48 Portland	84.4	87.2	87.6	(1)	(1)	(1)	4.6	4.2	4.2	15.8	16.3	16.2
49 MARYLAND	1,549.5	1,580.0	1,581.7	1.5	1.6	1.5	95.9	98.8	96.8	238.2	244.9	246.1
50 Baltimore	874.7	896.6	902.2	(1)	(1)	(1)	45.2	48.1	46.7	163.2	167.3	168.4
51 MASSACHUSETTS	2,442.0	2,531.5	2,549.0	(1)	(1)	(1)	77.5	84.4	83.1	630.4	654.1	657.3
52 Boston	1,319.1	1,371.2	1,378.1	(1)	(1)	(1)	43.5	45.8	45.4	269.8	284.0	285.6
53 Brockton	55.4	57.2	58.5	-	-	-	1.9	2.1	2.1	11.9	12.1	12.3
54 Fall River	55.0	57.8	57.6	(1)	(1)	(1)	1.4	1.5	1.5	20.7	21.6	21.5
55 Lawrence—Haverhill	103.8	106.7	107.4	(1)	(1)	(1)	2.6	2.7	2.7	38.8	39.5	39.5
56 Lowell	67.7	69.7	69.5	(1)	(1)	(1)	2.7	2.9	2.7	22.7	23.5	23.3
57 New Bedford	60.9	63.2	64.0	(1)	(1)	(1)	1.8	2.0	2.1	24.7	25.7	25.9
58 Springfield—Chicopee—Holyoke	224.0	229.5	227.8	(1)	(1)	(1)	5.6	5.8	5.6	65.5	67.1	67.4
59 Worcester	155.0	157.9	160.2	(1)	(1)	(1)	4.5	4.3	4.2	45.1	46.8	46.9
60 MICHIGAN	3,496.2	3,580.7	3,603.3	10.4	13.8	13.3	141.2	164.3	165.0	1,134.0	1,158.8	1,166.5
61 Ann Arbor	129.9	129.0	133.9	(1)	(1)	(1)	3.1	3.8	3.8	41.8	42.8	44.1
62 Battle Creek	65.4	68.0	67.7	(1)	(1)	(1)	1.8	2.0	2.0	23.4	24.4	23.8

**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			
OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	
28.1	28.8	28.5	90.6	91.4	90.9	24.8	25.4	25.5	85.9	88.2	88.7	83.9	82.2	86.1	1
23.2	23.8	23.5	75.9	76.2	75.9	22.0	22.7	22.7	69.8	71.7	72.4	71.4	69.1	73.1	2
18.5	19.8	19.8	79.1	83.2	84.2	16.8	22.2	22.3	53.7	58.2	57.9	70.0	70.6	71.5	3
4.3	4.8	4.7	19.5	21.4	21.7	5.8	9.1	9.3	12.2	13.8	13.8	17.4	18.4	18.4	4
278.3	283.8	285.6	1,068.2	1,072.8	1,077.3	270.7	280.2	279.3	854.8	885.0	886.5	728.7	758.9	779.0	5
3.0	3.0	3.0	11.6	12.1	12.2	7.1	7.4	7.3	7.7	7.8	7.8	11.6	11.3	11.6	6
2.5	2.5	2.5	14.9	14.9	15.2	2.2	2.3	2.3	9.9	10.1	9.9	28.0	26.8	29.0	7
205.5	210.9	(*)	778.6	769.4	(*)	210.7	218.3	(*)	651.0	661.4	(*)	456.4	473.4	(*)	8
190.8	196.7	196.8	730.3	721.2	724.8	202.0	209.6	209.0	618.9	629.0	629.8	426.2	447.7	456.3	9
7.6	7.6	7.6	38.8	39.9	40.0	6.5	6.7	6.6	23.9	23.9	24.0	25.1	25.2	25.5	10
4.7	3.5	4.7	11.8	11.9	12.1	2.4	2.5	2.5	9.6	9.8	9.8	5.4	5.4	5.4	11
7.9	8.2	8.2	34.7	34.9	35.4	6.9	7.1	7.2	26.2	27.4	27.5	13.6	13.1	13.2	12
4.7	4.7	4.7	24.2	24.6	24.7	3.7	3.8	3.8	16.6	16.8	16.8	12.0	12.0	12.1	13
4.9	4.9	4.9	18.1	18.3	18.5	6.5	6.8	6.9	16.6	16.5	16.5	24.6	24.6	24.8	14
106.5	107.4	109.5	461.8	479.6	478.1	92.9	95.9	95.7	293.8	304.5	302.1	348.4	356.9	362.9	15
1.4	1.6	1.5	9.9	10.6	10.5	1.6	1.6	1.6	6.5	6.6	6.7	5.9	5.8	5.7	16
6.4	6.5	6.5	28.2	28.9	28.8	4.0	4.1	4.1	21.6	22.0	21.8	12.1	12.0	12.2	17
10.3	10.7	10.7	38.1	39.4	40.1	9.2	9.6	9.6	24.9	26.1	25.9	15.4	15.7	15.6	18
14.7	14.7	14.6	48.3	49.8	49.1	8.7	8.9	8.9	32.1	33.2	32.9	30.2	29.4	29.7	19
29.7	30.2	30.2	119.3	122.3	122.7	33.9	34.6	34.4	75.8	78.9	78.5	84.8	88.4	87.2	20
1.5	1.6	1.6	10.6	11.2	11.2	2.7	2.8	2.8	7.8	8.2	8.2	19.3	19.2	19.4	21
2.0	2.1	2.1	11.5	11.7	11.7	1.5	1.5	1.5	7.0	7.5	7.3	11.2	9.8	11.0	22
5.1	5.2	5.2	25.1	25.8	25.5	4.9	4.9	5.0	22.1	22.8	22.8	11.6	11.4	11.7	23
3.9	3.8	3.8	14.7	15.5	15.6	2.0	2.0	2.0	8.8	9.1	9.0	11.9	11.8	12.0	24
54.8	54.8	54.9	273.8	278.9	279.9	52.5	53.4	53.4	190.8	199.0	198.3	210.0	204.8	212.6	25
3.8	3.8	3.8	17.1	17.3	17.3	3.9	4.1	4.0	14.2	14.0	14.0	9.7	9.9	10.0	26
10.9	10.8	10.8	45.4	46.0	46.5	18.8	19.1	19.1	34.8	35.1	35.2	28.2	28.7	29.3	27
1.7	1.7	1.6	9.3	9.6	9.7	1.2	1.2	1.2	8.8	9.0	9.0	4.0	3.8	3.8	28
3.5	3.8	3.8	13.7	13.6	13.6	2.7	2.7	2.7	11.0	11.0	11.1	7.1	6.9	7.3	29
2.5	2.5	2.5	13.6	13.6	13.7	1.8	1.9	1.9	10.4	10.3	10.3	11.0	11.2	11.5	30
58.5	59.6	59.4	212.1	217.7	217.7	42.7	44.3	44.2	152.1	157.7	157.4	179.6	175.1	175.6	31
7.6	7.7	7.6	18.1	18.7	18.5	5.7	5.7	5.7	15.1	15.7	15.8	21.0	21.4	21.4	32
10.1	10.0	10.1	40.3	41.3	41.5	9.0	9.1	9.1	34.3	34.3	34.1	22.5	21.5	22.3	33
65.6	68.7	69.2	255.0	270.3	269.9	47.8	51.0	51.5	188.4	193.2	194.9	223.2	233.9	242.3	34
6.2	6.8	6.8	30.5	32.6	33.0	6.2	6.5	6.7	24.2	24.9	24.8	30.1	30.4	31.5	35
23.6	25.2	25.4	83.8	90.0	90.6	21.0	22.3	22.2	69.7	73.8	74.6	53.0	56.6	56.6	36
2.0	2.1	2.1	6.9	7.1	7.1	1.2	1.2	1.2	4.8	5.3	5.4	4.2	4.2	4.2	37
96.8	105.6	105.6	323.1	326.0	326.1	65.2	67.8	68.1	225.4	230.2	231.6	256.8	254.7	255.4	38
2.3	2.4	2.4	11.0	10.7	11.0	2.7	2.7	2.7	9.0	9.3	9.3	13.6	13.8	13.8	39
8.4	9.0	9.0	37.0	36.9	36.9	10.4	10.8	10.8	26.2	25.8	26.0	47.9	50.4	50.4	40
4.2	4.0	4.2	15.4	15.8	15.7	1.9	2.0	2.0	9.5	9.6	9.6	9.0	8.5	8.8	41
2.8	3.1	3.1	12.4	12.5	12.6	2.2	2.3	2.3	8.3	8.2	8.3	8.9	8.7	8.6	42
2.3	2.3	2.3	12.0	11.8	12.0	3.1	3.2	3.2	6.9	7.2	7.5	9.7	9.5	9.5	43
39.8	47.3	47.5	119.0	119.9	120.1	27.3	27.5	27.6	95.0	99.5	97.4	72.6	72.7	72.8	44
9.2	9.8	9.9	34.1	35.1	35.3	6.1	6.2	6.2	21.8	22.9	23.1	20.7	21.8	21.4	45
18.0	18.2	18.0	86.2	92.3	90.3	15.2	15.6	15.7	67.4	72.0	69.7	79.7	79.0	81.3	46
1.1	1.1	1.1	7.7	8.1	8.0	1.4	1.4	1.4	6.4	6.9	7.1	3.1	3.0	3.1	47
5.0	5.0	5.0	21.6	23.5	23.8	6.4	6.9	6.8	17.4	18.2	17.8	13.6	13.1	13.8	48
77.4	82.3	82.8	376.2	379.9	382.1	82.3	84.1	83.5	299.2	313.9	311.8	378.8	374.5	377.1	49
51.9	56.9	57.2	201.7	204.9	206.8	51.3	51.6	51.7	167.1	174.3	174.3	194.3	193.5	197.1	50
114.5	117.2	116.7	545.0	571.2	572.1	138.4	144.2	143.0	546.5	574.0	583.6	389.7	386.4	393.2	51
69.3	68.6	68.4	300.6	305.7	306.2	94.8	98.8	98.4	343.6	368.5	371.7	197.5	199.8	202.4	52
4.0	4.0	4.0	14.8	15.4	15.6	2.0	2.2	2.2	8.6	8.5	8.8	12.2	13.0	13.5	53
1.9	2.0	2.0	11.9	12.9	12.6	2.5	2.7	2.8	8.9	9.4	9.3	7.7	7.7	7.9	54
4.1	4.2	4.2	21.4	23.0	23.3	3.5	3.6	3.6	15.2	15.3	15.2	18.2	18.4	18.9	55
3.1	3.1	3.1	14.8	15.3	15.2	2.1	2.1	2.1	10.3	10.4	10.3	12.0	12.4	12.8	56
2.5	2.7	2.6	11.8	12.2	11.9	1.8	1.8	1.9	8.4	8.9	9.4	9.9	9.8	10.2	57
9.5	9.7	9.7	45.3	45.9	45.4	11.2	11.6	11.6	41.7	43.8	42.4	45.2	45.6	45.7	58
7.0	6.7	6.9	33.7	34.2	34.5	8.3	8.4	8.4	29.6	29.9	31.0	26.8	27.6	28.3	59
148.5	152.6	153.0	712.1	720.4	719.1	140.2	145.7	145.4	580.3	609.7	612.1	629.4	615.3	628.9	60
2.2	2.4	2.3	18.2	18.0	17.7	3.6	3.9	3.9	18.1	17.6	17.4	42.9	40.1	44.7	61
2.1	2.2	2.3	10.8	11.2	11.2	3.5	3.6	3.6	11.4	11.8	11.9	12.4	12.8	12.9	62

**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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
MICHIGAN—Continued												
1 Bay City	35.9	37.1	37.8	(1)	(1)	(1)	1.7	2.0	1.9	11.2	11.6	12.0
2 Detroit	1,719.6	1,762.7	1,766.9	1.2	1.2	1.2	68.0	77.1	76.5	579.4	590.2	592.8
3 Flint	198.9	204.5	207.5	(1)	(1)	(1)	6.9	8.1	8.1	88.5	88.4	91.5
4 Grand Rapids	244.0	250.7	254.2	(1)	(1)	(1)	11.3	12.8	12.8	84.2	89.0	89.9
5 Jackson	51.4	53.7	53.5	(1)	(1)	(1)	1.9	1.4	1.5	15.7	17.1	17.4
6 Kalamazoo—Portage	106.0	109.3	109.3	(1)	(1)	(1)	4.3	4.7	4.6	35.3	36.7	36.8
7 Lansing—East Lansing	185.2	183.6	192.8	(1)	(1)	(1)	5.5	6.1	6.0	43.2	45.0	45.3
8 Muskegon-Norton Shores-Musk. Hgts	60.3	62.2	62.4	(1)	(1)	(1)	2.7	3.2	3.3	22.4	23.0	23.2
9 Saginaw	89.1	92.9	93.6	(1)	(1)	(1)	2.8	3.3	3.4	37.0	37.8	38.1
10 MINNESOTA	1,635.0	1,707.8	1,729.2	5.9	18.9	18.3	81.7	92.6	93.2	344.9	372.7	367.1
11 Duluth—Superior	59.1	60.3	60.1	(1)	(1)	(1)	2.8	2.6	2.6	7.8	7.9	7.8
12 Minneapolis—St. Paul	985.8	1,016.3	1,034.4	(1)	(1)	(1)	42.6	50.5	50.7	223.9	237.5	237.1
13 MISSISSIPPI	778.7	802.4	806.6	7.8	8.2	8.1	42.5	43.6	43.8	235.5	235.3	235.5
14 Jackson	129.9	134.3	134.7	1.1	1.1	1.1	7.4	7.8	7.9	18.4	18.8	18.9
15 MISSOURI	1,879.6	1,905.5	1,908.2	8.9	7.3	7.5	82.4	85.6	84.5	445.0	451.2	451.3
16 Kansas City	598.2	607.8	605.9	.5	.6	.6	25.8	28.8	28.0	123.1	125.9	126.2
17 St. Joseph	35.9	35.7	35.6	(3)	(3)	(3)	1.7	2.2	2.0	9.3	9.2	9.1
18 St. Louis	938.5	953.2	958.9	2.7	2.7	2.7	38.5	41.9	42.2	251.1	254.2	255.0
19 Springfield	78.6	80.6	81.0	(3)	(3)	(3)	3.7	4.0	3.9	17.9	18.2	18.0
20 MONTANA ⁵	270.1	287.4	282.2	6.2	7.1	7.0	17.4	19.6	18.5	26.1	27.2	26.9
21 Billings ⁵	44.5	46.6	46.0	(1)	(1)	(1)	2.6	3.0	2.6	4.5	4.2	4.2
22 Great Falls ⁵	29.7	31.4	30.8	(1)	(1)	(1)	2.1	2.1	2.0	1.8	1.9	1.9
23 NEBRASKA	590.7	606.4	604.7	1.6	1.6	1.7	33.6	36.0	35.6	91.7	94.3	95.2
24 Lincoln	94.6	98.1	96.9	-	-	-	4.5	4.7	4.7	14.3	14.3	14.4
25 Omaha	255.2	257.3	257.6	(3)	(3)	(3)	13.2	13.1	12.9	35.3	35.7	35.9
26 NEVADA	319.9	352.6	352.5	4.4	3.3	3.3	21.5	25.5	25.4	15.6	17.2	17.4
27 Las Vegas	173.2	188.2	189.2	.2	.2	.2	10.7	12.9	13.1	5.8	6.0	6.1
28 Reno	93.7	108.0	107.3	.6	.7	.7	8.1	9.2	9.0	6.9	7.6	7.8
29 NEW HAMPSHIRE	351.8	371.6	372.4	.5	.4	.4	21.6	24.3	24.3	104.7	107.1	107.4
30 Manchester	68.6	72.7	73.4	(3)	(3)	(3)	3.4	3.6	3.5	19.4	19.4	19.5
31 Nashua	51.9	54.6	54.9	(3)	(3)	(3)	2.4	2.7	2.7	23.4	24.1	24.3
32 NEW JERSEY	2,891.8	2,962.4	2,977.0	3.0	2.8	2.8	107.1	118.2	121.0	785.0	794.6	796.4
33 Atlantic City	66.6	75.3	71.8	-	-	-	3.7	3.9	3.8	8.5	7.6	7.7
34 Camden ⁶	307.3	317.5	318.9	.1	.1	.1	11.8	12.6	12.6	68.7	70.2	71.2
35 Hackensack ⁷	378.0	382.9	387.6	(1)	(1)	(1)	14.8	15.9	16.5	111.6	113.9	113.7
36 Jersey City ⁷	233.3	231.8	233.1	-	-	-	4.2	4.5	4.3	75.1	71.9	71.7
37 Long Branch—Asbury Park	148.3	151.1	150.5	(1)	(1)	(1)	6.3	6.7	6.5	24.4	23.6	23.8
38 New Bruns.—Perth Amboy-Sayreville ⁷	263.7	269.7	271.9	(1)	(1)	(1)	9.4	9.3	9.6	87.8	90.8	91.0
39 Newark ⁷	905.6	923.3	939.9	1.0	1.0	1.0	33.2	35.6	37.7	247.8	251.4	253.9
40 Paterson—Clifton—Passaic ⁷	184.8	190.6	190.7	(1)	(1)	(1)	5.8	6.1	6.2	66.1	68.8	67.4
41 Trenton	159.0	161.8	163.2	(1)	(1)	(1)	2.9	3.2	3.0	38.3	37.6	37.7
42 Vineland—Millville—Bridgeton	55.1	58.6	58.0	(1)	(1)	(1)	1.8	2.0	1.9	19.1	20.5	19.6
43 NEW MEXICO	425.6	454.8	455.6	24.1	24.8	25.0	32.5	35.7	35.5	32.7	34.6	34.4
44 Albuquerque	169.2	181.3	181.4	(1)	(1)	(1)	12.8	15.4	15.2	17.0	18.1	18.0
45 NEW YORK	6,902.5	6,973.6	7,008.1	7.6	7.3	7.2	208.6	223.6	222.7	1,483.7	1,490.2	1,494.3
46 Albany-Schenectady-Troy	321.7	324.1	325.0	(1)	(1)	(1)	11.3	11.8	11.8	64.1	62.1	62.0
47 Binghamton	113.0	114.2	114.6	(1)	(1)	(1)	5.0	4.7	4.6	40.6	41.9	41.6
48 Buffalo	504.8	505.7	509.3	(1)	(1)	(1)	20.3	20.0	19.9	145.8	144.4	143.8
49 Elmira	37.2	37.7	37.8	(1)	(1)	(1)	1.9	1.9	1.9	11.6	11.7	11.7
50 Monroe County ⁸	324.7	325.2	329.5	(1)	(1)	(1)	10.1	10.2	10.0	128.6	130.0	130.9
51 Nassau—Suffolk ⁹	838.6	859.8	861.6	(1)	(1)	(1)	33.8	36.5	36.0	154.2	156.1	156.9
52 New York—Northeastern New Jersey	6,391.0	6,459.6	(*)	3.5	3.5	(*)	185.6	193.4	(*)	1,375.8	1,381.0	(*)
53 New York and Nassau—Suffolk ⁹	4,425.6	4,456.2	4,474.7	1.9	1.9	1.9	118.2	123.8	123.8	787.4	784.2	786.7
54 New York SMSA ⁹	3,587.0	3,596.4	3,613.1	1.7	1.7	1.7	84.3	87.3	87.9	633.2	628.1	629.9
55 New York City ¹⁰	3,180.7	3,183.1	3,198.6	1.5	1.5	1.5	68.2	70.9	71.2	549.1	542.2	543.8
56 Poughkeepsie	88.6	91.4	92.3	(1)	(1)	(1)	3.1	3.1	3.0	28.8	30.6	30.9
57 Rochester	400.3	402.1	406.9	(1)	(1)	(1)	12.4	12.8	12.6	150.3	152.1	153.3
58 Rockland County ¹⁰	75.7	76.8	76.6	(1)	(1)	(1)	2.4	2.8	2.7	15.1	15.4	15.0
59 Syracuse	253.1	255.5	259.5	(1)	(1)	(1)	11.6	11.6	11.7	58.9	60.4	60.9
60 Utica—Rome	113.5	115.3	115.8	(1)	(1)	(1)	3.3	3.5	3.4	30.8	31.4	31.6
61 Westchester County ¹⁰	319.3	325.1	326.6	(1)	(1)	(1)	13.0	12.9	13.3	67.8	69.2	69.8

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			
OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	
2.1	2.0	2.0	8.6	9.0	8.8	1.1	1.1	1.2	6.2	6.3	6.5	5.0	5.1	5.4	1
81.2	83.8	83.2	341.5	345.0	343.2	81.5	84.0	83.9	312.7	330.2	330.5	254.1	251.1	255.7	2
5.1	6.0	6.0	37.3	40.0	39.8	5.5	5.6	5.6	26.4	28.1	28.3	28.1	28.3	28.2	3
9.6	9.8	9.8	56.5	56.6	57.5	8.5	8.8	8.8	43.8	43.5	44.7	30.1	30.2	30.7	4
4.4	4.5	4.5	9.9	10.6	10.3	1.5	1.6	1.6	9.1	9.7	9.6	8.9	8.8	8.6	5
3.5	3.4	3.4	19.7	20.3	20.4	3.5	3.7	3.8	17.9	18.5	18.2	21.8	22.0	22.1	6
4.4	4.5	4.6	33.9	34.1	34.9	8.4	9.0	9.0	24.4	25.0	25.0	65.4	59.9	68.0	7
3.0	3.1	3.1	11.2	11.9	11.6	1.7	1.8	1.8	8.7	9.0	8.7	10.6	10.2	10.7	8
4.1	4.1	4.1	17.5	18.1	18.0	3.8	3.9	3.9	11.9	13.2	13.2	12.0	12.5	12.9	9
94.8	95.3	97.0	414.8	430.3	432.1	84.2	89.0	89.1	319.4	334.0	338.8	289.2	275.1	293.6	10
5.5	7.4	7.4	16.3	17.0	16.8	2.1	2.1	2.1	11.9	12.2	12.1	11.7	11.2	11.2	11
61.1	60.3	61.8	246.5	252.2	254.4	61.9	65.2	65.5	202.0	210.8	214.1	147.8	139.8	150.8	12
37.3	37.8	38.8	152.5	157.6	158.1	30.4	31.4	31.5	109.6	115.3	117.7	163.2	173.1	173.1	13
8.1	8.2	8.2	31.0	33.5	33.6	10.0	10.3	10.3	25.5	25.9	26.1	28.4	28.6	28.5	14
131.2	132.5	133.0	448.2	457.8	458.0	96.0	97.9	97.5	341.4	348.9	346.0	326.5	324.3	330.4	15
52.3	50.9	51.2	152.7	153.4	153.8	38.7	39.8	39.9	115.8	120.4	118.6	89.3	88.0	87.6	16
2.5	2.4	2.4	8.7	8.3	8.4	1.8	1.9	1.9	6.3	6.2	6.2	5.6	5.5	5.6	17
66.1	68.1	69.1	209.7	209.6	210.4	49.8	50.9	50.9	184.0	189.4	190.2	136.6	136.4	138.4	18
5.6	5.7	5.7	22.0	22.9	22.9	3.0	3.1	3.1	15.7	15.9	16.2	10.7	10.8	11.2	19
20.5	22.9	22.7	67.7	75.0	72.0	11.4	12.4	12.3	49.2	54.9	52.4	71.6	68.4	70.4	20
3.8	4.4	4.3	14.5	15.6	15.6	2.1	2.1	2.1	8.9	9.5	9.4	8.1	7.8	7.8	21
1.8	2.0	2.0	9.7	10.5	10.2	1.9	2.0	2.0	6.1	6.7	6.6	6.3	6.2	6.1	22
42.4	44.7	44.6	155.4	157.3	158.1	38.3	39.2	39.6	102.5	106.8	105.5	125.2	126.5	124.4	23
6.6	6.9	6.8	20.7	21.7	21.8	6.7	6.8	6.9	15.0	15.3	15.4	26.9	28.4	26.9	24
22.2	22.9	23.1	64.6	65.4	65.8	22.2	22.8	22.8	53.1	53.7	53.6	44.7	43.7	43.5	25
19.0	20.5	20.5	63.1	70.9	70.2	13.3	14.4	14.5	132.1	148.7	148.0	50.9	52.1	53.2	26
10.6	11.4	11.4	35.2	40.0	39.6	7.0	7.5	7.5	81.0	86.6	87.0	22.7	23.6	24.3	27
6.0	6.6	6.5	19.5	21.6	21.4	5.0	5.4	5.4	33.4	42.6	42.0	14.2	14.3	14.5	28
12.6	13.0	13.0	76.4	84.2	82.6	16.5	18.0	18.0	65.5	69.7	69.9	54.0	54.9	56.8	29
4.1	4.2	4.2	17.2	18.9	19.3	4.8	5.5	5.5	11.7	12.7	12.8	8.0	8.4	8.6	30
1.7	1.8	1.8	10.0	10.9	11.0	1.7	1.8	1.8	7.7	8.3	8.3	5.0	5.0	5.0	31
180.2	191.5	194.1	644.0	660.8	659.9	144.6	151.1	150.8	530.3	549.2	544.4	497.6	494.2	508.4	32
3.3	3.5	3.5	17.7	20.3	18.6	4.3	4.5	4.5	15.1	21.5	19.2	14.0	14.0	14.5	33
14.6	14.8	14.9	80.6	83.6	84.8	14.7	15.6	15.5	58.8	61.4	60.9	58.0	59.2	58.9	34
18.1	18.3	18.1	110.8	112.1	113.1	14.1	14.4	14.5	66.5	68.5	69.1	42.0	39.8	42.6	35
28.8	29.0	29.2	45.4	46.0	47.0	8.8	8.9	8.9	28.6	28.5	28.6	42.3	43.0	43.4	36
6.0	6.2	6.1	36.6	39.2	39.1	6.9	7.0	7.0	35.1	35.9	35.1	33.1	32.5	32.9	37
16.9	18.6	18.0	58.9	61.5	62.4	8.4	8.5	8.5	35.3	37.7	36.9	46.9	43.3	45.5	38
65.0	68.5	70.0	174.1	174.9	177.2	61.2	64.1	64.2	173.8	181.8	183.4	149.6	146.0	152.5	39
6.5	6.8	6.8	42.1	42.1	42.6	9.1	9.4	9.4	28.2	29.2	29.0	27.0	28.2	29.3	40
5.2	5.4	5.4	23.7	24.2	25.2	6.4	6.7	6.7	38.5	38.4	38.7	43.9	46.3	46.5	41
3.0	3.0	3.0	8.7	9.2	9.4	3.1	3.2	3.2	8.1	8.2	8.1	11.4	12.5	12.8	42
25.5	27.4	27.5	97.7	106.0	105.5	18.6	19.9	20.0	81.9	89.6	89.0	112.6	116.8	118.7	43
9.5	10.5	10.7	43.4	47.0	46.7	9.5	10.1	10.1	38.0	40.0	39.8	39.0	40.2	40.9	44
427.7	426.0	426.3	1,438.5	1,460.4	1,462.6	577.8	584.6	584.4	1,497.3	1,514.7	1,523.1	1,261.3	1,266.7	1,287.5	45
15.1	14.8	14.6	64.5	65.8	66.1	14.4	14.7	14.6	62.4	62.4	62.6	89.8	92.6	93.4	46
4.7	4.7	4.6	21.0	21.9	21.9	3.6	3.7	3.7	15.4	15.5	15.6	22.6	21.8	22.6	47
27.6	27.5	27.9	112.3	112.8	112.9	21.5	22.0	22.0	91.7	92.2	93.7	85.6	86.6	89.1	48
1.4	1.4	1.4	8.2	8.6	8.6	1.0	1.0	1.0	6.3	6.1	6.4	6.7	7.1	6.9	49
10.2	10.1	10.0	61.0	61.4	62.0	14.3	14.7	14.7	61.9	61.3	62.7	38.5	37.4	39.3	50
35.1	35.3	35.5	223.7	229.4	229.2	45.6	46.6	46.3	173.3	179.7	178.6	172.8	176.4	179.1	51
449.2	453.0	(*)	1,371.0	1,380.7	(*)	580.0	587.9	(*)	1,376.6	1,404.2	(*)	1,049.2	1,055.9	(*)	52
314.0	312.0	311.6	939.9	942.8	946.9	478.4	482.9	482.6	1,044.7	1,060.6	1,066.5	741.1	747.9	754.8	53
278.9	276.7	276.1	716.2	713.5	717.6	432.8	436.3	436.2	871.6	881.1	888.0	568.4	571.6	575.7	54
257.1	254.8	254.3	621.6	615.8	620.0	413.9	416.9	416.9	776.1	783.8	791.4	493.3	497.1	499.5	55
2.9	2.8	2.8	15.1	15.3	15.4	2.4	2.5	2.5	15.4	16.0	15.6	21.0	21.3	22.3	56
13.2	13.1	13.1	77.5	78.5	78.8	15.8	16.3	16.3	72.3	72.0	73.3	58.7	57.3	59.5	57
3.6	3.5	3.5	16.0	16.3	16.4	2.2	2.2	2.2	16.0	16.5	16.5	20.3	20.1	20.3	58
14.3	14.3	14.4	56.7	57.9	57.7	14.8	15.0	15.0	49.8	49.0	51.6	47.0	47.3	48.3	59
4.0	4.0	4.0	21.2	21.9	21.8	5.3	5.5	5.4	19.8	20.2	20.3	29.2	28.9	29.2	60
17.5	17.8	17.6	75.5	78.2	78.1	16.3	16.8	16.7	77.3	78.8	78.0	52.0	51.5	53.1	61

**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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
1 NORTH CAROLINA	2,168.9	2,225.6	2,237.1	4.7	5.1	5.2	105.9	112.8	113.2	793.2	804.3	807.5
2 Asheville	65.9	68.1	68.6	(1)	(1)	(1)	3.2	3.4	3.4	21.5	21.7	21.8
3 Charlotte—Gastonia	294.8	301.4	302.9	(1)	(1)	(1)	14.4	14.7	14.8	84.4	85.0	85.5
4 Greensboro—Winston-Salem—High Pt	357.8	363.6	366.6	(1)	(1)	(1)	15.6	15.6	15.4	143.0	143.4	143.8
5 Raleigh—Durham	232.7	240.4	243.3	(1)	(1)	(1)	11.3	12.1	12.4	37.1	38.3	38.6
6 NORTH DAKOTA	228.1	235.1	237.3	3.4	4.1	4.0	19.2	20.4	20.6	15.9	16.0	16.4
7 Fargo—Moorhead	60.8	61.4	62.8	(3)	(3)	(3)	5.0	5.3	5.3	5.5	5.1	5.1
8 OHIO	4,295.4	4,374.2	4,406.6	30.3	31.1	30.9	178.5	193.1	191.4	1,360.4	1,385.3	1,381.5
9 Akron	262.8	264.3	268.0	.3	.4	.4	8.5	9.1	9.1	85.7	83.7	83.8
10 Canton	151.6	154.1	155.2	.9	1.0	1.0	6.3	6.9	7.0	56.3	56.7	56.8
11 Cincinnati	573.3	592.2	593.2	.5	.5	.5	26.4	28.7	28.2	164.7	169.6	170.3
12 Cleveland	889.5	900.0	911.3	1.5	1.6	1.6	32.3	34.3	33.7	274.2	279.5	280.4
13 Columbus	479.7	485.2	490.4	.8	.9	.9	20.9	22.4	22.2	101.2	101.3	101.1
14 Dayton	349.7	356.3	360.1	.4	.4	.4	14.2	16.0	15.8	110.2	110.7	110.0
15 Toledo	300.1	304.5	310.8	.6	.7	.7	12.2	12.9	13.0	90.0	91.7	91.8
16 Youngstown—Warren	212.9	215.1	215.7	.3	.3	.3	8.2	9.2	9.2	83.2	81.0	81.1
17 OKLAHOMA	992.4	1,041.5	1,041.7	50.4	54.6	54.4	51.6	58.0	57.5	165.3	169.9	170.9
18 Oklahoma City	342.9	374.3	374.4	11.7	13.9	13.9	18.7	25.6	24.8	44.8	47.9	48.3
19 Tulsa	259.7	267.3	267.2	16.1	16.7	16.6	14.2	15.5	15.2	54.5	55.3	55.6
20 OREGON	958.6	1,009.8	1,014.5	1.9	2.2	2.0	45.5	52.2	52.7	213.3	227.6	224.4
21 Eugene—Springfield	99.0	100.6	(*)	(1)	(1)	(*)	5.5	5.6	(*)	20.3	21.4	(*)
22 Jackson County	-	-	-	-	-	-	-	-	-	8.2	8.0	7.9
23 Portland	496.5	525.9	528.6	(1)	(1)	(1)	23.3	28.4	28.8	101.7	109.0	108.0
24 Salem	85.2	88.1	87.0	(1)	(1)	(1)	5.3	5.3	5.6	16.3	17.5	15.7
25 PENNSYLVANIA	4,610.7	4,647.1	4,668.1	49.2	47.7	47.1	199.9	204.9	202.4	1,346.5	1,371.7	1,370.3
26 Allentown—Bethlehem—Easton	262.1	264.8	265.8	(1)	(1)	(1)	10.7	10.0	9.9	107.5	108.2	108.2
27 Altoona	52.1	52.6	52.1	(1)	(1)	(1)	2.7	2.5	2.4	13.1	12.9	12.7
28 Delaware Valley ¹¹	1,530.9	1,538.8	1,554.8	(1)	(1)	(1)	55.6	57.1	57.3	382.5	382.3	382.6
29 Erie	112.6	114.0	116.1	(1)	(1)	(1)	3.6	4.2	4.1	43.6	43.7	45.2
30 Harrisburg	207.3	211.7	211.2	(1)	(1)	(1)	8.8	10.5	10.3	40.0	41.6	41.3
31 Johnstown	86.5	87.3	87.5	9.0	9.2	9.4	3.8	2.7	2.7	18.8	19.6	19.2
32 Lancaster	143.0	144.3	145.6	(1)	(1)	(1)	7.2	7.9	7.8	57.7	58.8	59.0
33 Northeast Pennsylvania	232.3	230.7	232.0	1.4	1.4	1.4	13.2	10.3	10.1	69.4	70.3	70.6
34 Philadelphia SMSA	1,833.1	1,856.4	1,873.6	(1)	(1)	(1)	66.5	69.8	69.9	449.9	452.6	453.7
35 Philadelphia City ¹²	797.6	806.8	807.8	(1)	(1)	(1)	17.0	18.4	17.9	156.2	155.4	155.5
36 Pittsburgh	918.7	931.1	929.7	12.0	11.6	11.6	48.8	51.7	50.6	244.8	250.3	248.4
37 Reading	134.8	138.0	138.5	(1)	(1)	(1)	5.2	5.6	5.5	52.4	53.5	52.9
38 Scranton ¹³	82.8	82.3	82.2	(1)	(1)	(1)	2.8	2.2	2.2	26.1	26.9	27.0
39 Wilkes-Barre—Hazleton ¹⁴	122.8	120.9	122.0	1.3	1.2	1.2	9.1	7.1	7.0	38.8	38.8	38.6
40 Williamsport	46.3	48.6	48.5	(1)	(1)	(1)	1.9	2.1	2.1	17.9	18.4	18.2
41 York	143.8	148.5	149.8	(1)	(1)	(1)	6.4	6.9	6.8	60.9	63.7	64.8
42 RHODE ISLAND	389.5	405.6	406.4	(1)	(1)	(1)	13.2	14.7	14.9	131.7	138.3	139.0
43 Providence—Warwick—Pawtucket	400.2	417.9	419.0	(1)	(1)	(1)	13.4	14.9	15.1	148.9	155.0	155.9
44 SOUTH CAROLINA	1,097.4	1,118.6	1,129.6	1.9	1.9	1.9	69.2	72.9	72.5	384.0	387.5	387.9
45 Charleston—North Charleston	131.6	133.1	134.3	(1)	(1)	(1)	10.6	9.7	9.6	18.4	18.7	18.8
46 Columbia	166.3	170.5	171.7	(1)	(1)	(1)	8.3	8.3	8.5	25.0	25.4	25.5
47 Greenville—Spartanburg	245.0	251.0	250.8	(1)	(1)	(1)	14.9	16.9	16.9	100.8	102.4	102.5
48 SOUTH DAKOTA	230.1	235.3	235.3	2.7	2.7	2.6	13.4	14.2	14.3	24.1	24.1	24.6
49 Rapid City	27.3	27.0	26.4	(3)	(3)	(3)	2.7	2.7	2.6	2.6	2.6	2.7
50 Sioux Falls	50.5	51.5	51.4	(3)	(3)	(3)	2.9	3.6	3.4	7.4	7.3	7.3
51 TENNESSEE	1,673.4	1,709.0	1,713.6	9.4	8.7	8.4	82.3	90.3	90.8	520.4	530.1	526.4
52 Chattanooga	162.5	163.7	163.6	1.1	1.2	1.2	5.9	5.9	5.8	56.0	55.1	54.8
53 Knoxville	185.9	187.2	188.4	1.6	1.6	1.6	12.0	11.4	11.6	52.3	53.2	52.2
54 Memphis	342.6	346.0	347.2	.2	.2	.2	14.9	13.3	13.2	61.7	63.9	63.7
55 Nashville—Davidson	333.1	343.5	345.0	(1)	(1)	(1)	17.5	20.7	21.3	82.1	83.0	83.0
56 TEXAS	4,943.1	5,158.4	5,180.0	159.6	172.9	172.6	347.9	362.6	364.4	909.0	955.6	959.1
57 Amarillo	69.9	71.9	72.2	(1)	(1)	(1)	4.8	5.6	5.6	8.6	9.1	9.1
58 Austin	203.2	213.2	216.0	(1)	(1)	(1)	11.6	13.2	13.2	23.2	26.1	26.3
59 Beaumont—Port Arthur—Orange	144.1	142.9	144.0	(1)	(1)	(1)	16.4	14.7	15.0	41.6	41.5	41.6
60 Corpus Christi	103.7	107.6	107.4	4.1	4.3	4.3	9.4	11.2	11.5	12.9	13.2	13.2
61 Dallas-Fort Worth	1,205.1	1,256.3	1,261.0	14.2	16.3	16.4	56.8	61.1	61.2	270.1	284.3	285.4
62 El Paso	141.1	144.6	144.7	(1)	(1)	(1)	8.3	8.5	8.6	28.1	29.3	29.4
63 Galveston—Texas City	69.3	72.7	72.5	(1)	(1)	(1)	5.0	5.6	5.9	11.9	11.7	11.9

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)

Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services			Government		
OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
105.2	109.5	109.9	418.3	432.4	435.3	84.1	84.5	84.3	297.8	312.7	313.4	359.7	364.3	368.3
3.3	3.4	3.4	13.3	13.9	14.2	2.4	2.4	2.4	11.0	11.4	11.3	11.3	11.9	12.1
27.2	27.6	27.7	70.1	71.7	72.3	18.6	18.7	18.7	44.0	46.5	46.3	36.1	37.2	37.6
20.2	21.2	21.2	71.1	72.7	73.6	16.2	16.4	16.7	50.1	52.7	52.7	41.6	41.6	43.2
10.7	11.7	11.7	46.6	47.7	47.9	13.7	13.8	14.0	48.7	50.0	51.4	64.6	66.8	67.3
14.0	15.2	15.2	63.7	65.7	65.9	10.1	10.7	10.7	43.0	44.7	44.9	58.8	58.3	59.6
3.7	4.0	3.9	19.1	19.9	20.2	3.4	3.6	3.7	12.3	12.0	12.7	11.8	11.6	12.0
221.3	223.2	230.8	932.9	962.5	962.0	185.3	193.8	193.0	742.3	774.9	771.9	644.4	610.3	645.2
14.2	13.8	14.6	58.1	61.3	61.2	9.0	9.4	9.3	45.7	47.9	47.7	41.2	38.7	42.0
7.2	7.1	7.7	32.4	33.8	33.6	5.6	5.9	5.9	25.4	26.1	26.2	17.5	16.7	17.0
32.6	34.2	34.2	132.8	135.3	135.8	29.9	30.3	30.2	106.5	113.3	112.5	79.9	80.4	81.6
46.0	47.8	48.5	204.1	209.2	209.1	45.3	46.2	45.8	168.2	176.7	177.4	118.0	104.6	114.8
23.5	24.6	25.1	114.9	117.2	118.2	31.7	33.6	33.7	91.6	94.5	94.8	95.2	90.7	94.5
12.6	13.4	13.4	72.6	74.8	75.2	12.0	12.6	12.6	63.9	66.1	67.2	63.9	62.2	65.4
20.0	20.7	21.3	67.3	69.6	70.1	9.9	10.5	10.5	54.1	57.5	57.7	45.8	40.9	45.6
9.9	10.1	10.4	45.0	46.3	46.1	6.9	7.0	6.9	34.2	36.5	35.6	25.2	24.7	25.9
59.6	61.3	61.0	235.7	246.6	244.9	49.6	51.6	51.3	162.7	175.7	174.0	217.5	223.8	227.7
20.5	21.4	21.4	85.6	90.1	89.7	21.7	23.2	23.1	57.1	63.0	63.3	82.8	89.2	89.9
19.6	19.9	19.9	63.4	64.4	64.0	13.3	13.7	13.8	50.8	53.6	53.8	27.8	28.2	28.3
55.0	58.3	58.6	229.4	244.4	243.4	58.5	62.8	62.9	165.3	174.5	174.4	189.7	187.8	196.1
4.9	5.1	(*)	24.3	24.5	(*)	4.8	4.9	(*)	17.4	17.7	(*)	21.8	21.4	(*)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32.7	34.7	34.8	126.4	135.0	135.2	38.0	40.1	40.1	96.6	101.9	102.4	77.8	76.8	79.3
3.0	3.2	3.3	17.1	17.7	17.7	4.9	5.1	5.1	12.8	13.0	13.0	25.8	26.3	26.6
259.6	259.5	260.9	936.7	937.1	950.4	219.3	226.8	227.8	879.5	890.8	904.6	720.0	708.6	704.6
12.6	13.4	13.5	45.6	46.8	46.8	7.9	8.1	8.1	40.2	40.8	41.0	37.6	37.5	38.3
8.2	8.2	8.2	11.4	11.6	11.4	1.4	1.4	1.4	7.9	8.2	8.0	7.4	7.8	8.0
81.8	82.2	82.8	325.4	323.1	330.7	99.6	101.0	101.2	351.1	362.4	368.1	234.9	230.7	232.1
5.2	5.3	5.4	21.5	22.1	22.0	4.5	4.6	4.7	19.8	19.8	19.9	14.4	14.3	14.8
15.1	15.0	14.8	40.6	40.9	41.5	11.5	11.9	12.0	36.6	36.6	35.8	54.7	55.2	55.5
5.6	5.7	5.6	16.5	16.1	16.2	3.6	3.8	3.8	15.2	15.3	15.2	14.0	14.9	15.4
6.4	6.7	6.9	31.1	30.4	31.0	4.4	4.6	4.6	22.0	22.2	22.1	14.2	13.7	14.2
12.5	12.8	12.7	49.0	48.7	49.0	8.8	9.2	9.2	40.6	40.4	40.4	37.4	37.6	38.6
97.0	96.9	97.7	406.2	406.8	415.5	113.8	116.5	116.8	407.2	423.8	429.0	292.5	290.0	291.0
55.3	54.8	55.1	156.5	157.3	160.6	65.7	67.0	66.9	200.9	205.4	209.4	146.0	148.5	142.4
57.8	56.1	56.4	199.5	205.0	204.6	41.9	43.1	43.1	188.1	187.1	188.0	125.8	126.2	127.0
6.4	6.4	6.5	25.1	25.1	25.2	5.2	5.7	5.6	21.6	22.2	22.6	18.9	19.5	20.2
4.3	4.4	4.4	18.8	18.1	18.3	3.3	3.4	3.4	16.3	16.4	16.1	11.2	10.9	10.8
6.2	6.5	6.5	25.5	25.9	25.8	4.7	4.9	5.0	17.7	17.0	17.5	19.5	19.5	20.4
2.3	2.4	2.4	9.0	10.1	10.2	1.8	2.0	2.0	7.7	7.7	7.7	5.7	5.9	5.9
6.6	6.8	6.6	29.9	31.3	31.1	3.6	3.9	3.8	19.4	19.3	19.5	17.0	16.6	17.2
13.7	13.6	13.7	78.9	81.2	81.2	19.5	20.2	20.1	73.5	77.3	77.6	59.0	60.3	59.9
13.5	13.5	13.6	78.5	81.8	81.7	19.4	20.5	20.6	70.6	74.8	75.2	55.9	57.4	56.9
44.9	49.4	49.7	201.8	210.8	208.8	41.6	44.3	44.2	136.0	138.6	141.1	218.0	213.2	223.5
7.2	8.6	8.4	28.4	28.5	28.5	5.6	6.0	5.9	19.8	20.6	20.4	41.6	41.0	42.7
8.4	8.9	9.0	35.2	35.9	35.9	12.2	13.2	13.2	25.1	25.5	25.8	52.1	53.3	53.8
9.5	9.8	9.8	46.3	47.5	47.4	8.7	9.2	9.1	32.6	33.0	33.0	32.2	32.2	32.1
12.1	12.8	12.7	63.0	64.3	63.5	10.1	10.6	10.4	48.8	51.7	51.6	55.9	54.9	55.6
1.8	1.9	1.8	7.7	7.7	7.6	1.2	1.2	1.2	5.9	5.8	5.4	5.4	5.1	5.1
3.9	4.0	4.1	15.6	15.7	15.6	2.8	2.9	2.9	11.5	11.3	11.4	6.4	6.7	6.7
79.1	81.8	82.1	355.9	367.7	369.8	70.4	71.5	71.0	257.1	257.3	257.4	298.8	301.6	307.7
6.3	6.3	6.2	29.7	29.9	29.8	8.4	8.6	8.6	25.7	25.7	25.9	29.4	31.0	31.3
7.6	7.7	7.7	37.9	38.1	38.3	6.9	7.0	7.0	27.7	27.8	27.9	39.9	40.4	42.1
23.9	25.0	25.1	90.5	91.4	91.6	18.7	19.0	18.8	66.9	67.7	68.1	65.8	65.5	66.5
17.7	18.6	18.6	74.4	77.3	77.8	19.8	19.8	20.1	61.2	61.0	60.8	60.4	63.1	63.4
312.9	330.0	330.9	1,213.4	1,256.8	1,259.8	275.9	289.4	290.4	850.7	887.4	885.7	873.7	903.7	917.1
6.8	6.9	6.9	20.9	21.1	21.2	3.5	3.6	3.6	13.3	13.4	13.3	12.0	12.2	12.5
6.4	6.8	6.8	42.4	44.0	44.3	11.6	12.7	12.7	33.9	35.1	35.3	74.1	75.3	77.4
10.5	11.0	11.2	29.5	29.5	29.4	5.1	5.4	5.4	22.2	22.0	22.5	18.8	18.8	18.9
6.1	6.4	6.2	25.4	25.6	25.6	5.3	5.7	5.6	17.1	17.5	17.5	23.4	23.7	23.5
79.4	84.6	85.0	322.4	333.3	333.1	90.3	95.2	95.2	208.9	219.9	219.8	163.0	161.6	164.9
9.2	9.2	9.2	35.9	36.3	36.0	6.8	7.2	7.2	24.9	24.9	24.9	27.9	29.2	29.4
7.0	7.4	7.3	12.7	13.5	13.3	4.6	4.9	4.9	10.2	11.1	10.9	17.9	18.5	18.3

**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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
TEXAS—Continued												
1 Houston	1,186.9	1,249.3	1,255.1	51.1	52.3	53.2	130.3	140.3	140.6	191.4	204.7	204.9
2 Lubbock	85.4	86.6	87.5	(1)	(1)	(1)	5.1	5.3	5.6	14.3	13.4	13.2
3 San Antonio	344.6	357.1	356.7	1.8	1.8	1.8	21.8	24.3	24.5	43.1	45.2	45.4
4 Waco	65.0	66.4	66.5	(1)	(1)	(1)	3.3	3.9	3.9	15.9	16.1	16.0
5 Wichita Falls	48.3	49.6	49.2	2.5	2.6	2.5	2.5	2.6	2.6	8.5	9.2	9.0
UTAH												
6	501.5	530.1	534.3	16.0	16.9	16.8	35.5	38.7	38.1	77.0	81.5	82.0
7 Salt Lake City—Ogden	358.0	377.9	380.2	7.0	7.4	7.3	24.4	26.6	26.5	51.3	54.4	54.2
VERMONT												
8	181.4	188.5	188.8	.7	.7	.7	9.7	9.6	9.5	44.3	48.3	48.5
9 Burlington	47.8	50.3	51.1	-	-	-	-	-	-	11.0	12.6	12.6
10 Springfield	13.4	14.1	14.1	-	-	-	-	-	-	5.5	6.0	6.0
VIRGINIA												
11	1,947.6	2,016.6	2,037.2	22.6	16.2	23.0	119.2	128.2	128.9	408.0	412.4	413.1
12 Bristol	24.9	26.0	26.2	(1)	(1)	(1)	1.0	1.3	1.2	8.5	9.2	9.3
13 Lynchburg	64.3	65.9	66.0	(1)	(1)	(1)	3.2	3.6	3.3	28.5	28.7	28.7
14 Newport News—Hampton	135.8	140.3	140.6	(1)	(1)	(1)	5.9	6.9	7.0	35.2	33.1	32.8
15 Norfolk—Virginia Beach—Portsmouth	260.1	269.3	269.6	(1)	(1)	(1)	16.0	18.3	18.2	28.5	29.1	29.1
16 Northern Virginia	379.8	397.6	398.5	.4	.4	.4	26.1	27.6	27.5	14.4	15.2	15.2
17 Petersburg-Colonial Heights-Hopewell	44.5	44.5	44.9	(1)	(1)	(1)	2.3	2.2	2.2	12.4	12.2	12.3
18 Richmond	302.1	312.2	312.4	.3	.4	.4	18.5	18.8	18.8	52.9	54.4	54.6
19 Roanoke	99.7	99.5	102.1	.2	.2	.2	5.9	6.0	5.9	21.4	21.5	21.6
WASHINGTON												
20	1,372.5	1,478.2	(*)	2.2	2.5	(*)	81.9	93.5	(*)	261.3	296.9	(*)
21 Seattle—Everett	633.1	701.2	(*)	(1)	(1)	(*)	35.0	43.4	(*)	117.3	150.4	(*)
22 Spokane	114.1	119.9	(*)	(1)	(1)	(*)	6.4	8.1	(*)	15.9	16.8	(*)
23 Tacoma	125.7	130.8	(*)	(1)	(1)	(*)	7.1	8.1	(*)	21.0	21.5	(*)
WEST VIRGINIA												
24	625.8	620.0	628.4	74.6	65.8	73.6	40.1	39.9	40.1	126.2	126.8	125.8
25 Charleston	108.7	108.0	108.6	6.6	6.7	6.7	7.8	7.6	7.7	19.5	19.4	19.3
26 Huntington—Ashland	99.6	99.3	100.4	1.0	.6	1.0	6.6	6.1	6.2	28.2	28.6	28.4
27 Parkersburg—Marietta	53.0	54.0	54.3	.5	.5	.5	3.1	3.1	3.3	15.9	16.9	16.9
28 Wheeling	65.8	65.6	66.4	7.3	7.2	7.1	3.6	3.8	3.8	14.5	13.9	13.9
WISCONSIN												
29	1,834.5	1,915.0	1,926.2	2.6	2.7	2.7	83.9	99.8	101.2	540.1	567.8	563.0
30 Appleton—Oshkosh	113.5	117.7	119.1	(1)	(1)	(1)	5.1	5.7	5.9	44.7	47.4	47.2
31 Eau Claire	41.7	41.8	41.9	(1)	(1)	(1)	1.8	1.6	1.6	8.7	8.5	8.6
32 Green Bay	71.6	73.1	74.0	(1)	(1)	(1)	3.6	3.8	3.8	21.0	21.6	21.2
33 Kenosha	40.9	42.5	43.2	(1)	(1)	(1)	1.2	1.3	1.4	16.3	18.1	18.1
34 La Crosse	40.3	41.6	42.0	(1)	(1)	(1)	2.0	2.1	2.2	10.1	10.5	10.5
35 Madison	154.4	156.6	158.0	(1)	(1)	(1)	8.1	8.0	7.8	18.4	18.7	18.2
36 Milwaukee	626.8	641.1	646.8	(1)	(1)	(1)	23.7	26.4	26.5	202.1	209.0	209.9
37 Racine	67.0	69.0	68.9	(1)	(1)	(1)	2.6	2.9	2.9	28.4	29.6	29.7
WYOMING												
38	174.1	190.6	189.2	26.1	29.9	30.0	18.7	20.4	20.3	9.7	9.2	9.9
39 Casper	31.3	35.1	35.1	5.9	7.1	6.9	3.2	4.0	4.1	1.7	1.8	1.8
40 Cheyenne	24.6	27.4	28.0	(1)	(1)	(1)	1.8	2.0	2.1	1.6	1.6	1.6

1 Combined with services.
 2 Based on 1972 Standard Industrial Classification Manual and adjusted to 1977 benchmark; not strictly comparable with previously published data.
 3 Combined with construction.
 4 Area included in Chicago-Gary Standard Consolidated Statistical Area.
 5 Revised to 1978 benchmark; not strictly comparable with previously published data.
 6 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Burlington, Camden, and Gloucester Counties, New Jersey.
 7 Subarea of New York-Northeastern New Jersey.
 8 Subarea of Rochester Standard Metropolitan Statistical Area.
 9 Area included in New York and Nassau-Suffolk combined SMSA's.
 10 Subarea of New York Standard Metropolitan Statistical Area.
 11 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pennsylvania.

12 Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Philadelphia County.
 13 Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Lackawanna County.
 14 Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Luzerne County.
 15 Total includes data for industry divisions not shown separately.
 16 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
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			
OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	
87.2	92.5	92.7	293.4	308.2	310.3	70.0	76.1	76.7	229.6	239.2	239.6	133.9	136.0	137.1	1
4.6	4.8	4.8	26.1	26.5	26.9	3.9	4.2	4.2	13.9	14.3	14.4	17.5	18.1	18.4	2
15.1	16.1	16.1	86.2	87.5	87.7	23.2	24.5	24.5	64.7	66.9	66.9	88.7	90.8	89.8	3
3.2	3.2	3.2	15.0	15.4	15.6	3.7	3.8	3.8	13.0	13.1	13.2	10.9	10.9	10.8	4
2.4	2.5	2.5	12.4	12.5	12.4	2.2	2.3	2.3	7.3	7.5	7.5	10.5	10.4	10.4	5
30.3	32.8	32.8	122.4	129.7	130.0	22.6	24.8	24.8	83.7	89.8	89.6	114.0	116.0	120.2	6
24.2	25.8	25.7	90.2	96.0	96.7	18.8	20.3	20.3	58.5	63.1	63.1	83.5	84.3	86.3	7
8.4	8.7	8.8	38.0	40.0	39.8	7.1	7.5	7.3	40.8	41.6	41.6	32.6	32.2	32.7	8
2.1	2.2	2.2	10.1	10.9	10.8	-	-	-	10.3	10.8	10.9	-	-	-	9
.7	.8	.8	2.2	2.3	2.3	-	-	-	2.6	2.6	2.6	-	-	-	10
106.9	104.0	110.2	406.6	419.9	424.7	91.0	94.2	93.8	330.5	349.3	347.2	462.8	492.4	496.3	11
.9	.8	.8	6.1	5.9	6.0	.8	.9	.9	3.1	3.1	3.1	4.5	4.8	4.9	12
2.5	2.4	2.4	10.5	10.7	10.9	2.8	2.9	2.9	8.5	8.6	8.8	8.3	9.0	9.0	13
4.5	4.8	4.8	24.4	26.0	26.2	4.3	4.6	4.5	24.3	26.9	26.3	37.2	38.0	39.0	14
17.1	16.5	17.3	63.7	65.3	65.4	12.9	13.2	13.1	45.1	47.4	46.2	76.8	79.5	80.3	15
26.4	27.6	27.5	90.8	95.6	96.4	24.0	25.6	25.3	88.0	93.8	93.6	109.7	111.8	112.6	16
1.3	1.4	1.3	8.2	8.1	8.1	1.1	1.1	1.1	5.2	5.2	5.3	14.0	14.3	14.6	17
18.2	18.6	18.6	69.3	70.2	70.4	23.1	23.5	23.4	51.5	52.1	52.0	68.3	74.2	74.2	18
10.0	6.8	9.5	23.5	24.5	24.8	5.5	5.8	5.8	17.7	18.1	18.2	15.5	16.6	16.1	19
78.5	85.6	(*)	339.7	368.7	(*)	77.2	83.7	(*)	251.2	277.6	(*)	280.5	269.7	(*)	20
44.8	48.0	(*)	159.6	172.9	(*)	45.5	48.9	(*)	121.4	133.5	(*)	109.5	104.1	(*)	21
7.5	7.9	(*)	31.5	33.5	(*)	7.4	8.2	(*)	25.8	26.4	(*)	19.6	19.0	(*)	22
5.9	6.3	(*)	29.8	32.7	(*)	6.2	6.5	(*)	25.8	29.7	(*)	29.9	26.0	(*)	23
41.2	39.0	41.1	123.3	123.5	123.6	19.8	20.1	20.1	87.3	89.2	89.0	113.3	115.9	115.0	24
9.0	9.1	9.2	24.3	24.1	24.4	4.6	4.7	4.7	18.2	18.2	18.3	18.7	18.1	18.4	25
9.5	9.1	9.3	20.6	20.7	21.1	3.6	3.6	3.6	13.2	13.9	13.9	16.9	16.5	16.9	26
2.4	2.5	2.5	11.4	11.6	11.6	1.8	1.9	1.9	8.1	8.0	8.1	9.7	9.7	9.6	27
3.7	3.7	3.7	14.3	14.9	15.3	2.4	2.4	2.4	12.5	12.4	12.5	7.6	7.3	7.6	28
87.9	89.8	90.9	417.1	436.3	443.2	80.3	84.4	84.6	326.7	343.5	342.6	295.9	290.7	298.1	29
4.2	4.0	4.1	23.0	23.8	24.3	4.4	4.5	4.6	17.4	18.1	18.1	14.8	14.2	14.9	30
2.4	2.4	2.4	10.4	10.8	11.0	1.3	1.4	1.3	8.0	8.2	8.2	9.1	8.8	8.8	31
4.4	4.5	4.5	17.0	17.4	18.0	2.4	2.6	2.6	13.2	13.4	13.7	10.1	9.8	10.1	32
1.5	1.4	1.6	7.9	8.0	8.1	.8	.9	.9	7.2	7.3	7.2	5.9	5.5	5.9	33
2.1	2.2	2.1	10.7	11.2	11.5	.9	.9	.9	8.3	8.6	8.6	6.3	6.1	6.2	34
5.4	5.4	5.4	33.3	34.8	35.2	10.3	11.2	11.3	25.4	25.6	25.9	53.5	52.9	54.3	35
32.5	33.2	33.5	136.2	139.4	142.6	32.2	33.3	33.3	124.4	128.7	129.5	75.6	71.0	71.6	36
2.7	2.6	2.5	12.3	12.7	12.8	2.0	2.3	2.2	10.2	10.6	10.4	8.9	8.4	8.4	37
13.3	14.3	14.2	38.4	43.2	43.0	5.7	6.2	6.2	23.1	26.8	24.6	39.1	40.6	41.0	38
2.1	2.3	2.3	8.1	9.7	9.8	1.3	1.3	1.3	4.5	4.5	4.5	4.5	4.4	4.4	39
3.4	3.7	3.7	5.9	6.5	6.9	1.4	1.4	1.4	3.9	4.2	4.3	6.6	8.0	8.0	40

ESTABLISHMENT DATA HOURS AND EARNINGS

C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	TOTAL PRIVATE	\$194.58	\$193.86	\$209.52	\$210.37	\$210.15	\$5.39	\$5.40	\$5.82	\$5.86	\$5.87
	MINING	317.02	317.80	345.39	349.09	349.43	7.14	7.19	7.94	7.97	8.07
10	METAL MINING	305.83	309.10	359.06	359.87	-	7.57	7.67	8.59	8.63	
101	Iron ores	326.16	331.67	373.05	366.08		7.55	7.47	8.84	8.80	
102	Copper ores	297.04	296.29	362.75	367.69		7.90	7.88	8.72	8.86	
11, 12	COAL MINING	371.76	374.41	394.80	400.49		8.43	8.49	9.87	9.84	
12	BITUMINOUS COAL AND LIGNITE MINING	372.65	375.29	396.00	401.71		8.45	8.51	9.90	9.87	
13	OIL AND GAS EXTRACTION	294.45	293.40	325.06	327.67		6.50	6.52	7.16	7.17	
131, 2	Crude petroleum, natural gas, and natural gas liquids	300.66	299.21	345.24	339.02		7.28	7.28	8.22	8.13	
138	Oil and gas field services	291.22	290.78	317.04	323.27		6.17	6.20	6.76	6.82	
14	NONMETALLIC MINERALS, EXCEPT FUELS	272.40	269.25	299.10	302.61		6.00	6.01	6.46	6.55	
142	Crushed and broken stone	269.56	262.48	301.11	302.73	-	5.86	5.82	6.26	6.32	
	CONSTRUCTION	308.39	298.19	332.63	336.93	324.85	8.29	8.26	8.87	8.89	8.90
15	GENERAL BUILDING CONTRACTORS	284.46	279.00	295.71	299.63	-	7.73	7.75	8.26	8.30	
152	Residential building construction	269.37	262.43	278.24	282.46	-	7.30	7.31	7.86	7.89	
153	Operative builders	247.38	243.89	258.79	259.19	-	6.91	6.87	7.09	7.24	
154	Nonresidential building construction	306.81	304.08	322.54	327.20	-	8.36	8.40	8.91	8.94	
16	HEAVY CONSTRUCTION CONTRACTORS	309.25	286.48	346.51	351.54		7.77	7.66	8.39	8.37	
161	Highway and street construction	310.67	271.32	340.63	346.81		7.45	7.14	7.94	7.90	
162	Heavy construction, except highway	308.44	294.57	349.00	355.06		7.97	7.94	8.66	8.66	
17	SPECIAL TRADE CONTRACTORS	320.89	314.16	347.39	350.02		8.84	8.80	9.44	9.46	
171	Plumbing, heating, air conditioning and mechanical	336.55	328.19	367.67	368.05		8.88	8.87	9.65	9.66	
172	Painting, paper hanging, decorating and wall covering	282.20	275.22	312.21	311.66		8.30	8.24	8.77	8.73	
173	Electrical work	371.95	365.02	401.57	401.19		9.84	9.76	10.54	10.53	
174	Masonry, stonework, and plastering and concrete	292.03	292.56	317.38	324.05		8.64	8.63	9.12	9.18	
175	Carpentering and flooring	277.64	274.92	304.07	305.95		7.91	7.90	8.47	8.57	
176	Roofing and sheet metal work	263.09	247.62	277.05	276.76		7.83	7.69	8.27	8.14	
	MANUFACTURING	236.29	238.10	255.60	257.00	259.90	5.82	5.85	6.28	6.33	6.37
24, 25, 32-39	DURABLE GOODS	256.89	258.75	277.79	279.19	282.62	6.22	6.25	6.71	6.76	6.81
20-23, 26-31	NONDURABLE GOODS	206.32	208.03	223.68	222.78	225.50	5.21	5.24	5.62	5.64	5.68
	DURABLE GOODS										
24	LUMBER AND WOOD PRODUCTS	212.50	208.95	230.00	232.13	228.85	5.26	5.25	5.75	5.76	5.75
241	Logging camps and logging contractors	275.26	258.00	307.69	319.03	-	7.04	6.88	7.56	7.56	-
242	Sawmills and planing mills	226.04	222.77	241.54	242.72	-	5.46	5.46	5.92	5.92	-
2421	Sawmills and planing mills, general	238.21	234.36	254.81	255.84	-	5.74	5.73	6.23	6.24	-
2426	Hardwood dimension and flooring	151.03	151.10	163.22	165.64	-	3.72	3.74	4.04	4.04	-
243	Millwork, plywood, and structural members	207.03	207.08	223.28	223.91	-	5.15	5.19	5.61	5.64	-
2431	Millwork	195.82	196.12	213.70	210.68	-	4.92	4.94	5.41	5.43	-
2434	Wood kitchen cabinets	181.27	180.69	202.91	203.78	-	4.66	4.73	5.06	5.12	-
2435	Hardwood veneer and plywood	175.12	171.74	177.58	182.00	-	4.23	4.23	4.53	4.55	-
2436	Softwood veneer and plywood	271.05	273.97	286.63	290.90	-	6.50	6.57	7.13	7.13	-
244	Wooden containers	149.00	146.69	159.05	161.20	-	3.87	3.85	4.23	4.22	-
245	Wood buildings and mobile homes	189.67	188.07	207.19	211.29	-	4.73	4.81	5.34	5.39	-
2451	Mobile homes	188.97	187.89	202.69	207.67	-	4.76	4.83	5.32	5.38	-
249	Miscellaneous wood products	174.99	176.14	187.53	188.47	-	4.31	4.36	4.70	4.70	-
25	FURNITURE AND FIXTURES	178.04	177.91	187.54	188.42	188.73	4.44	4.47	4.76	4.77	4.79
251	Household furniture	165.59	164.30	174.33	175.62	-	4.15	4.17	4.47	4.48	-
2511	Wood household furniture	154.66	154.33	161.87	166.38	-	3.80	3.82	4.14	4.17	-
2512	Upholstered household furniture	173.76	172.97	184.99	184.99	-	4.49	4.54	4.78	4.78	-
2514	Metal household furniture	171.00	167.35	175.95	175.03	-	4.34	4.28	4.57	4.57	-
2515	Mattresses and bedsprings	191.52	185.96	201.96	196.72	-	4.80	4.83	5.10	5.07	-
252	Office furniture	206.75	209.99	212.22	211.41	-	4.97	5.06	5.24	5.22	-
253	Public building and related furniture	203.21	205.42	217.04	214.14	-	5.03	5.11	5.18	5.16	-
254	Partitions and fixtures	217.48	216.00	229.64	228.67	-	5.41	5.40	5.67	5.76	-
259	Miscellaneous furniture and fixtures	195.43	198.58	206.06	205.41	-	4.79	4.82	5.23	5.24	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^p	Nov. 1978 ^p	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^p	Nov. 1978 ^p
	TOTAL PRIVATE	36.1	35.9	36.0	35.9	35.8					
	MINING	44.4	44.2	43.5	43.8	43.3					
10	METAL MINING	40.4	40.3	41.8	41.7	-	-	-	-	-	-
101	Iron ores	43.2	44.4	42.2	41.6	-	-	-	-	-	
102	Copper ores	37.6	37.6	41.6	41.5	-	-	-	-	-	
11, 12	COAL MINING	44.1	44.1	40.0	40.7	-	-	-	-	-	
12	BITUMINOUS COAL AND LIGNITE MINING	44.1	44.1	40.0	40.7	-	-	-	-	-	
13	OIL AND GAS EXTRACTION	45.3	45.0	45.4	45.7	-	-	-	-	-	
131, 2	Crude petroleum, natural gas, and natural gas liquids	41.3	41.1	42.0	41.7	-	-	-	-	-	
138	Oil and gas field services	47.2	46.9	46.9	47.4	-	-	-	-	-	
14	NONMETALLIC MINERALS, EXCEPT FUELS	45.4	44.8	46.3	46.2	-	-	-	-	-	
142	Crushed and broken stone	46.0	45.1	48.1	47.9	-	-	-	-	-	
	CONSTRUCTION	37.2	36.1	37.5	37.9	36.5					
15	GENERAL BUILDING CONTRACTORS	36.8	36.0	35.8	36.1	-	-	-	-	-	
152	Residential building construction	36.9	35.9	35.4	35.8	-	-	-	-	-	
153	Operative builders	35.8	35.5	36.5	35.8	-	-	-	-	-	
154	Nonresidential building construction	36.7	36.2	36.2	36.6	-	-	-	-	-	
16	HEAVY CONSTRUCTION CONTRACTORS	39.8	37.4	41.3	42.0	-	-	-	-	-	
161	Highway and street construction	41.7	38.0	42.9	43.9	-	-	-	-	-	
162	Heavy construction, except highway	38.7	37.1	40.3	41.0	-	-	-	-	-	
17	SPECIAL TRADE CONTRACTORS	36.3	35.7	36.8	37.0	-	-	-	-	-	
171	Plumbing, heating, air conditioning	37.9	37.0	38.1	38.1	-	-	-	-	-	
172	Painting, paper hanging, decorating	34.0	33.4	35.6	35.7	-	-	-	-	-	
173	Electrical work	37.8	37.4	38.1	38.1	-	-	-	-	-	
174	Masonry, stonework, and plastering	33.8	33.9	34.8	35.3	-	-	-	-	-	
175	Carpentering and flooring	35.1	34.8	35.9	35.7	-	-	-	-	-	
176	Roofing and sheet metal work	33.6	32.2	33.5	34.0	-	-	-	-	-	
	MANUFACTURING	40.6	40.7	40.7	40.6	40.8	3.7	3.6	3.9	3.8	
24, 25, 32-39	DURABLE GOODS	41.3	41.4	41.4	41.3	41.5	4.0	3.9	4.2	4.1	
20-23, 26-31	NONDURABLE GOODS	39.6	39.7	39.8	39.5	39.7	3.3	3.3	3.6	3.3	
	DURABLE GOODS										
24	LUMBER AND WOOD PRODUCTS	40.4	39.8	40.0	40.3	39.8	4.0	3.6	3.9	4.0	
241	Logging camps and logging contractors	39.1	37.5	40.7	42.2	-	4.5	3.4	4.9	5.6	
242	Sawmills and planing mills	41.4	40.8	40.8	41.0	-	4.7	4.4	4.6	4.8	
2421	Sawmills and planing mills, general	41.5	40.9	40.9	41.0	-	4.9	4.5	4.8	5.0	
2426	Hardwood dimension and flooring	40.6	40.4	40.4	41.0	-	3.9	3.8	3.9	3.9	
243	Millwork, plywood, and structural members	40.2	39.9	39.8	39.7	-	3.6	3.3	3.4	3.3	
2431	Millwork	39.8	39.7	39.5	38.8	-	2.7	2.6	2.6	2.2	
2434	Wood kitchen cabinets	38.9	38.2	40.1	39.8	-	2.9	2.3	2.6	2.5	
2435	Hardwood veneer and plywood	41.4	40.6	39.2	40.0	-	4.4	4.0	3.8	3.7	
2436	Softwood veneer and plywood	41.7	41.7	40.2	40.8	-	5.3	4.9	4.9	5.0	
244	Wooden containers	38.5	38.1	37.6	38.2	-	3.1	2.8	3.1	3.2	
245	Wood buildings and mobile homes	40.1	39.1	38.8	39.2	-	2.9	2.5	2.7	2.7	
2451	Mobile homes	39.7	38.9	38.1	38.6	-	2.8	2.5	2.0	2.2	
249	Miscellaneous wood products	40.6	40.4	39.9	40.1	-	3.7	3.6	3.8	3.6	
25	FURNITURE AND FIXTURES	40.1	39.8	39.4	39.5	39.4	3.0	2.9	2.9	2.8	
251	Household furniture	39.9	39.4	39.0	39.2	-	3.0	2.8	2.8	2.8	
2511	Wood household furniture	40.7	40.4	39.1	39.9	-	3.6	3.4	3.3	3.4	
2512	Upholstered household furniture	38.7	38.1	38.7	38.7	-	2.3	2.1	2.1	2.1	
2514	Metal household furniture	39.4	39.1	38.5	38.3	-	1.8	1.7	1.6	1.9	
2515	Mattresses and bedspings	39.9	38.5	39.6	38.8	-	3.5	2.8	4.2	3.2	
252	Office furniture	41.6	41.5	40.5	40.5	-	3.2	3.6	2.7	2.7	
253	Public building and related furniture	40.4	40.2	41.9	41.5	-	3.6	3.3	3.1	2.6	
254	Partitions and fixtures	40.2	40.0	40.5	39.7	-	3.3	2.9	3.7	3.3	
259	Miscellaneous furniture and fixtures	40.8	41.2	39.4	39.2	-	2.3	2.8	2.7	2.3	

See footnotes at end of table.

ESTABLISHMENT DATA HOURS AND EARNINGS

C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry—Continued

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
32	STONE, CLAY, AND GLASS PRODUCTS	\$ 246.51	\$ 249.37	\$ 271.97	\$ 273.68	\$ 274.07	\$ 5.94	\$ 5.98	\$ 6.46	\$ 6.47	\$ 6.51
321	Flat glass	327.38	327.82	352.29	357.52	—	7.39	7.40	8.08	8.20	—
322	Glass and glassware, pressed or blown	235.07	250.88	271.22	272.57	—	6.09	6.21	6.73	6.73	—
3221	Glass containers	238.88	261.39	284.72	286.01	—	6.37	6.47	7.03	7.01	—
3229	Pressed and blown glass, nec	229.37	236.34	252.00	255.27	—	5.72	5.85	6.30	6.35	—
323	Products of purchased glass	261.14	243.79	274.33	265.42	—	6.13	5.99	6.47	6.26	—
324	Cement, hydraulic	341.82	345.56	380.80	376.98	—	8.10	8.15	8.96	8.87	—
325	Structural clay products	196.52	198.65	214.32	213.15	—	4.77	4.81	5.24	5.25	—
326	Pottery and related products	194.13	195.42	203.71	208.43	—	4.89	4.91	5.21	5.25	—
327	Concrete, gypsum, and plaster products	261.16	256.71	284.68	286.86	—	5.99	5.97	6.47	6.49	—
3271	Concrete block and brick	239.32	236.03	264.74	263.87	—	5.39	5.34	5.87	5.89	—
3272	Concrete products, nec	226.80	231.63	247.66	245.23	—	5.40	5.45	5.80	5.77	—
3273	Ready-mixed concrete	292.16	277.02	315.86	323.55	—	6.64	6.58	7.13	7.19	—
329	Misc. nonmetallic mineral products	242.36	247.87	268.81	273.07	—	5.84	5.93	6.37	6.41	—
3291	Abrasive products	229.31	239.78	252.72	255.19	—	5.69	5.75	6.24	6.27	—
3292	Asbestos products	259.95	271.06	289.29	294.36	—	6.16	6.26	6.62	6.60	—
33	PRIMARY METAL INDUSTRIES	315.95	319.19	355.32	354.48	357.43	7.65	7.71	8.42	8.44	8.49
331	Blast furnace and basic steel products	349.74	352.15	410.18	402.97	—	8.70	8.76	9.72	9.71	—
3312	Blast furnaces and steel mills	357.50	359.00	422.84	413.83	—	8.96	9.02	10.02	10.02	—
3317	Steel pipe and tubes	303.05	313.34	327.83	327.47	—	7.25	7.39	7.75	7.76	—
332	Iron and steel foundries	290.49	294.68	311.33	315.78	—	6.90	6.95	7.36	7.43	—
3321	Gray iron foundries	302.18	306.16	319.07	322.48	—	7.11	7.17	7.49	7.57	—
3322	Malleable iron foundries	299.71	305.14	317.16	334.43	—	7.31	7.30	7.87	8.02	—
3325	Steel foundries, nec	264.55	267.07	297.22	299.34	—	6.39	6.42	7.01	7.06	—
333	Primary nonferrous metals	342.98	343.48	363.58	370.86	—	8.07	8.12	8.74	8.83	—
3334	Primary aluminum	366.96	365.44	383.16	398.14	—	8.80	8.87	9.30	9.39	—
335	Nonferrous rolling and drawing	291.98	296.34	321.41	322.93	—	6.87	6.94	7.44	7.51	—
3351	Copper rolling and drawing	274.13	259.79	304.10	300.91	—	6.39	6.23	6.88	6.87	—
3353	Aluminum sheet, plate, and foil	344.29	358.09	388.37	391.62	—	8.12	8.27	8.99	9.15	—
3357	Nonferrous wire drawing and insulating	275.70	279.97	300.18	300.48	—	6.58	6.65	7.03	7.07	—
336	Nonferrous foundries	244.78	247.70	288.95	262.67	—	5.87	5.94	6.27	6.36	—
3361	Aluminum foundries	252.47	257.46	270.19	273.16	—	6.04	6.13	6.59	6.63	—
34	FABRICATED METAL PRODUCTS	249.26	251.10	265.74	265.68	269.69	6.05	6.08	6.45	6.48	6.53
341	Metal cans and shipping containers	325.30	304.38	361.88	354.71	—	7.41	7.37	8.30	8.23	—
3411	Metal cans	337.57	311.88	373.64	365.07	—	7.62	7.57	8.55	8.49	—
342	Cutlery, hand tools, and hardware	240.85	248.53	250.31	248.65	—	5.86	5.96	6.15	6.17	—
3423, 5	Hand and edge tools, and hand saws and blades	224.13	225.50	237.58	237.20	—	5.44	5.50	5.91	5.93	—
3429	Hardware, nec	256.06	267.13	263.22	260.25	—	6.20	6.33	6.42	6.41	—
343	Plumbing and heating, except electric	211.07	210.94	223.68	226.46	—	5.29	5.30	5.62	5.69	—
3432	Plumbing fittings and brass goods	197.34	199.68	216.86	222.56	—	5.06	5.12	5.49	5.55	—
3433	Heating equipment, except electric	207.43	208.24	222.24	221.43	—	5.16	5.18	5.57	5.62	—
344	Fabricated structural metal products	232.70	235.48	249.69	248.44	—	5.76	5.80	6.15	6.18	—
3441	Fabricated structural metal	236.40	244.22	264.27	265.20	—	6.00	6.03	6.43	6.50	—
3442	Metal doors, sash, and trim	179.29	184.00	194.93	195.92	—	4.46	4.60	4.91	4.96	—
3443	Fabricated plate work (boiler shops)	261.12	263.49	274.73	273.38	—	6.40	6.38	6.75	6.75	—
3444	Sheet metal work	241.40	239.99	251.14	250.43	—	5.99	5.97	6.31	6.34	—
3446	Architectural metal work	222.80	228.83	243.00	238.58	—	5.57	5.65	6.06	6.04	—
345	Screw machine products, bolts, etc.	243.53	246.67	259.80	262.73	—	5.69	5.71	6.07	6.11	—
3451	Screw machine products	227.38	230.37	239.82	242.92	—	5.35	5.37	5.71	5.77	—
3452	Bolts, nuts, rivets, and washers	259.46	262.74	280.99	283.36	—	6.02	6.04	6.43	6.44	—
346	Metal forgings and stampings	300.04	300.04	315.33	318.02	—	7.11	7.11	7.49	7.59	—
3462	Iron and steel forgings	326.04	329.22	340.85	350.67	—	7.80	7.82	8.02	8.29	—
3465	Automotive stampings	367.14	362.90	381.87	382.12	—	8.44	8.42	8.86	8.97	—
3469	Metal stampings, nec	220.17	222.73	235.34	237.15	—	5.37	5.38	5.74	5.77	—
347	Metal services, nec	202.37	204.50	209.56	211.41	—	4.96	5.00	5.20	5.22	—
3471	Plating and polishing	191.29	192.78	202.61	203.52	—	4.70	4.76	5.04	5.05	—
3479	Metal coating and allied services	229.34	232.41	228.17	231.65	—	5.58	5.56	5.62	5.65	—
348	Ordinance and accessories, nec	237.05	236.34	258.08	255.54	—	5.81	5.85	6.31	6.35	—
3483	Ammunition, exc. for small arms, nec	219.64	218.44	225.81	231.00	—	5.45	5.53	5.85	6.00	—
349	Misc. fabricated metal products	232.40	237.31	249.90	251.94	—	5.71	5.76	6.11	6.16	—
3494	Valves and pipe fittings	255.25	261.01	269.19	271.05	—	6.02	6.07	6.44	6.50	—
3496	Misc. fabricated wire products	200.59	207.36	216.40	220.30	—	5.04	5.12	5.41	5.48	—
35	MACHINERY, EXCEPT ELECTRICAL	270.26	272.61	289.65	292.32	297.93	6.45	6.46	6.88	6.96	7.01
351	Engines and turbines	329.95	330.17	346.01	347.33	—	7.62	7.59	8.18	8.25	—
3511	Turbines and turbine generator sets	285.71	288.23	318.78	322.41	—	7.02	7.03	7.59	7.64	—
3519	Internal combustion engines, nec	348.10	348.33	356.16	355.74	—	7.84	7.81	8.40	8.47	—
352	Farm and garden machinery	291.81	279.30	309.55	308.74	—	7.10	7.00	7.55	7.68	—
3523	Farm machinery and equipment	298.70	284.57	318.89	316.37	—	7.25	7.15	7.74	7.87	—
353	Construction and related machinery	290.09	290.37	311.75	317.67	—	6.94	6.93	7.37	7.51	—

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				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
32	STONE, CLAY, AND GLASS PRODUCTS	41.5	41.7	42.1	42.3	42.1	5.0	4.6	5.2	5.2	
321	Fiat glass	44.3	44.3	43.6	43.6	—	7.7	7.2	5.8	6.5	
322	Glass and glassware, pressed or blown	38.6	40.4	40.3	40.5	—	3.9	4.1	4.3	4.2	
3221	Glass containers	37.5	40.4	40.5	40.8	—	4.2	4.5	4.9	4.7	
3229	Pressed and blown glass, nec	40.1	40.4	40.0	40.2	—	3.4	3.6	3.5	3.4	
323	Products of purchased glass	42.6	40.7	42.4	42.4	—	6.6	3.7	5.0	4.7	
324	Cement, hydraulic	42.2	42.4	42.5	42.5	—	4.0	4.2	4.7	4.4	
325	Structural clay products	41.2	41.3	40.9	40.6	—	4.3	4.3	4.4	4.4	
326	Pottery and related products	39.7	39.8	39.1	39.7	—	2.9	2.8	2.5	2.9	
327	Concrete, gypsum, and plaster products	43.6	43.0	44.0	44.2	—	6.7	6.0	7.2	7.2	
3271	Concrete block and brick	44.4	44.2	45.1	44.8	—	7.3	6.5	7.7	7.7	
3272	Concrete products, nec	42.0	42.5	42.7	42.5	—	5.2	5.2	6.5	6.0	
3273	Ready-mixed concrete	44.0	42.1	44.3	45.0	—	7.4	6.1	7.2	7.6	
329	Misc. nonmetallic mineral products	41.5	41.8	42.2	42.6	—	3.9	3.9	4.7	4.6	
3291	Abrasive products	40.3	41.7	40.5	40.7	—	3.2	3.5	3.5	3.6	
3292	Asbestos products	42.2	43.3	43.7	44.6	—	4.2	4.2	5.5	5.4	
33	PRIMARY METAL INDUSTRIES	41.3	41.4	42.2	42.0	42.1	3.7	3.8	4.5	4.4	
331	Blast furnace and basic steel products	40.2	40.2	42.2	41.5	—	2.4	2.4	3.9	3.8	
3312	Blast furnaces and steel mills	39.9	39.8	42.2	41.3	—	2.2	2.2	3.9	3.7	
3317	Steel pipe and tubes	41.8	42.4	42.3	42.2	—	4.4	4.4	4.7	4.4	
332	Iron and steel foundries	42.1	42.4	42.3	42.5	—	5.2	5.4	5.2	5.3	
3321	Gray iron foundries	42.5	42.7	42.6	42.6	—	5.8	5.9	5.7	5.7	
3322	Malleable iron foundries	41.0	41.8	40.3	41.7	—	4.3	4.9	4.2	5.2	
3325	Steel foundries, nec	41.4	41.6	42.4	42.4	—	4.2	4.2	4.5	4.3	
333	Primary nonferrous metals	42.5	42.3	41.6	42.0	—	3.7	3.8	3.6	3.6	
3334	Primary aluminum	41.7	41.2	41.2	42.4	—	4.7	4.6	3.9	3.8	
335	Nonferrous rolling and drawing	42.5	42.7	43.2	43.0	—	5.0	5.2	5.7	5.7	
3351	Copper rolling and drawing	42.9	41.7	44.2	43.8	—	4.7	4.0	6.3	6.2	
3353	Aluminum sheet, plate and foil	42.4	43.3	43.2	42.8	—	6.1	7.5	7.3	7.2	
3357	Nonferrous wire drawing and insulating	41.9	42.1	42.7	42.5	—	4.3	4.4	5.1	4.9	
336	Nonferrous foundries	41.7	41.7	41.3	41.3	—	3.9	3.8	3.8	3.8	
3361	Aluminum foundries	41.8	42.0	41.0	41.2	—	3.9	4.0	3.9	3.9	
34	FABRICATED METAL PRODUCTS	41.2	41.3	41.2	41.0	41.3	3.9	3.8	4.1	3.9	
341	Metal cans and shipping containers	43.9	41.3	43.6	43.1	—	4.8	3.2	5.5	4.2	
3411	Metal cans	44.3	41.2	43.7	43.0	—	4.7	2.9	5.3	3.8	
342	Cutlery, hand tools, and hardware	41.1	41.7	40.7	40.3	—	3.8	4.2	3.5	3.4	
3423, 5	Hand and edge tools, and hand saws and blades	41.2	41.0	40.2	40.0	—	3.4	3.3	3.3	3.3	
3429	Hardware, nec	41.3	42.2	41.0	40.6	—	4.1	4.8	3.8	3.6	
343	Plumbing and heating, except electric	39.9	39.8	39.8	39.8	—	2.8	2.7	3.0	3.1	
3432	Plumbing fittings and brass goods	39.0	39.0	39.5	40.1	—	1.6	1.7	2.9	3.2	
3433	Heating equipment, except electric	40.2	40.2	39.9	39.4	—	3.3	3.4	3.0	2.8	
344	Fabricated structural metal products	40.4	40.6	40.6	40.2	—	3.4	3.4	3.7	3.2	
3441	Fabricated structural metal	39.4	40.5	41.1	40.8	—	3.2	3.2	4.2	3.9	
3442	Metal doors, sash, and trim	40.2	40.0	39.7	39.5	—	3.0	3.2	3.0	2.7	
3443	Fabricated plate work (boiler shops)	40.8	41.3	40.7	40.5	—	3.8	3.8	3.4	3.0	
3444	Sheet metal work	40.3	40.2	39.8	39.5	—	3.6	3.5	3.7	3.4	
3446	Architectural metal work	40.0	40.5	40.5	39.5	—	2.5	2.6	3.0	2.1	
345	Screw machine products, bolts, etc.	42.8	43.2	42.8	43.0	—	5.1	5.1	5.6	5.7	
3451	Screw machine products	42.5	42.9	42.0	42.1	—	5.3	5.2	5.5	5.7	
3452	Bolts, nuts, rivets, and washers	43.1	43.5	43.7	44.0	—	4.9	5.0	5.8	5.7	
346	Metal forgings and stampings	42.2	42.2	42.1	41.9	—	5.1	4.9	5.0	4.9	
3462	Iron and steel forgings	41.8	42.1	42.5	42.3	—	5.1	5.1	5.8	5.6	
3465	Automotive stampings	43.5	43.1	43.1	42.6	—	6.9	6.2	5.9	5.8	
3469	Metal stampings, nec	41.0	41.4	41.0	41.1	—	3.3	3.4	3.7	3.7	
347	Metal services, nec	40.8	40.9	40.3	40.5	—	4.1	3.9	4.0	3.9	
3471	Plating and polishing	40.7	40.5	40.2	40.3	—	4.1	4.0	3.8	3.6	
3479	Metal coating and allied services	41.1	41.8	40.6	41.0	—	4.1	3.8	4.5	4.5	
348	Ordnance and accessories, nec	40.8	40.4	40.9	40.4	—	2.6	2.5	3.7	3.1	
3483	Ammunition, exc. for small arms, nec	40.3	39.5	38.6	38.5	—	2.0	2.0	1.5	1.6	
349	Misc. fabricated metal products	40.7	41.2	40.9	40.9	—	3.2	3.2	3.6	3.6	
3494	Valves and pipe fittings	42.4	43.0	41.8	41.7	—	3.8	4.1	3.7	3.8	
3496	Misc. fabricated wire products	39.8	40.5	40.0	40.2	—	2.7	2.7	3.3	3.4	
35	MACHINERY, EXCEPT ELECTRICAL	41.9	42.2	42.1	42.0	42.5	4.4	4.2	4.5	4.4	
351	Engines and turbines	43.3	43.5	42.3	42.1	—	4.4	4.5	4.2	4.2	
3511	Turbines and turbine generator sets	40.7	41.0	42.0	42.2	—	3.8	4.1	4.8	5.4	
3519	Internal combustion engines, nec	44.4	44.6	42.4	42.0	—	4.7	4.6	4.0	3.8	
352	Farm and garden machinery	41.1	39.9	41.0	40.2	—	5.1	2.8	4.5	4.2	
3523	Farm machinery and equipment	41.2	39.8	41.2	40.2	—	5.5	2.9	4.8	4.4	
353	Construction and related machinery	41.8	41.9	42.3	42.3	—	3.9	3.5	3.9	4.0	

See footnotes at end of table.

ESTABLISHMENT DATA HOURS AND EARNINGS

C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
MACHINERY, EXCEPT ELECTRICAL—Continued											
3531	Construction machinery	\$320.80	\$317.95	\$341.07	\$346.94		\$7.73	\$7.68	\$8.14	\$8.30	
3532	Mining machinery	268.71	269.12	306.59	317.69		6.57	6.58	7.13	7.32	
3533	Oil field machinery	272.16	277.93	298.08	303.72	—	6.30	6.36	6.79	6.95	—
3535	Conveyers and conveying equipment	242.80	249.95	254.56	256.85	—	5.74	5.84	6.09	6.13	—
3537	Industrial trucks and tractors	258.13	255.22	272.28	281.52	—	6.25	6.24	6.69	6.80	—
354	Metalworking machinery	291.27	296.59	311.58	316.24	—	6.65	6.68	7.13	7.22	—
3541	Machine tools, metal cutting types	306.43	311.21	326.03	332.57	—	6.84	6.87	7.31	7.44	—
3542	Machine tools, metal forming types	287.70	293.78	321.00	323.88	—	6.85	6.88	7.50	7.48	—
3544	Special dies, tools, jigs, and fixtures	322.79	328.19	338.90	346.30	—	7.11	7.15	7.65	7.73	—
3545	Machine tool accessories	253.68	261.97	274.56	275.14	—	6.04	6.05	6.43	6.52	—
3546	Power driven hand tools	214.08	221.08	233.38	232.15	—	5.26	5.34	5.61	5.69	—
355	Special industry machinery	250.69	256.43	269.75	271.83	—	6.07	6.12	6.50	6.55	—
3551	Food products machinery	261.81	266.80	283.45	288.15	—	6.37	6.46	6.83	6.91	—
3552	Textile machinery	200.59	210.63	220.58	219.65	—	5.04	5.10	5.38	5.41	—
3555	Printing trades machinery	264.38	269.24	279.47	277.72	—	6.34	6.38	6.67	6.66	—
356	General industrial machinery	264.77	268.36	284.81	285.79	—	6.38	6.42	6.83	6.87	—
3561	Pumps and pumping equipment	266.24	275.18	278.80	282.22	—	6.40	6.49	6.80	6.85	—
3562	Ball and roller bearings	267.96	268.55	287.85	287.73	—	6.38	6.44	6.87	6.90	—
3563	Air and gas compressors	276.64	286.89	307.30	306.87	—	6.54	6.58	7.13	7.12	—
3564	Blowers and fans	237.63	237.86	244.42	247.02	—	5.81	5.83	6.08	6.16	—
3566	Speed changers, drives, and gears	285.60	284.50	317.99	323.68	—	6.80	6.79	7.26	7.39	—
3568	Power transmission equipment, nec	250.10	252.56	281.96	285.53	—	6.13	6.16	6.65	6.75	—
357	Office and computing machines	220.17	225.06	235.00	235.66	—	5.37	5.41	5.69	5.72	—
3573	Electronic computing equipment	224.39	227.94	235.41	234.68	—	5.42	5.44	5.70	5.71	—
358	Refrigeration and service machinery	240.49	245.86	256.44	258.45	—	5.88	5.91	6.27	6.35	—
3585	Refrigeration and heating equipment	248.53	253.98	262.63	265.85	—	5.96	5.99	6.39	6.50	—
359	Misc. machinery, except electrical	257.88	260.18	283.57	286.57	—	6.14	6.18	6.61	6.68	—
3592	Carburetors, pistons, rings, valves	306.25	309.64	322.27	326.14	—	7.24	7.39	7.46	7.62	—
3599	Machinery, except electrical, nec	248.89	250.92	276.49	279.28	—	5.94	5.96	6.46	6.51	—
36	ELECTRIC AND ELECTRONIC EQUIPMENT	224.11	226.44	240.57	240.99	\$243.39	5.52	5.55	5.94	5.98	\$5.98
361	Electric distributing equipment	224.78	229.45	242.60	242.80	—	5.55	5.61	5.99	6.01	—
3612	Transformers	207.55	210.71	228.63	228.73	—	5.15	5.19	5.59	5.62	—
3613	Switchgear and switchboard apparatus	238.91	245.55	254.64	255.67	—	5.87	5.96	6.35	6.36	—
362	Electrical industrial apparatus	228.17	231.24	244.61	244.02	—	5.62	5.64	6.01	6.04	—
3621	Motors and generators	237.80	238.79	251.53	248.84	—	5.80	5.81	6.18	6.19	—
3622	Industrial controls	202.15	208.15	225.84	231.74	—	5.17	5.23	5.59	5.68	—
363	Household appliances	221.27	220.70	233.60	236.38	—	5.45	5.49	5.84	5.88	—
3632	Household refrigerators and freezers	243.07	237.80	249.60	255.10	—	5.76	5.80	6.24	6.33	—
3633	Household laundry equipment	249.74	245.36	267.42	266.81	—	6.47	6.44	6.91	6.93	—
3634	Electric housewares and fans	189.07	189.54	201.87	203.91	—	4.68	4.68	4.96	5.01	—
364	Electric lighting and wiring equipment	205.49	209.56	222.71	223.51	—	5.15	5.20	5.54	5.56	—
3641	Electric lamps	223.16	226.32	246.60	248.21	—	5.51	5.52	6.00	6.01	—
3643	Current-carrying wiring devices	192.16	198.13	207.03	206.52	—	4.78	4.88	5.15	5.15	—
3644	Noncurrent-carrying wiring devices	216.40	221.81	223.91	225.36	—	5.33	5.41	5.57	5.62	—
3645	Residential lighting fixtures	159.52	161.83	170.31	169.93	—	4.22	4.27	4.47	4.46	—
365	Radio and TV receiving equipment	203.91	204.53	219.35	216.78	—	5.01	5.05	5.47	5.53	—
3651	Radio and TV receiving sets	201.45	202.27	221.76	220.02	—	5.10	5.16	5.60	5.70	—
366	Communication equipment	261.62	264.13	283.86	280.44	—	6.35	6.38	6.84	6.84	—
3661	Telephone and telegraph apparatus	268.09	268.51	284.01	278.30	—	6.46	6.47	7.03	7.01	—
3662	Radio and TV communication equipment	256.25	260.19	283.41	282.24	—	6.25	6.30	6.70	6.72	—
367	Electronic components and accessories	182.74	185.78	199.90	201.39	—	4.58	4.61	5.01	5.06	—
3671-3	Electronic tubes	248.26	248.67	260.00	263.08	—	5.76	5.81	6.25	6.37	—
3674	Semiconductors and related devices	203.41	208.69	228.33	227.70	—	5.06	5.09	5.61	5.65	—
3679	Electronic components, nec	167.84	169.49	181.89	185.65	—	4.26	4.28	4.64	4.70	—
369	Misc. electrical equipment and supplies	277.97	282.32	294.24	293.25	—	6.65	6.69	7.09	7.17	—
3691	Storage batteries	305.55	305.27	311.53	311.96	—	6.76	6.86	7.33	7.41	—
3694	Engine electrical equipment	307.76	313.83	324.66	321.19	—	7.47	7.49	7.88	7.97	—
37	TRANSPORTATION EQUIPMENT	324.22	323.24	343.31	349.32	353.53	7.54	7.57	8.04	8.20	8.26
371	Motor vehicles and equipment	363.04	359.86	378.43	388.51	—	8.14	8.16	8.64	8.87	—
3711	Motor vehicles and car bodies	387.21	381.33	395.95	413.27	—	8.51	8.55	9.04	9.35	—
3713	Truck and bus bodies	261.79	260.00	273.32	278.40	—	6.48	6.50	6.85	6.96	—
3714	Motor vehicle parts and accessories	358.75	357.58	384.06	390.73	—	8.08	8.09	8.65	8.82	—
3715	Truck trailers	216.41	214.52	232.64	222.66	—	5.37	5.39	5.73	5.88	—
372	Aircraft and parts	296.10	302.60	325.46	329.02	—	7.05	7.12	7.64	7.76	—
3721	Aircraft	300.00	305.11	328.67	337.45	—	7.16	7.23	7.77	7.94	—
3724	Aircraft engines and engine parts	303.16	309.33	339.10	332.83	—	7.27	7.33	7.96	8.02	—
3728	Aircraft equipment, nec	278.80	288.61	299.81	301.70	—	6.56	6.65	6.94	7.00	—
373	Ship and boat building and repairing	244.11	245.07	266.11	(*)	—	6.18	6.22	6.72	(*)	—
3731	Shipbuilding and repairing	256.49	257.68	282.27	(*)	—	6.51	6.54	7.11	(*)	—
3732	Boat building and repairing	195.13	198.29	212.65	212.12	—	4.94	5.02	5.37	5.37	—
374	Railroad equipment	303.06	309.37	321.60	(*)	—	7.52	7.62	8.04	(*)	—

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
MACHINERY, EXCEPT ELECTRICAL—Continued											
3531	Construction machinery	41.5	41.4	41.9	41.8	—	3.3	3.0	3.4	3.2	—
3532	Mining machinery	40.9	40.9	43.0	43.4	—	3.6	3.1	3.4	3.9	—
3533	Oil field machinery	43.2	43.7	43.9	43.7	—	5.3	4.8	5.5	5.6	—
3535	Conveyers and conveying equipment	42.3	42.8	41.8	41.9	—	4.7	4.8	3.9	3.8	—
3537	Industrial trucks and tractors	41.3	40.9	40.7	41.4	—	3.9	3.1	3.2	3.9	—
354	Metalworking machinery	43.8	44.4	43.7	43.8	—	5.8	6.2	5.9	5.9	—
3541	Machine tools, metal cutting types	44.8	45.3	44.6	44.7	—	5.8	6.4	6.3	6.6	—
3542	Machine tools, metal forming types	42.0	42.7	42.8	43.3	—	5.3	5.2	6.2	6.0	—
3544	Special dies, tools, jigs, and fixtures	45.4	45.9	44.3	44.8	—	7.4	7.8	6.7	6.8	—
3545	Machine tool accessories	42.0	43.3	42.7	42.2	—	4.2	4.6	5.1	4.9	—
3546	Power driven hand tools	40.7	41.4	41.6	40.8	—	3.5	3.9	4.1	3.4	—
355	Special industry machinery	41.3	41.9	41.5	41.5	—	3.9	3.8	4.2	4.1	—
3551	Food products machinery	41.1	41.3	41.5	41.7	—	3.3	3.4	3.7	3.6	—
3552	Textile machinery	39.8	41.3	41.0	40.6	—	2.7	2.8	3.4	3.0	—
3555	Printing trades machinery	41.7	42.2	41.9	41.7	—	4.5	4.3	4.9	4.5	—
356	General industrial machinery	41.5	41.8	41.7	41.6	—	3.9	3.9	4.5	4.3	—
3561	Pumps and pumping equipment	41.6	42.4	41.0	41.2	—	4.2	4.4	3.8	4.0	—
3562	Ball and roller bearings	42.0	41.7	41.9	41.7	—	4.3	4.6	5.4	5.1	—
3563	Air and gas compressors	42.3	43.6	43.1	43.1	—	4.7	4.6	4.6	3.8	—
3564	Blowers and fans	40.9	40.8	40.2	40.1	—	2.8	3.0	3.5	3.4	—
3566	Speed changers, drives, and gears	42.0	41.9	43.8	43.8	—	4.0	3.5	5.1	5.1	—
3568	Power transmission equipment, nec	40.8	41.0	42.4	42.3	—	3.8	3.7	5.3	4.8	—
357	Office and computing machines	41.0	41.6	41.3	41.2	—	3.0	3.4	3.4	3.1	—
3573	Electronic computing equipment	41.4	41.9	41.3	41.1	—	3.2	3.7	3.5	3.0	—
358	Refrigeration and service machinery	40.9	41.6	40.9	40.7	—	3.7	3.6	3.5	3.3	—
3585	Refrigeration and heating equipment	41.7	42.4	41.1	40.9	—	3.9	4.0	3.7	3.4	—
359	Misc. machinery, except electrical	42.0	42.1	42.9	42.9	—	4.9	4.8	5.1	5.1	—
3592	Carburetors, pistons, rings, valves	42.3	41.9	43.2	42.8	—	3.6	3.4	4.2	4.1	—
3599	Machinery, except electrical, nec	41.9	42.1	42.8	42.9	—	5.1	5.1	5.2	5.3	—
36	ELECTRIC AND ELECTRONIC EQUIPMENT	40.6	40.8	40.5	40.3	40.7	2.8	2.9	3.1	2.9	—
361	Electric distributing equipment	40.5	40.9	40.5	40.4	—	2.5	2.7	2.9	2.9	—
3612	Transformers	40.3	40.6	40.9	40.7	—	1.9	2.3	3.0	2.9	—
3613	Switchgear and switchboard apparatus	40.7	41.2	40.1	40.2	—	3.0	3.0	2.8	3.0	—
362	Electrical industrial apparatus	40.6	41.0	40.7	40.4	—	3.1	3.1	3.2	3.1	—
3621	Motors and generators	41.0	41.1	40.7	40.2	—	3.5	3.4	3.3	3.1	—
3622	Industrial controls	39.1	39.8	40.4	40.8	—	2.2	2.2	2.4	2.7	—
363	Household appliances	40.6	40.2	40.0	40.2	—	2.5	2.4	2.5	2.3	—
3632	Household refrigerators and freezers	42.2	41.0	40.0	40.3	—	1.5	1.1	1.6	1.6	—
3633	Household laundry equipment	38.6	38.1	38.7	38.5	—	1.3	1.3	.9	.8	—
3634	Electric housewares and fans	40.4	40.5	40.7	40.7	—	3.0	2.9	3.4	3.5	—
364	Electric lighting and wiring equipment	39.9	40.3	40.2	40.2	—	2.5	2.6	3.1	3.0	—
3641	Electric lamps	40.5	41.0	41.1	41.3	—	2.0	2.3	2.9	2.9	—
3642	Current-carrying wiring devices	40.2	40.6	40.2	40.1	—	2.7	2.8	3.1	3.0	—
3644	Noncurrent-carrying wiring devices	40.6	41.0	40.2	40.1	—	2.4	2.5	3.3	3.0	—
3645	Residential lighting fixtures	37.8	37.9	38.1	38.1	—	1.9	1.9	1.9	2.0	—
365	Radio and TV receiving equipment	40.7	40.5	40.1	39.2	—	2.6	2.7	2.8	2.4	—
3651	Radio and TV receiving sets	39.5	39.2	39.6	38.6	—	1.5	1.5	2.2	1.8	—
366	Communication equipment	41.2	41.4	41.5	41.0	—	2.9	3.1	3.3	3.0	—
3661	Telephone and telegraph apparatus	41.5	41.5	40.4	39.7	—	3.0	3.1	3.2	2.9	—
3662	Radio and TV communication equipment	41.0	41.3	42.3	42.0	—	2.9	3.0	3.3	3.1	—
367	Electronic components and accessories	39.9	40.3	39.9	39.8	—	2.5	2.6	2.9	2.8	—
3671-3	Electronic tubes	43.1	42.8	41.6	41.3	—	2.4	2.7	2.4	2.1	—
3674	Semiconductors and related devices	40.2	41.0	40.7	40.3	—	3.1	3.6	4.1	3.5	—
3679	Electronic components, nec	39.4	39.6	39.2	39.5	—	2.3	2.3	2.6	2.7	—
369	Misc. electrical equipment and supplies	41.8	42.2	41.5	40.9	—	4.3	4.3	4.4	3.9	—
3691	Storage batteries	45.2	44.5	42.5	42.1	—	5.7	5.2	5.5	5.3	—
3694	Engine electrical equipment	41.2	41.9	41.2	40.3	—	4.7	4.7	4.6	3.8	—
37	TRANSPORTATION EQUIPMENT	43.0	42.7	42.7	42.6	42.8	5.5	5.3	5.5	5.5	—
371	Motor vehicles and equipment	44.6	44.1	43.8	43.8	—	6.9	6.5	6.8	6.9	—
3711	Motor vehicles and car bodies	45.5	44.6	43.8	44.2	—	7.7	7.2	6.8	7.4	—
3713	Truck and bus bodies	40.4	40.0	39.9	40.0	—	3.6	3.2	3.5	3.7	—
3714	Motor vehicle parts and accessories	44.4	44.2	44.4	44.3	—	6.8	6.5	7.4	7.1	—
3715	Truck trailers	40.3	39.8	40.6	39.2	—	2.9	2.7	3.7	2.7	—
372	Aircraft and parts	42.0	42.5	42.6	42.4	—	4.0	4.4	4.6	4.7	—
3721	Aircraft	41.9	42.2	42.3	42.5	—	3.1	3.4	3.8	4.1	—
3724	Aircraft engines and engine parts	41.7	42.2	42.6	41.5	—	4.7	5.0	5.4	5.2	—
3728	Aircraft equipment, nec	42.5	43.4	43.2	43.1	—	4.9	5.5	5.6	5.7	—
373	Ship and boat building and repairing	39.5	39.4	39.6	(*)	—	3.1	2.7	2.5	(*)	—
3731	Ship building and repairing	39.4	39.4	39.7	(*)	—	3.3	2.8	2.3	(*)	—
3732	Boat building and repairing	39.5	39.5	39.6	39.5	—	2.6	2.5	3.0	2.8	—
374	Railroad equipment	40.3	40.6	40.0	(*)	—	3.5	3.7	4.0	(*)	—

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				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
TRANSPORTATION EQUIPMENT—Continued											
376	Guided missiles, space vehicles, parts	\$282.40	\$286.44	\$326.70	\$337.03	—	\$6.99	\$7.09	\$7.58	\$7.73	—
3761	Guided missiles and space vehicles ^{††}	282.30	284.01	322.82	331.97	—	7.04	7.19	7.76	7.98	—
379	Miscellaneous transportation equipment	218.55	217.49	226.46	222.16	—	5.45	5.52	5.69	5.61	—
3792	Travel trailers and campers	197.90	188.86	195.33	194.66	—	5.01	4.97	5.10	5.03	—
INSTRUMENTS AND RELATED PRODUCTS											
38	Engineering and scientific instruments	220.04	222.63	236.74	237.80	\$239.85	5.38	5.43	5.76	5.80	\$5.85
381	Measuring and controlling devices	241.68	242.76	256.20	261.69	—	5.70	5.78	6.10	6.10	—
382	Environmental controls	222.49	224.81	241.43	241.54	—	5.48	5.51	5.86	5.92	—
3822	Process control instruments	206.40	208.43	226.44	225.43	—	5.16	5.25	5.55	5.58	—
3823	Instruments to measure electricity	231.84	234.92	258.26	254.89	—	5.60	5.62	6.02	6.04	—
3825	Optical instruments and lens	232.80	234.60	245.63	250.70	—	5.72	5.75	6.05	6.19	—
383	Medical instruments and supplies	256.77	256.36	268.14	273.42	—	5.77	5.80	6.15	6.20	—
384	Surgical and medical instruments	184.21	186.80	201.50	201.10	—	4.64	4.67	5.00	4.99	—
3841	Surgical appliances and supplies	180.37	179.45	199.26	197.41	—	4.41	4.42	4.79	4.78	—
3842	Ophthalmic goods	187.11	192.06	205.25	205.37	—	4.81	4.85	5.17	5.16	—
385	Photographic equipment and supplies	168.27	168.60	181.35	178.10	—	4.26	4.29	4.65	4.65	—
386	Watches, clocks, and watchcases	287.98	291.21	304.98	307.40	—	6.76	6.82	7.21	7.25	—
387		165.95	170.83	179.25	177.41	—	4.18	4.26	4.47	4.48	—
MISCELLANEOUS MANUFACTURING											
39	Jewelry, silverware, and plated ware	173.26	176.12	185.81	186.51	189.82	4.42	4.47	4.74	4.77	4.83
391	Musical instruments	188.33	192.98	188.76	191.59	—	4.65	4.65	4.84	4.90	—
3911	Costume jewelry	190.07	196.88	179.17	184.68	—	4.67	4.71	4.74	4.86	—
393	Toys and sporting goods	169.22	172.32	183.28	184.61	—	4.22	4.29	4.64	4.65	—
394	Dolls, games, toys, and children's vehicles	153.23	154.31	167.57	168.96	—	3.98	4.05	4.33	4.40	—
3942, 4	Sporting and athletic goods, nec	142.13	142.09	160.61	161.20	—	3.77	3.83	4.15	4.22	—
3949	Pens, pencils, office and art supplies	164.69	164.58	174.47	177.17	—	4.18	4.22	4.52	4.59	—
396	Costume jewelry and notions	180.50	186.05	198.53	197.15	—	4.49	4.56	4.89	4.88	—
396	Miscellaneous manufactures	147.05	149.77	156.21	156.11	—	3.88	3.89	4.10	4.13	—
3961	Signs and advertising displays	137.26	139.43	145.47	144.97	—	3.67	3.65	3.90	3.95	—
399		196.42	198.69	212.27	212.93	—	4.96	5.03	5.32	5.35	—
3993		211.38	216.46	221.26	222.05	—	5.42	5.48	5.63	5.65	—
NONDURABLE GOODS											
20	Meat products	216.51	222.31	236.56	234.61	237.80	5.44	5.53	5.87	5.88	5.96
201	Meat packing plants	223.84	228.10	243.01	238.20	—	5.61	5.66	6.03	6.00	—
2011	Sausages and other prepared meats	278.56	286.62	307.70	298.91	—	6.68	6.76	7.24	7.22	—
2013	Poultry dressing plants	259.03	261.23	271.55	267.44	—	6.38	6.45	6.84	6.84	—
2016	Dairy products	130.26	134.23	146.29	147.43	—	3.53	3.57	3.87	3.89	—
202	Cheese, natural and processed	227.64	231.26	249.55	246.79	—	5.42	5.48	5.97	5.99	—
2022	Fluid milk	204.72	215.97	221.76	225.27	—	5.03	5.13	5.60	5.66	—
2026	Preserved fruits and vegetables	239.45	241.79	262.73	258.07	—	5.53	5.61	6.11	6.13	—
203	Canned specialties	180.39	181.16	204.73	197.46	—	4.71	4.73	5.17	5.05	—
2032	Canned fruits and vegetables	214.24	218.51	248.64	241.90	—	5.20	5.24	5.92	5.90	—
2033	Frozen fruits and vegetables	178.13	174.19	208.40	193.05	—	4.75	4.67	5.21	4.95	—
2037	Grain mill products	169.65	176.79	195.61	192.08	—	4.50	4.58	4.99	4.90	—
204	Flour and other grain mill products	254.60	264.72	285.74	287.27	—	5.88	6.03	6.45	6.47	—
2041	Prepared feeds, nec	291.87	305.28	330.39	333.93	—	6.21	6.40	7.09	7.03	—
2048	Bakery products	202.53	206.35	229.62	228.51	—	4.71	4.81	5.16	5.17	—
205	Bread, cake, and related products	224.58	228.10	239.29	237.00	—	5.70	5.76	6.12	6.14	—
2051	Cookies and crackers	222.87	225.98	240.24	236.31	—	5.70	5.75	6.16	6.17	—
2052	Sugar and confectionery products	229.71	235.89	236.40	240.98	—	5.70	5.81	6.00	6.07	—
206	Cane and beet sugar	200.07	201.50	227.66	224.31	—	5.13	5.18	5.72	5.65	—
2061-3	Confectionery products	222.72	230.88	274.11	255.57	—	5.80	5.86	6.87	6.57	—
2065	Fats and oils	178.55	176.87	198.69	198.90	—	4.59	4.63	5.03	4.96	—
207	Beverages	247.52	251.43	273.68	268.06	—	5.60	5.65	6.22	6.12	—
208	Malt beverages	263.86	269.99	282.17	282.00	—	6.58	6.65	6.95	7.05	—
2082	Bottled and canned soft drinks	362.41	380.61	393.76	396.89	—	8.67	8.79	9.42	9.61	—
2086	Misc. foods and kindred products	185.06	189.47	211.01	204.23	—	4.87	4.96	5.21	5.21	—
209		179.27	184.99	194.05	191.25	—	4.73	4.83	5.12	5.10	—
21	Cigarettes	213.17	226.69	234.85	225.07	234.24	5.48	5.71	6.10	5.97	6.10
211		260.44	279.10	289.94	273.40	—	6.80	6.96	7.59	7.47	—
22	Weaving mills, cotton	166.46	168.51	179.89	178.57	181.12	4.10	4.12	4.42	4.42	4.45
221	Weaving mills, synthetics	175.44	177.57	188.09	190.81	—	4.30	4.31	4.61	4.62	—
222	Weaving and finishing mills, wool	177.53	181.38	196.98	196.14	—	4.33	4.36	4.69	4.67	—
223	Narrow fabric mills	172.06	172.03	188.52	184.42	—	4.28	4.29	4.51	4.52	—
224	Knitting mills	150.84	153.95	163.61	162.77	—	3.79	3.82	4.08	4.10	—
225		148.18	150.11	157.12	156.72	—	3.78	3.81	4.06	4.06	—

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
TRANSPORTATION EQUIPMENT—Continued											
376	Guided missiles, space vehicles, parts	40.4	40.4	43.1	43.6	—	3.3	3.3	4.7	5.5	
3761	Guided missiles and space vehicles	40.1	39.5	41.6	41.6	—	3.1	3.0	3.6	4.1	
379	Miscellaneous transportation equipment	40.1	39.4	39.8	39.6	—	2.5	2.3	2.9	2.2	
3792	Travel trailers and campers	39.5	38.0	38.3	38.7	—	2.3	2.0	2.5	2.1	
INSTRUMENTS AND RELATED PRODUCTS											
38	Engineering and scientific instruments	40.9	41.0	41.1	41.0	41.0	2.6	2.6	2.8	2.8	
381	Measuring and controlling devices	42.4	42.0	42.0	42.9	—	3.1	3.2	3.5	3.7	
382	Environmental controls	40.6	40.8	41.2	40.8	—	2.6	2.4	2.6	2.5	
3822	Process control instruments	40.0	39.7	40.8	40.4	—	1.9	1.8	2.2	1.7	
3823	Instruments to measure electricity	41.4	41.8	42.9	42.2	—	3.3	3.1	3.8	3.7	
3825	Optical instruments and lenses	40.7	40.8	40.6	40.5	—	2.4	2.1	1.9	2.1	
383	Medical instruments and supplies	44.5	44.2	43.6	44.1	—	3.7	3.8	3.8	3.6	
384	Surgical and medical instruments	39.7	40.0	40.3	40.3	—	2.0	2.1	2.6	2.5	
3841	Surgical appliances and supplies	40.9	40.6	41.6	41.3	—	1.8	1.9	3.1	2.8	
3842	Ophthalmic goods	38.9	39.6	39.7	39.8	—	2.2	2.5	2.4	2.4	
385	Photographic equipment and supplies	39.5	39.3	39.0	38.3	—	1.4	1.4	2.0	1.9	
386	Watches, clocks, and watchcases	42.6	42.7	42.3	42.4	—	3.6	3.4	3.5	3.5	
387	Watches, clocks, and watchcases	39.7	40.1	40.1	39.6	—	2.2	2.3	2.5	2.2	
MISCELLANEOUS MANUFACTURING INDUSTRIES											
39	Jewelry, silverware, and plated ware	39.2	39.4	39.2	39.1	39.3	2.5	2.7	2.6	2.7	
391	Jewelry, precious metal	40.5	41.5	39.0	39.1	—	3.6	4.6	2.9	3.2	
3911	Musical instruments	40.7	41.8	37.8	38.0	—	3.8	5.3	2.5	2.7	
393	Toys and sporting goods	40.1	40.4	39.5	39.7	—	2.0	2.0	2.1	2.1	
394	Dolls, games, toys, and children's vehicles	38.5	38.1	38.7	38.4	—	2.0	1.8	2.1	2.4	
3942, 4	Sporting and athletic goods, nec	37.7	37.1	38.7	38.2	—	1.9	1.4	2.5	2.9	
3949	Pens, pencils, office and art supplies	39.4	39.0	38.6	38.6	—	2.1	2.1	1.7	1.8	
395	Costume jewelry and notions	40.2	40.8	40.6	40.4	—	2.6	3.3	2.8	2.6	
396	Costume jewelry	37.9	38.5	38.1	37.8	—	2.5	3.0	2.7	3.1	
3961	Miscellaneous manufactures	37.4	38.2	37.3	36.7	—	2.7	3.2	2.6	3.1	
399	Signs and advertising displays	39.6	39.5	39.9	39.8	—	2.6	2.6	3.0	2.9	
3993	Signs and advertising displays	39.0	39.5	39.3	39.3	—	2.8	2.9	2.4	2.6	
NONDURABLE GOODS											
FOOD AND KINDRED PRODUCTS											
20	Meat products	39.8	40.2	40.3	39.9	39.9	4.1	4.1	4.7	4.1	
201	Meat packing plants	39.9	40.3	40.3	39.7	—	4.0	4.4	4.5	4.0	
2011	Sausages and other prepared meats	41.7	42.4	42.5	41.4	—	4.6	5.1	5.7	4.9	
2013	Poultry dressing plants	40.6	40.5	39.7	39.1	—	3.9	3.6	3.6	3.2	
2016	Dairy products	36.9	37.6	37.8	37.9	—	3.1	3.9	3.5	3.2	
202	Cheese, natural and processed	42.0	42.2	41.8	41.2	—	4.2	4.0	4.5	4.0	
2022	Fluid milk	40.7	42.1	39.6	39.8	—	4.1	4.8	3.5	3.9	
2026	Preserved fruits and vegetables	43.3	43.1	43.0	42.1	—	4.5	4.2	5.2	4.2	
203	Canned specialties	38.3	38.3	39.6	39.1	—	3.5	3.1	5.2	3.9	
2032	Frozen fruits and vegetables	41.2	41.7	42.0	41.0	—	4.3	4.3	6.4	5.0	
2033	Grain mill products	37.5	37.3	40.0	39.0	—	3.5	3.3	6.2	4.7	
2037	Flour and other grain mill products	37.7	38.6	39.2	39.2	—	3.5	2.9	4.1	3.7	
204	Prepared feeds, nec	43.3	43.9	44.3	44.4	—	6.3	6.4	7.1	6.9	
2041	Bakery products	47.0	47.7	46.6	47.5	—	7.5	7.8	8.1	8.7	
2048	Bread, cake, and related products	43.0	42.9	44.5	44.2	—	6.3	6.3	7.4	6.6	
205	Cookies and crackers	39.4	39.6	39.1	38.6	—	3.6	3.6	3.6	3.3	
2051	Sugar and confectionery products	39.1	39.3	39.0	38.3	—	3.7	3.8	4.1	3.6	
2052	Cane and beet sugar	40.3	40.6	39.4	39.7	—	3.2	2.8	2.3	2.4	
206	Confectionery products	39.0	38.9	39.8	39.7	—	4.3	3.7	3.3	3.3	
2061-3	Fats and oils	38.4	39.4	39.9	38.9	—	5.7	5.5	4.3	4.4	
2065	Beverages	38.9	38.2	39.5	40.1	—	3.6	2.7	2.6	2.8	
207	Malt beverages	44.2	44.5	44.0	43.8	—	6.5	6.5	6.1	6.2	
208	Bottled and canned soft drinks	40.1	40.6	40.6	40.0	—	4.1	4.2	4.5	4.1	
2082	Misc. foods and kindred products	41.8	43.3	41.8	41.3	—	4.9	5.9	5.4	5.1	
2086	...	38.0	38.2	40.5	39.2	—	3.2	3.1	4.4	3.5	
209	...	37.9	38.3	37.9	37.5	—	3.8	3.7	3.8	3.2	
TOBACCO MANUFACTURES											
21	Cigarettes	38.9	39.7	38.5	37.7	38.4	2.2	2.8	2.2	1.5	
211	...	38.3	40.1	38.2	36.6	—	1.9	2.9	2.4	1.3	
TEXTILE MILL PRODUCTS											
22	Weaving mills, cotton	40.6	40.9	40.7	40.4	40.7	3.6	3.7	3.8	3.7	
221	Weaving mills, synthetics	40.8	41.2	40.8	41.3	—	4.0	4.2	3.9	4.1	
222	Weaving and finishing mills, wool	41.0	41.6	42.0	42.0	—	3.6	3.8	4.3	4.3	
223	Narrow fabric mills	40.2	40.1	41.8	40.8	—	3.6	3.6	4.1	4.0	
224	Knitting mills	39.8	40.3	40.1	39.7	—	3.3	3.4	3.0	3.1	
225	...	39.2	39.4	38.7	38.6	—	2.9	2.9	2.9	2.7	

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				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
TEXTILE MILL PRODUCTS—Continued											
2251	Women's hosiery, except socks	\$135.68	\$142.91	\$152.46	\$153.98		\$3.47	\$3.52	\$3.85	\$3.84	
2252	Hosiery, nec	140.85	141.02	143.24	146.29		3.53	3.57	3.83	3.87	
2253	Knit outerwear mills	145.16	144.02	148.37	147.17		3.80	3.80	4.01	4.01	
2254	Knit underwear mills	134.59	139.32	142.12	143.25		3.57	3.60	3.74	3.75	
2257	Circular knit fabric mills	163.12	170.05	185.89	183.60		4.14	4.23	4.49	4.50	
226	Textile finishing, except wool	182.65	184.29	199.08	192.04		4.38	4.43	4.74	4.73	
2261	Finishing plants, cotton	190.00	191.56	203.34	196.99		4.46	4.55	4.83	4.84	
2262	Finishing plants, synthetics	194.44	191.27	210.15	201.96		4.60	4.62	4.91	4.89	
227	Floor covering mills	175.98	177.66	194.68	188.00		4.18	4.21	4.57	4.53	
228	Yarn and thread mills	155.86	159.01	170.56	168.90		3.82	3.85	4.16	4.16	
2281	Yarn mills, except wool	159.26	162.39	170.56	168.90		3.81	3.83	4.16	4.16	
2282	Throwing and winding mills	146.55	147.73	166.30	162.77		3.71	3.74	3.95	3.97	
229	Miscellaneous textile goods	185.51	187.65	199.96	198.77		4.47	4.50	4.83	4.86	
23	APPAREL AND OTHER TEXTILE PRODUCTS	132.84	133.93	143.24	142.71	\$145.48	3.69	3.71	3.99	4.02	\$4.03
231	Men's and boys' suits and coats	160.74	161.82	171.23	174.80		4.49	4.52	4.73	4.91	
232	Men's and boys' furnishings	120.52	122.28	129.96	129.23		3.32	3.35	3.61	3.62	
2321	Men's and boys' shirts and nightwear	115.84	118.13	129.15	128.13		3.20	3.21	3.50	3.52	
2327	Men's and boys' separate trousers	121.79	123.53	131.67	133.86		3.45	3.47	3.73	3.76	
2328	Men's and boys' work clothing	119.73	121.32	127.08	125.32		3.21	3.27	3.53	3.53	
233	Women's and misses' outerwear	126.41	126.79	136.06	133.67		3.74	3.74	3.99	3.99	
2331	Women's and misses' blouses and waists	120.75	121.09	128.00	128.00		3.49	3.52	3.71	3.71	
2335	Women's and misses' dresses	124.03	124.69	135.79	131.20		3.84	3.79	4.09	4.10	
2337	Women's and misses' suits and coats	136.37	135.96	149.21	139.63		4.12	4.12	4.35	4.27	
2339	Women's and misses' outerwear, nec	127.45	126.73	133.70	135.49		3.57	3.59	3.82	3.86	
234	Women's and children's undergarments	124.92	123.50	133.92	132.49		3.34	3.32	3.60	3.62	
2341	Women's and children's underwear	123.00	121.60	130.63	129.95		3.28	3.26	3.54	3.57	
2342	Brassieres and allied garments	131.01	131.01	147.84	143.63		3.56	3.56	3.86	3.83	
236	Children's outerwear	119.88	121.66	129.60	126.73		3.33	3.37	3.60	3.58	
2361	Children's dresses and blouses	120.52	122.64	125.67	126.73		3.32	3.36	3.56	3.54	
238	Misc. apparel and accessories	133.43	134.25	143.56	141.66		3.53	3.58	3.88	3.86	
239	Misc. fabricated textile products	167.42	167.42	182.44	183.61		4.26	4.26	4.69	4.72	
2391	Curtains and draperies	125.30	126.44	131.95	129.85		3.28	3.31	3.50	3.50	
2392	House furnishing, nec	145.30	145.36	156.78	158.77		3.66	3.68	4.02	4.04	
2396	Automotive and apparel trimmings	272.80	274.03	311.88	317.41		6.82	6.92	7.57	7.63	
26	PAPER AND ALLIED PRODUCTS	264.02	265.31	287.91	286.57	291.84	6.14	6.17	6.68	6.68	6.74
261, 2, 6	Paper and pulp mills	313.54	315.06	348.53	349.40		7.03	7.08	7.66	7.73	
262	Paper mills, except building paper	312.20	315.58	349.61	350.81		7.00	7.06	7.65	7.71	
263	Paperboard mills	320.50	327.52	350.95	357.25		7.17	7.23	7.94	8.01	
264	Misc. converted paper products	226.18	226.87	244.13	241.54		5.45	5.48	5.94	5.92	
2641	Paper coating and glazing	269.66	269.24	292.07	296.92		6.33	6.35	6.84	6.81	
2642	Envelopes	206.76	208.79	218.90	220.80		5.08	5.13	5.50	5.52	
2643	Bags, except textile bags	214.61	221.01	238.68	234.06		5.26	5.30	5.71	5.64	
265	Paperboard containers and boxes	231.55	232.94	256.20	255.00		5.50	5.52	6.00	6.00	
2651	Folding paperboard boxes	242.10	245.10	272.12	266.41		5.71	5.70	6.27	6.21	
2653	Corrugated and solid fiber boxes	246.96	246.96	271.49	272.16		5.73	5.77	6.27	6.30	
2654	Sanitary food containers	213.27	216.83	232.13	226.55		5.24	5.25	5.54	5.58	
27	PRINTING AND PUBLISHING	237.12	237.88	250.70	248.35	251.46	6.24	6.26	6.58	6.57	6.60
271	Newspapers	230.78	232.49	234.92	232.20		6.67	6.70	6.77	6.75	
272	Periodicals	222.90	214.70	232.25	231.81		5.96	5.85	5.94	5.99	
273	Books	217.01	220.09	236.41	233.64		5.48	5.53	5.97	5.93	
2731	Book publishing	217.31	218.59	226.55	222.90		5.46	5.52	5.75	5.73	
2732	Book printing	217.25	221.05	245.35	244.19		5.50	5.54	6.18	6.12	
274	Miscellaneous publishing	217.62	217.40	209.66	209.20		5.58	5.49	5.84	5.86	
275	Commercial printing	251.66	251.41	208.91	266.85		6.42	6.43	6.86	6.86	
2751	Commercial printing, letterpress	237.73	236.90	252.07	247.42		6.08	6.09	6.48	6.46	
2752	Commercial printing, lithographic	259.50	259.23	279.66	278.24		6.62	6.63	7.08	7.08	
276	Manifold business forms	236.93	244.08	258.75	259.38		5.85	5.91	6.22	6.25	
278	Blankbooks and bookbinding	188.07	189.21	201.45	197.34		4.81	4.79	5.10	5.06	
279	Printing trade services	305.69	308.32	338.52	334.95		7.94	8.05	8.68	8.70	
28	CHEMICALS AND ALLIED PRODUCTS	276.05	279.05	298.75	301.56	304.68	6.62	6.66	7.13	7.18	7.22
281	Industrial inorganic chemicals	304.50	308.13	329.09	334.34		7.25	7.25	7.78	7.89	
2819	Industrial inorganic chemicals, nec	296.73	305.41	324.48	327.81		7.15	7.22	7.80	7.87	
282	Plastics materials and synthetics	269.38	273.84	297.65	299.20		6.46	6.52	7.02	7.04	
2821	Plastics materials and resins	306.40	307.98	333.31	338.34		7.06	7.08	7.68	7.76	
2824	Organic fibers, noncellulosic	240.76	246.22	275.70	271.88		5.93	6.02	6.58	6.52	
283	Drugs	251.74	254.61	270.45	269.80		6.14	6.21	6.47	6.47	
2834	Pharmaceutical preparations	241.20	246.04	261.17	262.44		6.03	6.09	6.37	6.37	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	TEXTILE MILL PRODUCTS—Continued										
2251	Women's hosiery, except socks	39.1	40.6	39.6	40.1	—	2.5	3.4	3.0	3.2	—
2252	Hosiery, nec	39.9	39.5	37.4	37.8	—	2.8	2.7	2.2	2.3	—
2253	Knit outerwear mills	38.2	37.9	37.0	36.7	—	2.8	2.5	2.1	1.9	—
2254	Knit underwear mills	37.7	38.7	38.0	38.2	—	1.9	2.1	2.0	2.1	—
2257	Circular knit fabric mills	39.4	40.2	41.4	40.8	—	3.2	3.5	4.9	4.5	—
226	Textile finishing, except wool	41.7	41.6	42.0	40.6	—	4.3	4.5	4.5	3.9	—
2261	Finishing plants, cotton	42.6	42.1	42.1	40.7	—	4.8	5.4	4.9	4.0	—
2262	Finishing plants, synthetics	41.4	41.4	42.8	41.3	—	4.3	4.4	4.6	4.3	—
227	Floor covering mills	42.1	42.2	42.6	41.5	—	4.3	4.3	5.0	4.3	—
228	Yarn and thread mills	40.8	41.3	41.0	40.6	—	3.6	3.9	3.8	3.6	—
2281	Yarn mills, except wool	41.8	42.4	41.0	40.6	—	4.0	4.4	3.9	3.8	—
2282	Throwing and winding mills	39.5	39.5	42.1	41.0	—	3.3	3.1	4.2	3.6	—
229	Miscellaneous textile goods	41.5	41.7	41.4	40.9	—	4.2	4.1	4.3	4.3	—
23	APPAREL AND OTHER TEXTILE PRODUCTS	36.0	36.1	35.9	35.5	36.1	1.5	1.5	1.4	1.4	—
231	Men's and boys' suits and coats	35.8	35.8	36.2	35.6	—	.8	.8	1.0	.9	—
232	Men's and boys' furnishings	36.3	36.5	36.0	35.7	—	1.2	1.2	1.0	1.0	—
2321	Men's and boys' shirts and nightwear	36.2	36.8	36.9	36.4	—	1.1	1.2	1.0	1.1	—
2327	Men's and boys' separate trousers	35.3	35.6	35.3	35.6	—	1.2	1.2	1.0	.9	—
2328	Men's and boys' work clothing	37.3	37.1	36.0	35.5	—	1.3	1.1	1.0	.9	—
233	Women's and misses' outerwear	33.8	33.9	34.1	33.5	—	1.3	1.3	1.3	1.2	—
2331	Women's and misses' blouses and waists	34.6	34.4	34.5	34.5	—	1.0	1.1	1.0	1.0	—
2335	Women's and misses' dresses	32.3	32.9	33.2	32.0	—	1.1	1.2	1.3	1.2	—
2337	Women's and misses' suits and coats	33.1	33.0	34.3	32.7	—	1.4	1.3	1.4	.9	—
2339	Women's and misses' outerwear, nec	35.7	35.3	35.0	35.1	—	1.5	1.5	1.3	1.4	—
234	Women's and children's undergarments	37.4	37.2	37.2	36.6	—	1.7	1.5	1.5	1.3	—
2341	Women's and children's underwear	37.5	37.3	36.9	36.4	—	1.7	1.5	1.5	1.4	—
2342	Brassieres and allied garments	36.8	36.8	38.3	37.5	—	1.5	1.3	1.3	1.0	—
236	Children's outerwear	36.0	36.1	36.0	35.4	—	1.5	1.5	1.4	1.3	—
2361	Children's dresses and blouses	36.3	36.5	35.3	35.8	—	1.8	2.0	1.7	1.9	—
238	Misc. apparel and accessories	37.8	37.5	37.0	36.7	—	1.7	1.9	1.7	1.7	—
239	Misc. fabricated textile products	39.3	39.3	38.9	38.9	—	2.7	2.6	2.8	2.8	—
2391	Curtains and draperies	38.2	38.2	37.7	37.1	—	2.0	2.2	1.7	1.7	—
2392	House furnishings, nec	39.7	39.5	39.0	39.3	—	2.6	2.7	2.3	2.7	—
2396	Automotive and apparel trimmings	40.0	39.6	41.2	41.6	—	3.3	2.9	5.3	5.2	—
26	PAPER AND ALLIED PRODUCTS	43.0	43.0	43.1	42.9	43.3	5.1	4.9	5.6	5.3	—
261, 2, 6	Paper and pulp mills	44.6	44.5	45.5	45.2	—	6.5	6.5	7.4	7.0	—
262	Paper mills, except building paper	44.6	44.7	45.7	45.5	—	6.4	6.5	7.5	7.1	—
263	Paperboard mills	44.7	45.3	44.2	44.6	—	6.9	6.9	7.2	7.4	—
264	Misc. converted paper products	41.5	41.4	41.1	40.8	—	3.8	3.7	4.3	3.9	—
2641	Paper coating and glazing	42.6	42.4	42.7	43.6	—	5.0	5.1	6.2	5.8	—
2642	Envelopes	40.7	40.7	39.8	40.0	—	3.0	2.8	3.5	3.4	—
2643	Bags, except textile bags	40.8	41.7	41.8	41.5	—	3.8	3.9	4.2	3.8	—
265	Paperboard containers and boxes	42.1	42.2	42.7	42.5	—	4.2	3.9	4.8	4.6	—
2651	Folding paperboard boxes	42.4	43.0	43.4	42.9	—	4.4	4.1	5.3	5.1	—
2653	Corrugated and solid fiber boxes	43.1	42.8	43.3	43.2	—	5.0	4.5	5.4	5.3	—
2654	Sanitary food containers	40.7	41.3	41.9	40.6	—	2.9	2.7	3.9	3.1	—
27	PRINTING AND PUBLISHING	38.0	38.0	38.1	37.8	38.1	3.1	3.0	3.5	3.3	—
271	Newspapers	34.6	34.7	34.7	34.4	—	2.0	2.1	2.0	2.1	—
272	Periodicals	37.4	36.7	39.1	38.7	—	3.7	3.0	4.0	3.6	—
273	Books	39.6	39.8	39.6	39.4	—	3.7	3.6	4.3	4.0	—
2731	Book publishing	39.8	39.6	39.4	38.9	—	3.2	3.0	2.4	2.2	—
2732	Book printing	39.5	39.9	39.7	39.9	—	4.1	4.1	6.1	5.7	—
274	Miscellaneous publishing	39.0	39.6	35.9	35.7	—	2.8	2.9	2.1	2.5	—
275	Commercial printing	39.2	39.1	39.2	38.9	—	3.8	3.5	4.1	3.8	—
2751	Commercial printing, letterpress	39.1	38.9	38.9	38.3	—	3.4	3.2	3.7	3.2	—
2752	Commercial printing, lithographic	39.2	39.1	39.5	39.3	—	3.9	3.7	4.4	4.2	—
276	Manifold business forms	40.5	41.3	41.6	41.5	—	3.5	3.9	4.3	3.8	—
278	Blankbooks and bookbinding	39.1	39.5	39.5	39.0	—	2.6	2.4	2.8	2.5	—
279	Printing trade service	38.5	38.3	39.0	38.5	—	3.4	3.1	4.2	3.9	—
28	CHEMICALS AND ALLIED PRODUCTS	41.7	41.9	41.9	42.0	42.2	3.5	3.2	3.8	3.7	—
281	Industrial inorganic chemicals	42.0	42.5	42.3	42.4	—	3.9	3.6	3.9	4.1	—
2819	Industrial inorganic chemicals, nec	41.5	42.3	41.6	41.6	—	3.3	3.3	3.6	3.4	—
282	Plastics materials and synthetics	41.7	42.0	42.4	42.5	—	3.0	3.0	3.5	3.5	—
2821	Plastics materials and resins	43.4	43.5	43.4	43.6	—	4.7	4.5	4.8	5.0	—
2824	Organic fibers, noncellulosic	40.6	40.9	41.9	41.7	—	1.8	2.0	2.6	2.2	—
283	Drugs	41.0	41.0	41.8	41.7	—	2.9	2.9	2.9	2.8	—
2834	Pharmaceutical preparations	40.0	40.4	41.0	41.2	—	2.7	2.7	2.8	3.0	—

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				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 P	Nov. 1978 P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 P	Nov. 1978 P
	CHEMICALS AND ALLIED PRODUCTS—Cont'd.										
284	Soap, cleaners, and toilet goods	\$252.96	\$260.35	\$273.47	\$272.03	—	\$6.20	\$6.35	\$6.67	\$6.75	—
2841	Soap and other detergents	342.17	349.80	378.84	379.32	—	8.07	8.06	8.61	8.70	—
2842, 3	Polishing, sanitation, and finishing preparations	225.18	228.42	247.46	245.22	—	5.56	5.64	6.08	6.10	—
2844	Toilet preparations	202.47	210.00	216.78	212.04	—	5.10	5.33	5.53	5.58	—
285	Paints and allied products	247.80	247.61	263.49	265.56	—	6.00	6.00	6.38	6.43	—
286	Industrial organic chemicals	325.13	324.19	358.66	359.97	—	7.65	7.61	8.38	8.45	—
2865	Cyclic crudes and intermediates	302.32	307.55	329.80	323.47	—	7.08	7.07	7.76	7.72	—
2861, 9	Gum, wood, and industrial organic chemicals, nec	333.20	329.94	368.51	373.66	—	7.84	7.80	8.59	8.71	—
287	Agricultural chemicals	270.30	268.60	290.50	301.27	—	6.36	6.38	7.00	6.99	—
289	Miscellaneous chemical products	258.74	262.06	274.23	280.31	—	6.19	6.21	6.64	6.69	—
29	PETROLEUM AND COAL PRODUCTS	342.50	340.92	384.95	383.21	\$383.24	7.91	7.91	8.67	8.67	\$8.71
291	Petroleum refining	366.79	367.65	409.40	404.28	—	8.59	8.55	9.39	9.38	—
295	Paving and roofing materials	280.90	268.62	330.17	336.03	—	6.08	6.05	6.85	6.90	—
30	RUBBER AND MISC. PLASTICS PRODUCTS	214.54	215.78	230.45	233.76	236.55	5.22	5.25	5.58	5.66	5.70
301	Tires and inner tubes	310.68	313.54	352.00	363.64	—	7.31	7.36	8.00	8.19	—
302	Rubber and plastics footwear	141.60	141.31	147.44	148.61	—	3.64	3.68	3.80	3.84	—
303, 4	Reclaimed rubber, and rubber and plastics hose and belting	227.88	227.10	245.10	239.29	—	5.40	5.42	5.74	5.78	—
306	Fabricated rubber products, nec	204.50	205.41	217.71	220.45	—	5.00	5.01	5.31	5.39	—
307	Miscellaneous plastics products	194.62	196.32	208.08	210.12	—	4.77	4.80	5.10	5.15	—
31	LEATHER AND LEATHER PRODUCTS	136.15	138.37	145.04	144.62	146.07	3.66	3.68	3.92	3.93	3.98
311	Leather tanning and finishing	196.52	199.79	203.84	202.93	—	4.95	4.97	5.20	5.19	—
314	Footwear, except rubber	130.26	132.77	137.98	138.34	—	3.53	3.55	3.77	3.79	—
3143	Men's footwear, except athletic	138.65	141.66	146.25	146.22	—	3.62	3.67	3.90	3.92	—
3144	Women's footwear, except athletic	119.72	122.82	131.39	130.29	—	3.45	3.45	3.67	3.67	—
316	Luggage	135.76	138.70	159.89	156.88	—	3.74	3.80	4.23	4.24	—
317	Handbags and personal leather goods	134.78	132.30	142.13	138.73	—	3.51	3.50	3.76	3.78	—
	TRANSPORTATION AND PUBLIC UTILITIES	287.36	291.45	309.94	309.97	309.57	7.22	7.25	7.71	7.73	7.72
	RAILROAD TRANSPORTATION:										
4011	Class I railroads ²	322.41	337.57	(*)	(*)	—	7.64	7.62	(*)	(*)	—
41	LOCAL AND INTERURBAN PASSENGER TRANSIT	181.66	177.14	193.10	195.84	—	5.22	5.21	5.73	5.76	—
411	Local and suburban transportation	265.33	263.74	278.18	293.44	—	6.44	6.48	6.92	7.02	—
413	Intercity highway transportation	285.52	270.82	304.05	313.34	—	7.56	7.44	8.33	8.16	—
42	TRUCKING AND WAREHOUSING	295.97	294.19	319.56	320.76	—	7.29	7.30	7.91	7.92	—
421, 3	Trucking and trucking terminals	302.40	301.28	326.43	328.05	—	7.43	7.46	8.06	8.08	—
422	Public warehousing	200.06	207.90	222.39	216.78	—	5.21	5.25	5.63	5.53	—
46	PIPE LINES, EXCEPT NATURAL GAS	337.43	337.43	372.54	368.33	—	8.23	8.23	8.87	8.94	—
48	COMMUNICATION	284.40	289.98	305.92	304.50	—	7.11	7.16	7.61	7.67	—
481	Telephone communication	295.40	301.84	318.27	315.99	—	7.33	7.38	7.82	7.88	—
4817	Switchboard operating employees ³	221.50	231.25	227.74	228.25	—	6.17	6.25	6.47	6.54	—
4818	Line construction employees ⁴	399.15	413.52	437.81	428.61	—	8.87	8.97	9.58	9.61	—
483	Radio and television broadcasting	232.26	234.32	252.59	257.42	—	6.08	6.15	6.70	6.81	—
49	ELECTRIC, GAS, AND SANITARY SERVICES	302.22	305.24	324.37	327.71	—	7.30	7.32	7.76	7.84	—
491	Electric services	300.25	306.29	329.58	329.75	—	7.27	7.31	7.81	7.87	—
492	Gas production and distribution	283.87	279.48	292.73	302.99	—	6.89	6.85	7.21	7.39	—
493	Combination utility services	334.97	341.51	363.32	365.87	—	8.15	8.17	8.63	8.67	—
495	Sanitary services	255.35	251.39	269.23	272.84	—	5.87	5.86	6.32	6.36	—
	WHOLESALE AND RETAIL TRADE	145.08	144.10	155.47	156.31	156.15	4.37	4.38	4.74	4.78	4.79
50, 51	WHOLESALE TRADE	215.67	215.34	234.78	235.95	235.73	5.53	5.55	6.02	6.05	6.06
50	WHOLESALE TRADE-DURABLE GOODS	220.02	218.51	237.19	239.16	—	5.57	5.56	6.02	6.07	—
501	Motor vehicles and automotive equipment	196.83	198.39	215.00	216.93	—	5.06	5.10	5.57	5.62	—
502	Furniture and home furnishings	187.49	185.37	203.74	208.41	—	4.96	4.93	5.39	5.47	—
503	Lumber and construction materials	222.55	221.20	244.80	243.97	—	5.62	5.60	6.12	6.13	—
504	Sporting goods, toys, and hobby goods	216.59	220.96	228.89	231.38	—	5.73	5.83	6.12	6.17	—

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	CHEMICALS AND ALLIED PRODUCTS—Cont'd										
284	Soap, cleaners, and toilet goods	40.8	41.0	41.0	40.3	—	3.1	3.0	3.8	3.3	—
2841	Soap and other detergents	42.4	43.4	44.0	43.6	—	4.8	4.7	5.7	5.5	—
2842, 3	Polishing, sanitation, and finishing preparations	40.5	40.5	40.7	40.2	—	2.7	2.5	3.5	3.3	—
2844	Toilet preparations	39.7	39.4	39.2	38.0	—	2.1	1.9	2.6	1.8	—
285	Paints and allied products	41.3	41.2	41.3	41.3	—	3.4	2.9	4.0	3.6	—
286	Industrial organic chemicals	42.5	42.6	42.8	42.6	—	3.9	3.3	4.3	3.9	—
2865	Cyclic crudes and intermediates	42.7	43.5	42.5	41.9	—	4.3	4.2	5.0	3.9	—
2861, 9	Gum, wood, and industrial organic chemicals, nec	42.5	42.3	42.9	42.9	—	3.7	3.0	4.1	3.9	—
287	Agricultural chemicals	42.5	42.1	41.5	43.1	—	5.1	4.5	4.8	5.4	—
289	Miscellaneous chemical products	41.8	42.2	41.3	41.9	—	3.4	3.4	3.6	3.8	—
29	PETROLEUM AND COAL PRODUCTS	43.3	43.1	44.4	44.2	44.0	4.3	4.1	4.8	4.7	—
291	Petroleum refining	42.7	43.0	43.6	43.1	—	3.6	3.7	3.7	3.6	—
295	Paving and roofing materials	46.2	44.4	48.2	48.7	—	7.0	5.7	9.0	9.0	—
30	RUBBER AND MISC. PLASTICS PRODUCTS	41.1	41.1	41.3	41.3	41.5	3.7	3.5	4.0	4.0	—
301	Tires and inner tubes	42.5	42.6	44.0	44.4	—	4.6	4.2	5.8	6.2	—
302	Rubber and plastics footwear	38.9	38.4	38.8	38.7	—	2.2	1.9	2.5	2.3	—
303, 4	Reclaimed rubber, and rubber and plastics hose and belting	42.2	41.9	42.7	41.4	—	4.4	4.3	4.9	4.5	—
306	Fabricated rubber products, nec	40.9	41.0	41.0	40.9	—	3.3	3.1	3.7	3.5	—
307	Miscellaneous plastics products	40.8	40.9	40.8	40.8	—	3.6	3.5	3.7	3.6	—
31	LEATHER AND LEATHER PRODUCTS	37.2	37.6	37.0	36.8	36.7	2.0	2.0	1.8	1.6	—
311	Leather tanning and finishing	39.7	40.2	39.2	39.1	—	3.3	3.4	2.8	2.8	—
314	Footwear, except rubber	36.9	37.4	36.6	36.5	—	1.7	1.8	1.5	1.3	—
3143	Men's footwear, except athletic	38.3	38.6	37.5	37.3	—	2.0	2.0	1.5	1.2	—
3144	Women's footwear, except athletic	34.7	35.6	35.8	35.5	—	1.5	1.3	1.8	1.4	—
316	Luggage	36.3	36.5	37.8	37.0	—	1.8	1.9	2.7	2.0	—
317	Handbags and personal leather goods	38.4	37.8	37.8	36.7	—	2.6	2.1	2.5	2.3	—
	TRANSPORTATION AND PUBLIC UTILITIES	39.8	40.2	40.2	40.1	40.1					
	RAILROAD TRANSPORTATION:										
4011	Class I railroads ²	42.2	44.3	(*)	(*)	—	—	—	—	—	—
41	LOCAL AND INTERURBAN PASSENGER TRANSIT	34.8	34.0	33.7	34.0	—	—	—	—	—	—
411	Local and suburban transportation	41.2	40.7	40.2	41.8	—	—	—	—	—	—
413	Intercity highway transportation	37.9	36.4	36.5	38.4	—	—	—	—	—	—
42	TRUCKING AND WAREHOUSING	40.6	40.3	40.4	40.5	—	—	—	—	—	—
421, 3	Trucking and trucking terminals	40.7	40.4	40.5	40.6	—	—	—	—	—	—
422	Public warehousing	38.4	39.6	39.5	39.2	—	—	—	—	—	—
46	PIPE LINES, EXCEPT NATURAL GAS	41.0	41.0	42.0	41.2	—	—	—	—	—	—
48	COMMUNICATION	40.0	40.5	40.2	39.7	—	—	—	—	—	—
481	Telephone communication	40.3	40.9	40.7	40.1	—	—	—	—	—	—
4817	Switchboard operating employees ³	35.9	37.0	35.2	34.9	—	—	—	—	—	—
4818	Line construction employees ⁴	45.0	46.1	45.7	44.6	—	—	—	—	—	—
483	Radio and television broadcasting	38.2	38.1	37.7	37.8	—	—	—	—	—	—
49	ELECTRIC, GAS, AND SANITARY SERVICES	41.4	41.7	41.8	41.8	—	—	—	—	—	—
491	Electric services	41.3	41.9	42.2	41.9	—	—	—	—	—	—
492	Gas production and distribution	41.2	40.8	40.6	41.0	—	—	—	—	—	—
493	Combination utility services	41.1	41.8	42.1	42.2	—	—	—	—	—	—
495	Sanitary services	43.5	42.9	42.6	42.9	—	—	—	—	—	—
	WHOLESALE AND RETAIL TRADE	33.2	32.9	32.8	32.7	32.6					
50, 51	WHOLESALE TRADE	39.0	38.8	39.0	39.0	38.9					
50	WHOLESALE TRADE-DURABLE GOODS	39.5	39.3	39.4	39.4	—	—	—	—	—	—
501	Motor vehicles and automotive equipment	38.9	38.9	38.6	38.6	—	—	—	—	—	—
502	Furniture and home furnishings	37.8	37.6	37.8	38.1	—	—	—	—	—	—
503	Lumber and construction materials	39.6	39.5	40.0	39.8	—	—	—	—	—	—
504	Sporting goods, toys, and hobby goods	37.8	37.9	37.4	37.5	—	—	—	—	—	—

See footnotes at end of table.

ESTABLISHMENT DATA HOURS AND EARNINGS

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	WHOLESALE TRADE-DURABLE GOODS—Continued										
505	Metals and minerals, except petroleum	\$252.23	\$254.40	\$269.99	\$272.84	—	\$6.29	\$6.36	\$6.87	\$6.89	
506	Electrical goods	223.49	221.55	239.73	239.46	—	5.76	5.71	6.10	6.14	
507	Hardware, plumbing, and heating equipment	213.01	210.06	221.76	222.34	—	5.42	5.40	5.76	5.76	
508	Machinery, equipment, and supplies	233.34	230.62	252.05	254.87	—	5.79	5.78	6.27	6.34	
509	Miscellaneous durable goods	183.55	184.42	202.15	202.92	—	4.78	4.79	5.17	5.23	
51	WHOLESALE TRADE-NONDURABLE GOODS	210.82	210.31	230.57	231.33	—	5.49	5.52	6.02	6.04	
511	Paper and paper products	233.78	233.68	262.79	264.63	—	6.37	6.35	7.18	7.29	
512	Drugs, proprietaries, and sundries	220.95	219.82	238.08	237.12	—	5.68	5.68	6.20	6.24	
513	Apparel, piece goods, and notions	181.44	182.16	202.95	203.69	—	5.04	5.06	5.53	5.55	
514	Groceries and related products	215.22	215.81	232.93	234.47	—	5.59	5.62	6.05	6.09	
516	Chemicals and allied products	239.47	237.93	268.62	272.74	—	6.22	6.18	6.87	6.87	
517	Petroleum and petroleum products	245.78	248.22	281.56	285.19	—	6.27	6.30	7.11	7.22	
518	Beer, wine, and distilled beverages	243.70	248.16	268.09	261.52	—	6.43	6.60	7.13	7.03	
519	Miscellaneous nondurable goods	175.34	175.10	188.33	190.46	—	4.59	4.62	4.93	4.96	—
52-59	RETAIL TRADE	123.09	122.53	131.33	131.40	\$132.01	3.92	3.94	4.25	4.28	\$4.30
52	BUILDING MATERIALS AND GARDEN SUPPLIES	167.83	166.50	182.78	181.16	—	4.44	4.44	4.81	4.78	
521	Lumber and other building materials	188.07	185.72	202.00	201.70	—	4.69	4.69	5.05	5.03	
525	Hardware stores	129.20	129.18	137.36	136.46	—	3.66	3.67	3.97	3.99	
53	GENERAL MERCHANDISE STORES	113.40	109.88	119.02	118.90	—	3.78	3.75	4.09	4.10	
531	Department stores	118.59	114.95	123.68	124.26	—	3.94	3.91	4.25	4.27	
533	Variety stores	88.46	84.92	97.47	95.20	—	3.04	2.99	3.42	3.40	
539	Misc. general merchandise stores	91.81	89.40	94.96	93.67	—	3.01	2.97	3.23	3.23	
54	FOOD STORES	157.46	158.72	171.09	169.69	—	4.89	4.96	5.33	5.37	
541	Grocery stores	163.80	165.38	177.55	176.73	—	5.04	5.12	5.48	5.54	
546	Retail bakeries	108.11	107.53	115.24	115.53	—	3.64	3.67	3.96	3.97	
55	AUTOMOTIVE DEALERS AND SERVICE STATIONS	173.20	171.75	185.38	186.25	—	4.57	4.58	4.97	4.98	
551.2	New and used car dealers	214.11	212.46	228.82	229.25	—	5.49	5.49	5.99	5.97	
553	Auto and home supply stores	171.77	172.60	184.54	183.15	—	4.08	4.09	4.49	4.50	
554	Gasoline service stations	121.10	119.71	128.06	129.85	—	3.46	3.48	3.68	3.71	
56	APPAREL AND ACCESSORY STORES	105.14	104.02	112.27	112.31	—	3.54	3.55	3.78	3.82	
561	Men's and boys' clothing and furnishings	130.25	128.79	137.70	139.75	—	4.02	4.05	4.25	4.30	
562	Women's ready-to-wear stores	93.02	92.30	96.88	97.37	—	3.23	3.25	3.46	3.49	
565	Family clothing stores	95.58	95.37	109.96	108.90	—	3.24	3.30	3.57	3.63	
566	Shoe stores	116.32	114.27	124.20	124.26	—	3.97	3.90	4.21	4.27	
57	FURNITURE AND HOME FURNISHINGS STORES	158.75	158.10	173.11	171.99	—	4.51	4.53	4.89	4.90	
571	Furniture and home furnishings	165.20	165.90	176.05	176.09	—	4.68	4.74	5.03	5.06	
572	Household appliance stores	171.76	173.26	187.31	184.98	—	4.68	4.67	5.09	5.11	
573	Radio, television, and music stores	133.72	128.54	156.72	153.20	—	3.91	3.86	4.39	4.34	
58	EATING AND DRINKING PLACES⁵	81.99	81.35	88.08	87.96	—	2.96	2.98	3.25	3.27	
59	MISCELLANEOUS RETAIL	125.39	125.00	133.54	133.98	—	3.87	3.87	4.16	4.20	
591	Drug stores and proprietary stores	112.18	111.81	120.28	120.26	—	3.69	3.69	3.88	3.93	
594	Miscellaneous shopping goods stores	112.14	110.72	121.20	121.13	—	3.56	3.56	3.86	3.92	
596	Nonstore retailers	153.47	152.06	165.58	165.04	—	4.36	4.32	4.87	4.84	
598	Fuel and ice dealers	205.13	206.52	205.13	215.28	—	5.09	5.15	5.37	5.52	
599	Retail stores, nec	122.36	123.00	135.24	131.67	—	3.80	3.82	4.20	4.18	
	FINANCE, INSURANCE, AND REAL ESTATE⁶	169.36	168.53	180.91	184.10	182.23	4.64	4.63	4.97	5.03	5.02
60	BANKING	147.23	146.00	155.55	157.01	—	3.99	4.00	4.25	4.29	—
602	Commercial and stock savings banks	144.28	142.72	152.62	153.72	—	3.91	3.91	4.17	4.20	
61	CREDIT AGENCIES OTHER THAN BANKS	154.82	152.99	162.43	165.97	—	4.23	4.18	4.45	4.51	
612	Savings and loan associations	149.33	146.25	154.21	158.41	—	4.08	4.04	4.26	4.34	
614	Personal credit institutions	148.56	148.27	160.31	162.29	—	4.07	4.04	4.38	4.41	
63	INSURANCE CARRIERS	186.00	185.13	196.42	199.34	—	5.00	4.99	5.28	5.33	
631	Life insurance	185.47	186.48	194.99	196.68	—	5.04	5.04	5.27	5.33	
632	Medical service and health insurance	181.82	179.55	188.38	192.02	—	4.81	4.75	5.01	5.04	
633	Fire, marine, and casualty insurance	187.36	185.61	199.23	202.37	—	5.05	5.03	5.37	5.44	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

**C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry—Continued**

1972 SIC Code	Industry	Average weekly hours					Average overtime hours				
		Oct. 1977	Nov. 1977	Sept. , 1978	Oct., 1978 ^P	Nov., 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct., 1978 ^P	Nov., 1978 ^P
	WHOLESALE TRADE-DURABLE GOODS—Continued										
505	Metals and minerals, except petroleum	40.1	40.0	39.3	39.6						
506	Electrical goods	38.8	38.8	39.3	39.0						
507	Hardware, plumbing, and heating equipment	39.3	38.9	38.5	38.6						
508	Machinery, equipment, and supplies	40.3	39.9	40.2	40.2						
509	Miscellaneous durable goods	38.4	38.5	39.1	38.8						
51	WHOLESALE TRADE-NONDURABLE GOODS ..	38.4	38.1	38.3	38.3						
511	Paper and paper products	36.7	36.8	36.6	36.3						
512	Drugs, proprietaries, and sundries	38.9	38.7	38.4	38.0						
513	Apparel, piece goods, and notions	36.0	36.0	36.7	36.7						
514	Groceries and related products	38.5	38.4	38.5	38.5						
516	Chemicals and allied products	38.5	38.5	39.1	39.7						
517	Petroleum and petroleum products	39.2	39.4	39.6	39.5						
518	Beer, wine, and distilled beverages	37.9	37.6	37.6	37.2						
519	Miscellaneous nondurable goods	38.2	37.9	38.2	38.4						
52-59	RETAIL TRADE	31.4	31.1	30.9	30.7	30.7					
52	BUILDING MATERIALS AND GARDEN SUPPLIES	37.8	37.5	38.0	37.9						
521	Lumber and other building materials	40.1	39.6	40.0	40.1						
525	Hardware stores	35.3	35.2	34.6	34.2						
53	GENERAL MERCHANDISE STORES	30.0	29.3	29.1	29.0						
531	Department stores	30.1	29.4	29.1	29.1						
533	Variety stores	29.1	28.4	28.5	28.0						
539	Misc. general merchandise stores	30.5	30.1	29.4	29.0						
54	FOOD STORES	32.2	32.0	32.1	31.6						
541	Grocery stores	32.5	32.3	32.4	31.9						
546	Retail bakeries	29.7	29.3	29.1	29.1						
55	AUTOMOTIVE DEALERS AND SERVICE STATIONS	37.9	37.5	37.3	37.4						
551.2	New and used car dealers	39.0	38.7	38.2	38.4						
553	Auto and home supply stores	42.1	42.2	41.1	40.7						
554	Gasoline service stations	35.0	34.4	34.8	35.0						
56	APPAREL AND ACCESSORY STORES	29.7	29.3	29.7	29.4						
561	Men's and boys' clothing and furnishings	32.4	31.8	32.4	32.5						
562	Women's ready-to-wear stores	28.8	28.4	28.0	27.9						
565	Family clothing stores	29.5	28.9	30.8	30.0						
566	Shoe stores	29.3	29.3	29.5	29.1						
57	FURNITURE AND HOME FURNISHINGS STORES	35.2	34.9	35.4	35.1						
571	Furniture and home furnishings	35.3	35.0	35.0	34.8						
572	Household appliance stores	36.7	37.1	36.8	36.2						
573	Radio, television, and music stores	34.2	33.3	35.7	35.3						
58	EATING AND DRINKING PLACES⁵	27.7	27.3	27.1	26.9						
59	MISCELLANEOUS RETAIL	32.4	32.3	32.1	31.9						
591	Drug stores and proprietary stores	30.4	30.3	31.0	30.6						
594	Miscellaneous shopping goods stores	31.5	31.1	31.4	30.9						
596	Nonstore retailers	35.2	35.2	34.0	34.1						
598	Fuel and ice dealers	40.3	40.1	38.2	39.0						
599	Retail stores, nec	32.2	32.2	32.2	31.5						
	FINANCE, INSURANCE, AND REAL ESTATE⁶	36.5	36.4	36.4	36.6	36.3					
60	BANKING	36.9	36.5	36.6	36.6						
602	Commercial and stock savings banks	36.9	36.5	36.6	36.6						
61	CREDIT AGENCIES OTHER THAN BANKS	36.6	36.6	36.5	36.8						
612	Savings and loan associations	36.6	36.2	36.2	36.5						
614	Personal credit institutions	36.5	36.7	36.6	36.8						
63	INSURANCE CARRIERS	37.2	37.1	37.2	37.4						
631	Life insurance	36.8	37.0	37.0	36.9						
632	Medical service and health insurance	37.8	37.8	37.6	38.1						
633	Fire, marine, and casualty insurance	37.1	36.9	37.1	37.2						

See footnotes at end of table.

ESTABLISHMENT DATA HOURS AND EARNINGS

C-2. Gross hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry—Continued

1972 SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	SERVICES	\$157.56	\$157.26	\$165.46	\$167.10	\$167.24	\$4.76	\$4.78	\$5.06	\$5.11	\$5.13
	HOTELS AND OTHER LODGING PLACES:										
701	Hotels, motels, and tourist courts	105.82	104.38	113.52	115.87		3.37	3.40	3.65	3.69	
	PERSONAL SERVICES:										
721	Laundry, cleaning, and garment services	121.45	121.45	130.07	132.21		3.48	3.51	3.77	3.81	
723	Beauty shops	117.71	121.28	119.45	119.51		3.69	3.79	3.78	3.77	
	BUSINESS SERVICES										
73	Advertising	160.39	160.06	168.73	169.85		4.89	4.88	5.16	5.21	
731	Services to buildings	243.83	245.07	258.84	258.42		6.83	6.77	7.17	7.30	
734	Computer and data processing services	121.12	119.14	121.95	125.39		4.28	4.24	4.50	4.61	
737	Automotive repair shops	200.02	199.65	215.03	218.65		5.45	5.44	5.94	6.04	
75	AUTO REPAIR, SERVICES, AND GARAGES										
753	Miscellaneous repair services	174.37	176.06	188.33	187.36		4.70	4.72	5.09	5.05	
	MISCELLANEOUS REPAIR SERVICES										
76	Motion picture production and services	199.92	201.61	212.62	212.08		5.10	5.13	5.48	5.48	
	MOTION PICTURES										
78	Motion picture production and services	236.12	230.84	250.91	249.70		5.83	5.80	6.09	6.12	
781	Motion picture production and services	184.34	179.76	192.64	209.61		6.27	6.22	6.88	7.54	
	AMUSEMENT AND RECREATION SERVICES										
79	Motion picture production and services	342.11	321.86	378.79	406.03		8.84	8.77	9.89	10.77	
	AMUSEMENT AND RECREATION SERVICES										
79	Motion picture production and services	135.08	138.15	143.82	148.15		4.40	4.50	4.70	4.81	
	HEALTH SERVICES										
80	Offices of physicians	148.50	147.93	161.02	161.53		4.50	4.51	4.85	4.88	
801	Offices of dentists	158.12	155.57	169.50	168.96		4.72	4.70	5.09	5.12	
802	Nursing and personal care facilities	132.31	132.31	135.78	137.42		4.61	4.61	4.65	4.69	
805	Hospitals	102.94	102.28	112.58	113.15		3.31	3.31	3.62	3.65	
806	Hospitals	162.04	161.90	176.99	176.12		4.78	4.79	5.16	5.18	
81	LEGAL SERVICES	204.34	203.65	211.68	218.66		5.94	5.92	6.30	6.45	
	MISCELLANEOUS SERVICES										
89	Engineering and architectural services	265.42	264.65	277.40	280.46		6.93	6.91	7.30	7.40	
891	Accounting, auditing, and bookkeeping	287.23	287.17	299.15	300.30		7.29	7.27	7.71	7.80	
893	Accounting, auditing, and bookkeeping	226.50	226.42	237.23	242.73		6.04	5.99	6.36	6.49	

¹ For coverage of series, see footnote 1, table B-2.

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

³ 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.

⁴ 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.

⁵ Money payments only; tips, not included.

⁶ Data for nonoffice sales agents excluded from all series in this division.

^P preliminary.

* Not available.

** Corrected August 1978 data for Men's and boys' separate trousers (SIC 2327) for average weekly earnings are \$129.58.

[†] Revised data for guided missiles, space vehicles, parts (SIC 376) are: July 1978 average weekly earnings—\$309.50 and average hourly earnings \$7.44. August 1978 average weekly earnings—\$317.48 and average hourly earnings \$7.47.

^{††} Revised data for guided missiles and space vehicles (SIC 3761) are: July 1978 average weekly earnings—\$304.36 and average hourly earnings \$7.59. August 1978 average weekly earnings—\$312.07 and average hourly earnings \$7.63.

**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				
		Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^p	Nov. 1978 ^p	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^p	Nov. 1978 ^p
	SERVICES	33.1	32.9	32.7	32.7	32.6					
	HOTELS AND OTHER LODGING PLACES:										
701	Hotels, motels, and tourist courts	31.4	30.7	31.1	31.4						
	PERSONAL SERVICES:										
721	Laundry, cleaning, and garment services	34.9	34.6	34.5	34.7	--	--	--	--	--	
723	Beauty shops	31.9	32.0	31.6	31.7	--	--	--	--	--	
	BUSINESS SERVICES	32.8	32.8	32.7	32.6	--	--	--	--	--	
731	Advertising	35.7	36.2	36.1	35.4	--	--	--	--	--	
734	Services to buildings	28.3	28.1	27.1	27.2	--	--	--	--	--	
737	Computer and data processing services	36.7	36.7	36.2	36.2	--	--	--	--	--	
	AUTO REPAIR, SERVICES, AND GARAGES	37.1	37.3	37.0	37.1	--	--	--	--	--	
753	Automotive repair shops	39.2	39.3	38.8	38.7	--	--	--	--	--	
76	MISCELLANEOUS REPAIR SERVICES	40.5	39.8	41.2	40.8	--	--	--	--	--	
	MOTION PICTURES	29.4	28.9	28.0	27.8	--	--	--	--	--	
781	Motion picture production and services	38.7	36.7	38.3	37.7	--	--	--	--	--	
79	AMUSEMENT AND RECREATION SERVICES	30.7	30.7	30.6	30.8	--	--	--	--	--	
	HEALTH SERVICES	33.0	32.8	33.2	33.1	--	--	--	--	--	
801	Offices of physicians	33.5	33.1	33.3	33.0	--	--	--	--	--	
802	Offices of dentists	28.7	28.7	29.2	29.3	--	--	--	--	--	
805	Nursing and personal care facilities	31.1	30.9	31.1	31.0	--	--	--	--	--	
806	Hospitals	33.9	33.8	34.3	34.0	--	--	--	--	--	
81	LEGAL SERVICES	34.4	34.4	33.6	33.9	--	--	--	--	--	
	MISCELLANEOUS SERVICES	38.3	38.3	38.0	37.9	--	--	--	--	--	
891	Engineering and architectural services	39.4	39.5	38.8	38.5	--	--	--	--	--	
893	Accounting, auditing, and bookkeeping	37.5	37.8	37.3	37.4	--	--	--	--	--	

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	1977					1978							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Executive Branch													
Total employment	2,704.2	2,665.4	2,662.5	2,664.3	2,673.1	2,659.5	2,668.2	2,672.9	2,686.7	2,702.9	2,747.5	2,760.3	2,738.5
Average weekly hours	39.7	39.4	39.8	39.4	40.0	39.6	39.9	39.9	39.6	39.5	39.6	39.8	39.7
Average overtime hours	1.2	1.3	1.2	1.1	1.6	1.2	1.2	1.1	1.1	1.1	1.1	1.2	1.2
Indexes (1967=100):													
Average weekly earnings	212.7	214.9	226.9	225.9	230.5	229.0	230.2	227.4	226.5	226.0	226.5	227.7	226.8
Average hourly earnings	211.1	214.9	224.6	225.9	227.0	227.8	227.3	226.2	225.4	225.4	225.4	225.4	225.1
Department of Defense													
Total employment	922.0	909.1	907.8	909.8	907.7	906.4	906.0	905.6	905.4	911.3	924.8	927.1	918.6
Average weekly hours	40.0	39.9	39.9	39.8	40.0	39.9	40.1	40.0	40.1	40.0	40.0	40.1	40.1
Average overtime hours .....	.8	1.1	.9	.9	.8	.7	.8	.9	.9	.9	1.0	.9	1.0
Indexes (1967=100):													
Average weekly earnings	204.2	208.0	217.4	220.9	220.4	221.8	222.3	221.5	222.1	222.0	221.5	220.4	221.2
Average hourly earnings	205.7	210.1	219.6	223.7	222.1	224.0	223.4	223.2	223.7	223.2	221.5	222.3	222.3
Postal Service													
Total employment	656.8	655.0	649.2	650.2	668.2	645.6	646.9	647.6	647.9	648.3	648.3	647.5	649.0
Average weekly hours	39.9	40.1	41.2	39.8	41.8	41.1	41.5	40.4	40.1	39.9	40.0	40.2	39.9
Average overtime hours	1.4	1.7	2.0	1.5	3.5	2.5	2.1	1.7	1.5	1.5	1.6	1.8	1.5
Indexes (1967=100):													
Average weekly earnings	248.6	251.5	259.0	253.4	271.7	253.9	266.5	258.5	256.2	254.3	259.7	261.9	260.3
Average hourly earnings	240.5	242.1	242.7	245.7	250.9	249.9	247.9	247.0	246.6	246.0	250.6	251.5	251.8
Other Agencies													
Total employment	1,125.9	1,101.3	1,105.5	1,104.3	1,097.2	1,107.5	1,115.3	1,119.7	1,133.4	1,143.3	1,174.4	1,185.7	1,170.9
Average weekly hours	39.3	38.7	38.8	38.9	38.8	38.5	38.9	38.8	38.9	38.8	39.0	39.3	39.3
Average overtime hours	1.5	1.2	1.1	1.1	1.0	.9	1.0	1.0	1.0	1.0	1.0	1.1	1.2
Indexes (1967=100):													
Average weekly earnings	200.1	201.7	216.6	215.4	216.1	216.6	217.6	215.1	214.1	213.4	212.0	214.6	213.4
Average hourly earnings	197.5	202.2	216.6	214.9	216.1	218.3	217.1	215.1	213.6	213.4	210.9	211.9	210.6

NOTE: The hours and earnings averages presented in this table have been computed using data collected by the U.S. Civil Service Commission 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 ¹				
	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
MANUFACTURING	\$ 5.56	\$ 5.60	\$ 5.99	\$ 6.04	\$ 6.09
DURABLE GOODS	5.94	5.97	6.39	6.44	6.49
Lumber and wood products	5.01	5.03	5.48	5.49	-
Furniture and fixtures	4.28	4.32	4.59	4.61	-
Stone, clay, and glass products	5.60	5.67	6.09	6.10	-
Primary metal industries	7.33	7.37	8.00	8.02	-
Fabricated metal products	5.78	5.81	6.14	6.19	-
Machinery, except electrical	6.13	6.15	6.53	6.62	-
Electric and electronic equipment	5.33	5.36	5.72	5.77	-
Transportation equipment	7.09	7.13	7.55	7.70	-
Instruments and related products	5.22	5.26	5.57	5.61	-
Miscellaneous manufacturing industries	4.28	4.32	4.58	4.61	-
NONDURABLE GOODS	5.00	5.03	5.38	5.41	5.46
Food and kindred products	5.17	5.25	5.55	5.60	-
Tobacco manufactures	5.33	5.51	5.93	5.85	-
Textile mill products	3.92	3.94	4.22	4.23	-
Apparel and other textile products	3.62	3.63	3.92	3.94	-
Paper and allied products	5.80	5.84	6.27	6.29	-
Printing and publishing	(²)	(²)	(²)	(²)	-
Chemicals and allied products	6.35	6.41	6.82	6.88	-
Petroleum and coal products	7.54	7.56	8.23	8.24	-
Rubber and misc. plastics products	5.00	5.03	5.32	5.40	-
Leather and leather products	3.57	3.59	3.83	3.85	-

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

^P preliminary.

² Not available as average overtime rates are significantly above time and one-half. Inclusion of data for the group in the nondurable goods total has little effect.

ESTABLISHMENT DATA HOURS AND EARNINGS

C-5. Gross and spendable average weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, in current and 1967 dollars

Industry	Gross average weekly earnings			Spendable average weekly earnings ²					
				Worker with no dependents			Married worker with 3 dependents		
	Oct. 1977	Sept. 1978	Oct. 1978 ^P	Oct. 1977	Sept. 1978	Oct. 1978 ^P	Oct. 1977	Sept. 1978	Oct. 1978 ^P
TOTAL PRIVATE:									
Current dollars	\$194.58	\$209.52	\$210.37	\$160.73	\$169.58	\$170.19	\$177.09	\$185.08	\$185.71
1967 dollars	105.46	105.23	104.82	87.12	85.17	84.80	95.98	92.96	92.53
MINING:									
Current dollars	317.20	345.39	349.09	242.01	260.51	263.06	267.44	285.81	288.70
1967 dollars	171.83	173.48	173.94	131.17	130.84	131.07	144.95	143.55	143.85
CONSTRUCTION:									
Current dollars	308.39	332.63	336.93	236.39	252.17	254.88	261.43	276.33	279.42
1967 dollars	167.15	167.07	167.88	128.12	126.65	127.00	141.70	138.79	139.22
MANUFACTURING:									
Current dollars	236.29	255.60	257.00	189.73	201.63	202.57	208.42	219.65	220.73
1967 dollars	128.07	128.38	128.05	102.83	101.27	100.93	112.96	110.32	109.98
TRANSPORTATION AND PUBLIC UTILITIES:									
Current dollars	287.36	309.94	309.97	222.75	237.57	237.59	246.61	260.00	260.02
1967 dollars	155.75	155.67	154.44	120.73	119.32	118.38	133.66	130.59	129.56
WHOLESALE AND RETAIL TRADE:									
Current dollars	145.08	155.47	156.31	124.01	130.19	130.82	136.59	143.51	144.18
1967 dollars	78.63	78.09	77.88	67.21	65.39	65.18	74.03	72.08	71.84
FINANCE, INSURANCE, AND REAL ESTATE:									
Current dollars	169.36	180.91	184.10	142.40	148.99	151.29	157.20	163.33	165.78
1967 dollars	91.79	90.86	91.73	77.18	74.83	75.38	85.20	82.03	82.60
SERVICES:									
Current dollars	157.56	165.46	167.10	133.39	137.68	138.91	147.91	151.32	152.59
1967 dollars	85.40	83.10	83.26	72.30	69.15	69.21	80.17	76.00	76.03
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS (CPI-W, All items, 1967=100)	184.5	199.1	200.7	NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is an estimate of the average change in the prices of goods and services purchased by those consumers, and is used to deflate the current dollar values in this table to the 1967 dollar values shown. A major revision in the Consumer Price Index (revised CPI-W) was introduced with data for January 1978. Data prior to January 1978 in 1967 dollars are based on the unrevised Consumer Price Index for Urban Wage Earners and Clerical Workers (unrevised CPI-W).					

¹ For coverage of series, see footnote 1, table B-2.

² 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).

The data for spendable earnings for the seven month period June-December 1977 are calculated from formulas which concentrate the full year's effect of tax reduction in those seven months. A technical note on the calculation and uses of the spendable earnings series is available on request.

p=preliminary (applicable to earnings data only).

ESTABLISHMENT DATA HOURS AND EARNINGS

C-6. Indexes of aggregate weekly hours and payrolls of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group

[1967=100]

Industry division and group	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	Hours				
TOTAL PRIVATE	118.3	118.2	122.9	122.9	123.2
GOODS-PRODUCING	104.4	103.7	110.0	110.0	109.8
MINING	141.7	141.7	147.3	148.8	148.4
CONSTRUCTION	118.2	112.3	134.3	136.2	128.6
MANUFACTURING	100.7	100.8	104.4	104.0	105.1
DURABLE GOODS	101.7	102.1	106.7	107.1	108.4
Lumber and wood products	114.7	111.9	116.1	116.5	113.6
Furniture and fixtures	109.3	109.3	109.9	110.6	110.6
Stone, clay, and glass products	109.2	110.4	114.1	115.2	114.9
Primary metal industries	91.3	90.8	97.5	96.7	98.4
Fabricated metal products	101.1	101.7	104.8	105.1	106.3
Machinery, except electrical	104.3	106.4	112.5	113.3	115.7
Electric and electronic equipment	99.0	100.4	102.7	102.8	104.8
Transportation equipment	96.6	95.8	101.4	102.5	104.1
Instruments and related products	115.7	117.0	124.9	124.8	127.7
Miscellaneous manufacturing industries	102.6	102.4	105.9	106.7	105.9
NONDURABLE GOODS	99.2	99.0	101.1	99.5	100.3
Food and kindred products	98.3	96.0	103.0	97.6	95.5
Tobacco manufactures	88.1	87.0	85.0	84.5	84.7
Textile mill products	93.2	94.3	93.2	92.4	93.3
Apparel and other textile products	92.5	92.7	92.2	91.1	92.6
Paper and allied products	100.0	99.8	101.2	100.0	102.8
Printing and publishing	97.6	97.9	98.8	98.7	101.7
Chemicals and allied products	104.2	104.2	106.8	106.6	107.2
Petroleum and coal products	120.1	118.8	126.4	125.6	125.6
Rubber and misc. plastics products	143.2	143.8	149.6	150.7	152.8
Leather and leather products	69.7	71.1	69.0	67.8	66.5
SERVICE-PRODUCING	128.0	128.3	131.8	131.9	132.5
TRANSPORTATION AND PUBLIC UTILITIES	106.6	107.7	109.8	110.5	111.0
WHOLESALE AND RETAIL TRADE	124.2	124.9	128.1	128.0	129.6
WHOLESALE TRADE	123.2	122.9	127.4	128.2	128.9
RETAIL TRADE	124.6	125.7	128.4	128.0	129.9
FINANCE, INSURANCE, AND REAL ESTATE	133.0	133.0	139.4	140.2	139.9
SERVICES	141.7	141.0	144.9	144.7	144.5

¹ 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 workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group—Continued

[1967=100]

Industry division and group	Oct. 1977	Nov. 1977	Sept. 1978	Oct. 1978 ^P	Nov. 1978 ^P
	Payrolls				
TOTAL PRIVATE	238.0	238.1	266.7	268.8	270.0
GOODS-PRODUCING	216.8	215.5	247.7	249.4	249.4
MINING	317.6	319.7	366.9	372.2	375.5
CONSTRUCTION	238.2	225.7	289.8	294.2	278.3
MANUFACTURING	207.4	208.8	232.1	233.0	237.0
DURABLE GOODS	211.2	212.9	238.6	241.7	246.1
Lumber and wood products	255.0	248.4	282.2	283.9	276.4
Furniture and fixtures	209.3	210.6	225.0	227.1	227.9
Stone, clay, and glass products	230.1	234.2	261.7	264.5	265.2
Primary metal industries	209.4	209.6	245.8	244.5	250.3
Fabricated metal products	205.7	207.7	226.8	228.7	233.1
Machinery, except electrical	210.9	215.5	242.7	247.4	254.4
Electric and electronic equipment	196.9	201.0	220.1	221.4	226.0
Transportation equipment	212.0	211.2	237.3	244.6	250.5
Instruments and related products	219.1	223.4	252.5	254.0	262.0
Miscellaneous manufacturing industries	193.2	194.9	213.5	216.9	217.9
NONDURABLE GOODS	200.8	201.7	221.0	218.3	221.5
Food and kindred products	202.6	201.0	229.3	217.7	215.6
Tobacco manufactures	214.6	221.1	228.4	222.4	227.6
Textile mill products	185.9	189.3	200.2	198.4	201.6
Apparel and other textile products	168.2	169.2	181.3	180.2	183.7
Paper and allied products	214.0	214.7	235.3	232.6	241.2
Printing and publishing	185.7	186.9	198.3	197.9	204.8
Chemicals and allied products	222.3	223.9	245.4	246.5	249.4
Petroleum and coal products	267.0	264.3	306.3	304.6	306.0
Rubber and misc. plastics products	272.9	275.4	304.1	310.3	317.4
Leather and leather products	123.8	126.9	131.0	129.0	128.1
SERVICE-PRODUCING	256.3	257.7	283.1	285.6	287.7
TRANSPORTATION AND PUBLIC UTILITIES	238.0	241.5	261.6	264.1	264.9
WHOLESALE AND RETAIL TRADE	240.9	243.0	269.6	271.4	275.7
WHOLESALE TRADE	237.0	237.0	266.4	269.7	271.6
RETAIL TRADE	243.1	246.5	271.4	272.4	277.9
FINANCE, INSURANCE, AND REAL ESTATE	239.1	238.5	268.4	272.9	271.7
SERVICES	294.6	294.2	320.1	322.9	324.0

¹ For coverage of series, see footnote 1, table B-2.

p=preliminary.

**ESTABLISHMENT DATA
SEASONALLY ADJUSTED HOURS**

**C-7. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry division and major manufacturing group, seasonally adjusted**

Industry	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Nov. ^P
TOTAL PRIVATE	36.0	35.9	35.5	35.7	36.0	36.1	35.9	35.9	35.9	35.8	35.8	35.8	35.9
MINING	43.7	42.9	42.8	43.2	43.7	44.0	43.4	43.4	43.0	43.6	43.0	43.1	42.8
CONSTRUCTION	36.4	36.2	34.3	35.6	36.9	37.3	36.6	37.3	37.3	37.1	37.0	36.9	36.8
MANUFACTURING	40.5	40.5	39.8	40.1	40.6	40.8	40.4	40.5	40.5	40.3	40.4	40.4	40.6
<i>Overtime hours</i>	3.6	3.6	3.5	3.7	3.7	3.8	3.5	3.6	3.6	3.4	3.6	3.6	3.7
DURABLE GOODS	41.2	41.2	40.4	40.7	41.3	41.4	41.0	41.2	41.2	41.0	41.1	41.2	41.3
<i>Overtime hours</i>	3.8	3.8	3.7	4.0	3.9	4.0	3.7	3.7	3.8	3.6	3.8	3.9	4.0
Lumber and wood products	40.0	40.0	39.3	39.6	39.9	40.2	39.5	40.0	39.8	39.3	39.6	40.0	40.0
Furniture and fixtures	39.5	39.6	38.4	40.0	40.1	40.1	39.4	39.5	39.3	39.0	38.8	38.9	39.1
Stone, clay, and glass products	41.5	41.3	40.0	40.9	41.8	42.0	41.6	41.9	41.7	41.6	41.8	41.8	41.9
Primary metal industries	41.5	41.6	41.4	41.6	41.5	41.5	41.7	41.8	41.8	42.0	41.8	42.2	42.2
Fabricated metal products	41.0	41.2	40.3	40.7	41.3	41.4	41.1	41.0	41.0	40.9	40.9	40.8	41.0
Machinery, except electrical	41.9	41.9	41.1	41.8	42.3	42.3	42.1	42.3	42.2	41.8	41.9	42.0	42.2
Electric and electronic equipment	40.5	40.5	39.7	40.0	40.6	40.4	40.2	40.2	40.7	40.4	40.1	40.2	40.4
Transportation equipment	42.6	42.4	41.6	40.9	42.1	42.4	41.8	42.0	42.1	41.8	42.5	42.5	42.7
Instruments and related products	40.6	40.5	40.4	40.6	41.3	41.4	40.8	40.8	40.7	41.0	40.9	40.9	40.6
Miscellaneous manufacturing ind	38.9	38.6	38.0	38.3	39.0	39.1	38.8	38.8	38.8	39.0	39.0	38.8	38.8
NONDURABLE GOODS	39.5	39.4	38.8	39.1	39.7	39.8	39.5	39.4	39.4	39.3	39.4	39.3	39.5
<i>Overtime hours</i>	3.2	3.3	3.2	3.3	3.3	3.4	3.2	3.1	3.2	3.2	3.2	3.2	3.2
Food and kindred products	40.1	39.9	39.7	39.7	40.0	40.1	39.8	39.6	39.8	39.5	39.5	39.8	39.8
Tobacco manufactures	38.5	38.0	37.6	38.3	38.9	38.7	38.7	39.6	38.6	37.7	37.9	36.9	37.2
Textile mill products	40.7	40.5	40.3	40.3	40.8	40.9	40.5	40.3	40.2	40.4	40.4	40.4	40.5
Apparel and other textile products	35.8	35.9	33.7	35.5	36.0	36.3	35.9	35.8	35.8	35.6	35.7	35.1	35.8
Paper and allied products	42.8	42.9	42.5	42.5	43.4	43.5	42.9	42.9	42.9	42.7	42.7	42.7	43.1
Printing and publishing	37.8	37.6	37.4	37.4	38.0	37.9	37.3	37.5	37.6	37.4	37.8	37.7	37.9
Chemicals and allied products	41.7	41.7	41.6	41.6	42.1	42.0	41.9	41.9	41.8	41.9	41.8	42.0	42.0
Petroleum and coal products	42.8	43.4	43.1	42.8	43.3	43.6	42.9	43.4	43.9	44.3	43.8	43.8	43.7
Rubber and misc. plastics products	40.8	40.6	40.2	39.8	40.7	41.3	41.1	41.1	40.9	40.9	41.0	41.0	41.2
Leather and leather products	37.4	37.0	36.5	36.4	37.1	38.1	37.6	37.4	37.2	37.1	37.2	36.8	36.5
TRANSPORTATION AND PUBLIC UTILITIES	40.2	40.0	40.0	40.1	40.4	40.0	40.2	40.1	39.6	39.9	40.1	40.1	40.1
WHOLESALE AND RETAIL TRADE	33.1	33.1	32.7	32.7	33.0	33.0	32.9	32.8	32.9	32.8	32.8	32.8	32.9
WHOLESALE TRADE	38.8	38.8	38.7	38.7	38.9	39.0	38.7	38.8	38.7	38.8	39.0	38.9	38.9
RETAIL TRADE	31.4	31.4	30.9	30.9	31.2	31.2	31.1	31.0	31.1	30.9	30.9	30.9	31.0
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.4	36.3	36.3	36.3	36.7	36.3	36.5	36.6	36.5	36.5	36.6	36.3
SERVICES	33.0	33.0	33.0	32.9	33.0	33.0	32.9	32.8	32.8	32.7	32.8	32.8	32.7

¹ For coverage of series, see footnote 1, table B-2.

p=preliminary.

**ESTABLISHMENT DATA
SEASONALLY ADJUSTED**

**C-8. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls,
by industry division and major manufacturing group, seasonally adjusted**

[1967=100]

Industry division and group	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Nov. ^P
TOTAL PRIVATE	117.4	117.5	116.2	117.1	119.1	120.4	120.0	120.6	120.6	120.4	120.8	121.4	122.4
GOODS-PRODUCING	102.0	101.6	99.3	100.9	103.6	106.0	105.1	106.0	106.1	105.4	105.5	106.5	107.9
MINING	139.7	107.8	105.6	106.8	111.3	144.2	143.1	144.0	143.5	145.7	144.4	145.8	146.5
CONSTRUCTION	108.7	108.6	100.3	104.2	111.5	118.8	117.1	122.8	124.2	122.8	122.6	123.7	124.5
MANUFACTURING	99.5	100.2	98.9	100.1	102.0	102.5	101.6	101.7	101.6	101.0	101.2	102.1	103.7
DURABLE GOODS	100.8	101.7	100.5	101.9	103.9	104.2	103.5	103.8	104.0	103.5	103.9	105.5	107.0
Lumber and wood products	113.2	114.5	113.2	114.0	114.3	115.0	111.8	113.6	112.3	110.7	111.6	113.6	114.8
Furniture and fixtures	107.0	108.9	106.1	111.1	112.5	112.5	110.3	109.5	108.3	106.4	106.2	107.2	108.3
Stone, clay, and glass products	108.6	109.0	106.4	108.4	111.0	112.7	111.4	112.4	111.1	109.8	110.1	111.4	112.8
Primary metal industries	91.6	91.9	92.2	93.4	92.8	92.9	93.9	94.1	94.4	95.3	95.5	97.1	99.2
Fabricated metal products	100.1	101.1	99.4	101.4	102.9	103.5	103.3	102.4	102.0	101.8	102.0	103.1	104.7
Machinery, except electrical	105.1	106.2	104.6	107.1	109.4	110.1	109.5	111.3	112.1	110.8	111.5	113.7	114.4
Electric and electronic equipment	98.1	98.6	97.3	98.8	101.2	100.4	99.8	99.8	101.8	101.1	100.1	101.1	102.6
Transportation equipment	94.1	95.7	94.9	93.7	97.2	97.5	96.6	95.8	96.2	96.1	97.7	100.3	102.5
Instruments and related products	115.1	116.0	116.3	117.5	120.5	121.7	120.8	122.4	123.6	123.9	123.9	123.9	125.7
Miscellaneous manufacturing ind	97.7	99.0	97.4	99.0	102.0	102.6	101.5	101.4	99.8	100.6	100.3	100.6	101.2
NONDURABLE GOODS	97.6	97.9	96.5	97.4	99.2	99.9	98.9	98.7	98.1	97.2	97.2	97.2	98.9
Food and kindred products	94.3	94.6	94.5	94.7	96.2	96.4	94.6	94.0	93.6	91.4	91.3	92.0	93.9
Tobacco manufactures	77.1	78.7	77.9	79.4	82.0	80.2	81.5	84.1	78.6	71.5	74.5	73.8	74.4
Textile mill products	93.7	93.0	92.6	92.5	93.7	93.4	92.6	91.8	91.5	91.2	91.8	91.9	92.5
Apparel and other textile products	90.8	91.1	85.6	90.1	91.6	93.2	91.9	91.4	90.1	90.1	90.1	88.6	90.7
Paper and allied products	98.6	99.6	98.7	99.1	101.6	102.4	101.9	101.9	101.9	99.2	99.0	98.8	101.6
Printing and publishing	96.9	96.7	96.7	96.9	99.3	99.1	98.2	98.6	99.1	98.3	97.8	98.0	100.8
Chemicals and allied products	104.0	104.5	104.4	104.8	106.0	106.5	106.9	106.9	106.6	106.0	106.0	106.3	106.8
Petroleum and coal products	117.3	119.8	119.9	119.0	121.3	122.1	118.4	120.4	121.2	123.2	122.7	122.7	124.2
Rubber and misc. plastics products	141.3	142.1	141.0	140.1	144.5	147.3	146.6	147.0	146.2	145.4	145.0	147.0	150.3
Leather and leather products	70.3	69.6	68.0	67.8	69.1	71.3	70.4	70.1	67.1	69.1	69.6	68.3	66.1
SERVICE-PRODUCING	128.1	128.5	127.9	128.4	129.8	130.5	130.5	130.7	130.7	130.8	131.4	131.8	132.4
TRANSPORTATION AND PUBLIC UTILITIES	107.2	106.9	107.0	107.7	109.1	108.7	109.0	109.4	106.5	107.7	108.2	109.9	110.5
WHOLESALE AND RETAIL TRADE	124.2	124.7	123.7	124.2	125.9	126.4	126.8	126.8	127.4	127.2	127.5	127.9	128.8
WHOLESALE TRADE	122.4	123.0	123.1	123.9	125.3	126.0	125.2	126.1	125.7	126.1	127.1	127.2	128.3
RETAIL TRADE	124.9	125.4	123.9	124.4	126.1	126.6	127.3	127.0	128.0	127.7	127.7	128.1	129.0
FINANCE, INSURANCE, AND REAL ESTATE	133.6	133.9	134.3	135.1	135.4	137.5	136.2	137.9	139.0	139.2	139.6	140.5	140.3
SERVICES	141.6	142.1	141.7	141.8	143.3	144.1	143.8	143.9	144.1	144.1	145.1	144.7	145.1

¹ For coverage of series, see footnote 1, table B-2.

p=preliminary.

ESTABLISHMENT DATA SEASONALLY ADJUSTED

C-9. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, seasonally adjusted

Industry	1977		1978										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Nov. ^P
Average hourly earnings													
TOTAL PRIVATE	\$5.39	\$5.41	\$5.46	\$5.49	\$5.54	\$5.61	\$5.62	\$5.66	\$5.71	\$5.73	\$5.77	\$5.82	\$5.86
MINING	7.18	6.75	6.84	6.92	6.94	7.63	7.66	7.71	7.85	7.88	7.88	7.99	8.05
CONSTRUCTION	8.20	8.24	8.30	8.35	8.47	8.47	8.59	8.65	8.66	8.72	8.75	8.78	8.84
MANUFACTURING	5.85	5.88	5.93	5.98	6.01	6.05	6.08	6.12	6.18	6.20	6.25	6.33	6.37
TRANSPORTATION AND PUBLIC UTILITIES	7.21	7.28	7.34	7.38	7.40	7.49	7.50	7.52	7.53	7.58	7.65	7.67	7.68
WHOLESALE AND RETAIL TRADE	4.39	4.42	4.51	4.50	4.55	4.60	4.60	4.63	4.67	4.70	4.73	4.77	4.80
FINANCE, INSURANCE, AND REAL ESTATE	4.66	4.68	4.72	4.71	4.75	4.84	4.84	4.89	4.95	4.92	4.98	5.04	5.05
SERVICES	4.76	4.78	4.86	4.87	4.90	4.95	4.94	4.96	5.01	5.02	5.05	5.09	4.11
Average weekly earnings													
TOTAL PRIVATE:													
Current dollars	194.04	194.22	193.83	195.99	199.44	202.52	201.76	203.19	204.99	205.13	206.57	208.36	210.37
1967 dollars ²	104.77	104.42	103.38	103.86	104.86	105.59	104.21	104.04	104.43	103.92	103.91	103.97	-
Real spendable earnings (married worker with 3 dependents, 1967 dollars) ^{2, 3}	95.39	95.06	92.41	92.70	93.33	93.76	92.59	92.33	92.55	92.09	91.98	91.92	-

¹ For coverage of series, see footnote 1, table B-2.

² A major revision in the CPI was introduced beginning with the January 1978 data (see note on table C-5, and Explanatory Notes).

³ See footnote 2, table C-5.

p=preliminary.

C-10. Hours of wage and salary workers¹ in nonagricultural establishments, by industry division

Industry division	Millions of hours (Annual rate) ²			Percent change		
	SEPTEMBER 1978	OCTOBER 1978p	NOVEMBER 1978p	Nov. 1977 to Nov. 1978	Sept. 1978 to Oct. 1978	Oct. 1978 to Nov. 1978
TOTAL	162,931	163,556	165,279	4.6	0.4	1.1
PRIVATE SECTOR	132,612	133,356	134,250	4.4	0.6	0.7
MINING	1,991	2,019	2,033	5.4	1.4	0.7
CONSTRUCTION	8,258	8,309	8,349	12.7	0.6	0.5
MANUFACTURING	42,299	42,576	43,078	4.1	0.7	1.2
DURABLE GOODS	25,721	26,026	26,331	5.9	1.2	1.2
NONDURABLE GOODS	16,578	16,549	16,747	1.2	-0.2	1.2
TRANSPORTATION AND PUBLIC UTILITIES	10,112	10,208	10,295	4.1	1.0	0.9
WHOLESALE AND RETAIL TRADE	33,470	33,599	33,746	3.8	0.4	0.4
FINANCE, INSURANCE, AND REAL ESTATE	8,964	9,007	8,997	4.9	0.5	-0.1
SERVICES	27,519	27,639	27,753	3.4	0.4	0.4
GOVERNMENT	30,319	30,200	31,029	5.2	-0.4	2.7

¹ 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.

² "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										
			1976				1977				1978		
	1976	1977	I	II	III	IV	I	II	III	IV	I	II	III
PRIVATE BUSINESS SECTOR:													
Output per hour of all persons	116.4	118.4	115.4	116.1	117.1	117.2	117.9	117.4	118.9	119.0	117.6	118.0	119.0
Output	126.5	133.2	126.0	126.2	127.1	127.6	130.5	132.5	134.2	135.5	135.3	138.7	139.7
Hours	108.7	112.6	108.3	108.7	108.5	108.9	110.7	112.9	112.9	113.9	115.0	117.6	117.4
Compensation per hour	197.0	213.0	190.9	194.8	199.3	203.6	207.5	210.5	215.3	218.8	225.2	229.6	235.3
Real compensation per hour	115.6	117.4	114.1	115.0	116.1	117.3	117.2	116.4	117.6	118.2	119.3	118.6	119.0
Unit labor costs	169.3	180.2	165.4	167.7	170.1	173.8	176.0	179.3	181.1	183.9	191.4	194.6	197.8
Unit nonlabor payments	158.1	164.7	156.7	158.3	159.0	158.4	160.3	164.0	167.0	167.8	162.1	171.3	175.3
Implicit price deflator	165.4	174.9	162.4	164.5	166.3	168.5	170.6	174.0	176.3	178.4	181.3	186.6	190.0
NONFARM BUSINESS SECTOR:													
Output per hour of all persons	114.4	115.8	113.0	114.4	115.2	114.9	115.6	115.2	116.2	116.4	115.5	116.0	116.6
Output	127.0	133.6	125.2	126.9	127.7	128.1	131.0	133.0	134.6	135.8	136.1	139.8	140.5
Hours	111.0	115.4	110.8	110.9	110.9	111.5	113.3	115.5	116.7	117.8	117.8	120.6	120.5
Compensation per hour	193.7	209.3	187.6	191.7	195.8	199.9	203.9	207.1	211.2	215.1	221.4	225.8	231.0
Real compensation per hour	113.6	115.3	112.1	113.1	114.1	115.1	115.1	114.5	115.3	116.2	117.3	116.6	116.9
Unit labor costs	169.4	180.8	166.0	167.5	170.1	173.9	176.4	179.8	181.7	184.8	191.7	194.7	198.1
Unit nonlabor payments	156.0	162.6	153.7	155.5	157.4	157.2	157.7	161.7	166.1	165.1	159.2	167.1	171.7
Implicit price deflator	164.8	174.6	161.8	163.4	165.7	168.2	170.0	173.6	176.4	178.1	180.6	185.3	189.1
MANUFACTURING:													
Output per hour of all persons	123.2	126.1	121.8	123.3	124.1	123.9	123.7	125.6	127.6	127.5	125.9	128.4	131.6
Output	119.3	126.9	117.8	119.2	120.0	120.3	122.6	126.6	128.6	129.8	129.7	134.1	137.1
Hours	96.8	100.6	96.7	96.7	96.7	97.1	99.1	100.7	100.8	101.8	103.1	104.5	104.2
Compensation per hour	195.1	212.2	189.1	193.7	196.9	200.9	205.6	209.7	214.4	218.9	225.0	229.1	235.0
Real compensation per hour	114.4	116.9	113.0	114.4	114.7	115.7	116.1	116.0	117.1	118.2	119.2	118.3	118.8
Unit labor costs	158.3	168.3	155.3	157.1	158.7	162.2	166.3	166.9	168.0	171.7	178.8	178.5	178.6
DURABLE GOODS													
Output per hour of all persons	118.3	120.5	116.6	118.6	119.5	118.4	117.9	120.4	121.9	121.6	119.4	122.7	125.6
Output	113.3	121.4	110.8	113.3	114.8	114.4	116.3	121.0	123.5	124.8	124.4	129.5	133.4
Hours	95.8	100.8	95.0	95.5	96.1	96.6	98.7	100.5	101.3	102.7	104.1	105.6	106.2
Compensation per hour	196.9	214.3	191.5	195.8	198.5	201.7	207.1	211.8	216.4	221.5	227.0	231.2	237.0
Real compensation per hour	115.5	118.0	114.4	115.6	115.7	116.2	116.9	117.1	118.2	119.6	120.3	119.4	119.9
Unit labor costs	166.5	177.9	164.2	165.1	166.2	170.3	175.7	175.9	177.5	182.2	190.1	188.4	188.7
NONDURABLE GOODS													
Output per hour of all persons	131.3	135.3	130.1	130.9	131.5	132.7	133.1	134.1	136.9	137.3	136.4	137.7	141.4
Output	129.1	135.7	129.2	128.9	128.5	129.8	132.6	135.5	136.9	138.0	138.3	141.5	143.0
Hours	98.4	100.3	99.3	98.4	97.7	97.9	99.7	101.0	100.0	100.5	101.4	102.8	101.1
Compensation per hour	192.7	208.6	185.9	190.8	194.5	199.7	203.4	206.3	210.6	214.0	221.0	224.8	230.1
Real compensation per hour	113.0	115.0	111.1	112.6	113.3	115.0	114.8	114.1	115.0	115.6	117.1	116.1	116.4
Unit labor costs	146.8	154.2	142.9	145.8	147.9	150.5	152.8	153.9	153.8	155.9	162.1	163.3	162.8
NONFINANCIAL CORPORATIONS:													
Output per all-employee hour	115.5	116.9	114.9	115.8	116.2	115.5	116.0	116.5	117.7	117.6	116.9	118.1	118.5
Output	133.8	141.0	132.3	134.1	134.4	134.2	137.5	140.5	142.3	143.6	143.6	148.8	149.3
Hours	115.8	120.6	115.2	115.8	115.7	116.3	118.5	120.7	120.9	122.1	122.9	126.0	126.0
Compensation per hour	192.4	208.0	186.3	190.2	194.5	198.8	202.2	205.9	210.2	213.8	220.2	224.7	229.8
Real compensation per hour	112.9	114.6	111.3	112.3	113.3	114.5	114.1	113.9	114.8	115.5	116.7	116.0	116.3
Total unit costs	172.0	182.0	168.0	169.8	172.8	177.3	178.8	180.8	182.5	185.6	191.5	192.6	196.2
Unit labor costs	166.5	177.9	162.2	164.3	167.4	172.2	174.3	176.8	178.5	181.9	188.5	190.2	194.0
Unit nonlabor costs	188.8	194.5	186.1	186.9	189.4	193.0	192.6	193.1	195.0	197.1	201.1	200.1	203.3
Unit profits	112.7	120.2	114.9	115.5	114.7	105.6	108.8	120.1	128.3	122.9	104.5	127.8	130.8
Implicit price deflator	163.2	172.8	160.1	161.7	164.2	166.6	168.4	171.8	174.5	176.3	178.6	183.0	186.5

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					
	I 1977 to I 1977		II 1977 to III 1977		III 1977 to IV 1977		IV 1977 to I 1978		I 1978 to II 1978		II 1978 to III 1978	
PRIVATE BUSINESS SECTOR:												
Output per hour of all persons	-1.7	5.1	0.4	-4.5	1.2	3.4	1.1	1.5	1.5	-0.2	0.5	0.1
Output	6.5	5.0	4.0	-0.6	10.5	2.9	5.0	5.6	6.2	3.7	4.6	4.1
Hours	8.3	-0.1	3.7	4.0	9.2	-0.5	3.9	4.0	4.6	3.9	4.1	4.0
Compensation per hour	5.8	9.5	6.7	12.1	8.1	10.4	8.1	8.0	7.5	8.5	9.1	9.3
Real compensation per hour	-2.7	4.3	1.9	4.0	-2.5	1.6	1.2	1.3	0.7	1.8	1.9	1.2
Unit labor costs	7.6	4.2	6.3	17.4	6.8	6.7	6.9	6.5	5.8	8.8	8.5	9.2
Unit nonlabor payments	9.5	7.4	2.0	-13.1	24.8	9.7	3.6	5.0	5.9	1.1	4.4	5.0
Implicit price deflator	8.2	5.2	4.9	6.7	12.1	7.7	5.8	6.0	5.9	6.3	7.2	7.8
NONFARM BUSINESS SECTOR:												
Output per hour of all persons	-1.4	3.7	0.5	-3.1	1.7	2.3	0.7	0.9	1.3	-0.1	0.7	0.3
Output	6.2	5.0	3.5	0.7	11.6	2.0	4.8	5.4	6.0	3.8	5.2	4.4
Hours	7.7	1.3	3.0	3.9	9.8	-0.3	4.1	4.4	4.7	3.9	4.5	4.0
Compensation per hour	6.5	8.1	7.6	12.2	8.2	9.5	8.1	7.8	7.6	8.6	9.0	9.4
Real compensation per hour	-2.1	2.9	2.8	4.0	-2.4	0.9	1.2	1.1	0.9	1.9	1.8	1.3
Unit labor costs	8.0	4.2	7.1	15.7	6.4	7.1	7.3	6.8	6.3	8.7	8.3	9.0
Unit nonlabor payments	10.3	11.5	-2.4	-13.5	21.3	11.6	4.0	5.5	5.0	0.9	3.4	3.4
Implicit price deflator	8.7	6.5	4.0	5.8	10.8	8.5	6.2	6.4	5.9	6.2	6.7	7.2
MANUFACTURING:												
Output per hour of all persons	6.4	6.5	-0.3	-5.1	8.3	10.4	1.9	2.9	2.9	1.8	2.2	3.1
Output	13.7	6.6	4.0	-0.5	14.3	9.2	6.1	7.1	7.9	5.8	6.0	6.6
Hours	6.8	0.1	4.3	4.9	5.6	-1.1	4.2	4.1	4.8	4.0	3.7	3.4
Compensation per hour	8.2	9.2	8.8	11.6	7.4	10.6	8.3	8.9	9.0	9.4	9.2	9.6
Real compensation per hour	-0.6	3.9	4.0	3.5	-3.1	1.9	1.4	2.1	2.2	2.7	2.0	1.5
Unit labor costs	1.6	2.5	9.1	17.7	-0.8	0.2	6.2	5.8	5.9	7.6	6.9	6.3
DURABLE GOODS												
Output per hour of all persons	8.9	5.0	-1.1	-6.8	11.3	10.0	1.6	2.0	2.6	1.3	1.9	3.1
Output	17.1	8.3	4.5	-1.5	17.7	12.5	6.9	7.5	9.1	6.9	7.0	8.1
Hours	7.6	3.1	5.7	5.7	5.7	2.3	5.2	5.4	6.3	5.5	5.1	4.9
Compensation per hour	9.4	9.0	9.8	10.4	7.5	10.5	8.2	9.0	9.8	9.6	9.2	9.5
Real compensation per hour	0.5	3.8	4.9	2.4	-3.0	1.8	1.3	2.2	2.9	2.9	1.9	1.4
Unit labor costs	0.5	3.8	11.0	18.5	-3.4	0.5	6.5	6.8	7.0	8.2	7.1	6.3
NONDURABLE GOODS												
Output per hour of all persons	3.1	8.6	1.0	-2.6	3.9	11.2	2.4	4.1	3.5	2.5	2.6	3.2
Output	9.0	4.1	3.2	1.1	9.4	4.3	5.1	6.6	6.2	4.3	4.4	4.5
Hours	5.7	-4.2	2.2	3.8	5.3	-6.2	2.6	2.4	2.7	1.8	1.7	1.2
Compensation per hour	6.0	8.5	6.7	13.6	7.2	9.7	8.1	8.3	7.2	8.7	9.0	9.3
Real compensation per hour	-2.6	3.3	1.9	5.3	-3.3	1.0	1.3	1.5	0.5	2.0	1.8	1.2
Unit labor costs	2.8	-0.1	5.6	16.6	3.2	-1.3	5.6	4.0	3.6	6.0	6.1	5.8
NONFINANCIAL CORPORATIONS:												
Output per all-employee hour	1.7	4.4	-0.5	-2.5	4.4	1.3	0.6	1.3	1.8	0.8	1.4	0.7
Output	9.2	5.2	3.6	0.0	15.2	1.5	4.8	5.9	7.0	4.5	5.9	4.9
Hours	7.4	0.7	4.2	2.5	10.4	0.2	4.2	4.5	5.0	3.7	4.4	4.2
Compensation per hour	7.7	8.5	7.2	12.5	8.3	9.5	8.3	8.0	7.5	8.9	9.1	9.4
Real compensation per hour	-1.0	3.3	2.4	4.3	-2.3	0.8	1.4	1.3	0.8	2.2	1.9	1.3
Total unit costs	4.6	3.9	6.8	13.6	2.3	7.7	6.5	5.6	4.7	7.1	6.6	7.5
Unit labor costs	5.8	3.9	7.7	15.3	3.8	8.1	7.6	6.6	5.6	8.1	7.6	8.7
Unit nonlabor costs	1.0	3.9	4.3	8.5	-2.0	6.5	3.3	3.0	2.1	4.4	3.6	4.3
Unit profits	48.2	30.4	-15.8	-47.8	123.6	9.9	3.9	11.9	16.4	-4.0	6.4	1.9
Implicit price deflator	8.3	6.4	4.2	5.5	10.2	7.9	6.2	6.3	5.8	6.1	6.5	6.9

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		
	OCT. 1977	SEPT. 1978 ^P	OCT. 1978 ^P	OCT. 1977	SEPT. 1978	OCT. 1978 ^P	OCT. 1977	SEPT. 1978	OCT. 1978 ^P
ALABAMA	\$203.27	\$232.54	\$230.45	40.9	41.9	41.3	\$4.97	\$5.55	\$5.58
Birmingham	239.32	269.86	273.47	40.7	41.2	41.0	5.88	6.55	6.67
Mobile	254.70	279.79	272.95	42.1	42.2	41.8	6.05	6.63	6.53
ALASKA	418.59	464.49	422.73	41.2	47.3	42.7	10.16	9.82	9.90
ARIZONA	229.23	250.10	248.65	40.5	40.8	40.3	5.66	6.13	6.17
Phoenix	227.20	252.97	251.91	40.5	41.0	40.5	5.61	6.17	6.22
Tucson	226.55	230.88	227.35	39.4	39.0	38.6	5.75	5.92	5.89
ARKANSAS	175.64	190.87	191.27	40.1	39.6	39.6	4.38	4.82	4.83
Fayetteville-Springdale	161.18	173.45	176.80	40.6	39.6	40.0	3.97	4.38	4.42
Fort Smith	179.95	190.12	189.44	39.9	38.8	38.9	4.51	4.90	4.87
Little Rock-North Little Rock	201.68	215.17	222.31	39.7	38.7	40.2	5.08	5.56	5.53
Pine Bluff	220.81	270.32	261.61	42.3	43.6	42.4	5.22	6.20	6.17
CALIFORNIA	246.02	263.31	264.77	40.2	40.2	40.3	6.12	6.55	6.57
Anaheim-Santa Ana-Garden Grove	225.03	245.40	246.60	40.4	40.9	41.1	5.57	6.00	6.00
Bakersfield	244.28	275.01	275.80	39.4	39.4	38.9	6.20	6.98	7.09
Fresno	223.18	240.40	244.21	39.5	40.0	40.1	5.65	6.01	6.09
Los Angeles-Long Beach	230.68	244.82	248.47	40.4	40.4	40.8	5.71	6.06	6.09
Modesto	233.09	278.46	252.98	38.4	42.0	38.8	6.07	6.63	6.52
Oxnard-Simi Valley-Ventura	202.65	227.43	229.20	38.6	39.9	40.0	5.25	5.70	5.73
Riverside-San Bernardino-Ontario	246.40	275.40	275.93	40.0	40.5	40.4	6.16	6.80	6.83
Sacramento	256.90	291.01	289.28	38.4	40.7	39.9	6.69	7.15	7.25
Salinas-Seaside-Monterey	231.65	252.98	268.40	38.1	38.8	40.0	6.08	6.52	6.71
San Diego	235.77	244.68	248.29	39.1	38.9	39.1	6.03	6.29	6.35
San Francisco-Oakland	298.05	312.43	318.00	39.9	39.8	39.8	7.47	7.85	7.99
San Jose	258.70	282.90	276.61	39.8	41.0	39.8	6.50	6.90	6.95
Santa Barbara-Santa Maria-Lompoc	218.43	232.06	228.13	40.3	39.2	38.6	5.42	5.92	5.91
Santa Rosa	222.72	236.25	239.27	38.4	37.5	38.1	5.80	6.30	6.28
Stockton	259.88	291.51	282.03	38.5	40.6	38.9	6.75	7.18	7.25
Vallejo-Fairfield-Napa	251.68	276.44	279.66	38.9	39.1	39.5	6.47	7.07	7.08
COLORADO ¹	231.08	249.40	249.48	39.3	39.4	39.6	5.88	6.33	6.30
Denver-Boulder ¹	229.89	244.38	247.27	39.5	39.1	39.5	5.82	6.25	6.26
CONNECTICUT	237.42	254.82	257.98	41.8	42.4	42.5	5.68	6.01	6.07
Bridgeport	242.25	269.89	270.07	42.8	44.1	43.7	5.66	6.12	6.18
Hartford	256.63	280.37	286.89	42.7	43.2	43.8	6.01	6.49	6.55
New Britain	246.53	267.53	264.69	42.8	43.5	42.9	5.76	6.15	6.17
New Haven-West Haven	234.60	262.26	263.08	40.8	42.3	42.5	5.75	6.20	6.19
Stamford	245.96	259.14	266.54	43.0	42.0	43.2	5.72	6.17	6.17
Waterbury	200.28	226.94	226.31	41.9	42.9	42.3	4.78	5.29	5.35
DELAWARE	239.46	252.72	259.89	39.0	39.0	39.8	6.14	6.48	6.53
Wilmington	281.30	290.77	295.11	39.9	39.4	39.4	7.05	7.38	7.49
DISTRICT OF COLUMBIA: Washington SMSA	212.24	214.23	214.01	38.8	38.6	38.7	5.47	5.55	5.53
FLORIDA	193.17	210.73	211.04	41.1	41.4	41.3	4.70	5.09	5.11
Fort Lauderdale-Hollywood	190.59	192.23	196.18	40.9	40.3	40.2	4.66	4.77	4.88
Jacksonville	225.91	265.93	274.94	41.3	43.1	41.6	5.47	6.17	5.96
Miami	164.42	176.17	178.04	40.3	39.5	40.1	4.08	4.46	4.44
Orlando	208.25	224.61	229.38	42.5	42.3	42.4	4.90	5.31	5.41
Pensacola	250.06	272.82	284.85	42.6	43.1	44.3	5.87	6.33	6.43
Tampa-St. Petersburg	202.37	219.02	215.49	41.3	42.2	41.6	4.90	5.19	5.18
West Palm Beach-Boca Raton	227.69	241.92	243.95	41.1	42.0	42.5	5.54	5.76	5.74
GEORGIA	184.73	204.02	206.33	40.6	40.4	40.3	4.55	5.05	5.12
Atlanta	221.25	228.54	231.84	40.3	39.0	38.9	5.49	5.86	5.96
Savannah	251.37	283.36	284.70	44.1	44.0	43.8	5.70	6.44	6.50
HAWAII	224.26	233.14	247.68	38.4	38.6	38.7	5.84	6.04	6.40
Honolulu	223.71	225.82	246.46	37.1	37.7	37.8	6.03	5.99	6.52
IDAHO	242.20	264.80	265.49	40.1	40.0	39.1	6.04	6.62	6.79
Boise City	199.93	238.51	241.16	37.3	38.1	37.8	5.36	6.26	6.38

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
ILLINOIS	\$261.21	\$277.36	\$273.47	40.7	40.2	39.8	\$6.42	\$6.89	\$6.87
Bloomington—Normal	192.20	254.49	253.44	36.4	41.3	41.3	5.28	6.17	6.13
Champaign—Urbana—Rantoul	247.74	258.13	262.95	40.7	40.0	39.9	6.09	6.45	6.59
Chicago SMSA	263.32	273.05	272.63	41.6	40.8	40.5	6.33	6.69	6.73
Davenport—Rock Island—Moline	284.65	287.52	275.57	41.0	38.9	36.9	6.94	7.39	7.47
Decatur	294.86	311.49	319.18	42.4	41.7	41.8	6.95	7.46	7.63
Peoria	291.13	335.19	341.15	37.2	39.4	39.3	7.82	8.50	8.69
Rockford	263.06	286.97	288.11	43.1	42.8	42.4	6.10	6.70	6.80
Springfield	295.20	313.48	310.56	42.5	42.2	42.0	6.95	7.43	7.40
INDIANA	281.52	301.71	303.56	41.4	41.5	41.3	6.80	7.27	7.35
Gary—Hammond—East Chicago	352.00	410.66	(*)	40.6	42.6	(*)	8.67	9.64	(*)
Indianapolis	287.85	301.85	(*)	41.9	42.1	(*)	6.87	7.17	(*)
IOWA	270.81	285.20	294.35	40.6	40.0	40.6	6.67	7.13	7.25
Cedar Rapids	259.45	297.98	300.76	40.1	41.1	41.2	6.47	7.25	7.30
Des Moines	273.78	291.84	299.44	39.0	38.4	39.4	7.02	7.60	7.60
Dubuque	330.74	351.04	366.62	39.8	39.8	40.6	8.31	8.82	9.03
Sioux City	218.48	271.97	277.02	37.8	42.1	42.1	5.78	6.46	6.58
Waterloo—Cedar Falls	396.04	366.30	(*)	44.7	40.7	(*)	8.86	9.00	(*)
KANSAS	225.36	254.79	257.92	41.2	41.7	41.4	5.47	6.11	6.23
Topeka	252.10	288.72	290.28	41.6	42.9	42.5	6.06	6.73	6.83
Wichita	236.55	271.78	276.54	41.5	42.4	41.9	5.70	6.41	6.60
KENTUCKY	235.38	253.29	254.96	40.1	39.7	39.9	5.87	6.38	6.39
Louisville	271.88	293.54	294.84	40.7	40.6	40.5	6.68	7.23	7.28
LOUISIANA	249.99	274.86	275.52	42.3	41.9	42.0	5.91	6.56	6.56
Baton Rouge	306.13	345.77	345.10	42.4	44.5	44.3	7.22	7.77	7.79
New Orleans	236.01	259.25	255.17	39.8	39.4	39.5	5.93	6.58	6.46
Shreveport	234.12	246.19	243.39	42.8	41.1	40.7	5.47	5.99	5.98
MAINE	186.40	203.18	202.10	40.0	40.8	40.1	4.66	4.98	5.04
Lewiston—Auburn	146.61	163.11	160.18	37.4	38.2	37.6	3.92	4.27	4.26
Portland	191.28	207.67	202.40	40.1	40.8	40.0	4.77	5.09	5.06
MARYLAND	248.18	269.47	272.02	39.9	40.4	40.6	6.22	6.67	6.70
Baltimore	261.70	282.58	287.53	40.2	40.6	40.9	6.51	6.96	7.03
MASSACHUSETTS	209.87	229.70	224.53	39.9	40.8	39.6	5.26	5.63	5.67
Boston	232.76	255.65	245.96	40.2	41.3	39.8	5.79	6.19	6.18
Brockton	162.06	180.03	176.61	37.0	38.8	37.9	4.38	4.64	4.66
Fall River	145.85	161.33	157.88	35.4	36.5	35.4	4.12	4.42	4.46
Lawrence—Haverhill	205.80	223.28	219.01	39.5	39.8	38.9	5.21	5.61	5.63
Lowell	181.03	203.21	200.40	39.1	40.4	40.0	4.63	5.03	5.01
New Bedford	169.52	196.42	191.01	36.3	39.6	37.6	4.67	4.96	5.08
Springfield—Chicopee—Holyoke	222.03	231.99	233.19	41.5	41.5	41.2	5.35	5.59	5.66
Worcester	215.20	234.93	231.42	40.0	41.0	39.9	5.38	5.73	5.80
MICHIGAN	338.39	361.00	368.33	43.2	43.4	43.6	7.83	8.32	8.45
Ann Arbor	363.96	422.90	416.04	43.5	46.3	45.3	8.37	9.13	9.18
Battle Creek	312.79	336.84	350.65	41.0	41.3	42.1	7.63	8.16	8.33
Bay City	361.65	326.90	323.89	47.8	42.4	42.3	7.57	7.71	7.66
Detroit	362.26	392.25	399.68	43.4	43.9	44.1	8.35	8.94	9.06
Flint	419.14	425.88	440.17	48.1	46.6	47.3	8.71	9.14	9.31
Grand Rapids	266.78	276.27	282.93	41.9	41.6	41.4	6.37	6.64	6.83
Jackson	279.98	318.51	318.34	41.8	43.8	43.4	6.70	7.27	7.34
Kalamazoo—Portage	293.66	306.94	315.17	42.0	41.2	41.9	6.99	7.45	7.52
Lansing—East Lansing	368.22	378.70	393.65	44.9	43.3	43.7	8.20	8.75	9.01
Muskegon—Norton Shores—Muskegon Heights	273.70	295.28	295.43	41.3	41.2	41.4	6.63	7.17	7.14
Saginaw	402.82	426.17	434.48	46.1	45.4	45.0	8.74	9.39	9.66
MINNESOTA	244.82	262.85	264.77	40.2	40.5	40.3	6.09	6.49	6.57
Duluth—Superior	219.45	245.86	239.02	38.5	39.4	38.0	5.70	6.24	6.29
Minneapolis—St. Paul	264.96	284.82	284.38	40.7	41.1	40.8	6.51	6.93	6.97
MISSISSIPPI	172.16	186.24	186.65	40.7	40.4	40.4	4.23	4.61	4.62
Jackson	189.83	210.50	206.09	41.0	42.1	41.3	4.63	5.00	4.99

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
MISSOURI	\$243.76	\$255.33	\$255.60	40.9	40.4	40.0	\$5.96	\$6.32	\$6.39
Kansas City	279.97	291.62	296.53	41.6	40.9	40.9	6.73	7.13	7.25
St. Joseph	214.38	232.88	237.69	39.7	40.5	40.7	5.40	5.75	5.84
St. Louis	281.06	300.77	299.94	41.7	41.6	41.2	6.74	7.23	7.28
Springfield	196.67	217.95	212.69	39.1	39.7	38.6	5.03	5.49	5.51
MONTANA	300.84	328.75	326.82	43.1	41.3	40.7	6.98	7.96	8.03
NEBRASKA	224.81	253.38	253.44	40.8	42.3	42.1	5.51	5.99	6.02
Lincoln	211.87	245.46	246.25	37.7	39.4	39.4	5.62	6.23	6.25
Omaha	241.35	265.74	267.62	40.7	41.2	41.3	5.93	6.45	6.48
NEVADA	250.04	243.32	261.82	39.5	37.9	38.0	6.33	6.42	6.89
Las Vegas	313.05	313.86	(*)	41.3	38.7	(*) ¹	7.58	8.11	(*)
NEW HAMPSHIRE	188.67	205.13	206.45	40.4	40.7	40.8	4.67	5.04	5.06
Manchester	166.30	180.18	179.60	39.5	39.6	39.3	4.21	4.55	4.57
Nashua	210.50	224.64	224.67	41.6	41.6	41.3	5.06	5.40	5.44
NEW JERSEY	245.08	261.88	260.60	41.4	41.7	41.3	5.92	6.28	6.31
Atlantic City	204.34	175.50	176.18	38.7	37.5	38.3	5.28	4.68	4.60
Camden ²	234.77	253.58	254.82	40.2	40.9	41.3	5.84	6.20	6.17
Hackensack ³	236.13	255.88	249.55	42.7	44.1	43.1	5.53	5.80	5.79
Jersey City ³	239.54	253.49	253.03	40.6	40.3	40.1	5.90	6.29	6.31
New Brunswick—Perth Amboy—Sayreville ³	265.85	288.81	288.70	41.8	42.1	41.6	6.36	6.86	6.94
Newark ³	248.12	260.41	261.88	41.7	41.8	41.7	5.95	6.23	6.28
Paterson—Clifton—Passaic ³	232.78	243.58	246.24	41.2	40.8	40.5	5.65	5.97	6.08
Trenton	273.05	271.34	270.03	43.0	41.3	41.1	6.35	6.57	6.57
NEW MEXICO	182.20	189.91	192.38	40.4	38.6	37.5	4.51	4.92	5.13
Albuquerque	185.44	191.49	192.84	41.3	39.0	38.8	4.49	4.91	4.97
NEW YORK	231.60	245.22	244.99	40.0	40.2	39.9	5.79	6.10	6.14
Albany—Schenectady—Troy	248.25	270.91	269.33	40.3	40.8	40.5	6.16	6.64	6.65
Binghamton	211.04	229.48	231.84	40.9	41.2	41.4	5.16	5.57	5.60
Buffalo	317.25	334.70	334.85	42.3	42.1	41.7	7.50	7.95	8.03
Elmira	227.21	245.83	246.24	40.5	40.3	40.5	5.61	6.10	6.08
Monroe County ⁴	307.15	319.18	320.30	42.6	42.5	42.2	7.21	7.51	7.59
Nassau—Suffolk ⁵	222.71	229.65	229.28	40.2	39.8	39.6	5.54	5.77	5.79
New York—Northeastern New Jersey	221.69	232.80	(*)	39.8	40.0	(*)	5.57	5.82	(*)
New York and Nassau—Suffolk ³	202.61	209.66	208.62	38.3	38.4	38.0	5.29	5.46	5.49
New York SMSA ⁵	201.40	204.98	203.79	38.0	38.1	37.6	5.30	5.38	5.42
New York City ⁶	197.78	201.10	198.65	37.6	37.8	37.2	5.26	5.32	5.34
Poughkeepsie	238.43	258.58	247.57	42.5	42.6	41.4	5.61	6.07	5.98
Rochester	285.95	299.06	300.17	42.3	42.3	42.1	6.76	7.07	7.13
Rockland County ⁶	230.78	241.53	244.80	42.5	41.5	40.8	5.43	5.82	6.00
Syracuse	260.00	277.44	281.11	41.8	42.1	42.4	6.22	6.59	6.63
Utica—Rome	221.82	240.02	233.34	40.7	41.1	40.3	5.45	5.84	5.79
Westchester County ⁶	232.37	245.96	255.07	41.2	41.2	42.3	5.64	5.97	6.03
NORTH CAROLINA	167.18	182.86	184.12	39.9	40.1	40.2	4.19	4.56	4.58
Asheville	166.00	180.10	183.06	40.0	40.2	40.5	4.15	4.48	4.52
Charlotte—Gastonia	170.54	189.11	194.58	40.8	41.2	41.4	4.18	4.59	4.70
Greensboro—Winston-Salem—High Point	180.58	196.32	198.30	39.6	39.5	39.9	4.56	4.97	4.97
Raleigh—Durham	185.57	205.13	206.63	39.4	40.3	40.2	4.71	5.09	5.14
NORTH DAKOTA	212.79	237.05	232.40	39.7	40.8	40.7	5.36	5.81	5.71
Fargo—Moorhead	225.42	263.49	248.07	38.6	40.6	38.7	5.84	6.49	6.41
OHIO	291.75	315.88	317.67	42.1	42.4	42.3	6.93	7.45	7.51
Akron	292.60	309.40	304.72	42.1	42.5	41.8	6.95	7.28	7.29
Canton	289.35	317.46	316.98	40.3	40.7	40.9	7.18	7.80	7.75
Cincinnati	269.24	290.91	297.37	42.2	42.1	42.3	6.38	6.91	7.03
Cleveland	300.88	334.08	329.99	42.8	43.5	42.8	7.03	7.68	7.71
Columbus	245.57	272.69	272.03	39.8	40.7	40.3	6.17	6.70	6.75
Dayton	310.59	317.15	325.37	43.5	42.4	42.7	7.14	7.48	7.62
Toledo	311.18	325.80	330.84	43.1	42.7	42.8	7.22	7.63	7.73
Youngstown—Warren	328.44	376.51	367.53	40.8	42.4	42.1	8.05	8.88	8.73

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
OKLAHOMA	\$223.58	\$241.94	\$239.00	40.8	40.8	40.1	\$5.48	\$5.93	\$5.96
Oklahoma City	219.24	235.81	233.64	40.6	39.9	39.4	5.40	5.91	5.93
Tulsa	235.35	258.04	255.36	40.3	40.7	39.9	5.84	6.34	6.40
OREGON	263.55	283.33	286.73	38.7	38.4	38.8	6.81	7.38	7.39
Eugene—Springfield	294.74	313.23	325.13	40.1	39.4	41.0	7.35	7.95	7.93
Jackson County	272.63	282.75	(*)	39.8	37.6	(*)	6.85	7.52	(*)
Portland	253.87	269.31	(*)	38.7	38.2	(*)	6.56	7.05	(*)
PENNSYLVANIA	240.00	264.31	262.10	40.0	40.6	40.2	6.00	6.51	6.52
Allentown—Bethlehem—Easton	231.17	259.96	257.57	38.4	38.8	38.5	6.02	6.70	6.69
Altoona	196.86	218.50	212.06	38.6	38.4	37.8	5.10	5.69	5.61
Delaware Valley ⁷	247.78	272.16	271.35	39.9	40.5	40.2	6.21	6.72	6.75
Erie	254.75	272.84	271.55	41.9	42.3	42.1	6.08	6.45	6.45
Harrisburg	211.20	236.56	239.99	40.0	40.3	40.2	5.28	5.87	5.97
Johnstown	254.87	278.10	279.89	39.7	39.9	39.7	6.42	6.97	7.05
Lancaster	213.84	231.58	233.21	40.5	40.7	40.7	5.28	5.69	5.73
Northeast Pennsylvania	170.75	191.52	189.35	36.1	37.7	37.2	4.73	5.08	5.09
Philadelphia SMSA	(*)	269.99	269.06	(*)	40.6	40.4	(*)	6.65	6.66
Pittsburgh	307.13	327.81	319.14	41.9	41.6	40.5	7.33	7.88	7.88
Reading	221.76	230.68	230.88	39.6	38.9	39.0	5.60	5.93	5.92
Scranton ⁸	180.96	203.71	201.96	37.7	40.1	39.6	4.80	5.08	5.10
Wilkes-Barre—Hazleton ⁹	162.98	182.52	180.34	34.9	36.0	35.5	4.67	5.07	5.08
Williamsport	207.48	230.08	235.97	39.0	39.6	40.2	5.32	5.81	5.87
York	221.01	245.44	243.69	41.7	42.1	41.8	5.30	5.83	5.83
RHODE ISLAND	175.56	187.15	187.50	39.1	39.4	38.9	4.49	4.75	4.82
Providence—Warwick—Pawtucket	176.40	190.00	190.79	39.2	40.0	39.5	4.50	4.75	4.83
SOUTH CAROLINA	179.11	196.46	195.43	40.8	41.1	40.8	4.39	4.78	4.79
Charleston—North Charleston	200.64	225.60	222.32	41.2	41.7	41.4	4.87	5.41	5.37
Columbia	177.60	189.60	189.85	40.0	40.0	39.8	4.44	4.74	4.77
Greenville—Spartanburg	177.39	193.99	192.44	40.5	41.1	40.6	4.38	4.72	4.74
SOUTH DAKOTA	188.37	227.04	225.42	38.6	42.2	41.9	4.88	5.38	5.38
Rapid City	161.56	184.10	176.90	40.9	35.2	35.1	3.95	5.23	5.04
Sioux Falls	247.80	299.99	303.15	42.0	45.8	47.0	5.90	6.55	6.45
TENNESSEE	195.50	209.16	211.00	40.9	40.3	40.5	4.78	5.19	5.21
Chattanooga	202.59	217.65	216.71	40.6	41.3	41.2	4.99	5.27	5.26
Knoxville	230.45	250.91	252.95	41.3	41.2	41.4	5.58	6.09	6.11
Memphis	225.78	237.41	238.00	41.2	39.7	40.0	5.48	5.98	5.95
Nashville—Davidson	212.74	227.77	230.52	40.6	40.6	40.8	5.24	5.61	5.65
TEXAS	230.74	247.83	248.05	41.5	41.1	41.0	5.56	6.03	6.05
Amarillo	247.40	243.96	242.65	44.9	42.8	42.2	5.51	5.70	5.75
Austin	180.50	190.49	198.79	41.4	41.5	41.5	4.36	4.59	4.79
Beaumont	320.69	350.55	355.52	40.8	41.0	41.1	7.86	8.55	8.65
Corpus Christi	255.37	277.95	291.29	40.6	42.5	42.9	6.29	6.54	6.79
Dallas—Fort Worth	214.45	227.77	227.61	41.4	40.6	40.5	5.18	5.61	5.62
El Paso	163.94	176.34	175.95	39.6	41.2	41.4	4.14	4.28	4.25
Galveston—Texas City	355.58	408.58	391.00	43.1	44.8	43.3	8.25	9.12	9.03
Houston	286.09	322.83	324.14	42.7	44.9	44.1	6.70	7.19	7.35
Lubbock	164.01	183.23	186.18	40.9	40.9	41.1	4.01	4.48	4.53
San Antonio	175.56	178.42	180.97	41.8	39.3	39.6	4.20	4.54	4.57
Waco	188.60	210.60	210.40	41.0	40.5	40.0	4.60	5.20	5.26
Wichita Falls	192.64	209.97	215.74	40.9	39.1	40.1	4.71	5.37	5.38
UTAH	211.24	230.08	226.97	40.2	39.6	38.6	5.25	5.81	5.88
Salt Lake City—Ogden	198.61	222.48	221.03	40.1	39.8	39.4	4.95	5.59	5.61
VERMONT	195.76	217.88	214.35	41.3	41.5	41.3	4.74	5.25	5.19
Burlington	217.04	255.34	244.53	41.5	43.5	42.9	5.23	5.87	5.70
Springfield	225.34	248.20	244.22	41.5	42.5	42.4	5.43	5.84	5.76
VIRGINIA	192.23	208.64	211.29	40.3	40.2	40.4	4.77	5.19	5.23
Bristol	171.16	179.27	182.02	38.9	37.9	38.0	4.40	4.73	4.79
Lynchburg	196.66	219.06	220.01	40.8	41.1	41.2	4.82	5.33	5.34
Norfolk—Virginia Beach—Portsmouth	224.60	230.52	239.62	42.7	40.8	41.6	5.26	5.65	5.76
Northern Virginia ¹⁰	220.86	247.34	246.22	40.6	41.5	40.9	5.44	5.96	6.02
Petersburg Colonial Heights-Hopewell	227.94	244.20	243.46	38.7	38.7	38.4	5.89	6.31	6.34

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

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
VIRGINIA—Continued									
Richmond	\$227.48	\$261.40	\$253.66	39.7	41.1	40.2	\$5.73	\$6.36	\$6.31
Roanoke	171.25	192.16	192.30	40.2	40.2	40.4	4.26	4.78	4.76
WASHINGTON	272.74	300.65	(*)	39.3	39.3	(*)	6.94	7.65	(*)
Seattle—Everett	278.30	304.59	(*)	39.7	39.1	(*)	7.01	7.79	(*)
Spokane	237.07	270.55	(*)	38.8	40.2	(*)	6.11	6.73	(*)
Tacoma	285.91	304.20	(*)	39.6	39.1	(*)	7.22	7.78	(*)
WEST VIRGINIA	248.85	272.05	272.23	39.5	39.6	39.8	6.30	6.87	6.84
Charleston	300.30	312.01	313.12	42.9	42.8	42.2	7.00	7.29	7.42
Huntington—Ashland	257.11	300.75	302.40	37.7	40.1	40.0	6.82	7.50	7.56
Parkersburg—Marietta	260.09	278.20	285.01	40.2	39.8	40.6	6.47	6.99	7.02
Wheeling	262.02	291.85	288.15	39.7	40.2	40.3	6.60	7.26	7.15
WISCONSIN	257.76	279.00	285.02	40.7	41.1	41.2	6.34	6.79	6.91
Appleton—Oshkosh	250.29	272.84	274.03	41.7	41.8	41.8	6.01	6.53	6.56
Eau Claire	256.80	273.50	275.97	41.4	41.4	40.2	6.21	6.61	6.86
Green Bay	260.81	285.86	294.76	42.5	42.1	42.6	6.14	6.79	6.91
Kenosha	286.23	301.10	332.47	38.5	39.1	40.4	7.44	7.69	8.23
La Crosse	215.66	219.28	219.44	40.4	39.6	39.5	5.33	5.54	5.56
Madison	266.31	284.70	276.78	39.3	40.2	39.7	6.78	7.08	6.98
Milwaukee	281.71	309.68	310.17	40.6	41.2	41.2	6.93	7.52	7.53
Racine	271.95	296.85	298.74	40.4	41.0	41.1	6.73	7.24	7.27
WYOMING	220.41	240.92	236.93	38.6	38.0	38.4	5.71	6.34	6.17
Casper	267.11	276.38	232.48	38.6	38.6	36.1	6.92	7.16	6.44
Cheyenne	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)

¹ Based on 1972 Standard Industrial Classification Manual and adjusted to 1977 benchmark; not strictly comparable with previously published data.

² Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Burlington, Camden, and Gloucester Counties, New Jersey.

³ Subarea of New York—Northeastern New Jersey.

⁴ Subarea of Rochester Standard Metropolitan Statistical Area.

⁵ Area included in New York and Nassau—Suffolk combined SMSA's.

⁶ Subarea of New York Standard Metropolitan Statistical Area.

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

⁸ Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Lack-

awanna County.

⁹ Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Luzerne County.

¹⁰ 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-1. Labor turnover rates in manufacturing, 1969 to date

[Per 100 employees]

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions													
1969	4.7	4.6	3.9	4.4	4.5	4.8	6.6	5.1	5.6	5.9	5.0	3.6	2.9
1970	4.0	4.0	3.6	3.7	3.7	4.2	5.4	4.4	5.1	4.7	3.8	3.0	2.4
1971	3.9	3.5	3.1	3.5	3.6	4.0	4.9	4.0	5.3	4.8	3.9	3.3	2.5
1972	4.5	4.1	3.7	4.0	4.1	4.9	5.4	4.7	6.1	5.4	4.8	3.7	2.7
1973	4.8	4.7	4.1	4.5	4.6	5.4	5.9	5.2	6.3	5.8	5.2	3.8	2.6
1974	4.2	4.2	3.7	4.1	4.5	5.1	5.4	4.9	5.5	4.9	3.8	2.4	1.8
1975	3.7	2.9	2.7	3.2	3.7	4.0	4.5	4.6	5.2	4.6	3.7	2.8	2.2
1976	3.9	3.9	3.5	4.2	3.9	4.5	4.8	4.2	5.1	4.4	3.5	2.9	2.2
1977	4.0	3.7	3.7	4.0	3.8	4.6	4.9	4.3	5.2	4.6	3.9	3.1	2.3
1978	-	3.8	3.2	3.7	4.0	4.7	4.8	4.3	5.3	4.8	^p 4.3		
1979													
New hires													
1969	3.7	3.3	3.0	3.4	3.5	3.8	5.4	3.9	4.3	4.8	4.0	2.8	2.1
1970	2.8	2.9	2.5	2.6	2.6	2.8	3.9	3.0	3.5	3.4	2.7	1.9	1.4
1971	2.6	2.0	1.9	2.2	2.3	2.7	3.5	2.7	3.4	3.4	2.7	2.2	1.6
1972	3.3	2.6	2.5	2.8	2.9	3.7	4.2	3.5	4.5	4.3	3.9	2.9	2.1
1973	3.9	3.5	3.2	3.5	3.7	4.5	5.0	4.1	5.1	4.8	4.4	3.1	2.0
1974	3.2	3.2	2.8	3.1	3.3	4.0	4.3	3.7	4.2	3.9	2.9	1.7	1.0
1975	2.0	1.3	1.2	1.3	1.6	2.0	2.5	2.6	3.1	3.1	2.5	1.8	1.3
1976	2.6	2.1	2.1	2.7	2.6	3.1	3.6	2.9	3.6	3.2	2.5	1.9	1.3
1977	2.8	2.2	2.1	2.6	2.7	3.5	3.7	3.0	4.0	3.5	2.9	2.2	1.6
1978	-	2.5	2.2	2.7	2.9	3.6	3.9	3.3	4.1	3.9	^p 3.5		
1979													
Recalls													
1976	1.0	1.4	1.0	1.2	1.0	1.0	.9	1.1	1.1	.8	.7	.7	.7
1977	.9	1.2	1.3	1.1	.9	.8	.8	.9	.9	.8	.6	.6	.5
1978	-	1.0	.7	.8	.8	.8	.7	.8	.9	.8	^p .6		
1979													
Total separations													
1969	4.9	4.5	4.0	4.4	4.5	4.6	4.6	5.3	6.2	6.6	5.4	4.3	4.2
1970	4.8	4.8	4.3	4.4	4.8	4.6	4.4	5.3	5.6	6.0	5.3	4.3	4.1
1971	4.2	4.2	3.5	3.7	3.9	3.7	3.8	4.8	5.5	5.3	4.3	3.7	3.8
1972	4.3	4.1	3.5	3.9	3.8	3.9	4.2	4.8	5.5	5.5	4.4	3.8	3.7
1973	4.7	4.3	3.8	4.3	4.2	4.4	4.5	5.2	6.5	5.8	5.0	4.2	4.0
1974	4.9	5.0	4.1	4.4	4.3	4.4	4.2	4.9	6.2	5.5	5.1	5.0	5.2
1975	4.2	6.1	4.5	4.2	4.0	3.9	3.7	4.4	4.7	4.4	4.1	3.5	3.4
1976	3.8	3.7	3.0	3.5	3.6	3.4	3.6	4.3	4.9	4.7	4.1	3.4	3.5
1977	3.8	3.9	3.4	3.4	3.4	3.5	3.5	4.2	5.1	4.8	3.8	3.4	3.3
1978	-	3.6	3.1	3.5	3.6	3.6	3.8	4.1	5.2	4.8	^p 4.1		
1979													
Quits													
1969	2.7	2.3	2.1	2.4	2.6	2.7	2.6	2.7	4.0	4.4	3.0	2.1	1.6
1970	2.1	2.1	1.9	2.0	2.1	2.1	2.1	2.1	3.0	3.3	2.1	1.4	1.2
1971	1.8	1.5	1.3	1.5	1.6	1.7	1.8	1.8	2.8	2.9	2.0	1.5	1.2
1972	2.3	1.7	1.6	1.9	2.0	2.2	2.2	2.2	3.6	3.5	2.5	2.0	1.6
1973	2.8	2.3	2.1	2.5	2.5	2.8	2.8	2.8	4.6	4.0	3.1	2.3	1.6
1974	2.4	2.2	2.0	2.3	2.4	2.7	2.5	2.6	4.0	3.3	2.2	1.4	1.0
1975	1.4	1.1	.9	1.0	1.1	1.3	1.4	1.5	2.5	2.1	1.6	1.2	.9
1976	1.7	1.3	1.2	1.6	1.7	1.7	1.8	1.9	2.8	2.5	1.7	1.2	1.0
1977	1.8	1.4	1.3	1.6	1.7	1.9	1.9	1.9	3.1	2.8	1.9	1.5	1.2
1978	-	1.5	1.4	1.8	2.0	2.1	2.2	2.1	3.4	3.0	^p 2.3		
1979													
Layoffs													
1969	1.2	1.2	1.0	1.0	.9	.9	1.0	1.6	1.1	1.1	1.3	1.3	1.8
1970	1.8	1.7	1.5	1.6	1.7	1.5	1.5	2.3	1.7	1.7	2.2	2.1	2.2
1971	1.6	1.9	1.4	1.4	1.4	1.2	1.2	2.1	1.8	1.5	1.5	1.5	1.8
1972	1.1	1.5	1.1	1.1	1.0	.9	1.1	1.7	.9	.9	1.0	1.0	1.3
1973	.9	1.1	.8	.8	.7	.7	.7	1.4	.8	.8	.8	1.1	1.6
1974	1.5	1.8	1.3	1.1	.9	.8	.8	1.4	1.1	1.2	1.8	2.8	3.6
1975	2.1	4.0	2.9	2.5	2.1	1.8	1.6	2.0	1.3	1.5	1.6	1.7	1.9
1976	1.3	1.6	1.0	1.1	1.1	.9	.9	1.6	1.1	1.3	1.5	1.5	1.8
1977	1.1	1.7	1.4	1.0	.9	.8	.8	1.4	1.0	1.1	1.1	1.1	1.4
1978	-	1.2	.9	.9	.7	.7	.7	1.0	.7	.8	^p .9		
1979													

^p=preliminary.

**ESTABLISHMENT DATA
LABOR TURNOVER**

D-2. Labor turnover rates, by industry

1972 SIC Code	Industry	Accession rates						Separation rates					
		Total		New hires		Recalls		Total		Quits		Layoffs	
		Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P
	MANUFACTURING	4.8	4.3	3.9	3.5	0.7	0.6	4.8	4.1	3.0	2.3	0.8	0.9
24, 25, 32-39	DURABLE GOODS	4.5	4.1	3.5	3.3	.6	.4	4.2	3.6	2.6	2.0	.6	.6
20-23, 26-31	NONDURABLE GOODS	5.4	4.8	4.4	3.8	.8	.7	5.8	4.8	3.8	2.8	1.1	1.2
	DURABLE GOODS												
24	LUMBER AND WOOD PRODUCTS	6.3	5.7	5.7	5.0	.4	.4	7.3	6.3	5.3	4.0	.7	1.1
242	Sawmills and planing mills	4.9	-	4.3	-	.3	-	6.0	-	4.5	-	.4	-
2421	Sawmills and planing mills, general	4.0	-	3.5	-	.3	-	5.3	-	3.9	-	.5	-
243	Millwork, plywood, and structural members	6.8	-	6.3	-	.4	-	8.0	-	5.8	-	.8	-
2431	Millwork	6.4	-	5.9	-	.4	-	7.8	-	5.7	-	.7	-
244	Wooden containers	9.7	-	9.0	-	.5	-	9.3	-	7.9	-	.3	-
245	Wood buildings and mobile homes	9.9	-	9.3	-	.4	-	12.0	-	7.8	-	1.7	-
2451	Mobile homes	11.4	-	10.7	-	.5	-	11.8	-	8.2	-	.6	-
249	Miscellaneous wood products	6.4	-	5.8	-	.5	-	6.0	-	4.7	-	.5	-
25	FURNITURE AND FIXTURES	7.4	6.7	6.8	6.1	.4	.4	7.2	6.0	5.1	4.1	.7	.6
251	Household furniture	7.9	-	7.3	-	.3	-	7.5	-	5.5	-	.6	-
2511	Wood household furniture	8.1	-	7.6	-	.2	-	8.1	-	5.9	-	.8	-
2512	Upholstered household furniture	7.0	-	6.5	-	.3	-	6.1	-	4.9	-	.1	-
2515	Mattresses and bedsprings	7.0	-	6.7	-	.2	-	7.3	-	5.2	-	.4	-
252	Office furniture	5.0	-	4.9	-	.1	-	4.7	-	3.2	-	.3	-
254	Partitions and fixtures	8.1	-	7.3	-	.3	-	8.5	-	5.7	-	.9	-
32	STONE, CLAY, AND GLASS PRODUCTS	4.3	4.1	3.6	3.5	.4	.4	4.8	4.1	2.9	2.3	.8	.7
322	Glass and glassware, pressed or blown	2.7	-	1.9	-	.3	-	4.0	-	1.8	-	1.2	-
3221	Glass containers	2.5	-	2.1	-	.2	-	4.5	-	2.1	-	1.5	-
3229	Pressed and blown glass, nec	2.8	-	1.7	-	.5	-	3.5	-	1.3	-	.7	-
323	Products of purchased glass	6.0	-	5.0	-	.8	-	5.3	-	3.6	-	.5	-
324	Cement, hydraulic	1.2	-	1.1	-	.1	-	2.1	-	1.2	-	.2	-
325	Structural clay products	7.0	-	6.4	-	.5	-	7.8	-	5.6	-	.9	-
326	Pottery and related products	5.4	-	4.5	-	.6	-	5.3	-	3.6	-	.5	-
327	Concrete, gypsum, and plaster products	5.2	-	4.7	-	.4	-	5.6	-	3.5	-	.9	-
329	Misc. nonmetallic mineral products	3.5	-	3.1	-	.2	-	3.7	-	2.3	-	.5	-
33	PRIMARY METAL INDUSTRIES	2.9	2.7	2.1	2.0	.5	.5	3.2	2.6	1.6	1.1	.6	.7
331	Blast furnace and basic steel products	2.2	-	1.1	-	.7	-	2.7	-	1.1	-	.7	-
3312	Blast furnaces and steel mills	2.1	-	1.0	-	.7	-	2.6	-	.9	-	.7	-
332	Iron and steel foundries	4.1	-	3.4	-	.4	-	4.0	-	2.4	-	.6	-
3321	Gray iron foundries	3.9	-	3.3	-	.3	-	3.7	-	2.3	-	.5	-
3325	Steel foundries, nec	4.7	-	3.9	-	.7	-	4.5	-	2.4	-	.7	-
333	Primary nonferrous metals	1.5	-	1.2	-	.1	-	2.5	-	1.4	-	.3	-
335	Nonferrous rolling and drawing	2.5	-	2.0	-	.3	-	2.5	-	1.3	-	.3	-
3351	Copper rolling and drawing	2.9	-	2.7	-	.2	-	3.8	-	1.8	-	.1	-
3353	Aluminum sheet, plate, and foil	1.5	-	1.0	-	.4	-	1.7	-	.8	-	.5	-
3357	Nonferrous wire drawing and insulating	2.4	-	1.8	-	.3	-	2.1	-	1.1	-	.2	-
336	Nonferrous foundries	5.5	-	4.4	-	.8	-	5.2	-	2.9	-	.9	-
3361	Aluminum foundries	5.5	-	4.3	-	.9	-	4.5	-	2.6	-	.9	-
34	FABRICATED METAL PRODUCTS	4.9	4.6	4.2	4.0	.5	.4	4.6	4.3	3.0	2.4	.6	.9
341	Metal cans and shipping containers	3.1	-	1.5	-	1.1	-	5.7	-	1.8	-	2.7	-
3411	Metal cans	2.7	-	.9	-	1.3	-	5.7	-	1.4	-	3.2	-
342	Cutlery, hand tools, and hardware	4.4	-	3.7	-	.3	-	4.2	-	2.9	-	.5	-
3423, 5	Hand and edge tools, and hand saws and blades	4.3	-	3.7	-	.4	-	4.1	-	2.7	-	.4	-
3429	Hardware, nec	4.4	-	3.7	-	.1	-	4.3	-	3.0	-	.5	-
343	Plumbing and heating, except electric	5.3	-	4.6	-	.6	-	4.4	-	3.0	-	.3	-
344	Fabricated structural metal products	5.6	-	4.9	-	.6	-	5.2	-	3.4	-	.7	-
3441	Fabricated structural metal	5.5	-	4.9	-	.6	-	5.1	-	3.2	-	.7	-
3442	Metal doors, sash, and trim	8.4	-	6.9	-	1.4	-	7.6	-	5.4	-	.5	-
3443	Fabricated plate work (boiler shops)	3.0	-	2.5	-	.3	-	3.1	-	1.8	-	.5	-
3444	Sheet metal work	6.9	-	6.4	-	.4	-	6.0	-	4.0	-	1.0	-
345	Screw machine products, bolts, etc.	4.5	-	4.3	-	.1	-	4.1	-	2.8	-	.2	-
3451	Screw machine products	5.5	-	5.4	-	.1	-	4.8	-	3.6	-	.1	-
3452	Bolts, nuts, rivets, and washers	3.6	-	3.3	-	.2	-	3.4	-	2.1	-	.3	-
346	Metal forgings and stampings	4.2	-	3.4	-	.4	-	3.9	-	2.2	-	.6	-
3462	Iron and steel forgings	3.0	-	2.8	-	.1	-	2.5	-	1.6	-	.1	-
3465	Automotive stampings	3.9	-	2.6	-	.4	-	3.1	-	1.3	-	.9	-
3469	Metal stampings, nec	5.2	-	4.6	-	.5	-	5.2	-	3.4	-	.5	-
347	Metal services, nec	8.5	-	7.5	-	.7	-	6.9	-	4.8	-	.3	-
348	Ordinance and accessories, nec	2.6	-	2.0	-	.5	-	2.4	-	1.4	-	.4	-
349	Misc. fabricated metal products	4.6	-	3.9	-	.5	-	4.5	-	3.1	-	.4	-
3494	Valves and pipe fittings	3.2	-	2.5	-	.4	-	3.5	-	2.1	-	.5	-
3496	Misc. fabricated wire products	7.0	-	6.5	-	.3	-	6.3	-	5.1	-	.2	-

See footnotes at end of table.

**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	
		Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p
35	MACHINERY, EXCEPT ELECTRICAL	3.4	3.4	2.8	2.8	0.3	0.3	3.2	2.5	2.0	1.4	0.3	0.3
351	Engines and turbines	2.4	-	1.7	-	.1	-	2.0	-	.8	-	.2	-
3511	Turbines and turbine generator sets	1.5	-	1.0	-	(¹)	-	1.8	-	.4	-	.2	-
3519	Internal combustion engines, nec	2.8	-	2.0	-	.2	-	2.1	-	.9	-	.2	-
352	Farm and garden machinery	4.5	-	3.1	-	.9	-	3.6	-	2.1	-	.4	-
3523	Farm machinery and equipment	4.4	-	3.0	-	.9	-	3.5	-	2.0	-	.4	-
353	Construction and related machinery	3.1	-	2.8	-	.2	-	2.7	-	1.7	-	.3	-
3531	Construction machinery	2.6	-	2.3	-	.2	-	2.2	-	1.3	-	.3	-
3533	Oil field machinery	4.1	-	3.8	-	(¹)	-	3.4	-	2.3	-	.2	-
354	Metalworking machinery	3.2	-	2.7	-	.2	-	3.1	-	1.9	-	.3	-
3541	Machine tools, metal cutting types	2.2	-	1.9	-	.2	-	1.8	-	1.3	-	(¹)	-
3544	Special dies, tools, jigs, and fixtures	3.9	-	3.0	-	.4	-	3.9	-	2.1	-	.6	-
3545	Machine tool accessories	3.3	-	3.0	-	.1	-	3.3	-	2.5	-	.1	-
355	Special industry machinery	3.0	-	2.5	-	.3	-	2.8	-	1.6	-	.4	-
3551	Food products machinery	2.4	-	2.2	-	.1	-	2.5	-	1.6	-	.3	-
3552	Textile machinery	4.1	-	2.9	-	.8	-	3.3	-	1.8	-	.6	-
356	General industrial machinery	2.7	-	2.3	-	.2	-	2.7	-	1.7	-	.2	-
3561	Pumps and pumping equipment	2.1	-	2.0	-	.1	-	2.2	-	1.5	-	.2	-
3562	Ball and roller bearings	2.9	-	2.2	-	.2	-	2.6	-	1.4	-	.3	-
3564	Blowers and fans	3.8	-	3.5	-	.2	-	3.6	-	2.3	-	.4	-
357	Office and computing machines	3.2	-	2.8	-	.2	-	2.9	-	2.0	-	.1	-
3573	Electronic computing equipment	2.9	-	2.7	-	.1	-	2.7	-	1.9	-	(¹)	-
358	Refrigeration and service machinery	3.7	-	2.8	-	.6	-	4.0	-	2.1	-	.8	-
3585	Refrigeration and heating equipment	3.8	-	2.6	-	.8	-	4.3	-	2.1	-	1.1	-
359	Misc. machinery, except electrical	4.7	-	4.3	-	.3	-	4.8	-	3.3	-	.5	-
36	ELECTRIC AND ELECTRONIC EQUIPMENT	4.1	3.8	3.2	3.0	.4	.3	4.1	3.3	2.3	1.7	.6	.5
361	Electric distributing equipment	3.7	-	2.6	-	.5	-	3.8	-	2.1	-	.3	-
3612	Transformers	3.9	-	2.6	-	.7	-	3.7	-	2.2	-	.3	-
3613	Switchgear and switchboard apparatus	3.5	-	2.6	-	.3	-	4.0	-	2.0	-	.4	-
362	Electrical industrial apparatus	3.0	-	2.2	-	.4	-	3.2	-	1.8	-	.5	-
3621	Motors and generators	3.1	-	2.3	-	.5	-	3.2	-	1.8	-	.5	-
3622	Industrial controls	2.9	-	1.9	-	.5	-	3.5	-	1.7	-	.7	-
363	Household appliances	4.7	-	3.0	-	.6	-	7.1	-	2.8	-	2.5	-
3632	Household refrigerators and freezers	3.9	-	1.1	-	.8	-	14.5	-	2.5	-	9.0	-
3633	Household laundry equipment	2.3	-	.6	-	.6	-	3.4	-	1.2	-	1.6	-
3634	Electric housewares and fans	7.3	-	6.1	-	.8	-	5.7	-	4.5	-	(¹)	-
364	Electric lighting and wiring equipment	4.7	-	4.0	-	.4	-	4.2	-	2.5	-	.5	-
3641	Electric lamps	3.1	-	2.1	-	.2	-	2.4	-	1.0	-	.4	-
3643	Current-carrying wiring devices	4.3	-	3.8	-	.2	-	4.1	-	2.6	-	.4	-
365	Radio and TV receiving equipment	6.4	-	4.1	-	.7	-	6.7	-	2.8	-	1.6	-
3651	Radio and TV receiving sets	6.3	-	3.4	-	.9	-	7.5	-	2.8	-	2.0	-
366	Communication equipment	2.7	-	2.1	-	.2	-	2.3	-	1.4	-	.1	-
3661	Telephone and telegraph apparatus	1.7	-	1.3	-	.2	-	2.0	-	.9	-	.2	-
3662	Radio and TV communication equipment	3.1	-	2.5	-	.2	-	2.5	-	1.7	-	.1	-
367	Electronic components and accessories	5.4	-	4.6	-	.4	-	4.9	-	3.3	-	.4	-
3671-3	Electronic tubes	4.1	-	2.9	-	.4	-	3.5	-	1.6	-	.5	-
3674	Semiconductors and related devices	4.2	-	3.5	-	.5	-	3.6	-	2.1	-	.4	-
3679	Electronic components, nec	6.5	-	6.0	-	.3	-	5.9	-	4.4	-	.3	-
369	Misc. electrical equipment and supplies	3.7	-	3.1	-	.3	-	3.2	-	2.0	-	.4	-
3694	Engine electrical equipment	3.4	-	2.7	-	.4	-	2.9	-	1.8	-	.3	-
37	TRANSPORTATION EQUIPMENT	5.1	-	2.9	-	1.7	-	3.0	-	1.6	-	.6	-
371	Motor vehicles and equipment	5.8	-	2.8	-	2.4	-	2.7	-	1.5	-	.3	-
3711	Motor vehicles and car bodies	7.5	-	2.3	-	4.4	-	2.3	-	1.2	-	.3	-
3713	Truck and bus bodies	4.5	-	3.7	-	.2	-	4.7	-	2.9	-	.9	-
3714	Motor vehicle parts and accessories	4.3	-	2.9	-	.8	-	2.7	-	1.4	-	.4	-
3715	Truck trailers	6.9	-	6.5	-	.3	-	4.5	-	3.1	-	.1	-
372	Aircraft and parts	2.8	-	2.3	-	.2	-	1.5	-	1.0	-	(¹)	-
3721	Aircraft	2.8	-	2.2	-	.3	-	1.4	-	.9	-	(¹)	-
3724	Aircraft engines and engine parts	2.2	-	1.7	-	.1	-	1.2	-	.7	-	(¹)	-
3728	Aircraft equipment, nec	3.8	-	3.4	-	.3	-	2.5	-	1.7	-	.1	-
373	Ship and boat building and repairing	7.7	-	4.5	-	3.0	-	6.0	-	2.9	-	2.0	-
3731	Ship building and repairing	7.6	-	3.8	-	3.7	-	5.9	-	2.4	-	2.4	-
3732	Boat building and repairing	8.1	-	7.1	-	.9	-	6.6	-	4.6	-	.6	-
374	Railroad equipment	4.8	-	2.3	-	1.7	-	3.5	-	1.0	-	1.2	-
376	Guided missiles, space vehicles, parts	1.8	-	1.0	-	.5	-	1.3	-	.6	-	.3	-
3761	Guided missiles and space vehicles	1.7	-	.9	-	.6	-	1.1	-	.5	-	.2	-
379	Miscellaneous transportation equipment	7.6	-	6.6	-	.9	-	9.0	-	5.9	-	1.7	-
38	INSTRUMENTS AND RELATED PRODUCTS	3.2	3.1	2.8	2.7	.2	.1	3.5	2.8	2.4	1.8	.4	.3
381	Engineering and scientific instruments	2.9	-	2.7	-	.1	-	2.6	-	1.9	-	.2	-
382	Measuring and controlling devices	3.4	-	2.7	-	.3	-	3.5	-	2.2	-	.5	-
3822	Environmental controls	3.8	-	2.4	-	.9	-	3.3	-	1.7	-	.8	-
3823	Process control instruments	3.8	-	3.3	-	.2	-	3.4	-	1.9	-	.4	-
3825	Instruments to measure electricity	3.1	-	2.7	-	(¹)	-	3.8	-	2.8	-	.2	-

See footnotes at end of table.

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	
		Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978 ^P	Sept. 1978	Oct. 1978
	INSTRUMENTS AND RELATED PRODUCTS—Cont'd												
383	Optical instruments and lenses	2.7	-	2.4	-	0.1	-	3.1	-	2.4	-	0.1	-
384	Medical instruments and supplies	4.3	-	3.9	-	.2	-	3.6	-	2.3	-	.3	-
3841	Surgical and medical instruments	5.3	-	5.0	-	(1)	-	3.7	-	2.7	-	.1	-
3842	Surgical appliances and supplies	3.4	-	3.0	-	.3	-	3.4	-	2.0	-	.4	-
385	Ophthalmic goods	4.2	-	3.6	-	.3	-	5.1	-	3.5	-	.6	-
386	Photographic equipment and supplies	1.4	-	1.2	-	.1	-	2.9	-	2.4	-	.1	-
387	Watches, clocks, and watchcases	4.5	-	3.9	-	.2	-	5.8	-	3.2	-	1.1	-
39	MISCELLANEOUS MANUFACTURING												
	INDUSTRIES												
391	Jewelry, silverware, and plated ware	6.3	-	5.4	-	.8	0.8	5.2	6.2	4.0	4.0	.6	1.1
393	Musical instruments	5.9	-	4.9	-	.6	-	4.8	-	3.5	-	.4	-
394	Toys and sporting goods	10.4	-	8.5	-	1.5	-	9.7	-	5.8	-	1.2	-
3942.4	Dolls, games, toys, and children's vehicles	13.4	-	12.3	-	.7	-	11.8	-	7.8	-	.5	-
3949	Sporting and athletic goods, nec	7.3	-	4.6	-	2.3	-	7.6	-	3.8	-	1.9	-
395	Pens, pencils, office and art supplies	4.7	-	4.2	-	.2	-	5.1	-	3.3	-	.4	-
396	Costume jewelry and notions	9.6	-	8.0	-	1.3	-	7.5	-	5.1	-	.8	-
399	Miscellaneous manufactures	6.0	-	5.1	-	.7	-	5.3	-	3.3	-	.6	-
	NONDURABLE GOODS												
	FOOD AND KINDRED PRODUCTS												
20	Meat products	8.1	6.7	6.3	4.9	1.6	1.5	9.1	7.5	5.5	3.7	2.5	2.9
201	Meat packing plants	7.8	-	6.3	-	1.0	-	8.4	-	5.9	-	1.4	-
2011	Sausages and other prepared meats	4.7	-	3.1	-	1.1	-	5.6	-	2.4	-	2.3	-
2013	Poultry dressing plants	5.7	-	4.1	-	1.5	-	5.9	-	3.4	-	1.6	-
2016	Dairy products	14.0	-	12.5	-	.7	-	14.2	-	12.7	-	.2	-
202	Preserved fruits and vegetables	4.2	-	3.7	-	.3	-	5.5	-	3.6	-	1.1	-
203	Grain mill products	18.4	-	13.9	-	4.4	-	22.2	-	12.2	-	8.4	-
204	Bakery products	4.7	-	3.9	-	.7	-	4.4	-	2.7	-	.9	-
205	Bread, cake, and related products	4.0	-	3.4	-	.4	-	4.0	-	2.8	-	.5	-
2051	Cookies and crackers	3.9	-	3.5	-	.2	-	4.0	-	3.0	-	.5	-
2052	Sugar and confectionery products	4.5	-	2.7	-	1.6	-	3.6	-	2.1	-	.7	-
206	Fats and oils	9.6	-	5.4	-	4.0	-	6.0	-	3.6	-	1.4	-
207	Beverages	4.5	-	3.2	-	1.0	-	3.5	-	2.0	-	.9	-
208	Malt beverages	5.2	-	4.1	-	.9	-	6.2	-	3.4	-	1.5	-
2082	Bottled and canned soft drinks	3.3	-	1.4	-	1.6	-	5.2	-	1.2	-	2.7	-
2086	Misc. foods and kindred products	5.4	-	5.1	-	.2	-	6.8	-	4.5	-	.9	-
209	Cigarettes	7.3	-	6.1	-	1.0	-	9.6	-	6.3	-	2.2	-
21	TOBACCO MANUFACTURES	5.5	-	3.4	-	1.7	-	2.9	-	1.8	-	.3	-
211	Cigarettes	1.8	-	1.0	-	.3	-	1.5	-	.6	-	(1)	-
22	TEXTILE MILL PRODUCTS	5.2	5.1	4.4	4.3	.5	.5	5.6	5.1	4.0	3.5	.5	.6
221	Weaving mills, cotton	4.2	-	3.2	-	.3	-	4.6	-	3.3	-	.3	-
222	Weaving mills, synthetics	4.9	-	4.2	-	.3	-	4.7	-	3.7	-	.1	-
223	Weaving and finishing mills, wool	5.9	-	5.1	-	.6	-	6.6	-	4.6	-	.9	-
224	Narrow fabric mills	5.8	-	5.3	-	.2	-	5.3	-	3.9	-	.6	-
225	Knitting mills	5.6	-	4.6	-	.7	-	6.5	-	4.6	-	.7	-
2251	Women's hosiery, except socks	7.0	-	5.9	-	.7	-	5.9	-	4.4	-	.2	-
2252	Hosiery, nec	5.7	-	5.4	-	.2	-	6.2	-	5.0	-	.4	-
2253	Knit outerwear mills	4.9	-	4.2	-	.5	-	7.3	-	4.8	-	1.6	-
2254	Knit underwear mills	5.5	-	5.0	-	.4	-	5.8	-	5.0	-	.1	-
2257	Circular knit fabric mills	6.2	-	3.9	-	2.0	-	6.7	-	3.7	-	.4	-
226	Textile finishing, except wool	3.7	-	3.1	-	.3	-	4.8	-	2.9	-	.9	-
227	Floor covering mills	5.5	-	4.9	-	.4	-	4.8	-	3.7	-	.2	-
228	Yarn and thread mills	6.8	-	5.8	-	.5	-	7.0	-	5.5	-	.5	-
229	Miscellaneous textile goods	4.6	-	3.6	-	.5	-	4.7	-	3.2	-	.6	-
23	APPAREL AND OTHER TEXTILE PRODUCTS	6.4	5.8	5.0	4.4	1.1	1.2	6.5	5.8	4.5	3.6	1.1	1.3
231	Men's and boys' suits and coats	4.2	-	2.6	-	1.2	-	5.9	-	2.5	-	2.9	-
232	Men's and boys' furnishings	6.3	-	5.1	-	.9	-	6.9	-	5.4	-	.7	-
2321	Men's and boys' shirts and nightwear	5.9	-	4.9	-	.7	-	6.1	-	4.8	-	.5	-
2327	Men's and boys' separate trousers	6.1	-	4.4	-	1.5	-	7.0	-	5.3	-	1.0	-
2328	Men's and boys' work clothing	7.7	-	6.8	-	.6	-	7.8	-	6.5	-	.6	-
233	Women's and misses' outerwear	6.1	-	4.5	-	1.3	-	6.3	-	3.8	-	1.4	-
234	Women's and children's undergarments	6.7	-	5.7	-	.7	-	6.9	-	5.5	-	.5	-
2341	Women's and children's underwear	7.1	-	6.1	-	.8	-	7.2	-	5.9	-	.3	-
2342	Brassieres and allied garments	5.0	-	4.4	-	.4	-	5.9	-	3.7	-	.9	-
236	Children's outerwear	6.9	-	4.9	-	1.7	-	6.7	-	4.8	-	1.1	-
238	Misc. apparel and accessories	6.5	-	5.2	-	1.1	-	5.5	-	4.1	-	.7	-
239	Misc. fabricated textile products	7.8	-	6.8	-	.7	-	7.0	-	4.9	-	.6	-
26	PAPER AND ALLIED PRODUCTS	3.3	2.9	2.9	2.3	.3	.4	4.0	2.7	2.5	1.4	.6	.5
261,2,6	Paper and pulp mills	1.5	-	1.3	-	.1	-	3.0	-	2.0	-	.4	-
262	Paper mills, except building paper	1.4	-	1.2	-	.1	-	3.1	-	2.1	-	.4	-

See footnotes at end of table.

**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	
		Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p	Sept. 1978	Oct. 1978 ^p
PAPER AND ALLIED PRODUCTS—Continued													
263	Paperboard mills	2.0		1.7		0.1		2.5		1.5		0.3	
264	Misc. converted paper products	4.1		3.6		.3		4.7		2.8		.9	
265	Paperboard containers and boxes	4.5		3.9		.4		4.6		2.9		.6	
2651	Folding paperboard boxes	4.2		3.8		.2		4.3		2.9		.4	
2653	Corrugated and solid fiber boxes	4.0		3.7		.2		4.2		2.9		.2	
PRINTING AND PUBLISHING													
27	Printing and publishing	4.3	3.9	3.8	3.4	.4	0.3	4.1	3.3	2.9	2.2	.5	0.5
271	Newspapers	4.4		4.0		.2		4.4		3.6		.2	
272	Periodicals	4.2		3.8		.4		3.6		2.8		.3	
273	Books	3.9		3.2		.4		4.8		2.4		1.4	
274	Miscellaneous publishing	4.7		3.7		.9		3.4		2.3		.5	
275	Commercial printing	3.9		3.4		.4		3.4		2.1		.6	
2751	Commercial printing, letterpress	3.9		3.3		.5		3.4		2.3		.3	
2752	Commercial printing, lithographic	4.0		3.5		.4		3.5		2.0		.9	
278	Blankbooks and bookbinding	6.5		6.0		.4		6.2		3.8		1.1	
CHEMICALS AND ALLIED PRODUCTS													
28	Chemicals and allied products	1.9	1.7	1.4	1.3	.3	.3	2.3	1.5	1.3	.7	.4	.3
281	Industrial inorganic chemicals	1.4		1.2		.1		2.0		1.1		.3	
2819	Industrial inorganic chemicals, nec	1.4		1.1		.1		1.8		.9		.3	
282	Plastics materials and synthetics	1.1		.9		.1		2.0		1.0		.6	
2821	Plastics materials and resins	1.5		1.2		.2		3.0		1.2		1.1	
2824	Organic fibers, noncellulosic	.8		.6		(1)		1.3		.8		.2	
283	Drugs	2.3		1.6		.2		2.2		1.3		.2	
2834	Pharmaceutical preparations	2.5		1.8		.3		2.3		1.4		.3	
284	Soap, cleaners, and toilet goods	2.7		2.1		.4		3.6		1.9		.9	
2841	Soap and other detergents	1.8		1.6		.1		2.4		1.2		.6	
2844	Toilet preparations	3.0		2.1		.7		4.1		1.9		1.2	
285	Paints and allied products	2.1		1.8		.1		3.4		2.1		.5	
286	Industrial organic chemicals	1.1		.9		.1		1.3		.7		.1	
287	Agricultural chemicals	3.2		2.1		1.0		3.0		1.7		.8	
289	Miscellaneous chemical products	2.6		2.1		.4		2.5		1.7		.2	
PETROLEUM AND COAL PRODUCTS													
29	Petroleum and coal products	2.3	1.8	1.9	1.6	.2	.1	2.8	2.0	1.5	.9	.6	.6
291	Petroleum refining	1.5		1.4		.1		1.9		.9		.4	
295	Paving and roofing materials	4.8		3.6		.8		6.1		3.1		1.7	
RUBBER AND MISC. PLASTICS PRODUCTS													
30	Rubber and misc. plastics products	5.9	6.1	5.2	5.3	.4	.5	6.0	5.3	4.1	3.5	.6	.7
301	Tires and inner tubes	2.0		1.3		.1		2.4		1.0		.5	
302	Rubber and plastic footwear	9.9		9.2		.3		8.9		7.1		.2	
303,4	Reclaimed rubber, and rubber and plastic hose and belting	5.0		3.9		.8		4.2		3.0		.3	
306	Fabricated rubber products, nec	5.0		4.2		.3		5.0		3.3		.5	
307	Miscellaneous plastics products	7.1		6.3		.5		7.1		5.0		.7	
LEATHER AND LEATHER PRODUCTS													
31	Leather and leather products	7.9	7.0	6.4	5.6	1.0	1.0	9.1	8.2	6.2	4.8	1.7	2.2
311	Leather tanning and finishing	4.5		3.2		1.3		9.2		3.8		4.1	
314	Footwear, except rubber	7.9		6.5		.9		9.6		6.8		1.5	
3143	Men's footwear, except athletic	8.6		7.6		.7		9.5		7.6		.7	
3144	Women's footwear, except athletic	7.3		5.5		1.2		10.1		6.1		2.5	
NONMANUFACTURING:													
MINING													
	MINING	4.9	4.8	4.0	3.9	.4	.6	4.8	4.5	3.4	3.1	.4	.5
METAL MINING													
10	Metal mining	2.8	2.7	2.5	2.0	.1	.3	4.0	3.5	2.5	1.2	.6	1.5
101	Iron ores	1.9		1.6		.1		3.3		1.9		.5	
102	Copper ores	1.3		1.0		.1		2.1		.7		.6	
BITUMINOUS COAL AND LIGNITE MINING													
12	Bituminous coal and lignite mining	1.8	1.7	1.3	1.2	.1	.3	2.1	1.2	1.1	.7	.3	.1
OIL AND GAS EXTRACTION													
13	Oil and gas extraction	7.4	7.5	6.0	6.1	.7	1.0	6.8	7.0	5.2	5.3	.4	.6
131, 2	Crude petroleum, natural gas, and natural gas liquids	2.1		1.4		.4		3.4		2.2		.3	
138	Oil and gas field services	11.3		9.3		.8		9.3		7.3		.4	
NONMETALLIC MINERALS, EXCEPT FUELS													
14	Nonmetallic minerals, except fuels	4.0	3.2	3.7	2.8	.2	.3	4.0	2.9	2.6	1.7	.5	.5
142	Crushed and broken stone	4.5		4.3		.2		3.2		2.2		.5	
144	Sand and gravel	3.9		3.5		.3		5.4		3.1		.8	
COMMUNICATION:													
481	Telephone communication	1.5		1.3		(1)		1.3		.6		.3	

¹ Less than 0.05.

^ppreliminary.

ESTABLISHMENT DATA
SEASONALLY ADJUSTED LABOR TURNOVER

D-3. Labor turnover rates in manufacturing, 1969 to date, seasonally adjusted

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions												
1969	4.9	4.8	4.9	4.9	4.7	5.0	4.7	4.5	4.7	4.6	4.5	4.6
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	4.7	4.5	4.3	4.2	4.1	4.0	3.8	3.3	3.1
1975	3.0	3.1	3.2	3.8	3.6	3.8	4.0	4.0	3.8	3.9	3.9	3.9
1976	4.2	4.2	4.2	4.1	3.9	3.8	3.8	3.7	3.7	3.8	3.8	4.0
1977	4.0	4.4	4.1	3.9	3.9	3.9	3.9	3.7	3.9	4.0	4.1	4.4
1978	4.2	4.0	3.9	4.2	4.0	3.9	3.8	3.8	4.1	^p 4.4		
1979												
New hires												
1969	3.7	3.8	3.9	3.8	3.7	3.9	3.7	3.5	3.7	3.6	3.5	3.5
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	3.2	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	2.3	2.4	2.5	2.5
1976	2.6	2.8	2.9	2.8	2.7	2.7	2.6	2.5	2.4	2.5	2.5	2.6
1977	2.7	2.8	2.9	2.8	3.0	2.8	2.7	2.7	2.7	2.8	2.9	3.3
1978	3.1	3.0	3.0	3.1	3.0	3.0	2.9	2.8	3.1	^p 3.4		
1979												
Total separations												
1969	4.6	4.9	4.9	4.8	4.8	5.0	4.8	4.9	4.9	5.0	4.9	4.9
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	4.5	4.5	4.6	4.7	4.5	4.8	5.1	4.9
1975	5.2	5.0	4.6	4.6	4.6	4.3	4.0	3.9	3.8	3.8	3.8	3.5
1976	3.6	3.6	3.9	3.9	3.8	3.9	3.9	3.9	3.9	3.9	3.7	3.7
1977	4.0	4.1	3.7	3.7	3.8	3.8	3.9	3.9	3.8	3.7	3.9	3.9
1978	3.8	3.8	3.8	4.0	3.9	4.0	3.9	3.7	3.7	^p 4.0		
1979												
Quits												
1969	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6
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	2.3	2.3	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	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.7
1977	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.9	2.0	2.0
1978	2.0	2.0	2.0	2.2	2.1	2.1	2.0	1.9	2.0	^p 2.3		
1979												
Layoffs												
1969	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.3	1.4
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	1.0	1.1	1.2	1.4	1.3	1.8	2.4	2.5
1975	2.9	2.9	2.7	2.6	2.5	2.2	1.7	1.7	1.7	1.5	1.5	1.3
1976	1.2	1.0	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.3	1.2
1977	1.3	1.4	1.1	1.1	1.1	1.2	1.2	1.3	1.1	1.1	1.0	1.0
1978	.9	.9	1.0	.9	1.0	1.0	.9	.9	.8	^p .9		
1979												

^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	
	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P
ALABAMA:												
Birmingham	3.8	2.8	2.9	2.0	0.4	0.5	3.4	3.1	1.8	1.5	0.6	0.5
Mobile ¹	10.1	5.2	2.5	1.7	7.5	3.2	9.2	7.1	2.5	2.1	5.6	3.9
ALASKA	13.7	15.8	12.0	14.0	1.5	1.6	23.6	30.8	10.3	10.5	11.9	19.7
ARIZONA	5.8	(*)	5.2	(*)	.5	(*)	5.5	(*)	3.8	(*)	.4	(*)
Phoenix	6.3	(*)	5.7	(*)	.4	(*)	5.7	(*)	4.0	(*)	.4	(*)
ARKANSAS	8.8	6.8	7.7	5.8	.7	.6	9.4	7.4	7.2	5.1	.8	1.0
Fort Smith	8.3	8.0	7.0	7.0	1.1	.3	9.8	8.4	7.4	6.1	.8	1.0
Little Rock—North Little Rock	6.2	5.7	5.7	4.8	.2	.5	8.5	7.8	5.6	3.5	1.2	2.7
Pine Bluff	5.3	4.3	4.2	3.3	.7	.8	7.4	4.6	3.7	3.2	2.9	1.0
COLORADO ²	7.2	6.0	6.5	5.5	.6	.4	7.1	6.3	4.7	5.2	1.0	.6
Denver—Boulder ²	6.5	6.8	6.0	6.4	.4	.3	6.1	6.2	4.5	4.8	.2	.3
CONNECTICUT	3.1	(*)	2.5	(*)	.3	(*)	3.4	(*)	2.2	(*)	.4	(*)
Hartford	2.7	(*)	2.3	(*)	.2	(*)	2.8	(*)	1.7	(*)	.3	(*)
DELAWARE ¹	8.4	2.8	1.9	1.5	5.5	.4	3.3	2.5	1.6	1.2	.9	.7
Wilmington ¹	8.3	2.4	1.4	1.2	5.8	.4	2.5	2.5	1.2	1.1	.8	.9
FLORIDA	6.4	6.7	5.7	5.5	.5	1.0	6.2	5.7	4.3	4.0	.6	.6
Fort Lauderdale—Hollywood	7.1	7.7	6.7	7.0	.3	.6	6.5	7.0	4.8	5.2	.2	.5
Jacksonville	4.5	6.3	4.2	3.5	.3	2.7	5.2	4.7	3.4	2.4	.7	1.1
Miami	5.7	6.0	5.1	4.9	.3	.9	6.1	4.6	3.9	3.3	.6	.4
Orlando	4.2	4.8	3.7	4.1	.4	.6	4.3	4.2	3.0	2.8	.8	.6
Pensacola	1.4	1.5	1.2	1.5	.1	(3)	2.4	2.7	1.6	1.1	.3	.8
Tampa—St. Petersburg	7.7	7.7	6.8	6.6	.7	.9	6.5	7.2	4.9	5.2	.6	.9
West Palm Beach—Boca Raton	5.4	3.6	4.4	3.2	1.0	.4	4.1	3.0	2.5	2.2	.3	.1
GEORGIA	5.0	4.8	4.3	4.0	.4	.5	5.2	4.9	3.7	3.6	.4	.4
Atlanta ⁴	4.5	4.1	3.7	3.4	.7	.4	3.9	3.9	2.4	2.2	.3	.4
HAWAII ⁵	3.4	3.1	1.1	1.5	2.2	1.5	2.2	2.7	1.5	1.2	.4	.8
IDAHO ⁶	6.6	6.7	6.1	5.9	.3	.5	7.4	7.1	5.9	4.9	.4	1.2
ILLINOIS:												
Chicago SMSA	4.2	4.0	3.7	3.4	.2	.2	4.6	4.0	3.0	2.6	.3	.2
INDIANA	4.3	3.7	3.4	2.8	.5	.5	5.3	4.3	3.2	2.2	1.1	1.3
Indianapolis ⁷	3.6	3.6	2.5	2.7	.2	.2	3.7	3.0	2.5	1.8	.3	.3
IOWA	4.9	4.6	3.9	3.6	.7	.7	5.0	4.2	3.6	2.9	.5	.5
Cedar Rapids	4.9	3.7	4.0	3.1	.6	.5	3.8	3.5	2.3	1.8	.7	1.1
Des Moines	7.2	6.1	4.8	4.4	1.5	.9	6.7	5.2	4.3	3.4	.3	.4
KANSAS	7.6	6.5	7.0	5.9	.4	.3	10.2	5.7	6.2	4.1	2.6	.6
Topeka	2.0	2.0	1.8	1.9	.1	.1	5.4	4.3	4.4	2.0	.6	1.9
Wichita	8.9	7.8	8.0	6.9	.5	.4	7.0	5.3	5.1	4.1	.1	.1
KENTUCKY	4.3	3.9	2.9	2.7	1.0	.6	4.3	4.1	2.7	2.0	.6	1.0
Louisville	3.2	3.2	1.9	1.8	.6	.2	3.4	4.5	1.6	1.7	.4	1.2
LOUISIANA:												
New Orleans	5.0	5.1	4.5	4.4	.2	.5	7.6	4.5	3.6	3.1	2.7	.3
MAINE	8.1	6.6	6.5	5.5	1.3	.8	7.6	8.5	5.3	5.6	1.2	1.8
Portland	5.3	5.1	4.9	4.4	.2	.6	6.4	7.3	4.4	5.7	1.2	.9
MARYLAND	4.8	3.8	2.5	2.3	2.1	1.4	3.4	3.3	1.9	1.7	.6	.9
Baltimore	5.2	4.0	2.1	1.9	2.8	1.9	3.2	2.9	1.6	1.3	.8	.9
MASSACHUSETTS	4.6	4.7	3.4	4.0	.8	.5	4.8	4.5	3.1	3.0	.6	.6
Boston	3.5	4.1	2.8	3.4	.4	.4	4.1	4.0	2.7	2.5	.4	.5
MICHIGAN	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Detroit	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Flint	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Grand Rapids	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Lansing—East Lansing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)

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	
	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P
MINNESOTA	5.6	5.3	4.6	4.6	0.8	0.5	4.9	5.9	3.6	4.5	0.5	0.8
Minneapolis—St. Paul	3.7	4.3	3.3	3.8	.2	.3	4.1	4.1	2.8	3.2	.5	.3
MISSISSIPPI:												
Jackson	5.7	6.2	5.4	5.2	.2	.7	7.5	4.5	5.0	2.7	.6	.3
MISSOURI	4.3	3.9	3.6	3.3	.4	.4	5.4	4.1	3.6	2.5	.8	.7
Kansas City	4.6	3.8	4.1	3.3	.4	.3	5.5	3.7	3.6	2.4	.8	.4
St. Louis	3.1	3.0	2.4	2.4	.4	.4	4.1	3.1	2.5	1.5	.6	.8
MONTANA	3.5	(*)	2.9	(*)	(*)	(*)	3.7	(*)	2.5	(*)	.6	(*)
NEBRASKA	5.5	6.0	5.0	5.4	.3	.4	6.0	5.4	4.8	4.2	.3	.2
NEVADA	11.8	9.0	10.9	8.5	.6	.4	8.8	8.9	6.7	6.7	.4	.4
NEW HAMPSHIRE	5.6	4.7	4.6	4.4	.6	.1	5.3	4.9	4.1	3.9	.3	.3
NEW JERSEY:												
Camden ⁸	3.7	3.4	2.6	2.8	.8	.3	4.9	4.0	2.3	2.1	1.6	.6
Hackensack	5.7	5.3	4.1	4.5	1.5	.6	5.4	5.1	3.3	3.1	.9	.8
Jersey City	4.4	3.5	3.3	2.6	1.0	.7	4.7	3.6	1.9	1.8	1.8	.9
Newark	5.0	4.0	3.0	2.9	1.7	.9	4.5	3.6	2.5	2.0	.8	.6
New Brunswick—Perth Amboy—Sayreville	5.7	4.7	4.7	4.2	.7	.3	5.7	5.1	3.4	2.9	.6	.5
Paterson—Clifton—Passaic	6.7	4.1	4.4	3.0	2.0	.8	5.3	3.6	2.9	2.0	.9	.7
Trenton	4.1	3.1	2.8	2.3	1.1	.6	3.5	3.2	2.1	1.5	.5	.8
NEW YORK	5.1	4.5	3.2	3.1	1.6	1.2	4.3	4.2	2.1	2.2	1.2	1.1
Albany—Schenectady—Troy	3.7	2.9	2.2	1.7	1.0	.6	3.8	3.8	1.6	1.6	1.2	1.2
Binghamton	6.8	3.4	3.1	3.0	3.5	.2	3.5	3.1	2.5	2.1	.3	.2
Buffalo	3.2	4.0	2.2	2.0	.8	1.7	3.7	3.1	1.5	1.5	1.4	1.0
Elmira	2.9	4.0	1.8	1.8	.8	2.0	5.4	3.5	1.8	1.5	2.1	.5
Monroe County ⁹	2.5	2.5	2.1	1.8	.2	.6	2.4	2.9	1.5	2.3	.3	.1
Nassau—Suffolk ¹⁰	6.3	6.1	4.7	4.8	1.4	1.1	6.1	5.9	4.0	4.1	.9	.7
New York and Nassau—Suffolk	5.8	5.3	3.6	3.6	2.1	1.5	4.7	4.9	2.1	2.2	1.6	1.6
New York SMSA ¹⁰	5.7	5.1	3.3	3.3	2.3	1.6	4.3	4.6	1.7	1.7	1.7	1.9
New York City ¹¹	6.1	5.4	3.4	3.4	2.6	1.8	4.5	4.8	1.7	1.7	1.9	2.1
Rochester	4.0	3.8	3.1	2.8	.6	.8	3.1	3.9	1.9	2.9	.4	.4
Syracuse	4.3	2.8	3.2	2.4	.9	.3	3.7	3.5	1.9	1.7	.7	1.1
Utica—Rome	3.7	2.9	2.4	2.3	1.3	.5	3.5	3.0	2.1	1.6	.5	.7
Westchester County ¹¹	3.4	3.5	2.5	2.7	.7	.6	2.8	3.4	1.6	2.0	.5	.6
NORTH CAROLINA	6.5	5.8	5.5	5.0	.6	.5	6.7	5.2	5.3	4.0	.3	.2
Charlotte—Gastonia	7.5	5.9	6.9	5.3	.4	.4	8.0	6.0	6.5	5.0	.3	.1
Greensboro—Winston-Salem—High Point	5.5	5.0	4.8	4.6	.2	.1	6.2	4.5	4.9	3.6	.1	.1
NORTH DAKOTA	6.5	11.1	5.3	7.3	.9	4.0	7.3	7.2	5.5	6.1	.7	.3
Fargo—Moorhead	6.9	8.7	6.0	5.5	.7	3.0	5.1	7.2	3.7	3.7	.2	2.6
OHIO	3.5	3.3	2.6	2.5	(*)	(*)	3.4	3.6	1.9	2.1	.6	.6
Akron	1.9	2.0	1.3	1.3	(*)	(*)	1.9	2.2	1.2	1.2	.2	.5
Canton	3.5	3.4	2.4	2.2	(*)	(*)	3.2	3.7	1.6	2.2	.3	.4
Cincinnati	2.9	2.7	2.5	2.3	(*)	(*)	3.4	3.1	2.1	1.9	.4	.4
Cleveland	3.3	3.4	2.7	2.8	(*)	(*)	3.1	3.2	1.9	2.0	.2	.2
Columbus	3.4	3.1	2.7	2.5	(*)	(*)	2.8	3.4	1.9	1.9	.1	.6
Dayton	2.3	2.5	2.0	2.0	(*)	(*)	2.9	2.6	1.9	1.6	.3	.2
Toledo	2.7	3.0	1.7	2.1	(*)	(*)	2.6	3.1	1.2	1.7	.5	.8
Youngstown—Warren	2.3	2.7	1.1	.9	(*)	(*)	2.9	3.2	.9	1.0	.9	1.2
OKLAHOMA	8.5	7.4	7.5	6.7	.6	.5	8.9	6.8	7.1	5.2	.5	.6
Oklahoma City	8.2	7.2	7.3	6.5	.8	.6	8.7	6.7	6.9	5.3	.4	.4
Tulsa ¹²	8.6	7.5	7.6	7.0	.7	.3	8.7	7.4	6.5	4.9	.8	1.3
OREGON ¹	5.3	4.6	4.4	4.0	.7	.4	5.3	5.8	3.2	3.9	1.1	1.0
Portland ¹	6.1	5.3	4.9	4.3	1.1	.6	5.6	6.0	3.1	3.8	1.3	1.3
PENNSYLVANIA	3.3	3.1	2.1	2.2	.9	.6	3.4	3.3	1.9	1.8	.7	.5
Allentown—Bethlehem—Easton	3.0	2.9	2.0	1.8	.9	.8	3.2	3.0	1.9	1.6	.9	.7
Altoona	4.2	2.1	1.5	1.1	2.5	.7	3.5	3.1	1.6	1.5	1.3	1.1
Erie	4.9	3.7	2.7	3.0	1.8	.3	3.3	3.5	1.9	2.0	.3	.6
Harrisburg	4.0	3.1	3.1	2.6	.7	.2	3.8	4.1	2.8	2.6	.2	.9
Johnstown	3.8	3.3	1.2	1.4	2.5	1.9	3.1	3.8	1.3	1.0	1.1	2.1
Lancaster	3.9	3.3	3.3	3.1	.4	.1	4.8	3.9	3.4	2.8	.4	.3

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	
	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P	Aug. 1978	Sept. 1978 ^P
PENNSYLVANIA—Continued												
Northeast Pennsylvania	4.7	3.5	1.9	2.3	2.4	0.8	3.8	3.7	2.0	1.7	1.1	1.2
Philadelphia SMSA	3.2	3.2	2.1	2.4	.8	.6	3.5	3.4	1.8	1.8	.8	.7
Pittsburgh	2.3	2.2	1.4	1.2	.6	.6	3.1	2.3	1.5	1.1	.8	.6
Reading	4.1	4.5	3.1	3.3	.9	1.1	3.6	3.3	2.4	2.2	.4	.4
Scranton ¹³	5.1	2.8	1.9	2.1	3.2	.5	2.9	3.2	1.8	1.3	.6	1.4
Wilkes-Barre—Hazleton ¹³	3.9	3.3	1.9	2.0	1.6	.9	3.6	3.5	1.8	1.7	1.2	.8
Williamsport	3.2	2.1	2.6	1.7	.5	.3	3.3	3.4	1.6	1.4	1.3	1.5
York	6.2	6.0	3.9	4.7	2.1	1.2	6.2	4.4	3.7	3.3	1.6	.5
RHODE ISLAND												
Providence—Warwick—Pawtucket	6.5	7.0	5.6	6.4	.5	.4	6.6	6.1	4.8	4.5	.6	.7
Providence—Warwick—Pawtucket	6.7	7.5	5.7	6.6	.6	.5	6.9	6.5	5.1	4.7	.6	.7
SOUTH CAROLINA												
Charleston—North Charleston	5.1	4.6	4.4	3.9	.4	.4	5.6	4.5	4.1	3.2	.4	.3
Charleston—North Charleston	4.0	6.5	3.2	5.0	.6	1.4	5.6	4.6	4.1	3.0	.4	.2
Columbia	5.2	4.4	4.9	4.1	.1	.2	5.7	4.5	4.2	3.3	.4	.1
Greenville—Spartanburg	5.6	5.2	5.0	4.6	.3	.3	6.3	5.0	4.6	3.6	.4	.3
SOUTH DAKOTA												
Sioux Falls	6.6	6.6	6.1	6.2	.3	.2	7.1	5.7	5.8	4.6	.6	.2
Sioux Falls	5.6	5.4	5.4	5.3	.2	.2	6.7	4.9	5.2	3.8	.7	.2
TENNESSEE:												
Memphis	3.9	3.5	3.3	3.1	.3	.2	4.5	3.9	2.9	2.3	.4	.6
TEXAS:												
Dallas—Fort Worth	6.6	7.3	6.2	5.9	.3	1.3	8.0	6.0	5.4	4.6	1.2	.3
Houston	6.0	5.5	5.7	5.2	.2	.1	6.2	5.0	4.9	3.8	.1	.1
San Antonio	4.8	4.9	4.5	4.5	.3	.3	5.8	5.2	4.5	3.9	.1	.2
UTAH ⁴												
Salt Lake City—Ogden ⁴	7.3	6.9	6.6	6.2	.5	.5	7.0	7.6	5.3	5.8	.8	.6
Salt Lake City—Ogden ⁴	7.1	6.1	6.6	5.8	.3	.3	6.7	7.1	5.0	5.4	.8	.7
VERMONT												
Burlington	4.1	4.2	3.6	3.7	.2	.3	4.3	4.3	2.8	2.8	.7	.9
Burlington	2.6	2.5	2.2	2.2	(³)	.1	2.9	3.3	1.0	1.4	1.5	1.4
Springfield	2.7	2.8	2.5	2.4	.2	.4	3.2	3.5	1.7	1.8	.6	1.1
VIRGINIA												
Richmond	5.0	4.4	3.6	3.5	1.1	.5	4.7	4.3	3.2	2.9	.4	.4
Richmond	3.0	2.9	2.2	2.3	.4	.2	2.1	2.4	1.3	1.4	(³)	.1
WASHINGTON:												
Seattle—Everett ¹⁴	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
WISCONSIN												
Milwaukee	5.1	3.8	4.1	3.1	.7	.4	5.2	4.6	3.7	2.5	.5	1.2
Milwaukee	4.1	3.4	3.1	2.6	.6	.3	4.0	3.4	2.5	1.8	.4	.5
WYOMING												
.....	10.2	4.4	9.2	4.0	1.0	.4	11.5	5.8	9.4	3.3	.1	1.3

¹ Excludes canning and preserving.

² Based on the 1967 Standard Industrial Classification Manual.

³ Less than 0.05.

⁴ Excludes agricultural chemicals, and miscellaneous manufacturing.

⁵ Excludes canned fruits, vegetables, preserves, jams, and jellies.

⁶ Excludes canning and preserving, and sugar.

⁷ Excludes canning and preserving, and newspapers.

⁸ Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area.

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 Excludes new-hire rate for transportation equipment.

¹³ Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area.

¹⁴ Excludes canning and preserving, printing and publishing.

^P 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					
				Number			Percent of labor force		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
ALABAMA	1,546.3	1,590.4	1,597.5	106.1	90.2	90.5	6.9	5.7	5.7
Birmingham	359.5	375.0	376.6	22.1	19.1	19.4	6.1	5.1	5.1
Huntsville	127.9	132.4	133.0	9.0	7.4	7.6	7.0	5.6	5.7
Mobile	174.0	180.2	178.4	13.3	11.7	11.3	7.6	6.5	6.3
Montgomery	108.9	114.1	114.3	6.0	6.2	6.2	5.5	5.4	5.5
Tuscaloosa	52.8	51.9	52.0	3.6	2.8	2.8	6.9	5.3	5.4
ALASKA	172.0	188.8	185.9	14.2	17.4	18.9	8.3	9.2	10.2
ARIZONA	989.1	1,016.0	1,030.1	75.1	57.5	54.4	7.6	5.7	5.3
Phoenix	583.1	605.8	615.7	38.2	29.8	28.2	6.5	4.9	4.6
Tucson	184.3	187.8	191.0	14.2	9.7	9.3	7.7	5.1	4.8
ARKANSAS	943.7	934.6	936.2	54.5	57.0	62.8	5.8	6.1	6.7
Fayetteville-Springdale	69.9	69.7	69.9	3.0	2.8	3.5	4.3	4.1	5.0
Fort Smith ¹	80.5	82.6	82.7	5.2	5.6	6.8	6.5	6.8	8.2
Little Rock-North Little Rock	178.3	177.6	176.4	7.5	9.7	9.4	4.2	5.5	5.3
Pine Bluff	35.9	36.5	36.9	1.5	2.7	3.0	4.2	7.4	8.2
CALIFORNIA ²	10,225.3	10,632.0	10,639.2	748.1	678.4	632.6	7.3	6.4	5.9
Anaheim-Santa Ana-Garden Grove	929.2	975.7	997.7	51.2	46.6	42.8	5.5	4.9	4.3
Bakersfield	167.0	168.9	167.6	13.4	14.1	13.6	8.0	8.4	8.1
Fresno	253.2	287.3	255.6	20.7	19.0	19.3	8.2	6.6	7.6
Los Angeles-Long Beach ²	3,385.0	3,526.0	3,532.0	255.0	206.0	192.0	7.5	5.8	5.4
Modesto	126.9	136.4	129.1	12.6	9.3	10.2	9.9	6.8	7.9
Oxnard-Simi Valley-Ventura	195.3	205.3	204.5	15.3	17.9	16.1	7.9	8.7	7.9
Riverside-San Bernardino-Ontario	508.0	530.1	536.3	39.1	39.4	34.5	7.7	7.4	6.4
Sacramento	424.5	443.7	441.8	32.2	28.9	28.4	7.6	6.5	6.4
Salinas-Seaside-Monterey	124.1	127.3	126.6	8.1	7.3	7.0	6.5	5.8	5.5
San Diego	650.4	675.0	677.1	49.7	44.3	43.8	7.5	6.5	6.5
San Francisco-Oakland	1,510.5	1,530.9	1,537.5	100.1	98.0	86.2	6.6	6.4	5.6
San Jose	616.9	653.7	658.7	36.1	35.4	32.6	5.8	5.4	4.9
Santa Barbara-Santa Maria-Lompoc	129.1	131.6	131.8	7.9	8.9	7.5	6.1	6.7	5.7
Santa Rosa	113.9	116.0	117.1	8.8	8.2	7.0	7.7	7.0	6.0
Stockton	157.9	168.4	167.9	13.1	12.0	13.2	8.3	7.1	7.9
Vallejo-Fairfield-Napa	117.3	121.1	121.4	8.1	7.7	6.5	6.9	6.3	5.3
COLORADO	1,269.5	1,320.1	1,325.6	72.4	67.4	62.4	5.7	5.1	4.7
Denver-Boulder	739.9	767.5	772.4	40.6	37.6	34.0	5.5	4.9	4.4
CONNECTICUT	1,501.1	1,515.2	1,514.5	85.2	65.7	66.7	5.7	4.3	4.4
Bridgeport	183.8	184.8	185.3	11.6	8.8	9.1	6.3	4.8	4.9
Hartford	358.1	364.4	362.4	19.0	14.4	14.8	5.3	4.0	4.1
New Britain	70.9	69.3	69.9	4.1	2.7	2.9	5.8	3.9	4.1
New Haven-West Haven	197.4	194.5	195.7	13.2	7.8	8.5	6.7	4.0	4.4
Stamford	111.0	118.3	118.2	4.5	4.7	4.6	4.1	3.9	3.9
Waterbury	105.7	107.8	106.1	6.7	5.4	5.1	6.4	5.0	4.8
DELAWARE	273.1	275.8	275.2	19.2	18.4	18.1	7.0	6.7	6.6
Wilmington ¹	239.7	235.7	238.1	17.2	15.0	14.7	7.2	6.4	6.2
DISTRICT OF COLUMBIA	327.6	328.7	331.2	30.3	28.8	27.5	9.2	8.8	8.3
Washington SMSA ¹	1,548.6	1,556.1	1,558.5	74.0	70.7	70.1	4.8	4.5	4.5
FLORIDA ²	3,632.0	3,807.4	3,764.2	280.9	289.5	264.5	7.7	7.6	7.0
Fort Lauderdale-Hollywood	358.6	378.1	375.2	30.2	28.9	26.8	8.4	7.6	7.1
Jacksonville	307.0	320.2	315.4	19.2	21.5	20.8	6.3	6.7	6.6
Miami	706.5	734.9	725.9	59.8	58.0	52.5	8.5	7.9	7.2
Orlando	283.2	297.6	292.4	21.4	21.3	19.2	7.6	7.1	6.6
Pensacola	110.8	117.0	115.2	6.1	7.4	7.1	5.5	6.4	6.2
Tampa-St. Petersburg	561.2	590.8	583.8	39.4	40.3	36.2	7.0	6.8	6.2
West Palm Beach-Boca Raton	198.0	208.1	208.1	17.1	18.1	16.2	8.7	8.7	7.8
GEORGIA	2,307.3	2,352.4	2,353.1	153.2	139.3	137.3	6.6	5.9	5.8
Atlanta	873.1	876.4	880.0	60.2	51.3	49.9	6.9	5.9	5.7
Augusta ¹	123.5	129.0	129.0	9.1	8.2	8.3	7.4	6.4	6.5
Columbus ¹	87.1	89.1	88.5	6.3	6.3	5.7	7.2	7.1	6.4
Macon	106.4	105.0	105.1	10.6	6.7	6.9	10.0	6.4	6.6
Savannah	88.8	88.9	88.0	6.4	6.0	6.1	7.2	6.7	6.9

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
HAWAII	402.4	398.8	405.1	30.6	32.3	34.4	7.6	8.1	8.5
Honolulu	317.3	314.4	320.1	24.1	25.2	26.8	7.6	8.0	8.4
IDAHO	401.2	428.5	420.7	16.9	19.6	17.7	4.2	4.6	4.2
Boise City	79.1	94.0	91.1	2.1	2.6	2.7	2.7	2.7	2.9
ILLINOIS ²	5,273.7	5,335.4	5,416.4	314.0	272.4	288.9	6.0	5.1	5.3
Bloomington—Normal	61.2	63.0	64.0	1.8	2.0	2.0	3.0	3.1	3.2
Champaign—Urbana—Rantoul	75.0	75.4	78.2	2.9	3.1	3.3	3.8	4.1	4.2
Chicago	3,348.7	3,399.8	3,442.2	199.3	172.2	183.8	6.0	5.1	5.3
Davenport—Rock Island—Moline ¹	175.1	180.8	183.5	8.0	7.2	7.5	4.6	4.0	4.1
Decatur	61.1	61.5	62.2	3.7	4.5	3.6	6.0	7.4	5.8
Peoria	172.6	176.7	178.9	8.5	7.5	7.8	5.0	4.3	4.3
Rockford	131.4	136.9	138.8	9.7	6.3	6.9	7.4	4.6	5.0
Springfield	96.5	96.3	97.8	4.7	5.1	5.5	4.9	5.3	5.6
INDIANA	2,469.7	2,582.3	2,585.9	115.3	135.4	128.7	4.7	5.2	5.0
Evansville ¹	133.8	138.6	138.6	6.0	7.1	6.5	4.5	5.1	4.7
Fort Wayne	176.8	186.6	187.8	7.2	8.5	8.3	4.1	4.5	4.4
Gary—Hammond—East Chicago	280.6	290.6	289.3	15.0	16.9	15.2	5.6	5.9	5.2
Indianapolis	551.7	574.0	572.6	26.7	28.9	26.4	4.8	5.0	4.6
Muncie	55.7	56.7	57.6	2.9	3.8	3.5	5.1	6.7	6.1
South Bend	131.8	137.3	138.0	6.0	7.0	7.1	4.6	5.1	5.2
Terre Haute	77.1	80.0	80.4	3.3	3.9	3.7	4.2	4.9	4.6
IOWA	1,411.4	1,426.4	1,433.5	45.5	39.0	37.2	3.2	2.7	2.6
Cedar Rapids	83.6	86.2	85.9	2.4	2.0	1.9	2.9	2.3	2.2
Des Moines	172.4	175.9	177.0	5.9	5.3	4.8	3.4	3.0	2.7
Dubuque	44.5	45.0	45.3	1.9	1.8	1.7	4.2	4.0	3.6
Sioux City ¹	59.1	58.0	58.6	2.3	2.7	2.8	3.9	4.7	4.7
Waterloo—Cedar Falls	66.6	66.5	66.7	2.4	2.3	2.6	3.6	3.5	3.8
KANSAS	1,136.1	1,165.2	1,170.3	43.1	30.5	29.3	3.8	2.6	2.5
Topeka	95.3	95.4	95.6	4.2	3.2	3.1	4.4	3.4	3.3
Wichita	210.3	212.5	215.4	9.6	6.2	6.0	4.6	2.9	2.8
KENTUCKY	1,571.4	1,593.4	1,591.1	63.8	73.5	75.0	4.1	4.6	4.7
Lexington—Fayette	160.7	164.1	164.4	4.7	4.5	5.0	3.0	2.7	3.1
Louisville ¹	402.9	418.0	418.8	19.1	19.4	20.9	4.7	4.7	5.0
LOUISIANA	1,582.7	1,623.9	1,616.5	102.3	104.3	95.1	6.5	6.4	5.9
Baton Rouge	199.5	201.4	200.5	13.8	11.9	11.0	6.9	5.9	5.5
Lake Charles	65.0	63.2	63.1	4.6	4.4	4.2	7.1	7.0	6.7
Monroe	51.1	52.9	53.1	3.1	3.5	3.2	6.1	6.6	6.1
New Orleans	460.7	463.7	457.6	34.5	30.7	27.0	7.5	6.6	5.9
Shreveport	145.6	151.3	150.0	8.5	9.3	7.9	5.8	6.2	5.3
MAINE	471.3	486.1	473.8	32.9	23.4	24.2	7.0	4.8	5.1
Lewiston—Auburn	36.8	36.8	36.9	2.5	1.7	1.5	6.7	4.5	4.1
Portland	84.3	85.2	86.4	5.7	3.5	3.6	6.7	4.1	4.2
MARYLAND	1,960.1	2,018.2	2,020.4	107.3	87.6	93.2	5.5	4.3	4.6
Baltimore	976.9	1,030.7	1,040.3	61.7	48.8	52.7	6.3	4.7	5.1
MASSACHUSETTS ²	2,795.1	2,813.6	2,805.1	184.9	162.1	120.6	6.6	5.8	4.3
Boston	1,345.8	1,359.7	1,364.6	90.1	75.4	55.7	6.7	5.5	4.1
Brockton	79.5	80.8	82.6	6.0	4.8	3.6	7.6	6.0	4.4
Fall River ¹	75.6	81.6	78.2	5.1	4.8	3.8	6.8	5.9	4.9
Lawrence—Haverhill ¹	N.A.	139.1	138.0	N.A.	9.1	7.3	N.A.	6.6	5.3
Lowell	109.1	112.1	111.8	7.2	6.9	5.2	6.6	6.2	4.6
New Bedford	82.1	79.1	80.0	6.9	5.8	4.4	8.4	7.3	5.5
Springfield—Chicopee—Holyoke	273.1	274.0	272.6	14.8	15.1	11.1	5.4	5.5	4.1
Worcester	196.0	193.6	196.0	10.3	9.1	6.7	5.3	4.7	3.4
MICHIGAN ²	4,173.9	4,182.2	4,182.0	270.6	242.5	229.3	6.5	5.8	5.5
Ann Arbor	135.0	131.9	135.5	7.2	6.3	5.8	5.3	4.8	4.3
Battle Creek	81.7	81.9	81.5	5.8	4.8	4.5	7.1	5.9	5.5
Bay City	53.4	53.9	54.2	3.5	3.1	2.8	6.6	5.8	5.1
Detroit	1,983.9	1,986.3	1,985.5	124.4	108.8	105.4	6.3	5.5	5.3
Flint	220.4	226.5	225.9	14.3	17.5	14.0	6.5	7.7	6.2

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
MICHIGAN—Continued									
Grand Rapids	286.9	288.0	286.1	14.3	12.9	11.8	5.0	4.5	4.1
Jackson	65.4	65.3	65.5	4.0	3.1	3.1	6.2	4.4	4.7
Kalamazoo—Portage	131.8	132.2	132.6	7.1	6.7	6.5	5.4	5.1	4.9
Lansing—East Lansing	227.5	222.2	229.3	13.3	12.3	10.6	5.9	5.5	4.6
Muskegon—Norton Shores—Muskegon Heights	76.3	76.7	75.7	5.9	5.4	4.6	7.7	7.1	6.1
Saginaw	101.7	103.1	103.6	5.6	4.8	4.7	5.5	4.6	4.5
MINNESOTA	1,954.8	2,010.9	2,021.9	75.4	60.4	59.2	3.9	3.0	2.9
Duluth—Superior ¹	113.9	N.A.	N.A.	8.6	N.A.	N.A.	7.6	N.A.	N.A.
Minneapolis—St. Paul	1,038.8	1,046.3	1,064.0	36.2	29.0	27.8	3.5	2.8	2.6
MISSISSIPPI	990.2	975.3	979.2	68.9	69.5	65.7	7.0	7.1	6.7
Jackson	138.6	139.2	140.4	8.3	7.7	7.5	6.0	5.5	5.3
MISSOURI	2,236.1	2,255.2	2,256.9	116.7	99.0	97.3	5.2	4.4	4.3
Kansas City ¹	667.3	677.1	677.0	35.8	25.5	25.2	5.4	3.8	3.7
St. Joseph	45.6	44.1	43.8	2.8	2.2	2.1	6.1	5.0	4.7
St. Louis ¹	1,073.7	1,069.0	1,076.1	65.6	52.0	51.1	6.1	4.9	4.8
Springfield	99.3	100.7	101.6	4.3	3.6	3.8	4.3	3.6	3.8
MONTANA	346.0	375.9	364.2	18.8	17.2	16.1	5.4	4.6	4.4
Billings	53.6	54.3	53.3	2.3	2.0	1.6	4.3	3.6	3.0
Great Falls	36.1	35.9	35.1	2.2	2.2	1.9	6.1	6.0	5.5
NEBRASKA	760.2	779.1	784.9	27.1	23.7	21.7	3.6	3.0	2.8
Lincoln	106.6	112.0	112.4	3.1	3.0	2.9	2.9	2.6	2.6
Omaha ¹	278.4	281.0	282.9	15.9	11.2	10.2	5.7	4.0	3.6
NEVADA	329.7	339.1	335.2	20.7	13.4	13.4	6.3	3.9	4.0
Las Vegas	178.1	180.4	179.2	13.2	8.1	7.7	7.4	4.5	4.3
Reno	94.1	101.9	100.5	4.1	2.2	2.6	4.3	2.2	2.6
NEW HAMPSHIRE	422.9	435.0	432.2	21.6	14.8	15.6	5.1	3.4	3.6
Manchester	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
NEW JERSEY²	3,387.0	3,526.4	3,538.1	302.3	251.7	219.6	8.9	7.1	6.2
Atlantic City	82.3	90.9	87.6	9.7	7.6	7.4	11.8	8.4	8.4
Jersey City	258.7	258.8	259.3	31.9	27.6	23.9	12.3	10.7	9.2
Long Branch—Asbury Park	218.4	228.3	227.7	18.1	16.4	14.9	8.3	7.2	6.5
Newark	945.2	982.5	999.0	83.0	68.1	57.7	8.8	6.9	5.8
New Brunswick—Perth Amboy—Sayreville	301.7	321.5	324.7	23.4	21.1	18.2	7.7	6.6	5.6
Paterson—Clifton—Passaic	213.5	219.5	220.6	22.3	18.4	16.3	10.4	8.4	7.4
Trenton	158.7	164.2	165.2	10.6	9.7	7.9	6.7	5.9	4.8
Vineland—Millville—Bridgeton	58.1	64.0	63.3	7.0	5.8	5.6	12.0	9.1	8.8
NEW MEXICO	518.3	536.8	540.3	35.2	31.3	31.7	6.8	5.8	5.9
Albuquerque	189.5	196.1	196.7	13.4	11.2	11.3	7.1	5.7	5.8
NEW YORK²	7,744.2	7,849.9	7,937.7	642.7	603.3	623.6	8.3	7.7	7.9
Albany—Schenectady—Troy	356.0	361.8	367.1	21.2	22.2	21.5	6.0	6.1	5.9
Birghampton ¹	133.1	136.6	138.3	9.0	8.7	8.2	6.8	6.4	5.9
Buffalo	567.7	567.9	579.0	44.1	47.0	45.0	7.8	8.3	7.8
Elmira	40.1	40.3	40.9	3.2	2.8	2.7	8.0	6.9	6.5
Nassau—Suffolk	1,232.4	1,256.3	1,274.7	96.6	90.5	84.8	7.8	7.2	6.7
New York	3,560.0	3,601.2	3,623.9	336.3	305.6	336.2	9.4	8.5	9.3
New York City ²	2,996.0	3,027.0	3,044.0	301.0	270.0	304.0	10.0	8.9	10.0
Poughkeepsie	98.5	101.1	103.9	5.1	5.2	5.1	5.2	5.1	4.9
Rochester	455.4	453.7	464.2	27.7	26.5	25.0	6.1	5.9	5.4
Syracuse	292.7	296.2	303.7	19.9	19.8	18.6	6.9	6.7	6.1
Utica—Rome	137.3	137.7	139.6	10.1	9.4	9.5	7.3	6.8	6.8
NORTH CAROLINA	2,632.9	2,697.7	2,681.9	129.8	91.9	91.6	4.9	3.4	3.4
Asheville	80.4	83.0	83.2	3.4	2.8	3.0	4.2	3.4	3.6
Charlotte—Gastonia	321.5	324.5	326.5	12.9	9.0	8.9	4.0	2.8	2.7
Greensboro—Winston-Salem—High Point	404.6	408.2	408.3	18.1	12.9	12.0	4.5	3.2	2.9
Raleigh—Durham	262.9	270.4	271.5	9.4	7.0	7.0	3.6	2.6	2.6
NORTH DAKOTA	298.0	305.0	295.3	11.2	10.0	9.6	3.9	3.3	3.2
Fargo—Moorehead ¹	70.4	71.1	71.9	2.3	2.1	2.2	3.2	2.9	3.0

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
OHIO ²	4,883.3	5,031.1	5,086.2	269.4	272.8	240.5	5.5	5.4	4.7
Akron	296.0	301.6	306.1	16.1	17.3	14.7	5.4	5.7	4.8
Canton	175.6	179.2	181.9	10.0	9.1	8.8	5.7	5.1	4.8
Cincinnati ¹	629.5	651.6	656.5	29.9	32.8	29.9	4.7	5.0	4.6
Cleveland	914.7	937.2	946.5	47.7	45.1	39.4	5.2	4.8	4.2
Columbus	519.4	530.4	539.7	25.4	26.6	23.0	4.9	5.0	4.3
Dayton	374.2	385.2	391.0	17.2	17.6	16.1	4.6	4.6	4.1
Toledo ¹	361.9	371.2	378.7	21.7	23.1	20.4	6.0	6.2	5.4
Youngstown—Warren	240.0	240.8	242.5	18.4	15.6	14.1	7.7	6.5	5.8
OKLAHOMA	1,244.2	1,250.9	1,244.4	56.1	35.6	34.4	4.5	2.8	2.8
Oklahoma City	371.0	390.0	387.8	15.1	10.2	9.6	4.1	2.6	2.5
Tulsa	296.9	295.1	292.2	13.6	8.2	7.8	4.6	2.8	2.7
OREGON	1,145.5	1,197.4	1,202.5	67.6	64.7	66.3	5.9	5.4	5.5
Eugene—Springfield	120.0	121.5	123.5	8.4	8.3	8.6	7.0	6.9	6.9
Portland ¹	545.1	576.1	580.2	31.1	27.8	28.9	5.7	4.8	5.0
Salem	109.6	114.4	112.8	5.2	5.4	5.3	4.8	4.7	4.7
PENNSYLVANIA ²	5,200.1	5,273.0	5,342.1	367.1	373.3	370.6	7.1	7.1	6.9
Allentown—Bethlehem—Easton ¹	299.9	301.3	304.5	19.5	17.1	16.9	6.5	5.7	5.5
Altoona	56.4	57.9	58.1	3.7	4.6	4.7	6.5	7.9	8.2
Erie	121.0	124.2	126.6	8.0	8.6	9.0	6.6	6.9	7.1
Harrisburg	208.2	213.2	214.9	10.7	10.9	10.7	5.1	5.1	5.0
Johnstown	106.2	106.0	107.2	10.7	9.5	9.3	10.0	9.0	8.7
Lancaster	166.6	169.7	172.1	6.9	7.7	7.5	4.2	4.5	4.3
Northeast Pennsylvania	270.1	268.2	274.9	23.0	22.3	24.9	8.5	8.3	9.0
Philadelphia ¹	2,077.2	2,102.2	2,130.8	174.7	169.1	160.0	8.4	8.0	7.5
Pittsburgh	975.9	990.0	999.5	57.9	60.8	59.8	5.9	6.1	6.0
Reading	146.3	150.2	152.0	8.0	8.2	7.2	5.4	5.5	4.8
Williamsport	50.6	52.7	53.5	4.0	4.0	4.2	7.9	7.5	7.9
York	159.3	164.4	166.4	8.4	8.1	7.4	5.3	4.9	4.5
RHODE ISLAND	444.3	435.3	433.7	31.8	21.1	20.9	7.1	4.9	4.8
Providence—Warwick—Pawtucket ¹	447.5	438.5	438.9	31.8	21.9	20.9	7.1	5.0	4.8
SOUTH CAROLINA	1,296.6	1,315.4	1,319.5	87.3	74.1	79.6	6.7	5.5	6.0
Charleston—North Charleston	146.9	147.3	148.1	11.3	9.8	9.9	7.7	6.6	6.7
Columbia	170.3	172.8	173.9	8.8	7.4	8.2	5.1	4.3	4.7
Greenville—Spartanburg	255.5	257.4	257.0	15.6	11.6	12.2	6.1	4.5	4.7
SOUTH DAKOTA	317.7	332.3	326.5	6.8	8.5	8.0	2.1	2.6	2.4
Sioux Falls	56.1	58.3	57.2	1.1	1.2	.9	1.9	2.0	1.5
TENNESSEE	1,930.8	1,958.7	1,980.5	103.6	108.6	115.1	5.4	5.5	5.8
Chattanooga ¹	182.8	185.6	185.8	10.0	10.6	10.5	5.5	5.7	5.7
Knoxville	199.4	198.3	203.9	8.5	8.9	12.4	4.3	4.5	6.1
Memphis ¹	376.1	377.3	380.0	22.2	22.8	23.4	5.9	6.0	6.1
Nashville—Davidson	383.8	395.4	398.2	15.2	16.4	16.3	4.0	4.1	4.1
TEXAS ²	5,876.5	5,935.6	6,079.5	304.1	284.7	260.4	5.2	4.8	4.3
Amarillo	86.0	86.3	88.7	3.3	3.2	2.9	3.9	3.7	3.3
Austin	229.4	233.8	241.9	10.3	8.2	7.5	4.5	3.5	3.1
Beaumont—Port Arthur—Orange	168.0	163.4	168.4	11.3	10.6	10.0	6.7	6.5	6.0
Corpus Christi	126.1	127.7	130.3	8.4	7.5	6.5	6.7	5.9	5.0
Dallas—Fort Worth	1,348.3	1,372.1	1,407.0	61.5	56.1	49.5	4.6	4.1	3.5
El Paso	164.2	161.9	164.8	18.1	15.0	13.6	11.0	9.2	8.2
Galveston—Texas City	87.9	88.9	90.6	6.1	5.1	4.8	6.9	5.7	5.3
Houston	1,303.5	1,338.9	1,374.6	56.2	53.6	48.6	4.3	4.0	3.5
Lubbock	101.8	101.2	103.9	3.6	3.5	3.1	3.6	3.5	3.0
San Antonio	395.3	401.4	408.7	27.2	26.2	24.2	6.9	6.5	5.9
Waco	77.2	77.1	79.1	3.7	3.4	3.3	4.8	4.5	4.2
Wichita Falls	59.3	59.7	60.7	2.2	2.3	2.1	3.6	3.9	3.4
UTAH	535.5	552.2	549.2	24.9	16.8	17.8	4.6	3.0	3.2
Salt Lake City—Ogden	356.1	363.7	363.3	17.0	11.5	12.1	4.8	3.2	3.3
VERMONT	231.5	242.6	241.0	13.9	9.3	9.6	6.0	3.8	4.0

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		
	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P	OCT. 1977	SEPT. 1978	OCT. 1978P
VIRGINIA	2,386.9	2,501.8	2,493.5	99.5	124.2	116.0	4.2	5.0	4.7
Lynchburg	69.4	72.8	72.3	2.4	3.1	2.8	3.5	4.3	3.9
Newport News—Hampton	153.2	160.9	161.4	7.7	9.0	9.6	5.0	5.6	6.0
Norfolk—Virginia Beach—Portsmouth ¹	307.7	323.5	322.5	15.4	17.9	18.6	5.0	5.5	5.8
Richmond	314.5	328.9	328.0	10.1	10.7	10.9	3.2	3.3	3.3
Roanoke	108.3	113.6	112.4	4.1	4.7	4.7	3.8	4.1	4.2
WASHINGTON	1,674.3	1,772.5	1,757.4	124.1	94.2	91.0	7.4	5.3	5.2
Seattle—Everett	711.9	770.9	769.5	51.6	36.9	34.9	7.3	4.8	4.5
Spokane	133.2	138.8	138.0	10.3	6.9	6.9	7.8	5.0	5.0
Tacoma	156.0	165.6	161.6	13.4	10.9	9.8	8.6	6.6	6.1
WEST VIRGINIA	697.4	729.4	734.9	39.1	44.5	31.8	5.6	6.1	4.3
Charleston	113.2	116.5	118.7	4.1	3.5	3.2	3.7	3.0	2.7
Huntington—Ashland ¹	113.9	114.7	115.4	5.9	5.8	4.6	5.2	5.0	4.0
Parkersburg—Marietta ¹	63.5	65.4	66.4	3.0	2.7	2.5	4.7	4.1	3.7
Wheeling ¹	78.5	81.3	81.2	4.6	3.6	3.4	5.8	6.9	4.1
WISCONSIN	2,240.6	2,334.3	2,343.1	90.5	100.4	102.6	4.0	4.3	4.4
Appleton—Oshkosh	139.2	142.3	144.3	5.5	5.8	6.4	3.9	4.1	4.4
Green Bay	86.7	86.0	87.1	3.6	4.5	4.5	4.2	5.2	5.1
Kenosha	61.9	60.4	62.1	3.3	3.1	3.2	5.4	5.1	5.1
La Crosse	44.0	45.5	46.1	1.9	2.0	2.1	4.4	4.4	4.5
Madison	177.3	174.1	175.7	5.2	6.5	6.2	2.9	3.7	3.6
Milwaukee	720.2	706.9	715.4	27.0	27.5	26.7	3.8	3.9	3.7
Racine	89.3	89.1	89.2	4.2	3.8	3.9	4.7	4.3	4.4
WYOMING	200.1	219.9	212.5	6.3	6.2	6.2	3.2	2.8	2.9

¹ Includes interstate portion of area located in adjacent State.

² 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 1977 have been benchmarked to 1977 Current Population Survey annual averages. Except in the 10 largest States designated by footnote 2, estimates for 1978

are provisional 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," or "Unemployment Rates for States and Local Governments, Second Quarter 1978." 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

These explanatory notes provide information on the concepts, methodology, and scope of Household Data (A tables), Establishment Data (B, C, and D tables), and State and Area Unemployment Data (E table) published in *Employment and Earnings*.

Introduction

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

Data based on household interviews are obtained from a sample survey of the population 16 years of age and over. The survey is conducted each month by the Bureau of the Census for the Bureau of Labor Statistics and provides comprehensive data on the labor force, the employed and the unemployed, including such characteristics as age, sex, race, family relationship, marital status, occupation, and industry attachment. The survey also provides data on the characteristics and past work experience of those not in the labor force. The information is collected by trained interviewers from a sample of about 56,000 households, representing 614 areas in 1,113 counties and independent cities, with coverage in 50 States and the District of Columbia. The data collected are based on the activity or status reported for the calendar week including the 12th of the month.

Data based on establishment records are compiled each month from mail questionnaires by the Bureau of Labor Statistics, in cooperation with State agencies. The establishment survey is designed to provide industry information on nonagricultural wage and salary employment, average weekly hours, average hourly 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 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 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 industries 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 records, 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, 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 (agriculture, domestic service, self-employment, unpaid family work, and religious organizations). 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 the 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 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 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 obtained from the Department of Defense.

Each month, 56,000 occupied units are eligible for interview. About 2,500 of these households are visited but interviews are not obtained because the occupants are not found at home after repeated calls or are unavailable for other reasons. This represents a noninterview rate for the survey of about 4 percent. In addition to the 56,000 occupied units, there are 9,500 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.

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 own 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 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 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, 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 total noninstitutional population that is employed. This measure can also be computed as a ratio of employment and the civilian noninstitutional population.

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 data derived from the CPS household interviews 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 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 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," 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 time 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 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 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, which until recently has been identified as "Negro and other races" and prior to 1969 as "nonwhite," 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, Asian and Pacific Islanders, and all other "non-white" groups. 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, 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 are 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 nonpoor 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. At the same time, several definitions were sharpened to clear up ambiguities. The principal definitional changes were: (1) Counting as unemployed only persons who were currently available for work and who had engaged in some specific jobseeking activity within the past 4 weeks, an exception to the latter condition is made for persons waiting to start a new job in 30 days or waiting to be recalled from layoff; in the past, the current availability test was not applied and the time period for jobseeking was ambiguous; (2) counting as employed persons who were absent from their jobs in the survey week because of strikes, bad weather, etc. and were also looking for other jobs; previously, these persons had been classified as unemployed; (3) sharpening the questions on hours of work, duration of unemployment, and self-employment in order to increase their reliability.

These changes did not affect the unemployment rate by more than one-fifth of a percentage point in either direction, although the distribution of unemployment by sex was affected. The number of employed was reduced about 1 million because of the exclusion of 14- and 15-year-olds. For persons 16 years and over, the only employment series appreciably affected were those relating to hours of work and class of worker. A detailed discussion of the changes and 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 indication of the differences appear in "Revisions in the Current Population Survey in January 1978" in the February 1978 issue of *Employment and Earnings*.

Beginning in October 1978, the race of the individual was determined by the household respondent for the incoming rotation group households, rather than 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 has race determined by the household respondent and seven-eighths of the sample households has race determined by interviewer observation. The corresponding numbers are 2/8 and 6/8 in November 1978, 3/8 and 5/8 in December 1978, 4/8 and 4/8 from January 1978 through September 1978, 5/8 and 3/8 in October 1979, and so on, until the entire sample has race determined by the household respondent in January 1980. Although the impact of this change is presently unknown, it is possible that it will cause a break in the time series given for some racial statistics.

Changes in 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 non-farm 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 occupation 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. A recent change was introduced in January 1978, when a supplemental sample of 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 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. This sample is composed of approximately 450 sample household units which represent 237,000 occupied mobile homes and 600,000 new construction housing units. These new construction units are composed of those units where building permits were issued prior to January 1970 and construction was not completed by the time of the 1970 Census (i.e., April 1970). The extent of other sources of housing undercoverage is unknown but believed to be small. The

Time period	Number of sample areas ¹	Households eligible		Households visited not eligible ²
		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 ³	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 present	614	53,500	2,500	9,500

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

² These are households which were visited, but were found to

be vacant or otherwise not eligible for interview.

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

inclusion of this coverage improvement sample in the CPS does not have a significant effect on the estimates.

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*, U.S. Department of Commerce, Bureau of the Census, Technical Paper No. 40, 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 no 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 expansion, 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 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 3 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 sample, a portion of the 614 sample areas are 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 contribution to 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 applied within each State that contains nonsample areas and takes into account the differences that existed at the time of the 1970 census in the distribution by race and residence of the population in sample areas and the known race-residence distribution in the portions of the State represented by these areas.

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. U.S. Department of Commerce, Bureau of the Census.

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. Bailer, *Journal of the American Statistical Association*, Volume 70, No. 349, March 1975.

Undercoverage in the CPS results from missed housing units and missed persons within sample households. 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 used 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 Bailer, Proceedings of the Annual Meetings of the American Statistical Association, Social Statistics Section, Chicago, Illinois, August 1977; in the paper "The Current Population Survey: An Overview," by Marvin Thompson and Gary Shapiro, *Annals of Economic and Social Measurement*, Vol. 2, No. 2, April 1973; and in *The Current Population Survey, Design and Methodology*, Technical Paper No. 40, U.S. Department of Commerce, Bureau of the Census. 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. Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and enumerators. 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 chances are about 68 out of 100 that an estimate from the survey differs from a complete census figure by less than the standard error. The chances are about 95 out of 100 that the differences would be less than twice the standard error.

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 procedure in effect prior to the expansion for annual average 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 error 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 over other time periods are subject to higher standard errors. For years prior to 1967, the standard errors must be adjusted due to differences in sample size. For years before 1956, the standard errors should be multiplied by 1.50 and for the 1956-1966 period they should be multiplied by 1.22.

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. Consequently, the chances are about 68 out of 100 that the sample estimate differs by less than 150,000 from the figure which would have been obtained from a complete count of the number of persons working the given number of hours. 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 shows 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 percent). The appropriate factor from table H for the numerator of the percentage, agriculture employment, is 1.26. The generalized standard error on the estimated 3.6 percent is then approximately $0.09 \times 1.26 = 0.1$ percent.

Table A. Standard errors of major employment status categories

Employment status, sex, age, and race	Standard error of—	
	Monthly level	Month-to- month change (consecutive months only)
<i>(In thousands)</i>		
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

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	OCCUPATION—Continued		
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	INDUSTRY		
Part-time workers . . . . .	.32	.40	Nonagricultural private wage and salary workers . . . . .	.12	.13
Unemployed 15 weeks and over . . . . .	.06	.07	Construction . . . . .	.58	.66
OCCUPATION			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 ¹								
	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	—	—	—	—	—	—	—

¹ 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 ¹							
	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 ²	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	—	—	—	—	—	—	—

¹ See footnote 1, table C.

² 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)	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

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 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 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 assures maximum comparability and accuracy of reporting, since the respondent can see the figures that have been reported for previous months.

Form BLS 790 provides for entry of data on the number of full- and part-time workers on the payrolls of nonagricultural establishments and, for most industries, 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.

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. This information is collected each year on a supplement to the monthly 790 or 1219 report. 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.

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 laid off, on leave without pay, or on strike for the entire period or who are hired but have not been paid 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 the remaining private nonagricultural components. 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 plants own use (e.g., power plant), and record-keeping 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 pre-cutting 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 nonsupervisory 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 does 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 are derived by multiplying average weekly hours by average hourly earnings. 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 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.

Hours and earnings for total private nonagricultural industries. The series covers all nonagricultural industry divisions except government. The principal source of payroll data is Form BLS 790. Secondary source material such as the Bureau's *Employment and Wages, County Business Patterns* of the Bureau of the Census, and additional supporting information such as *The Hospital Guide, Part II*, of the American Hospital Association and special studies by the National Council of Churches supplement data for certain industry groups within the services division.

For a technical description of this series, see the article, "Hours and Earnings for Workers in Private Nonagricultural Industries," published in the May 1967 issue of *Employment and Earnings and Monthly Report on the Labor Force*. Reprints are available upon request.

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 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 reflects 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 M. Schwab, "Two Measures of Purchasing Power Contrasted," in the *Monthly Labor Review* for April 1971. 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. "Real" earnings for months prior to January 1978 are deflated by the unrevised CPI-W, whereas those for January 1978 forward are deflated by the revised CPI-W. 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. 537-540). Both methods eliminate only the earnings due to overtime 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 monthly average for the 1967 period. The hour 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 aggregation, hour and payroll aggregates are the sum of the component aggregates.

Indexes of diffusion of changes in number of employees on non-agricultural 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 date relate to all employees, whether full- or part-time, permanent or temporary, including executive, office, sales, other salaried personnel, and production workers. Transfers to another establishment of the company are included, beginning with January 1959.

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 are 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, transfers 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 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 industry 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 I. Summary of methods for

Table I. 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)
Monthly data		
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. ¹	Sum of all-employee estimates for component cells.
Production or nonsupervisory workers, women employees	All-employee estimate for current month multiplied by (1) ratio of production or nonsupervisory workers to all employees in sample establishments for current month, (2) estimated ratio of women to all employees. ²	Sum of production- or nonsupervisory-worker estimates, or estimates of women employees, for component cells.
Gross average weekly hours	Production- or nonsupervisory-worker hours divided by number of production or nonsupervisory workers. ²	Average, weighted by production- or nonsupervisory-worker employment, of the average weekly hours for component cells.
Average weekly overtime hours	Production-worker overtime hours divided by number of production workers. ²	Average, weighted by production-worker employment, of the average weekly overtime hours for component cells.
Gross average hourly earnings	Total production- or nonsupervisory-worker payroll divided by total production- or nonsupervisory-worker hours. ²	Average, weighted by aggregate hours, of the average hourly earnings for component cells.
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.
Annual average data		
All employees, women employees, and production or nonsupervisory workers	Sum of monthly estimates divided by 12.	Sum of monthly estimates divided by 12.
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 I. 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 aggregate (of each labor turnover action) divided by annual sum of employment.	Annual aggregate (of each labor turnover action) divided by annual sum of employment.

¹ The estimates result from multiplying the product shown by business birth adjustment factors to compensate for the under representation of newly formed enterprises in the sample.

² The sample production-worker ratio, women-worker ratio, average weekly hours, average overtime hours, and average hourly earnings are modified by a wedging technique designed to 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.

computing industry statistics on employment, hours, earnings, and labor turnover.

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, may be a whole industry or a size stratum, a region stratum, or a size stratum of a region within an industry.

Benchmark adjustments

Employment estimates are compared periodically with 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 1977 levels. Normally, benchmark adjustments are made annually.

The primary sources of benchmark information are employment data, by industry, compiled quarterly by State agencies from reports of establishments covered under State unemployment insurance laws. These tabulations cover nearly 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 at levels 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 1977 benchmark adjustment is shown in table J.

Table J. Comparison of nonagricultural employment benchmarks based on 1972 SIC and estimates based on 1967 SIC for 1977

Industry division	Benchmark (1972 SIC) March 1977	Estimate (1967 SIC) March 1977	Percent difference
Total	80,493	80,547	-0.1
Mining	805	827	-2.7
Construction	3,430	3,451	-.6
Manufacturing	19,253	19,183	.4
Transportation and public utilities	4,603	4,522	1.8
Wholesale and retail trade	17,891	17,799	.5
Finance, insurance, and real estate	4,377	4,422	-1.0
Services	14,935	15,028	-.6
Government	15,199	15,315	-.8

Data for all months since the last benchmark to which the series has been adjusted are subject to revision. To provide users of the data with a convenient reference source for the revised data, the BLS publishes, as soon as possible after each benchmark revision, a summary volume of employment, hours, earnings, and labor turnover statistics, entitled *Employment and Earnings, United States*.

THE SAMPLE

Design

The sampling plan used in the current employment statistics program is known as "sampling proportionate to average size of

establishment." This design is an optimum allocation design among strata since the sampling variance is proportional to the average size of establishments. Under this type of design, large establishments fall into the sample with certainty. The size of the sample for the various industries is determined empirically on the basis of experience and of cost considerations. In a manufacturing industry in which a high proportion of total employment is concentrated in relatively few establishments, a large percentage 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 fluctuations 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 reports are mailed by respondents, 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 K 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 L shows the approximate coverage, in terms of employment, of the labor turnover sample.

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 M presents the average percent revisions (based on the 1967 SIC) of the

Table K. Approximate size and coverage of BLS employment and payrolls sample, March 1977¹

Industry division	Number of establishments in sample	Employees	
		Number reported	Percent of total
Total	164,300	32,152,000	40
Mining	2,100	313,000	39
Construction	16,300	686,000	20
Manufacturing	47,100	11,166,000	58
Transportation and public utilities:			
Railroad transportation (ICC)	77	508,000	95
Other transportation and public utilities ..	7,400	2,208,000	53
Wholesale and retail trade	40,600	3,242,000	18
Finance, insurance, and real estate	10,600	1,583,000	36
Services	24,300	2,896,000	19
Government:			
Federal (Civil Service Commission) ²	3,700	2,714,000	100
State and local	12,100	6,836,000	55

¹ 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.

² National estimates of Federal employment are provided to the BLS by the Civil Service Commission. State and area estimates are based on a sample of 3,700 reports covering about 55 percent of employment in Federal establishments.

Table L. Approximate size and coverage of BLS labor turnover sample, March 1977

Industry	Employees	
	Number reported	Percent of total
Total	10,070,140	49
Manufacturing	9,233,370	48
Mining	136,810	41
Telephone communication....	699,960	72

six 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.

The hours and earnings estimates for 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 (based on the 1967 SIC) for major industries are presented in table M and for individual industries with the specified number of employees in table N. 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 experience of the last 6 years and the 1967 SIC) of differences between final estimates and benchmarks are presented in table N.

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 O 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

Table M. Average benchmark percent revision in employment estimates and relative errors for average weekly hours and average hourly earnings by industry division¹

[In percent]

Industry division	Average benchmark revision in estimates of employment ²	Relative errors ³ (in percent)	
		Average weekly hours	Average hourly earnings
Total nonagricultural employment	0.2		
Total private	.1	0.1	0.2
Mining	1.2	.5	.5
Contract construction	1.2	.2	.3
Manufacturing	.3	.1	.1
Durable	.4	.1	.1
Nondurable goods	.3	.1	.1
Transportation and public utilities	.4	.7	.4
Trade	.3	.1	.2
Wholesale	1.0	.2	.3
Retail	.2	.2	.2
Finance, insurance, and real estate	.4	.2	.4
Services	.6	.4	.8
Government ⁴	.6	—	—

¹ Based on 1967 SIC.

² The average percent revision in employment for the 1967-71 and 1974 benchmarks.

³ Relative errors relate to March 1971 data.

⁴ 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.

normally not greater than .1 of an hour for weekly hours and 1 cent for hourly earnings.

Table N. Root-mean-square errors of differences between benchmarks and estimates of employment and average relative errors for average weekly hours and average hourly earnings¹

Size of employment estimate	Root-mean-square error of employment estimates ²	Relative errors ³ (in percent)	
		Average weekly hours	Average hourly earnings
50,000	1,900	0.9	1.5
100,000	2,700	.7	1.1
200,000	4,100	.5	.9
500,000	9,600	.4	.8
1,000,000	13,000	.3	.5
2,000,000	16,800	.3	.5

¹ Based on 1967 SIC.

² Assuming 12-month intervals between benchmark revisions.

³ Relative errors relate to March 1971 data.

Table O. Errors of preliminary employment estimates¹

Size of employment estimate	Root-mean-square error of	
	Monthly level	Month-to-month change
50,000	600	600
100,000	800	700
200,000	1,400	1,200
500,000	3,300	3,200
1,000,000	4,200	4,200
2,000,000	6,500	6,300
10,000,000	27,000	23,000
Total nonagricultural employment	94,000	81,000
Mining	6,000	5,000
Contract construction	17,000	15,000
Manufacturing	35,000	33,000
Transportation and public utilities	14,000	12,000
Wholesale and retail trade	33,000	31,000
Finance, insurance, and real estate	6,000	6,000
Services	27,000	22,000
Government	45,000	39,000

¹ Based on 1967 SIC.

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.

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.

Definition

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 payment 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 households 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 hour data are from the Bureau of Economic Analysis and the Bureau of Labor Statistics.

State and area unemployment data

(E table)

FEDERAL-STATE COOPERATIVE PROGRAM

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

Monthly employment and unemployment estimates in the remaining 40 States and 205 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 residence 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 UI laws; (2) those previously employed in industries not covered by these laws; and (3) those who were either entering the labor force of 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 six 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 labor force included in the LMA's exhaust 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

Many economic statistics reflect a regularly recurring seasonal movement which can be estimated on the basis of past experience. By eliminating that part of the change which can be ascribed to usual seasonal variation, it is possible to observe the cyclical and other nonseasonal movements in the series. However, in evaluating deviations from the seasonal pattern—that is, 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 in addition, are 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 an adaptation 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).

Data for the household series are seasonally adjusted utilizing the Census Bureau's X-11 Method. Each January, seasonal adjustment factors for unemployment and other labor force series are revised to take into account data from the previous year. In January 1976, in addition to the routine annual revisions, the Bureau introduced a modification in the procedure for seasonally

adjusting teenage unemployment and those few other unemployment series (e.g., unemployed new entrants) of which teenagers are the exclusive or major part. In January 1978, modifications were introduced in the procedure for seasonally adjusting teenage nonagricultural employment, a number of other teenage employment series, and adult male unemployment.

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 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 series for major components of the labor force based on data through December 1977, new seasonal factors for the 12 major components of the civilian labor force, and a description of the seasonal adjustment methodology are published in the February 1978 *Employment and Earnings*. 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 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 revised Consumer Price Index for Urban Wage Earners and Clerical Workers (revised 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 May 1978. Seasonal factors to be used for current adjustment appear in the October 1978 issue of *Employment and Earnings*.

Additional information concerning the preparation of the labor force, employment, hours, earnings, and labor turnover series—concepts and scope, survey methods, and limitations—is contained in the *Handbook of Methods, BLS Bulletin 1910*.

U.S. Department of Labor Bureau of Labor Statistics

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

V ALABAMA	Department of Industrial Relations, Industrial Relations Building, Montgomery 36130
X ALASKA	Employment Security Division, Department of Labor, P.O. Box 37000 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 (LAUS and CES)
VIII COLORADO	Management Services, Department of Labor and Employment, 1210 Sherman Street, Denver 80202
I CONNECTICUT	Employment Security Division, Labor Department, 200 Foley Brook Boulevard, Wethersfield 06109
III DELAWARE	Department of Labor, University Plaza Office Complex, Bldg. D, Chapman Rd., Route 273, Newark 19713
II DIST. OF COL.	Office of Administration and Management Service, D.C. Department of Manpower, Suite 1000, 605 G Street, N.W., Washington 20001
IV FLORIDA	Department of Commerce, 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, Chicago 60605
V INDIANA	Employment Security Division, 10 North Senate Avenue, Indianapolis 46204
VII IOWA	Department of Job Services, 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, Department of Labor, 7310 Woodward Avenue, Detroit 48202
V MINNESOTA	Department of Economic Security, 390 North Robert Street, 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, State House Station, 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, 202 John Fitch Plaza, Trenton 08625
VI NEW MEXICO	Employment Service 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
VII 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, 301 Will Rogers Memorial Office Building, Oklahoma City 73105
X OREGON	Employment Division, Department of Human Resources, Room 402, 875 Union Street, N.E., Salem 97310
III PENNSYLVANIA	Department of Labor and Industry, Seventh and Forster Streets, Harrisburg 17121
I RHODE ISLAND	Division of Statistics and Census, Department of Labor, 220 Elmwood Avenue, Providence 02907 (CES) Department of Employment Security, 24 Mason Street, Providence 02903 (LAUS and LTS)
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, State Office Building, 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