

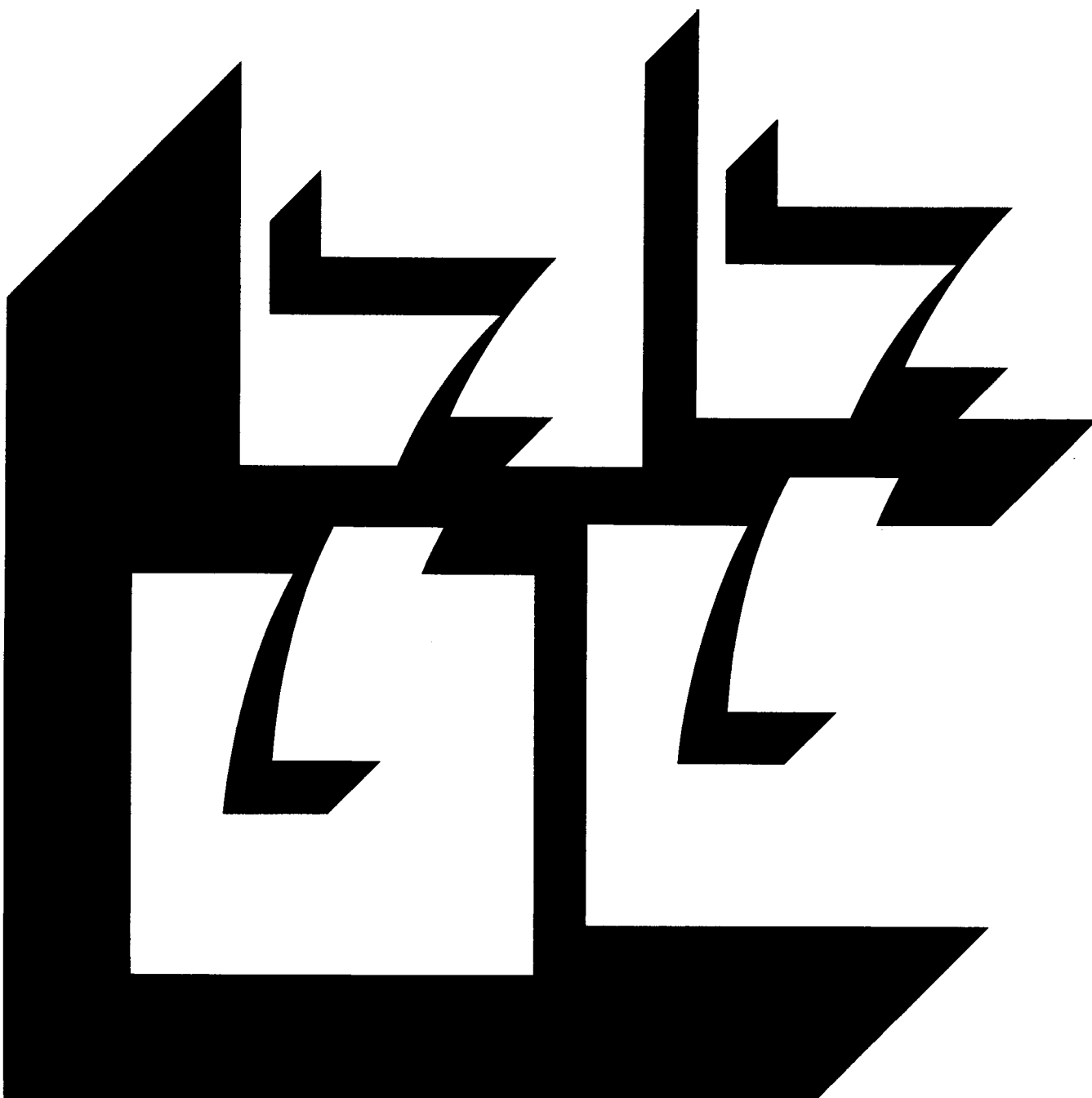
Employment and Earnings

November 1977



U.S. Department of Labor
Bureau of Labor Statistics

Vol. 24 No. 11



MONTHLY HOUSEHOLD DATA

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¹ Monthly data in February, May, August, and November issues; annual averages in March issue.

Employment and Unemployment Developments, October 1977

The overall employment situation was little changed in October. The unemployment rate was 7.0 percent, thus remaining within the 6.9 to 7.1 percent range that has prevailed since April.

Total employment—as measured by the monthly survey of households—edged up by 135,000 to 91.2 million in October. Over the past 12 months, employment has grown by 3.5 million. Nonfarm payroll employment—as measured by the monthly survey of establishments—also rose slightly (by 120,000) over the month to 82.9 million. Payroll jobs have increased by 3.1 million since October 1976.

Unemployment

There were 6.9 million unemployed persons in October, after seasonal adjustment, about the same number as in the previous month. The unemployment rate was 7.0 percent, the level around which it fluctuated narrowly during the prior 6 months. Strong downward movements early in the year, however, account for an 11-month decline of a full percentage point.

While the overall number of persons unemployed was little changed in October, there was an increase among men 25 years old and over; their 4.4-percent jobless rate marked an 8-month high. Partly offsetting this movement were marginal declines in the rates for most other age-sex groups. The jobless rate for blacks, which tends to fluctuate much more from month to month than the rate for whites, edged up from 13.1 to 13.9 percent in October. Unemployment of white workers, on the other hand, has held at 6.1 percent for 4 straight months. Over the past year, the black rate has shown no improvement, while joblessness for whites has declined by more than a percentage point.

Over the October 1976-77 period, total unemployment has fallen by more than 600,000, with four-fifths of the decline occurring among job losers. The average (mean) duration of unemployment edged down in October to 13.8 weeks and was 1.5 weeks lower than a year earlier.

Total employment and the labor force

Total employment continued its post-recession expansion with a small rise in October. There were over-the-month increases among teenagers of 175,000 and adult men

of 160,000. These outweighed a decline of 200,000 among adult women, which followed an advance of 500,000 in the previous month. Total employment has risen by 3.5 million over the past 12 months, and, in contrast with the September-October developments, almost half of the total increase was among adult women. Their ranks swelled by 1.7 million, while employment of adult men was up 1.4 million and teenage employment grew by nearly 500,000.

The employment-population ratio—the proportion of the total noninstitutional population that is employed—held steady over the month at 57.3 percent, a tenth of a point below the record high last reached in March 1974.

An October increase brought the civilian labor force to 98.1 million, 2.9 million more than a year earlier. The labor force participation rate—the proportion of the civilian noninstitutional population either working or seeking work—was 62.4 percent in October, a tenth of a point above the September rate and a tenth below the alltime high recorded in June.

Industry payroll employment

Total nonagricultural payroll employment rose a modest 120,000 in October to a level of 82.9 million, seasonally adjusted. There were employment gains in 63 percent of the 172 industries that make up the BLS diffusion index of private nonagricultural payroll employment. Virtually all of the net job growth occurred in contract construction, services, and finance, insurance, and real estate. Since October of last year, nonfarm payrolls have expanded by 3.1 million jobs.

Other than the gains in services (45,000) and finance, insurance, and real estate (25,000), there was little employment activity elsewhere in the service-producing industries. Employment in this sector has grown by about 2.0 million over the year.

In the goods-producing sector, the employment increase in contract construction offset losses in manufacturing. Construction employment grew by almost 45,000, re-establishing, at least temporarily, the growth pattern that started at the beginning of the year. Manufacturing employment edged down in October, resulting in part from sharply increased strike activity. (Workers who are on strike for an entire reference period are not counted as

employed in the payroll survey.) Declines were concentrated in durable goods, particularly in the transportation equipment industry, where strike activity was heaviest (most aircraft and parts), and in primary metals, where there have been recent layoffs among steel workers. Mining employment was unchanged over the month.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged up by a tenth of an hour in October, the first increase in 4 months. The workweek averaged 36.1 hours in October, seasonally adjusted. The manufacturing workweek also rose by 0.1 hour to 40.3 hours, the same level as in July and August. Factory overtime rose by two-tenths of an hour to 3.5 hours.

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls rose 0.2 percent to an alltime high of 116.2 (1967=100) in October. The total index thus showed strength for the second month in a row, after declining in June, July, and August. Both the goods- and service-producing sectors' indices posted gains over the month. The overall index has risen 3.6 percent since October 1976.

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls rose 1.3 percent, seasonally adjusted, in October. This gain, combined with the slight increase in average weekly hours, resulted in a 1.6-percent increase in average weekly earnings. Hourly and weekly earnings stood 8.7 percent above their levels of a year earlier.

Before adjustment for seasonality, average hourly earnings rose a nickel from September to \$5.41, which, in turn, was 43 cents above the October 1976 level. Average weekly earnings rose \$1.27 over the month to \$195.30 and were up \$15.02 over the year.

The hourly earnings index

The Hourly Earnings Index—earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries—was 203.1 (1967=100) in October, 1.0 percent higher than in September. The index was 7.8 percent above October a year ago. During the 12-month period ended in September, the Hourly Earnings Index in dollars of constant purchasing power rose 0.6 percent.

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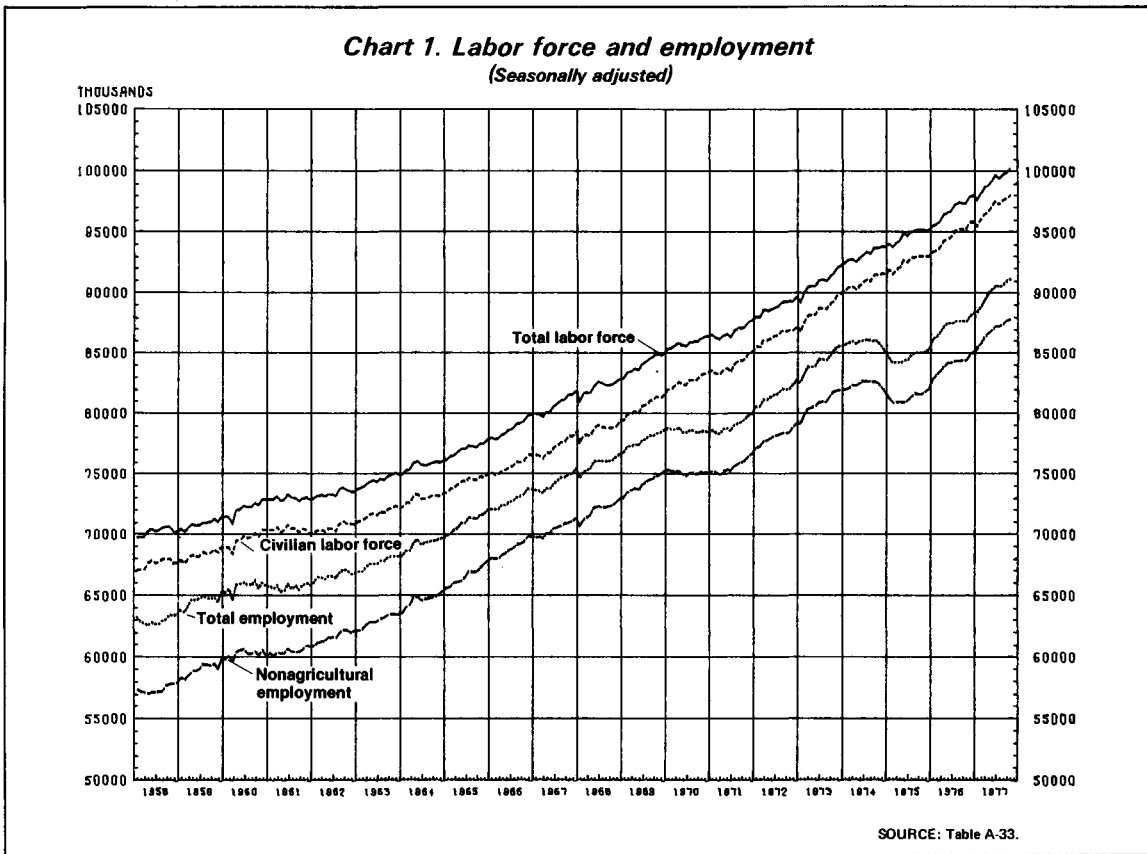
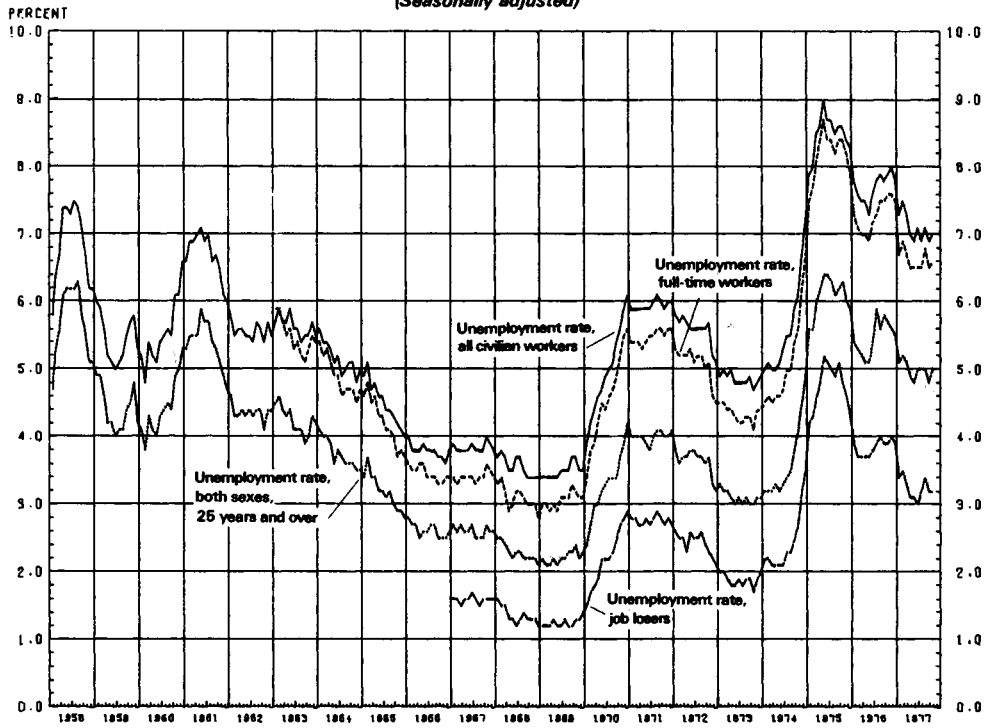


Chart 2. Major unemployment indicators

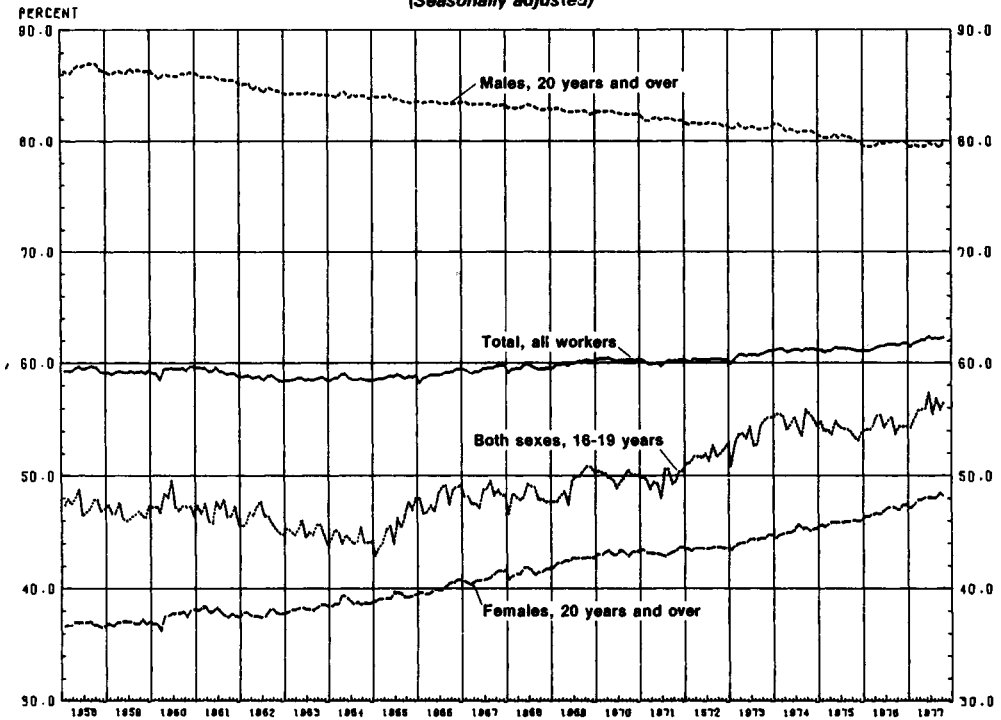
(Seasonally adjusted)



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

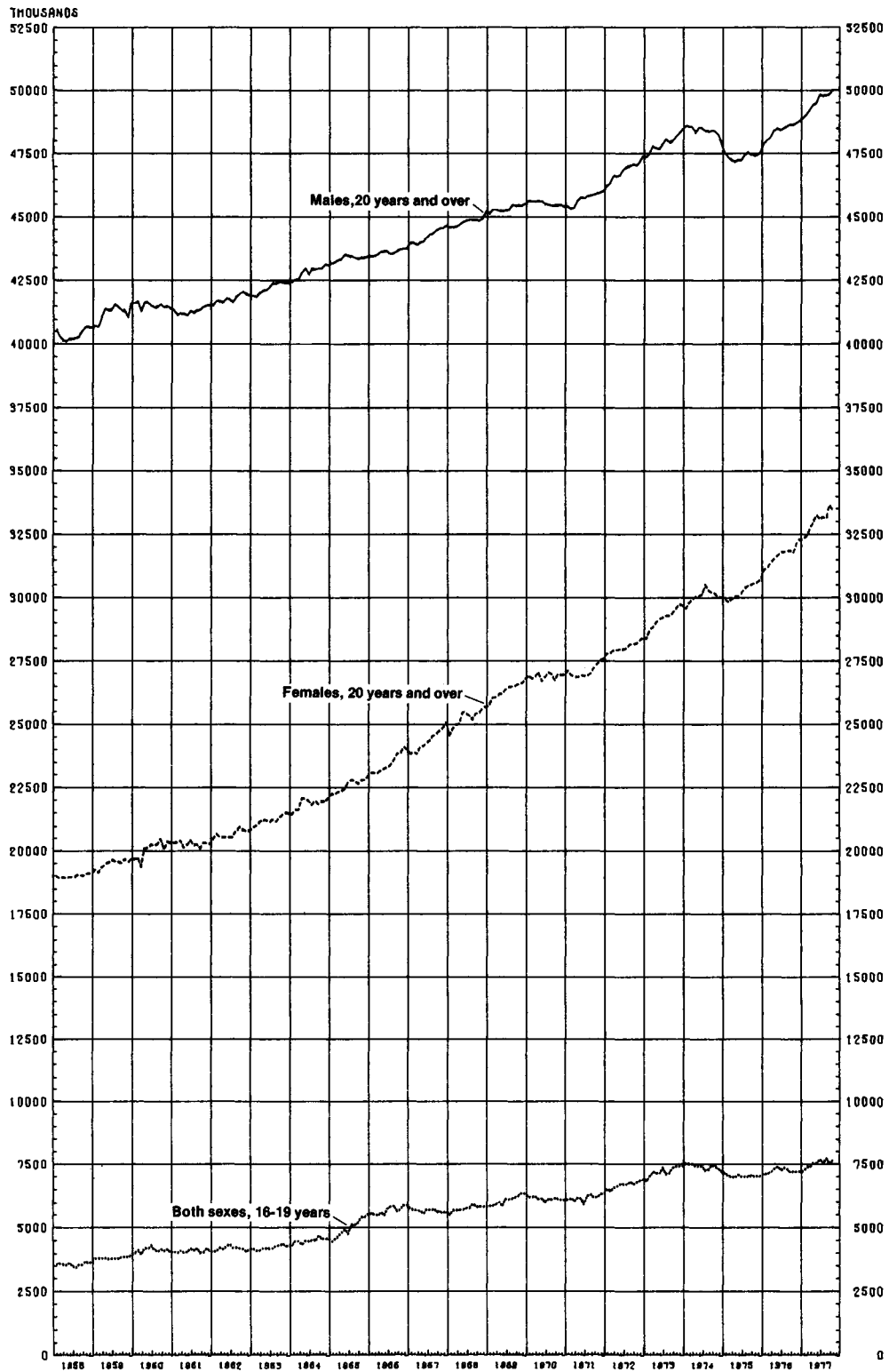
Chart 3. Civilian labor force participation rates by sex and age

(Seasonally adjusted)



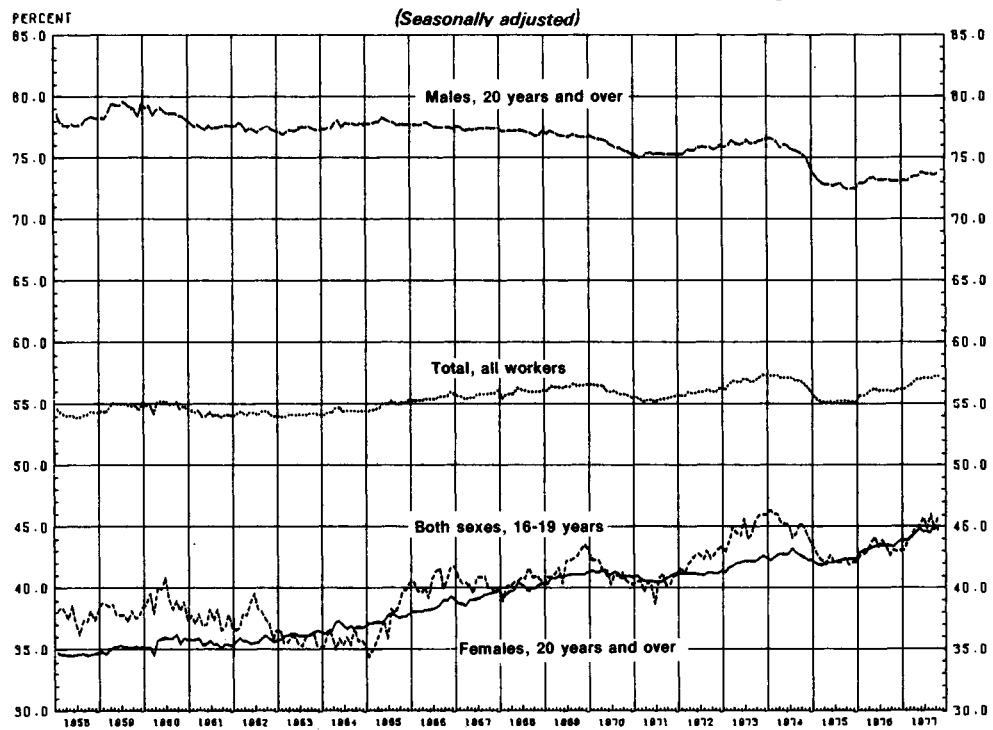
SOURCE: Table A-33.

Chart 4. Total employment by sex and age
(Seasonally adjusted)



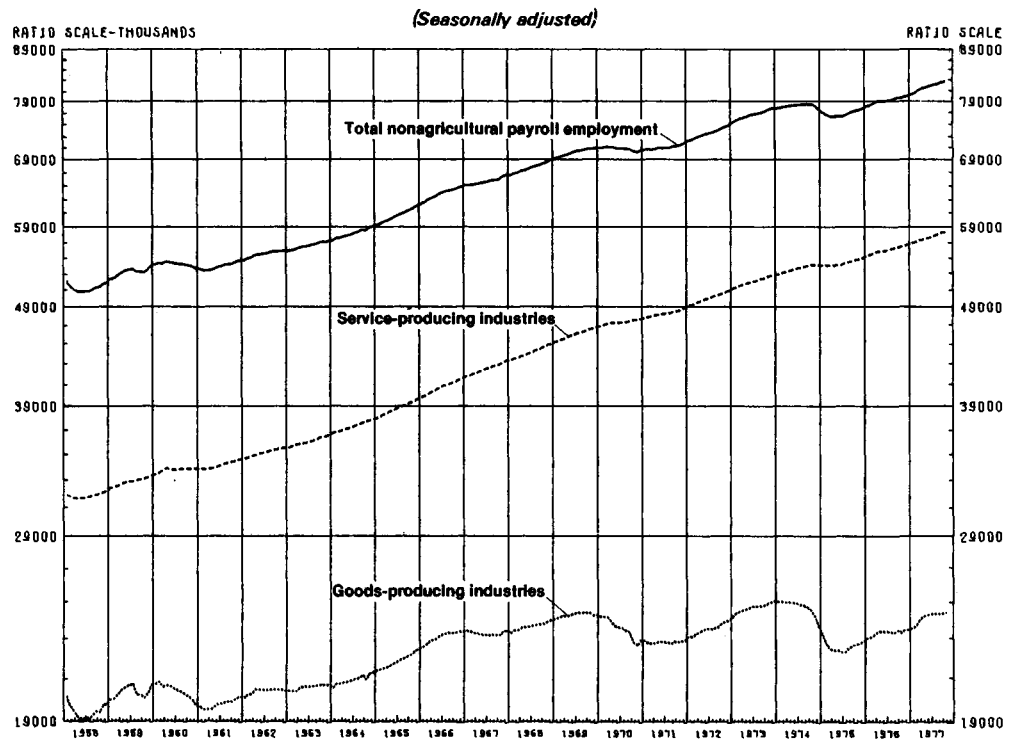
SOURCE: Table A-33.

Chart 5. Employment—population ratios by sex and age



SOURCE: Table A-33.

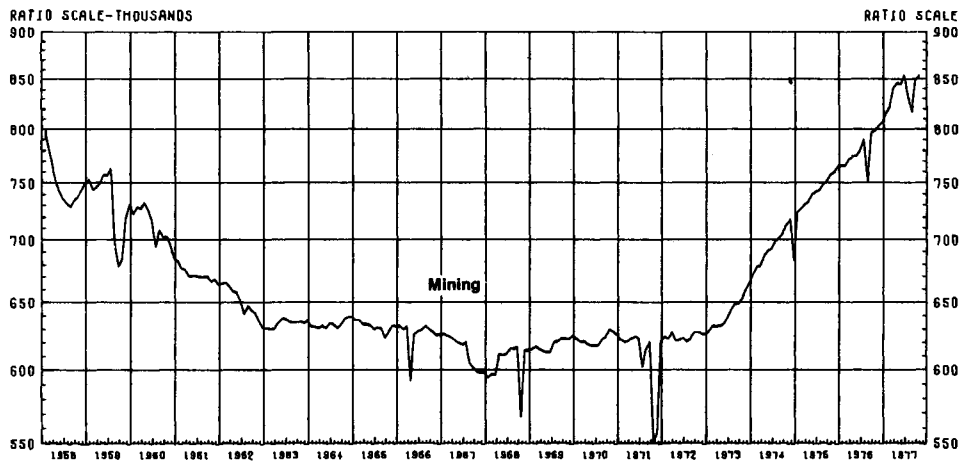
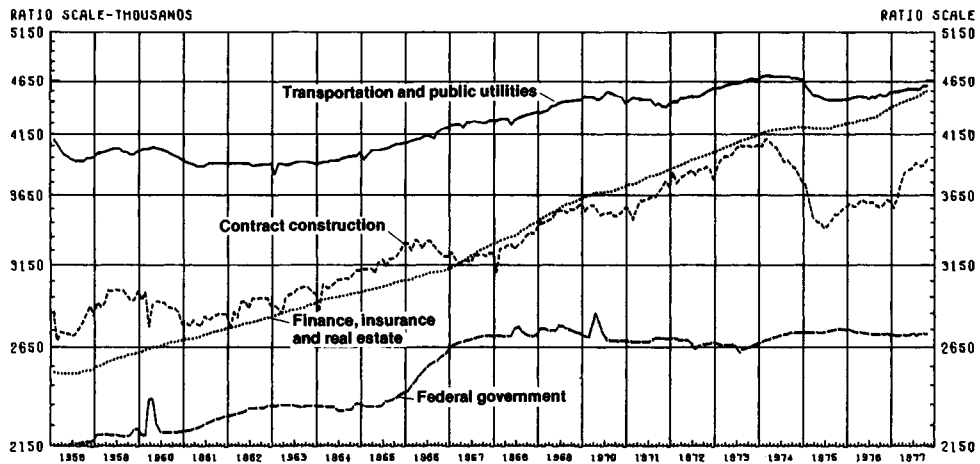
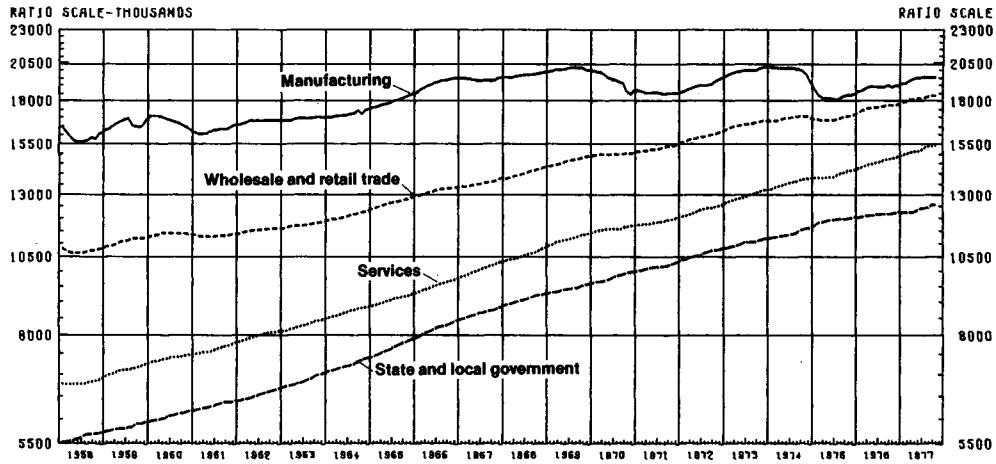
Chart 6. Payroll employment in goods- and service-producing industries



NOTE: Data for two most recent months are preliminary.

SOURCE: Table B-5.

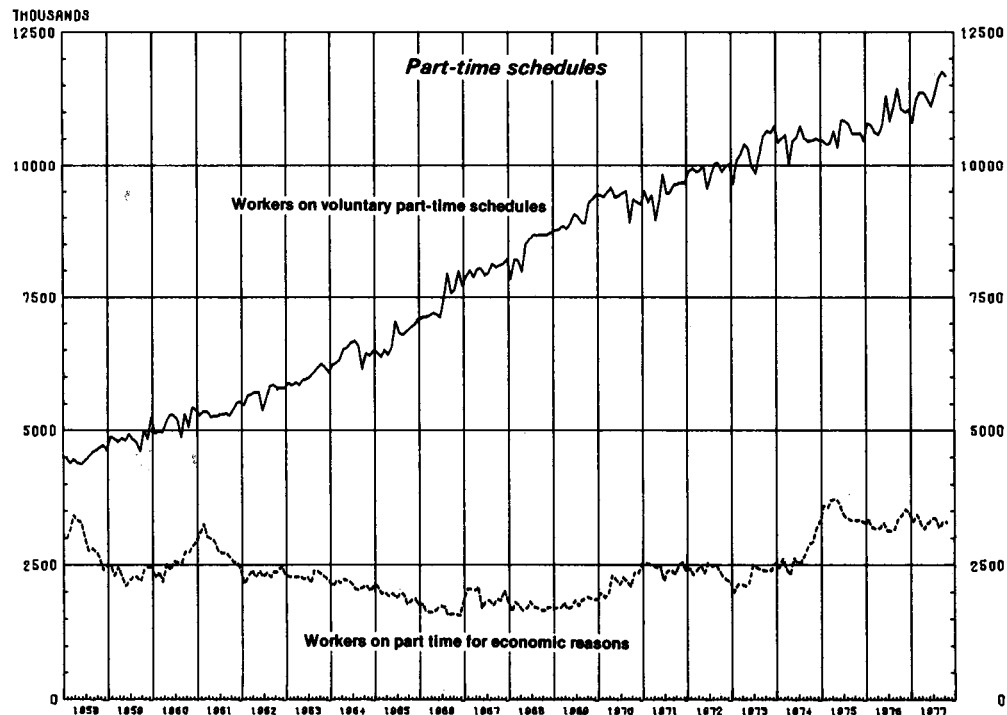
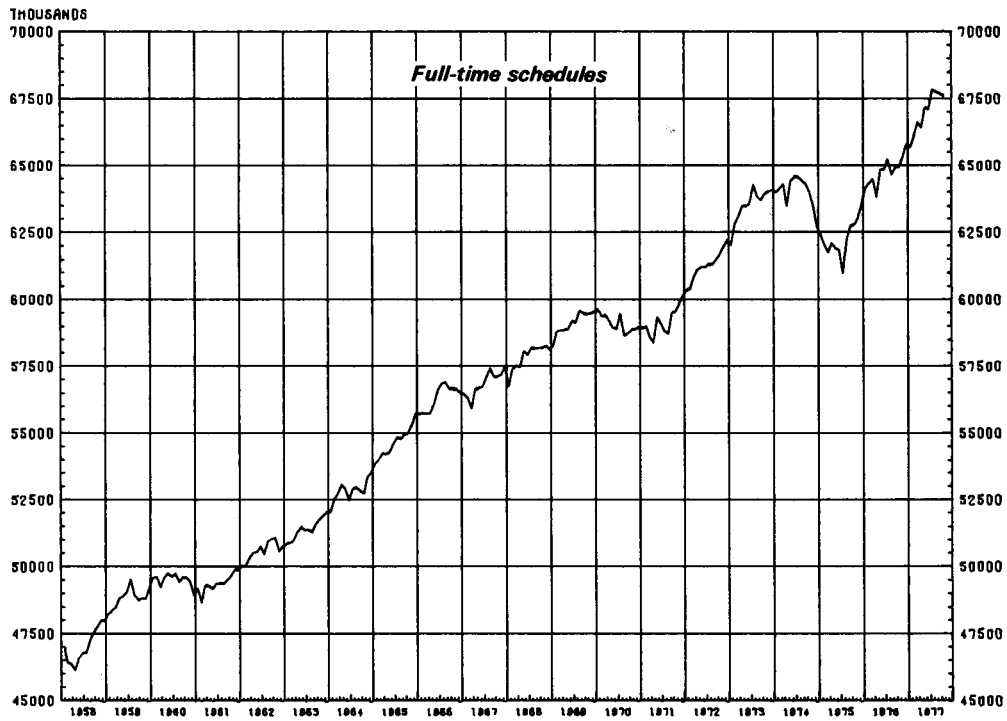
Chart 7. Nonagricultural payroll employment by industry
(Seasonally adjusted)



NOTE: Data for two most recent months are preliminary.

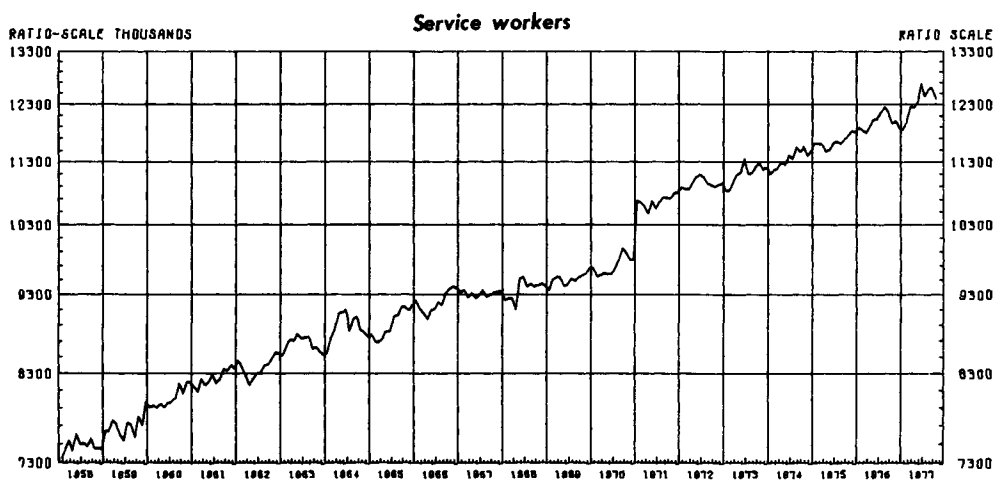
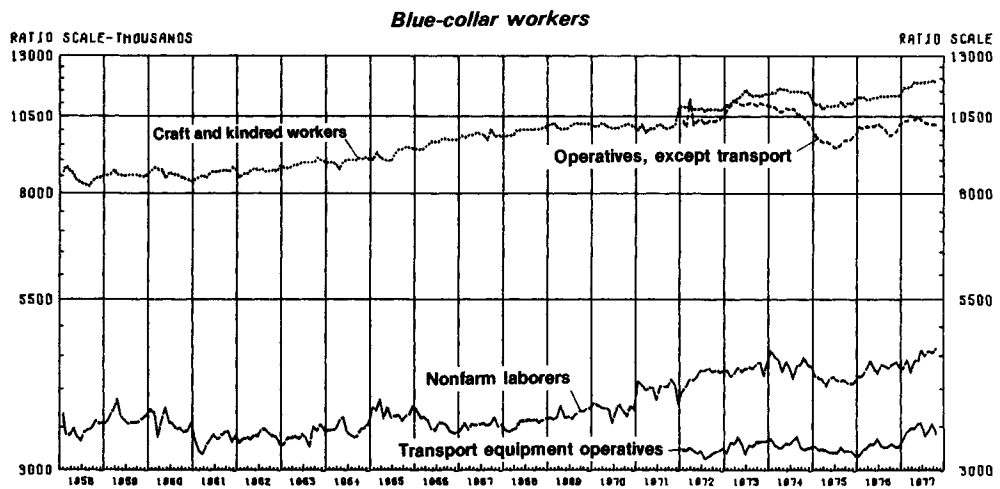
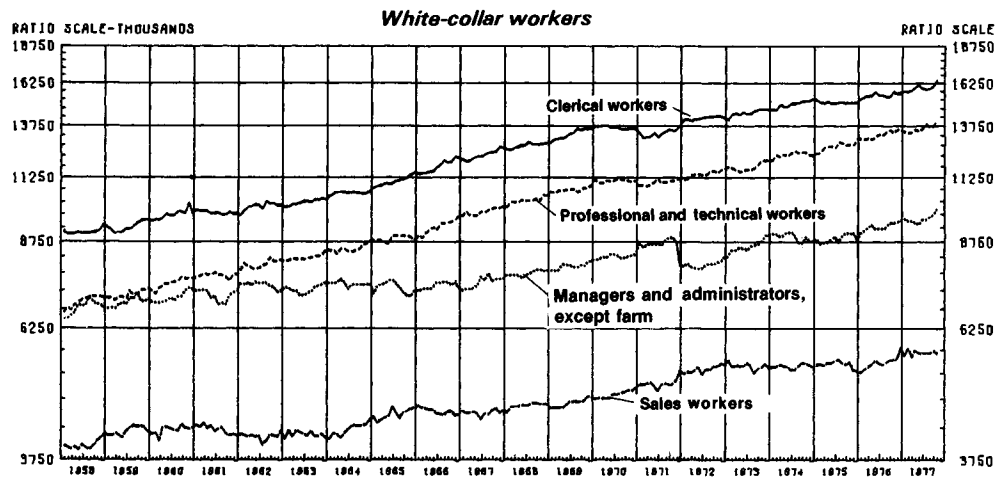
SOURCE: Table B-5.

**Chart 8. Persons at work full and part time
in nonagricultural industries**
(Seasonally adjusted)



SOURCE: Table A-42.

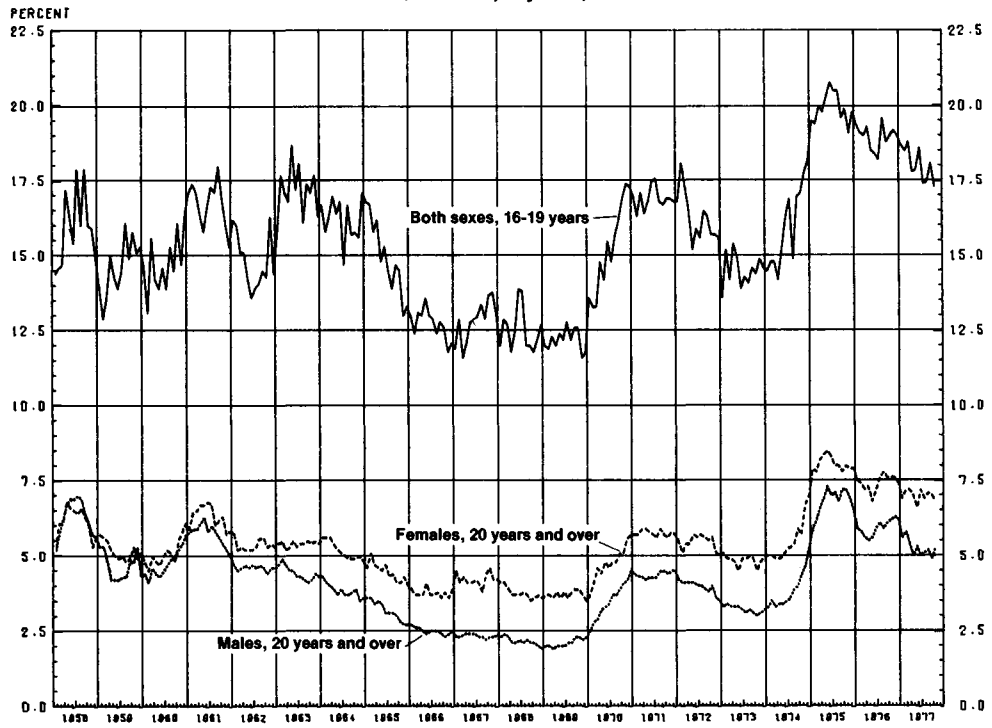
Chart 9. Employment in nonfarm occupations
(Seasonally adjusted)



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.

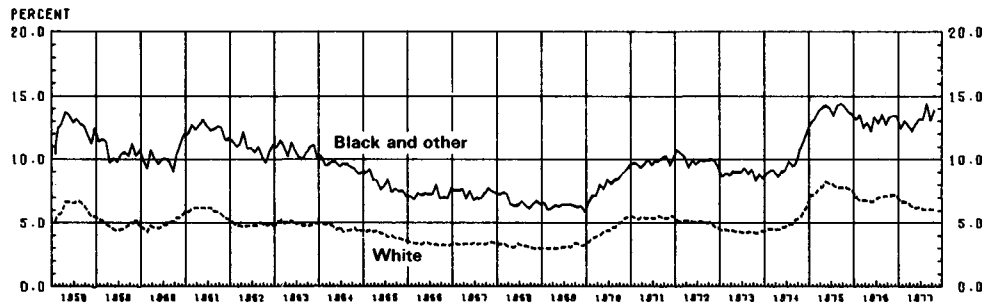
SOURCE: Table A-42.

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

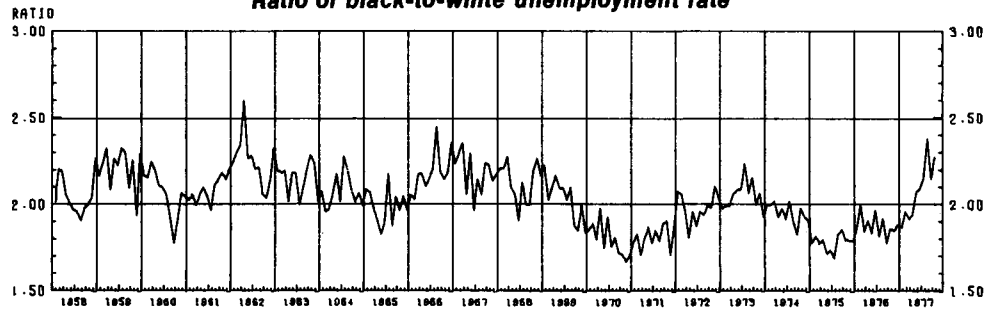


SOURCE: Table A-36.

Chart 11. Unemployment rates by race
(Seasonally adjusted)

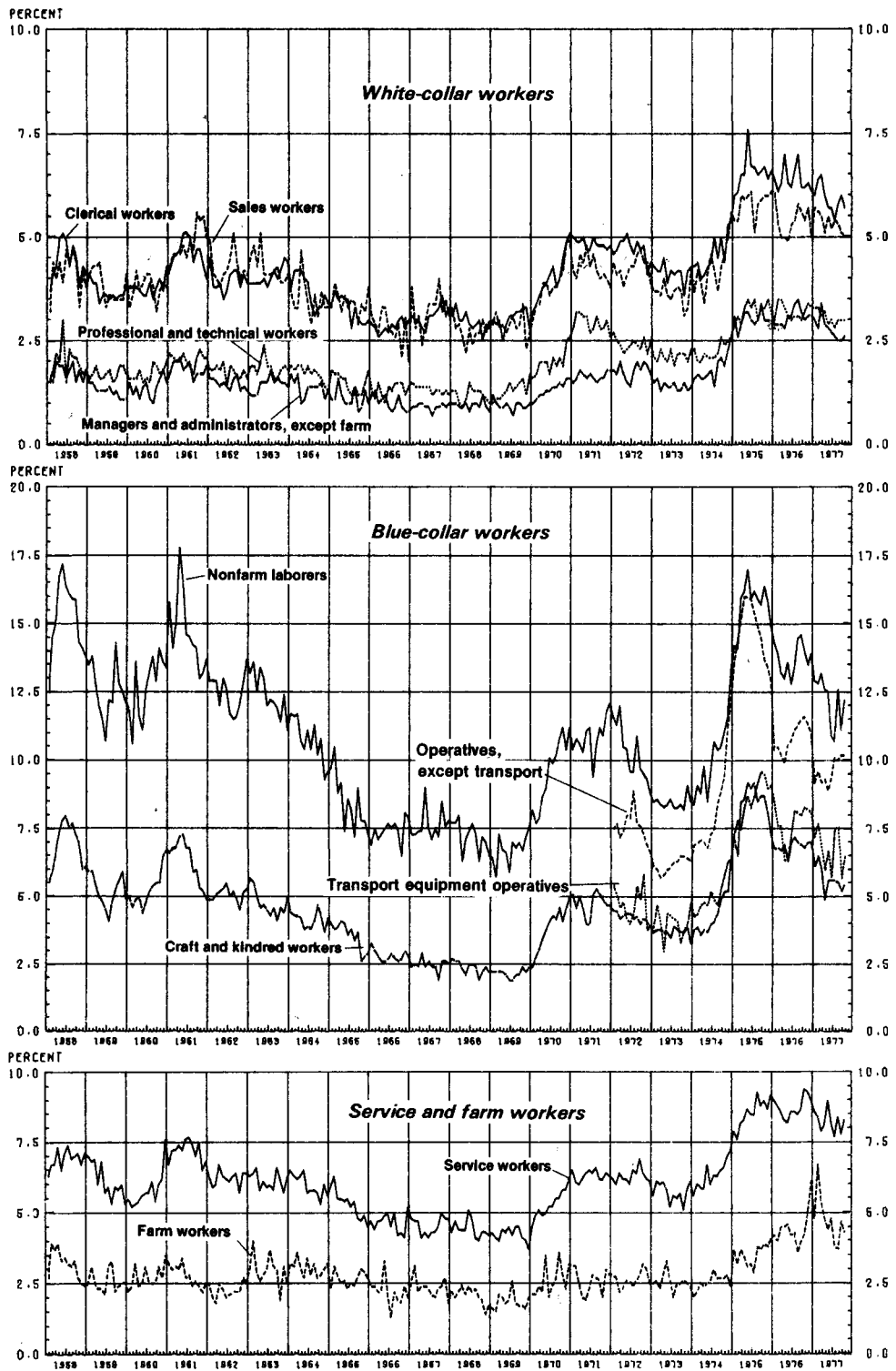


Ratio of black-to-white unemployment rate



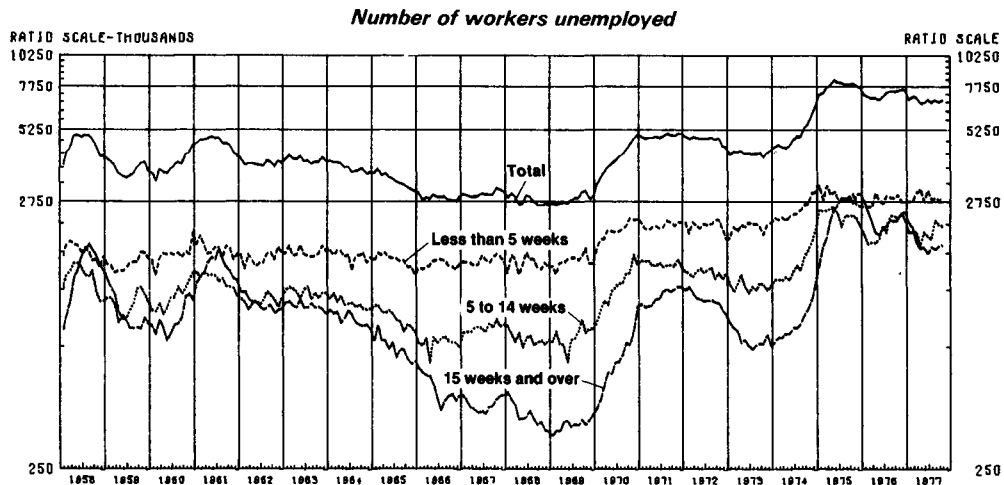
SOURCE: Table A-35.

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



SOURCE: Table A-36.

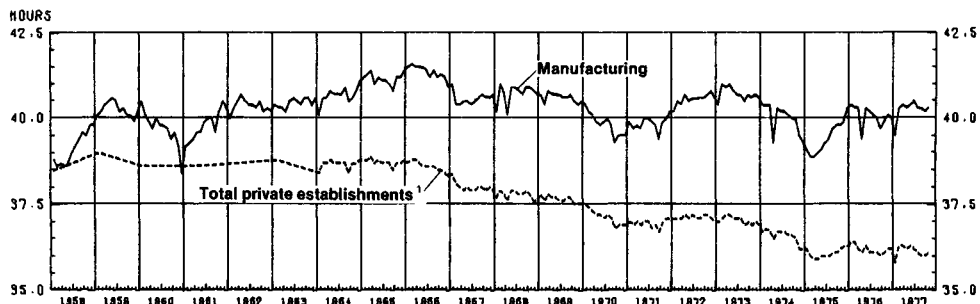
Chart 13. Duration of unemployment
(Seasonally adjusted)



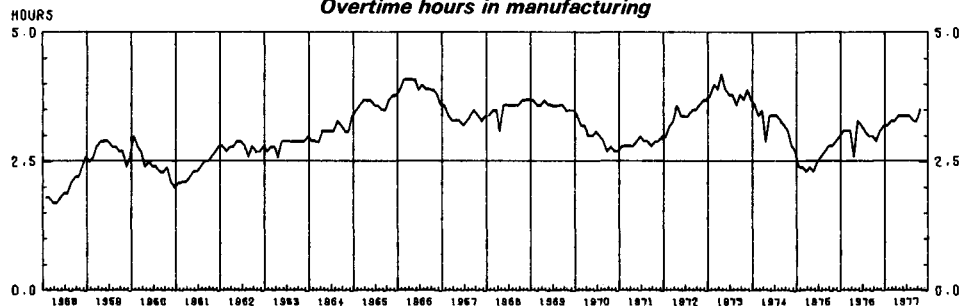
SOURCE: Table A-37.

Chart 14. Average weekly hours in nonagricultural industries

(Seasonally adjusted)



Overtime hours in manufacturing

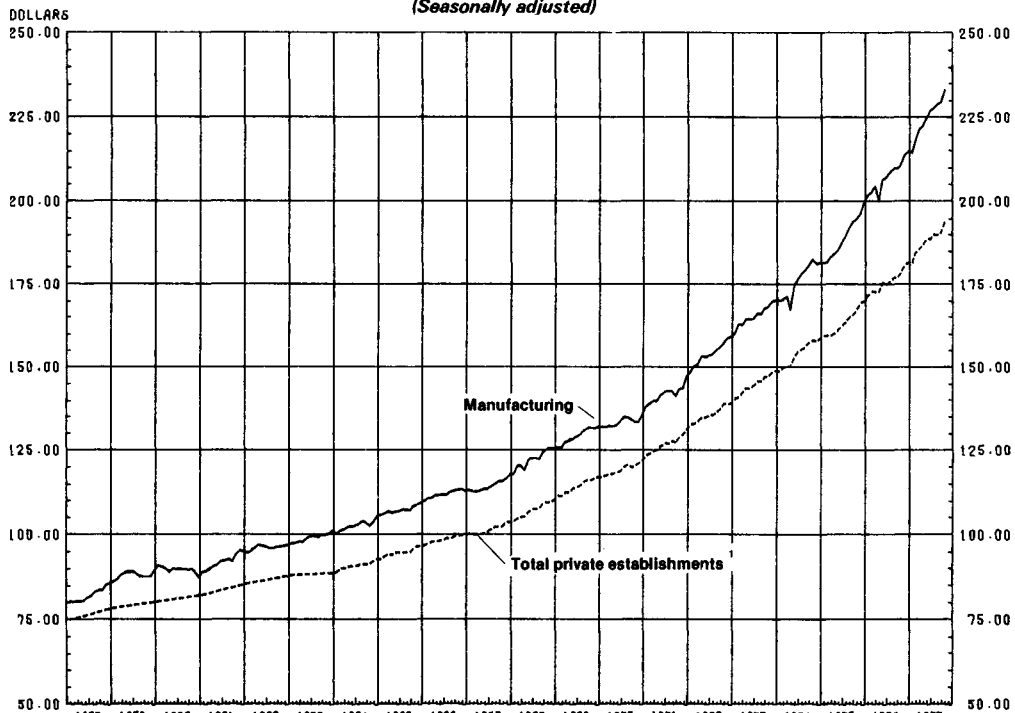


¹ Annual averages prior to 1964.
NOTE: Data for two most recent months are preliminary.

SOURCE: Table C-7.

Chart 15. Average weekly earnings in nonagricultural industries

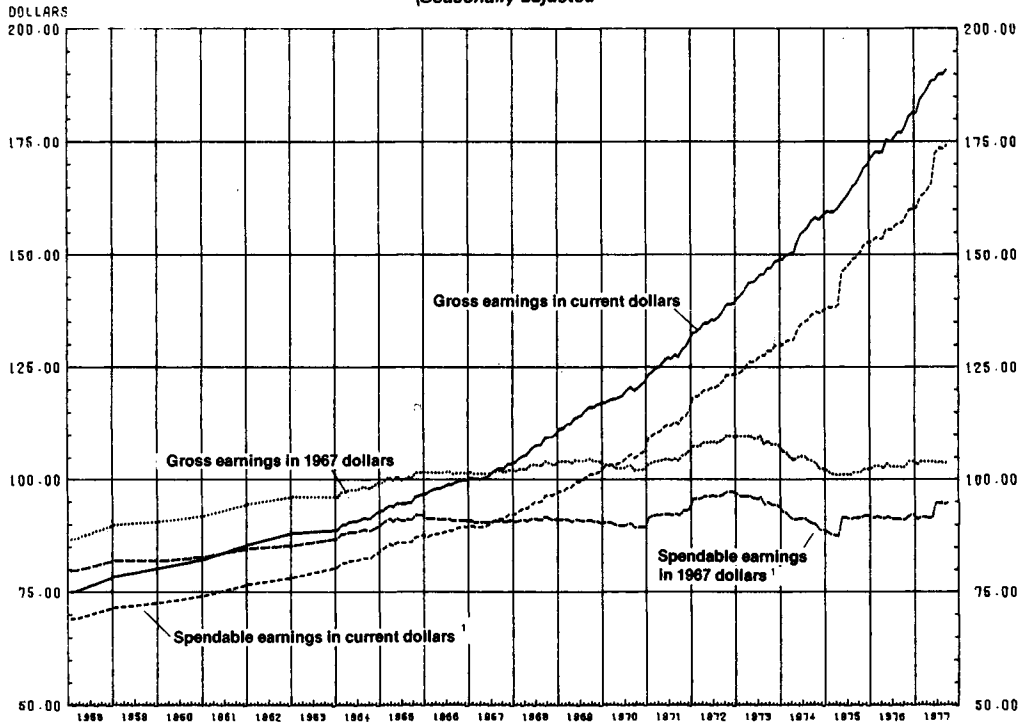
(Seasonally adjusted)



¹ Annual 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)

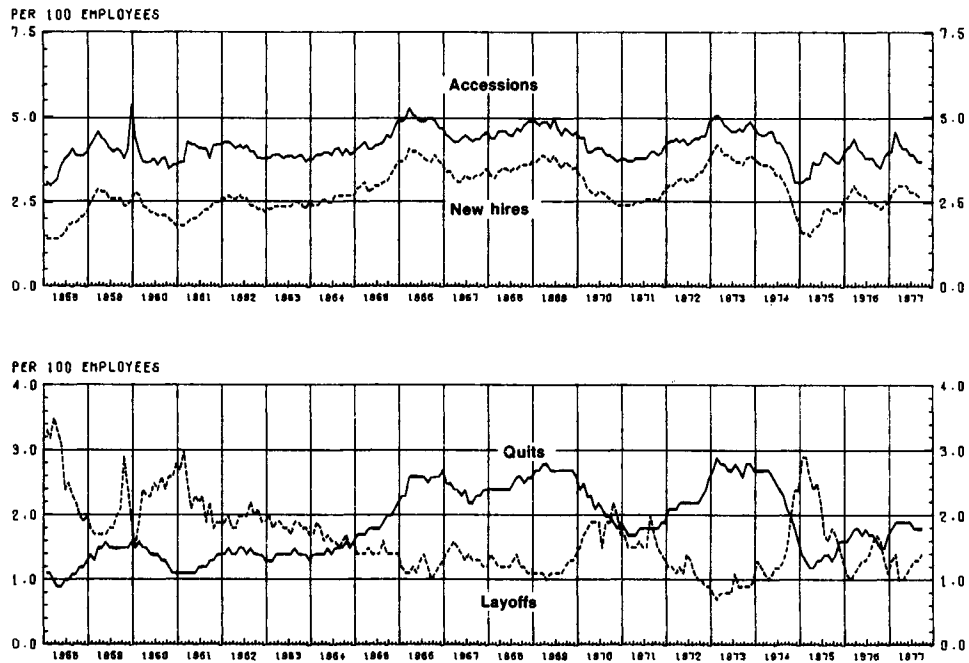


¹ Worker with three dependents.

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

SOURCE: Table C-8.

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	
TOTAL										
Annual averages										
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
Monthly data, seasonally adjusted²										
1976:										
October.....	156,788	97,449	62.2	95,302	87,738	3,310	84,428	7,564	7.9	59,340
November.....	157,006	98,020	62.4	95,871	88,220	3,248	84,972	7,651	8.0	58,986
December.....	157,176	98,106	62.4	95,960 ^c	88,441	3,257	85,184	7,519	7.8	59,071
1977:										
January.....	157,381	97,649	62.0	95,516	88,558	3,090	85,468	6,958	7.3	59,732
February.....	157,584	98,282	62.4	96,145	88,962	3,090	85,872	7,183	7.5	59,302
March.....	157,782	98,677	62.5	96,539	89,475	3,116	86,359	7,064	7.3	59,104
April.....	157,986	98,892	62.6	96,760	90,023	3,260	86,763	6,737	7.0	59,094
May.....	158,228	99,286	62.7	97,158	90,408	3,386	87,022	6,750	6.9	58,943
June.....	158,456	99,770	63.0	97,641	90,679	3,338	87,341	6,962	7.1	58,686
July.....	158,682	99,440	62.7	97,305	90,561	3,213	87,348	6,744	6.9	59,242
August.....	158,899	99,834	62.8	97,697	90,771	3,252	87,519	6,926	7.1	59,064
September.....	159,114	99,999	62.7	97,868	91,095	3,215	87,880	6,773	6.9	58,114
October.....	159,334	100,236	62.9	98,102	91,230	3,272	87,958	6,872	7.0	59,099

¹ Not strictly comparable with prior years due to the introduction of population adjustments in these years. For an explanation, see "Historic Comparability" under Household Data section of Explanatory Notes.

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

C=corrected.

**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
MALES										
Annual averages										
1967.....	64,316	52,398	81.5	46,987	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	55,186	52,518	2,900	49,618	2,668	4.8	14,904
1975.....	73,494	57,706	78.5	55,615	51,230	2,801	48,429	4,385	7.9	15,788
1976.....	74,739	58,397	78.1	56,359	52,391	2,716	49,675	3,968	7.0	16,341
Monthly data, seasonally adjusted²										
1976:										
October.....	75,095	58,791	78.3	56,754	52,576	2,688	49,888	4,178	7.4	16,304
November.....	75,198	58,929	78.4	56,887	52,643	2,625	50,018	4,244	7.5	16,269
December.....	75,325	58,987	78.3	56,951	52,799	2,624	50,175	4,152	7.3	16,338
1977:										
January.....	75,422	58,654	77.8	56,632	52,918	2,548	50,370	3,714	6.6	16,768
February.....	75,519	58,976	78.1	56,950	53,046	2,546	50,500	3,904	6.9	16,543
March.....	75,610	59,007	78.0	56,982	53,270	2,544	50,726	3,712	6.5	16,603
April.....	75,706	59,060	78.0	57,041	53,575	2,626	50,949	3,466	6.1	16,646
May.....	75,823	59,346	78.3	57,331	53,722	2,724	50,998	3,609	6.3	16,477
June.....	75,932	59,581	78.5	57,567	53,987	2,698	51,289	3,580	6.2	16,351
July.....	76,041	59,457	78.2	57,438	53,900	2,624	51,276	3,538	6.2	16,584
August.....	76,144	59,588	78.2	57,567	53,958	2,675	51,283	3,609	6.3	16,556
September.....	76,246	59,419	77.9 ^c	57,405	53,966	2,650	51,316	3,439	6.0	16,827
October.....	76,352	59,929	78.5	57,913	54,266	2,654	51,612	3,647	6.3	16,423
FAEMALES										
Annual averages										
1967.....	69,003	28,395	41.2	28,360	26,893	680	26,212	1,468	5.2	40,608
1968.....	70,217	29,242	41.6	29,204	27,807	660	27,147	1,397	4.8	40,976
1969.....	71,476	30,551	42.7	30,513	29,084	643	28,441	1,429	4.7	40,924
1970.....	72,774	31,560	43.4	31,520	29,667	601	29,066	1,853	5.9	41,214
1971.....	74,084	32,132	43.4	32,091	29,875	598	29,277	2,217	6.9	41,952
1972 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
Monthly data, seasonally adjusted²										
1976:										
October.....	81,694	38,657	47.3	38,548	35,162	622	34,540	3,386	8.8	43,037
November.....	81,808	39,093	47.8	38,984	35,577	623	34,594	3,407	8.7 ^c	42,715
December.....	81,851	39,118	47.8	39,009	35,642	633	35,009	3,367	8.6	42,733
1977:										
January.....	81,959	38,995	47.6	38,884	35,640	542	35,098	3,244	8.3	42,964
February.....	82,065	39,306	47.9	39,195	35,916	544	35,372	3,279	8.4	42,759
March.....	82,172	39,671	48.3	39,557	36,205	572	35,633	3,352	8.5	42,501
April.....	82,280	39,832	48.4	39,719	36,448	634	35,814	3,271	8.2	42,448
May.....	82,405	39,940	48.5	39,827	36,686	662	36,024	3,141	7.9	42,465
June.....	82,524	40,190	48.7	40,074	36,692	640	36,052	3,382	8.4	42,334
July.....	82,642	39,983	48.4	39,867	36,661	589	36,072	3,206	8.0	42,659
August.....	82,755	40,246	48.6	40,130	36,813	577	36,236	3,317	8.3	42,509
September.....	82,868	40,581	49.0	40,463	37,129	565	36,564	3,334	8.2	42,287
October.....	82,983	40,307	48.6	40,189	36,964	618	36,346	3,225	8.0	42,676

¹ Not strictly comparable with prior years due to the introduction of population adjustments in these years. For an explanation, see "Historic Comparability" under Household Data section of Explanatory Notes.

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

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

[Numbers in thousands]

Sex, age, and race	October 1977										
	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	59,741	78.2	57,725	54,685	3,040	5.3	16,611	279	4,631	1,749	9,952
16 to 21 years	8,497	66.7	7,796	6,735	1,062	13.6	4,240	20	3,865	24	330
16 to 19 years	5,139	60.5	4,815	4,076	739	15.4	3,360	10	3,106	10	234
16 to 17 years	2,083	49.0	2,049	1,693	356	17.4	2,164	7	2,044	5	109
18 to 19 years	3,056	71.9	2,765	2,383	383	13.8	1,196	3	1,062	5	125
20 to 64 years	52,651	89.9	50,960	48,753	2,207	4.3	5,942	116	1,524	1,253	3,049
20 to 24 years	8,547	85.4	7,798	7,132	666	8.5	1,456	11	1,177	48	219
25 to 54 years	36,966	94.7	36,025	34,717	1,308	3.6	2,060	62	339	651	1,007
25 to 29 years	8,317	95.0	7,944	7,500	444	5.6	433	15	233	65	121
30 to 34 years	7,354	96.6	7,111	6,811	300	4.2	256	3	66	80	107
35 to 39 years	5,862	96.8	5,669	5,500	169	3.0	192	7	14	66	105
40 to 44 years	5,186	95.7	5,094	4,960	135	2.6	235	12	12	102	110
45 to 49 years	5,160	93.1	5,127	4,997	130	2.5	380	8	12	155	206
50 to 54 years	5,086	90.0	5,080	4,949	131	2.6	564	17	4	184	359
55 to 64 years	7,138	74.6	7,136	6,904	233	3.3	2,425	42	7	554	1,822
55 to 59 years	4,372	83.5	4,370	4,242	128	2.9	862	16	5	266	576
60 to 64 years	2,766	63.9	2,766	2,661	105	3.8	1,563	27	3	288	1,246
65 years and over	1,950	21.1	1,950	1,857	93	4.8	7,309	153	1	486	6,669
65 to 69 years	1,142	31.0	1,142	1,076	66	5.8	2,546	53	--	174	2,319
70 years and over	809	14.5	809	782	27	3.3	4,763	100	1	312	4,350
White											
16 years and over	53,366	79.1	51,717	49,400	2,317	4.5	14,067	225	3,723	1,379	8,740
16 to 21 years	7,521	69.2	6,954	6,152	802	11.5	3,345	20	3,090	20	215
16 to 19 years	4,587	63.4	4,323	3,759	564	13.0	2,643	10	2,466	5	161
16 to 17 years	1,913	53.2	1,885	1,584	301	16.0	1,684	6	1,587	3	88
18 to 19 years	2,674	73.6	2,438	2,175	263	10.8	958	4	879	3	73
20 to 64 years	47,000	90.6	45,615	43,936	1,677	3.7	4,857	91	1,256	980	2,530
20 to 24 years	7,470	86.4	6,875	6,383	492	7.2	1,172	12	978	41	142
25 to 54 years	32,987	95.5	32,198	31,206	992	3.1	1,563	46	272	487	758
25 to 34 years	13,913	96.4	13,402	12,840	561	4.2	513	14	241	103	154
35 to 44 years	9,824	96.8	9,582	9,360	223	2.3	322	15	19	128	161
45 to 54 years	9,250	92.7	9,214	9,006	208	2.3	728	17	12	256	443
55 to 64 years	6,542	75.5	6,541	6,347	194	3.0	2,121	33	7	452	1,630
55 to 59 years	3,989	84.4	3,988	3,889	99	2.5	738	12	4	216	506
60 to 64 years	2,553	64.9	2,553	2,458	95	3.7	1,383	21	3	236	1,124
65 years and over	1,779	21.3	1,779	1,704	76	4.3	6,568	124	1	394	6,049
Black and other											
16 years and over	6,375	71.5	6,008	5,286	722	12.0	2,544	54	907	370	1,212
16 to 21 years	976	52.2	842	582	260	30.8	895	--	775	4	116
16 to 19 years	552	43.5	492	316	175	35.7	718	--	640	4	73
16 to 17 years	170	26.1	164	109	55	33.7	480	--	457	2	21
18 to 19 years	382	61.6	327	207	120	36.7	238	--	183	2	52
20 to 64 years	5,652	83.9	5,345	4,816	530	9.9	1,085	25	267	274	519
20 to 24 years	1,076	79.1	923	749	174	18.9	284	--	199	7	78
25 to 54 years	3,980	88.9	3,827	3,510	317	8.3	497	16	67	164	249
25 to 34 years	1,758	90.9	1,653	1,471	182	11.0	177	4	58	42	73
35 to 44 years	1,224	92.1	1,181	1,100	81	6.9	105	4	6	39	55
45 to 54 years	997	82.2	993	940	53	5.4	216	8	3	83	122
55 to 64 years	596	66.2	596	557	39	6.5	304	9	1	102	192
55 to 59 years	382	75.5	382	354	28	7.4	124	4	1	50	70
60 to 64 years	214	54.2	214	203	10	4.9	180	5	--	53	122
65 years and over	171	18.7	171	153	17	10.2	741	29	--	92	620

HOUSEHOLD DATA

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

(Numbers in thousands)

Sex, age, and race	October 1977										
	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	40,844	49.2	40,726	37,545	3,181	7.8	42,139	33,094	4,582	910	3,554
16 to 21 years	6,878	55.1	6,830	5,769	1,061	15.5	5,603	1,425	3,860	17	301
16 to 19 years	4,195	50.4	4,177	3,436	741	17.7	4,128	704	3,206	6	211
16 to 17 years	1,692	41.1	1,691	1,377	314	18.6	2,424	182	2,143	3	96
18 to 19 years	2,503	59.5	2,486	2,059	427	17.2	1,703	522	1,063	3	115
20 to 64 years	35,556	57.8	35,456	33,069	2,387	6.7	25,935	22,700	1,366	379	1,490
20 to 24 years	6,727	67.4	6,662	5,939	723	10.9	3,259	2,122	922	21	195
25 to 54 years	24,401	59.8	24,366	22,878	1,488	6.1	16,407	15,023	432	185	767
25 to 29 years	5,617	63.0	5,593	5,121	471	8.4	3,299	2,968	187	13	131
30 to 34 years	4,591	58.8	4,584	4,283	301	6.6	3,219	2,968	93	23	135
35 to 39 years	3,863	60.6	3,860	3,642	219	5.7	2,515	2,321	56	26	112
40 to 44 years	3,480	60.7	3,479	3,284	194	5.6	2,250	2,070	37	29	114
45 to 49 years	3,458	59.1	3,457	3,299	159	4.6	2,393	2,200	38	34	121
50 to 54 years	3,392	55.4	3,392	3,248	144	4.2	2,731	2,495	21	60	154
55 to 64 years	4,428	41.4	4,428	4,252	176	4.0	6,268	5,556	11	172	529
55 to 59 years	2,792	48.5	2,792	2,677	115	4.1	2,960	2,657	10	75	218
60 to 64 years	1,636	33.1	1,636	1,576	60	3.7	3,308	2,899	2	97	311
65 years and over	1,093	8.3	1,093	1,040	53	4.9	12,077	9,690	10	525	1,853
65 to 69 years	675	14.5	675	635	40	5.9	3,977	3,422	8	63	484
70 years and over	418	4.9	418	405	14	3.3	8,100	6,267	2	462	1,369
White											
16 years and over	35,459	48.9	35,364	32,907	2,457	6.9	37,070	29,655	3,603	726	3,086
16 to 21 years	6,111	57.9	6,071	5,286	786	12.9	4,442	1,146	3,058	12	226
16 to 19 years	3,766	53.6	3,751	3,183	568	15.1	3,260	563	2,530	5	162
16 to 17 years	1,569	45.3	1,568	1,312	256	16.3	1,895	148	1,667	1	79
18 to 19 years	2,197	61.7	2,182	1,871	312	14.3	1,365	416	863	3	83
20 to 64 years	30,721	57.4	30,641	28,803	1,839	6.0	22,824	20,225	1,065	281	1,254
20 to 24 years	5,829	68.7	5,778	5,264	514	8.9	2,659	1,770	726	15	148
25 to 54 years	20,944	59.1	20,916	19,751	1,166	5.6	14,475	13,397	328	133	618
25 to 34 years	8,648	60.0	8,623	8,040	584	6.8	5,755	5,325	195	26	209
35 to 44 years	6,292	60.1	6,289	5,973	315	5.0	4,172	3,859	84	40	189
45 to 54 years	6,005	56.9	6,005	5,738	267	4.4	4,549	4,214	49	66	220
55 to 64 years	3,948	41.0	3,948	3,788	160	4.0	5,689	5,057	11	133	487
55 to 59 years	2,483	48.0	2,483	2,382	100	4.0	2,686	2,423	9	58	195
60 to 64 years	1,465	32.8	1,465	1,406	59	4.0	3,003	2,635	2	75	292
65 years and over	972	8.1	972	921	50	5.2	10,986	8,867	8	441	1,670
Black and other											
16 years and over	5,385	51.5	5,362	4,638	724	13.5	5,069	3,439	979	183	468
16 to 21 years	767	39.8	759	483	275	36.3	1,160	279	801	5	74
16 to 19 years	429	33.1	426	253	174	40.7	868	141	676	1	49
16 to 17 years	123	18.8	123	64	58	47.5	529	35	476	1	17
18 to 19 years	306	47.5	304	188	115	38.0	338	106	200	--	32
20 to 64 years	4,834	60.8	4,815	4,267	548	11.4	3,111	2,476	301	98	237
20 to 24 years	898	59.9	885	675	209	23.7	600	352	196	6	46
25 to 54 years	3,455	64.1	3,449	3,126	322	9.3	1,931	1,624	104	53	149
25 to 34 years	1,560	67.2	1,554	1,365	189	12.1	763	611	85	10	57
35 to 44 years	1,051	63.9	1,051	953	98	9.3	593	532	9	16	37
45 to 54 years	845	59.5	845	809	36	4.2	575	481	11	28	55
55 to 64 years	481	45.3	481	464	16	3.4	580	499	1	39	41
55 to 59 years	310	53.0	310	295	15	4.9	275	235	1	17	23
60 to 64 years	171	35.9	171	170	1	.7	305	264	--	22	18
65 years and over	121	10.0	121	118	3	2.5	1,091	822	2	84	182

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	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
MALES								
16 years and over	58,500	59,741	77.9	78.2	56,462	57,725	77.3	77.7
16 to 19 years	4,940	5,139	58.1	60.5	4,598	4,815	56.4	58.9
16 to 17 years	1,952	2,083	46.1	49.0	1,918	2,049	45.7	48.6
18 to 19 years	2,988	3,056	70.1	71.9	2,680	2,765	67.7	69.8
20 to 24 years	8,376	8,547	85.4	85.4	7,619	7,798	84.2	84.3
25 to 54 years	36,282	36,966	94.6	94.7	35,344	36,025	94.5	94.6
25 to 34 years	15,183	15,672	95.7	95.8	14,573	15,055	95.6	95.6
35 to 44 years	10,732	11,048	95.8	96.3	10,443	10,763	95.6	96.2
45 to 54 years	10,368	10,246	91.9	91.6	10,329	10,207	91.8	91.5
55 to 64 years	7,052	7,138	75.0	74.6	7,051	7,136	75.0	74.6
55 to 59 years	4,280	4,372	83.8	83.5	4,279	4,370	83.8	83.5
60 to 64 years	2,772	2,766	64.5	63.9	2,772	2,766	64.5	63.9
65 years and over	1,850	1,950	20.5	21.1	1,850	1,950	20.5	21.1
White								
16 years and over	52,288	53,366	78.7	79.1	50,599	51,717	78.2	78.6
16 to 19 years	4,416	4,587	61.0	63.4	4,130	4,323	59.4	62.1
16 to 17 years	1,779	1,913	49.6	53.2	1,750	1,885	49.2	52.8
18 to 19 years	2,637	2,674	72.3	73.6	2,380	2,438	70.2	71.8
20 to 24 years	7,345	7,470	86.4	86.4	6,737	6,875	85.5	85.4
25 to 54 years	32,399	32,987	95.3	95.5	31,605	32,198	95.2	95.4
25 to 34 years	13,478	13,913	96.2	96.4	12,965	13,402	96.1	96.3
35 to 44 years	9,564	9,824	96.5	96.8	9,318	9,582	96.4	96.7
45 to 54 years	9,357	9,250	92.8	92.7	9,322	9,214	92.7	92.7
55 to 64 years	6,451	6,542	75.7	75.5	6,450	6,541	75.7	75.5
55 to 59 years	3,909	3,989	84.6	84.4	3,907	3,988	84.6	84.4
60 to 64 years	2,542	2,553	65.1	64.9	2,542	2,553	65.1	64.9
65 years and over	1,678	1,779	20.6	21.3	1,678	1,779	20.6	21.3
Black and other								
16 years and over	6,212	6,375	71.5	71.5	5,863	6,008	70.3	70.3
16 to 19 years	524	552	41.6	43.5	468	492	38.9	40.7
16 to 17 years	173	170	26.8	26.1	168	164	26.2	25.5
18 to 19 years	351	382	57.1	61.6	300	327	53.2	57.9
20 to 24 years	1,031	1,076	78.1	79.1	882	923	75.3	76.5
25 to 54 years	3,882	3,980	89.3	88.9	3,739	3,827	88.9	88.5
25 to 34 years	1,705	1,758	92.1	90.9	1,608	1,653	91.6	90.3
35 to 44 years	1,168	1,224	90.1	92.1	1,125	1,181	89.8	91.8
45 to 54 years	1,010	997	84.1	82.2	1,007	993	84.1	82.2
55 to 64 years	601	596	68.4	66.2	601	596	68.4	66.2
55 to 59 years	372	382	76.6	75.5	372	382	76.6	75.5
60 to 64 years	230	214	58.3	54.2	230	214	58.3	54.2
65 years and over	172	171	19.5	18.7	172	171	19.5	18.7

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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	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
FEMALES								
16 years and over	39,177	40,844	48.0	49.2	39,068	40,726	47.9	49.1
16 to 19 years	4,041	4,195	48.6	50.4	4,022	4,177	48.5	50.3
16 to 17 years	1,574	1,692	38.3	41.1	1,573	1,691	38.3	41.1
18 to 19 years	2,467	2,503	58.6	59.5	2,449	2,486	58.4	59.3
20 to 24 years	6,412	6,727	65.6	67.4	6,352	6,662	65.4	67.1
25 to 54 years	23,320	24,401	58.1	59.8	23,291	24,366	58.1	59.8
25 to 34 years	9,484	10,208	58.5	61.0	9,459	10,177	58.4	61.0
35 to 44 years	7,009	7,343	59.3	60.6	7,005	7,339	59.3	60.6
45 to 54 years	6,827	6,850	56.4	57.2	6,826	6,849	56.4	57.2
55 to 64 years	4,330	4,428	41.1	41.4	4,330	4,428	41.1	41.4
55 to 59 years	2,704	2,792	48.1	48.5	2,704	2,792	48.1	48.5
60 to 64 years	1,626	1,636	33.1	33.1	1,626	1,636	33.1	33.1
65 years and over	1,073	1,093	8.3	8.3	1,073	1,093	8.3	8.3
White								
16 years and over	34,110	35,459	47.7	48.9	34,020	35,364	47.6	48.8
16 to 19 years	3,664	3,766	52.1	53.6	3,648	3,751	52.0	53.5
16 to 17 years	1,472	1,569	42.5	45.3	1,472	1,568	42.5	45.3
18 to 19 years	2,192	2,197	61.3	61.7	2,176	2,182	61.2	61.5
20 to 24 years	5,581	5,829	67.0	68.7	5,532	5,778	66.8	68.5
25 to 54 years	20,069	20,944	57.5	59.1	20,045	20,916	57.5	59.1
25 to 34 years	8,044	8,648	57.5	60.0	8,023	8,623	57.4	60.0
35 to 44 years	5,986	6,292	58.6	60.1	5,983	6,289	58.6	60.1
45 to 54 years	6,039	6,005	56.5	56.9	6,038	6,005	56.5	56.9
55 to 64 years	3,852	3,948	40.5	41.0	3,852	3,948	40.5	41.0
55 to 59 years	2,402	2,483	47.5	48.0	2,402	2,483	47.5	48.0
60 to 64 years	1,449	1,465	32.6	32.8	1,449	1,465	32.6	32.8
65 years and over	944	972	8.0	8.1	944	972	8.0	8.1
Black and other								
16 years and over	5,068	5,385	49.9	51.5	5,048	5,362	49.8	51.4
16 to 19 years	377	429	29.4	33.1	374	426	29.3	32.9
16 to 17 years	102	123	15.8	18.8	102	123	15.7	18.8
18 to 19 years	275	306	43.4	47.5	273	304	43.1	47.3
20 to 24 years	832	898	57.6	59.9	820	885	57.2	59.6
25 to 54 years	3,251	3,455	62.3	64.1	3,246	3,449	62.2	64.1
25 to 34 years	1,440	1,560	64.9	67.2	1,436	1,554	64.8	67.1
35 to 44 years	1,023	1,051	64.0	63.9	1,022	1,051	64.0	63.9
45 to 54 years	788	845	56.2	59.5	788	845	56.2	59.5
55 to 64 years	479	481	46.2	45.3	479	481	46.2	45.3
55 to 59 years	302	310	53.7	53.0	302	310	53.7	53.0
60 to 64 years	177	171	37.4	35.9	177	171	37.4	35.9
65 years and over	129	121	11.0	10.0	129	121	11.0	10.0

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

[Numbers in thousands]

Sex and age	October 1977						Not in labor force	
	Civilian labor force					Percent of labor force		
	Total	Employed			Unemployed			
		Total	Agriculture	Nonagricultural industries	Number			
Total								
16 years and over	9,793	8,445	214	8,231	1,348	13.8	6,648	
16 to 19 years	808	480	12	468	328	40.6	1,441	
16 to 17 years	248	142	8	133	106	42.8	934	
18 to 19 years	560	338	4	334	222	39.6	507	
20 to 24 years	1,571	1,201	18	1,183	370	23.6	753	
25 to 54 years	6,188	5,601	127	5,475	587	9.5	2,036	
25 to 34 years	2,705	2,357	40	2,317	348	12.9	749	
35 to 44 years	1,918	1,762	32	1,731	156	8.1	591	
45 to 54 years	1,564	1,481	55	1,427	83	5.3	696	
55 to 64 years	960	918	40	878	42	4.4	794	
55 to 59 years	614	581	19	562	33	5.3	359	
60 to 64 years	346	337	21	315	10	2.8	434	
65 years and over	266	245	17	228	21	7.8	1,626	
Males								
16 years and over	5,169	4,497	171	4,327	671	13.0	2,218	
16 to 19 years	442	273	13	261	169	38.2	637	
16 to 17 years	148	93	8	85	55	37.3	441	
18 to 19 years	294	180	4	176	114	38.7	196	
20 to 24 years	810	637	15	622	173	21.4	230	
25 to 54 years	3,243	2,959	97	2,861	284	8.8	432	
25 to 34 years	1,377	1,209	29	1,180	168	12.2	150	
35 to 44 years	1,008	938	22	916	70	6.9	96	
45 to 54 years	857	811	46	765	46	5.4	186	
55 to 64 years	519	492	30	461	27	5.1	282	
55 to 59 years	330	312	16	297	18	5.4	119	
60 to 64 years	188	179	15	165	9	4.6	162	
65 years and over	155	137	15	121	18	11.5	638	
Females								
16 years and over	4,624	3,947	43	3,904	677	14.6	4,430	
16 to 19 years	366	207	--	207	159	43.5	804	
16 to 17 years	99	49	--	49	51	51.0	493	
18 to 19 years	266	158	--	158	108	40.7	311	
20 to 24 years	761	564	3	561	197	25.9	523	
25 to 54 years	2,944	2,642	30	2,613	302	10.3	1,604	
25 to 34 years	1,328	1,148	11	1,136	180	13.6	599	
35 to 44 years	910	824	9	815	86	9.5	495	
45 to 54 years	707	670	9	661	36	5.1	510	
55 to 64 years	442	426	10	416	16	3.6	512	
55 to 59 years	284	269	3	266	15	5.2	240	
60 to 64 years	158	157	7	151	1	.7	272	
65 years and over	111	108	2	106	3	2.7	988	

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

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

[Numbers in thousands]

Employment status and race	Total		Males, 20 years and over		Females, 20 years and over		Both sexes, 16-19 years	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
TOTAL								
Total noninstitutional population	156,788	159,334	66,598	67,852	73,378	74,660	16,812	16,822
Total labor force	97,677	100,584	53,560	54,601	35,136	36,649	8,981	9,334
Percent of population	62.3	63.1	80.4	80.5	47.9	49.1	53.4	55.5
Civilian labor force	95,530	98,451	51,864	52,910	35,046	36,549	8,621	8,992
Employed	88,697	92,230	49,215	50,610	32,430	34,109	7,052	7,511
Agriculture	3,447	3,408	2,424	2,427	631	617	392	364
Nonagricultural industries	85,250	88,822	46,791	48,182	31,799	33,493	6,660	7,147
Unemployed	6,833	6,221	2,649	2,300	2,615	2,440	1,569	1,480
Percent of labor force	7.2	6.3	5.1	4.3	7.5	6.7	18.2	16.5
Not in labor force	59,112	58,750	13,038	13,251	38,243	38,012	7,831	7,488
White								
Total noninstitutional population	137,944	139,962	59,169	60,203	64,505	65,503	14,270	14,256
Total labor force	86,398	88,825	47,872	48,779	30,445	31,693	8,080	8,353
Percent of population	62.6	63.5	80.9	81.0	47.2	48.4	56.6	58.6
Civilian labor force	84,619	87,081	46,469	47,394	30,372	31,613	7,778	8,074
Employed	79,133	82,307	44,318	45,640	28,286	29,724	6,529	6,942
Agriculture	3,137	3,150	2,188	2,245	588	555	361	350
Nonagricultural industries	75,996	79,157	42,130	43,396	27,697	29,169	6,169	6,592
Unemployed	5,486	4,774	2,151	1,753	2,086	1,889	1,249	1,131
Percent of labor force	6.5	5.5	4.6	3.7	6.9	6.0	16.1	14.0
Not in labor force	51,546	51,137	11,297	11,425	34,060	33,810	6,190	5,902
Black and other								
Total noninstitutional population	18,844	19,372	7,429	7,649	8,873	9,157	2,542	2,566
Total labor force	11,279	11,759	5,688	5,823	4,690	4,955	901	981
Percent of population	59.9	60.7	76.6	76.1	52.9	54.1	35.5	38.2
Civilian labor force	10,911	11,370	5,395	5,516	4,674	4,936	843	918
Employed	9,564	9,923	4,897	4,969	4,145	4,385	523	569
Agriculture	310	258	236	183	43	61	31	14
Nonagricultural industries	9,254	9,665	4,661	4,787	4,102	4,323	491	555
Unemployed	1,347	1,447	498	547	529	551	320	349
Percent of labor force	12.3	12.7	9.2	9.9	11.3	11.2	38.0	38.0
Not in labor force	7,565	7,613	1,742	1,826	4,183	4,202	1,641	1,585

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

[Numbers in thousands]

Employment status	October 1977								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
Total noninstitutional population	25,218	12,737	12,481	21,420	10,866	10,554	3,798	1,871	1,927
Total labor force	15,375	8,497	6,878	13,632	7,521	6,111	1,743	976	767
Percent of population	61.0	66.7	55.1	63.6	69.2	57.9	45.9	52.2	39.8
Civilian labor force	14,626	7,796	6,830	13,025	6,954	6,071	1,601	842	759
Employed	12,503	6,735	5,769	11,438	6,152	5,286	1,066	582	483
Agriculture	557	467	90	535	446	89	22	21	1
Nonagricultural industries	11,946	6,268	5,679	10,903	5,706	5,197	1,044	561	482
Unemployed	2,123	1,062	1,061	1,588	802	786	535	260	275
Percent of labor force	14.5	13.6	15.5	12.2	11.5	12.9	33.4	30.8	36.3
Looking for full-time work	1,196	596	600	860	434	427	335	162	173
Looking for part-time work	927	466	461	727	368	359	200	97	102
Not in labor force	9,843	4,240	5,603	7,787	3,345	4,442	2,055	895	1,160
MAJOR ACTIVITY: GOING TO SCHOOL									
Civilian labor force	4,558	2,457	2,100	4,118	2,218	1,901	439	240	200
Employed	3,687	1,990	1,697	3,436	1,857	1,579	251	133	118
Agriculture	166	146	20	162	142	20	4	4	--
Nonagricultural industries	3,521	1,844	1,677	3,274	1,715	1,559	247	129	118
Unemployed	871	467	404	683	361	322	188	107	81
Percent of labor force	19.1	19.0	19.2	16.6	16.3	16.9	42.8	44.6	40.8
Looking for full-time work	80	35	45	54	19	35	26	16	10
Looking for part-time work	791	432	358	629	342	287	162	90	72
Not in labor force	7,725	3,865	3,860	6,149	3,090	3,058	1,576	775	801
MAJOR ACTIVITY: OTHER									
Civilian labor force	10,069	5,339	4,730	8,907	4,737	4,171	1,161	602	559
Employed	8,817	4,745	4,072	8,002	4,295	3,707	814	449	365
Agriculture	391	321	70	373	304	70	18	17	1
Nonagricultural industries	8,426	4,424	4,002	7,629	3,992	3,637	797	432	364
Unemployed	1,252	594	658	905	441	464	347	153	194
Percent of labor force	12.4	11.1	13.9	10.2	9.3	11.1	29.9	25.4	34.7
Looking for full-time work	1,116	561	555	806	415	391	309	146	163
Looking for part-time work	136	33	103	98	26	72	38	7	31
Not in labor force	2,118	375	1,743	1,639	255	1,384	479	120	359

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

[Numbers in thousands]

Race, sex, and age	October 1977								
	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	82,967	75,073	3,184	4,710	5.7	15,483	13,973	1,511	9.8
16 to 21 years	8,815	6,834	785	1,196	13.6	5,811	4,884	927	16.0
16 to 19 years	4,388	3,189	509	690	15.7	4,603	3,813	790	17.2
16 to 17 years	781	491	140	150	19.2	2,959	2,439	521	17.6
18 to 19 years	3,607	2,698	370	540	15.0	1,644	1,374	270	16.4
20 years and over	78,579	71,885	2,675	4,020	5.1	10,880	10,160	720	6.6
20 to 24 years	12,264	10,481	631	1,152	9.4	2,197	1,960	237	10.8
25 years and over	66,315	61,404	2,044	2,868	4.3	8,683	8,200	483	5.6
25 to 54 years	54,597	50,476	1,667	2,455	4.5	5,792	5,451	341	5.9
55 years and over	11,717	10,928	376	414	3.5	2,890	2,748	142	4.9
Males, 16 years and over	52,474	48,610	1,432	2,432	4.6	5,251	4,643	608	11.6
16 to 21 years	4,917	3,928	393	596	12.1	2,879	2,413	466	16.2
16 to 19 years	2,464	1,856	268	341	13.8	2,351	1,952	399	17.0
20 years and over	50,101	46,755	1,164	2,091	4.2	2,900	2,691	209	7.2
20 to 24 years	6,906	6,050	291	565	8.2	893	792	101	11.3
25 years and over	43,104	40,705	873	1,526	3.5	2,007	1,899	108	5.4
25 to 54 years	35,313	33,344	703	1,266	3.6	712	670	42	5.9
55 years and over	7,792	7,361	170	259	3.3	1,296	1,229	66	5.1
Females, 16 years and over	30,494	26,463	1,752	2,278	7.5	10,232	9,329	903	8.8
16 to 21 years	3,897	2,906	392	600	15.4	2,933	2,471	461	15.7
16 to 19 years	1,924	1,333	242	349	18.2	2,253	1,861	392	17.4
20 years and over	28,569	25,130	1,511	1,929	6.8	7,980	7,469	511	6.4
20 to 24 years	5,358	4,431	340	587	11.0	1,304	1,168	136	10.4
25 years and over	23,211	20,699	1,171	1,342	5.8	6,676	6,301	375	5.6
25 to 54 years	19,286	17,132	965	1,189	6.2	5,080	4,781	299	5.9
55 years and over	3,927	3,566	206	154	3.9	1,595	1,519	76	4.8
White									
Males, 16 years and over	46,990	43,956	1,194	1,841	3.9	4,726	4,250	477	10.1
16 to 21 years	4,339	3,557	348	434	10.0	2,615	2,247	368	14.1
16 to 19 years	2,198	1,717	231	250	11.4	2,126	1,812	314	14.8
20 years and over	44,793	42,238	964	1,591	3.6	2,601	2,438	163	6.3
20 to 24 years	6,058	5,393	257	408	6.7	817	733	84	10.3
25 years and over	38,735	36,845	707	1,183	3.1	1,784	1,705	79	4.4
25 to 54 years	31,585	30,056	559	969	3.1	614	591	23	3.7
55 years and over	7,150	6,789	147	214	3.0	1,170	1,114	56	4.8
Females, 16 years and over	26,016	22,881	1,426	1,708	6.6	9,348	8,599	748	8.0
16 to 21 years	3,404	2,614	363	427	12.5	2,667	2,308	359	13.5
16 to 19 years	1,691	1,199	234	257	15.2	2,060	1,749	311	15.1
20 years and over	24,326	21,682	1,192	1,451	6.0	7,288	6,850	438	6.0
20 to 24 years	4,600	3,909	282	408	8.9	1,178	1,073	105	8.9
25 years and over	19,726	17,773	910	1,043	5.3	6,110	5,777	333	5.5
25 to 54 years	16,225	14,566	754	906	5.6	4,691	4,431	260	5.5
55 years and over	3,500	3,207	156	138	3.9	1,419	1,346	73	5.1
Black and other									
Males, 16 years and over	5,483	4,655	237	591	10.8	525	393	131	25.0
16 to 21 years	579	371	46	162	28.0	264	166	97	37.0
16 to 19 years	266	138	37	91	34.1	225	141	85	37.5
20 years and over	5,217	4,516	200	500	9.6	299	253	47	15.6
20 to 24 years	847	656	34	157	18.5	76	59	17	22.6
25 years and over	4,370	3,860	166	343	7.8	223	194	30	13.5
25 to 54 years	3,728	3,287	144	297	8.0	99	80	20	20.2
55 years and over	642	572	23	46	7.2	125	114	10	8.0
Females, 16 years and over	4,477	3,582	326	570	12.7	885	730	154	17.5
16 to 21 years	493	291	29	173	35.1	265	163	102	38.6
16 to 19 years	234	134	7	92	39.5	193	111	81	42.2
20 years and over	4,244	3,448	319	478	11.3	692	619	73	10.6
20 to 24 years	758	522	58	179	23.6	126	96	31	24.3
25 years and over	3,486	2,926	261	299	8.6	566	523	42	7.4
25 to 54 years	3,059	2,566	211	282	9.2	390	349	40	10.3
55 years and over	426	359	50	17	4.0	176	173	3	1.7

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

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

[Numbers in thousands]

Family relationship	October 1977									
	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	98,451	62.6	92,230	6,221	6.3	58,750	33,373	9,213	2,659	13,506
Husbands ¹	40,579	82.1	39,408	1,171	2.9	8,843	116	205	1,105	7,417
With employed wife	19,620	92.0	19,139	481	2.5	1,694	39	111	374	1,171
With unemployed wife	1,273	93.3	1,163	110	8.6	91	--	7	31	54
With wife not in labor force	18,273	73.5	17,761	512	2.8	6,589	50	60	643	5,835
Wives	22,679	47.7	21,315	1,364	6.0	24,862	23,026	331	227	1,279
With employed husband	20,302	53.3	19,139	1,163	5.7	17,762	16,687	289	88	698
With unemployed husband	592	53.6	481	110	18.6	512	457	22	2	30
With husband not in labor force	1,785	21.3	1,694	91	5.1	6,589	5,882	20	137	551
Relatives in husband-wife families	13,456	59.1	11,738	1,718	12.8	9,321	1,398	6,365	372	1,187
16-19 years	6,453	54.6	5,498	956	14.8	5,367	145	4,943	7	273
20-24 years	4,494	72.5	3,978	517	11.5	1,706	168	1,324	44	171
25 years and over	2,509	52.8	2,262	245	9.8	2,248	1,085	98	321	743
Women who head families	4,582	57.3	4,147	435	9.5	3,418	2,817	147	120	334
Relatives in female-headed families	3,909	55.1	3,224	685	17.5	3,182	822	1,429	278	653
16-19 years	1,225	47.3	904	321	26.2	1,366	108	1,122	7	130
20-24 years	1,113	71.8	903	210	18.9	438	83	266	16	72
25 years and over	1,571	53.3	1,417	154	9.8	1,378	631	41	255	451
Persons not living in families ²	13,246	43.6	12,398	848	6.4	9,124	5,194	736	557	2,636

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	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
Total, 16 years and over	3,491	3,040	6.2	5.3	3,341	3,181	8.6	7.8
Married, spouse present	1,389	1,176	3.5	2.9	1,631	1,445	7.2	6.2
Widowed, divorced, or separated	349	295	8.8	6.8	621	581	8.7	7.8
Single (never married)	1,753	1,568	13.8	11.7	1,089	1,155	11.7	11.4
White, 16 years and over	2,818	2,317	5.6	4.5	2,668	2,457	7.8	6.9
Married, spouse present	1,189	949	3.3	2.6	1,415	1,206	7.0	5.8
Widowed, divorced, or separated	263	213	8.3	6.0	443	446	7.7	7.4
Single (never married)	1,366	1,155	12.3	9.9	810	805	10.1	9.3
Black and other, 16 years and over	674	722	11.5	12.0	673	724	13.3	13.5
Married, spouse present	200	227	5.8	6.6	216	239	9.2	9.8
Widowed, divorced, or separated	86	83	11.0	10.3	178	135	12.7	9.3
Single (never married)	387	413	24.0	23.6	279	350	21.3	23.7
Total, 20 to 64 years of age	2,563	2,207	5.1	4.3	2,565	2,387	7.6	6.7
Married, spouse present	1,296	1,082	3.4	2.8	1,514	1,335	6.9	6.0
Widowed, divorced, or separated	327	280	8.8	6.8	564	525	8.8	7.7
Single (never married)	939	845	11.4	9.7	490	527	8.5	8.4
White, 20 to 64 years of age	2,080	1,677	4.6	3.7	2,039	1,839	6.9	6.0
Married, spouse present	1,108	871	3.2	2.5	1,311	1,123	6.7	5.6
Widowed, divorced, or separated	245	203	8.2	6.1	392	393	7.6	7.2
Single (never married)	727	604	10.3	8.1	336	323	7.0	6.2
Black and other, 20 to 64 years of age	483	530	9.2	9.9	527	548	11.6	11.4
Married, spouse present	188	211	5.6	6.3	202	210	8.9	8.9
Widowed, divorced, or separated	82	78	11.2	10.2	171	132	13.1	9.7
Single (never married)	211	240	18.3	19.1	154	204	15.9	18.6

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

Occupation	Thousands of persons		Unemployment rates					
			Total		Males		Females	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
Total	6,833	6,221	7.2	6.3	6.2	5.3	8.6	7.8
White-collar workers	2,096	1,983	4.5	4.1	3.0	2.7	5.9	5.4
Professional and technical	416	407	3.0	2.8	2.6	2.1	3.4	3.6
Managers and administrators, except farm	282	255	2.9	2.5	2.2	2.0	5.5	4.1
Sales workers	297	280	5.0	4.7	3.7	4.1	6.7	5.4
Clerical workers	1,102	1,041	6.6	6.0	5.1	4.4	7.0	6.4
Blue-collar workers	2,576	2,243	8.1	6.8	7.3	6.1	11.4	10.0
Craft and kindred workers	656	542	5.4	4.3	5.3	4.2	7.3	6.8
Carpenters and other construction craft	304	254	8.1	6.6	8.2	6.3	--	(1)
All other	352	288	4.2	3.3	3.9	3.2	7.6	5.4
Operatives, except transport	1,092	976	9.7	8.5	8.1	7.3	12.1	10.4
Transport equipment operatives	230	184	6.4	5.0	6.4	5.1	6.7	4.1
Nonfarm laborers	598	540	12.0	10.5	12.0	10.1	11.8	14.2
Construction laborers	177	131	19.1	13.0	19.1	11.8	(1)	(1)
All other	421	409	10.4	9.9	10.3	9.7	11.5	11.8
Service workers	1,194	1,080	9.0	8.0	8.1	7.2	9.6	8.4
Private household	74	55	5.9	4.4	(1)	(1)	6.0	4.3
All other	1,120	1,025	9.4	8.3	8.2	7.2	10.2	9.1
Farm workers	103	103	3.4	3.5	2.9	3.0	5.6	5.3
No previous work experience	863	813	--	--	--	--	--	--
16 to 19 years	623	598	--	--	--	--	--	--
20 to 24 years	157	133	--	--	--	--	--	--
25 years and over	83	82	--	--	--	--	--	--

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

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

Industry	Percent distribution		Unemployment rates					
			Total		Males		Females	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
Total	100.0	100.0	7.2	6.3	6.2	5.3	8.6	7.8
Nonagricultural private wage and salary workers	73.2	72.1	7.2	6.3	6.3	5.3	8.6	7.7
Mining	.6	.3	4.4	2.1	4.6	1.3	2.1	9.5
Construction	7.3	6.5	11.2	9.0	11.5	8.5	6.6	16.0
Manufacturing	21.8	20.9	7.0	6.0	5.6	4.5	10.2	9.2
Durable goods	12.6	10.9	6.8	5.3	5.7	4.3	10.1	8.3
Lumber and wood products	.7	.8	6.8	6.6	5.3	7.1	18.3	(1)
Furniture and fixtures	.9	.8	11.0	10.0	11.5	8.5	10.1	13.8
Stone, clay, and glass products	.7	.8	6.2	7.2	6.5	5.8	4.9	12.2
Primary metal industries	1.3	1.1	6.8	5.5	5.5	4.8	17.4	10.7
Fabricated metal products	1.8	1.4	8.0	5.6	7.0	5.0	11.6	7.5
Machinery, except electrical equipment	1.5	1.5	4.4	3.8	4.3	3.2	4.4	6.4
Electrical equipment	2.2	1.7	6.8	4.9	4.3	2.6	10.4	7.8
Transportation equipment	1.9	1.5	6.1	4.2	5.5	3.6	10.2	7.5
Automobiles	.8	.4	4.8	2.0	4.7	1.9	5.7	3.0
Other transportation equipment	1.1	1.1	7.7	7.2	6.4	6.0	14.7	13.6
Instruments and related products	.4	.4	4.5	5.4	4.6	5.0	4.3	5.9
Other durable goods industries	1.2	.8	12.3	7.4	9.3	4.2	16.4	11.7
Nondurable goods	9.2	1.0	7.3	6.9	5.3	4.8	10.2	10.0
Food and kindred products	2.4	3.1	8.8	9.6	7.2	7.2	13.3	15.1
Textile mill products	.9	1.3	7.2	8.2	3.8	8.2	10.7	8.3
Apparel and other textile products	2.0	2.0	9.8	9.0	5.1	8.0	11.0	9.2
Paper and allied products	.6	.4	6.2	3.5	4.3	3.0	13.1	5.1
Printing and publishing	.9	.9	4.8	4.5	4.0	2.4	5.9	7.8
Chemicals and allied products	.8	.8	4.7	4.4	4.1	2.5	6.2	9.7
Rubber and plastics products	1.0	.9	10.2	6.9	7.5	3.8	15.4	12.7
Other nondurable goods industries	.5	.6	5.7	6.1	4.4	4.5	7.8	8.9
Transportation and public utilities	3.4	3.6	4.8	4.3	4.7	4.0	5.3	5.3
Railroads and railway express	.3	.3	3.1	2.9	3.2	2.7	(1)	(1)
Other transportation	2.5	2.4	7.3	6.1	7.5	6.0	6.5	6.8
Communication and other public utilities	.7	.9	2.4	2.6	1.2	1.7	4.8	4.4
Wholesale and retail trade	21.2	21.7	8.2	7.4	6.5	6.1	10.1	9.0
Finance, insurance, and real estate	2.9	2.7	4.4	3.5	3.0	2.6	5.5	4.2
Service industries	16.1	16.5	7.2	6.4	6.4	4.2	7.7	6.8
Professional services	6.9	7.2	5.5	5.0	3.8	3.7	6.3	5.6
All other service industries	9.2	9.3	9.3	8.3	8.7	7.7	9.9	8.8
Agricultural wage and salary workers	2.1	2.2	9.3	8.4	8.4	7.7	12.4	11.1
All other classes of workers	12.1	12.6	3.9	3.2	2.6	2.7	4.7	3.8
No previous work experience	12.6	13.1	--	--	--	--	--	--

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

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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	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
UNEMPLOYMENT LEVEL												
Total unemployed, in thousands	6,833	6,221	2,649	2,300	2,615	2,440	1,569	1,480	5,486	4,774	1,347	1,447
Job losers	3,015	2,521	1,723	1,384	974	896	318	241	2,424	1,966	591	556
On layoff	706	604	389	335	246	217	71	53	604	502	102	102
Other job losers	2,309	1,917	1,334	1,049	728	679	246	189	1,820	1,463	489	454
Job leavers	1,005	952	335	339	509	435	160	177	878	786	127	166
Reentrants	1,952	1,940	490	498	995	973	467	469	1,551	1,454	401	486
New entrants	861	807	101	78	137	136	623	592	634	568	227	239
Total unemployed, percent distribution	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	44.1	40.5	65.1	60.2	37.2	36.7	20.2	16.4	44.2	41.2	43.9	38.4
On layoff	10.3	9.7	14.7	14.6	9.4	8.9	4.5	3.6	11.0	10.5	7.6	7.0
Other job losers	33.8	30.8	50.4	45.6	27.8	27.8	15.7	12.8	33.2	30.7	36.3	31.4
Job leavers	14.7	15.3	12.6	14.8	19.5	17.8	10.2	12.0	16.0	16.5	9.4	11.5
Reentrants	28.6	31.2	18.5	21.7	38.0	39.9	29.8	31.7	28.3	30.5	29.8	33.6
New entrants	12.6	13.0	3.8	3.4	5.2	5.6	39.7	40.0	11.6	11.9	16.9	16.5
UNEMPLOYMENT RATE												
Total unemployment rate	7.2	6.3	5.1	4.3	7.5	6.7	18.2	16.5	6.5	5.5	12.3	12.7
Job loser rate ¹	3.1	2.5	3.3	2.6	2.8	2.5	3.7	2.7	2.9	2.3	5.4	4.9
Job leaver rate ¹	1.1	1.0	.6	.6	1.5	1.2	1.9	2.0	1.0	.9	1.2	1.5
Reentrant rate ¹	2.0	2.0	.9	.9	2.8	2.7	5.4	5.2	1.8	1.7	3.7	4.3
New entrant rate ¹	.9	.8	.2	.1	.4	.4	7.2	6.6	.7	.7	2.1	2.1

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	October 1977						
	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	6,221	100.0	44.0	31.1	24.9	11.7	13.2
Job losers	2,521	100.0	36.2	29.9	33.9	14.5	19.4
On layoff	604	100.0	48.7	27.0	24.3	13.2	11.1
Other job losers	1,917	100.0	32.2	30.8	37.0	14.9	22.1
Job leavers	952	100.0	45.2	34.3	20.5	9.8	10.7
Reentrants	1,940	100.0	53.4	31.3	15.3	7.8	7.5
New entrants	807	100.0	44.5	30.7	24.8	14.6	10.2
Males, 20 years and over	2,300	100.0	37.1	30.7	32.3	13.0	19.3
Job losers	1,384	100.0	34.2	30.1	35.8	14.1	21.7
On layoff	335	100.0	47.8	30.7	21.5	9.0	12.5
Other job losers	1,049	100.0	29.8	29.9	40.3	15.7	24.6
Job leavers	339	100.0	42.2	31.3	26.5	11.2	15.3
Reentrants	498	100.0	42.0	33.3	24.7	11.0	13.7
New entrants	78	100.0	37.2	23.1	39.7	11.5	28.2
Females, 20 years and over	2,440	100.0	45.7	29.9	24.4	11.4	13.0
Job losers	896	100.0	32.3	30.4	37.4	17.5	19.9
On layoff	217	100.0	43.3	26.3	30.4	22.1	8.3
Other job losers	679	100.0	28.7	31.7	39.7	16.1	23.6
Job leavers	435	100.0	42.8	36.6	20.7	10.1	10.6
Reentrants	973	100.0	59.3	27.6	13.1	6.2	6.9
New entrants	136	100.0	45.9	21.5	32.6	12.6	20.0
Both sexes, 16 to 19 years	1,480	100.0	51.9	33.8	14.3	10.4	3.9
Job losers	241	100.0	62.0	26.9	11.2	6.2	5.0
On layoff	53	100.0	(1)	(1)	(1)	(1)	(1)
Other job losers	189	100.0	57.9	32.6	9.5	6.3	3.2
Job leavers	177	100.0	57.6	34.5	7.9	5.6	2.3
Reentrants	469	100.0	53.2	37.0	9.8	7.9	1.9
New entrants	592	100.0	45.3	33.7	21.0	15.4	5.6

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

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

Sex, age, and race	October 1977								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	6,221	5,500	27.2	6.6	72.8	30.3	13.6	6.3	1.57
16 to 19 years	1,480	1,391	17.8	3.4	77.6	22.6	13.3	7.2	1.42
20 to 24 years	1,389	1,239	32.1	7.2	77.6	30.8	11.3	5.9	1.65
25 to 34 years	1,516	1,310	32.1	7.8	74.1	33.1	13.9	5.2	1.66
35 to 44 years	717	609	27.6	7.7	64.7	33.3	12.2	4.9	1.50
45 to 54 years	563	479	29.4	9.6	63.5	40.7	16.3	8.4	1.68
55 to 64 years	409	333	29.7	6.9	59.5	30.6	18.0	8.7	1.53
65 years and over	147	139	15.1	5.8	66.9	28.1	20.9	5.8	1.43
Males, 16 years and over	3,040	2,624	30.0	7.0	72.6	28.9	15.2	7.8	1.62
16 to 19 years	739	693	17.9	2.7	76.8	22.7	13.0	7.8	1.41
20 to 24 years	666	581	37.0	7.9	79.0	29.8	13.6	5.9	1.73
25 to 34 years	744	619	36.2	9.0	74.8	31.0	16.8	7.4	1.75
35 to 44 years	304	246	32.5	7.3	63.0	36.2	13.4	8.5	1.61
45 to 54 years	261	219	35.2	13.2	58.0	35.6	17.4	12.3	1.72
55 to 64 years	233	179	29.1	6.7	61.5	26.8	21.8	10.1	1.56
65 years and over	93	87	18.4	5.7	66.7	24.1	17.2	5.7	1.38
Females, 16 years and over	3,181	2,876	24.6	6.2	72.9	31.6	12.1	5.0	1.52
16 to 19 years	741	698	17.8	4.0	78.5	22.3	13.8	6.4	1.43
20 to 24 years	723	658	27.8	6.5	76.4	31.6	9.3	5.9	1.58
25 to 34 years	772	691	28.5	6.7	73.5	34.9	11.3	3.2	1.58
35 to 44 years	413	363	24.2	8.0	65.8	31.4	11.0	2.5	1.43
45 to 54 years	302	260	25.0	6.3	68.1	45.0	15.4	5.0	1.65
55 to 64 years	176	153	30.7	7.2	57.5	35.9	13.1	7.8	1.52
65 years and over	53	52	(1)	(1)	(1)	(1)	(1)	(1)	(1)
White	4,774	4,161	24.7	6.3	73.6	32.0	12.9	6.6	1.56
Males	2,317	1,983	27.3	7.1	73.1	30.2	14.4	8.1	1.60
Females	2,457	2,179	22.2	5.6	74.1	33.6	11.6	5.3	1.52
Black and other	1,447	1,339	35.0	7.3	70.1	25.2	15.7	5.4	1.59
Males	722	641	38.2	6.9	70.8	25.0	17.8	7.0	1.66
Females	724	697	32.1	7.7	69.3	25.3	13.8	3.9	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	October 1977								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	6,221	5,500	27.2	6.6	72.8	30.3	13.6	6.3	1.57
Job losers	2,521	1,896	37.3	7.6	71.0	33.8	15.4	6.0	1.71
Job leavers	952	940	27.1	7.9	77.3	31.8	11.5	3.1	1.59
Reentrants	1,940	1,869	20.8	5.6	69.6	29.5	12.2	8.6	1.46
New entrants	807	795	18.1	5.0	79.1	22.3	15.0	5.8	1.45
Males, 16 years and over	3,040	2,624	30.0	7.0	72.6	28.9	15.2	7.8	1.62
Job losers	1,537	1,166	38.5	8.1	69.3	32.2	16.0	7.1	1.71
Job leavers	427	423	27.7	8.7	80.4	33.8	12.1	3.5	1.66
Reentrants	737	703	22.5	4.8	70.8	23.3	13.8	12.8	1.48
New entrants	338	332	19.3	6.0	77.7	22.9	19.3	5.1	1.50
Females, 16 years and over	3,181	2,876	24.6	6.2	72.9	31.6	12.1	5.0	1.52
Job losers	984	730	35.5	6.8	73.7	36.4	14.5	4.1	1.71
Job leavers	525	516	26.7	7.2	75.0	30.2	11.0	2.7	1.53
Reentrants	1,203	1,168	19.7	6.1	68.6	33.0	11.3	6.0	1.45
New entrants	469	463	17.3	4.3	80.3	21.8	11.9	6.5	1.42

NOTE: See note, table A-15.

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A-17. Unemployed persons by duration of unemployment

Duration of unemployment	Total				Household heads			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
Total	6,833	6,221	100.0	100.0	2,484	2,161	100.0	100.0
Less than 5 weeks	2,796	2,737	40.9	44.0	839	872	33.8	40.4
5 to 14 weeks	2,075	1,936	30.4	31.1	731	614	29.4	28.4
5 to 10 weeks	1,560	1,433	22.8	23.0	528	455	21.3	21.1
11 to 14 weeks	515	503	7.5	8.1	203	159	8.2	7.4
15 weeks and over	1,962	1,547	28.7	24.9	915	676	36.8	31.3
15 to 26 weeks	866	729	12.7	11.7	378	291	15.2	13.5
27 weeks and over	1,096	818	16.0	13.1	537	385	21.6	17.8
27 to 51 weeks	565	427	8.3	6.9	289	199	11.6	9.2
52 weeks and over	531	390	7.8	6.3	247	186	9.9	8.6
Average (mean) duration	14.7	13.3	--	--	17.9	16.1	--	--

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	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		Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
	October 1977									
Total, 16 years and over	6,221	2,737	1,936	729	818	13.3	40.9	44.0	28.7	24.9
16 to 21 years	2,123	1,056	730	212	125	9.1	49.8	49.8	18.5	15.9
16 to 19 years	1,480	769	501	154	57	7.8	50.8	51.9	17.1	14.3
20 to 24 years	1,389	620	462	133	174	12.4	44.9	44.7	24.9	22.1
25 to 34 years	1,516	642	468	181	226	14.2	39.4	42.3	29.3	26.8
35 to 44 years	717	326	201	85	104	14.1	33.4	45.5	33.0	26.4
45 to 54 years	563	192	173	79	120	17.6	31.9	34.0	43.5	35.3
55 to 64 years	409	136	106	74	93	20.9	28.9	33.3	46.2	40.8
65 years and over	147	53	26	24	44	24.9	29.3	36.0	41.7	46.3
Males, 16 years and over	3,040	1,210	963	380	486	15.2	37.4	39.8	33.3	28.5
16 to 21 years	1,062	486	382	109	85	10.4	46.9	45.8	20.6	18.3
16 to 19 years	739	356	257	82	44	9.0	49.0	48.2	17.8	17.0
20 to 24 years	666	266	243	61	97	13.7	39.3	39.9	31.1	23.6
25 to 34 years	744	249	238	113	144	17.3	33.8	33.4	34.4	34.5
35 to 44 years	304	122	83	38	61	17.0	26.3	40.3	40.6	32.4
45 to 54 years	261	102	70	31	58	18.7	31.3	39.1	49.9	34.1
55 to 64 years	233	81	54	39	59	22.8	30.4	34.6	51.6	42.1
65 years and over	93	34	17	16	25	24.2	30.1	36.8	44.4	44.6
Females, 16 years and over	3,181	1,527	973	350	331	11.4	44.6	48.0	23.9	21.4
16 to 21 years	1,061	570	348	103	40	7.8	53.1	53.8	15.9	13.5
16 to 19 years	741	412	244	72	14	6.7	52.8	55.6	16.2	11.5
20 to 24 years	723	355	219	72	77	11.3	50.8	49.1	18.4	20.7
25 to 34 years	772	393	229	68	82	11.3	44.6	50.9	24.6	19.4
35 to 44 years	413	204	119	47	44	11.9	39.5	49.3	26.4	22.0
45 to 54 years	302	90	103	48	62	16.6	32.6	29.7	36.8	36.3
55 to 64 years	176	56	51	35	34	18.3	27.2	31.6	39.6	39.2
65 years and over	53	19	9	7	19	26.2	(1)	(1)	(1)	(1)
White	4,774	2,156	1,440	560	617	13.0	41.8	45.2	28.7	24.7
Males	2,317	982	698	273	363	14.7	38.1	42.4	33.3	27.5
Females	2,457	1,174	742	287	253	11.4	45.8	47.8	23.9	22.0
Black and other	1,447	581	496	169	201	14.2	37.3	40.2	28.6	25.5
Males	722	228	265	106	123	16.8	34.5	31.5	33.2	31.8
Females	724	353	231	63	78	11.6	40.1	48.8	23.9	19.4
Males:										
Married, spouse present	1,176	456	336	166	217	16.4	31.9	38.8	39.8	32.6
Widowed, divorced, or separated	295	101	90	45	59	17.5	30.0	34.3	36.4	35.2
Single (never married)	1,568	652	537	168	210	13.9	43.2	41.6	27.6	24.1
Females:										
Married, spouse present	1,445	710	442	141	153	11.0	43.8	49.1	25.7	20.3
Widowed, divorced, or separated	581	249	168	77	87	14.9	40.1	42.9	28.2	28.2
Single (never married)	1,155	568	363	132	91	10.2	48.5	49.2	18.7	19.3

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

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

Occupation and industry	Thousands of persons					Average (mean) 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		Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
	October 1977									
OCCUPATION										
White-collar workers	1,983	840	611	246	286	14.0	37.4	42.4	32.2	26.8
Professional and managerial	662	250	194	98	118	16.0	33.5	37.8	38.0	32.6
Sales workers	280	123	76	28	53	16.3	39.6	44.1	34.0	28.7
Clerical workers	1,041	466	340	121	115	12.1	39.3	44.7	28.0	22.6
Blue-collar workers	2,243	967	681	269	326	13.8	39.4	43.1	31.2	26.5
Craft and kindred workers	542	226	141	83	93	14.3	35.1	41.6	37.0	32.5
Operatives, except transport	976	443	289	108	136	13.9	41.5	45.4	29.3	25.1
Transport equipment operatives	184	74	54	26	30	14.2	43.5	40.1	29.5	30.3
Nonfarm laborers	540	224	197	52	67	13.1	38.8	41.6	29.0	21.9
Service workers	1,080	510	361	91	118	11.5	46.0	47.3	23.3	19.4
INDUSTRY¹										
Agriculture	135	75	44	9	6	7.6	48.3	56.0	19.4	11.7
Construction	426	178	139	46	62	13.6	40.8	41.8	28.2	25.5
Manufacturing	1,306	553	370	181	202	15.0	38.6	42.3	34.2	29.3
Durable goods	681	263	209	90	120	15.9	34.3	38.6	38.4	30.8
Non-durable goods	624	290	161	91	82	13.9	44.6	46.4	28.5	27.7
Transportation and public utilities	263	111	75	24	53	15.5	35.5	42.3	38.3	29.1
Wholesale and retail trade	1,354	633	412	136	173	12.8	42.6	46.7	26.9	22.8
Finance and service industries	1,546	667	509	170	200	12.4	40.6	43.1	27.1	23.9
Public administration	235	74	102	34	25	12.6	24.9	31.6	36.5	25.0
No previous work experience	813	365	248	118	82	12.9	45.7	44.9	21.9	24.6

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	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
All industries	88,697	92,230	52,971	54,685	35,726	37,545
16 to 19 years	7,052	7,511	3,756	4,076	3,296	3,436
16 to 17 years	2,777	3,070	1,518	1,693	1,260	1,377
18 to 19 years	4,275	4,442	2,238	2,383	2,037	2,059
20 to 24 years	12,389	13,072	6,803	7,132	5,586	5,939
25 to 54 years	55,538	57,595	33,846	34,716	21,691	22,878
25 to 34 years	22,433	23,716	13,801	14,311	8,631	9,405
35 to 44 years	16,634	17,386	10,066	10,459	6,568	6,926
45 to 54 years	16,471	16,493	9,979	9,946	6,492	6,547
55 to 64 years	10,932	11,156	6,803	6,904	4,129	4,252
55 to 59 years	6,735	6,919	4,148	4,242	2,587	2,677
60 to 64 years	4,197	4,237	2,655	2,661	1,542	1,576
65 years and over	2,787	2,897	1,763	1,857	1,024	1,040
Nonagricultural industries	85,250	88,822	50,214	51,960	35,037	36,862
16 to 19 years	6,660	7,147	3,422	3,778	3,238	3,369
16 to 17 years	2,578	2,869	1,348	1,533	1,230	1,336
18 to 19 years	4,082	4,279	2,074	2,245	2,008	2,034
20 to 24 years	12,008	12,651	6,500	6,770	5,508	5,881
25 to 54 years	53,775	55,885	32,504	33,424	21,271	22,460
25 to 34 years	21,842	23,145	13,340	13,873	8,502	9,271
35 to 44 years	16,109	16,872	9,676	10,073	6,433	6,799
45 to 54 years	15,824	15,868	9,488	9,478	6,336	6,390
55 to 64 years	10,371	10,605	6,340	6,453	4,032	4,152
55 to 59 years	6,421	6,592	3,895	3,973	2,527	2,620
60 to 64 years	3,950	4,012	2,445	2,480	1,505	1,532
65 years and over	2,436	2,535	1,447	1,535	989	1,000
Agriculture	3,447	3,408	2,757	2,725	690	683
16 to 19 years	392	364	334	298	59	66
16 to 17 years	199	201	169	160	30	41
18 to 19 years	193	163	164	137	29	26
20 to 24 years	381	421	303	363	78	59
25 to 54 years	1,763	1,710	1,341	1,292	421	417
25 to 34 years	591	571	461	438	130	133
35 to 44 years	525	514	389	386	135	127
45 to 54 years	647	625	491	468	156	157
55 to 64 years	560	551	463	451	97	101
55 to 59 years	313	327	253	270	60	57
60 to 64 years	247	224	210	181	37	43
65 years and over	351	362	316	322	35	40

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A-21. Employed persons by occupation, sex, and age

(In thousands)

Occupation	Total		Males, 20 years and over		Females, 20 years and over		Males, 16-19 years		Females, 16-19 years	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
	TOTAL	88,697	92,230	49,215	50,610	32,430	34,109	3,756	4,076	3,296	3,436
White-collar workers	44,387	46,332	21,291	21,946	20,871	22,032	611	658	1,614	1,696
Professional and technical	13,612	14,251	7,734	8,069	5,736	6,031	65	70	76	81
Health workers	2,343	2,534	809	876	1,519	1,649	3	3	13	8
Teachers, except college	3,224	3,196	898	905	2,302	2,278	3	5	21	8
Other professional and technical	8,045	8,521	6,027	6,288	1,915	2,104	59	62	42	65
Managers and administrators, except farm	9,463	9,981	7,507	7,715	1,892	2,168	37	58	27	39
Salaried workers	7,757	8,036	6,160	6,218	1,536	1,726	34	56	27	36
Self-employed workers in retail trade	905	957	656	662	247	291	2	2	--	3
Self-employed workers, except retail trade	801	988	690	836	110	152	1	--	--	--
Sales workers	5,592	5,727	2,867	2,966	2,073	2,163	252	247	400	352
Retail trade	3,096	3,093	960	953	1,576	1,604	189	202	371	334
Other industries	2,496	2,634	1,907	2,013	497	558	63	45	29	19
Clerical workers	15,721	16,373	3,183	3,196	11,170	11,670	257	284	1,111	1,223
Stenographers, typists, and secretaries	4,408	4,686	86	75	3,951	4,241	10	7	361	363
Other clerical workers	11,313	11,687	3,097	3,121	7,219	7,429	247	277	750	860
Blue-collar workers	29,354	30,536	22,144	22,827	4,779	4,987	2,030	2,260	401	462
Craft and kindred workers	11,486	11,969	10,582	10,932	473	564	393	430	38	44
Carpenters	1,077	1,214	999	1,113	8	7	67	92	4	2
Construction craft, except carpenters	2,393	2,390	2,280	2,278	23	18	92	96	--	--
Mechanics and repairers	3,031	3,243	2,860	3,072	28	52	143	119	--	2
Metal craft	1,200	1,256	1,154	1,200	20	25	24	29	2	1
Blue-collar worker supervisors, not elsewhere classified	1,477	1,549	1,357	1,382	109	155	9	10	3	2
All other	2,307	2,318	1,931	1,887	285	307	59	84	31	39
Operatives, except transport	10,131	10,459	5,567	5,646	3,734	3,849	582	653	248	311
Durable goods manufacturing	4,533	4,801	2,899	3,011	1,381	1,453	178	239	74	99
Nondurable goods manufacturing	3,245	3,328	1,239	1,205	1,776	1,841	115	127	115	155
Other industries	2,353	2,330	1,429	1,430	577	555	289	287	59	57
Transport equipment operatives	3,362	3,499	2,938	3,056	235	257	178	175	11	11
Drivers, motor vehicles	2,843	2,933	2,464	2,553	219	234	149	136	10	10
All other	519	566	474	503	15	22	29	39	1	1
Nonfarm laborers	4,376	4,609	3,057	3,193	337	318	878	1,002	104	96
Construction	751	873	590	693	11	10	144	172	7	--
Manufacturing	1,055	1,066	830	814	120	109	100	132	4	12
Other industries	2,570	2,669	1,637	1,687	206	199	634	697	93	86
Service workers	12,031	12,485	3,689	3,749	6,284	6,607	823	900	1,235	1,228
Private household workers	1,177	1,191	13	23	890	946	9	21	265	200
Service workers, except private household	10,854	11,294	3,676	3,726	5,394	5,661	814	879	970	1,028
Food service workers	3,975	4,179	730	735	2,066	2,151	509	570	670	723
Protective service workers	1,257	1,291	1,144	1,174	82	101	25	11	7	5
All other	5,622	5,824	1,802	1,817	3,246	3,409	280	298	293	300
Farm workers	2,925	2,878	2,091	2,087	496	483	291	257	47	50
Farmers and farm managers	1,550	1,493	1,433	1,373	102	112	14	9	1	--
Farm laborers and supervisors	1,375	1,385	658	714	394	371	277	248	46	51
Paid workers	1,015	1,074	630	683	158	161	194	192	33	37
Unpaid family workers	360	311	28	31	236	210	83	56	13	14

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

[Percent distribution]

Occupation and race	Total		Males		Females	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
TOTAL						
Total employed (thousands)	88,697	92,230	52,971	54,685	35,726	37,545
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	50.0	50.2	41.3	41.3	62.9	63.2
Professional and technical	15.3	15.5	14.7	14.9	16.3	16.3
Managers and administrators, except farm	10.7	10.8	14.2	14.2	5.4	5.9
Sales workers	6.3	6.2	5.9	5.9	6.9	6.7
Clerical workers	17.7	17.8	6.5	6.4	34.4	34.3
Blue-collar workers	33.1	33.1	45.6	45.9	14.5	14.5
Craft and kindred workers	12.9	13.0	20.7	20.8	1.4	1.6
Operatives, except transport	11.4	11.3	11.6	11.5	11.1	11.1
Transport equipment operatives	3.8	3.8	5.9	5.9	.7	.7
Nonfarm laborers	4.9	5.0	7.4	7.7	1.2	1.1
Service workers	13.6	13.5	8.5	8.5	21.0	20.9
Private household workers	1.3	1.3	(1)	(1)	3.2	2.1
Other service workers	12.2	12.2	8.5	8.4	17.8	17.8
Farm workers	3.3	3.1	4.5	4.3	1.5	1.4
Farmers and farm managers	1.7	1.6	2.7	2.5	.3	.3
Farm laborers and supervisors	1.6	1.5	1.8	1.8	1.2	1.1
White						
Total employed (thousands)	79,133	82,307	47,781	49,400	31,352	32,907
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	51.8	52.0	42.9	42.8	65.4	65.8
Professional and technical	15.7	15.8	15.2	15.4	16.5	16.5
Managers and administrators, except farm	11.4	11.6	15.1	15.1	5.8	6.3
Sales workers	6.8	6.6	6.2	6.2	7.6	7.3
Clerical workers	17.9	17.9	6.4	6.2	35.6	35.6
Blue-collar workers	32.5	32.7	44.7	45.1	14.0	14.0
Craft and kindred workers	13.5	13.4	21.3	21.3	1.5	1.7
Operatives, except transport	10.9	10.9	11.1	11.2	10.5	10.5
Transport equipment operatives	3.6	3.6	5.6	5.6	.7	.8
Nonfarm laborers	4.5	4.7	6.7	7.0	1.2	1.1
Service workers	12.3	12.1	7.8	7.6	19.1	18.7
Private household workers	1.0	.9	(1)	(1)	2.4	2.2
Other service workers	11.3	11.2	7.8	7.6	16.7	16.5
Farm workers	3.4	3.2	4.6	4.4	1.6	1.4
Farmers and farm managers	1.9	1.8	2.9	2.7	.3	.3
Farm laborers and supervisors	1.5	1.4	1.7	1.7	1.3	1.1
Black and other						
Total employed (thousands)	9,564	9,923	5,190	5,286	4,375	4,638
Percent	100.0	100.0	100.0	100.0	100.0	100.0
White-collar workers	35.4	35.4	26.9	27.3	45.4	44.6
Professional and technical	12.3	12.2	10.3	10.3	14.6	14.4
Managers and administrators, except farm	4.6	4.5	6.2	6.0	2.6	2.7
Sales workers	2.5	2.6	2.7	2.8	2.2	2.3
Clerical workers	16.0	16.2	7.7	8.2	25.9	25.3
Blue-collar workers	37.8	36.7	54.3	53.1	18.2	17.9
Craft and kindred workers	8.5	9.1	15.0	15.8	.7	1.4
Operatives, except transport	16.1	14.7	16.2	14.5	16.0	15.0
Transport equipment operatives	5.0	5.1	8.9	9.2	.4	.3
Nonfarm laborers	8.2	7.8	14.2	13.7	1.2	1.2
Service workers	24.4	25.7	15.2	16.5	35.3	36.2
Private household workers	4.4	4.4	.1	.3	9.5	9.1
Other service workers	20.0	21.3	15.1	16.2	25.8	27.1
Farm workers	2.4	2.2	3.6	3.0	1.1	1.3
Farmers and farm managers4	.3	.8	.5	(1)	(1)
Farm laborers and supervisors	2.0	2.0	2.8	2.6	1.1	1.3

¹ Less than 0.05 percent.

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

[In thousands]

Age and sex	October 1977								
	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	82,309	1,397	15,556	65,356	6,069	444	1,465	1,609	334
16 to 19 years	7,044	289	437	6,317	83	21	279	15	70
16 to 17 years	2,829	226	122	2,480	27	13	143	8	50
18 to 19 years	4,214	62	315	3,837	56	8	137	7	20
20 to 24 years	12,347	102	1,652	10,593	282	22	303	108	10
25 to 34 years	21,726	148	4,501	17,077	1,336	83	285	233	52
35 to 44 years	15,329	174	3,309	11,846	1,411	132	183	277	54
45 to 54 years	14,339	240	3,312	10,786	1,409	120	203	357	65
55 to 64 years	9,575	255	2,030	7,289	980	50	137	364	51
55 to 59 years	5,981	143	1,343	4,495	578	34	73	226	28
60 to 64 years	3,594	113	687	2,794	402	16	64	138	23
65 years and over	1,950	189	314	1,447	569	16	75	256	31
Males, 16 years and over	47,604	198	7,839	39,568	4,319	37	1,171	1,467	87
16 to 19 years	3,706	81	207	3,419	56	16	227	14	56
16 to 17 years	1,501	70	58	1,373	20	12	112	8	40
18 to 19 years	2,205	11	148	2,045	36	4	115	6	16
20 to 24 years	6,581	23	662	5,895	181	8	252	107	3
25 to 34 years	12,958	20	2,276	10,662	912	3	214	211	12
35 to 44 years	9,074	12	1,660	7,402	999	--	145	241	--
45 to 54 years	8,427	12	1,738	6,677	1,049	2	152	314	2
55 to 64 years	5,730	19	1,112	4,599	719	4	114	333	4
55 to 59 years	3,537	10	704	2,823	434	2	62	208	--
60 to 64 years	2,193	9	408	1,776	285	2	52	125	4
65 years and over	1,128	31	183	915	403	4	66	246	10
Females, 16 years and over	34,705	1,200	7,717	25,788	1,750	407	294	142	246
16 to 19 years	3,338	208	231	2,899	27	5	52	1	13
16 to 17 years	1,328	157	64	1,107	7	1	31	--	10
18 to 19 years	2,009	51	167	1,791	20	4	21	1	3
20 to 24 years	5,766	79	989	4,698	100	14	50	1	7
25 to 34 years	8,768	128	2,225	6,415	423	80	71	22	40
35 to 44 years	6,255	161	1,649	4,445	412	132	38	36	54
45 to 54 years	5,912	228	1,574	4,109	360	118	51	43	63
55 to 64 years	3,845	236	918	2,691	261	46	23	30	47
55 to 59 years	2,444	133	639	1,672	144	31	11	18	28
60 to 64 years	1,401	104	279	1,018	117	15	12	13	19
65 years and over	822	158	131	532	166	12	9	10	21

A-24. Employed persons by industry and occupation

[In thousands]

Industry	October 1977											
	Total employed	White-collar workers				Blue-collar workers				Service workers		Farm workers
		Professional and technical workers	Managers and administrators, except farm	Sales workers	Clerical workers	Craft and kindred workers	Operatives, except transport	Transport equipment operatives	Nonfarm laborers	Private household workers	Other service workers	
Agriculture	3,408	75	38	14	72	42	20	45	221	--	3	2,878
Mining	864	105	85	--	78	269	240	61	13	--	13	--
Construction	5,598	187	622	21	347	3,105	226	178	873	--	38	--
Manufacturing	20,981	2,107	1,410	444	2,530	4,087	8,130	773	1,066	--	434	--
Durable goods	12,494	1,365	790	144	1,405	2,723	4,801	391	633	--	242	--
Nondurable goods	8,487	742	620	300	1,125	1,364	3,328	383	433	--	192	--
Transportation and public utilities	5,896	481	606	39	1,303	1,241	188	1,419	453	--	165	--
Wholesale and retail trade	18,934	370	3,743	3,930	3,290	1,440	921	763	1,196	--	3,280	--
Wholesale trade	3,661	114	798	837	760	322	141	382	275	--	31	--
Retail trade	15,273	256	2,945	3,093	2,529	1,118	780	380	922	--	3,249	--
Finance, insurance, and real estate	5,113	217	1,035	1,130	2,334	101	13	56	--	--	218	--
Services	26,502	9,799	1,815	146	4,582	1,400	679	202	585	1,191	6,104	--
Private households	1,416	12	--	--	9	4	4	7	142	1,191	48	--
Other service industries	25,086	9,787	1,815	146	4,573	1,396	675	195	443	--	6,056	--
Public administration	4,934	910	626	3	1,837	283	47	44	145	--	1,039	--

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			
					Paid absences ²		Unpaid absences ²	
	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977	Oct. 1976	Oct. 1977
Total	3,872	4,162	3,791	4,078	1,806	2,094	1,606	1,567
Vacation	1,594	1,799	1,571	1,786	1,173	1,331	287	327
Illness	1,315	1,452	1,287	1,411	503	590	660	680
Bad weather	32	29	19	21	--	--	--	--
Industrial dispute	212	156	212	156	--	--	--	--
All other reasons	719	726	701	704	130	173	659	560
Males	2,274	2,501	2,218	2,426	1,205	1,349	793	838
Vacation	969	1,122	953	1,110	782	868	101	157
Illness	762	873	740	836	326	375	345	372
All other reasons ³	543	506	525	480	97	106	347	309
Females	1,598	1,661	1,573	1,652	600	745	811	732
Vacation	625	677	618	675	390	463	186	170
Illness	554	579	548	575	177	215	315	309
All other reasons ³	419	405	407	402	33	67	311	253

¹Excludes private household.³Includes bad weather and industrial dispute, not shown separately.²Pay 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	October 1977					
	Thousands of persons			Percent distribution		
	All industries	Nonagricultural industries	Agriculture	All industries	Nonagricultural industries	Agriculture
Total at work	88,068	84,744	3,324	100.0	100.0	100.0
1-34 hours	23,784	22,814	970	27.0	26.9	29.2
1-4 hours	777	734	43	.9	.9	1.3
5-14 hours	4,263	4,059	204	4.8	4.8	6.1
15-29 hours	10,757	10,255	502	12.2	12.1	15.1
30-34 hours	7,987	7,766	221	9.1	9.2	6.6
35 hours and over	64,283	61,931	2,353	73.0	73.1	70.8
35-39 hours	5,441	5,293	147	6.2	6.2	4.4
40 hours	34,285	33,823	462	38.9	39.9	13.9
41 hours and over	24,557	22,815	1,744	27.9	26.9	52.5
41 to 48 hours	9,422	9,207	216	10.7	10.9	6.5
49 to 59 hours	8,440	8,046	394	9.6	9.5	11.9
60 hours and over	6,695	5,562	1,134	7.6	6.6	34.1
Average hours, total at work	38.8	38.4	47.1	--	--	--
Average hours, workers on full-time schedules	43.3	42.8	56.0	--	--	--

HOUSEHOLD DATA

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	October 1977					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total	23,784	8,656	15,128	22,813	8,351	14,462
Economic reasons	3,184	1,275	1,909	2,970	1,148	1,822
Slack work	1,389	896	493	1,250	795	455
Material shortages or repairs to plant and equipment	77	77	--	74	74	--
New job started during week	232	232	--	217	217	--
Job terminated during week	70	70	--	61	61	--
Could find only part-time work	1,416	--	1,416	1,367	--	1,367
Other reasons	20,600	7,381	13,219	19,843	7,203	12,640
Does not want, or unavailable for, full-time work	11,072	--	11,072	10,608	--	10,608
Vacation	796	796	--	785	785	--
Illness	1,868	1,636	232	1,795	1,594	201
Bad weather	335	335	--	257	257	--
Industrial dispute	25	25	--	25	25	--
Legal or religious holiday	3,236	3,236	--	3,232	3,232	--
Full time for this job	1,417	--	1,417	1,382	--	1,382
All other reasons	1,852	1,353	499	1,759	1,310	449
Average hours:						
Economic reasons	21.5	24.2	19.7	21.6	24.4	19.8
Other reasons	21.8	28.0	18.4	21.9	28.0	18.4
Worked 30 to 34 hours:						
Economic reasons	938	543	395	882	500	382
Other reasons	7,049	4,942	2,107	6,884	4,854	2,030

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

[Numbers in thousands]

Industry	October 1977								
	Total at work	Full- or part-time status						Average hours, total at work	Average hours, workers on full-time schedules
		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		
Total¹	84,744	2,970	12,640	69,134	46,319	9,207	13,608	38.4	42.8
Wage and salary workers	78,588	2,711	11,435	64,442	44,340	8,629	11,473	38.2	42.4
Construction	4,449	275	215	3,959	2,882	432	645	39.3	41.6
Manufacturing	19,505	474	664	18,367	12,396	2,997	2,974	41.2	42.4
Durable goods	11,571	156	272	11,143	7,433	1,845	1,865	41.8	42.6
Nondurable goods	7,934	318	392	7,224	4,964	1,152	1,108	40.3	42.1
Transportation and public utilities	5,334	130	392	4,812	3,306	564	942	40.9	43.1
Wholesale and retail trade	16,288	769	4,244	11,275	6,887	1,891	2,497	36.3	43.6
Finance, insurance, and real estate	4,542	68	510	3,964	2,946	422	596	38.2	40.9
Service industries	22,988	932	5,124	16,932	12,106	1,788	3,038	35.8	42.3
Private households	1,339	216	715	408	254	47	107	23.2	45.7
All other industries	21,649	716	4,409	16,524	11,852	1,741	2,931	36.6	42.2
Public administration	4,705	52	266	4,387	3,434	410	543	38.6	40.1
Self-employed workers	5,712	257	1,008	4,447	1,849	553	2,045	42.2	49.2
Unpaid family workers	444	1	198	245	130	25	90	36.1	47.6

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	October 1977							
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
TOTAL								
Both sexes, 16 years and over	84,744	2,970	12,640	69,134	46,319	22,815	38.4	42.8
16 to 21 years	11,651	736	4,580	6,335	4,758	1,577	30.2	40.9
16 to 19 years	6,997	481	3,565	2,951	2,271	680	27.0	40.5
16 to 17 years	2,825	122	2,266	437	357	80	19.7	39.3
18 to 19 years	4,172	359	1,299	2,514	1,913	601	31.9	40.7
20 years and over	77,747	2,488	9,075	66,184	44,051	22,133	39.5	42.9
20 to 24 years	12,227	594	1,854	9,779	6,982	2,797	37.4	41.8
25 years and over	65,520	1,894	7,221	56,405	37,069	19,336	39.9	43.1
25 to 44 years	38,420	1,127	3,650	33,643	21,620	12,023	40.5	43.4
45 to 64 years	24,757	692	2,365	21,700	14,747	6,953	40.1	42.8
65 years and over	2,343	77	1,206	1,060	700	360	28.1	42.6
Males, 16 years and over	49,534	1,293	4,019	44,222	26,324	17,898	41.6	44.3
16 to 21 years	6,120	354	2,205	3,561	2,451	1,110	31.8	42.0
16 to 19 years	3,706	244	1,778	1,684	1,215	469	28.3	41.4
16 to 17 years	1,504	70	1,173	261	199	62	20.8	40.6
18 to 19 years	2,201	172	605	1,424	1,017	407	33.5	41.6
20 years and over	45,829	1,050	2,241	42,538	25,110	17,428	42.7	44.4
20 to 24 years	6,547	268	731	5,548	3,539	2,009	39.5	43.2
25 years and over	39,282	782	1,510	36,990	21,571	15,419	43.2	44.6
25 to 44 years	23,003	481	428	22,094	12,459	9,635	44.0	45.0
45 to 64 years	14,858	265	416	14,177	8,654	5,523	43.2	44.3
65 years and over	1,421	36	666	719	457	262	29.5	42.3
Females, 16 years and over	35,210	1,677	8,621	24,912	19,995	4,917	34.0	40.2
16 to 21 years	5,532	382	2,375	2,775	2,308	467	28.4	39.5
16 to 19 years	3,292	238	1,787	1,267	1,055	212	25.4	39.2
16 to 17 years	1,321	52	1,094	175	157	18	18.5	37.4
18 to 19 years	1,971	186	693	1,092	898	194	30.1	39.6
20 years and over	31,918	1,439	6,834	23,645	18,940	4,705	34.9	40.2
20 to 24 years	5,681	326	1,123	4,232	3,444	788	34.9	39.9
25 years and over	26,237	1,113	5,711	19,413	15,496	3,917	34.9	40.3
25 to 44 years	15,416	645	3,222	11,549	9,159	2,390	35.1	40.3
45 to 64 years	9,899	428	1,949	7,522	6,091	1,431	35.3	40.1
65 years and over	922	40	560	342	245	97	26.0	43.4
RACE								
White	75,529	2,449	11,594	61,486	40,062	21,424	38.6	43.1
Males	44,719	1,074	3,657	39,988	23,094	16,894	41.9	44.6
Females	30,810	1,375	7,938	21,497	16,967	4,530	33.9	40.3
Black and other	9,216	520	1,046	7,650	6,259	1,391	36.9	40.6
Males	4,816	219	363	4,234	3,230	1,004	38.9	41.6
Females	4,400	300	683	3,417	3,030	387	34.8	39.3
MARITAL STATUS								
Males:								
Married, spouse present	35,131	606	1,232	33,293	19,033	14,260	43.5	44.8
Widowed, divorced, or separated	3,685	130	236	3,319	2,028	1,291	41.4	43.9
Single (never married)	10,719	557	2,551	7,611	5,264	2,347	35.2	42.3
Females:								
Married, spouse present	20,189	873	4,976	14,340	11,602	2,738	34.1	40.0
Widowed, divorced, or separated	6,454	357	996	5,101	3,985	1,116	36.3	40.6
Single (never married)	8,567	447	2,649	5,471	4,409	1,062	32.0	40.2

HOUSEHOLD DATA

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

[Numbers in thousands]

Occupational group and sex	October 1977								
	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									
White-collar workers	44,406	901	6,649	36,856	24,328	4,449	8,079	39.0	43.0
Professional and technical	13,716	201	1,696	11,819	7,601	1,425	2,793	39.8	43.3
Managers and administrators, except farm	9,538	61	465	9,012	4,243	1,275	3,494	45.7	47.2
Sales workers	5,446	190	1,471	3,785	2,288	518	979	36.2	43.9
Clerical workers	15,705	449	3,018	12,238	10,194	1,231	813	35.1	39.5
Blue-collar workers	28,900	1,272	2,150	25,478	16,930	3,968	4,580	40.0	42.8
Craft and kindred workers	11,293	381	421	10,491	6,741	1,692	2,058	41.5	43.1
Operatives, except transport	9,874	463	571	8,840	6,244	1,393	1,203	39.8	41.9
Transport equipment operatives	3,319	119	308	2,892	1,550	446	896	42.3	45.8
Nonfarm laborers	4,413	310	850	3,253	2,394	437	422	35.0	41.1
Service workers	11,962	832	3,939	7,191	5,288	818	1,085	32.6	42.2
Private household	1,146	173	611	362	230	41	91	23.6	44.6
Other service workers	10,816	658	3,328	6,830	5,058	777	995	33.5	42.1
Males									
White-collar workers	21,711	230	1,507	19,974	10,772	2,718	6,484	43.4	45.5
Professional and technical	7,861	70	525	7,266	4,244	887	2,135	42.6	44.6
Managers and administrators, except farm	7,442	38	223	7,181	3,069	1,002	3,110	47.2	48.2
Sales workers	3,094	54	397	2,643	1,394	395	854	41.5	45.4
Clerical workers	3,314	68	363	2,883	2,064	434	385	38.4	41.4
Blue-collar workers	23,705	932	1,541	21,232	13,525	3,411	4,296	40.8	43.3
Craft and kindred workers	10,711	355	336	10,020	6,376	1,628	2,016	41.8	43.3
Operatives, except transport	5,919	177	301	5,441	3,481	955	1,005	41.5	43.3
Transport equipment operatives	3,059	106	183	2,770	1,464	429	877	43.4	45.9
Nonfarm laborers	4,015	294	720	3,001	2,205	399	397	35.3	41.1
Service workers	4,492	159	1,010	3,323	2,190	448	685	37.1	43.9
Private household	44	8	21	15	3	3	9	29.4	64.6
Other service workers	4,448	151	989	3,308	2,188	445	675	37.2	43.8
Females									
White-collar workers	22,695	671	5,142	16,882	13,555	1,732	1,595	34.8	40.1
Professional and technical	5,855	130	1,171	4,554	3,359	538	657	36.0	41.2
Managers and administrators, except farm	2,097	24	242	1,831	1,173	273	385	40.6	43.3
Sales workers	2,352	136	1,074	1,142	893	123	126	29.2	40.4
Clerical workers	12,391	380	2,655	9,356	8,130	798	428	34.3	38.8
Blue-collar workers	5,195	341	609	4,245	3,403	557	285	36.5	40.0
Craft and kindred workers	581	26	85	470	364	64	42	36.6	40.4
Operatives, except transport	3,955	287	270	3,398	2,762	438	198	37.4	39.8
Transport equipment operatives	260	12	124	124	88	17	19	29.5	42.1
Nonfarm laborers	398	16	130	252	189	38	25	32.2	40.9
Service workers	7,470	673	2,929	3,868	3,097	370	401	29.9	40.7
Private household	1,102	166	589	347	229	38	80	23.4	43.7
Other service workers	6,368	508	2,339	3,521	2,869	332	320	31.0	40.4

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

[Numbers in thousands]

Employment status	October 1977								
	Total			White			Black and other		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
Civilian noninstitutional population	8,225	4,201	4,054	6,940	3,541	3,399	1,315	660	654
Civilian labor force	1,582	866	717	1,479	807	672	103	58	45
Employed	1,313	696	617	1,267	670	597	46	26	20
Agriculture	150	123	26	148	121	27	1	2	--
Nonagricultural industries	1,163	573	590	1,119	549	570	44	24	20
Unemployed	269	169	100	212	137	75	58	32	25
Unemployment rate	17.0	19.5	14.0	14.3	17.0	11.2	56.3	(1)	(1)
Not in labor force	6,673	3,335	3,337	5,461	2,734	2,728	1,211	602	609
Keeping house	51	4	47	47	2	45	3	2	1
Going to school	6,512	3,272	3,240	5,326	2,680	2,646	1,186	592	594
Unable to work	6	2	4	6	2	4	--	--	--
All other reasons	104	57	47	82	49	32	22	8	14

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	October 1977					
	Thousands of persons			Percent distribution		
	Both sexes	Males	Females	Both sexes	Males	Females
CLASS OF WORKER						
Total	1,313	696	617	100.0	100.0	100.0
Nonagricultural industries	1,163	573	590	88.6	82.3	95.5
Wage and salary workers	1,054	493	561	80.3	70.8	90.8
Private household workers	490	125	364	37.3	18.0	59.0
Government workers	26	16	10	2.0	2.3	1.6
Other wage and salary workers	539	352	186	41.0	50.6	30.1
Self-employed workers	94	72	22	7.2	10.3	3.6
Unpaid family workers	15	8	7	1.1	1.1	1.1
Agriculture	150	123	26	11.4	17.7	4.5
Wage and salary workers	84	67	17	6.4	9.6	2.8
Self-employed workers	2	3	--	.2	.4	--
Unpaid family workers	64	53	11	4.9	7.6	1.8
OCCUPATION						
Total	1,313	696	617	100.0	100.0	100.0
White-collar workers	274	188	86	20.9	27.1	14.1
Professional and technical	2	--	3	.2	--	.5
Managers and administrators, except farm	1	1	--	.1	.1	--
Sales workers	219	167	52	16.7	23.9	8.4
Clerical workers	32	21	32	4.0	3.0	5.2
Blue-collar workers	235	223	12	17.8	31.9	2.1
Craft and kindred workers	15	16	--	1.1	2.3	--
Operatives, except transport	39	36	3	3.0	5.2	.5
Transport equipment operatives	4	1	3	.3	.1	.5
Nonfarm laborers	176	170	7	13.4	24.4	1.1
Service workers	663	170	493	50.5	24.5	79.6
Private household workers	401	35	366	30.6	5.0	59.2
Other service workers	262	136	126	20.0	19.5	20.4
Farm workers	141	115	25	10.7	16.5	4.2
Farmers and farm managers	1	1	--	.1	.1	--
Farm laborers and supervisors	140	114	26	10.7	16.3	4.2

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

[Numbers in thousands]

Characteristics	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
WHITE													
Total, 16 years and over:													
Civilian labor force	84,511	84,816	84,854	84,616	85,086	85,482	85,642	85,937	86,268	85,968	86,285	86,471	86,861
Employed	78,384	78,647	78,828	78,923	79,365	79,832	80,249	80,603	80,813	80,752	81,010	81,214	81,540
Unemployed	6,127	6,169	6,026	5,693	5,721	5,650	5,393	5,334	5,455	5,216	5,275	5,257	5,321
Unemployment rate	7.2	7.3	7.1	6.7	6.7	6.6	6.3	6.2	6.3	6.1	6.1	6.1	6.1
Males, 20 years and over:													
Civilian labor force	46,561	46,667	46,624	46,347	46,605	46,584	46,600	46,769	46,967	46,948	47,086	47,057	47,381
Employed	43,926	43,996	44,044	44,035	44,159	44,299	44,434	44,563	44,856	44,811	44,987	45,042	45,233
Unemployed	2,635	2,671	2,580	2,312	2,446	2,285	2,166	2,206	2,111	2,137	2,099	2,015	2,148
Unemployment rate	5.7	5.7	5.5	5.0	5.2	4.9	4.6	4.7	4.5	4.6	4.5	4.3	4.5
Females, 20 years and over:													
Civilian labor force	29,914	30,138	30,211	30,071	30,261	30,588	30,663	30,838	30,879	30,868	30,873	31,188	31,135
Employed	27,775	28,017	28,143	28,170	28,328	28,604	28,781	29,021	28,895	28,958	28,921	29,253	29,198
Unemployed	2,139	2,121	2,068	1,901	1,933	1,984	1,882	1,817	1,984	1,910	1,952	1,935	1,937
Unemployment rate	7.2	7.0	6.8	6.3	6.4	6.5	6.1	5.9	6.4	6.2	6.3	6.2	6.2
Both sexes, 16 to 19 years:													
Civilian labor force	8,036	8,011	8,019	8,198	8,220	8,310	8,379	8,330	8,422	8,152	8,326	8,226	8,345
Employed	6,683	6,634	6,641	6,718	6,878	6,929	7,034	7,019	7,062	6,983	7,102	6,919	7,109
Unemployed	1,353	1,377	1,378	1,480	1,342	1,381	1,345	1,311	1,360	1,169	1,224	1,307	1,236
Unemployment rate	16.8	17.2	17.2	18.1	16.3	16.6	16.1	15.7	16.1	14.3	14.7	15.9	14.8
BLACK AND OTHER													
Total, 16 years and over:													
Civilian labor force	10,910	11,114	11,109	11,030	11,163	11,104	11,071	11,171	11,325	11,236	11,402	11,359	11,375
Employed	9,444	9,618	9,623	9,648	9,697	9,690	9,711	9,730	9,833	9,758	9,744	9,868	9,799
Unemployed	1,466	1,496	1,486	1,382	1,466	1,414	1,360	1,441	1,492	1,478	1,658	1,491	1,576
Unemployment rate	13.4	13.5	13.4	12.5	13.1	12.7	12.3	12.9	13.2	13.2	14.5	13.1	13.9
Males, 20 years and over:													
Civilian labor force	5,388	5,437	5,457	5,464	5,523	5,506	5,432	5,502	5,551	5,494	5,514	5,414	5,516
Employed	4,802	4,806	4,838	4,907	4,976	4,991	4,972	4,959	5,018	4,941	4,867	4,849	4,872
Unemployed	586	631	619	557	547	515	460	543	533	553	647	565	644
Unemployment rate	10.9	11.6	11.3	10.2	9.9	9.4	8.5	9.9	9.6	10.1	11.7	10.4	11.7
Females, 20 years and over:													
Civilian labor force	4,602	4,728	4,714	4,674	4,758	4,725	4,775	4,811	4,784	4,741	4,847	4,972	4,860
Employed	4,072	4,209	4,173	4,171	4,167	4,176	4,188	4,245	4,215	4,223	4,257	4,410	4,307
Unemployed	530	519	541	503	591	549	587	566	569	518	590	562	553
Unemployment rate	11.5	11.0	11.5	10.8	12.4	11.6	12.3	11.8	11.9	10.9	12.2	11.3	11.4
Both sexes, 16 to 19 years:													
Civilian labor force	920	949	938	892	882	873	864	858	990	1,001	1,041	973	999
Employed	570	603	612	570	554	523	551	526	600	594	620	609	620
Unemployed	350	346	326	322	328	350	313	332	390	407	421	364	379
Unemployment rate	38.0	36.5	34.8	36.1	37.2	40.1	36.2	38.7	39.4	40.7	40.4	37.4	37.9

HOUSEHOLD DATA SEASONALLY ADJUSTED

A-36. Major unemployment indicators, seasonally adjusted

[Unemployment rates]

Selected categories	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Characteristics													
Total (all civilian workers)	7.9	8.0	7.8	7.3	7.5	7.3	7.0	6.9	7.1	6.9	7.1	6.9	7.0
Males, 20 years and over	6.2	6.3	6.2	5.6	5.8	5.4	5.0	5.3	5.0	5.1	5.2	4.9	5.3
Females, 20 years and over	7.6	7.6	7.4	6.9	7.2	7.2	7.0	6.6	7.2	6.9	7.1	7.0	6.8
Both sexes, 16-19 years	19.0	19.2	19.0	18.7	18.5	18.8	17.8	17.9	18.6	17.4	17.5	18.1	17.3
White	7.2	7.3	7.1	6.7	6.7	6.6	6.3	6.2	6.3	6.1	6.1	6.1	6.1
Black and other	13.4	13.5	13.4	12.5	13.1	12.7	12.3	12.9	13.2	13.2	14.5	13.1	13.9
Household heads	5.4	5.3	5.1	4.8	4.9	4.6	4.4	4.5	4.3	4.3	4.6	4.5	4.6
Married men	4.4	4.5	4.3	3.8	4.1	3.7	3.6	3.6	3.4	3.4	3.5	3.4	3.7
Full-time workers	7.6	7.6	7.5	6.7	6.9	6.7	6.5	6.5	6.5	6.5	6.8	6.5c	6.6
Part-time workers	10.3	10.5	9.8	10.2	10.7	11.1	9.9	9.9	10.7	9.2	8.9	9.5	9.7
Unemployed 15 weeks and over ¹	2.5	2.6	2.6	2.4	2.3	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9
Labor force time lost ²	8.6	8.6	8.4	8.0	7.9	7.8	7.4	7.5	7.5	7.4	7.7	7.4	7.5
OCCUPATION													
White-collar workers	4.6	4.7	4.5	4.5	4.6	4.7	4.4	4.3	4.2	4.0	4.2	4.2	4.1
Professional and technical	3.2	3.4	3.3	3.3	3.3	3.1	3.2	2.9	3.0	2.8	3.0	3.0	3.0
Managers and administrators, except farm	3.0	3.1	3.1	3.0	2.8	3.4	2.9	2.8	2.7	2.6	2.5	2.5	2.6
Sales workers	5.4	5.7	5.0	5.7	5.6	5.5	5.1	5.5	5.2	5.4	5.3	5.1	5.0
Clerical workers	6.2	6.3	6.1	6.0	6.4	6.5	6.0	5.7	5.7	5.4	5.8	6.0	5.7
Blue-collar workers	9.8	9.7	9.6	8.4	8.7	8.3	7.8	7.9	7.7	8.2	8.4	7.9	8.3
Craft and kindred workers	6.8	7.0	7.0	6.1	6.5	6.0	4.9	5.6	5.6	5.6	5.5	5.2	5.5
Operatives, except transport	11.6	11.3	11.0	9.2	9.6	9.2	9.3	8.9	9.4	10.1	10.0	10.2	10.2
Transport equipment operatives	8.3	8.2	8.1	7.2	7.7	6.9	6.0	6.7	5.7	7.5	7.6	5.7	6.5
Nonfarm laborers	14.0	13.5	13.9	12.9	12.8	13.2	12.6	12.5	10.9	10.7	12.6	11.1	12.2
Service workers	9.4	9.3	9.0	8.6	8.4	7.9	8.1	9.0	8.2	7.7	8.4	7.8	8.3
Farm workers	4.2	5.1	6.1	4.8	6.7	5.4	4.8	4.4	4.8	3.8	3.7	4.7	4.3
INDUSTRY													
Nonagricultural private wage and salary workers ³	8.2	8.2	7.9	7.4	7.6	7.4	7.0	7.1	6.9	6.8	7.0	6.9	7.1
Construction	15.1	15.4	14.1	14.9	15.2	14.2	12.0	13.0	12.6	12.1	11.5	10.4	12.2
Manufacturing	8.2	8.2	8.2	6.9	7.1	6.6	6.7	6.2	6.3	6.7	7.0	7.2	7.0
Durable goods	8.0	7.7	8.0	6.5	7.0	6.6	6.0	5.7	5.6	6.1	6.5	6.6	6.3
Nondurable goods	8.5	8.9	8.6	7.4	7.3	7.3	7.7	7.0	7.3	7.6	7.7	8.2	8.1
Transportation and public utilities	5.6	5.7	5.2	4.7	4.6	5.1	4.4	4.3	4.1	4.7	4.9	5.0	5.0
Wholesale and retail trade	8.9	9.0	8.2	8.4	8.7	8.4	7.8	8.3	7.9	7.7	8.3	7.6	8.1
Finance and service industries	6.7	6.8	6.8	6.2	6.2	6.4	6.1	6.6	6.0	5.7	5.6	5.7	5.9
Government workers	4.4	4.3	4.4	4.3	4.5	4.0	4.0	4.1	4.2	3.9	4.4	4.0	4.1
Agricultural wage and salary workers	11.5	13.2	14.0	12.6	13.4	13.2	12.3	11.5	11.0	9.7	9.3	10.4	10.4

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.

C-corrected.

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

[Numbers in thousands]

Weeks of unemployment	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Duration													
Less than 5 weeks	2,952	2,759	2,765	2,762	2,804	3,005	3,100	2,782	3,058	2,830	2,870	2,789	2,890
5 to 14 weeks	2,367	2,494	2,319	2,083	2,107	2,098	1,857	2,093	2,023	1,969	2,338	2,236	2,208
15 weeks and over	2,360	2,517	2,514	2,283	2,182	1,923	1,816	1,836	1,737	1,834	1,808	1,866	1,862
15 to 26 weeks	1,094	1,188	1,130	1,038	947	777	715	800	798	917	966	940	916
27 weeks and over	1,266	1,329	1,384	1,245	1,235	1,146	1,101	1,036	939	917	842	926	946
Average (mean) duration, in weeks	15.3	15.5	15.6	15.5	14.7	14.0	14.3	14.9	14.4	14.1	13.5	14.2	13.8
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	38.4	35.5	36.4	38.7	39.5	42.8	45.8	41.5	44.9	42.7	40.9	40.5	41.5
5 to 14 weeks	30.8	32.1	30.5	29.2	29.7	29.9	27.4	31.2	29.7	29.7	33.3	32.4	31.7
15 weeks and over	30.7	32.4	33.1	32.0	30.8	27.4	26.8	27.4	25.5	27.6	25.8	27.1	26.8
15 to 26 weeks	14.2	15.3	14.9	14.6	13.4	11.1	10.6	11.9	11.7	13.8	13.8	13.6	13.2
27 weeks and over	16.5	17.1	18.2	17.5	17.4	16.3	16.3	15.4	13.8	13.8	12.0	13.4	13.6

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

Sex and age	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	7.9	8.0	7.8	7.3	7.5	7.3	7.0	6.9	7.1	6.9	7.1	6.9	7.0
16 to 19 years	19.0	19.2	19.0	18.7	18.5	18.8	17.8	17.9	18.6	17.4	17.5	18.1	17.3
16 to 17 years	21.3	21.6	20.7	21.1	19.8	22.2	19.2	20.4	21.3	19.9	20.7	19.8	18.8
18 to 19 years	17.5	17.6	17.7	17.0	17.5	16.6	16.8	16.3	16.5	15.3	15.6	16.9	16.3
20 to 24 years	12.6	12.7	12.5	11.4	12.0	11.4	10.8	10.7	10.5	10.6	11.1	10.7	10.6
25 years and over	5.7	5.6	5.5	5.1	5.2	5.1	4.9	4.8	5.0	5.0	5.0	4.8	5.0
25 to 54 years	6.0	5.9	5.9	5.3	5.3	5.2	5.1	5.1	5.3	5.2	5.3	4.9	5.2
55 years and over	4.6	4.6	4.2	4.1	4.8	4.3	4.1	4.0	3.8	3.9	3.9	4.2	4.2
Males, 16 years and over	7.4	7.5	7.3	6.6	6.9	6.5	6.1	6.3	6.2	6.2	6.3	6.0	6.3
16 to 19 years	19.6	19.7	19.1	17.4	18.6	18.7	17.0	17.0	18.6	16.9	17.6	17.5	16.7
16 to 17 years	22.3	22.2	21.0	19.5	19.3	22.2	17.9	18.7	22.7	20.2	21.7	19.2	18.8
18 to 19 years	17.7	18.1	17.4	16.1	17.9	16.1	16.0	16.0	15.5	14.7	14.8	16.0	15.1
20 to 24 years	12.7	12.6	12.9	11.3	12.1	11.2	10.5	10.6	9.9	10.6	11.3	10.5	10.2
25 years and over	5.1	5.2	5.0	4.6	4.6	4.3	4.1	4.2	4.1	4.2	4.2	3.9	4.4
25 to 54 years	5.3	5.4	5.2	4.7	4.6	4.3	4.1	4.4	4.3	4.3	4.4	3.8	4.5
55 years and over	4.4	4.4	3.9	4.0	4.7	4.4	3.7	3.9	3.3	3.6	3.5	3.9	4.1
Females, 16 years and over	8.8	8.7	8.6	8.3	8.4	8.5	8.2	7.9	8.4	8.0	8.3	8.2	8.0
16 to 19 years	18.3	18.5	18.9	20.1	18.4	18.9	18.8	19.0	18.7	17.9	17.4	18.9	18.0
16 to 17 years	20.1	20.8	20.2	23.0	20.4	22.2	20.8	22.5	19.7	19.5	19.4	20.5	18.7
18 to 19 years	17.3	17.1	18.0	18.1	16.9	17.1	17.7	16.6	17.5	16.0	16.4	17.9	17.6
20 to 24 years	12.4	12.8	11.9	11.4	11.9	11.7	11.2	10.9	11.0	10.5	10.8	10.9	11.2
25 years and over	6.6	6.4	6.4	5.9	6.1	6.1	6.0	5.7	6.3	6.2	6.2	6.1	5.9
25 to 54 years	7.1	6.7	6.9	6.2	6.3	6.6	6.5	6.1	6.7	6.4	6.6	6.4	6.3
55 years and over	4.9	5.1	4.7	4.3	4.9	4.2	4.6	4.3	4.6	4.4	4.6	4.5	4.4

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

[Numbers in thousands]

Reason for unemployment	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
NUMBER OF UNEMPLOYED													
Job losers	3,756	3,802	3,736	3,207	3,396	3,143	2,953	3,038	2,927	3,075	3,289	3,144	3,139
On layoff	1,107	1,067	1,057	791	1,001	865	754	749	827	919	1,018	928	947
Other job losers	2,649	2,735	2,679	2,416	2,395	2,278	2,199	2,289	2,100	2,156	2,271	2,216	2,192
Job leavers	936	858	831	932	852	919	846	944	954	841	910	873	886
Reentrants	1,927	2,061	1,957	1,991	1,963	2,013	2,001	1,993	1,889	1,822	1,857	1,856	1,915
New entrants	894	920	942	905	936	1,003	972	893	1,077	974	1,000	935	840
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	50.0	49.8	50.0	45.6	47.5	44.4	43.6	44.2	42.7	45.8	46.6	46.2	46.3
On layoff	14.7	14.0	14.2	11.2	14.0	12.2	11.1	10.9	12.1	13.7	14.4	13.6	14.0
Other job losers	35.3	35.8	35.9	34.3	33.5	32.2	32.5	33.2	30.7	32.1	32.2	32.5	32.3
Job leavers	12.5	11.2	11.1	13.2	11.9	13.0	12.5	13.7	13.9	12.5	12.9	12.8	13.1
Reentrants	25.6	27.0	26.2	28.3	27.5	28.4	29.5	29.0	27.6	27.1	26.3	27.3	28.2
New entrants	11.9	12.0	12.6	12.9	13.1	14.2	14.4	13.0	15.7	14.5	14.2	13.7	12.4
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	3.9	4.0	3.9	3.4	3.5	3.3	3.1	3.1	3.0	3.2	3.4	3.2	3.2
On layoff	1.0	.9	.9	1.0	.9	1.0	.9	1.0	1.0	.9	.9	.9	.9
Other job losers	2.9	3.1	3.0	2.4	2.6	2.3	2.2	2.1	2.0	2.3	2.5	2.3	2.3
Job leavers	1.0	.9	.9	1.0	.9	1.0	.9	1.0	1.0	.9	.9	.9	.9
Reentrants	2.0	2.1	2.0	2.1	2.0	2.1	2.1	2.1	1.9	1.9	1.9	1.9	2.0
New entrants	.9	1.0	1.0	.9	1.0	1.0	1.0	.9	1.1	1.0	1.0	1.0	.9

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

[In thousands]

Sex and age	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	87,738	88,220	88,441	88,558	88,962	89,475	90,023	90,408	90,679	90,561	90,771	91,095	91,230
16 to 19 years	7,243	7,239	7,242	7,266	7,394	7,458	7,573	7,589	7,704	7,555	7,745	7,539	7,713
16 to 17 years	2,861	2,882	2,914	2,906	3,017	2,972	3,092	3,044	3,056	3,029	3,111	3,134	3,163
18 to 19 years	4,380	4,356	4,332	4,396	4,402	4,461	4,527	4,499	4,605	4,507	4,616	4,451	4,550
20 to 24 years	12,279	12,378	12,459	12,598	12,634	12,706	12,710	12,758	12,986	12,901	12,887	13,008	12,960
25 years and over	68,257	68,533	68,762	68,759	68,980	69,336	69,744	70,082	70,014	70,033	70,032	70,582	70,614
25 to 54 years	54,688	54,873	55,059	55,239	55,511	55,787	56,010	56,233	56,356	56,456	56,496	56,828	56,704
55 years and over	13,569	13,664	13,702	13,564	13,538	13,530	13,698	13,780	13,671	13,602	13,586	13,757	13,927
Males, 16 years and over	52,576	52,643	52,799	52,918	53,046	53,270	53,575	53,722	53,987	53,900	53,958	53,966	54,266
16 to 19 years	3,892	3,870	3,940	3,957	3,955	4,003	4,110	4,191	4,128	4,106	4,104	4,082	4,223
16 to 17 years	1,588	1,577	1,622	1,588	1,617	1,613	1,714	1,734	1,640	1,674	1,702	1,729	1,771
18 to 19 years	2,301	2,289	2,316	2,381	2,358	2,384	2,433	2,481	2,451	2,420	2,392	2,391	2,449
20 to 24 years	6,787	6,832	6,879	6,975	6,951	6,988	6,958	6,929	7,069	7,036	7,034	7,041	7,119
25 years and over	41,922	41,931	42,016	41,993	42,160	42,298	42,500	42,639	42,809	42,687	42,708	42,881	42,976
25 to 54 years	33,505	33,478	33,529	33,594	33,799	33,908	34,029	34,070	34,190	34,123	34,175	34,358	34,360
55 years and over	8,461	8,460	8,500	8,449	8,384	8,395	8,461	8,543	8,592	8,558	8,524	8,502	8,651
Females, 16 years and over	35,162	35,577	35,642	35,640	35,916	36,205	36,448	36,686	36,692	36,661	36,813	37,129	36,964
16 to 19 years	3,351	3,369	3,302	3,309	3,439	3,455	3,463	3,398	3,576	3,449	3,641	3,457	3,490
16 to 17 years	1,273	1,305	1,292	1,318	1,400	1,359	1,378	1,310	1,416	1,355	1,409	1,405	1,392
18 to 19 years	2,079	2,067	2,016	2,015	2,044	2,077	2,094	2,081	2,154	2,087	2,224	2,060	2,101
20 to 24 years	5,492	5,546	5,580	5,623	5,683	5,718	5,752	5,829	5,917	5,865	5,853	5,967	5,841
25 years and over	26,335	26,602	26,746	26,766	26,820	27,038	27,244	27,443	27,205	27,346	27,324	27,701	27,638
25 to 54 years	21,183	21,395	21,530	21,645	21,712	21,879	21,981	22,163	22,166	22,333	22,321	22,470	22,344
55 years and over	5,138	5,184	5,202	5,115	5,154	5,135	5,237	5,237	5,079	5,044	5,062	5,255	5,276

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

[In thousands]

Sex and age	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	7,564	7,651	7,519	6,958	7,183	7,064	6,737	6,750	6,962	6,744	6,926	6,773	6,872
16 to 19 years	1,703	1,718	1,702	1,668	1,677	1,725	1,643	1,653	1,765	1,589	1,641	1,671	1,614
16 to 17 years	776	792	760	777	746	847	736	779	829	752	811	773	732
18 to 19 years	930	930	930	901	931	886	916	873	907	815	851	905	886
20 to 24 years	1,767	1,802	1,779	1,617	1,722	1,638	1,545	1,533	1,516	1,522	1,609	1,559	1,541
25 years and over	4,106	4,102	4,027	3,681	3,766	3,689	3,580	3,565	3,667	3,679	3,662	3,561	3,731
25 to 54 years	3,470	3,438	3,449	3,090	3,088	3,086	3,039	3,006	3,137	3,076	3,147	2,919	3,123
55 years and over	652	664	608	583	679	608	579	580	533	552	550	599	617
Males, 16 years and over	4,178	4,244	4,152	3,714	3,904	3,712	3,466	3,609	3,580	3,538	3,609	3,439	3,647
16 to 19 years	950	951	933	833	903	918	842	858	942	838	875	866	846
16 to 17 years	455	449	432	384	387	459	374	399	481	424	472	410	411
18 to 19 years	496	505	487	457	515	459	465	459	449	417	414	456	437
20 to 24 years	990	987	1,022	892	958	879	819	823	781	833	899	828	807
25 years and over	2,236	2,281	2,194	2,002	2,034	1,919	1,835	1,892	1,843	1,874	1,856	1,759	1,995
25 to 54 years	1,862	1,902	1,853	1,656	1,616	1,534	1,517	1,563	1,548	1,551	1,566	1,370	1,627
55 years and over	385	387	349	354	414	385	328	343	289	319	307	349	373
Females, 16 years and over	3,386	3,407	3,367	3,244	3,279	3,352	3,271	3,141	3,382	3,206	3,317	3,334	3,225
16 to 19 years	753	767	769	835	774	807	801	795	823	751	766	805	768
16 to 17 years	321	343	328	393	359	388	362	380	348	328	339	363	321
18 to 19 years	434	425	443	444	416	427	451	414	458	398	437	449	449
20 to 24 years	777	815	757	725	764	759	726	710	735	689	710	731	734
25 years and over	1,870	1,821	1,833	1,679	1,732	1,770	1,745	1,673	1,824	1,805	1,806	1,802	1,736
25 to 54 years	1,608	1,536	1,596	1,434	1,472	1,552	1,522	1,443	1,589	1,525	1,581	1,549	1,496
55 years and over	267	277	259	229	265	223	251	237	244	233	243	250	244

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

[In thousands]

Selected categories	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total employed	87,738	88,220	88,441	88,588	88,962	89,475	90,023	90,408	90,679	90,561	90,771	91,095	91,230
Household heads	51,159	51,356	51,525	51,710	51,729	51,970	52,230	52,314	52,437	52,295	52,395	52,520	52,714
Married men, spouse present	37,989	37,895	37,998	38,195	38,159	38,294	38,536	38,509	38,582	38,434	38,316	38,358	38,386
Married women, spouse present	20,384	20,482	20,498	20,511	20,756	20,963	21,076	20,962	20,831	20,846	20,814	21,232	21,097
Occupation													
White-collar workers	44,207	44,297	44,648	44,521	44,451	44,495	44,851	44,766	44,798	45,105	45,114	45,437	46,147
Professional and technical	13,427	13,597	13,544	13,444	13,408	13,439	13,591	13,483	13,638	13,863	13,720	13,777	14,054
Managers and administrators, except farm	9,436	9,491	9,564	9,613	9,502	9,543	9,434	9,400	9,570	9,583	9,688	9,777	9,951
Sales workers	5,551	5,597	5,815	5,633	5,815	5,617	5,765	5,695	5,673	5,716	5,722	5,748	5,687
Clerical workers	15,793	15,612	15,725	15,831	15,726	15,896	16,061	16,188	15,917	15,943	15,984	16,135	16,455
Blue-collar workers	28,921	29,001	29,150	29,634	29,917	30,025	30,193	30,423	30,432	30,063	30,231	30,282	30,084
Craft and kindred workers	11,352	11,353	11,302	11,626	11,668	11,709	11,896	11,894	11,891	11,887	11,931	11,974	11,827
Operatives, except transport	9,885	9,970	10,231	10,341	10,341	10,574	10,394	10,530	10,378	10,270	10,242	10,211	10,204
Transport equipment operatives	3,297	3,258	3,283	3,358	3,448	3,487	3,482	3,552	3,551	3,397	3,462	3,541	3,430
Nonfarm laborers	4,387	4,420	4,334	4,309	4,450	4,255	4,421	4,447	4,612	4,509	4,596	4,556	4,623
Service workers	11,972	12,026	11,880	11,874	12,017	12,272	12,254	12,372	12,697	12,460	12,591	12,604	12,420
Farm workers	2,829	2,743	2,791	2,624	2,663	2,652	2,779	2,904	2,838	2,743	2,778	2,676	2,783
Major industry and class of worker													
Agriculture:													
Wage and salary workers	1,310	1,285	1,380	1,246	1,280	1,282	1,310	1,325	1,381	1,271	1,331	1,350	1,402
Self-employed workers	1,671	1,627	1,530	1,490	1,511	1,513	1,548	1,655	1,595	1,561	1,604	1,566	1,584
Unpaid family workers	343	342	340	354	338	319	366	393	378	363	315	275	303
Nonagricultural industries:													
Wage and salary workers	78,498	78,766	78,957	79,205	79,520	79,869	80,306	80,429	80,814	80,738	80,951	81,341	81,651
Private households	1,377	1,448	1,384	1,391	1,317	1,313	1,320	1,305	1,388	1,445	1,401	1,409	1,352
Government	14,998	15,045	14,967	15,013	14,913	14,923	14,960	15,075	14,961	15,131	15,282	15,296	15,494
Other	62,123	62,273	62,606	62,801	63,290	63,633	64,026	64,049	64,465	64,162	64,268	64,636	64,805
Self-employed workers	5,632	5,771	5,798	5,853	5,854	5,919	5,954	6,050	5,997	5,896	6,151	6,072	6,039
Unpaid family workers	448	449	460	419	516	536	499	550	518	523	469	504	448
Persons at work¹													
Nonagricultural industries	79,469	79,940	80,369	79,832	80,837	81,330	81,005	81,771	81,618	82,572	82,613	82,799	82,626
Full-time schedules	64,955	65,385	65,846	65,700	66,144	66,659	66,436	67,219	67,126	67,867	67,755	67,706	67,646
Part time for economic reasons	3,448	3,545	3,454	3,320	3,438	3,276	3,174	3,290	3,368	3,371	3,199	3,315	3,298
Usually work full time	1,339	1,289	1,234	1,112	1,335	1,212	1,167	1,314	1,341	1,440	1,196	1,246	1,251
Usually work part time	2,109	2,256	2,220	2,208	2,103	2,064	2,007	1,976	2,027	1,931	2,003	2,069	2,047
Part time for noneconomic reasons	11,066	11,010	11,069	10,812	11,255	11,395	11,395	11,262	11,124	11,334	11,659	11,778	11,682

¹ Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial dispute.

HOUSEHOLD DATA

A-43. Employment status of male Vietnam-Era veterans and nonveterans 20 to 34 years of age

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1976	Sept. 1977	Oct. 1977	Oct. 1976	June 1977	July 1977	Aug. 1977	Sept. 1977	Oct. 1977
VETERANS¹									
Total, 20 to 34 years:									
Civilian noninstitutional population ²	6,765	6,815	6,819	6,765	6,819	6,817	6,813	6,815	6,819
Civilian labor force	6,354	6,494	6,511	6,389	6,500	6,517	6,543	6,527	6,527
Employed	5,919	6,095	6,126	5,832	6,004	6,000	6,032	6,025	6,036
Unemployed	435	399	385	557	496	517	511	502	491
Unemployment rate	6.8	6.1	5.9	8.7	7.6	7.9	7.8	7.7	7.5
20 to 24 years									
Civilian noninstitutional population ²	1,078	1,036	1,033	1,078	1,058	1,050	1,040	1,036	1,033
Civilian labor force	937	929	917	951	937	942	947	936	925
Employed	789	774	796	770	767	788	782	748	777
Unemployed	148	155	121	181	170	154	165	188	148
Unemployment rate	15.8	16.7	13.2	19.0	18.1	16.3	17.4	20.1	16.0
25 to 29 years									
Civilian noninstitutional population ²	3,206	2,960	2,927	3,206	3,062	3,028	2,994	2,960	2,927
Civilian labor force	2,995	2,814	2,794	3,019	2,923	2,895	2,872	2,836	2,807
Employed	2,818	2,676	2,650	2,780	2,715	2,688	2,690	2,663	2,613
Unemployed	177	138	144	239	208	207	182	173	194
Unemployment rate	5.9	4.9	5.2	7.9	7.1	7.2	6.3	6.1	6.9
30 to 34 years									
Civilian noninstitutional population ²	2,481	2,819	2,859	2,481	2,699	2,739	2,779	2,819	2,859
Civilian labor force	2,422	2,751	2,800	2,419	2,640	2,680	2,724	2,755	2,795
Employed	2,312	2,645	2,680	2,282	2,522	2,524	2,560	2,614	2,646
Unemployed	110	106	120	137	118	156	164	141	149
Unemployment rate	4.5	3.9	4.3	5.7	4.5	5.8	6.0	5.1	5.3
NONVETERANS									
Total, 20 to 34 years:									
Civilian noninstitutional population ²	16,954	17,781	17,844	16,954	17,556	17,640	17,172	17,781	17,844
Civilian labor force	15,268	15,953	16,019	15,372	15,870	15,917	16,004 ^c	15,928	16,090
Employed	14,134	14,961	15,014	14,004	14,780	14,713	14,743	14,809	14,877
Unemployed	1,134	992	1,005	1,368	1,090	1,204	1,261	1,119	1,213
Unemployment rate	7.4	6.2	6.3	8.9	6.9	7.6	7.9	7.0	7.5
20 to 24 years									
Civilian noninstitutional population ²	7,976	8,204	8,222	7,976	8,133	8,158	8,183	8,204	8,222
Civilian labor force	6,682	6,886	6,881	6,816	6,909	6,902	6,970	6,918	6,989
Employed	6,013	6,301	6,336	6,007	6,293	6,222	6,241	6,288	6,330
Unemployed	669	585	545	809	616	680	729	630	659
Unemployment rate	10.0	8.5	7.9	11.9	8.9	9.9	10.5	9.1	9.4
25 to 29 years									
Civilian noninstitutional population ²	5,157	5,404	5,449	5,157	5,276	5,307	5,354	5,404	5,449
Civilian labor force	4,909	5,080	5,149	4,880	5,006	5,015	5,070	5,030	5,111
Employed	4,588	4,824	4,849	4,507	4,689	4,674	4,734	4,734	4,763
Unemployed	321	256	300	373	317	341	336	296	348
Unemployment rate	6.5	5.0	5.8	7.6	6.3	6.8	6.6	5.9	6.8
30 to 34 years									
Civilian noninstitutional population ²	3,821	4,173	4,173	3,821	4,147	4,175	4,175	4,173	4,173
Civilian labor force	3,677	3,987	3,989	3,676	3,955	4,000	3,964	3,980	3,990
Employed	3,533	3,836	3,829	3,490	3,798	3,817	3,768	3,787	3,784
Unemployed	144	151	160	186	157	183	196	193	206
Unemployment rate	3.9	3.8	4.0	5.1	4.0	4.6	4.9	4.8	5.2

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

² Since seasonal variations are not present in the population figures, identical numbers appear in the unadjusted and seasonally adjusted columns.

C=corrected.

**ESTABLISHMENT DATA
EMPLOYMENT**

B-2. Employees on nonagricultural payrolls, by industry

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977P	Oct. 1977P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977P	Oct. 1977P
-	TOTAL	80,277	80,572	82,397	83,158	83,711	-	-	-	-	-
	PRIVATE SECTOR	65,617	65,468	67,921	68,108	68,223	54,077	53,930	55,718	55,873	55,950
-	MINING	804	804	833	857	858	610	609	620	645	643
10	METAL MINING	96.1	95.6	79.6	83.5	-	74.2	74.0	57.3	61.3	-
101	Iron ores	26.5	26.1	11.1	10.7	-	21.4	21.1	5.8	5.6	-
102	Copper ores	36.6	36.8	33.5	37.2	-	28.1	28.3	25.4	29.5	-
11,12	COAL MINING	220.0	220.6	209.5	232.9	-	188.0	187.2	170.7	192.9	-
12	Bituminous coal and lignite mining	216.1	216.8	205.4	228.7	-	184.6	183.9	167.0	189.3	-
13	OIL AND GAS EXTRACTION	367.6	370.0	417.6	416.3	-	252.0	253.8	291.5	291.2	-
131,2	Crude petroleum and natural gas fields	166.4	166.0	180.5	177.3	-	82.2	81.7	90.2	88.7	-
138	Oil and gas field services	201.2	204.0	237.4	239.0	-	169.8	172.1	201.3	202.5	-
14	NONMETALLIC MINERALS, EXCEPT FUELS	120.4	117.9	125.8	124.4	-	95.9	93.7	100.3	99.4	-
142	Crushed and broken stone	42.0	41.7	44.0	43.7	-	34.7	34.4	36.8	36.5	-
144	Sand and gravel	37.4	37.0	39.9	39.2	-	-	-	-	-	-
-	CONTRACT CONSTRUCTION	3,815	3,815	4,204	4,169	4,196	3,066	3,077	3,394	3,367	3,388
15	GENERAL BUILDING CONTRACTORS	1,132.9	1,136.5	1,247.1	1,227.5	-	895.2	901.5	996.5	980.8	-
16	HEAVY CONSTRUCTION CONTRACTORS	801.2	791.5	892.0	883.7	-	668.9	661.8	742.1	735.8	-
161	Highway and street construction	353.1	346.1	415.5	409.5	-	306.1	301.3	355.2	350.3	-
162	Heavy construction, nec	448.1	445.4	476.5	474.2	-	362.8	360.5	386.9	385.5	-
17	SPECIAL TRADE CONTRACTORS	1,880.7	1,887.1	2,065.3	2,057.8	-	1,501.8	1,513.4	1,655.3	1,650.2	-
171	Plumbing, heating, air conditioning	433.7	436.2	476.6	473.3	-	330.0	332.5	362.1	360.5	-
172	Painting, paper hanging, decorating	143.9	143.4	169.6	166.2	-	123.4	123.0	142.6	139.9	-
173	Electrical work	331.5	330.6	346.9	345.2	-	261.0	260.2	272.9	272.2	-
174	Masonry, stonework, and plastering	205.1	206.6	242.0	241.3	-	178.9	180.9	210.4	209.9	-
176	Roofing and sheet metal work	136.9	139.8	147.1	149.4	-	112.3	115.4	119.7	121.5	-
	MANUFACTURING	19,408	19,185	19,763	19,938	19,884	14,040	13,807	14,217	14,397	14,327
19,24,25, 32-39	DURABLE GOODS	11,278	11,131	11,522	11,688	11,677	8,092	7,941	8,230	8,392	8,368
20-23, 26-31	NONDURABLE GOODS	8,130	8,054	8,241	8,250	8,207	5,948	5,866	5,987	6,005	5,959
	DURABLE GOODS										
19	ORDNANCE AND ACCESSORIES	156.9	156.0	155.9	155.8	151.4	70.4	70.0	71.1	70.3	66.0
192	Ammunition, except for small arms	102.0	101.9	99.7	99.9	95.4	35.7	35.9	35.8	35.4	31.2
1925	Complete guided missiles	84.1	84.1	81.2	81.3	-	22.7	22.9	22.3	22.0	-
1929	Ammunition, exc. for small arms, nec	17.9	17.8	18.5	18.6	-	13.0	13.0	13.5	13.4	-
24	LUMBER AND WOOD PRODUCTS	626.9	622.5	666.7	664.7	661.5	528.2	524.2	570.5	568.1	563.8
241	Logging camps and logging contractors	79.5	78.8	78.3	77.5	75.2	-	-	-	-	-
242	Sawmills and planing mills	215.0	214.0	221.3	222.2	220.4	191.4	190.6	197.8	198.2	196.3
2421	Sawmills and planing mills, general	183.6	182.0	187.8	188.6	-	163.4	162.1	168.0	168.3	-
243	Millwork, plywood and related products	212.1	210.1	239.6	238.2	238.5	176.2	174.3	200.7	199.2	198.8
2431	Millwork	95.2	94.5	108.0	108.6	-	78.3	77.6	89.4	89.8	-
2432	Veneer and plywood	75.8	75.9	79.7	79.1	-	67.5	67.7	70.8	70.1	-
244	Wooden containers	22.2	21.4	22.0	21.7	21.8	19.6	18.8	19.3	19.2	19.2
2441,2	Wooden boxes, shooks, and crates	17.9	17.2	17.7	17.4	-	15.9	15.2	15.6	15.5	-
249	Miscellaneous wood products	98.1	98.2	105.5	105.1	105.6	79.0	79.0	88.0	87.7	88.1

See footnotes at end of table.

ESTABLISHMENT DATA EMPLOYMENT

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

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
	DURABLE GOODS—Continued										
25	FURNITURE AND FIXTURES	499.0	498.4	513.2	518.3	524.7	411.2	410.8	421.7	426.4	432.4
251	Household furniture	362.0	361.7	370.6	374.3	379.1	307.3	307.3	312.7	316.7	321.1
2511	Wood household furniture	187.7	187.3	191.3	193.1	—	164.7	164.6	167.2	169.1	—
2512	Upholstered household furniture	104.7	104.7	107.9	108.8	—	87.1	87.0	88.9	90.0	—
2515	Mattresses and bedsprings	34.4	33.9	33.9	34.1	—	26.6	26.2	26.3	26.5	—
252	Office furniture	36.6	39.8	42.6	42.8	—	29.0	32.2	34.6	34.7	—
254	Partitions and fixtures	54.1	53.2	55.3	56.0	—	40.9	39.9	41.5	42.0	—
253,9	Other furniture and fixtures	46.3	43.7	44.7	45.2	(*)	34.0	31.4	32.9	33.0	(*)
32	STONE, CLAY, AND GLASS PRODUCTS	643.7	641.8	673.5	673.0	672.1	514.7	512.3	539.4	537.8	536.6
321	Flat glass	15.3	16.5	17.2	17.0	—	12.2	13.3	14.0	13.9	—
322	Glass and glassware, pressed or blown	134.1	135.1	137.0	137.9	135.8	115.9	116.8	118.7	118.9	117.0
3221	Glass containers	79.3	78.7	80.4	79.4	—	70.1	69.5	71.7	70.3	—
3229	Pressed and blown glass, nec	54.8	56.4	56.6	58.5	—	45.8	47.3	47.0	48.6	—
324	Cement, hydraulic	30.4	29.8	30.9	30.1	30.1	24.2	23.6	24.6	24.0	24.0
325	Structural clay products	48.8	47.7	52.9	52.3	52.0	39.2	37.8	42.7	42.3	42.1
3251	Brick and structural clay tile	22.2	22.0	24.0	23.8	—	18.5	18.2	20.1	20.1	—
326	Pottery and related products	44.1	44.0	42.0	42.2	—	37.6	37.5	35.4	35.8	—
327	Concrete, gypsum, and plaster products	197.5	196.6	213.6	212.2	212.5	154.1	153.4	168.1	166.4	166.3
328,9	Other stone and nonmetallic mineral products	135.7	134.4	139.0	140.0	140.6	102.6	101.1	105.6	106.2	106.7
3291	Abrasive products	24.3	24.5	24.6	24.8	—	17.2	17.4	17.5	17.7	—
33	PRIMARY METAL INDUSTRIES	1,220.0	1,192.6	1,206.3	1,213.9	1,196.8	961.4	934.1	939.9	950.6	933.1
331	Blast furnace and basic steel products	556.7	541.7	554.8	546.3	(*)	436.3	421.5	432.1	425.7	(*)
3312	Blast furnaces and steel mills	481.1	468.2	481.4	473.3	—	378.6	366.0	376.5	370.3	—
332	Iron and steel foundries	223.9	215.0	215.0	225.9	224.7	185.1	176.0	174.5	185.9	184.3
3321	Gray iron foundries	143.6	137.6	137.8	146.0	—	120.9	114.4	113.1	121.6	—
3322	Malleable iron foundries	22.0	19.8	20.8	21.1	—	17.9	15.8	17.0	17.3	—
3323	Steel foundries	58.3	57.6	56.4	58.8	—	46.3	45.8	44.4	47.0	—
333,4	Nonferrous metals	86.2	85.5	81.4	84.4	85.6	66.3	65.3	61.2	64.4	65.4
3334	Primary aluminum	34.6	34.3	34.9	36.0	—	28.2	27.8	27.9	29.1	—
335	Nonferrous rolling and drawing	198.4	197.2	197.6	199.4	197.4	147.7	146.8	144.2	146.7	145.6
3351	Copper rolling and drawing	36.2	36.3	37.3	37.1	—	27.7	27.8	28.3	28.8	—
3352	Aluminum rolling and drawing	63.2	62.7	63.2	64.2	—	45.8	45.5	45.2	46.1	—
3357	Nonferrous wire drawing and insulating	79.1	78.5	76.8	77.7	—	59.6	59.1	56.8	57.8	—
336	Nonferrous foundries	82.3	80.3	83.8	82.7	84.0	68.5	66.6	69.4	67.9	69.3
3361	Aluminum castings	46.1	43.9	46.9	45.3	—	39.1	36.8	39.5	37.4	—
3362,9	Other nonferrous castings	36.2	36.4	36.9	37.4	—	29.4	29.8	29.9	30.5	—
339	Miscellaneous primary metal products	72.5	72.9	73.7	75.2	76.5	57.5	57.9	58.5	60.0	61.2
3391	Iron and steel forgings	46.9	47.0	46.3	47.5	—	37.4	37.5	37.0	38.1	—
34	FABRICATED METAL PRODUCTS	1,421.3	1,406.5	1,464.0	1,482.4	1,494.2	1,078.5	1,062.0	1,108.3	1,126.8	1,138.0
341	Metal cans	65.3	60.4	63.7	62.4	61.3	56.6	51.9	54.3	53.0	52.0
342	Cutlery, hand tools, and hardware	170.1	172.0	176.6	180.7	183.0	131.6	133.5	137.2	141.6	143.9
3421,3,5	Cutlery and hand tools, including saws	71.6	71.8	71.2	72.1	—	54.7	54.8	54.8	55.7	—
3429	Hardware, nec	98.5	100.2	105.4	108.6	—	76.9	78.7	82.4	85.9	—
343	Plumbing and heating, except electric	70.5	70.9	75.4	75.9	76.4	52.2	52.6	55.8	56.3	56.6
3431,2	Sanitary ware and plumbers' brass goods	31.7	31.7	34.3	33.8	—	24.2	24.2	26.5	26.0	—
3433	Heating equipment, except electric	38.8	39.2	41.1	42.1	—	28.0	28.4	29.3	30.3	—
344	Fabricated structural metal products	456.1	455.7	480.3	483.9	486.3	319.1	316.6	338.5	342.2	343.6
3441	Fabricated structural steel	99.6	98.3	98.3	98.0	—	70.8	69.4	70.0	70.1	—
3442	Metal doors, sash, and trim	73.1	73.0	82.8	84.2	—	54.7	54.1	62.8	64.2	—
3443	Fabricated plate work (boiler shops)	137.5	138.0	138.7	139.5	—	89.0	89.2	88.9	90.6	—
3444	Sheet metal work	87.9	87.8	96.9	97.6	—	64.0	63.6	71.5	72.2	—
3446,9	Architectural and miscellaneous metal work	58.0	58.6	63.6	64.6	—	40.6	40.3	44.3	45.1	—
345	Screw machine products, bolts, etc	100.9	100.8	105.4	106.3	107.2	78.7	78.6	82.7	83.5	84.9
3451	Screw machine products	47.4	47.8	51.2	51.5	—	39.2	39.4	42.1	42.4	—
3452	Bolts, nuts, rivets, and washers	53.5	53.0	54.2	54.8	—	39.5	39.2	40.6	41.1	—
346	Metal stampings	238.1	227.6	231.0	239.3	243.2	194.8	184.7	187.1	195.5	199.5
347	Metal services, nec	92.8	93.5	96.0	96.7	98.5	75.8	76.7	78.8	79.5	80.9
348	Miscellaneous fabricated wire products	60.4	59.5	60.4	61.0	61.5	47.8	46.8	47.1	47.6	48.1
349	Miscellaneous fabricated metal products	167.1	166.1	175.2	176.2	176.8	121.9	120.6	126.8	127.6	128.5
3494,8	Valves, pipe, and pipe fittings	109.9	108.4	116.0	115.2	—	75.6	74.3	80.0	78.9	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT**

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

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
DURABLE GOODS—Continued											
TRANSPORTATION EQUIPMENT—Continued											
3732	Boat building and repairing	46.8	47.8	47.9	48.7	—	38.0	39.3	39.2	39.3	—
374	Railroad equipment	40.6	42.9	49.2	(*)	—	29.1	31.3	36.3	(*)	—
375,9	Other transportation equipment	147.2	145.3	159.9	161.0	—	118.1	116.4	128.5	130.0	—
38	INSTRUMENTS AND RELATED PRODUCTS	513.7	514.0	527.6	530.5	531.9	313.4	313.7	321.1	324.5	326.2
381	Engineering and scientific instruments	59.7	58.2	59.7	59.8	—	28.5	28.1	27.9	28.3	—
382	Mechanical measuring and control devices	118.4	118.9	122.9	124.3	125.0	75.6	75.4	79.3	80.5	81.4
3821	Mechanical measuring devices	76.4	77.3	81.1	82.3	—	45.8	46.1	49.4	50.7	—
3822	Automatic temperature controls	41.7	41.6	41.8	42.0	—	29.8	29.3	29.9	29.8	—
383,5	Optical and ophthalmic goods	64.4	65.4	70.4	70.9	72.1	43.4	44.3	47.7	48.1	49.1
385	Ophthalmic goods	41.9	42.3	45.5	45.4	—	30.6	31.0	33.3	33.2	—
384	Medical instruments and supplies	110.1	110.5	116.0	116.8	117.1	74.0	74.2	77.5	77.9	78.1
386	Photographic equipment and supplies	129.9	130.4	129.5	128.6	(*)	67.0	67.4	66.1	65.9	(*)
387	Watches, clocks, and watchcases	31.2	30.6	29.1	30.1	—	24.9	24.3	22.6	23.8	—
MISCELLANEOUS MANUFACTURING INDUSTRIES											
39	Jewelry, silverware, and plated ware	437.6	435.8	425.8	427.6	428.9	337.7	336.1	325.1	327.1	327.1
391	Toys and sporting goods	55.3	55.8	55.2	56.0	57.0	40.8	41.2	40.5	41.2	41.8
394	Games, toys, dolls, and play vehicles	133.8	131.9	123.9	123.5	—	106.1	104.3	95.1	94.8	—
3941-3	Sporting and athletic goods, nec	78.2	76.4	70.4	69.0	—	61.3	59.5	53.5	52.4	—
3949	Pens, pencils, office, and art supplies	55.6	55.5	53.5	54.5	—	44.8	44.8	41.6	42.4	—
395	Costume jewelry and notions	33.4	33.5	34.2	34.4	—	23.4	23.5	24.6	24.9	—
396	Other manufacturing industries	53.3	53.0	49.7	50.1	—	43.3	43.1	40.1	40.5	—
393,9	Musical instruments and parts	161.8	161.6	162.8	163.6	164.2	124.1	124.0	124.8	125.7	125.9
393		23.9	24.1	23.4	24.4	—	19.5	19.7	18.9	19.8	—
NONDURABLE GOODS											
20	FOOD AND KINDRED PRODUCTS	1,837.1	1,777.9	1,830.0	1,836.5	1,775.3	1,287.9	1,228.6	1,268.9	1,278.9	1,220.9
201	Meat products	358.3	360.2	364.5	364.7	365.0	295.8	298.1	300.4	301.0	301.7
2011	Meat packing plants	171.7	172.9	170.2	171.0	—	138.0	140.0	135.7	136.9	—
2013	Sausages and other prepared meats	66.8	66.8	68.5	68.2	—	47.9	47.6	50.0	49.8	—
2015	Poultry dressing plants	119.8	120.5	125.8	125.5	—	109.9	110.5	114.7	114.3	—
202	Dairy products	195.6	192.9	198.4	194.6	192.5	101.8	99.9	104.3	100.8	99.1
2024	Ice cream and frozen desserts	22.9	22.0	24.6	23.0	—	12.4	11.7	14.0	12.7	—
2026	Fluid milk	125.5	124.3	126.7	125.6	—	54.1	53.3	54.7	53.5	—
203	Canned, cured, and frozen foods	405.9	332.5	383.7	391.7	—	355.6	281.6	330.8	339.6	—
2031,6	Canned, cured, and frozen sea foods	48.2	46.5	43.8	43.6	—	42.0	40.5	38.4	38.4	—
2032,3	Canned food, except sea foods	237.5	156.3	225.6	230.3	—	212.5	130.4	197.4	202.5	—
2037	Frozen fruits and vegetables	71.9	77.5	63.9	67.1	—	63.2	68.8	55.5	58.8	—
204	Grain mill products	146.7	148.1	147.9	148.0	148.5	102.8	103.6	103.3	103.2	103.6
2041	Flour and other grain mill products	27.3	27.5	28.7	28.6	—	19.6	19.7	19.7	19.8	—
2042	Prepared feeds for animals and fowls	75.0	75.6	73.5	73.4	—	49.5	49.5	49.1	48.8	—
205	Bakery products	243.2	243.2	242.5	242.2	243.3	141.2	140.9	141.1	141.3	141.6
2051	Bread, cake, and related products	201.0	201.1	202.9	202.1	—	107.4	107.3	109.3	109.0	—
2052	Cookies and crackers	42.2	42.1	39.6	40.1	—	33.8	33.6	31.8	32.3	—
206	Sugar	31.6	43.4	25.5	27.8	—	23.2	35.2	18.2	20.7	—
207	Confectionery and related products	79.8	81.0	77.0	78.6	84.8	61.4	62.6	59.2	61.1	66.2
2071	Confectionery products	58.4	60.1	55.0	57.2	—	46.0	47.6	43.4	45.9	—
208	Beverages	229.5	229.1	242.5	239.0	237.0	111.6	111.3	116.6	114.6	113.4
2082	Malt liquors	51.0	49.3	53.1	52.1	—	36.9	35.4	38.4	37.2	—
2086	Bottled and canned soft drinks	134.2	132.8	144.4	140.6	—	49.0	48.1	53.3	51.1	—
209	Miscellaneous foods and kindred products	146.5	147.5	148.0	149.9	151.0	94.5	95.4	95.0	96.6	97.7
21	TOBACCO MANUFACTURES	84.8	84.2	73.7	75.8	76.8	71.4	71.0	60.1	61.9	62.9
211	Cigarettes	45.3	44.9	44.1	44.0	—	37.1	36.6	34.7	34.5	—
212	Cigars	10.2	10.1	9.3	9.6	—	8.9	8.8	8.1	8.4	—
22	TEXTILE MILL PRODUCTS	973.0	964.8	990.0	988.7	991.1	849.9	841.7	862.9	861.8	863.4
221	Weaving mills, cotton	175.6	175.3	169.7	169.1	168.8	159.5	159.3	153.2	152.7	152.0
222	Weaving mills, synthetics	123.5	122.4	120.4	120.1	120.4	110.5	109.2	107.8	107.7	107.9
223	Weaving and finishing mills, wool	23.1	22.5	22.6	22.3	22.2	19.3	18.8	19.0	18.7	18.5
224	Narrow fabric mills	25.8	25.7	26.4	26.4	26.4	22.4	22.3	22.9	23.1	23.1
225	Knitting mills	261.5	259.0	276.9	277.7	280.2	224.9	222.4	239.1	240.0	241.7
2251	Women's hosiery, except socks	39.1	38.9	38.3	38.6	—	34.5	34.2	34.0	34.1	—
2252	Hosiery, nec	34.5	34.3	36.9	36.9	—	30.5	30.4	33.1	33.2	—
2253	Knit outerwear mills	79.0	78.4	85.6	86.2	—	67.4	66.9	73.4	74.0	—
2254	Knit underwear mills	39.5	39.2	41.6	41.5	—	34.2	33.8	35.9	35.8	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT**

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

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
NONDURABLE GOODS—Continued											
TEXTILE MILL PRODUCTS—Continued											
226	Textile finishing, except wool	81.2	78.9	82.0	81.8	80.8	69.0	66.8	69.6	69.4	68.4
227	Floor covering mills	61.6	61.1	64.6	65.1	—	49.1	48.5	51.2	51.5	—
228	Yarn and thread mills	153.6	152.2	159.4	158.2	158.5	140.6	139.2	145.5	143.9	144.2
229	Miscellaneous textile goods	67.1	67.7	68.0	68.0	68.4	54.6	55.2	54.6	54.8	55.4
23	APPAREL AND OTHER TEXTILE PRODUCTS	1,298.9	1,295.7	1,295.2	1,303.9	1,309.0	1,116.5	1,112.7	1,109.3	1,118.3	1,122.0
231	Men's and boys' suits and coats	89.4	89.6	88.1	88.4	88.6	78.9	79.1	76.4	76.8	77.1
232	Men's and boys' furnishings	384.3	383.6	389.5	389.0	388.4	328.5	327.5	334.4	333.9	333.2
2321	Men's and boys' shirts and nightwear	117.8	117.8	115.9	114.5	—	102.5	102.5	100.2	98.9	—
2327	Men's and boys' separate trousers	85.5	85.5	87.4	86.7	—	74.2	74.2	76.9	76.1	—
2328	Men's and boys' work clothing	94.2	94.3	100.2	101.2	—	77.1	77.1	82.8	84.0	—
233	Women's and misses' outerwear	380.3	379.3	374.9	372.8	(*)	333.4	332.1	326.4	324.3	(*)
2331	Women's and misses' blouses and waists	47.5	47.7	48.0	47.3	—	41.9	42.0	41.8	41.3	—
2335	Women's and misses' dresses	165.9	166.3	162.2	160.4	—	148.6	148.5	144.1	142.1	—
2337	Women's and misses' suits and coats	58.4	55.1	56.3	56.3	—	50.1	47.2	47.3	47.4	—
2339	Women's and misses' outerwear, nec	108.5	110.2	108.4	108.8	—	92.8	94.4	93.2	93.5	—
234	Women's and children's undergarments	102.3	102.8	102.0	102.9	103.4	87.0	87.3	86.5	87.5	88.1
2341	Women's and children's underwear	77.5	77.8	78.2	78.6	—	67.2	67.4	67.5	67.9	—
2342	Corsets and allied garments	24.8	25.0	23.8	24.3	—	19.8	19.9	19.0	19.6	—
235	Hats, caps, and millinery	15.7	15.5	16.0	15.9	—	13.6	13.5	14.2	14.0	—
236	Children's outerwear	76.5	77.1	74.7	75.7	75.8	65.5	66.3	63.6	64.4	64.5
2361	Children's dresses and blouses	30.3	31.0	28.5	30.4	—	27.3	28.0	25.6	27.3	—
237,8	Fur goods and miscellaneous apparel	69.6	69.2	68.4	70.6	—	60.1	59.7	58.5	60.7	—
239	Miscellaneous fabricated textile products	180.8	178.6	181.6	188.6	(*)	149.5	147.2	149.3	156.7	(*)
2391,2	Housefurnishings	77.8	78.5	78.1	82.1	—	65.0	65.7	65.5	69.4	—
26	PAPER AND ALLIED PRODUCTS	684.8	681.9	711.0	707.6	708.0	519.3	516.2	533.8	532.9	532.5
261,2,6	Paper and pulp mills	203.2	200.1	207.6	205.2	203.4	155.6	152.9	159.6	157.7	155.7
263	Paperboard mills	71.0	70.3	72.4	70.9	(*)	56.5	55.8	57.0	55.9	(*)
264	Miscellaneous converted paper products	200.4	199.2	211.0	211.8	212.5	143.9	142.4	147.2	149.3	149.3
2643	Bags, except textile bags	43.8	43.7	45.5	46.2	—	35.1	35.1	35.9	36.7	—
265	Paperboard containers and boxes	210.2	212.3	220.0	219.7	220.9	163.3	165.1	170.0	170.0	171.0
2651,2	Folding and setup paperboard boxes	61.3	60.9	59.9	59.8	—	49.8	49.6	48.1	48.0	—
2653	Corrugated and solid fiber boxes	101.7	103.2	106.9	107.1	—	75.1	76.3	78.5	78.8	—
2654	Sanitary food containers	30.7	30.3	35.3	35.1	—	25.6	25.0	29.2	29.2	—
27	PRINTING AND PUBLISHING	1,084.9	1,090.4	1,112.0	1,116.6	1,122.2	632.7	634.3	637.2	640.4	645.7
271	Newspapers	384.9	387.8	394.4	394.5	396.8	166.5	167.8	163.3	163.5	164.5
272	Periodicals	69.9	70.9	72.5	72.8	—	18.8	18.7	19.7	19.7	—
273	Books	86.1	87.2	88.6	88.0	—	44.8	45.7	46.2	45.5	—
275	Commercial printing	361.4	361.8	366.6	370.8	373.0	272.4	271.5	274.4	276.8	280.1
2751	Commercial printing, except lithographic	206.8	206.7	206.3	208.6	—	158.1	157.3	156.8	157.6	—
2752	Commercial printing, lithographic	144.8	145.2	150.2	151.8	—	107.0	106.8	109.5	110.9	—
278	Blankbooks and bookbinding	51.4	50.7	52.8	52.6	53.4	42.0	41.3	43.3	43.2	43.7
274,6,7,9	Other publishing and printing ind	131.2	132.0	137.1	137.9	137.2	88.2	89.3	90.3	91.7	91.9
28	CHEMICALS AND ALLIED PRODUCTS	1,040.6	1,037.5	1,070.6	1,061.8	1,057.3	593.2	590.7	615.2	610.2	605.8
281	Industrial chemicals	338.2	337.7	351.3	348.1	347.5	180.6	179.7	190.9	188.6	187.9
2812	Alkalies and chlorine	21.8	21.1	21.5	21.2	—	16.2	15.6	15.7	15.3	—
2818	Industrial organic chemicals, nec	140.0	139.8	144.6	143.5	—	62.5	62.7	68.5	68.3	—
2819	Industrial inorganic chemicals, nec	110.2	110.8	116.9	116.1	—	60.2	59.9	63.6	62.8	—
282	Plastics materials and synthetics	203.8	202.6	206.0	202.8	200.8	135.4	135.0	139.3	137.0	135.0
2821	Plastics materials and resins	89.4	89.0	91.0	89.7	—	56.2	56.0	56.9	56.2	—
2823,4	Synthetic fibers	102.3	101.7	101.2	99.5	—	70.2	70.0	72.0	70.5	—
283	Drugs	169.8	169.7	176.8	174.8	174.7	84.4	84.1	87.3	86.1	86.4
2834	Pharmaceutical preparations	135.8	135.4	141.2	139.6	—	65.2	64.6	67.3	66.4	—
284	Soap, cleaners, and toilet goods	126.9	127.5	126.9	128.0	126.7	76.3	77.1	76.7	78.4	77.0
2841	Soap and other detergents	40.4	40.6	41.1	41.0	—	27.0	27.3	26.8	26.9	—
2844	Toilet preparations	52.8	53.2	51.2	52.2	—	31.6	32.1	31.4	32.7	—
285	Paints and allied products	67.0	66.5	72.3	70.8	70.2	35.8	35.5	38.9	37.4	37.0
287	Agricultural chemicals	54.1	54.4	55.9	55.7	55.8	32.6	33.0	33.9	33.8	33.7
2871,2	Fertilizers, complete and mixing only	31.9	32.4	33.3	33.4	—	21.5	22.0	21.9	21.8	—
286,9	Other chemical products	80.8	79.1	81.4	81.6	81.6	48.1	46.3	48.2	48.9	48.8
2892	Explosives	15.0	13.4	14.1	14.1	—	9.9	8.2	9.5	9.7	—
29	PETROLEUM AND COAL PRODUCTS	205.2	204.6	215.0	213.3	214.4	133.6	132.9	142.1	141.4	142.1
291	Petroleum refining	157.4	157.0	163.4	161.7	(*)	98.1	97.8	103.6	102.7	(*)
295,9	Other petroleum and coal products	47.8	47.6	51.6	51.6	52.1	35.5	35.1	38.5	38.7	38.8

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT**

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

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
NONDURABLE GOODS—Continued											
30	RUBBER AND PLASTICS PRODUCTS, NEC...	652.4	652.6	678.3	683.2	685.9	513.4	511.9	529.6	535.0	536.8
301	Tires and inner tubes	117.6	118.5	123.2	122.8	122.2	87.6	87.6	91.1	90.6	90.0
302,3,6	Other rubber products	172.8	171.9	172.8	174.5	174.6	136.4	134.8	134.8	136.7	136.0
302	Rubber footwear	23.4	23.5	19.7	19.6	—	19.6	19.8	16.6	16.7	—
307	Miscellaneous plastics products	362.0	362.2	382.3	385.9	389.1	289.4	289.5	303.7	307.7	310.8
31	LEATHER AND LEATHER PRODUCTS	268.1	264.2	265.6	262.8	266.6	299.6	225.9	227.8	224.3	227.2
311	Leather tanning and finishing	23.3	22.8	23.2	22.9	23.0	19.9	19.4	19.9	19.7	19.6
314	Footwear, except rubber	166.8	163.1	162.9	161.4	163.8	145.1	141.6	142.5	140.6	142.4
312,3,5,7,9	Other leather products	78.0	78.3	79.5	78.5	79.8	64.6	64.9	65.4	64.0	65.2
316	Luggage	18.2	17.9	18.4	18.3	—	14.3	14.1	14.3	14.1	—
317	Handbags and personal leather goods	36.1	36.6	36.5	35.7	—	30.2	30.6	30.4	29.6	—
TRANSPORTATION AND PUBLIC UTILITIES											
4,560 4,538 4,604 4,645 4,642 3,908 3,887 3,913 3,935 3,928											
40	RAILROAD TRANSPORTATION	537.6	537.4	545.5	541.1	—	—	—	—	—	—
4011	Class I railroads ²	498.9	498.8	507.5	504.0	—	—	—	—	—	—
LOCAL AND INTERURBAN PASSENGER TRANSIT											
271.2 275.2 223.9 249.8 — — — — — — —											
41	Local and suburban transportation	68.7	67.1	66.6	66.6	—	63.0	61.4	61.5	61.2	—
412	Taxicabs	75.3	75.1	69.3	69.0	—	—	—	—	—	—
413	Intercity highway transportation	41.0	39.4	41.1	40.1	—	37.1	35.5	37.6	36.4	—
42	TRUCKING AND WAREHOUSING	1,123.0	1,104.3	1,145.9	1,156.7	—	1,003.1	984.2	1,015.3	1,025.5	—
421,3	Trucking and trucking terminals	1,035.3	1,012.2	1,053.9	1,062.9	—	928.2	904.8	936.5	944.6	—
422	Public warehousing	87.7	92.1	92.0	93.8	—	74.9	79.4	78.8	80.9	—
45	TRANSPORTATION BY AIR	374.6	372.8	384.8	384.1	—	—	—	—	—	—
451,2	Air transportation	339.2	337.1	347.8	347.0	—	—	—	—	—	—
46	PIPELINE TRANSPORTATION	16.6	16.6	17.1	16.6	—	12.4	12.2	12.5	12.1	—
44,47	OTHER TRANSPORTATION AND SERVICES	350.4	345.2	359.4	375.1	—	—	—	—	—	—
44	WATER TRANSPORTATION	203.6	197.7	198.5	212.9	—	—	—	—	—	—
47	TRANSPORTATION SERVICES	146.8	147.5	160.9	162.2	—	—	—	—	—	—
48	COMMUNICATION	1,152.9	1,150.9	1,172.0	1,177.6	—	887.9	885.6	895.3	894.2	—
481	Telephone communication	941.4	939.4	954.6	958.8	—	717.1	714.8	720.6	718.2	—
482	Telegraph communication ³	17.4	17.4	18.3	(*)	—	12.9	13.0	14.7	(*)	—
483	Radio and television broadcasting	159.9	159.8	162.7	164.7	—	128.0	127.8	128.2	129.4	—
49	ELECTRIC, GAS, AND SANITARY SERVICES	734.0	735.6	755.2	743.8	—	607.2	608.8	624.1	612.2	—
491	Electric companies and systems	312.1	314.5	324.4	321.1	—	255.8	258.6	266.0	263.0	—
492	Gas companies and systems	159.4	158.0	160.3	156.0	—	131.0	129.6	132.2	127.9	—
493	Combination companies and systems	194.6	194.7	197.3	194.6	—	161.9	161.7	162.9	159.4	—
494-7	Water, steam, and sanitary systems	67.9	68.4	73.2	72.1	—	58.5	58.9	63.0	61.9	—
—	WHOLESALE AND RETAIL TRADE	17,870	17,922	18,352	18,457	18,530	15,797	15,850	16,174	16,256	16,325
50	WHOLESALE TRADE	4,300	4,322	4,429	4,421	4,440	3,561	3,582	3,658	3,647	3,662
501	Motor vehicles and automotive equipment	382.7	382.0	398.2	395.4	—	312.6	311.4	326.0	323.5	—
502	Drugs, chemicals, and allied products	242.2	242.0	248.5	249.8	—	192.1	192.2	196.4	198.0	—
503	Dry goods and apparel	155.6	156.2	160.4	159.7	—	121.2	121.8	124.3	123.4	—
504	Groceries and related products	631.4	638.1	629.9	631.7	—	550.2	556.7	547.7	548.3	—
506	Electrical goods	319.7	321.3	329.8	332.4	—	269.3	270.1	274.0	275.3	—
507	Hardware, plumbing and heating equipment	188.3	188.4	197.3	196.6	—	156.6	156.4	164.0	163.0	—
508	Machinery, equipment, and supplies	890.8	892.7	941.0	939.4	—	734.8	737.2	779.7	778.0	—
509	Miscellaneous wholesalers	1,375.8	1,380.9	1,415.3	1,407.1	—	1,129.9	1,136.4	1,159.7	1,150.5	—
52-59	RETAIL TRADE	13,570	13,600	13,923	14,036	14,090	12,236	12,268	12,516	12,609	12,663
53	Retail General Merchandise	2,487.3	2,538.6	2,459.3	2,513.2	—	2,288.8	2,340.1	2,260.2	2,312.7	—
531	Department stores	1,681.2	1,716.7	1,683.4	1,731.7	—	1,556.5	1,592.7	1,559.9	1,607.1	—
532	Mail order houses	113.5	122.5	107.2	111.4	—	106.6	115.6	102.0	106.3	—
533	Variety stores	311.9	315.7	295.4	297.1	—	292.3	296.5	274.8	276.1	—
54	FOOD STORES	2,066.3	2,080.6	2,098.3	2,123.4	—	1,909.7	1,924.0	1,937.2	1,960.6	—
541-3	Grocery, meat, and vegetable stores	1,882.4	1,892.4	1,904.6	1,926.3	—	1,739.6	1,749.9	1,758.4	1,779.2	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT**

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

(In thousands)

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
WHOLESALE AND RETAIL TRADE—Continued											
56	APPAREL AND ACCESSORY STORES	793.5	802.6	797.2	812.1	—	692.2	700.4	689.4	703.1	—
561	Men's and boys' clothing and furnishings	136.9	140.2	139.2	140.0	—	118.5	121.9	120.0	120.1	—
562	Women's ready-to-wear stores	294.7	297.9	286.4	291.8	—	259.2	262.6	249.5	254.5	—
565	Family clothing stores	123.1	125.7	127.2	128.8	—	111.5	113.0	113.0	114.6	—
566	Shoe stores	165.3	164.0	169.7	174.2	—	138.5	137.3	140.7	145.2	—
57	FURNITURE AND HOME FURNISHINGS STORES	534.8	538.7	550.3	552.0	—	451.6	455.0	462.9	463.3	—
571	Furniture and home furnishings	323.1	323.7	329.2	329.4	—	275.2	275.6	279.1	278.7	—
58	EATING AND DRINKING PLACES	3,773.5	3,706.7	3,985.6	4,008.2	—	3,521.2	3,458.2	3,705.9	3,717.5	—
52,55,59	OTHER RETAIL TRADE	3,914.3	3,932.4	4,031.9	4,027.3	—	3,372.9	3,390.7	3,460.4	3,452.0	—
52	Building materials and farm equipment	636.6	637.4	674.8	667.9	—	545.7	546.7	577.5	569.1	—
55	Automotive dealers and service stations	1,757.8	1,754.9	1,791.9	1,785.7	—	—	—	—	—	—
551,2	Motor vehicle dealers	791.0	794.6	814.6	815.1	—	660.4	664.1	678.4	678.5	—
553,9	Other automotive and accessory dealers	334.6	331.7	351.6	345.0	—	282.9	280.0	299.1	291.6	—
554	Gasoline service stations	632.2	628.6	625.7	625.6	—	—	—	—	—	—
59	Miscellaneous retail stores	1,519.9	1,540.1	1,565.2	1,573.7	—	—	—	—	—	—
591	Drug stores and proprietary stores	475.8	477.7	484.3	487.4	—	423.1	424.8	429.8	429.8	—
594	Book and stationery stores	82.2	81.8	81.2	81.6	—	69.6	69.2	68.4	69.1	—
596	Farm and garden supply stores	138.6	140.7	139.9	140.7	—	—	—	—	—	—
598	Fuel and ice dealers	95.8	97.7	95.1	94.7	—	80.7	82.4	80.0	79.8	—
FINANCE, INSURANCE, AND REAL ESTATE⁴											
4,347 4,355 4,578 4,550 4,559 3,319 3,325 3,494 3,465 3,469											
60	Banking	1,305.2	1,306.7	1,360.7	1,349.4	—	1,029.2	1,030.4	1,059.8	1,051.9	—
61	Credit agencies other than banks	467.4	470.8	506.6	506.8	—	359.3	362.9	392.0	391.2	—
612	Savings and loan associations	189.2	190.9	210.4	211.1	—	152.6	154.1	167.9	168.3	—
614	Personal credit institutions	194.8	196.0	206.1	205.7	—	—	—	—	—	—
62	Security, commodity brokers and services	176.5	176.6	181.9	180.7	—	142.8	144.1	148.2	146.7	—
63	Insurance carriers	1,114.7	1,117.4	1,157.5	1,155.9	—	753.1	755.5	785.5	782.5	—
631	Life insurance	514.5	514.9	520.7	519.3	—	293.8	294.6	295.5	293.7	—
632	Accident and health insurance	122.0	121.9	124.6	124.5	—	99.5	99.1	101.8	101.3	—
633	Fire, marine, and casualty insurance	416.3	418.0	443.3	443.3	—	308.6	310.0	331.3	330.7	—
64	Insurance agents, brokers, and service	344.4	346.6	370.1	370.2	—	—	—	—	—	—
65	Real estate	823.7	822.5	884.4	870.0	—	—	—	—	—	—
655	Subdividers and developers	118.1	115.9	126.9	122.8	—	—	—	—	—	—
656	Operative builders	58.0	58.5	67.2	66.6	—	—	—	—	—	—
66,67	Other finance, insurance, and real estate	115.5	114.8	117.1	117.1	—	—	—	—	—	—
SERVICES											
14,813 14,849 15,587 15,492 15,554 13,337 13,375 13,906 13,808 13,870											
70	Hotels and other lodging places	1,109.6	1,043.8	1,231.8	1,126.3	—	—	—	—	—	—
701	Hotels, tourist courts, and motels	907.6	866.4	936.5	903.5	—	842.4	802.9	867.5	834.9	—
72	Personal services	815.8	820.7	799.0	799.7	—	—	—	—	—	—
721	Laundries and dry cleaning plants	351.6	350.7	350.9	349.6	—	315.0	314.3	313.9	313.1	—
722	Photographic studios	45.6	48.6	39.2	41.3	—	40.7	43.7	35.1	37.3	—
73	Miscellaneous business services	2,164.3	2,171.8	2,285.4	2,299.0	—	—	—	—	—	—
731	Advertising	127.5	128.4	135.7	135.7	—	—	—	—	—	—
732	Credit reporting and collection	82.5	83.1	88.4	88.4	—	—	—	—	—	—
734	Services to buildings	417.5	417.1	429.6	433.1	—	—	—	—	—	—
76	Miscellaneous repair services	222.4	222.4	233.2	234.5	—	—	—	—	—	—
78	Motion pictures	212.2	201.5	229.4	216.5	—	—	—	—	—	—
781	Motion picture filming and distributing	69.0	67.2	75.4	72.2	—	53.1	52.0	63.5	60.4	—
782,3	Motion picture theaters and services	143.2	134.3	154.0	144.3	—	—	—	—	—	—
80	Medical and other health services	4,500.6	4,519.4	4,792.4	4,800.7	—	—	—	—	—	—
806	Hospitals	2,412.6	2,423.0	2,520.2	2,519.8	—	2,200.5	2,210.3	2,254.0	2,247.3	—
81	Legal services	372.8	377.3	420.7	410.0	—	—	—	—	—	—
82	Educational services	1,210.1	1,339.4	1,113.6	1,257.3	—	—	—	—	—	—
821	Elementary and secondary schools	396.8	425.8	374.5	422.0	—	—	—	—	—	—
822	Colleges and universities	639.3	734.4	555.9	644.0	—	—	—	—	—	—
89	Miscellaneous services	913.3	917.4	987.9	986.6	—	—	—	—	—	—
891	Engineering and architectural services	415.4	417.9	453.3	450.5	—	—	—	—	—	—
892	Nonprofit research agencies	152.6	153.3	168.7	167.9	—	—	—	—	—	—

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT**

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

[In thousands]

SIC Code	Industry	All employees					Production workers ¹				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
—	GOVERNMENT	14,660	15,104	14,476	15,050	15,488					
91	FEDERAL GOVERNMENT ⁵	2,717	2,711	2,757	2,717	2,709	—	—	—	—	—
	Executive	2,668.0	2,661.1	2,704.7	2,665.4	—	—	—	—	—	
	Department of Defense	917.2	918.0	922.0	909.1	—	—	—	—	—	
	Postal Service	662.8	657.9	656.8	655.0	—	—	—	—	—	
	Other agencies	1,088.0	1,085.2	1,125.9	1,101.3	—	—	—	—	—	
	Legislative	38.2	38.5	39.9	39.3	—	—	—	—	—	
	Judicial	11.2	11.5	12.4	12.5	—	—	—	—	—	
92,93	STATE AND LOCAL GOVERNMENT	11,943	12,393	11,719	12,333	12,779	—	—	—	—	
92	State government	3,180.8	3,344.5	3,132.8	3,269.6	—	—	—	—	—	
	State education	1,295.8	1,463.4	1,150.7	1,314.3	—	—	—	—	—	
	Other State government	1,885.0	1,881.1	1,982.1	1,955.3	—	—	—	—	—	
93	Local government	8,762.5	9,048.6	8,585.7	9,062.9	—	—	—	—	—	
	Local education	4,792.1	5,142.9	4,262.5	4,964.4	—	—	—	—	—	
	Other local government	3,970.4	3,905.2	4,323.2	4,098.5	—	—	—	—	—	

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

² Beginning January 1976, data relate to line haul railroads with operating revenues of \$10,000,000 or more.

³ Data for nonsupervisory workers exclude messengers.

⁴ Data for nonoffice sales agents excluded from nonsupervisory count for all series in this division.

⁵ Prepared by the U.S. Civil Service Commission. Data relate to civilian employment only and exclude Central Intelligence and National Security Agencies.

* Not available.

^p preliminary.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
	TOTAL	30,857	39	32,723	40	32,394	39
	PRIVATE SECTOR	24,752	38	25,627	39	26,011	38
	MINING	59	7	62	7	67	8
10	METAL MINING	5.3	6	5.7	6	5.7	6
11,12	COAL MINING	4.7	2	5.3	2	5.5	3
13	OIL AND GAS EXTRACTION	41.8	11	44.0	11	47.6	11
131,2	Crude petroleum and natural gas fields	26.5	16	28.6	17	31.5	18
138	Oil and gas field services	15.3	8	15.4	7	16.1	7
14	NONMETALLIC MINERALS, EXCEPT FUELS	6.9	6	7.3	6	7.7	6
142	Crushed and broken stone	2.3	5	2.2	5	2.4	5
144	Sand and gravel	2.0	5	2.3	6	2.4	6
	CONTRACT CONSTRUCTION	249	7	258	7	273	7
15	GENERAL BUILDING CONTRACTORS	77.9	7	81.3	7	85.4	7
16	HEAVY CONSTRUCTION CONTRACTORS	43.7	5	43.7	6	48.2	5
161	Highway and street construction	14.7	4	15.9	5	19.6	5
162	Heavy construction, nec	29.0	6	27.8	7	28.6	6
17	SPECIAL TRADE CONTRACTORS	127.0	7	132.8	7	139.1	7
171	Plumbing, heating, air conditioning	36.7	8	38.0	9	39.5	8
172	Painting, paper hanging, decorating	8.4	6	9.4	7	10.1	6
173	Electrical work	20.3	6	22.0	7	23.2	7
174	Masonry, stonework, and plastering	9.4	5	11.2	5	11.3	5
176	Roofing and sheet metal work	9.0	7	9.4	7	9.9	7
	MANUFACTURING	5,514	29	5,730	30	5,762	29
19,24,25,32-39	DURABLE GOODS	2,418	22	2,569	23	2,595	23
20-23,26-31	NONDURABLE GOODS	3,096	39	3,161	40	3,167	39
	DURABLE GOODS						
19	ORDNANCE AND ACCESSORIES	36.1	23	35.2	23	34.6	22
192	Ammunition, except for small arms	23.7	23	23.1	23	22.9	23
1925	Complete guided missiles	17.9	21	17.1	21	16.6	21
1929	Ammunition, except for small arms, nec	5.8	34	6.0	33	6.3	34
24	LUMBER AND WOOD PRODUCTS	79.1	13	82.5	13	85.0	13
241	Logging camps, and logging contractors	5.5	7	3.6	5	3.8	5
242	Sawmills and planing mills	16.0	7	17.8	8	18.4	8
2421	Sawmills and planing mills, general	12.1	7	13.2	7	13.6	7
243	Millwork, plywood and related products	29.9	14	31.9	15	33.9	14
2431	Millwork	17.1	18	17.8	18	18.7	18
2432	Veneer and plywood	9.5	13	10.2	13	10.8	14
244	Wooden containers	4.4	20	4.8	22	4.8	22
2441,2	Wooden boxes, shooks, and crates	3.6	20	3.7	21	3.8	21
249	Miscellaneous wood products	23.3	24	24.4	24	24.1	23
25	FURNITURE AND FIXTURES	132.4	28	142.5	28	140.4	28
251	Household furniture	104.2	30	114.3	31	111.4	31
2511	Wood household furniture	51.3	29	54.1	29	54.7	29
2512	Upholstered household furniture	34.0	34	36.7	35	36.2	35
2515	Mattresses and bedsprings	9.3	28	9.3	28	9.1	28
252	Office furniture	6.6	19	8.1	20	8.8	21
254	Partitions and fixtures	8.4	16	8.1	15	8.1	15
253,9	Other furniture and fixtures	13.2	28	12.0	28	12.1	28
32	STONE, CLAY, AND GLASS PRODUCTS	114.3	18	114.8	18	118.8	18
321	Flat glass	1.5	9	1.3	8	1.6	9
322	Glass and glassware, pressed or blown	45.8	34	46.3	34	47.4	34
3221	Glass containers	28.5	36	28.2	36	29.2	36
3229	Pressed and blown glass nec	17.3	32	18.1	31	18.2	32
324	Cement, hydraulic	1.4	4	1.3	4	1.4	4
325	Structural clay products	5.7	12	6.1	12	6.3	12
3251	Brick and structural clay tile	1.2	5	1.3	6	1.4	6
326	Pottery and related products	14.9	35	13.3	33	13.7	33
327	Concrete, gypsum, and plaster products	12.8	6	12.7	6	13.8	6
328,9	Other stone and nonmetallic mineral products	21.9	16	23.3	17	23.9	17
3291	Abrasive products	5.4	22	5.3	22	5.4	22

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
DURABLE GOODS—Continued							
33	PRIMARY METAL INDUSTRIES	103.1	9	106.3	9	110.6	9
331	Blast furnace and basic steel products	31.6	6	30.8	6	33.5	6
3312	Blast furnaces and steel mills	25.3	5	24.7	5	27.1	6
332	Iron and steel foundries	13.0	6	14.4	7	15.6	7
3321	Gray iron foundries	6.8	5	7.6	5	8.5	6
3322	Malleable iron foundries	1.2	6	1.4	7	1.4	7
3323	Steel foundries	5.0	9	5.4	10	5.7	10
333,4	Nonferrous metals	4.4	5	4.9	6	5.0	7
3334	Primary aluminum	1.3	4	1.4	4	1.6	4
335	Nonferrous rolling and drawing	36.1	19	37.2	19	36.9	19
3351	Copper rolling and drawing	2.8	8	3.5	10	3.7	10
3352	Aluminum rolling and drawing	7.5	12	7.5	12	8.2	13
3357	Nonferrous wire drawing and insulating	21.4	28	22.6	28	21.6	28
336	Nonferrous foundries	11.8	15	12.7	16	12.8	16
3361	Aluminum castings	5.8	13	6.1	13	6.3	14
3362,9	Other nonferrous castings	6.0	18	6.6	18	6.5	18
339	Miscellaneous primary metal products	6.2	9	6.3	9	6.8	9
3391	Iron and steel forgings	3.2	7	3.2	7	3.3	7
34	FABRICATED METAL PRODUCTS	272.0	20	287.3	20	289.0	20
341	Metal cans	11.1	17	10.2	17	11.0	18
342	Cutlery, hand tools, and hardware	54.8	33	58.4	34	58.4	34
3421,3,5	Cutlery and hand tools, including saws	20.7	30	21.6	31	22.1	32
3429	Hardware, nec	34.1	36	36.8	36	36.3	35
343	Plumbing and heating, except electric	13.3	19	15.0	20	15.0	20
3431,2	Sanitary ware and plumbers' brass goods	6.5	21	7.2	22	7.5	22
3433	Heating equipment, except electric	6.8	18	7.8	19	7.5	19
344	Fabricated structural metal products	61.3	14	62.1	14	64.3	14
3441	Fabricated structural steel	6.7	7	6.6	7	6.7	7
3442	Metal doors, sash, and trim	23.1	32	22.0	30	23.2	29
3443	Fabricated plate work (boiler shops)	12.2	9	13.3	10	13.5	10
3444	Sheet metal work	12.9	15	12.9	14	13.1	14
3446,9	Architectural and miscellaneous metal work	6.4	11	7.3	13	7.8	13
345	Screw machine products, bolts, etc.	20.4	21	22.4	22	22.1	21
3451	Screw machine products	10.8	24	12.1	24	11.8	23
3452	Bolts, nuts, rivets, and washers	9.6	18	10.3	19	10.3	19
346	Metal stampings	45.5	21	48.8	21	47.5	21
347	Metal services, n e c	19.2	21	20.8	22	20.5	22
348	Misc. fabricated wire products	15.0	25	15.3	25	15.2	25
349	Misc. fabricated metal products	31.4	19	34.3	20	35.0	20
3494,8	Valves, pipe, and pipe fittings	19.7	18	21.6	19	22.3	19
35	MACHINERY, EXCEPT ELECTRICAL	341.5	17	369.1	17	377.5	17
351	Engines and turbines	17.6	16	19.1	17	17.4	15
3511	Steam engines and turbines	5.3	12	5.4	13	5.5	13
3519	Internal combustion engines, nec	12.3	18	13.7	19	11.9	17
352	Farm machinery	17.4	12	18.9	13	18.4	13
353	Construction and related machinery	35.6	11	35.3	10	36.1	10
3531,2	Construction and mining machinery	17.0	9	16.0	9	15.8	9
3533	Oil field machinery	8.0	12	7.7	11	8.2	11
3535,6	Conveyors, hoists, cranes, monorails	5.3	11	5.7	12	5.8	12
3537	Industrial trucks and tractors	3.1	10	3.8	12	4.1	12
354	Metal working machinery	42.7	14	46.2	14	46.7	14
3541	Machine tools, metal cutting types	6.4	11	6.8	11	6.8	11
3544	Special dies, tools, jigs and fixtures	11.4	10	12.6	10	13.1	10
3545	Machine tool accessories	10.2	19	10.8	19	11.1	19
3542,8	Miscellaneous metal working machinery	14.7	20	16.0	21	15.7	21
355	Special industry machinery	23.2	13	24.4	14	24.6	14
3551	Food products machinery	4.8	12	5.0	12	5.2	12
3552	Textile machinery	5.4	18	5.5	18	5.5	19
3555	Printing trades machinery	3.3	14	3.9	15	4.0	15
356	General industrial machinery	49.9	18	52.9	18	54.2	18
3561	Pumps and compressors	12.4	15	13.3	16	13.7	16
3562	Ball and roller bearings	12.2	23	12.9	23	13.2	23
3564	Blowers and fans	6.6	19	6.9	20	7.1	20
3566	Power transmission equipment	7.3	15	7.3	15	7.7	16
357	Office and computing machines	85.8	29	93.9	30	101.2	31
3573	Electronic computing equipment	63.8	29	70.0	29	76.1	30
358	Service industry machines	29.1	18	32.6	19	33.0	19
3585	Refrigeration machinery	18.6	17	22.0	18	22.0	18
359	Miscellaneous machinery, except electrical	40.2	16	45.8	17	45.9	17

**ESTABLISHMENT DATA .
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
DURABLE GOODS - CONTINUED							
36	ELECTRICAL EQUIPMENT AND SUPPLIES	740.1	41	792.2	42	801.1	41
361	Electrical test and distributing equipment	68.4	37	76.0	38	77.8	38
3611	Electric measuring instruments	30.8	44	33.5	45	35.0	44
3612	Transformers	13.2	30	16.6	33	16.1	32
3613	Switchgear and switchboard apparatus	24.4	34	25.9	34	26.7	34
362	Electrical industrial apparatus	76.5	36	84.1	38	85.0	38
3621	Motors and generators	37.4	37	40.2	37	40.7	38
3622	Industrial controls	29.0	43	31.8	45	31.9	45
363	Household appliances	51.4	31	60.2	34	59.8	33
3632	Household refrigerators and freezers	7.3	21	9.0	24	9.9	25
3633	Household laundry equipment	5.0	21	6.0	22	6.2	22
3634	Electric housewares and fans	25.4	52	28.7	55	28.0	53
364	Electric lighting and wiring equipment	85.9	45	92.7	45	92.7	45
3641	Electric lamps	23.3	64	24.2	64	24.2	64
3642	Lighting fixtures	22.0	36	24.1	36	23.3	36
3643,4	Wiring devices	40.6	43	44.4	44	45.2	44
365	Radio and TV receiving equipment	69.4	54	67.6	52	68.1	52
366	Communication equipment	147.0	35	154.4	36	158.2	36
3661	Telephone and telegraph apparatus	58.7	45	65.7	46	67.9	47
3662	Radio and TV communication equipment	88.3	31	88.7	31	90.3	31
367	Electronic components and accessories	194.9	53	205.0	53	206.2	53
3671-3	Electron tubes	15.9	38	16.1	38	16.6	38
3674,9	Other electronic components	179.0	55	188.9	55	189.6	55
369	Miscellaneous electrical equipment and supplies	46.6	33	52.2	34	53.3	34
3694	Engine electrical equipment	25.6	35	27.9	35	28.1	35
37	TRANSPORTATION EQUIPMENT	211.3	13	238.3	13	241.7	13
371	Motor vehicles and equipment	88.6	11	104.6	12	107.7	12
3711	Motor vehicles	29.3	9	35.2	10	37.4	10
3712	Passenger car bodies	1.5	6	5.6	12	4.2	11
3713	Truck and bus bodies	3.8	10	4.6	11	4.6	11
3714	Motor vehicle parts and accessories	52.6	14	57.5	14	59.9	15
3715	Truck trailers	1.4	7	1.7	7	1.6	6
372	Aircraft and parts	72.6	15	77.8	16	79.4	16
3721	Aircraft	40.5	16	43.6	17	44.1	17
3722	Aircraft engines and engine parts	17.4	14	18.9	14	19.4	15
3723,9	Other aircraft parts and equipment	14.7	16	15.3	17	15.9	17
373	Ship and boat building and repairing	19.5	9	22.2	10	23.5	10
3731	Ship building and repairing	12.7	8	13.8	8	15.4	9
3732	Boat building and repairing	6.8	15	8.4	16	8.1	16
374	Railroad equipment	4.5	11	4.7	10	4.8	10
375,9	Other transportation equipment	26.1	17	29.0	18	26.3	17
38	INSTRUMENTS AND RELATED PRODUCTS	200.7	39	209.7	40	211.3	40
381	Engineering and scientific instruments	16.3	28	17.0	29	16.1	28
382	Mechanical measuring and control devices	47.2	40	48.0	40	49.0	40
3821	Mechanical measuring devices	26.5	35	28.5	36	28.4	35
3822	Automatic temperature controls	20.7	50	19.5	50	20.6	50
383,5	Optical and ophthalmic goods	28.1	44	30.7	45	31.9	46
385	Ophthalmic goods	21.4	51	22.6	51	23.5	52
384	Medical instruments and supplies	54.4	50	59.2	51	59.8	52
386	Photographic equipment and supplies	35.6	27	35.3	27	35.6	27
387	Watches, clocks, and watchcases	19.1	64	19.5	64	18.9	64
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	187.2	45	191.1	46	185.3	45
391	Jewelry, silverware, and plated ware	21.1	43	23.9	44	22.2	43
394	Toys and sporting goods	63.5	51	62.7	53	61.2	52
3941-3	Games, toys, dolls, and play vehicles	37.6	55	33.4	56	35.7	56
3949	Sporting and athletic goods, n e c	25.9	47	29.3	50	25.5	47
395	Pens, pencils, office and art supplies	18.5	56	18.9	56	18.7	56
396	Costume jewelry and notions	27.1	54	27.2	54	25.1	54
393,9	Other manufacturing industries	57.0	37	58.4	37	58.1	37
393	Musical instruments and parts	9.1	41	9.7	41	9.3	42
NONDURABLE GOODS							
20	FOOD AND KINDRED PRODUCTS	481.8	28	450.6	27	486.6	28
201	Meat products	107.5	30	107.6	30	112.3	31
2011	Meat packing plants	25.6	15	25.7	15	25.8	15
2013	Sausages and other prepared meats	19.2	29	19.0	28	19.5	28
2015	Poultry dressing plants	62.7	53	62.9	53	67.0	53
202	Dairy products	38.1	19	36.9	19	38.9	20
2024	Ice cream and frozen desserts	6.6	26	5.6	25	6.3	26

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
NONDURABLE GOODS — CONTINUED							
FOOD AND KINDRED PRODUCTS — Continued							
2026	Fluid milk	19.8	16	20.0	16	20.7	16
203	Canned, cured, and frozen foods	140.8	43	106.5	41	132.1	42
2031,6	Canned, cured, and frozen sea foods	27.6	57	24.3	55	26.6	57
2032,3	Canned food, except sea foods	62.5	39	34.2	32	57.6	36
2037	Frozen fruits and vegetables	28.9	47	32.1	49	27.7	47
204	Grain mill products	24.2	17	25.6	18	26.2	18
2041	Flour and other grain mill products	3.8	14	4.7	17	4.5	16
2042	Prepared feeds for animals and fowls	11.9	16	11.7	16	12.1	16
205	Bakery products	61.8	25	61.8	26	62.1	26
2051	Bread, cake, and related products	42.0	21	42.5	21	42.6	21
2052	Cookies and crackers	19.8	48	19.3	48	19.5	50
206	Sugar	3.1	10	3.1	12	3.2	12
207	Confectionery and related products	34.2	45	34.1	45	33.9	45
2071	Confectionery products	26.0	47	26.1	48	25.5	48
208	Beverages	33.6	14	34.3	15	35.4	15
2082	Malt liquors	5.0	10	5.0	10	5.6	11
2086	Bottled and canned soft drinks	14.9	11	15.1	11	15.8	11
209	Miscellaneous foods and kindred products	38.5	27	40.7	28	42.5	29
21	TOBACCO MANUFACTURES	27.2	37	24.0	36	23.4	36
211	Cigarettes	14.6	32	13.9	31	13.7	31
212	Cigars	6.6	68	6.5	69	6.1	69
22	TEXTILE MILL PRODUCTS	442.5	47	458.9	47	456.6	47
221	Weaving mills, cotton	72.1	42	72.9	42	72.3	42
222	Weaving mills, synthetics	47.4	39	48.6	40	48.8	40
223	Weaving and finishing mills, wool	8.3	37	9.0	38	8.4	38
224	Narrow fabric mills	14.7	59	15.1	58	14.0	57
225	Knitting mills	163.3	64	170.3	64	171.3	64
2251	Women's hosiery, except socks	28.7	76	28.8	76	28.3	76
2252	Hosiery, n e c	25.3	72	25.4	72	26.1	72
2253	Knit outerwear mills	53.8	73	58.1	72	57.9	72
2254	Knit underwear mills	28.2	69	28.8	71	29.3	71
226	Textile finishing, except wool	23.4	29	24.1	29	23.9	29
227	Floor covering mills	21.3	36	23.6	37	23.3	37
228	Yarn and thread mills	73.4	48	75.6	48	75.3	48
229	Miscellaneous textile goods	18.6	29	19.7	29	19.3	29
23	APPAREL AND OTHER TEXTILE PRODUCTS	1,006.5	80	1,039.9	81	1,002.1	80
231	Men's and boys' suits and coats	65.1	77	67.4	77	65.5	78
232	Men's and boys' furnishings	312.0	83	319.3	84	309.4	83
2321	Men's and boys' shirts and nightwear	100.4	87	99.7	87	96.2	87
2327	Men's and boys' separate trousers	68.0	81	70.3	81	68.4	81
2328	Men's and boys' work clothing	73.8	82	79.7	82	76.5	81
233	Women's and misses' outerwear	319.3	85	325.0	86	309.9	85
2331	Women's and misses' blouses and waists	41.3	87	43.2	89	40.2	88
2335	Women's and misses' dresses	141.7	87	148.2	87	137.0	86
2337	Women's and misses' suits and coats	44.9	78	37.3	78	42.4	79
2339	Women's and misses' outerwear, n e c	91.4	85	96.3	86	90.3	86
234	Women's and children's undergarments	83.0	85	86.4	86	84.0	85
2341	Women's and children's underwear	63.8	87	67.2	87	65.1	87
2342	Corsets and allied garments	19.2	80	19.2	81	18.9	80
235	Hats, caps, and millinery	11.1	72	12.3	75	11.8	75
236	Children's outerwear	63.8	87	65.4	87	65.3	86
2361	Children's dresses and blouses	27.2	89	27.2	89	27.1	89
237,8	Fur goods and miscellaneous apparel	47.1	73	51.1	75	47.1	72
239	Miscellaneous fabricated textile products	105.1	62	113.0	63	109.1	62
2391,2	Housefurnishings	49.6	69	52.1	69	51.8	69
26	PAPER AND ALLIED PRODUCTS	141.5	21	146.3	21	150.7	21
261,2,6	Paper and pulp mills	23.6	12	23.5	12	25.0	12
263	Paperboard mills	5.4	8	5.6	8	5.8	8
264	Miscellaneous converted paper products	64.7	33	67.9	33	69.0	33
2643	Bags, except textile bags	13.7	32	14.7	33	14.1	32
265	Paperboard containers and boxes	47.8	23	49.3	23	50.9	23
2651,2	Folding and setup paperboard boxes	18.3	31	18.0	30	17.7	30
2653	Corrugated and solid fiber boxes	14.1	14	15.3	15	15.8	15
2654	Sanitary food containers	10.2	33	10.6	33	12.0	34

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
NONDURABLE GOODS – CONTINUED							
27	PRINTING AND PUBLISHING	379.2	35	395.1	36	402.1	36
271	Newspapers	125.1	33	127.6	33	131.0	33
272	Periodicals	35.4	51	36.9	52	38.0	53
273	Books	42.1	49	47.5	52	46.5	52
275	Commercial printing	102.9	29	107.5	29	108.0	30
2751	Commercial printing, ex. lithographic	59.3	29	60.7	30	61.3	30
2752	Commercial printing, lithographic	40.7	28	43.0	29	43.3	29
278	Blankbooks and bookbinding	25.8	51	26.2	51	26.9	51
274,6,7,9	Other publishing and printing ind.	47.9	37	49.4	37	51.7	38
28	CHEMICALS AND ALLIED PRODUCTS	224.9	22	235.0	22	240.4	22
281	Industrial chemicals	44.3	13	46.9	14	48.9	14
2812	Alkalies and chlorines	1.9	9	2.0	10	2.1	10
2818	Industrial organic chemicals, n e c	20.7	15	21.2	15	21.9	15
2819	Industrial inorganic chemicals, n e c	14.6	13	16.1	14	16.9	14
282	Plastics materials and synthetics	35.8	18	38.6	19	39.9	19
2821	Plastics materials and resins	8.1	9	9.9	11	10.8	12
2823,4	Synthetic fibers	26.8	26	27.6	27	27.9	27
283	Drugs	67.0	39	70.8	41	71.3	41
2834	Pharmaceutical preparations	55.4	41	58.9	43	59.5	43
284	Soap, cleaners, and toilet goods	45.5	37	45.9	38	47.1	38
2841	Soap and other detergents	8.2	21	8.3	21	8.6	21
2844	Toilet preparations	27.7	56	27.6	57	28.3	56
285	Paints and allied products	11.3	17	11.3	16	11.8	16
287	Agricultural chemicals	6.7	12	6.9	11	6.9	12
2871,2	Fertilizers, complete and mixing only	3.0	9	3.2	9	3.3	10
286,9	Other chemical products	14.3	17	14.6	18	14.5	18
2892	Explosives	2.6	17	2.3	17	2.3	17
29	PETROLEUM AND COAL PRODUCTS	21.1	10	23.0	11	25.0	12
291	Petroleum refining	16.0	10	17.6	11	19.3	12
295,9	Other petroleum and coal products	5.1	11	5.4	11	5.7	11
30	RUBBER AND PLASTICS PRODUCTS, NEC	208.8	37	227.5	34	228.2	34
301	Tires and inner tubes	6.7	12	11.1	9	11.3	9
302,3,6	Other rubber products	57.7	36	62.7	36	61.9	36
302	Rubber footwear	11.5	61	13.0	62	12.2	61
307	Miscellaneous plastics products	144.4	41	153.7	41	155.0	41
31	LEATHER AND LEATHER PRODUCTS	162.1	61	160.4	60	151.4	60
311	Leather tanning and finishing	3.2	14	3.3	14	3.0	14
314	Footwear, except rubber	110.5	66	108.2	65	102.3	66
312,3,5-7,9	Other leather products	48.4	64	48.9	63	46.1	62
316	Luggage	11.5	65	10.9	59	9.8	55
317	Handbags and personal leather goods	24.5	71	24.4	71	24.1	71
-	TRANSPORTATION AND PUBLIC UTILITIES	977	22	1,023	23	1,033	22
41	LOCAL AND INTERURBAN PASSENGER TRANSIT	31.7	13	54.3	20	32.1	14
411	Local and suburban transportation	7.3	11	8.7	13	7.5	11
412	Taxis	4.5	6	6.0	8	5.9	8
413	Intercity highway transportation	4.5	11	4.3	11	4.8	12
42	TRUCKING AND WAREHOUSING	113.2	10	115.8	10	121.0	11
421,3	Trucking and trucking terminals	99.8	10	100.3	10	105.0	10
422	Public warehousing	13.4	16	15.5	17	16.0	18
45	TRANSPORTATION BY AIR	107.5	29	109.8	29	115.3	30
451,2	Air transportation	102.1	30	104.3	31	109.7	32
46	PIPE LINE TRANSPORTATION	1.6	9	1.5	9	1.7	10
44	WATER TRANSPORTATION	18.8	9	18.2	9	19.2	10
47	TRANSPORTATION SERVICES	36.4	25	45.4	29	49.0	30
48	COMMUNICATION	524.1	45	520.3	45	527.4	45
481	Telephone communication	464.2	49	459.7	49	467.3	49
483	Radio and television broadcasting	46.1	29	46.9	29	47.2	29
49	ELECTRIC, GAS, AND SANITARY SERVICES	123.3	17	123.5	17	127.0	17
491	Electric companies and systems	51.6	16	51.7	16	52.9	16
492	Gas companies and systems	31.3	19	30.5	20	31.5	20

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
NONDURABLE GOODS — CONTINUED							
ELECTRIC, GAS, AND SANITARY SERVICES — Cont'd							
493	Combination companies and systems	31.0	16	31.5	16	32.1	16
494-7	Water, steam, and sanitary systems	9.4	14	9.8	14	10.5	14
—	WHOLESALE AND RETAIL TRADE	7,346	41	7,523	42	7,611	42
50	WHOLESALE TRADE	1,038	24	1,062	25	1,075	24
501	Motor vehicles and automotive equipment	81.2	21	83.6	21	86.6	22
502	Drugs, chemicals, and allied products	84.1	35	83.3	34	84.9	34
503	Dry goods and apparel	75.4	49	77.9	49	76.4	49
504	Groceries and related products	139.0	22	138.2	23	138.7	22
506	Electrical goods	86.0	27	88.8	27	90.3	27
507	Hardware; plumbing and heating equipment	48.4	26	49.9	26	51.3	26
508	Machinery, equipment, and supplies	187.2	21	195.4	21	200.9	21
509	Miscellaneous wholesalers	311.2	23	318.1	23	321.0	23
52-59	RETAIL TRADE	6,308	47	6,461	47	6,536	47
53	Retail general merchandise	1,646.6	68	1,641.3	67	1,643.7	67
531	Department stores	1,134.9	69	1,124.9	67	1,132.3	67
532	Mail order houses	66.0	61	66.2	63	62.9	60
533	Variety stores	214.3	72	222.9	74	221.6	75
54	Food stores	800.6	39	835.2	40	843.0	40
541-3	Grocery, meat, and vegetable stores	690.0	37	717.1	38	727.9	38
58	Apparel and accessory stores	521.1	67	536.4	66	525.6	66
561	Men's and boys' clothing and furnishings	59.6	43	60.2	43	60.1	43
562	Women's ready-to-wear stores	255.8	87	256.5	88	247.9	87
565	Family clothing stores	85.1	70	91.0	73	92.0	73
566	Shoe stores	61.4	39	67.2	38	64.4	39
57	Furniture and home furnishings stores	161.5	30	166.2	31	165.6	30
571	Furniture and home furnishings	105.8	33	108.2	33	108.4	33
58	Eating and drinking places	2,089.3	56	2,164.7	57	2,230.1	56
52,55,59	Other retail trade	1,088.5	28	1,116.7	28	1,128.4	28
52	Building materials and farm equipment	122.0	19	123.9	19	129.5	19
55	Automotive dealers and service stations	262.2	15	258.8	15	267.6	15
551,2	Motor vehicle dealers	99.2	13	103.6	13	104.8	13
553,9	Other automotive and accessory dealers	54.7	16	54.1	16	56.9	16
59	Miscellaneous retail stores	704.3	47	734.0	47	731.3	47
591	Drug stores and proprietary stores	289.0	61	287.5	60	292.1	61
594	Book and stationery stores	38.2	48	40.6	49	38.5	49
596	Farm and garden supply stores	30.0	22	34.5	23	30.9	21
598	Fuel and ice dealers	18.9	20	20.0	20	19.5	21
—	FINANCE, INSURANCE, AND REAL ESTATE	2,390	55	2,481	56	2,550	56
60	Banking	875.9	67	901.1	68	928.4	68
61	Credit agencies other than banks	283.4	61	304.8	62	316.5	63
612	Savings and loan associations	131.5	70	143.1	71	150.0	72
614	Personal credit institutions	100.9	52	108.2	54	111.0	54
62	Security, commodity brokers and services	62.5	35	65.2	36	65.3	36
63	Insurance carriers	616.7	55	639.4	56	652.3	56
631	Life insurance	243.0	47	246.6	48	249.2	48
632	Accident and health insurance	87.0	71	88.9	72	89.9	72
633	Fire, marine, and casualty insurance	247.3	60	260.7	61	267.5	61
64	Insurance agents, brokers, and service	195.4	57	207.6	58	213.1	58
65	Real estate	295.0	35	303.5	36	314.6	36
655	Subdividers and developers	28.6	23	30.3	26	32.7	25
656	Operative builders	12.0	20	12.5	20	14.0	21
66,67	Other finance, insurance, and real estate	60.6	52	58.9	51	59.9	52
—	SERVICES	8,217	55	8,550	56	8,715	56
Hotels and other lodging places:							
701	Hotels, tourist courts, and motels	504.1	54	453.5	53	503.0	55
72	Personal services	519.7	63	506.2	63	504.8	63
721	Laundries and dry cleaning plants	221.3	62	215.1	62	217.7	62
722	Photographic studios	26.5	62	22.8	59	22.1	58
73	Miscellaneous business services	785.3	37	824.9	37	855.6	38
731	Advertising	56.8	45	60.5	46	62.3	46
732	Credit reporting and collection	56.6	69	60.1	70	62.2	70
734	Services to buildings	162.5	40	164.5	39	164.5	38
76	Miscellaneous repair services	36.1	16	38.8	17	41.0	18
78	Motion pictures	82.9	38	74.8	38	82.6	38
781	Motion picture filming and distributing	25.7	38	23.2	39	25.3	36
782,3	Motion picture theaters and services	57.2	38	51.6	37	57.3	38

**ESTABLISHMENT DATA
WOMEN EMPLOYEES**

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

SIC Code	Industry	July 1976		April 1977		July 1977	
		Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment	Number (in thousands)	Percent of total employment
	SERVICES — Continued						
80	Medical and other health services	3,574.5	80	3,763.5	81	3,870.8	81
806	Hospitals	1,893.7	80	1,977.2	80	2,016.9	80
81	Legal services	239.1	62	253.7	65	269.4	64
82	Educational services	523.2	49	710.1	52	570.7	51
821	Elementary and secondary schools	198.1	58	276.4	62	222.4	58
822	Colleges and universities	243.2	43	335.7	46	253.4	45
89	Miscellaneous services	254.6	28	279.4	29	283.1	29
891	Engineering and architectural services	69.8	17	79.1	18	83.9	18
892	Nonprofit research agencies	55.4	36	57.9	36	60.9	36
	GOVERNMENT	6,105	43	7,096	46	6,383	44
91	FEDERAL GOVERNMENT	817	29	866	32	887	32
92,93	STATE AND LOCAL GOVERNMENT	5,288	46	6,230	50	5,496	46
92	State government	1,358.7	44	1,524.2	45	1,401.0	44
	State education	508.4	43	653.0	44	520.0	44
	Other State government	850.3	44	871.2	46	881.0	45
93	Local government	3,929.2	46	4,705.6	51	4,094.6	47
	Local education	2,458.3	58	3,288.5	62	2,520.7	58
	Other local government	1,470.9	35	1,417.1	36	1,573.9	37

**ESTABLISHMENT DATA
SEASONALLY ADJUSTED EMPLOYMENT**

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

[In thousands]

Industry division and group	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept ^P	Oct ^P
TOTAL	79,819	80,106	80,344	80,561	80,824	81,395	81,686	81,921	82,121	82,366	82,480	82,807	82,926
GOODS-PRODUCING	23,323	23,489	23,508	23,589	23,701	24,005	24,217	24,306	24,353	24,399	24,316	24,400	24,432
MINING	800	805	808	817	823	842	847	845	855	834	818	851	854
CONTRACT CONSTRUCTION	3,582	3,619	3,605	3,561	3,645	3,759	3,842	3,861	3,876	3,917	3,889	3,896	3,940
MANUFACTURING	18,941	19,065	19,095	19,211	19,233	19,404	19,528	19,600	19,622	19,648	19,609	19,653	19,638
DURABLE GOODS	11,018	11,128	11,158	11,236	11,230	11,370	11,423	11,469	11,491	11,530	11,536	11,577	11,561
Ordnance and accessories	155	156	156	156	156	156	157	157	157	156	155	155	151
Lumber and wood products	613	621	626	625	626	633	639	638	637	639	641	650	651
Furniture and fixtures	491	491	493	494	497	503	507	509	510	513	507	514	516
Stone, clay, and glass products	630	636	629	631	620	641	651	654	659	660	656	659	660
Primary metal industries	1,194	1,186	1,182	1,183	1,178	1,199	1,208	1,217	1,218	1,209	1,206	1,210	1,198
Fabricated metal products	1,387	1,396	1,404	1,413	1,416	1,432	1,433	1,447	1,452	1,458	1,461	1,465	1,474
Machinery, except electrical	2,078	2,106	2,107	2,125	2,134	2,142	2,150	2,165	2,168	2,202	2,215	2,224	2,234
Electrical equipment and supplies	1,849	1,860	1,863	1,874	1,888	1,906	1,919	1,931	1,933	1,941	1,953	1,953	1,958
Transportation equipment	1,695	1,749	1,766	1,790	1,766	1,808	1,808	1,802	1,809	1,810	1,803	1,808	1,781
Instruments and related products	511	514	517	521	524	526	526	526	528	527	525	528	529
Miscellaneous manufacturing	415	413	415	424	425	424	425	423	420	415	414	411	409
NONDURABLE GOODS	7,923	7,937	7,937	7,975	8,003	8,034	8,105	8,131	8,131	8,118	8,073	8,076	8,077
Food and kindred products	1,706	1,711	1,710	1,721	1,727	1,734	1,743	1,735	1,737	1,726	1,710	1,710	1,704
Tobacco manufactures	76	75	75	74	73	68	73	71	72	72	68	68	69
Textile mill products	961	960	957	958	964	973	981	988	987	992	984	987	987
Apparel and other textile products	1,273	1,276	1,271	1,278	1,280	1,283	1,291	1,298	1,306	1,293	1,287	1,286	1,286
Paper and allied products	677	680	680	684	688	688	697	703	703	705	705	703	703
Printing and publishing	1,087	1,089	1,089	1,090	1,095	1,097	1,102	1,109	1,111	1,115	1,115	1,118	1,119
Chemicals and allied products	1,032	1,038	1,041	1,044	1,050	1,051	1,060	1,063	1,060	1,064	1,062	1,057	1,052
Petroleum and coal products	202	203	204	205	205	207	211	210	210	210	209	210	212
Rubber and plastics products, nec	645	642	647	656	656	666	680	685	680	684	673	674	678
Leather and leather products	264	263	263	265	265	267	267	269	265	257	260	263	267
SERVICE-PRODUCING	56,496	56,617	56,836	56,972	57,123	57,390	57,469	57,615	57,768	57,967	58,164	58,407	58,494
TRANSPORTATION AND PUBLIC UTILITIES	4,506	4,519	4,553	4,549	4,553	4,568	4,575	4,586	4,579	4,572	4,577	4,613	4,610
WHOLESALE AND RETAIL TRADE ..	17,824	17,808	17,898	17,981	18,067	18,189	18,203	18,235	18,247	18,294	18,363	18,425	18,429
WHOLESALE TRADE	4,292	4,291	4,304	4,323	4,334	4,354	4,371	4,384	4,383	4,394	4,398	4,403	4,409
RETAIL TRADE	13,532	13,517	13,594	13,658	13,733	13,835	13,832	13,851	13,864	13,900	13,965	14,022	14,020
FINANCE, INSURANCE, AND REAL ESTATE	4,359	4,381	4,403	4,423	4,431	4,453	4,463	4,480	4,489	4,506	4,519	4,541	4,564
SERVICES	14,819	14,873	14,936	15,010	15,068	15,149	15,182	15,197	15,245	15,372	15,463	15,477	15,523
Hotels and other lodging places	1,069	1,071	1,090	1,099	1,084	1,090	1,092	1,071	1,061	1,078	1,079	1,084	-
Personal services	814	809	808	808	807	809	809	805	805	803	804	801	-
Medical and other health services	4,519	4,648	4,577	4,584	4,603	4,629	4,658	4,681	4,722	4,747	4,778	4,806	-
Educational services	1,283	1,277	1,271	1,269	1,282	1,288	1,290	1,287	1,284	1,311	1,323	1,315	-
GOVERNMENT	14,988	15,036	15,046	15,009	15,004	15,031	15,046	15,117	15,208	15,223	15,242	15,351	15,368
FEDERAL	2,730	2,734	2,720	2,721	2,721	2,725	2,719	2,723	2,735	2,721	2,735	2,728	2,728
STATE AND LOCAL	12,258	12,302	12,326	12,288	12,283	12,306	12,327	12,394	12,473	12,502	12,507	12,623	12,640

p = preliminary.

**ESTABLISHMENT DATA
SEASONALLY ADJUSTED EMPLOMENT**

**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	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. P	Oct. P
TOTAL	53,309	53,498	53,672	53,813	54,965	54,534	54,771	54,911	54,932	55,076	55,088	55,268	55,299
GOODS-PRODUCING	17,032	17,172	17,158	17,190	17,287	17,568	17,771	17,858	17,874	17,888	17,791	17,873	17,871
MINING	605	612	613	609	617	637	640	637	644	624	609	639	639
CONTRACT CONSTRUCTION	2,852	2,855	2,854	2,780	2,860	2,973	3,065	3,076	3,086	3,125	3,094	3,103	3,140
MANUFACTURING	13,575	13,675	13,691	13,801	13,810	13,958	14,066	14,145	14,144	14,139	14,088	14,131	14,092
DURABLE GOODS	7,833	7,929	7,955	8,026	8,011	8,128	8,177	8,233	8,240	8,261	8,258	8,295	8,256
Ordnance and accessories	69	69	70	70	70	69	72	73	72	72	72	70	65
Lumber and wood products	515	522	528	529	531	538	543	543	543	544	546	554	554
Furniture and fixtures	403	403	406	403	408	413	418	420	420	421	415	423	424
Stone, clay, and glass products	501	506	500	501	488	510	519	522	527	528	523	526	525
Primary metal industries	934	926	923	923	917	938	944	954	954	948	942	948	933
Fabricated metal products	1,044	1,051	1,059	1,069	1,071	1,083	1,085	1,099	1,103	1,105	1,105	1,109	1,119
Machinery, except electrical	1,329	1,357	1,358	1,373	1,378	1,384	1,387	1,407	1,407	1,437	1,445	1,451	1,452
Electrical equipment and supplies	1,224	1,232	1,231	1,237	1,250	1,265	1,277	1,289	1,288	1,288	1,299	1,295	1,301
Transportation equipment	1,186	1,236	1,251	1,278	1,251	1,281	1,284	1,278	1,281	1,280	1,278	1,284	1,251
Instruments and related products	311	312	315	318	320	321	322	323	323	323	320	323	324
Miscellaneous manufacturing	317	315	314	325	327	326	326	325	321	315	313	312	308
NONDURABLE GOODS	5,742	5,746	5,736	5,775	5,799	5,830	5,889	5,912	5,904	5,878	5,830	5,836	5,836
Food and kindred products	1,159	1,161	1,156	1,169	1,175	1,183	1,190	1,183	1,184	1,173	1,156	1,156	1,152
Tobacco manufactures	63	63	62	60	60	56	60	57	58	57	55	55	56
Textile mill products	838	835	833	835	840	848	856	863	860	865	856	860	860
Apparel and other textile products	1,091	1,093	1,089	1,096	1,098	1,100	1,108	1,115	1,122	1,105	1,102	1,102	1,100
Paper and allied products	512	515	514	517	517	517	524	529	529	529	528	529	528
Printing and publishing	632	632	631	631	635	635	639	644	642	642	640	640	643
Chemicals and allied products	588	590	590	594	601	602	608	612	609	612	610	606	603
Petroleum and coal products	131	132	132	133	132	135	138	138	138	137	137	138	140
Rubber and plastics products, nec	502	501	505	513	514	525	537	540	535	537	524	526	527
Leather and leather products	226	224	224	227	227	229	229	231	227	221	222	224	227
SERVICE-PRODUCING	36,277	36,326	36,514	36,623	36,778	36,966	37,000	37,053	37,058	37,188	37,297	37,395	37,428
TRANSPORTATION AND PUBLIC UTILITIES	3,856	3,861	3,900	3,882	3,878	3,890	3,897	3,907	3,899	3,885	3,886	3,904	3,897
WHOLESALE AND RETAIL TRADE ..	15,761	15,734	15,792	15,876	15,974	16,071	16,077	16,109	16,102	16,136	16,179	16,228	16,233
WHOLESALE TRADE	3,554	3,553	3,562	3,572	3,584	3,602	3,618	3,630	3,623	3,623	3,625	3,632	3,633
RETAIL TRADE	12,207	12,181	12,230	12,304	12,390	12,469	12,459	12,479	12,479	12,513	12,554	12,596	12,600
FINANCE, INSURANCE, AND REAL ESTATE	3,325	3,345	3,364	3,374	3,382	3,396	3,402	3,410	3,417	3,434	3,436	3,455	3,469
SERVICES	13,335	13,386	13,458	13,491	13,544	13,609	13,624	13,627	13,640	13,733	13,796	13,808	13,829

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, 1974 to date

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	64.8	63.1
February	55.8	55.2	56.4	59.6
March	48.0	54.7	54.7	54.9
April	54.7	52.3	51.5	50.0
May	54.7	57.0	50.3	40.1
June	54.4	50.9	44.5	28.2
July	49.1	44.2	35.8	26.7
August	42.2	36.0	32.0	22.1
September	32.6	35.5	21.8	20.6
October	35.5	26.2	15.7	18.6
November	19.8	21.8	16.0	16.6
December	19.8	12.8	13.7	14.0
1975				
January	16.9	12.5	13.7	16.3
February	16.9	14.0	12.8	17.4
March	27.3	22.7	18.9	17.2
April	44.2	34.6	29.1	20.3
May	51.2	43.6	40.7	25.6
June	39.8	47.7	59.0	40.1
July	57.3	55.5	63.4	50.3
August	72.4	75.0	66.6	61.9
September	81.4	78.8	72.4	71.5
October	64.0	70.6	78.8	75.9
November	59.6	69.2	79.4	79.1
December	69.2	75.0	77.6	81.4
1976				
January	76.7	82.0	82.8	84.6
February	74.4	84.3	83.1	82.8
March	77.9	84.9	77.0	79.4
April	77.9	81.1	77.0	73.5
May	63.4	70.6	71.5	79.7
June	47.1	57.0	70.9	79.4
July	52.9	47.4	55.2	75.3
August	49.1	65.1	55.2	74.1
September	68.9	54.9	61.9	78.2
October	39.0	59.9	70.1	76.5
November	64.2	53.8	69.8	75.0
December	68.3	75.9	76.7	74.7
1977				
January	71.5	76.7	88.4	75.9
February	61.6	84.6	86.6	75.6
March	79.7	86.0	83.7	76.7p
April	79.1	83.7	79.4	81.1p
May	68.9	71.5	74.1	
June	57.8	61.6	68.3p	
July	62.5	52.0	65.1p	
August	48.0	59.6p		
September	62.8p	62.5p		
October	63.1p			
November				
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			Contract construction			Manufacturing		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
1 ALABAMA	1,219.5	1,266.7	1,261.6	14.3	14.4	14.5	72.2	75.1	74.1	347.0	355.8	356.2
2 Birmingham	322.2	329.5	328.8	5.5	7.7	7.7	20.9	23.0	21.7	64.7	67.1	67.1
3 Huntsville	134.8	137.2	137.7	(1)	(1)	(1)	3.8	4.2	4.0	29.7	31.5	31.6
4 Mobile	135.8	135.2	136.8	(1)	(1)	(1)	11.7	10.9	10.9	27.7	27.0	27.0
5 Montgomery	89.8	93.0	92.7	(1)	(1)	(1)	5.9	6.1	6.0	13.7	14.5	14.6
6 Tuscaloosa	48.7	47.3	48.0	.7	.9	.9	3.4	3.4	3.3	11.2	10.2	10.0
7 ALASKA	187.4	160.6	(*)	4.3	5.5	(*)	37.2	17.5	(*)	13.1	14.7	(*)
8 ARIZONA	765.2	779.0	795.2	25.0	22.1	18.0	42.8	50.7	51.2	108.3	112.6	113.9
9 Phoenix	452.9	467.6	477.3	.5	.5	.5	24.7	30.0	30.5	79.0	84.3	84.7
10 Tucson	148.1	147.1	148.5	8.0	6.0	4.5	9.1	10.0	10.1	12.9	13.0	13.0
11 ARKANSAS	670.8	700.6	708.6	4.8	5.2	5.2	35.2	38.2	37.8	200.7	213.3	215.3
12 Fayetteville-Springdale	53.6	54.2	55.5	(1)	(1)	(1)	2.8	2.9	2.7	16.1	17.0	16.9
13 Fort Smith	60.9	61.8	63.1	.5	.5	.5	2.9	2.6	2.5	21.7	22.7	23.4
14 Little Rock-North Little Rock	158.9	164.3	165.2	(1)	(1)	(1)	9.5	9.8	9.7	28.6	30.8	31.3
15 Pine Bluff	27.0	26.4	27.5	(1)	(1)	(1)	1.3	1.1	1.1	5.8	6.1	6.2
16 CALIFORNIA	8,214.3	8,590.6	8,676.2	35.9	36.9	36.7	336.4	390.0	400.4	1,706.8	1,736.9	1,756.1
17 Anaheim-Santa Ana-Garden Grove	604.3	640.8	643.8	1.9	2.1	2.1	33.5	40.3	41.7	162.8	167.4	168.6
18 Bakersfield	108.0	111.9	110.6	8.7	8.9	8.9	4.6	5.0	5.0	8.9	9.0	9.1
19 Fresno	157.9	166.2	167.1	.8	.8	.8	8.1	9.2	9.3	22.1	23.5	24.3
20 Los Angeles-Long Beach	3,123.4	3,223.0	3,252.3	11.6	11.6	11.6	97.3	108.6	109.7	800.7	815.5	822.4
21 Modesto	83.6	89.1	90.4	.1	.1	.1	4.5	5.3	5.1	26.4	27.7	28.1
22 Oxnard-Simi Valley-Ventura	116.6	119.4	120.6	2.1	2.2	2.2	4.6	5.0	5.1	18.3	18.3	18.7
23 Riverside-San Bernardino-Ontario	342.8	352.7	359.4	2.4	2.5	2.6	13.3	14.7	15.0	54.4	54.5	54.2
24 Sacramento	339.6	352.4	356.8	.3	.3	.3	15.3	16.8	17.2	27.8	28.2	28.8
25 Salinas-Seaside-Monterey	76.9	79.5	80.6	.6	.6	.6	2.8	3.1	3.1	9.1	9.4	9.9
26 San Diego	497.4	516.4	525.5	.8	.8	.8	28.0	30.9	31.3	72.4	75.3	76.0
27 San Francisco-Oakland	1,375.7	1,397.4	1,403.4	2.2	2.3	2.3	60.1	62.9	63.7	192.5	192.4	194.4
28 San Jose	506.1	525.2	530.2	.1	.1	.1	18.6	19.7	20.0	172.9	179.3	179.7
29 Santa Barbara-Santa Maria-Lompoc	101.9	102.4	104.5	1.0	1.0	1.0	3.6	3.5	3.5	13.2	14.1	14.0
30 Santa Rosa	68.9	72.5	72.9	.4	.4	.4	3.9	4.1	4.2	10.4	10.8	10.8
31 Stockton	139.4	113.0	114.9	.1	.1	.1	4.1	4.4	4.4	24.3	24.9	25.8
32 Vallejo-Fairfield-Napa	86.7	88.6	89.0	.2	.2	.2	3.6	3.4	3.5	9.5	9.2	9.1
33 COLORADO	981.8	993.2	994.2	20.3	23.0	22.9	59.1	62.3	61.7	140.2	145.3	144.6
34 Denver-Boulder	621.3	626.5	631.9	8.1	9.8	9.9	38.2	41.7	41.6	95.3	98.3	98.3
35 CONNECTICUT	1,250.5	1,250.7	1,267.9	(3)	(3)	(3)	44.4	42.9	42.2	400.4	391.7	398.7
36 Bridgeport	147.0	144.4	145.2	(3)	(3)	(3)	4.3	4.2	3.2	58.3	58.5	58.2
37 Hartford	343.5	340.7	347.1	(3)	(3)	(3)	11.5	9.6	9.9	85.5	81.0	83.5
38 New Britain	54.7	55.0	56.6	(3)	(3)	(3)	2.1	2.3	2.2	25.7	26.2	26.9
39 New Haven-West Haven	172.5	170.3	172.4	(3)	(3)	(3)	5.7	4.6	4.5	43.1	42.5	42.9
40 Stamford	91.1	93.6	94.4	(3)	(3)	(3)	3.3	3.5	3.5	27.6	27.1	27.2
41 Waterbury	82.5	82.3	81.9	(3)	(3)	(3)	2.6	2.3	2.3	34.0	32.7	32.1
42 DELAWARE	237.1	235.8	237.9	(1)	(1)	(1)	14.5	15.1	14.8	69.4	68.2	71.2
43 Wilmington	206.7	205.0	207.1	(1)	(1)	(1)	12.7	13.9	13.7	65.0	62.3	65.6
44 DISTRICT OF COLUMBIA	573.1	585.6	575.9	(1)	(1)	(1)	17.3	18.8	18.7	15.5	15.4	15.5
45 Washington SMSA	1,364.4	1,399.4	1,392.5	(1)	(1)	(1)	74.9	80.1	78.8	49.6	50.5	50.6
46 FLORIDA	2,749.6	2,831.3	2,859.1	9.1	9.3	9.3	173.2	186.6	187.0	341.6	357.1	361.1
47 Fort Lauderdale-Hollywood	233.6	240.9	242.0	(1)	(1)	(1)	17.5	18.8	18.6	25.7	27.7	28.2
48 Jacksonville	258.0	261.2	264.4	(1)	(1)	(1)	14.5	15.5	15.7	29.7	30.1	30.1
49 Miami	582.1	583.3	586.5	(1)	(1)	(1)	24.4	24.2	23.9	84.7	87.6	87.8
50 Orlando	209.7	212.3	213.2	(1)	(1)	(1)	11.6	12.0	12.0	25.0	25.9	26.4
51 Pensacola	87.7	91.4	92.5	(1)	(1)	(1)	6.1	6.9	7.0	13.7	13.9	14.0
52 Tampa-St. Petersburg	418.2	417.9	423.6	(1)	(1)	(1)	27.9	28.3	28.6	56.5	58.1	58.9
53 West Palm Beach-Boca Raton	141.1	145.5	147.9	(1)	(1)	(1)	9.8	10.2	10.5	17.9	19.9	20.0
54 GEORGIA	1,870.9	1,920.7	1,939.3	7.2	7.4	7.3	86.2	100.1	100.1	488.3	490.7	499.1
55 Atlanta	779.3	783.4	796.7	(1)	(1)	(1)	32.9	34.3	34.0	128.8	121.2	130.2
56 Augusta	109.1	112.0	113.0	(1)	(1)	(1)	7.1	8.6	8.5	35.6	36.0	36.1
57 Columbus	74.3	78.0	76.9	(1)	(1)	(1)	4.1	4.5	3.9	19.8	20.2	21.0
58 Macon	93.4	94.1	93.8	(1)	(1)	(1)	5.3	5.3	5.2	16.8	17.4	16.8
59 Savannah	77.6	78.3	78.1	(1)	(1)	(1)	5.0	5.4	5.1	16.3	16.3	16.0
60 HAWAII	335.2	352.3	338.3	(1)	(1)	(1)	22.9	22.2	20.1	23.7	26.9	23.0
61 Honolulu	280.8	295.5	283.3	(1)	(1)	(1)	19.1	18.9	16.9	17.2	20.3	16.7

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT**

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

(In thousands)

State and area	Total			Mining			Contract construction			Manufacturing		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
NORTH CAROLINA—Continued												
1 Raleigh-Durham	217.6	223.0	226.1	(1)	(1)	(1)	10.9	11.7	11.5	36.2	37.3	37.2
NORTH DAKOTA	220.2	225.6	228.8	2.7	2.9	3.0	18.3	21.3	20.6	15.9	14.4	15.2
3 Fargo-Moorhead	56.4	56.6	58.1	(3)	(3)	(3)	4.4	4.6	4.7	5.3	4.9	4.8
OHIO	4,154.3	4,223.7	4,264.9	29.0	29.1	29.2	171.8	169.8	169.6	1,327.7	1,335.8	1,351.4
5 Akron	249.3	254.9	254.1	.3	.3	.3	7.8	7.5	7.4	83.1	83.7	84.6
6 Canton	149.4	150.7	151.9	.8	.8	.8	6.5	6.2	6.1	56.1	56.3	56.8
7 Cincinnati	549.1	551.0	558.8	.4	.4	.4	24.9	23.7	24.1	159.7	156.1	160.2
8 Cleveland	870.0	885.4	891.9	1.5	1.5	1.5	32.2	31.1	30.7	270.4	269.6	273.1
9 Columbus	456.5	470.4	474.1	.7	.7	.7	19.4	19.2	19.2	95.4	97.3	97.8
10 Dayton	333.9	336.9	342.1	.4	.4	.4	12.6	12.2	12.0	105.2	107.0	108.6
11 Toledo	287.2	293.3	294.4	.6	.6	.6	12.6	13.0	12.9	88.7	88.3	88.4
12 Youngstown-Warren	205.3	204.8	210.2	.3	.3	.3	7.3	7.1	7.0	80.9	79.1	82.8
OKLAHOMA	938.1	985.8	990.7	45.3	51.7	51.4	45.1	50.0	48.6	157.8	165.9	165.6
14 Oklahoma City	319.3	340.7	345.3	10.0	11.5	11.4	15.3	22.4	22.3	41.7	45.7	46.3
15 Tulsa	247.6	255.7	255.1	16.3	16.7	16.7	15.9	16.0	16.0	53.0	53.8	53.8
OREGON	898.3	914.3	924.6	1.6	1.6	1.6	41.4	39.8	40.1	208.6	212.2	212.1
17 Eugene-Springfield	89.3	95.3	97.0	(1)	(1)	(1)	4.0	5.4	5.5	20.8	21.3	21.3
18 Jackson County	-	-	-	-	-	-	-	-	-	7.7	8.2	8.3
19 Portland	468.2	478.3	482.4	(1)	(1)	(1)	22.5	19.8	20.1	98.3	100.9	101.6
20 Salem	80.0	81.9	80.0	(1)	(1)	(1)	3.9	4.0	4.1	18.4	19.7	17.9
PENNSYLVANIA	4,525.7	4,518.7	4,533.9	49.5	47.7	48.6	197.0	203.2	200.5	1,348.0	1,345.3	1,342.8
22 Allentown-Bethlehem-Easton	258.2	260.1	257.1	(1)	(1)	(1)	10.0	9.8	9.5	109.0	109.3	107.8
23 Altoona	51.1	53.3	53.0	(1)	(1)	(1)	2.3	2.3	2.4	13.2	13.6	13.3
24 Delaware Valley	1,505.8	1,487.9	1,498.2	(1)	(1)	(1)	53.7	54.9	53.4	384.7	380.2	377.7
25 Erie	110.0	109.9	112.3	(1)	(1)	(1)	3.9	3.9	3.6	42.4	44.3	44.6
26 Harrisburg	203.8	207.1	205.4	(1)	(1)	(1)	9.3	9.1	8.4	40.1	40.3	39.8
27 Johnstown	87.3	81.8	86.1	9.4	8.3	8.8	3.4	3.6	4.3	21.0	17.7	18.8
28 Lancaster	134.2	137.1	138.2	(1)	(1)	(1)	7.1	7.5	7.2	54.8	56.0	56.0
29 Northeast Pennsylvania	230.2	234.7	231.6	1.2	1.4	1.4	13.4	14.0	13.6	71.3	69.9	69.9
30 Philadelphia SMSA	1,799.5	1,785.4	1,797.3	(1)	(1)	(1)	66.5	67.4	65.9	449.9	447.2	445.2
31 Philadelphia City	810.0	783.1	796.7	(1)	(1)	(1)	18.1	17.7	17.6	161.3	158.7	159.6
32 Pittsburgh	906.7	899.2	908.4	11.9	11.8	11.8	45.6	48.6	48.6	251.5	247.1	245.8
33 Reading	130.6	130.0	132.4	(1)	(1)	(1)	4.6	5.2	5.1	50.2	51.2	51.7
34 Scranton	81.7	83.7	83.9	(1)	(1)	(1)	3.0	3.0	2.9	26.5	26.2	26.6
35 Wilkes-Barre-Hazleton	122.7	123.5	121.2	1.1	1.2	1.2	9.1	9.4	9.3	40.4	39.2	39.0
36 Williamsport	44.8	45.3	46.1	(1)	(1)	(1)	1.4	1.7	1.8	17.5	17.4	17.5
37 York	140.1	141.0	143.1	(1)	(1)	(1)	6.4	6.8	6.6	58.8	58.9	59.6
RHODE ISLAND	374.7	381.9	378.7	(1)	(1)	(1)	13.8	14.0	14.0	126.1	126.6	127.3
39 Providence-Warwick-Pawtucket	386.9	394.4	391.0	(1)	(1)	(1)	14.4	14.5	14.5	141.4	141.3	142.1
SOUTH CAROLINA	1,051.3	1,081.1	1,089.3	1.8	1.8	1.8	62.4	63.0	62.3	374.8	379.5	379.2
41 Charleston-North Charleston	122.8	126.8	127.6	(1)	(1)	(1)	9.6	10.7	10.6	17.6	18.4	18.3
42 Columbia	150.0	153.6	158.1	(1)	(1)	(1)	7.0	7.3	7.3	23.1	23.5	23.9
43 Greenville-Spartanburg	232.1	232.6	235.8	(1)	(1)	(1)	12.8	13.3	13.1	101.3	101.0	100.2
SOUTH DAKOTA	223.9	228.9	229.3	2.7	2.7	2.6	12.7	13.9	13.4	22.4	23.4	23.1
45 Rapid City	26.3	26.3	26.4	(3)	(3)	(3)	2.3	2.3	2.3	2.2	2.4	2.3
46 Sioux Falls	47.5	50.6	50.5	(3)	(3)	(3)	2.7	3.5	3.4	6.7	7.2	7.2
TENNESSEE	1,595.7	1,642.2	1,660.9	9.3	9.2	9.1	80.1	86.8	88.4	496.7	511.4	517.8
48 Chattanooga	161.2	164.0	164.3	1.1	1.0	1.0	6.5	6.6	6.7	55.9	57.2	57.3
49 Knoxville	175.8	186.3	186.3	1.7	1.8	1.8	10.6	12.6	12.7	50.5	51.2	51.5
50 Memphis	330.8	334.6	337.4	.2	.2	.2	15.3	16.7	17.0	58.8	59.6	60.3
51 Nashville-Davidson	322.0	323.9	327.4	(1)	(1)	(1)	17.8	18.2	18.3	79.7	77.7	78.6
TEXAS	4,737.6	4,840.9	4,891.5	139.8	156.2	156.3	326.7	337.7	333.5	868.8	890.9	896.8
53 Amarillo	66.8	67.7	68.6	(1)	(1)	(1)	4.4	4.8	4.8	8.9	8.0	8.5
54 Austin	175.9	180.2	182.5	(1)	(1)	(1)	8.9	9.0	8.9	17.7	19.5	19.6
55 Beaumont-Port Arthur-Orange	137.2	137.7	137.9	(1)	(1)	(1)	15.6	14.7	15.1	40.9	41.5	41.3
56 Corpus Christi	103.6	105.2	104.2	3.9	3.7	3.7	10.9	11.0	11.0	12.6	11.8	11.9
57 Dallas-Fort Worth	1,128.4	1,160.1	1,173.6	12.7	13.3	13.3	50.7	52.2	50.6	248.4	253.3	256.6
58 El Paso	137.8	135.2	137.4	(1)	(1)	(1)	6.3	6.9	6.8	30.6	29.4	29.2
59 Galveston-Texas City	67.9	72.9	72.5	(1)	(1)	(1)	7.1	9.1	9.3	11.9	11.8	11.8
60 Houston	1,102.4	1,167.1	1,166.0	46.1	48.7	49.3	116.1	127.3	126.7	187.5	191.0	191.4
61 Lubbock	79.2	81.2	83.0	(1)	(1)	(1)	4.8	4.6	4.4	11.7	13.5	13.9
62 San Antonio	331.0	332.3	333.6	1.7	1.8	1.8	18.8	19.7	20.0	41.4	42.4	42.7

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT**

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

(In thousands)

State and area	Total			Mining			Contract construction			Manufacturing		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
TEXAS—Continued												
1 Waco	61.4	62.7	63.3	(1)	(1)	(1)	2.9	3.4	3.3	14.6	14.8	14.8
2 Wichita Falls	45.6	46.9	47.3	2.2	2.3	2.3	2.7	2.8	2.8	7.5	8.4	8.3
UTAH												
4 Salt Lake City—Ogden	475.9	485.4	493.5	14.5	15.1	15.0	31.7	32.4	33.7	73.7	76.2	76.7
	339.0	347.8	349.0	6.6	7.0	6.8	21.6	21.4	21.5	49.2	50.9	51.1
VERMONT												
6 Burlington	173.3	180.1	181.0	.7	.7	.8	9.2	10.3	10.0	42.1	43.6	43.5
7 Springfield	44.8	46.4	47.4	-	-	-	-	-	-	10.0	11.0	11.0
	12.7	13.4	13.3	-	-	-	-	-	-	5.1	5.4	5.4
VIRGINIA												
8	1,867.8	1,928.3	1,939.8	22.2	22.7	22.5	117.2	126.2	124.6	392.6	401.7	402.8
9 Bristol	25.1	24.7	25.2	(1)	(1)	(1)	1.1	1.1	1.0	8.6	8.6	8.6
10 Lynchburg	62.0	61.9	63.3	(1)	(1)	(1)	2.9	2.9	2.9	27.2	28.0	28.3
11 Newport News—Hampton	135.7	139.1	139.8	(1)	(1)	(1)	7.1	7.8	7.8	32.3	34.9	34.9
12 Norfolk—Virginia Beach—Portsmouth	252.6	263.2	259.5	(1)	(1)	(1)	15.9	18.0	17.4	26.6	28.0	28.0
13 Northern Virginia ^{1,6}	363.8	375.9	376.7	.4	.4	.4	24.7	27.3	26.3	13.7	14.2	14.2
14 Petersburg—Colonial Hts.—Hopewell	43.9	44.3	44.8	(1)	(1)	(1)	2.4	2.4	2.6	12.4	12.2	12.4
15 Richmond	288.6	296.7	296.6	.3	.3	.3	16.2	19.0	19.1	52.0	51.4	51.9
16 Roanoke	98.7	98.6	99.6	.2	.2	.2	5.7	5.8	5.8	21.4	21.0	21.1
WASHINGTON												
17	1,295.1	1,343.2	1,369.4	2.2	2.2	2.2	74.5	83.1	85.5	253.4	268.6	273.7
18 Seattle—Everett	595.9	633.0	640.3	(1)	(1)	(1)	28.5	35.9	36.5	120.9	130.7	131.1
19 Spokane	109.6	110.8	113.3	(1)	(1)	(1)	5.9	5.8	6.5	15.0	16.1	16.2
20 Tacoma	123.3	124.5	128.1	(1)	(1)	(1)	6.3	6.9	6.9	20.8	20.9	21.3
WEST VIRGINIA												
21	604.4	589.1	623.0	70.5	52.4	74.5	39.3	39.2	39.2	126.7	126.4	128.4
22 Charleston	103.3	101.9	103.3	6.1	5.2	6.2	6.5	6.0	6.0	19.3	19.3	19.3
23 Huntington—Ashland	97.9	95.9	97.3	.8	.8	.8	6.1	5.6	5.6	28.8	27.6	28.1
24 Parkersburg—Marietta	52.1	52.4	52.9	.4	.4	.4	2.6	2.3	2.3	16.5	17.1	17.2
25 Wheeling	63.6	64.4	64.9	8.4	8.4	8.4	3.0	2.4	2.3	13.0	14.3	14.8
WISCONSIN												
26	1,771.6	1,807.2	1,812.0	2.8	2.6	2.6	74.4	83.4	82.6	532.3	539.3	532.2
27 Appleton—Oshkosh	111.0	111.0	111.3	(1)	(1)	(1)	5.7	5.5	5.6	41.8	42.8	42.7
28 Green Bay	69.3	71.6	71.6	(1)	(1)	(1)	3.5	4.1	3.8	21.0	22.2	21.6
29 Kenosha	42.2	39.3	40.2	(1)	(1)	(1)	.9	1.0	1.1	18.4	15.3	15.7
30 La Crosse	37.0	37.2	37.5	(1)	(1)	(1)	1.2	1.5	1.4	9.2	9.2	9.2
31 Madison	146.6	146.7	151.5	(1)	(1)	(1)	6.2	6.8	6.8	17.8	18.5	18.4
32 Milwaukee	614.9	610.9	610.8	(1)	(1)	(1)	21.9	23.6	23.4	200.4	199.8	196.3
33 Racine	64.2	66.7	66.3	(1)	(1)	(1)	1.6	1.9	2.0	27.0	27.8	27.7
WYOMING												
34	162.5	177.0	177.1	21.4	25.5	24.9	16.3	19.2	19.0	8.5	8.7	8.6
35 Casper	28.2	30.2	30.3	5.0	5.6	5.0	2.5	2.7	2.6	1.7	1.9	1.8
36 Cheyenne	24.0	24.7	24.8	(1)	(1)	(1)	1.5	1.8	1.8	1.4	1.4	1.5

¹ Combined with services.

² Based on the 1967 Standard Industrial Classification Manual.

³ Combined with construction.

⁴ Area included in Chicago-Gary Standard Consolidated Statistical Area.

⁵ Based on 1972 Standard Industrial Classification and adjusted to 1976 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. Services excludes agriculture, forestry, and fisheries.

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			
SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	
3.0	3.0	3.0	13.8	14.5	14.5	3.6	3.6	3.6	12.8	12.6	13.4	10.7	10.8	10.7	1
2.2	2.3	2.3	11.4	11.8	11.7	2.0	2.1	2.1	6.7	6.9	6.8	10.9	10.3	11.0	2
29.0	29.6	29.8	115.8	119.4	120.1	21.0	22.3	22.2	79.7	80.0	80.4	110.5	109.8	112.5	3
23.1	23.5	23.5	85.5	89.5	89.7	17.4	17.9	17.7	54.0	57.1	56.8	81.8	80.5	81.8	4
8.5	8.6	8.6	35.9	37.5	37.9	6.8	7.1	7.0	39.2	42.4	41.3	31.0	30.1	32.0	5
2.1	2.1	2.1	10.0	10.3	10.6	-	-	-	9.8	9.7	10.1	-	-	-	6
.8	.8	.8	2.0	2.0	2.0	-	-	-	2.4	2.0	2.6	-	-	-	7
108.1	110.7	110.4	389.1	399.0	401.1	86.9	92.3	91.0	318.1	336.1	334.5	433.6	439.6	453.0	8
.9	.9	.9	6.0	6.1	6.1	.9	.9	.9	3.5	3.3	3.3	4.1	3.8	4.4	9
2.6	2.6	2.6	10.1	9.6	9.7	2.7	2.7	2.7	8.1	8.2	8.5	8.4	7.9	8.6	10
4.4	4.5	4.6	25.1	24.8	24.8	4.3	4.5	4.5	26.2	25.8	25.4	36.3	36.8	37.8	11
17.6	18.2	17.6	60.8	63.6	63.2	13.1	13.0	13.1	45.2	45.5	45.2	73.4	76.9	75.0	12
26.0	26.6	26.4	86.6	88.7	89.4	21.3	23.7	23.0	83.2	88.2	87.7	107.5	106.8	109.3	13
1.5	1.3	1.4	7.9	8.1	8.2	1.1	1.2	1.2	5.4	5.5	5.4	13.2	13.6	13.6	14
18.1	18.2	18.1	66.9	68.3	68.0	22.4	23.3	23.0	50.4	52.0	51.7	62.5	63.6	64.5	15
10.1	10.0	10.0	23.6	23.6	23.5	5.4	5.4	5.4	18.4	18.0	18.3	13.9	14.6	15.3	16
77.1	80.1	80.0	315.1	327.0	332.1	69.3	74.8	75.4	237.0	249.4	252.2	266.5	258.0	268.3	17
43.9	45.9	46.0	147.7	156.6	157.4	41.4	44.4	44.8	110.5	118.7	119.8	103.0	100.8	104.7	18
7.6	7.8	7.3	31.1	32.0	32.1	6.9	7.6	7.5	24.8	24.4	25.2	18.3	17.1	18.5	19
6.0	6.1	5.9	29.9	29.1	29.9	5.7	5.9	6.0	26.1	25.7	27.7	28.5	29.9	30.4	20
39.7	40.0	41.2	117.1	121.4	121.7	18.5	18.8	18.6	86.4	87.5	87.6	106.2	103.8	111.9	21
8.4	8.3	8.5	23.2	23.4	23.5	4.5	4.5	4.5	17.3	17.0	17.1	18.1	18.1	18.3	22
9.1	9.1	9.4	19.8	20.0	20.0	3.3	3.4	3.4	13.5	13.3	13.3	16.4	16.3	16.7	23
2.3	2.3	2.4	11.4	11.5	11.6	1.7	1.8	1.8	8.0	7.5	7.7	9.3	9.4	9.7	24
3.6	3.7	3.7	13.5	13.5	13.5	2.4	2.5	2.4	12.3	12.2	12.3	7.4	7.4	7.4	25
83.7	82.2	85.1	398.5	417.4	417.2	77.8	81.5	80.8	314.6	333.7	332.4	287.5	267.2	279.1	26
3.9	3.7	3.8	23.0	22.1	22.3	4.2	4.3	4.3	17.4	18.1	18.0	15.1	14.4	14.6	27
4.6	4.5	4.5	16.3	16.7	16.7	2.1	2.3	2.3	12.4	12.7	13.2	9.3	9.3	9.5	28
1.5	1.4	1.6	8.0	8.1	8.1	.8	.8	.8	6.7	7.0	7.1	5.8	5.5	5.8	29
2.2	2.1	2.1	9.8	9.8	10.2	.9	1.0	.9	7.7	8.2	8.2	5.9	5.4	5.4	30
5.3	5.2	5.3	31.0	32.7	33.2	9.5	10.3	10.2	25.9	26.1	26.1	50.9	47.3	51.6	31
30.9	30.5	31.5	134.8	134.9	135.2	33.1	33.7	33.6	119.7	122.8	124.3	74.2	65.6	66.6	32
2.2	2.2	2.5	12.5	12.7	12.8	1.7	1.8	1.8	10.5	11.2	11.1	8.5	9.0	8.4	33
13.0	13.6	13.5	36.4	40.4	40.2	5.3	5.8	5.8	24.9	27.8	26.4	36.7	36.0	38.7	34
2.1	2.2	2.2	7.3	7.6	7.7	1.2	1.4	1.3	4.0	4.4	4.5	4.4	4.4	4.6	35
3.3	3.5	3.5	5.5	6.1	6.2	1.2	1.4	1.3	4.3	4.2	4.2	6.8	6.3	6.3	36

PUBLICATIONS

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Other selected publications

HANDBOOK OF LABOR STATISTICS 1976, Bulletin 1905, \$4.30. A supplement to the 1975 *Reference* edition, which contains complete historical data on the major statistical series produced by BLS. In general, each table in the 1976 *Handbook* begins with 1967 data and runs through calendar year 1975.

HANDBOOK OF METHODS. Latest edition (1976). Bulletin 1910, \$3.50. Brief account of each major statistical program of the Bureau of Labor Statistics, sources of original data, definition of terms and concepts, methodology and techniques, uses and limitations of data.

MONTHLY LABOR REVIEW INDEX OF VOLUMES 94-98. Bulletin 1922, \$1.15. Contains listings, by subject and by author, of all articles, research reports, and court decisions published in Monthly Labor Review from January 1971 through December 1975. Authors of books reviewed during the 5-year period are also listed.

OCCUPATIONAL OUTLOOK HANDBOOK, 1976-77 edition. Bulletin 1875, \$7. Describes what workers do on the job, the training and education required, places of employment, advancement opportunities, employment outlook, earnings, and working conditions for 850 occupations and 30 industries. Also lists sources of additional information and provides information on high school courses useful in preparing for each occupation.

ESTABLISHMENT DATA HOURS AND EARNINGS

C-2. Gross hours and earnings of production or nonsupervisory workers ¹ on private nonagricultural payrolls, by industry

SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
-	TOTAL PRIVATE	\$179.55	\$180.28	\$191.99	\$194.03	\$195.30	\$4.96	\$4.98	\$5.26	\$5.36	\$5.41
-	MINING	289.08	287.33	303.21	319.11	326.35	6.60	6.56	6.86	7.06	7.11
10	METAL MINING	293.16	288.56	296.79	303.96	-	6.98	6.92	7.31	7.45	-
101	Iron ores	323.54	314.07	325.46	334.35	-	7.32	7.22	7.38	7.43	-
102	Copper ores	291.45	286.16	283.50	294.51	-	7.25	7.19	7.52	7.73	-
11,12	COAL MINING	337.33	325.99	352.77	391.80	-	8.07	7.99	8.48	8.63	-
12	Bituminous coal and lignite mining	338.58	326.82	354.43	393.16	-	8.10	8.03	8.52	8.66	-
13	OIL AND GAS EXTRACTION	266.50	272.12	287.20	291.35	-	5.87	5.89	6.23	6.32	-
131,2	Crude petroleum and natural gas fields	282.32	280.14	295.53	306.00	-	6.69	6.67	7.07	7.20	-
138	Oil and gas field services	259.44	268.47	283.68	284.77	-	5.52	5.57	5.91	5.97	-
14	NONMETALLIC MINERALS, EXCEPT FUELS	246.53	251.87	268.04	271.05	-	5.54	5.56	5.93	6.01	-
142	Crushed and broken stone	242.19	247.48	266.23	266.92	-	5.37	5.38	5.75	5.79	-
-	CONTRACT CONSTRUCTION	287.41	299.87	301.44	304.22	307.43	7.81	7.85	8.06	8.20	8.22
-	GENERAL BUILDING CONTRACTORS	275.08	283.79	290.72	293.02	-	7.25	7.67	7.90	8.05	-
16	HEAVY CONSTRUCTION CONTRACTORS	291.73	307.86	299.63	299.30	-	7.33	7.33	7.38	7.52	-
161	Highway and street construction	289.98	308.73	301.18	298.22	-	7.09	7.13	7.24	7.40	-
162	Heavy construction, nec	292.55	307.16	398.54	299.10	-	7.54	7.51	7.52	7.63	-
17	SPECIAL TRADE CONTRACTORS	293.30	306.61	308.19	312.91	-	8.17	8.22	8.49	8.62	-
171	Plumbing, heating, air conditioning	308.10	318.27	331.68	337.92	-	8.26	8.31	8.66	8.80	-
172	Painting, paper hanging, decorating	271.46	279.78	281.64	281.99	-	7.69	7.75	8.07	8.15	-
173	Electrical work	331.52	348.56	355.32	357.95	-	8.96	9.03	9.45	9.52	-
174	Masonry, stonework, and plastering	264.06	275.99	282.74	281.87	-	8.10	8.07	8.39	8.49	-
176	Roofing and sheetmetal work	250.00	263.44	248.06	253.83	-	7.53	7.57	7.68	7.81	-
-	MANUFACTURING	212.93	211.20	227.70	232.47	234.09	5.31	5.28	5.65	5.74	5.78
19,24,25,32-39	DURABLE GOODS	229.80	228.17	246.02	252.97	255.03	5.66	5.62	6.03	6.14	6.19
20-23,26-31	NONDURABLE GOODS	189.12	188.16	201.85	204.73	204.61	4.80	4.80	5.11	5.17	5.18
	DURABLE GOODS										
19	ORDNANCE AND ACCESSORIES	235.17	239.13	250.74	259.03	252.86	5.85	5.89	6.30	6.38	6.29
192	Ammunition, except for small arms	236.41	241.80	255.58	263.74	(*)	5.97	6.03	6.52	6.61	(*)
1925	Complete guided missiles	262.00	267.59	286.63	297.75	-	6.55	6.64	7.22	7.37	-
1929	Ammunition, exc. for small arms, nec	190.51	195.62	204.14	207.62	-	4.91	4.94	5.33	5.31	-
24	LUMBER AND WOOD PRODUCTS	195.77	197.72	205.71	209.56	209.68	4.87	4.87	5.13	5.20	5.19
242	Sawmills and planing mills	194.21	196.65	206.32	211.87	209.20	4.76	4.75	5.02	5.13	5.09
2421	Sawmills and planing mills, general	202.78	206.26	216.41	221.90	-	4.97	4.97	5.24	5.36	-
243	Millwork, plywood and related products	200.00	201.50	212.53	216.27	217.21	5.00	5.00	5.30	5.34	5.35
2431	Millwork	186.42	189.60	202.75	207.08	-	4.78	4.80	5.12	5.19	-
2432	Veneer and plywood	219.89	218.24	234.11	238.94	-	5.35	5.31	5.71	5.73	-
244	Wooden containers	139.50	141.64	146.30	149.37	149.77	3.71	3.66	3.80	3.83	3.86
2441,2	Wooden boxes, shooks, and crates	139.01	139.52	141.72	144.35	-	3.62	3.55	3.71	3.73	-
249	Miscellaneous wood products	159.60	159.20	170.43	172.89	173.75	4.01	4.01	4.25	4.29	4.29
25	FURNITURE AND FIXTURES	156.33	157.53	171.83	174.28	176.00	4.05	4.06	4.35	4.39	4.40
251	Household furniture	147.07	147.07	160.70	163.51	164.34	3.83	3.83	4.11	4.15	4.15
2511	Wood household furniture	140.01	141.48	152.43	154.81	-	3.59	3.60	3.83	3.88	-
2512	Upholstered household furniture	152.11	152.15	167.52	172.54	-	4.10	4.09	4.42	4.47	-
2515	Mattresses and bedsprings	168.28	164.93	184.86	190.08	-	4.44	4.41	4.74	4.80	-
252	Office furniture	187.11	196.30	213.90	209.10	-	4.62	4.73	4.94	4.92	-
254	Partitions and fixtures	194.34	195.91	209.09	213.86	-	4.92	4.91	5.28	5.32	-
253,9	Other furniture and fixtures	168.78	170.50	190.48	191.66	(*)	4.43	4.44	4.81	4.84	(*)
32	STONE, CLAY, AND GLASS PRODUCTS	224.80	226.97	244.11	243.02	242.67	5.43	5.43	5.84	5.87	5.89
321	Flat glass	311.90	284.13	299.01	308.38	-	7.22	6.83	7.24	7.36	-
322	Glass and glassware, pressed or blown	221.90	223.71	247.86	232.32	236.07	5.52	5.51	6.09	6.05	6.10
3221	Glass containers	229.65	232.23	263.49	234.47	-	5.77	5.72	6.38	6.32	-
3229	Pressed and blown glass, nec	209.71	210.60	224.64	228.90	-	5.14	5.20	5.63	5.68	-
324	Cement, hydraulic	317.94	311.08	343.40	342.69	341.51	7.57	7.46	8.08	8.14	8.17
325	Structural clay products	177.10	179.31	191.06	196.77	191.53	4.33	4.30	4.66	4.73	4.66
3251	Brick and structural clay tile	163.86	166.24	174.72	175.97	-	3.92	3.93	4.19	4.22	-
326	Pottery and related products	178.75	181.96	194.78	201.56	-	4.56	4.63	5.02	5.09	-
327	Concrete, gypsum, and plaster products	235.55	240.13	254.18	255.79	255.93	5.44	5.47	5.79	5.84	5.87
328,9	Other stone and nonmetallic mineral products	214.52	216.12	232.37	235.98	231.34	5.31	5.31	5.64	5.70	5.67
3291	Abrasive products	206.98	211.20	224.62	227.66	-	5.28	5.28	5.56	5.58	-

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
—	TOTAL PRIVATE	36.2	36.2	36.5	36.2	36.1	—	—	—	—	—
—	MINING	43.8	43.8	44.2	45.2	45.9	—	—	—	—	—
10	METAL MINING	42.0	41.7	40.6	40.8	—	—	—	—	—	—
101	Iron ores	44.2	43.5	44.1	45.0	—	—	—	—	—	—
102	Copper ores	40.2	39.8	37.7	38.1	—	—	—	—	—	—
11,12	COAL MINING	41.8	40.8	41.6	45.4	—	—	—	—	—	—
12	Bituminous coal and lignite mining	41.8	40.7	41.6	45.4	—	—	—	—	—	—
13	OIL AND GAS EXTRACTION	45.4	46.2	46.1	46.1	—	—	—	—	—	—
131,2	Crude petroleum and natural gas fields	42.2	42.0	41.8	42.5	—	—	—	—	—	—
138	Oil and gas field services	47.0	48.2	48.0	47.7	—	—	—	—	—	—
14	NONMETALLIC MINERALS, EXCEPT FUELS	44.5	45.3	45.2	45.1	—	—	—	—	—	—
142	Crushed and broken stone	45.1	46.0	46.3	46.1	—	—	—	—	—	—
—	CONTRACT CONSTRUCTION	36.8	38.2	37.4	37.1	37.4	—	—	—	—	—
15	GENERAL BUILDING CONTRACTORS	36.1	37.0	36.8	36.4	—	—	—	—	—	—
16	HEAVY CONSTRUCTION CONTRACTORS	39.8	42.0	40.6	39.8	—	—	—	—	—	—
161	Highway and street construction	40.9	43.3	41.6	40.3	—	—	—	—	—	—
162	Heavy construction, nec	38.8	40.9	39.7	39.2	—	—	—	—	—	—
17	SPECIAL TRADE CONTRACTORS	35.9	37.3	36.3	36.3	—	—	—	—	—	—
171	Plumbing, heating, air conditioning	37.3	38.3	38.3	38.4	—	—	—	—	—	—
172	Painting, paper hanging, decorating	35.3	36.1	34.9	34.6	—	—	—	—	—	—
173	Electrical work	37.0	38.6	37.6	37.6	—	—	—	—	—	—
174	Masonry, stonework, and plastering	32.6	34.2	33.7	33.2	—	—	—	—	—	—
176	Roofing and sheet metal work	33.2	34.8	32.3	32.5	—	—	—	—	—	—
—	MANUFACTURING	40.1	40.0	40.3	40.5	40.5	3.4	3.2	3.5	3.7	3.7
19,24,25,32-39	DURABLE GOODS	40.6	40.6	40.8	41.2	41.2	3.4	3.2	3.6	3.9	3.9
20-23,26-31	NONDURABLE GOODS	39.4	39.2	39.5	39.6	39.5	3.3	3.0	3.3	3.4	3.3
	DURABLE GOODS										
19	ORDNANCE AND ACCESSORIES	40.2	40.6	39.8	40.6	40.2	2.3	2.7	2.6	3.0	—
192	Ammunition, except for small arms	39.6	40.1	39.2	39.9	(*)	1.9	2.4	2.5	2.7	—
1925	Complete guided missiles	40.0	40.3	39.7	40.4	—	—	—	—	—	—
1929	Ammunition, exc. for small arms, nec.	38.8	39.6	38.3	39.1	—	—	—	—	—	—
24	LUMBER AND WOOD PRODUCTS	40.2	40.6	40.1	40.3	40.4	3.6	3.8	4.2	4.3	—
242	Sawmills and planing mills	40.8	41.4	41.1	41.3	41.1	4.2	4.3	4.7	4.8	—
2421	Sawmills and planing mills, general	40.8	41.5	41.3	41.4	—	—	—	—	—	—
243	Millwork, plywood and related products	40.0	40.3	40.1	40.5	40.6	3.3	3.4	4.0	4.0	—
2431	Millwork	39.0	39.5	39.6	39.9	—	—	—	—	—	—
2432	Veneer and plywood	41.1	41.1	41.0	41.7	—	—	—	—	—	—
244	Wooden containers	37.6	38.7	38.5	39.0	38.8	2.2	2.1	3.0	3.0	—
2441,2	Wooden boxes, shooks, and crates	38.4	39.3	38.2	38.7	—	—	—	—	—	—
249	Miscellaneous wood products	39.8	39.7	40.1	40.3	40.5	2.8	3.4	3.6	3.7	—
25	FURNITURE AND FIXTURES	38.6	38.8	39.5	39.7	40.0	2.1	2.2	2.7	2.9	—
251	Household furniture	38.4	38.4	39.1	39.4	39.6	2.0	2.0	2.6	2.9	—
2511	Wood household furniture	39.0	39.3	39.8	39.9	—	2.4	2.4	3.1	3.2	—
2512	Upholstered household furniture	37.1	37.2	37.9	38.6	—	—	—	—	—	—
2515	Mattresses and bedsprings	37.9	37.4	39.0	39.6	—	—	—	—	—	—
252	Office furniture	40.5	41.5	43.3	42.5	—	2.4	3.3	3.9	3.3	—
254	Partitions and fixtures	39.5	39.9	39.6	40.2	—	3.2	2.8	2.7	3.4	—
253,9	Other furniture and fixtures	38.1	38.4	39.6	39.6	(*)	1.4	1.9	2.0	2.2	—
32	STONE, CLAY, AND GLASS PRODUCTS	41.4	41.8	41.8	41.4	41.2	4.5	4.6	5.0	4.8	—
321	Flat glass	43.2	41.6	41.3	41.9	—	5.7	5.3	6.8	7.3	—
322	Glass and glassware, pressed or blown	40.2	40.6	40.7	38.4	38.7	4.5	4.2	4.3	3.5	—
3221	Glass containers	39.8	40.6	41.3	37.1	—	—	—	—	—	—
3229	Pressed and blown glass, nec	40.8	40.5	39.9	40.3	—	3.5	2.8	3.3	3.3	—
324	Cement, hydraulic	42.0	41.7	42.5	42.1	41.8	3.1	3.0	4.1	4.1	—
325	Structural clay products	40.9	41.7	41.0	41.6	41.1	4.0	4.1	4.5	4.6	—
3251	Brick and structural clay tile	41.8	42.3	41.7	41.7	—	—	—	—	—	—
326	Pottery and related products	39.2	39.3	38.8	39.6	—	2.6	2.5	2.3	2.6	—
327	Concrete, gypsum and plaster products	43.3	43.9	43.9	43.8	43.6	6.0	6.5	7.0	6.9	—
328,9	Other stone and nonmetallic mineral products	40.4	40.7	41.2	41.4	40.8	3.4	3.3	3.9	3.9	—
3291	Abrasive products	39.2	40.0	40.4	40.8	—	—	—	—	—	—

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
	DURABLE GOODS—Continued										
33	PRIMARY METAL INDUSTRIES	40.8	40.1	40.8	41.3	41.2	3.6	3.1	3.6	4.0	—
331	Blast furnace and basic steel products	40.2	38.9	40.1	40.7	(*)	2.8	2.0	2.7	3.0	—
3312	Blast furnaces and steel mills	40.0	38.6	39.9	40.5	—	2.7	1.8	2.6	2.9	—
332	Iron and steel foundries	41.3	41.0	41.2	41.8	(*)	4.7	4.5	4.7	5.1	—
3321	Gray iron foundries	42.0	41.1	42.2	42.8	—	5.4	5.2	5.4	5.9	—
3322	Malleable iron foundries	40.7	39.3	39.9	39.6	—	—	—	—	—	—
3323	Steel foundries	39.9	41.2	39.3	40.0	—	3.3	3.6	3.4	3.8	—
3334	Nonferrous metals	42.1	41.7	41.1	41.5	(*)	4.1	3.2	3.6	4.4	—
3334	Primary aluminum	41.5	41.9	41.7	41.2	—	—	—	—	—	—
335	Nonferrous rolling and drawing	42.1	41.7	42.1	42.3	(*)	4.6	4.4	4.9	5.3	—
3351	Copper rolling and drawing	42.9	42.2	43.6	43.3	—	—	—	—	—	—
3352	Aluminum rolling and drawing	42.2	42.0	42.4	42.0	—	5.4	5.2	6.2	6.7	—
3357	Nonferrous wire drawing and insulating	42.2	41.3	41.2	41.9	—	4.2	3.8	4.1	4.4	—
336	Nonferrous foundries	40.1	39.8	40.9	41.0	(*)	3.0	2.8	3.7	3.6	—
3361	Aluminum castings	40.4	40.0	41.2	41.4	—	—	—	—	—	—
3362,9	Other nonferrous castings	39.7	39.7	40.5	40.5	—	—	—	—	—	—
339	Miscellaneous primary metal products	40.1	39.9	41.0	41.7	(*)	4.1	3.2	4.3	5.1	—
3391	Iron and steel forgings	40.1	40.0	44.4	42.4	—	—	—	—	—	—
34	FABRICATED METAL PRODUCTS	40.9	40.6	41.0	41.3	41.2	3.6	3.4	3.8	4.1	—
341	Metal cans	43.1	41.9	45.2	43.5	(*)	4.3	3.5	5.1	4.5	—
342	Cutlery, hand tools, and hardware	40.5	40.9	40.6	41.3	41.4	3.3	3.5	3.4	3.8	—
3421,3,5	Cutlery and hand tools, incl. saws	40.2	40.8	39.8	40.9	—	—	—	—	—	—
3429	Hardware, nec	40.8	40.9	41.1	41.6	—	—	—	—	—	—
343	Plumbing and heating, except electric	40.3	40.4	39.1	40.3	40.7	3.2	2.9	2.5	3.5	—
3431,2	Sanitary ware and plumbers' brass goods	40.2	39.9	38.3	39.5	—	—	—	—	—	—
3433	Heating equipment, except electric	40.4	40.8	39.9	41.0	—	—	—	—	—	—
344	Fabricated structural metal products	40.4	40.6	40.9	40.5	40.4	3.0	3.0	3.6	3.7	—
3441	Fabricated structural steel	40.9	41.3	44.4	40.2	—	3.3	3.4	3.5	3.5	—
3442	Metal doors, sash, and trim	39.1	39.7	40.2	39.9	—	—	—	—	—	—
3443	Fabricated plate work (boiler shops)	41.2	40.6	40.4	40.2	—	3.0	2.8	3.4	3.2	—
3444	Sheet metal work	39.6	40.5	40.7	40.6	—	—	—	—	—	—
3446,9	Architectural and misc. metal work	40.9	40.7	42.0	42.1	—	—	—	—	—	—
345	Screw machine products, bolts, etc	41.9	41.8	42.4	43.2	(*)	4.2	4.1	4.8	5.3	—
3451	Screw machine products	41.6	41.2	42.5	43.4	—	—	—	—	—	—
3452	Bolts, nuts, rivets, and washers	42.1	42.5	42.4	42.9	—	—	—	—	—	—
346	Metal stampings	42.3	39.9	41.4	42.0	(*)	5.2	4.2	4.4	5.1	—
347	Metal services, nec	39.8	40.0	39.8	40.3	40.0	3.2	3.3	3.4	3.8	—
348	Miscellaneous fabricated wire products	39.8	40.1	40.3	40.3	39.8	2.6	2.8	2.9	3.4	—
349	Miscellaneous fabricated metal products	40.2	40.6	40.7	41.2	41.1	3.1	3.0	3.4	3.6	—
3494,8	Valves, pipe, and pipe fittings	40.0	41.0	41.2	42.1	—	—	—	—	—	—
35	MACHINERY, EXCEPT ELECTRICAL	41.0	41.2	41.5	42.0	41.9	3.4	3.2	3.9	4.2	—
351	Engines and turbines	40.4	40.0	42.5	43.3	(*)	3.0	2.6	4.0	4.5	—
3511	Steam engines and turbines	40.8	41.3	40.2	40.7	—	—	—	—	—	—
3519	Internal combustion engines, nec	40.2	39.4	43.5	44.4	—	—	—	—	—	—
352	Farm machinery	41.1	40.5	41.1	41.7	—	4.0	2.8	3.9	3.6	—
353	Construction and related machinery	40.5	40.5	41.7	42.0	42.0	2.8	2.4	3.4	3.7	—
3531,2	Construction and mining machinery	40.0	39.5	41.2	41.7	—	2.2	1.8	2.6	2.9	—
3533	Oil field machinery	42.4	42.9	43.9	43.8	—	—	—	—	—	—
3535,6	Conveyors, hoists, cranes, monorails	40.0	40.3	41.4	41.1	—	—	—	—	—	—
3537	Industrial trucks and tractors	40.0	40.3	40.0	41.5	—	—	—	—	—	—
354	Metal working machinery	41.8	42.2	42.7	43.3	43.3	4.0	4.4	5.2	5.6	—
3541	Machine tools, metal cutting types	42.3	42.4	44.0	44.7	—	4.0	3.9	5.4	5.6	—
3544	Special dies, tools, jig and fixtures	42.8	43.5	43.7	44.3	—	—	—	—	—	—
3545	Machine tool accessories	41.2	41.0	41.8	42.5	—	3.3	3.5	4.0	4.8	—
3542,8	Miscellaneous metal working machinery	40.0	40.4	40.5	40.6	—	—	—	—	—	—
355	Special industry machinery	41.1	41.0	40.7	41.5	41.0	3.3	3.2	3.5	4.1	—
3551	Food products machinery	41.0	41.1	40.4	40.9	—	—	—	—	—	—
3552	Textile machinery	40.8	40.4	40.9	41.0	—	—	—	—	—	—
3555	Printing trades machinery	41.1	40.7	39.8	41.2	—	—	—	—	—	—
356	General industrial machinery	40.4	40.8	41.2	41.8	(*)	3.2	3.1	3.8	4.3	—
3561	Pumps and compressors	40.8	41.2	41.3	42.3	—	3.4	3.3	4.3	5.0	—
3562	Ball and roller bearings	40.1	41.2	41.9	42.3	—	3.6	3.6	4.1	4.6	—
3564	Blowers and fans	41.0	40.6	41.8	41.2	—	—	—	—	—	—
3566	Power transmission equipment	40.9	40.8	41.1	42.1	—	3.4	2.9	4.0	4.5	—
357	Office and computing machines	42.5	42.5	41.0	41.2	(*)	3.4	3.4	2.8	3.2	—
3573	Electronic computing equipment	42.9	42.8	41.6	41.7	—	—	—	—	—	—
358	Service industry machines	40.0	40.1	39.9	40.1	(*)	2.5	2.1	2.9	3.0	—
3585	Refrigeration machinery	40.1	40.3	39.6	39.9	—	2.4	1.9	2.9	3.0	—
359	Miscellaneous machinery, except electrical	41.4	41.7	41.4	42.2	(*)	3.8	3.9	4.2	4.6	—

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
DURABLE GOODS—Continued											
36	ELECTRICAL EQUIPMENT AND SUPPLIES	40.0	40.2	40.2	40.5	40.4	2.5	2.5	2.7	3.0	—
361	Electric test and distributing equipment	39.7	40.1	40.1	40.5	40.6	2.0	2.2	2.2	2.6	—
3611	Electric measuring instruments	39.8	39.8	39.8	39.9	—	1.4	1.6	2.0	2.0	—
3612	Transformers	39.8	40.7	41.0	40.8	—	—	—	—	—	—
3613	Switchgear and switchboard apparatus	39.6	40.0	39.8	40.8	—	—	—	—	—	—
362	Electrical industrial apparatus	39.5	39.9	40.1	40.9	40.8	2.2	2.3	2.8	3.3	—
3621	Motors and generators	39.6	40.3	40.5	41.2	—	2.5	2.6	3.1	3.7	—
3622	Industrial controls	38.7	39.1	38.8	39.6	—	1.4	1.8	1.8	2.3	—
363	Household appliances	39.2	39.5	40.0	40.1	(*)	2.0	1.9	2.6	2.8	—
3632	Household refrigerators and freezers	39.8	39.0	43.1	42.0	—	—	—	—	—	—
3633	Household laundry equipment	38.5	38.9	37.6	37.5	—	—	—	—	—	—
3634	Electric housewares and fans	39.2	39.7	39.1	40.2	—	2.3	2.4	2.6	3.4	—
364	Electric lighting and wiring equipment	39.7	40.0	39.7	40.0	39.9	2.3	2.3	2.3	2.4	—
3641	Electric lamps	41.3	41.7	40.7	41.1	—	2.4	2.4	2.0	2.1	—
3642	Lighting fixtures	39.5	39.4	39.2	39.0	—	2.6	2.6	2.4	2.3	—
3643,4	Wiring devices	39.1	39.5	39.5	40.3	—	2.1	2.1	2.3	2.6	—
365	Radio and TV receiving equipment	38.3	39.4	39.1	39.6	39.3	2.4	2.9	2.0	2.2	—
366	Communication equipment	40.6	41.0	41.4	41.6	41.5	2.6	2.5	2.7	3.1	—
3661	Telephone and telegraph apparatus	41.6	41.5	41.7	42.0	—	—	—	—	—	—
3662	Radio and TV communication equipment	39.8	40.6	41.1	41.3	—	2.4	2.4	2.6	2.8	—
367	Electronic components and accessories	40.2	40.0	39.3	39.6	(*)	2.5	2.5	2.3	2.7	—
3671-3	Electron tubes	40.4	39.5	42.4	43.6	—	1.8	1.2	2.2	3.4	—
3674,9	Other electronic components	40.2	40.0	38.9	39.1	—	2.6	2.7	2.3	2.6	—
369	Miscellaneous electrical equip. and supplies	41.8	41.5	42.1	42.1	(*)	4.4	3.4	5.2	5.0	—
3694	Engine electrical equipment	41.7	41.1	43.2	42.1	—	—	—	—	—	—
37	TRANSPORTATION EQUIPMENT	41.5	41.4	41.4	42.5	42.5	4.7	4.2	4.6	4.9	—
371	Motor vehicles and equipment	43.2	42.4	42.7	44.1	(*)	6.4	5.4	6.0	6.3	—
3711	Motor vehicles	43.7	42.9	42.6	45.8	—	7.0	5.7	6.1	6.7	—
3712	Passenger car bodies	40.7	48.9	37.6	41.0	—	—	—	—	—	—
3713	Truck and bus bodies	40.6	39.9	40.4	40.8	—	—	—	—	—	—
3714	Motor vehicle parts and accessories	43.4	41.5	43.5	43.6	—	6.2	5.0	6.3	6.4	—
3715	Truck trailers	39.6	40.1	40.2	40.3	—	—	—	—	—	—
372	Aircraft and parts	40.1	41.0	41.2	41.8	(*)	2.6	3.0	3.4	3.8	—
3721	Aircraft	40.8	41.3	41.6	41.7	—	2.3	2.4	2.8	2.9	—
3722	Aircraft engines and engine parts	39.1	40.4	39.9	41.6	—	2.9	3.5	3.8	4.4	—
3723,9	Other aircraft parts and equipment	40.0	41.3	41.9	42.4	—	3.1	3.5	4.3	4.8	—
373	Ship and boat building and repairing	38.3	39.7	38.1	39.3	39.3	2.4	2.8	2.7	2.9	—
3731	Ship building and repairing	38.0	39.7	38.1	39.3	—	—	—	—	—	—
3732	Boat building and repairing	39.4	39.9	38.3	39.6	—	—	—	—	—	—
374	Railroad equipment	39.0	39.1	40.5	(*)	—	1.6	1.8	3.2	(*)	—
375,9	Other transportation equipment	39.2	39.4	39.7	39.6	—	2.7	2.5	2.9	2.7	—
38	INSTRUMENTS AND RELATED PRODUCTS	40.2	40.3	40.1	40.6	40.6	2.5	2.5	2.2	2.7	—
381	Engineering and scientific instruments	40.0	39.7	40.8	41.6	—	2.9	2.1	2.8	2.9	—
382	Mechanical measuring and control devices	40.1	40.3	39.8	40.5	40.3	2.6	2.6	2.5	3.0	—
3821	Mechanical measuring devices	40.4	41.0	40.3	41.2	—	2.6	2.9	2.5	3.5	—
3822	Automatic temperature controls	39.6	39.1	39.1	39.2	—	2.5	2.1	2.4	2.2	—
383,5	Optical and ophthalmic goods	40.4	39.7	40.1	40.5	(*)	2.3	2.3	1.8	2.4	—
385	Ophthalmic goods	39.6	38.5	39.0	39.3	—	2.1	2.0	1.4	1.6	—
384	Medical instruments and supplies	39.4	39.7	39.5	39.6	(*)	2.0	2.1	2.1	2.4	—
386	Photographic equipment and supplies	42.1	42.0	41.4	41.9	(*)	3.2	3.2	2.4	3.2	—
387	Watches, clocks, and watch cases	38.4	39.7	38.9	39.5	—	1.7	2.0	1.5	1.9	—
39	MISC. MANUFACTURING INDUSTRIES	38.4	38.9	38.8	39.2	39.3	2.2	2.2	2.0	2.3	—
391	Jewelry, silverware, and plated ware	39.2	40.1	38.8	39.7	(*)	2.7	3.7	2.1	2.9	—
394	Toys and sporting goods	37.9	38.7	38.4	38.8	—	2.1	1.9	1.6	1.8	—
3941-3	Games, toys, dolls and play vehicles	37.4	38.3	38.4	38.6	—	—	—	—	—	—
3949	Sporting and athletic goods, nec	38.6	39.2	38.6	39.0	—	—	—	—	—	—
395	Pens, pencils, office and art supplies	39.9	40.5	40.0	39.8	—	2.5	3.2	3.0	3.0	—
396	Costume jewelry and notions	37.3	37.2	37.4	38.3	—	1.8	1.4	1.5	2.1	—
393,9	Other manufacturing industries	38.7	39.1	39.3	39.5	39.7	2.1	2.1	2.3	2.5	—
393	Musical instruments and parts	39.2	39.2	40.4	40.0	—	1.6	1.6	2.0	1.9	—
NONDURABLE GOODS											
20	FOOD AND KINDRED PRODUCTS	40.9	40.4	40.3	40.2	39.3	4.5	4.0	4.4	4.5	—
201	Meat products	41.0	40.8	39.8	40.4	(*)	4.3	4.5	3.8	4.2	—
2011	Meat packing plants	42.5	42.4	41.1	42.0	—	5.0	5.2	4.2	4.7	—
2013	Sausages and other prepared meats	40.7	40.8	39.8	40.4	—	—	—	—	—	—
2015	Poultry dressing plants	39.3	38.9	38.2	38.5	—	—	—	—	—	—

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
	NONDURABLE GOODS—Continued										
	FOOD AND KINDRED PRODUCTS—Continued										
202	Dairy products	42.3	41.1	42.6	42.6	(*)	4.5	3.8	4.8	4.8	—
2024	Ice cream and frozen desserts	40.6	39.2	41.4	40.6	—	—	—	—	—	—
2026	Fluid milk	43.1	41.9	44.1	44.1	—	—	—	—	—	—
203	Canned, cured, and frozen foods	39.7	39.0	39.3	38.5	—	4.4	3.5	5.1	4.8	—
2031,6	Canned, cured, and frozen sea foods	35.0	34.4	36.2	34.7	—	—	—	—	—	—
2032,3	Canned food, except sea foods	41.2	39.4	39.8	39.1	—	—	—	—	—	—
2037	Frozen fruits and vegetables	38.3	40.4	39.2	39.0	—	—	—	—	—	—
204	Grain mill products	44.8	43.8	43.4	43.7	(*)	6.7	5.8	5.9	6.6	—
2041	Flour and other grain mill products	47.9	44.1	46.0	46.2	—	—	—	—	—	—
2042	Prepared feeds for animals and fowls	44.8	44.5	42.3	43.0	—	—	—	—	—	—
205	Bakery products	39.4	39.1	39.3	39.0	38.7	3.6	3.3	3.5	3.6	—
2051	Bread, cake, and related products	39.2	38.8	39.2	39.0	—	—	—	—	—	—
2052	Cookies and crackers	39.9	40.0	39.9	39.0	—	—	—	—	—	—
206	Sugar	41.1	39.5	40.7	39.9	—	4.9	4.2	3.8	4.4	—
207	Confectionery and related products	39.6	40.0	39.9	39.5	40.0	2.9	2.7	2.9	3.1	—
2071	Confectionery products	39.3	39.5	39.3	39.2	—	—	—	—	—	—
208	Beverages	40.8	40.2	40.8	40.2	39.5	4.6	4.0	4.7	4.3	—
2082	Malt liquors	43.0	42.7	42.3	42.0	—	—	—	—	—	—
2086	Bottled and canned soft drinks	39.6	38.5	40.5	39.1	—	—	—	—	—	—
209	Miscellaneous foods and kindred products	41.8	41.8	40.8	41.1	41.1	4.8	4.8	3.9	4.4	—
21	TOBACCO MANUFACTURES	37.8	38.7	38.1	39.4	39.7	1.3	1.8	2.0	2.0	—
211	Cigarettes	36.5	37.8	38.6	39.0	—	1.1	1.5	2.5	1.8	—
212	Cigars	37.3	37.4	40.0	39.7	—	.8	.9	.8	1.5	—
22	TEXTILE MILL PRODUCTS	39.4	39.5	40.4	40.6	40.6	3.0	3.1	3.5	3.7	—
221	Weaving mills, cotton	39.9	41.0	40.2	40.3	40.7	3.4	3.7	3.8	3.9	—
222	Weaving mills, synthetics	39.9	39.8	40.8	41.1	41.3	3.2	3.4	3.2	3.5	—
223	Weaving and finishing mills, wool	40.9	41.0	40.4	40.0	40.1	3.0	3.3	3.3	3.2	—
224	Narrow fabric mills	40.0	39.2	40.5	40.7	39.9	3.1	2.9	2.8	2.9	—
225	Knitting mills	38.1	38.0	39.1	39.0	39.1	2.4	2.5	2.9	2.9	—
2251	Women's hosiery, except socks	37.0	38.1	38.5	38.7	—	—	—	—	—	—
2252	Hosiery, nec	36.3	37.1	39.1	38.1	—	—	—	—	—	—
2253	Knit outerwear mills	37.8	37.7	38.0	37.5	—	—	—	—	—	—
2254	Knit underwear mills	38.2	37.5	37.8	37.6	—	—	—	—	—	—
226	Textile finishing, except wool	39.3	39.2	41.1	41.7	41.9	3.0	2.9	4.0	4.4	—
227	Floor covering mills	40.9	41.0	43.4	43.5	—	4.5	3.5	5.4	5.2	—
228	Yarn and thread mills	39.1	38.7	41.1	41.3	40.8	2.8	2.6	3.7	3.9	—
229	Miscellaneous textile goods	40.8	41.5	40.8	40.9	(*)	3.3	3.8	3.9	4.0	—
23	APPAREL AND OTHER TEXTILE PRODUCTS	35.2	35.3	35.8	35.4	35.8	1.2	1.2	1.3	1.3	—
231	Men's and boys' suits and coats	36.3	35.7	36.0	36.0	35.9	1.0	.9	.5	.7	—
232	Men's and boys' furnishings	35.8	35.9	36.3	36.0	36.2	1.1	1.0	1.1	1.1	—
2321	Men's and boys' shirts and nightwear	35.8	35.9	35.7	35.3	—	1.1	1.1	1.0	.9	—
2327	Men's and boys' separate trousers	35.5	35.1	36.0	35.5	—	1.1	.8	1.0	1.2	—
2328	Men's and boys' work clothing	36.0	37.0	37.3	36.8	—	1.0	1.0	1.3	1.2	—
233	Women's and misses' outerwear	32.7	32.9	33.7	32.9	(*)	.9	.9	1.1	1.1	—
2331	Women's and misses' blouses and waists	33.5	34.2	33.9	33.3	—	—	—	—	—	—
2335	Women's and misses' dresses	31.5	31.7	32.6	31.5	—	.8	.8	1.0	.8	—
2337	Women's and misses' suits and coats	32.6	31.7	33.7	32.6	—	1.0	.8	1.4	1.2	—
2339	Women's and misses' outerwear, nec	34.3	34.8	35.3	34.8	—	1.1	1.2	1.3	1.4	—
234	Women's and children's undergarments	36.0	36.4	37.2	36.8	(*)	1.3	1.4	1.4	1.4	—
2341	Women's and children's underwear	36.1	36.6	37.3	37.0	—	—	—	—	—	—
2342	Corsets and allied garments	35.7	35.8	36.7	36.1	—	—	—	—	—	—
235	Hats, caps, and millinery	36.9	37.5	37.3	36.9	—	1.3	1.7	1.3	.9	—
236	Children's outerwear	35.0	35.6	35.2	35.0	35.9	1.2	1.1	1.8	1.4	—
2361	Children's dresses and blouses	34.3	35.7	33.8	34.6	—	—	—	—	—	—
237,8	Fur goods and miscellaneous apparel	36.1	36.1	36.5	36.1	—	1.2	1.2	1.0	1.4	—
239	Miscellaneous fabricated textile products	38.2	38.1	38.4	38.5	(*)	2.4	2.3	2.0	2.7	—
2391,2	Housefurnishings	37.9	37.7	37.7	38.0	—	—	—	—	—	—
26	PAPER AND ALLIED PRODUCTS	42.6	42.3	42.7	43.0	42.8	5.1	4.6	4.9	5.1	—
261,2,6	Paper and pulp mills	45.1	44.1	44.2	44.7	44.5	6.7	6.0	6.1	6.4	—
263	Paperboard mills	44.4	43.6	44.7	45.0	(*)	7.5	6.7	7.2	7.3	—
264	Miscellaneous converted paper products	40.7	40.7	41.0	40.9	41.1	3.6	3.4	3.7	3.9	—
2643	Bags, except textile bags	41.0	40.9	41.6	40.7	—	—	—	—	—	—
265	Paperboard containers and boxes	41.2	41.6	42.1	42.6	42.1	4.0	3.7	4.1	4.4	—
2651,2	Folding and setup paperboard boxes	41.1	41.3	41.0	41.4	—	—	—	—	—	—
2653	Corrugated and solid fiber boxes	41.6	41.9	42.9	43.8	—	4.6	4.2	4.5	5.0	—
2654	Sanitary food containers	41.1	41.6	42.9	42.3	—	—	—	—	—	—

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

SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
	NONDURABLE GOODS—Continued										
27	PRINTING AND PUBLISHING	\$218.86	\$216.95	\$233.09	\$237.46	\$235.60	\$5.79	\$5.77	\$6.15	\$6.20	\$6.20
271	Newspapers	221.54	219.22	229.14	232.53	231.88	6.44	6.41	6.70	6.74	6.78
272	Periodicals	228.69	225.17	243.92	246.28	—	5.94	5.91	6.47	6.55	—
273	Books	200.27	196.60	213.73	218.43	—	5.07	5.08	5.33	5.38	—
275	Commercial printing	226.58	223.68	242.58	249.32	248.06	5.78	5.75	6.22	6.28	6.28
2751	Commercial printing, except lithographic	219.35	217.23	232.97	241.98	—	5.61	5.57	6.02	6.08	—
2752	Commercial printing, lithographic	238.16	234.69	257.28	261.76	—	6.06	6.08	6.53	6.61	—
278	Blankbooks and bookbinding	174.15	174.33	185.89	188.58	189.29	4.50	4.47	4.73	4.75	4.78
274,6,7,9	Other publishing and printing ind.	218.50	218.30	239.12	241.30	239.29	5.69	5.67	6.10	6.14	6.12
28	CHEMICALS AND ALLIED PRODUCTS ..	253.68	251.26	268.32	271.88	274.21	6.04	6.04	6.45	6.52	6.56
281	Industrial chemicals	292.83	287.90	306.68	312.26	(*)	6.81	6.79	7.25	7.33	(*)
2812	Alkalies and chlorine	294.87	299.84	325.80	325.29	—	6.81	6.83	7.63	7.69	—
2818	Industrial organic chemicals, nec.	320.03	311.32	329.87	335.20	—	7.29	7.24	7.78	7.85	—
2819	Industrial inorganic chemicals, nec.	282.81	271.83	296.52	303.03	—	6.67	6.55	7.06	7.13	—
282	Plastics materials and synthetics	249.74	242.08	263.54	266.46	265.63	5.89	5.89	6.32	6.39	6.37
2821	Plastics materials and resins	269.55	264.63	284.26	284.46	—	6.14	6.14	6.58	6.60	—
2823,4	Synthetic fibers	228.11	216.86	239.72	243.19	—	5.51	5.49	5.89	5.99	—
283	Drugs	226.70	232.22	236.61	241.19	(*)	5.57	5.65	5.93	5.97	(*)
2834	Pharmaceutical preparations	221.68	227.14	229.70	234.83	—	5.46	5.54	5.83	5.93	—
284	Soap, cleaners, and toilet goods	230.68	235.91	247.20	250.69	247.05	5.71	5.74	6.00	6.07	6.10
2841	Soap and other detergents	304.50	310.86	334.54	336.18	—	7.25	7.28	7.78	7.80	—
2844	Tiolet preparations	185.81	190.07	193.59	200.38	—	4.74	4.74	4.78	4.96	—
285	Paints and allied products	224.00	223.99	242.76	246.19	244.99	5.45	5.49	5.95	5.99	5.99
287	Agricultural chemicals	235.09	233.69	253.73	256.28	255.92	5.48	5.46	5.97	6.03	6.05
2871,2	Fertilizers, complete and mixing only ..	222.83	219.56	236.18	239.56	—	5.17	5.13	5.61	5.65	—
286,9	Other chemical products	234.36	233.79	246.33	249.23	(*)	5.58	5.62	5.95	6.02	(*)
2892	Explosives	224.35	237.97	232.53	232.36	—	5.38	5.56	5.77	5.78	—
29	PETROLEUM AND COAL PRODUCTS	309.02	306.00	330.07	337.22	338.87	7.22	7.20	7.73	7.77	7.79
291	Petroleum refining	335.62	329.22	356.17	363.80	(*)	7.86	7.82	8.46	8.50	(*)
295,9	Other petroleum and coal products	235.64	240.12	259.01	267.44	262.11	5.48	5.52	5.86	5.93	5.93
30	RUBBER AND PLASTICS PRODUCTS, NEC	198.37	199.75	209.20	212.38	213.61	4.85	4.86	5.14	5.18	5.21
301	Tires and inner tubes	311.66	310.25	314.05	312.91	314.65	6.79	6.73	7.17	7.21	7.25
302,3,8	Other rubber products	188.87	197.62	203.41	210.53	(*)	4.71	4.82	5.06	5.16	(*)
302	Rubber footwear	129.13	127.39	133.96	135.38	—	3.49	3.49	3.65	3.61	—
307	Miscellaneous plastics products	167.93	167.53	180.00	183.82	183.37	4.23	4.22	4.50	4.55	4.55
31	LEATHER AND LEATHER PRODUCTS ..	126.32	125.96	135.39	136.89	139.47	3.48	3.47	3.62	3.67	3.68
311	Leather tanning and finishing	177.87	175.49	187.02	191.78	(*)	4.62	4.57	4.82	4.88	(*)
314	Footwear, except rubber	118.83	116.82	127.97	129.48	130.53	3.31	3.30	3.44	3.49	3.49
312,3,5-7,9	Other leather products	127.72	130.50	136.13	136.16	(*)	3.48	3.48	3.63	3.67	(*)
316	Luggage	132.13	134.64	141.74	139.43	—	3.66	3.60	3.80	3.82	—
317	Handbags and personal leather goods ..	121.03	124.08	132.75	133.88	—	3.28	3.30	3.54	3.57	—
—	TRANSPORTATION AND PUBLIC UTILITIES	265.06	265.20	282.40	285.42	286.00	6.61	6.63	6.99	7.10	7.15
4011	RAILROAD TRANSPORTATION: Class I railroads ²	308.52	297.22	327.87	(*)	—	6.98	7.01	7.52	(*)	—
411	LOCAL AND INTERURBAN PASSENGER TRANSIT: Local and suburban transportation	220.49	228.98	244.55	238.79	—	5.54	5.64	5.95	6.03	—
413	Intercity highway transportation	259.46	266.63	294.08	282.74	—	6.81	6.75	7.56	7.56	—
42	TRUCKING AND WAREHOUSING	267.24	267.90	287.41	289.27	—	6.55	6.55	7.01	7.09	—
421,3	Trucking and trucking terminals	273.62	274.70	294.58	296.84	—	6.69	6.70	7.15	7.24	—
422	Public warehousing	192.15	189.29	200.06	196.84	—	4.84	4.78	5.21	5.18	—
46	PIPE LINE TRANSPORTATION	312.91	322.75	334.46	342.34	—	7.54	7.63	8.04	8.19	—
48	COMMUNICATION	261.10	262.68	272.70	283.27	—	6.61	6.65	6.75	6.96	—
481	Telephone communication	266.74	267.81	276.89	289.16	—	6.77	6.78	6.82	7.07	—
4817	Switchboard operating employees ³	193.00	200.80	205.56	206.21	—	5.71	5.77	5.71	5.76	—
4818	Line construction employees ⁴	339.98	343.22	361.09	371.01	—	7.87	7.89	8.06	8.19	—
482	Telegraph communication ⁵	271.76	250.20	306.87	(*)	—	6.71	6.00	7.12	(*)	—
483	Radio and television broadcasting	239.79	244.51	251.29	257.15	—	6.04	6.19	6.46	6.56	—

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
	NONDURABLE GOODS—Continued										
27	PRINTING AND PUBLISHING	37.8	37.6	37.9	38.3	38.0	2.9	2.6	3.0	3.3	—
271	Newspapers	34.4	34.2	34.2	34.5	34.2	1.8	1.8	1.7	2.0	—
272	Periodicals	38.5	38.1	37.7	37.6	—	3.3	2.2	2.9	3.6	—
273	Books	39.5	38.7	40.1	40.6	—	3.1	2.5	4.5	4.7	—
275	Commercial printing	39.2	38.9	39.0	39.7	39.5	3.5	3.1	3.5	3.9	—
2751	Commercial printing, except lithographic	39.1	39.0	38.7	39.8	—	3.5	3.2	3.2	3.7	—
2752	Commercial printing, lithographic	39.3	38.6	39.4	39.6	—	3.5	3.1	3.9	4.2	—
278	Blankbooks and bookbinding	38.7	39.0	39.3	39.7	39.6	2.7	2.5	2.6	2.8	—
274,6,7,9	Other publishing and printing ind	38.4	38.5	39.2	39.3	39.1	3.0	2.7	3.0	3.5	—
28	CHEMICALS AND ALLIED PRODUCTS	42.0	41.6	41.6	41.7	41.8	3.6	3.3	3.4	3.6	—
281	Industrial chemicals	43.0	42.4	42.3	42.6	(*)	4.5	3.9	3.8	4.1	—
2812	Alkalies and chlorine	43.3	43.9	42.7	42.3	—	—	—	—	—	—
2818	Industrial organic chemicals, nec	43.9	43.0	42.4	42.7	—	4.1	4.0	3.8	4.0	—
2819	Industrial inorganic chemicals, nec	42.4	41.5	42.0	42.5	—	5.0	3.6	3.5	4.0	—
282	Plastics materials and synthetics	42.4	41.1	41.7	41.7	41.7	3.2	2.7	3.4	3.4	—
2821	Plastics materials and resins	43.9	43.1	43.2	43.1	—	5.1	4.5	4.8	5.0	—
2823,4	Synthetic fibers	41.4	39.5	40.7	40.6	—	1.8	1.4	2.5	2.4	—
283	Drugs	40.7	41.1	39.9	40.4	(*)	2.9	2.9	2.6	2.6	—
2834	Pharmaceutical preparations	40.6	41.0	39.4	39.6	—	—	—	—	—	—
284	Soap, cleaners, and toilet goods	40.4	41.1	41.2	41.3	40.5	3.0	3.3	2.9	3.4	—
2841	Soap and other detergents	42.0	42.7	43.0	43.1	—	—	—	—	—	—
2844	Toilet preparations	39.2	40.1	40.5	40.4	—	—	—	—	—	—
285	Paints and allied products	41.1	40.8	40.8	41.1	40.9	3.1	2.7	3.4	3.9	—
287	Agricultural chemicals	42.9	42.8	42.5	42.5	42.3	4.8	4.4	4.7	4.7	—
2871,2	Fertilizers, complete and mixing only	43.1	42.8	42.1	42.4	—	—	—	—	—	—
286,9	Other chemical products	42.0	41.6	41.4	41.4	(*)	3.4	3.4	3.4	3.6	—
2892	Explosives	41.7	42.8	40.3	40.2	—	—	—	—	—	—
29	PETROLEUM AND COAL PRODUCTS	42.8	42.5	42.7	43.4	43.5	3.5	3.6	3.8	4.4	—
291	Petroleum refining	42.7	42.1	42.1	42.8	(*)	2.9	3.0	3.0	3.5	—
295,9	Other petroleum and coal products	43.0	43.5	44.2	45.1	44.2	5.3	5.1	6.0	6.6	—
30	RUBBER AND PLASTICS PRODUCTS, NEC	40.9	41.1	40.7	41.0	41.0	4.1	3.9	3.5	3.7	—
301	Tires and inner tubes	45.9	46.1	43.8	43.4	43.4	8.0	7.7	5.3	5.0	—
302,3,6	Other rubber products	40.1	41.0	40.2	40.8	(*)	3.5	3.6	3.1	3.5	—
302	Rubber footwear	37.0	36.5	36.7	37.5	—	1.6	.7	1.2	1.8	—
307	Miscellaneous plastics products	39.7	39.7	40.0	40.4	40.3	3.2	2.9	3.2	3.4	—
31	LEATHER AND LEATHER PRODUCTS	36.3	36.3	37.4	37.3	37.9	1.6	1.6	1.9	1.9	—
311	Leather tanning and finishing	38.5	38.4	38.8	39.3	(*)	2.5	2.3	2.5	2.7	—
314	Footwear, except rubber	35.9	35.4	37.2	37.1	37.4	1.4	1.2	1.8	1.7	—
312,3,5,7,9	Other leather products	36.7	37.5	37.5	37.1	(*)	1.7	2.1	2.0	2.2	—
316	Luggage	36.1	37.4	37.3	36.5	—	1.5	2.4	2.5	2.2	—
317	Handbags and personal leather goods	36.9	37.6	37.5	37.5	—	2.0	2.3	2.3	2.7	—
—	TRANSPORTATION AND PUBLIC UTILITIES	40.1	40.0	40.4	40.2	40.0	—	—	—	—	—
4011	RAILROAD TRANSPORTATION: Class I railroads ²	44.2	42.4	43.6	(*)	—	—	—	—	—	—
411	LOCAL AND INTERURBAN PASSENGER TRANSIT: Local and suburban transportation	39.8	40.6	41.1	39.6	—	—	—	—	—	—
413	Intercity highway transportation	38.1	39.5	38.9	37.4	—	—	—	—	—	—
42	TRUCKING AND WAREHOUSING	40.8	40.9	41.0	40.8	—	—	—	—	—	—
421,3	Trucking and trucking terminals	40.9	41.0	41.2	41.0	—	—	—	—	—	—
422	Public warehousing	39.7	39.6	38.4	38.0	—	—	—	—	—	—
46	PIPE LINE TRANSPORTATION	41.5	42.3	41.6	41.8	—	—	—	—	—	—
48	COMMUNICATION	39.5	39.5	40.4	40.7	—	—	—	—	—	—
481	Telephone communication	39.4	39.5	40.6	40.9	—	—	—	—	—	—
4817	Switchboard operating employees ³	33.8	34.8	36.0	35.8	—	—	—	—	—	—
4818	Line construction employees ⁴	43.2	43.5	44.8	45.3	—	—	—	—	—	—
482	Telegraph communication ⁵	40.5	41.7	43.1	(*)	—	—	—	—	—	—
483	Radio and television broadcasting	39.7	39.5	38.9	39.2	—	—	—	—	—	—

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**

SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
-	TRANSPORTATION AND PUBLIC UTILITIES—Continued										
49	ELECTRIC, GAS, AND SANITARY SERVICES	\$278.30	\$281.06	\$291.17	\$295.71	-	\$6.69	\$6.74	\$7.05	\$7.16	-
491	Electric companies and systems	280.64	281.63	297.20	302.10	-	6.73	6.77	7.11	7.21	-
492	Gas companies and systems	250.08	256.63	269.43	275.81	-	6.19	6.29	6.62	6.76	-
493	Combination companies and systems	314.16	319.82	319.87	324.77	-	7.48	7.49	7.84	7.96	-
494-7	Water, steam, and sanitary systems	228.60	226.85	234.48	239.04	-	5.43	5.44	5.65	5.76	-
-	WHOLESALE AND RETAIL TRADE	135.74	135.20	145.52	144.09	\$144.87	4.04	4.06	4.28	4.34	\$4.39
50	WHOLESALE TRADE	204.61	204.34	216.28	219.40	222.69	5.26	5.28	5.56	5.64	5.71
501	Motor vehicles and automotive equipment	186.84	181.81	195.22	196.33	-	4.73	4.71	4.98	5.06	-
502	Drugs, chemicals, and allied products	215.27	216.41	227.12	232.16	-	5.68	5.68	5.93	6.03	-
503	Dry goods and apparel	175.79	168.86	180.43	182.58	-	4.79	4.77	5.04	5.10	-
504	Groceries and related products	200.07	196.99	213.71	219.82	-	5.13	5.13	5.58	5.68	-
506	Electrical goods	221.09	224.97	224.64	229.12	-	5.64	5.71	5.76	5.83	-
507	Hardware, plumbing, and heating equipment	193.54	192.65	206.84	210.11	-	5.04	5.03	5.29	5.36	-
508	Machinery, equipment, and supplies	224.64	226.46	237.18	239.59	-	5.63	5.69	5.90	5.96	-
509	Miscellaneous wholesalers	199.79	200.41	213.12	214.68	-	5.23	5.26	5.55	5.62	-
52-59	RETAIL TRADE	115.88	115.43	124.86	122.61	122.38	3.61	3.63	3.83	3.88	3.91
53	Retail general merchandise [†]	107.92	106.79	118.31	115.90	-	3.47	3.49	3.78	3.80	-
531	Department stores [†]	110.57	109.38	122.45	118.80	-	3.59	3.61	3.95	3.96	-
532	Mail order houses	146.63	143.40	160.77	157.72	-	4.30	4.23	4.66	4.68	-
533	Variety stores	86.98	85.26	93.33	91.19	-	2.88	2.89	3.07	3.06	-
54	Food stores	145.64	142.56	155.64	153.90	-	4.40	4.40	4.66	4.75	-
541-3	Grocery, meat, and vegetable stores	149.97	147.27	160.41	158.60	-	4.49	4.49	4.76	4.85	-
56	Apparel and accessory stores	98.75	98.37	103.77	102.12	-	3.27	3.29	3.38	3.42	-
561	Men's and boys' clothing and furnishings	122.18	123.20	128.64	122.85	-	3.83	3.85	3.91	3.90	-
562	Women's ready-to-wear stores	85.26	85.24	90.26	88.07	-	2.94	2.97	3.07	3.09	-
565	Family clothing stores	96.10	97.61	104.29	101.87	-	3.12	3.19	3.29	3.34	-
566	Shoe stores	104.65	102.26	108.28	112.31	-	3.50	3.49	3.55	3.82	-
57	Furniture and home furnishings stores	153.61	151.73	158.84	159.22	-	4.22	4.18	4.40	4.46	-
571	Furniture and home furnishings	157.68	156.22	162.90	163.80	-	4.32	4.28	4.50	4.55	-
58	Eating and drinking places ⁶	76.45	76.45	82.94	79.72	-	2.74	2.78	2.89	2.92	-
52,55,59	Other retail trade	143.78	144.11	155.77	154.64	-	3.95	3.97	4.21	4.26	-
52	Building materials and farm equipment	163.98	164.79	176.11	176.76	-	4.12	4.13	4.37	4.43	-
551.2	Motor vehicle dealers	189.68	190.39	210.65	208.50	-	4.79	4.82	5.36	5.36	-
553.9	Other automotive and accessory dealers	163.96	163.14	181.04	182.40	-	4.13	4.13	4.47	4.56	-
591	Drug stores and proprietary stores	106.64	106.18	114.20	111.65	-	3.44	3.47	3.58	3.59	-
594	Book and stationery stores	118.86	121.11	131.97	130.65	-	3.58	3.67	3.87	3.90	-
598	Fuel and ice dealers	175.67	182.74	184.86	187.59	-	4.47	4.58	4.74	4.81	-
-	FINANCE, INSURANCE, AND REAL ESTATE⁷	160.67	161.85	169.28	169.46	172.86	4.39	4.41	4.60	4.63	4.71
60	Banking	135.42	136.15	141.99	142.30	-	3.71	3.73	3.89	3.92	-
61	Credit agencies other than banks	143.96	145.10	155.04	154.54	-	3.87	3.89	4.08	4.11	-
612	Savings and loan associations	138.71	139.85	147.34	146.52	-	3.79	3.79	3.95	3.96	-
62	Security, commodity brokers and services	289.92	297.60	286.52	(*)	-	7.55	7.75	7.56	(*)	-
63	Insurance carriers	172.50	172.33	180.91	182.02	-	4.60	4.62	4.85	4.88	-
631	Life insurance	168.81	168.35	176.49	177.23	-	4.55	4.55	4.77	4.79	-
632	Accident and health insurance	165.35	169.73	179.74	178.98	-	4.34	4.42	4.73	4.76	-
633	Fire, marine, and casualty insurance	176.72	175.68	183.63	186.00	-	4.70	4.71	4.91	4.96	-

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**

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
	TRANSPORTATION AND PUBLIC UTILITIES—Continued										
49	ELECTRIC, GAS, AND SANITARY SERVICES	41.6	41.7	41.3	41.3	—	—	—	—	—	—
491	Electric companies and systems	41.7	41.6	41.8	41.9	—	—	—	—	—	—
492	Gas companies and systems	40.4	40.8	40.7	40.8	—	—	—	—	—	—
493	Combination companies and systems	42.0	42.7	40.8	40.8	—	—	—	—	—	—
494-7	Water, steam, and sanitary systems	42.1	41.7	41.5	41.5	—	—	—	—	—	—
—	WHOLESALE AND RETAIL TRADE	33.6	33.3	34.0	33.2	33.0	—	—	—	—	—
50	WHOLESALE TRADE	38.9	38.7	38.9	38.9	39.0	—	—	—	—	—
501	Motor vehicles and automotive equipment	39.5	38.6	39.2	38.8	—	—	—	—	—	—
502	Drugs, chemicals, and allied products	37.9	38.1	38.3	38.5	—	—	—	—	—	—
503	Dry goods and apparel	36.7	35.4	35.8	35.8	—	—	—	—	—	—
504	Groceries and related products	39.0	38.4	38.3	38.7	—	—	—	—	—	—
506	Electrical goods	39.2	39.4	39.0	39.3	—	—	—	—	—	—
507	Hardware; plumbing and heating equipment	38.4	38.3	39.1	39.2	—	—	—	—	—	—
508	Machinery, equipment, and supplies	39.9	39.8	40.2	40.2	—	—	—	—	—	—
509	Miscellaneous wholesalers	38.2	38.1	38.4	38.2	—	—	—	—	—	—
52-59	RETAIL TRADE	32.1	31.8	32.6	31.6	31.3	—	—	—	—	—
53	Retail general merchandise	31.1	30.6	31.3	30.5	—	—	—	—	—	—
531	Department stores	30.8	30.3	31.0	30.0	—	—	—	—	—	—
532	Mail order houses	34.1	33.9	34.5	33.7	—	—	—	—	—	—
533	Variety stores	30.2	29.5	30.4	29.8	—	—	—	—	—	—
54	Food stores	33.1	32.4	33.4	32.4	—	—	—	—	—	—
541-3	Grocery, meat, and vegetable stores	33.4	32.8	33.7	32.7	—	—	—	—	—	—
56	Apparel and accessory stores	30.2	29.9	30.7	29.6	—	—	—	—	—	—
561	Men's and boys' clothing and furnishings	31.9	32.0	32.9	31.5	—	—	—	—	—	—
562	Women's ready-to-wear stores	29.0	28.7	29.4	28.5	—	—	—	—	—	—
565	Family clothing stores	30.8	30.6	31.7	30.5	—	—	—	—	—	—
566	Shoe stores	29.9	29.3	30.5	29.4	—	—	—	—	—	—
57	Furniture and home furnishings stores	36.4	36.3	36.1	35.7	—	—	—	—	—	—
571	Furniture and home furnishings	36.5	36.5	36.2	36.0	—	—	—	—	—	—
58	Eating and drinking places ⁶	27.9	27.5	28.7	27.3	—	—	—	—	—	—
52,55,59	Other retail trade	36.4	36.3	37.0	36.3	—	—	—	—	—	—
52	Building materials and farm equipment	39.8	39.9	40.3	39.9	—	—	—	—	—	—
551,2	Motor vehicle dealers	39.6	39.5	39.3	38.9	—	—	—	—	—	—
553,9	Other automotive and accessory dealers	39.7	39.5	40.5	40.0	—	—	—	—	—	—
591	Drug stores and proprietary stores	31.0	30.6	31.9	31.1	—	—	—	—	—	—
594	Book and stationery stores	33.2	33.0	34.1	33.5	—	—	—	—	—	—
598	Fuel and ice dealers	39.3	39.9	39.0	39.0	—	—	—	—	—	—
	FINANCE, INSURANCE, AND REAL ESTATE⁷	36.6	36.7	36.8	36.6	36.7	—	—	—	—	—
60	Banking	36.5	36.5	36.5	36.3	—	—	—	—	—	—
61	Credit agencies other than banks	37.2	37.3	38.0	37.6	—	—	—	—	—	—
612	Savings and loan associations	36.6	36.9	37.3	37.0	—	—	—	—	—	—
62	Security, commodity brokers and services	38.4	38.4	37.9	(*)	—	—	—	—	—	—
63	Insurance carriers	37.5	37.3	37.3	37.3	—	—	—	—	—	—
631	Life insurance	37.1	37.0	37.0	37.0	—	—	—	—	—	—
632	Accident and health insurance	38.1	38.4	38.0	37.6	—	—	—	—	—	—
633	Fire, marine, and casualty insurance	37.6	37.3	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 workers ¹ on private nonagricultural payrolls, by industry—Continued

SIC Code	Industry	Average weekly earnings					Average hourly earnings				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
	SERVICES	\$ 148.07	\$ 148.74	\$ 157.72	\$ 159.51	\$ 161.51	\$ 4.42	\$ 4.44	\$ 4.68	\$ 4.79	\$ 4.85
	Hotels and other lodging places:										
701	Hotels, tourist courts, and motels ⁶	96.39	97.64	102.72	101.99	—	3.06	3.08	3.20	3.29	—
	Personal services:										
721	Laundries and dry cleaning plants	115.83	116.51	124.60	123.55	—	3.30	3.31	3.50	3.51	—
722	Photographic studios	118.33	126.01	125.78	127.16	—	3.47	3.51	3.87	3.83	—
	Motion pictures:										
781	Motion picture filming and distributing	281.22	280.69	351.95	349.36	—	6.76	6.78	8.69	8.80	—
806	Hospitals	145.94	145.01	163.06	164.02	—	4.23	4.24	4.74	4.81	—

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

² Beginning January 1976, data relate to line haul railroads with operating revenues of \$10,000,000 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 1975, such employees made up 30 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 1975, such employees made up 47 percent of the total number of nonsupervisory employees in establishments reporting hours and earnings data.

⁵ Data relate to nonsupervisory employees except messengers.

⁶ Money payments only; tips, not included.

⁷ Data for nonoffice sales agents excluded from all series in this division.

[†] Beginning February 1977 data not strictly comparable with those previously published due to change in pay practices of a large employer.

*Not available.

p=preliminary.

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

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

SIC Code	Industry	Average weekly hours					Average overtime hours				
		Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^P	Oct. 1977 ^P
	SERVICES	33.5	33.5	33.7	33.3	33.3	-	-	-	-	-
	Hotels and other lodging places:										
701	Hotels, tourist courts, and motels ⁶	31.5	31.7	32.1	31.0	-	-	-	-	-	
	Personal services:										
721	Laundries and dry cleaning plants	35.1	35.2	35.6	35.2	-	-	-	-	-	
722	Photographic studios	34.1	35.9	32.5	33.2	-	-	-	-	-	
	Motion pictures:										
781	Motion picture filming and distributing ...	41.6	41.4	40.5	39.7	-	-	-	-	-	
806	Hospitals	34.5	34.2	34.4	34.1	-	-	-	-	-	

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	1976						1977						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Executive Branch													
Total employment	2,724.1	2,704.2	2,668.0	2,661.1	2,670.3	2,674.4	2,645.8	2,654.9	2,662.8	2,664.0	2,675.8	2,712.3	2,720.3
Average weekly hours	39.4	39.4	39.3	39.9	39.6	40.4	39.4	39.5	39.3	39.2	39.2	39.3	39.7
Average overtime hours	1.0	1.0	1.1	1.4	1.2	2.0	1.0	1.0	.9	.9	.9	1.0	1.1
Indexes (1967=100):													
Average weekly earnings	196.1	196.5	199.5	209.7	208.6	215.9	208.9	209.2	208.7	208.7	209.2	208.9	211.1
Average hourly earnings	195.1	196.5	200.0	207.0	207.6	210.5	208.9	208.6	209.2	209.7	210.3	209.5	209.5
Department of Defense													
Total employment	938.5	929.3	917.2	918.0	920.4	919.6	918.4	917.6	918.4	917.4	920.0	932.0	931.6
Average weekly hours	40.1	40.0	39.9	39.9	40.2	40.0	39.9	40.0	39.9	39.6	39.9	39.9	40.0
Average overtime hours .....	.6	.7	.9	.8	.8	.7	.7	.7	.7	.7	.7	.8	.7
Indexes (1967=100):													
Average weekly earnings	188.2	191.5	195.1	201.5	204.4	203.7	202.3	204.2	203.9	204.3	204.8	203.7	203.4
Average hourly earnings	189.1	192.9	197.0	203.5	204.9	205.2	204.4	205.7	206.0	207.9	206.8	205.7	204.9
Postal service													
Total employment	670.7	667.8	662.8	657.9	664.9	685.7	650.0	649.9	652.3	650.7	652.9	655.6	657.5
Average weekly hours	39.7	39.4	39.6	42.1	40.6	43.8	40.4	40.4	39.6	39.7	39.3	39.3	40.4
Average overtime hours	1.0	1.1	1.4	2.9	2.2	5.5	1.9	1.4	1.2	1.2	1.0	1.1	1.5
Indexes (1967=100):													
Average weekly earnings	224.5	223.8	226.8	243.7	237.6	267.8	240.0	238.0	233.3	234.9	235.6	235.0	241.9
Average hourly earnings	218.3	219.2	221.0	223.5	225.9	236.0	229.3	227.4	227.4	228.4	231.4	230.8	231.1
Other agencies													
Total employment	1,114.9	1,107.1	1,088.0	1,085.2	1,085.0	1,069.1	1,077.4	1,087.4	1,092.1	1,095.9	1,102.9	1,124.7	1,131.4
Average weekly hours	39.1	38.9	38.6	38.7	38.6	38.4	38.2	38.5	38.5	38.6	38.6	38.6	39.0
Average overtime hours	1.2	1.1	1.2	1.1	1.0	.9	.8	.9	.9	.9	1.0	1.1	1.3
Indexes (1967=100):													
Average weekly earnings	187.3	185.6	188.6	199.0	197.5	197.4	197.2	197.5	198.2	198.0	198.7	197.5	200.5
Average hourly earnings	185.9	185.1	189.6	199.5	198.5	199.5	200.2	199.0	199.8	199.0	199.8	198.5	199.5

NOTE: Averages presented in this table have been computed using data collected by the U.S. Civil Service Commission from all agencies of 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 supervisory and nonsupervisory, they are not comparable to similar data presented in table C-2 which relate only to production or nonsupervisory workers.

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

Major industry group	Average hourly earnings excluding overtime ¹				
	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
MANUFACTURING	\$ 5.09	\$ 5.08	\$ 5.42	\$ 5.49	\$ 5.53
DURABLE GOODS	5.43	5.40	5.78	5.86	5.91
Ordnance and accessories	5.69	5.71	6.10	6.15	-
Lumber and wood products	4.66	4.65	4.87	4.94	-
Furniture and fixtures	3.94	3.94	4.21	4.23	-
Stone, clay, and glass products	5.15	5.15	5.51	5.55	-
Primary metal industries [*]	6.66	6.65	7.27	7.34	-
Fabricated metal products	5.31	5.27	5.61	5.67	-
Machinery, except electrical	5.63	5.61	5.94	6.03	-
Electrical equipment and supplies	4.87	4.88	5.22	5.27	-
Transportation equipment	6.31	6.27	6.73	6.87	-
Instruments and related products	4.78	4.80	5.07	5.11	-
Miscellaneous manufacturing industries	3.91	3.95	4.21	4.26	-
NONDURABLE GOODS	4.61	4.62	4.91	4.95	4.97
Food and kindred products	4.76	4.80	5.08	5.13	-
Tobacco manufactures	4.58	4.58	5.29	5.22	-
Textile mill products	3.64	3.65	3.88	3.90	-
Apparel and other textile products	3.43	3.43	3.56	3.61	-
Paper and allied products	5.27	5.28	5.68	5.72	-
Printing and publishing	(²)	(²)	(²)	(²)	-
Chemicals and allied products	5.79	5.81	6.19	6.24	-
Petroleum and coal products	6.94	6.91	7.40	7.40	-
Rubber and plastics products, nec	4.62	4.64	4.93	4.96	-
Leather and leather products	3.41	3.40	3.53	3.58	-

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

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.

^p = preliminary.

* Primary metal industries (SIC 33) for July 1977 data corrected to \$7.20

**ESTABLISHMENT DATA
HOURS AND EARNINGS**

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

Industry	Gross average weekly earnings			Spendable average weekly earnings					
				Worker with no dependents			Married worker with 3 dependents		
	Sept. 1976	Aug. 1977	Sept. 1977 ^p	Sept. 1976	Aug. 1977	Sept. 1977 ^p	Sept. 1976	Aug. 1977	Sept. 1977 ^p
TOTAL PRIVATE:									
Current dollars	\$179.55	\$191.99	\$194.03	\$146.26	\$158.86	\$160.33	\$158.95	\$175.06	\$176.66
1967 dollars	104.03	104.74	105.45	84.74	86.67	87.14	92.09	95.50	96.01
MINING:									
Current dollars	289.08	303.21	319.11	225.67	233.01	243.48	242.21	257.83	269.01
1967 dollars	167.49	165.42	173.43	130.75	127.12	132.33	140.33	140.66	146.20
CONTRACT CONSTRUCTION:									
Current dollars	287.41	301.44	304.22	224.50	231.86	233.67	240.94	256.59	258.53
1967 dollars	166.52	164.45	165.34	130.07	126.49	126.99	139.59	139.98	140.51
MANUFACTURING:									
Current dollars	212.93	227.70	232.47	170.54	183.97	187.19	184.04	202.03	205.61
1967 dollars	123.37	124.22	126.34	98.81	100.37	101.73	106.63	110.22	111.74
TRANSPORTATION AND PUBLIC UTILITIES:									
Current dollars	265.06	282.40	285.42	208.53	219.58	221.51	223.87	242.98	245.19
1967 dollars	153.57	154.06	155.12	120.82	119.79	120.39	129.70	132.56	133.26
WHOLESALE AND RETAIL TRADE:									
Current dollars	135.74	145.52	144.09	113.85	124.34	123.26	126.84	137.01	135.66
1967 dollars	78.64	79.39	78.31	65.96	67.83	66.99	73.49	74.75	73.73
FINANCE, INSURANCE, AND REAL ESTATE:									
Current dollars	160.67	169.28	169.46	132.58	142.34	142.48	144.48	157.13	157.28
1967 dollars	93.09	92.35	92.10	76.81	77.65	77.43	83.71	85.72	85.48
SERVICES:									
Current dollars	148.07	157.72	159.51	123.11	133.51	134.85	135.25	148.02	149.43
1967 dollars	85.79	86.04	86.69	71.33	72.84	73.29	78.36	80.75	81.21
CONSUMER PRICE INDEX (All items, 1967 = 100)	172.6	183.3	184.0	NOTE: The Consumer Price Index is an estimate of the average change in prices of goods and services purchased by urban wage earners and clerical workers.					

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

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	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^b	Oct. 1977 ^p
	Hours				
TOTAL	113.9	113.6	118.4	117.8	117.8
GOODS-PRODUCING	99.7	99.2	103.4	105.0	104.7
MINING	133.5	133.6	137.1	145.9	147.7
CONTRACT CONSTRUCTION	110.5	115.2	124.4	122.3	124.0
MANUFACTURING	96.9	95.2	98.6	100.5	99.9
DURABLE GOODS	95.4	93.6	97.4	100.4	100.1
Ordnance and accessories	39.0	39.2	39.0	39.3	36.5
Lumber and wood products	101.7	102.1	109.5	109.7	109.2
Furniture and fixtures	104.9	105.3	110.1	112.0	114.2
Stone, clay, and glass products	102.4	102.9	108.4	107.0	106.3
Primary metal industries	90.1	85.9	88.1	90.2	88.3
Fabricated metal products	100.9	98.6	104.1	106.3	107.3
Machinery, except electrical	96.2	93.7	101.1	104.3	104.2
Electrical equipment and supplies	93.3	94.0	97.6	100.2	100.4
Transportation equipment	92.8	88.3	89.1	97.5	95.7
Instruments and related products	108.6	108.9	110.9	113.3	114.1
Miscellaneous manufacturing	97.3	98.1	94.5	96.1	96.3
NONDURABLE GOODS	99.1	97.4	100.2	100.7	99.6
Food and kindred products	108.4	102.3	105.3	105.8	98.8
Tobacco manufactures	94.8	96.4	80.4	85.5	87.6
Textile mill products	96.3	95.7	100.4	100.5	100.8
Apparel and other textile products	88.3	88.2	89.2	89.0	90.2
Paper and allied products	98.2	97.0	101.2	101.8	101.2
Printing and publishing	94.2	93.8	95.1	96.6	96.6
Chemicals and allied products	101.2	99.8	103.8	103.4	102.9
Petroleum and coal products	116.8	115.4	124.0	125.5	126.3
Rubber and plastics products, nec	127.7	128.2	131.3	133.5	134.0
Leather and leather products	72.0	70.7	73.6	72.2	74.3
SERVICE-PRODUCING	123.8	123.7	128.7	126.8	126.8
TRANSPORTATION AND PUBLIC UTILITIES	104.2	103.4	105.0	105.2	104.4
WHOLESALE AND RETAIL TRADE	120.0	119.3	124.3	122.0	121.9
WHOLESALE TRADE	115.5	115.6	118.6	118.3	119.2
RETAIL TRADE	121.7	120.9	126.3	123.4	122.9
FINANCE, INSURANCE, AND REAL ESTATE	127.8	128.3	135.1	133.4	133.9
SERVICES	137.2	137.7	143.9	141.3	141.8

¹For 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	Sept. 1976	Oct. 1976	Aug. 1977	Sept. 1977 ^p	Oct. 1977 ^p
	Payrolls				
TOTAL	211.0	211.5	232.5	235.8	237.8
GOODS-PRODUCING	189.1	189.9	209.2	215.6	216.5
MINING	276.3	274.8	294.8	323.2	329.2
CONTRACT CONSTRUCTION	210.0	219.9	243.8	243.8	247.9
MANUFACTURING	181.8	177.7	197.0	204.2	204.0
DURABLE GOODS	179.8	175.1	195.7	205.3	206.2
Ordnance and accessories	71.6	72.5	77.1	78.7	72.2
Lumber and wood products	209.1	210.2	237.2	241.2	239.5
Furniture and fixtures	182.5	183.6	205.9	211.1	215.8
Stone, clay, and glass products	197.3	198.3	224.4	222.7	222.2
Primary metal industries	187.7	177.6	200.3	207.8	205.1
Fabricated metal products	187.9	181.8	205.1	212.6	216.1
Machinery, except electrical	176.9	171.4	196.9	207.1	209.2
Electrical equipment and supplies	168.9	170.5	190.1	197.2	198.1
Transportation equipment	180.3	169.1	184.4	206.2	207.9
Instruments and related products	187.8	189.2	202.8	210.1	211.0
Miscellaneous manufacturing	166.4	169.7	174.1	179.3	180.3
NONDURABLE GOODS	185.2	181.9	199.3	202.3	200.4
Food and kindred products	206.2	195.2	214.0	217.4	203.9
Tobacco manufactures	194.5	199.1	192.4	201.7	202.7
Textile mill products	176.9	176.4	197.5	199.2	199.8
Apparel and other textile products	151.7	151.7	159.2	161.1	164.7
Paper and allied products	190.8	188.0	211.5	214.8	214.1
Printing and publishing	166.4	165.1	178.2	182.7	182.6
Chemicals and allied products	196.8	194.4	215.8	217.1	217.3
Petroleum and coal products	236.0	232.1	268.0	272.7	275.0
Rubber and plastics products, nec	225.5	226.8	245.4	251.8	254.3
Leather and leather products	121.2	118.6	128.9	128.1	132.1
SERVICE-PRODUCING	229.9	230.9	252.5	253.2	256.1
TRANSPORTATION AND PUBLIC UTILITIES	212.9	211.8	226.8	230.7	230.9
WHOLESALE AND RETAIL TRADE	215.8	216.0	236.7	235.9	238.2
WHOLESALE TRADE	211.0	212.0	229.2	231.6	236.5
RETAIL TRADE	218.6	218.4	240.7	238.2	239.1
FINANCE, INSURANCE, AND REAL ESTATE	217.1	219.2	240.5	239.4	243.8
SERVICES	265.0	267.1	294.2	295.3	300.4

¹For 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	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. p	Oct. p
TOTAL PRIVATE	36.1	36.2	36.2	35.8	36.3	36.3	36.2	36.3	36.2	36.1	36.0	36.0	36.1
MINING	43.3	43.3	43.7	42.9	43.6	44.4	44.4	44.0	44.0	44.8	44.2	44.9	45.4
CONTRACT CONSTRUCTION	37.3	37.4	37.3	35.4	37.8	37.1	37.3	37.4	36.8	36.8	36.3	36.2	36.6
MANUFACTURING	39.9	40.1	40.0	39.5	40.3	40.4	40.3	40.4	40.5	40.3	40.3	40.2	40.3
<i>Overtime hours</i>	2.9	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.3	3.3	3.5
DURABLE GOODS	40.5	40.8	40.5	40.0	40.8	41.0	40.8	41.1	41.2	41.0	41.0	40.9	41.0
<i>Overtime hours</i>	3.0	3.2	3.3	3.4	3.3	3.4	3.6	3.6	3.7	3.6	3.5	3.5	3.7
Ordnance and accessories	40.6	40.6	41.0	40.5	40.6	40.6	41.2	41.1	40.9	40.4	40.2	40.5	40.2
Lumber and wood products	40.3	40.3	40.3	39.9	40.5	40.1	40.0	40.0	39.9	40.4	39.7	39.9	40.1
Furniture and fixtures	38.4	38.6	38.6	37.0	38.1	38.6	38.4	38.7	38.8	38.9	39.0	39.1	39.6
Stone, clay, and glass products	41.4	41.2	41.2	39.9	41.4	41.4	41.4	41.7	41.7	41.4	41.4	40.9	40.8
Primary metal industries	40.2	40.3	40.1	40.0	40.6	41.1	41.5	41.6	41.6	40.9	41.1	40.8	41.3
Fabricated metal products	40.4	40.8	40.5	39.9	40.8	41.0	40.7	41.0	41.3	41.0	41.0	41.0	41.0
Machinery, except electrical	41.2	41.5	41.2	40.6	41.3	41.5	41.3	41.6	41.9	41.9	41.9	41.8	41.9
Electrical equipment and supplies	40.0	40.3	40.2	39.4	40.6	40.3	40.0	40.1	40.4	40.2	40.3	40.2	40.2
Transportation equipment	41.2	42.0	41.1	41.4	41.4	42.8	41.9	42.7	42.9	42.2	42.5	42.1	42.3
Instruments and related products	40.3	40.4	40.7	39.8	40.8	40.4	40.1	40.4	40.7	40.4	40.3	40.3	40.6
Miscellaneous manufacturing, ind.	38.7	39.0	38.9	38.2	39.5	39.3	38.9	39.0	39.2	38.7	38.8	39.0	39.1
NONDURABLE GOODS	39.1	39.2	39.3	38.7	39.6	39.5	39.5	39.5	39.6	39.3	39.2	39.2	39.3
<i>Overtime hours</i>	2.8	3.0	3.1	3.0	3.2	3.1	3.2	3.1	3.1	3.0	3.1	3.0	3.1
Food and kindred products	40.3	40.4	40.1	39.5	40.3	40.2	40.3	39.9	40.0	39.7	39.7	39.5	39.2
Tobacco manufactures	37.5	36.9	37.5	36.1	39.4	38.4	38.3	38.6	39.0	37.4	37.6	38.7	38.4
Textile mill products	39.4	39.8	40.1	39.7	40.5	40.8	40.5	40.7	40.5	40.4	40.1	40.2	40.5
Apparel and other textile products	35.0	35.1	35.3	34.2	35.7	35.6	35.1	35.7	35.9	35.3	35.4	35.1	35.5
Paper and allied products	42.1	42.4	42.6	41.9	42.7	42.8	43.3	43.0	43.1	42.7	42.4	42.6	42.6
Printing and publishing	37.5	37.6	37.7	37.4	37.9	37.7	37.7	37.6	37.7	37.8	37.7	37.9	37.9
Chemicals and allied products	41.6	41.7	41.7	41.6	41.7	41.8	41.9	41.7	41.9	41.7	41.8	41.6	41.8
Petroleum and coal products	42.0	41.9	42.5	42.3	42.5	43.0	42.7	42.6	43.0	42.9	43.0	42.8	43.0
Rubber and plastics products, nec	41.1	41.2	41.5	40.9	41.4	41.2	41.2	41.3	41.1	40.6	40.6	40.6	41.0
Leather and leather products	36.4	36.4	36.5	35.3	36.7	36.4	37.4	37.1	37.2	36.8	37.2	37.5	38.1
TRANSPORTATION AND PUBLIC UTILITIES	39.8	40.2	40.5	39.8	40.5	40.3	40.1	40.2	40.1	39.9	40.0	40.0	39.8
WHOLESALE AND RETAIL TRADE	33.5	33.4	33.6	33.2	33.4	33.5	33.5	33.4	33.3	33.3	33.2	33.2	33.2
WHOLESALE TRADE	38.7	38.7	38.6	38.7	39.1	38.9	39.0	38.7	38.8	38.8	38.8	38.8	39.0
RETAIL TRADE	32.0	31.9	32.2	31.6	31.8	31.9	31.9	31.9	31.7	31.7	31.6	31.6	31.5
FINANCE, INSURANCE, AND REAL ESTATE	36.7	36.7	36.7	36.8	36.6	36.7	36.6	36.7	36.6	36.6	36.7	36.7	36.7
SERVICES	33.5	33.5	33.5	33.5	33.6	33.5	33.5	33.5	33.3	33.2	33.2	33.3	33.4

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

p = preliminary.

C-8. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, seasonally adjusted

Industry	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. p	Oct. p
Average hourly earnings													
TOTAL PRIVATE	\$4.95	\$5.00	\$5.02	\$5.07	\$5.09	\$5.12	\$5.17	\$5.20	\$5.22	\$5.27	\$5.28	\$5.31	\$5.38
MINING	6.62	6.62	6.67	6.67	6.72	6.78	6.79	6.82	6.89	6.95	6.92	7.06	7.17
CONTRACT CONSTRUCTION	7.76	7.81	7.82	7.82	7.88	7.90	7.95	7.96	8.06	8.09	8.09	8.09	8.13
MANUFACTURING	5.29	5.34	5.38	5.43	5.43	5.49	5.53	5.57	5.61	5.67	5.69	5.72	5.79
TRANSPORTATION AND PUBLIC UTILITIES	6.58	6.62	6.64	6.69	6.74	6.75	6.83	6.88	6.89	6.99	6.95	7.03	7.10
WHOLESALE AND RETAIL TRADE	4.05	4.08	4.11	4.15	4.18	4.19	4.23	4.24	4.26	4.30	4.31	4.33	4.38
FINANCE, INSURANCE, AND REAL ESTATE	4.43	4.42	4.43	4.51	4.48	4.50	4.53	4.58	4.54	4.60	4.63	4.63	4.73
SERVICES	4.43	4.48	4.50	4.58	4.58	4.61	4.64	4.67	4.68	4.72	4.75	4.76	4.84
Average weekly earnings													
TOTAL PRIVATE:													
Current dollars	178.70	181.00	181.72	181.51	184.77	185.86	187.15	188.76	188.96	190.25	190.08	191.16	194.22
1967 dollars	103.29	104.32	104.32	103.37	104.21	104.18	104.09	104.34	103.88	104.19	103.76	104.00	—
Real spendable earnings (worker and 3 dependents, 1967 dollars)	91.51	92.24	92.18	91.36	91.86	91.75	91.58	91.69	94.93	95.12	94.73	94.89	—

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

p = preliminary.

**ESTABLISHMENT DATA
SEASONALLY ADJUSTED**

C-9. 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	1976			1977									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Oct. ^P
TOTAL	112.2	112.8	113.3	112.3	114.2	115.2	115.6	116.1	115.8	115.7	115.6	116.0	116.2
GOODS-PRODUCING	96.0	97.2	96.9	95.2	98.3	100.0	100.9	101.7	101.8	101.4	100.6	100.9	101.4
MINING	131.1	132.6	134.0	130.7	134.6	141.5	142.2	140.2	141.8	139.9	134.7	143.5	145.1
CONTRACT CONSTRUCTION	104.2	105.7	104.3	96.4	105.9	108.1	112.0	112.7	111.3	112.7	110.1	110.1	112.6
MANUFACTURING	93.2	94.5	94.4	93.8	95.7	97.1	97.5	98.5	98.8	98.1	97.7	97.8	97.9
DURABLE GOODS	92.0	93.8	93.6	93.2	94.8	96.8	96.8	98.1	98.7	98.3	98.3	98.5	98.3
Ordnance and accessories	38.5	38.5	39.5	39.0	39.1	38.5	40.8	41.3	41.1	40.0	39.8	39.0	36.0
Lumber and wood products	99.4	100.8	101.9	101.1	103.0	103.4	104.1	104.1	103.8	105.3	103.9	105.9	106.4
Furniture and fixtures	102.2	102.8	103.5	98.5	102.7	105.3	106.0	107.4	107.7	108.2	106.9	109.3	110.9
Stone, clay, and glass products	99.7	100.2	99.1	96.1	97.1	101.5	104.1	104.7	105.7	105.1	104.1	103.4	103.0
Primary metal industries	86.2	85.7	85.0	84.8	85.5	88.5	90.0	91.1	91.1	89.0	88.9	88.8	88.5
Fabricated metal products	96.5	98.1	98.1	97.6	100.0	101.6	101.0	103.1	104.2	103.6	103.6	104.0	105.0
Machinery, except electrical	94.0	96.7	96.0	95.7	97.7	98.6	98.3	100.5	101.2	103.3	103.9	104.1	104.4
Electrical equipment and supplies	92.1	93.4	93.1	91.7	95.5	95.9	96.1	97.3	97.9	97.4	98.5	98.0	98.4
Transportation equipment	86.1	91.5	90.6	93.3	91.3	96.7	94.8	96.2	96.9	95.2	95.8	95.3	93.3
Instruments and related products	107.9	108.5	110.4	108.9	112.4	111.6	111.1	112.3	113.2	112.3	111.0	112.0	113.2
Miscellaneous manufacturing, Ind.	92.0	92.1	91.6	93.1	96.8	96.0	95.1	95.0	94.3	91.4	91.0	91.2	90.3
NONDURABLE GOODS	95.0	95.4	95.5	94.7	97.1	97.6	98.5	98.9	98.9	97.8	96.9	96.9	97.2
Food and kindred products	96.2	96.6	95.5	95.1	97.5	97.9	98.8	97.2	97.5	95.9	94.5	94.0	94.0
Tobacco manufactures	83.0	81.6	81.6	76.1	83.0	75.5	80.7	77.2	97.4	74.9	72.6	74.8	75.5
Textile mill products	95.0	95.6	96.1	95.4	97.9	99.5	99.7	101.1	100.2	100.5	98.8	99.5	100.2
Apparel and other textile products	85.7	86.1	86.3	84.1	88.0	87.9	87.3	89.4	90.4	87.6	87.6	86.8	87.7
Paper and allied products	95.7	97.0	97.2	96.2	98.0	98.3	100.8	101.0	101.3	100.3	99.4	100.1	99.9
Printing and publishing	93.4	93.6	93.7	93.0	94.8	94.3	94.9	95.4	95.3	95.6	95.1	95.6	96.0
Chemicals and allied products	99.4	100.0	100.0	100.4	101.8	102.2	103.5	103.7	103.7	103.7	102.6	102.4	102.4
Petroleum and coal products	112.5	113.1	114.7	115.0	114.7	118.7	120.5	120.2	121.3	120.2	120.4	120.8	123.1
Rubber and plastics products, nec	125.6	125.7	127.6	127.7	129.6	131.7	134.7	135.8	133.9	132.7	129.5	130.0	131.5
Leather and leather products	71.0	70.4	70.5	69.1	71.9	71.9	73.9	73.9	72.9	70.2	71.3	72.5	74.6
SERVICE-PRODUCING	123.5	123.5	124.6	124.1	125.3	125.8	125.8	126.6	125.4	125.7	126.0	126.0	126.5
TRANSPORTATION AND PUBLIC UTILITIES	102.0	103.2	105.0	102.7	104.4	104.2	103.9	104.4	104.0	103.1	103.4	103.8	103.1
WHOLESALE AND RETAIL TRADE	119.3	118.9	120.0	119.1	120.7	121.5	121.7	121.7	121.1	121.4	121.4	121.8	121.7
WHOLESALE TRADE	114.8	114.8	114.8	115.4	117.0	116.9	117.8	117.3	117.3	117.3	117.4	117.6	118.3
RETAIL TRADE	121.0	120.4	122.0	120.4	122.1	123.2	123.1	123.3	122.5	122.9	122.9	123.3	123.0
FINANCE, INSURANCE, AND REAL ESTATE	128.3	129.1	129.8	130.6	130.2	131.1	131.1	131.6	131.5	132.2	132.6	133.4	133.9
SERVICES	137.6	137.7	138.4	138.8	139.7	140.0	140.1	140.2	139.5	140.0	140.6	141.2	141.8

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

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		
	August 1977	September 1977P	October 1977P	Oct. 1976 to Oct. 1977	Aug. 1976 to Sept. 1977	Sept. 1977 to Oct. 1977
TOTAL	156,975	157,268	158,226	3.6	0.2	0.6
PRIVATE SECTOR	126,699	127,174	127,540	4.0	0.4	0.3
MINING	1,880	1,987	2,016	11.9	5.7	1.5
CONTRACT CONSTRUCTION	7,341	7,334	7,499	7.9	-0.1	2.2
MANUFACTURING	40,818	40,868	40,908	4.4	0.1	0.1
DURABLE GOODS	24,373	24,417	24,425	5.9	0.2	0.0
NONDURABLE GOODS	16,444	16,451	16,483	2.3	0.0	0.2
TRANSPORTATION AND PUBLIC UTILITIES	9,520	9,595	9,541	2.3	0.8	-0.6
WHOLESALE AND RETAIL TRADE	31,821	31,924	31,906	2.4	0.3	-0.1
FINANCE, INSURANCE, AND REAL ESTATE	8,624	8,666	8,710	4.7	0.5	0.5
SERVICES	26,695	26,800	26,960	4.1	0.4	0.6
GOVERNMENT	30,277	30,094	30,687	2.0	-0.6	2.0

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 Survey 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										
			1975				1976				1977		
	1975	1976	I	II	III	IV	I	II	III	IV	I	II	III p
PRIVATE BUSINESS SECTOR:													
Output per hour of all persons	111.8	116.5	108.9	111.7	113.8	113.3	115.4	116.3	117.2	117.2	118.9	118.5	120.0
Output	118.7	126.9	115.1	117.2	120.6	121.8	124.9	126.7	127.7	128.4	131.3	134.0	135.4
Hours	106.1	108.9	105.7	104.9	105.9	107.5	108.3	108.9	109.0	109.5	110.5r	113.1r	112.8
Compensation per hour	180.2	196.5	176.2	179.0	181.1	184.7	190.5	194.3	198.6	202.7	208.3r	211.5r	215.8
Real compensation per hour	111.8	115.3	112.0	112.2	111.2	111.6	113.8	114.8	115.6	116.7	117.6r	117.0	117.8
Unit labor costs	161.1	168.7	161.7	160.4	159.1	163.0	165.1	167.0	169.4	173.0	175.2	178.4r	179.9
Unit nonlabor payments	152.1	159.9	139.8	149.1	159.8	159.0	158.7	160.5	160.8	159.5	160.4	163.0r	166.8
Implicit price deflator	158.0	165.6	154.2	156.5	159.4	161.6	162.9	164.8	166.5	168.3	170.1	173.1r	175.4
NONFARM BUSINESS SECTOR:													
Output per hour of all persons	109.9	114.3	106.9	109.5	112.0	111.1	112.9	114.4	115.2	114.7	116.0r	116.2	117.2
Output	118.7	127.4	115.3	117.1	120.6	121.8	125.2	127.2	128.3	128.4	131.6	134.5r	135.7
Hours	108.1	111.4	107.9	106.9	107.7	109.7	111.0	111.3	111.4	112.2	113.5r	115.7	115.8
Compensation per hour	177.6	193.1	173.2	176.2	179.2	182.0	186.9	191.1	195.2	198.7	204.2r	207.9r	211.7
Real compensation per hour	110.2	113.3	110.1	110.4	110.1	110.0	111.7	113.0	113.7	114.4	115.3r	115.0	115.5
Unit labor costs	161.7	160.9	162.0	160.9	160.0	163.9	165.6	167.1	169.5	173.3	176.0	178.9r	180.6
Unit nonlabor payments	147.7r	157.4	136.9	145.4	154.4	153.5	155.3	156.8	159.2	158.1	157.2	160.7r	166.0
Implicit price deflator	156.9	165.0	153.4	155.6	158.1	160.3	162.1	163.6	166.0	168.1	169.6	172.7r	175.6
MANUFACTURING:													
Output per hour of all persons	116.3	124.2	109.3	113.9	120.5r	121.3r	122.2	124.0r	125.4	125.0r	125.1	126.0	128.0
Output	107.6	120.0	101.1	103.8r	111.2r	114.3r	117.8	119.9	121.1	121.2r	123.0r	126.5r	128.2
Hours	92.5	96.6	92.4	91.1	92.3	94.2	96.4	96.7	96.6	97.0	98.3r	100.5	100.2
Compensation per hour	179.4	194.8	174.9	178.2	180.7	183.7	189.1r	193.3	196.5	200.1	206.3r	209.8	213.6
Real compensation per hour	111.3	114.3	111.2	111.7	111.0	111.0	113.1r	114.3	114.4	115.2	116.5	116.0	116.6
Unit labor costs	154.3	156.9	159.9	156.4r	150.0	151.5r	154.8r	155.9r	156.7	160.0r	164.9r	166.5	167.0
DURABLE GOODS													
Output per hour of all persons	112.2	120.3	105.1r	109.9r	116.7r	116.9r	118.1r	120.5r	121.7r	120.8r	120.4r	121.9r	123.5
Output	102.5	114.9	97.7	99.1	105.6r	107.7r	111.7r	114.9r	116.8r	116.2r	117.6	121.8r	124.0
Hours	91.3	95.5	92.9	90.1	90.5	92.2	94.6	95.4	95.9	96.2	97.6	100.0	100.4
Compensation per hour	180.9	197.0	175.0	179.5	182.7	186.0	191.7r	196.0	198.5	201.2	207.7r	211.9	215.0
Real compensation per hour	112.2	115.5	111.3	112.5	112.2	112.4	114.6r	115.9	115.6	115.9	117.3	117.2	117.3
Unit labor costs	161.2	163.7	166.5r	163.4r	156.6r	159.1r	162.4r	162.8r	163.1r	166.6r	172.5	173.9r	174.1
NONDURABLE GOODS													
Output per hour of all persons	123.0	130.5	116.2r	120.5r	126.7r	128.3r	129.0r	129.9	131.3	131.9r	132.8r	132.6r	135.2
Output	115.3	123.3	106.6r	111.4r	120.3r	124.9	127.6r	128.1	128.1	129.4r	131.7r	134.2r	135.1
Hours	94.2	98.3	91.7	92.4	95.0	97.3	98.9	98.6	97.5	98.1	99.2	101.2	99.9
Compensation per hour	177.4	191.7	174.5	176.4	178.3	181.0	185.8	189.5	193.4	198.6	204.3	206.4	211.2
Real compensation per hour	110.1	112.5	111.0	110.6	109.5	109.4	111.1	112.0	112.6	114.3	115.3r	114.1	115.3
Unit labor costs	144.3	147.0	150.1r	146.4r	140.8r	141.0r	144.0r	145.9	147.3	150.6r	153.9r	155.6r	156.2
NONFINANCIAL CORPORATIONS:													
Output per all-employee hour	113.0	117.2	109.0	112.7	115.4	114.8	116.2	117.4	118.0	117.2	118.9r	119.3r	N.A.
Output	124.4	133.9	119.8	122.7	126.9	128.2	131.8	134.0	135.0	135.0	138.0	141.4r	N.A.
Hours	110.1	114.3	110.0	108.8	109.9	111.6	113.4	114.2	114.4	115.1	116.1	118.5	N.A.
Compensation per hour	179.4	194.9	175.0	178.0	180.8	183.9	189.1	193.0	196.8	200.7	206.7r	210.3	N.A.
Real compensation per hour	111.3	114.3	111.3	111.5	111.0	111.2	113.0	114.1	114.6	115.6	116.7r	116.3	N.A.
Total unit costs	166.1	172.1	167.0	165.5	164.4	167.6	168.9	170.3	172.5	176.3	179.0	180.6r	N.A.
Unit labor costs	158.8	166.3	160.6	157.9	156.6	160.2	162.7	164.5	166.8	171.2	173.9	176.2r	N.A.
Unit nonlabor costs	188.8	190.1	186.9	189.3	183.5	190.6	187.7	188.3	190.1	194.1	195.0	194.3r	N.A.
Unit profits	93.6	113.2	65.8	97.8	111.2	107.8	113.1	115.0	117.7	107.0	103.7	115.5r	N.A.
Implicit price deflator	155.3	163.4	152.0	154.0	156.5	158.7	160.5	162.1	164.3	166.4	167.8	170.9	N.A.

p=preliminary.
r=revised.

**PRODUCTIVITY
SEASONALLY ADJUSTED**

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

Item	Quarterly percent change						Annual percent change					
	I 1976		II 1976		III 1976		IV 1976		I 1977		II 1977	
	to II 1976	to III 1976	to IV 1976	to I 1977	to II 1977	to III 1977	to II 1976	to III 1976	to IV 1976	to I 1977	to II 1977	to III 1977
PRIVATE BUSINESS SECTOR:												
Output per hour of all persons	3.3	3.0	-0.0r	5.8	-1.1r	4.9	4.2	3.0	3.5	3.0r	1.9	2.4
Output	5.9	3.1	2.1	9.6	8.5r	4.0	8.1	5.9	5.4	5.1	5.8r	6.0
Hours	2.6	0.1	2.1	3.5r	9.7r	-0.8	3.8	2.8	1.9	2.1r	3.8	3.5
Compensation per hour	8.3	9.0	8.6	11.5r	6.3r	8.4	8.5	9.6	9.8	9.4	8.9	8.7
Real compensation per hour	3.6	2.7	3.9	3.1r	-2.2r	3.0	2.4	3.9	4.6	3.3r	1.8	1.9
Unit labor costs	4.9	5.8	8.6	5.3	7.5r	3.3	4.2	6.5	6.1	6.2	6.8r	6.2
Unit nonlabor payments	4.5	0.8	-3.2	2.3	6.7r	9.6	7.6	0.6	0.3	1.1	1.6	3.7
Implicit price deflator	4.8	4.1	4.6	4.4	7.2r	5.3	5.3	4.5	4.1	4.5	5.1	5.4
NONFARM BUSINESS SECTOR:												
Output per hour of all persons	5.5	2.9	-1.8	4.8r	0.7r	3.5	4.4	2.8	3.2	2.8r	1.6	1.8
Output	6.6	3.2	1.3	9.5	8.8r	3.8	8.7	6.4	5.6	5.1	5.7r	5.8
Hours	1.0	0.4	3.2	4.5r	8.1r	0.2	4.1	3.4	2.3	2.2	4.0	4.0
Compensation per hour	9.4	8.8	7.4	11.4r	7.5r	7.4	8.5	8.9	9.2	9.3	8.8	8.4
Real compensation per hour	4.6	2.5	2.7	3.0	-1.2r	2.0	2.3	3.3	4.0	3.2r	1.8	1.6
Unit labor costs	3.7	5.8	9.4	6.3	6.8r	3.7	3.9	5.9	5.8	6.3	7.1	6.5
Unit nonlabor payments	4.0	6.4	-2.8	-2.2	9.1	13.9	7.8	3.1	3.0	1.3	2.5r	4.2
Implicit price deflator	3.8	6.0	5.3	3.5	7.5	6.9	5.1	5.0	4.9	4.6	5.6	5.8
MANUFACTURING:												
Output per hour of all persons	6.1r	4.4r	-1.0r	-0.3r	2.7r	6.5	8.9	4.1	3.1	2.4	1.6	2.1
Output	7.6	3.9	0.5	5.8	12.2	5.4	15.6	8.9	6.1	4.4	5.5	5.9
Hours	1.4	-0.5	1.5	5.5r	9.3r	-1.0	6.2	4.7	2.9	2.0	3.9	3.7
Compensation per hour	9.2r	6.7	7.5	13.0r	6.9r	7.6	8.5	8.7	8.9	9.1r	8.5	8.7
Real compensation per hour	4.4r	0.5	2.8	4.5r	-1.8r	2.2	2.3	3.1	3.8	3.0r	1.5	1.9
Unit labor costs	2.9r	2.2r	3.7r	12.7r	4.1r	1.0	-0.3r	4.5r	5.6r	6.5r	6.8r	6.5
DURABLE GOODS												
Output per hour of all persons	8.4r	4.2r	-2.9r	-1.3r	4.9	5.3	9.6r	4.3r	3.3r	2.0r	1.2r	1.5
Output	12.0r	6.7r	-2.0r	4.8r	15.4r	7.2	16.0r	10.6r	7.8r	5.2r	6.0r	6.2
Hours	3.3	2.3	0.9	6.2r	9.9r	1.8	5.8	6.0	4.4	3.2r	4.8	4.6
Compensation per hour	9.4r	5.1	5.6	13.5r	8.3r	5.9	9.2	8.6	8.2	8.4r	8.1	8.3
Real compensation per hour	4.6r	-1.0	1.0	5.0r	-0.4r	0.6	3.0	3.0	3.1	2.4r	1.1	1.5
Unit labor costs	0.9r	0.8r	8.8r	15.0r	3.2r	0.6	-0.4r	4.2r	4.7r	6.2r	6.8r	6.7
NONDURABLE GOODS												
Output per hour of all persons	2.8r	4.5	1.7r	2.7r	-0.5r	8.2	7.8r	3.7r	2.8r	2.9r	2.1r	3.0
Output	1.6r	-0.1	4.3r	7.2r	7.7r	2.7	15.0r	6.5r	3.6r	3.2r	4.7r	5.5
Hours	-1.2	-4.4	2.5	4.4r	8.3r	-5.1	6.7	2.7	0.8	0.3r	2.6	2.4
Compensation per hour	3.2	3.6	11.1	12.0r	4.2r	9.8	7.4	8.5	9.7	9.9r	8.9	9.2
Real compensation per hour	3.4	2.3	6.2	3.6	-4.2r	4.3	1.3	2.9	4.6	3.9	1.9	2.4
Unit labor costs	5.2	3.9	9.2r	9.0r	4.7r	1.4	-0.3	4.6r	6.8r	6.8r	6.7r	6.1
NONFINANCIAL CORPORATIONS:												
Output per all-employee hour	4.0	2.1	-2.5	5.7r	1.6r	N.A.	4.1	2.2	2.1	2.3r	1.7r	N.A.
Output	6.8	2.9	-0.1	9.4	10.1r	N.A.	9.2	6.3	5.3	4.7	5.5	N.A.
Hours	2.6	0.8	2.5	3.5r	8.5r	N.A.	4.9	4.1	3.1	2.4r	3.8	N.A.
Compensation per hour	8.6	8.1	8.1	12.6r	7.1r	N.A.	8.5	8.9	9.1	9.3r	8.9	N.A.
Real compensation per hour	3.8	1.9	3.3	4.1r	-1.5r	N.A.	2.3	3.2	4.0	3.3	1.9	N.A.
Total unit costs	3.5	5.3	10.3	5.2	3.6r	N.A.	2.9	4.9	5.5	6.1	6.1	N.A.
Unit labor costs	4.4	5.9	10.9	6.4	5.5r	N.A.	4.2	6.5	6.9	6.9	7.1r	N.A.
Unit nonlabor costs	1.4	3.8	8.9	1.7	-1.3	N.A.	-0.5	0.8	1.9	3.9	3.2	N.A.
Unit profits	7.0	9.5	-31.7	-11.6	53.5r	N.A.	30.9	5.8	-0.7	-8.3	-0.4	N.A.
Implicit price deflator	3.9	5.7	5.1	3.5	7.6	N.A.	5.3	5.0	4.9	4.6	5.5	N.A.

p=preliminary.
r=revised.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS

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

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
ALABAMA	\$184.22	\$200.29	\$202.31	40.4	40.3	40.3	\$4.56	\$4.97	\$5.02
Birmingham	221.60	242.60	239.60	40.0	40.5	39.8	5.54	5.99	6.02
Mobile	217.16	245.09	252.97	39.7	41.4	41.2	5.47	5.92	6.14
ALASKA	302.86	377.35	(*)	36.8	45.3	(*)	8.23	8.33	(*)
ARIZONA	210.81	221.44	227.70	39.7	39.9	40.3	5.31	5.55	5.65
Phoenix	208.95	224.16	230.77	39.8	40.1	40.7	5.25	5.59	5.67
Tucson	209.47	218.44	218.62	39.3	38.8	38.9	5.33	5.63	5.62
ARKANSAS	157.98	177.07	175.27	39.2	40.8	40.2	4.03	4.34	4.36
Fayetteville-Springdale	146.65	156.79	156.78	40.4	40.1	39.0	3.63	3.91	4.02
Fort Smith	157.41	182.11	177.69	38.3	40.2	39.4	4.11	4.53	4.51
Little Rock-North Little Rock	174.46	203.94	198.50	38.2	41.2	40.1	4.58	4.95	4.95
Pine Bluff	194.28	215.17	216.07	40.9	41.3	41.0	4.75	5.21	5.27
CALIFORNIA	225.15	244.01	248.27	39.5	40.2	40.5	5.70	6.07	6.13
Anaheim-Santa Ana-Garden Grove	207.50	223.11	224.62	39.6	40.2	40.4	5.24	5.55	5.56
Bakersfield	240.20	250.22	244.53	40.1	40.1	39.0	5.99	6.24	6.27
Fresno	204.10	219.54	220.80	39.1	39.7	40.0	5.22	5.53	5.52
Los Angeles-Long Beach	207.23	226.00	229.54	39.1	40.0	40.2	5.30	5.65	5.71
Modesto	230.16	256.06	260.57	41.1	41.5	42.3	5.60	6.17	6.16
Oxnard-Simi Valley-Ventura	196.78	199.26	206.98	39.2	38.1	39.5	5.02	5.23	5.24
Riverside-San Bernardino-Ontario	231.08	242.53	249.89	39.3	39.5	40.5	5.88	6.14	6.17
Sacramento	241.56	283.05	275.22	39.6	42.5	41.7	6.10	6.66	6.60
Salinas-Seaside-Monterey	216.58	220.50	234.30	38.4	37.5	38.6	5.64	5.88	6.07
San Diego	213.93	228.72	234.60	37.4	38.7	39.1	5.72	5.91	6.00
San Francisco-Oakland	277.60	291.20	296.34	40.0	40.0	40.1	6.94	7.28	7.39
San Jose	246.43	264.58	263.04	40.8	41.6	41.1	6.04	6.36	6.40
Santa Barbara-Santa Maria-Lompoc	202.13	213.15	213.56	38.5	39.4	38.9	5.25	5.41	5.49
Santa Rosa	212.44	218.88	217.67	37.6	38.0	37.4	5.65	5.76	5.82
Stockton	259.78	273.98	277.13	41.9	41.2	41.8	6.20	6.65	6.63
Vallejo-Fairfield-Napa	229.52	247.81	250.90	38.0	38.6	38.6	6.04	6.42	6.50
COLORADO	218.25	229.68	232.64	39.9	39.6	39.7	5.47	5.80	5.86
Denver-Boulder	217.16	228.71	233.23	39.7	39.5	39.8	5.47	5.79	5.86
CONNECTICUT	210.60	228.93	234.77	40.5	41.1	41.7	5.20	5.57	5.63
Bridgeport	222.79	232.54	238.42	41.8	41.6	42.5	5.33	5.59	5.61
Hartford	231.09	245.27	251.93	40.9	41.5	42.2	5.65	5.91	5.97
New Britain	226.28	238.71	247.68	43.1	42.1	43.3	5.25	5.67	5.72
New Haven-West Haven	212.38	226.95	232.72	40.3	40.6	40.9	5.27	5.59	5.69
Stamford	214.43	241.25	239.36	41.0	42.4	41.7	5.23	5.69	5.74
Waterbury	181.97	197.13	201.60	40.8	41.5	42.0	4.46	4.75	4.80
DELAWARE	214.73	219.08	247.01	38.9	38.1	41.1	5.52	5.75	6.01
Wilmington	244.58	267.96	288.97	38.7	38.5	41.4	6.32	6.96	6.98
DISTRICT OF COLUMBIA:									
Washington SMSA	211.07	212.08	213.01	38.8	38.7	38.8	5.44	5.48	5.49
FLORIDA	179.15	189.26	190.76	39.9	40.7	40.5	4.49	4.65	4.71
Fort Lauderdale-Hollywood	180.67	189.98	190.39	40.6	41.3	41.3	4.45	4.60	4.61
Jacksonville	209.97	233.37	234.92	39.1	42.2	42.1	5.37	5.53	5.58
Miami	153.92	165.11	161.66	38.1	39.5	38.4	4.04	4.18	4.21
Orlando	182.34	203.45	210.08	39.9	41.1	42.1	4.57	4.95	4.99
Pensacola	243.66	239.10	243.08	45.8	41.8	41.2	5.32	5.72	5.90
Tampa-St. Petersburg	186.53	199.51	202.59	40.2	40.8	40.6	4.64	4.89	4.99
West Palm Beach-Boca Raton	215.69	215.02	223.97	41.4	40.8	41.4	5.21	5.27	5.41
GEORGIA	166.80	179.49	185.64	40.0	40.7	40.8	4.17	4.41	4.55
Atlanta	199.69	207.08	226.95	38.7	39.9	40.6	5.16	5.19	5.59
Savannah	238.49	240.62	253.75	43.6	43.2	43.6	5.47	5.57	5.82
HAWAII	206.03	200.70	209.62	38.8	39.2	37.1	5.31	5.12	5.65
Honolulu	197.25	192.89	205.46	37.5	38.5	36.3	5.26	5.01	5.66
IDAHO	218.75	255.23	242.26	39.7	41.3	41.2	5.51	6.18	5.88

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		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
ILLINOIS	(*)	\$254.57	\$260.48	(*)	40.4	40.8	(*)	\$6.30	\$6.39
Bloomington—Normal	(*)	187.04	193.45	(*)	36.1	36.4	(*)	5.17	5.31
Champaign—Urbana—Rantoul	(*)	223.49	232.83	(*)	36.1	38.2	(*)	5.87	6.09
Chicago SMSA	(*)	257.58	263.46	(*)	41.2	41.5	(*)	6.25	6.35
Davenport—Rock Island—Moline	(*)	276.59	279.53	(*)	40.0	41.1	(*)	6.81	6.81
Decatur	(*)	281.63	284.74	(*)	41.9	41.9	(*)	6.72	6.80
Peoria	(*)	284.78	287.90	(*)	37.9	38.1	(*)	7.51	7.55
Rockford	(*)	254.32	257.23	(*)	42.0	43.1	(*)	5.96	5.97
Springfield	(*)	297.79	304.47	(*)	43.0	43.5	(*)	6.92	6.99
INDIANA	\$247.04	277.06	279.55	40.5	41.6	41.6	\$6.13	6.66	6.72
Gary—Hammond—East Chicago	320.74	355.88	(*)	40.0	41.0	(*)	7.90	8.68	(*)
Indianapolis	245.84	278.28	(*)	40.5	42.1	(*)	6.07	6.61	(*)
IOWA	243.01	257.54	263.31	40.3	39.5	40.2	6.03	6.52	6.55
Cedar Rapids	245.43	247.17	256.86	40.5	38.5	39.7	6.06	6.42	6.47
Des Moines	255.84	258.31	266.73	39.3	37.0	38.6	6.51	6.87	6.91
Dubuque	279.63	358.09	315.51	39.0	44.1	39.0	7.17	8.12	6.09
Sioux City	212.22	201.62	209.59	38.1	37.2	37.9	5.57	5.42	5.53
Waterloo—Cedar Falls	297.08	328.80	345.77	39.4	41.1	42.9	7.54	8.00	8.06
KANSAS	208.48	218.83	225.50	41.5	40.6	41.3	5.05	5.39	5.46
Topeka	227.58	240.24	250.98	43.2	42.0	41.9	5.27	5.72	5.99
Wichita	227.59	236.65	242.86	42.1	41.3	41.8	5.41	5.73	5.81
KENTUCKY	210.26	224.96	232.13	39.3	40.1	40.3	5.35	5.61	5.76
Louisville	241.20	266.02	271.67	40.2	40.8	41.1	6.00	6.52	6.61
LOUISIANA	226.59	236.81	244.36	41.5	40.9	41.0	5.46	5.79	5.96
Baton Rouge	287.74	309.03	316.25	43.4	43.1	43.5	6.63	7.17	7.27
New Orleans	211.60	226.57	228.97	39.7	40.1	40.1	5.33	5.65	5.71
Shreveport	200.08	213.21	241.38	41.0	41.4	42.2	4.88	5.15	5.72
MAINE	171.50	181.20	183.94	39.7	40.0	39.9	4.32	4.53	4.61
Lewiston—Auburn	140.46	147.05	147.00	38.8	37.9	37.5	3.62	3.88	3.92
Portland	174.05	183.02	184.08	39.2	39.7	39.0	4.44	4.61	4.72
MARYLAND	221.26	238.39	247.60	39.5	39.6	40.0	5.63	6.02	6.19
Baltimore	234.24	252.63	263.25	39.5	40.1	40.5	5.93	6.30	6.50
MASSACHUSETTS	194.62	205.20	(*)	39.8	40.0	(*)	4.89	5.13	(*)
Boston	214.26	223.91	(*)	39.9	40.2	(*)	5.37	5.57	(*)
Brockton	156.33	157.36	(*)	38.6	37.2	(*)	4.05	4.23	(*)
Fall River	135.17	148.57	(*)	35.2	35.8	(*)	3.84	4.15	(*)
Lawrence—Haverhill	188.33	202.69	(*)	39.4	40.7	(*)	4.78	4.98	(*)
Lowell	172.77	178.09	(*)	39.0	38.8	(*)	4.43	4.59	(*)
New Bedford	161.88	174.02	(*)	38.0	38.5	(*)	4.26	4.52	(*)
Springfield—Chicopee—Holyoke	199.51	215.69	(*)	40.8	41.4	(*)	4.89	5.21	(*)
Worcester	151.35	211.98	(*)	39.5	40.5	(*)	4.87	5.26	(*)
MICHIGAN	299.28	318.33	331.58	43.0	42.5	43.6	6.96	7.49	7.61
Ann Arbor	346.57	366.44	364.28	45.8	45.0	44.5	7.57	8.04	8.19
Battle Creek	287.35	315.96	317.23	41.7	41.4	41.3	6.89	7.63	7.68
Bay City	309.61	348.10	368.40	47.5	47.2	49.1	6.52	7.38	7.50
Detroit	323.11	338.78	362.74	43.0	42.1	44.7	7.38	8.05	8.12
Flint	342.62	361.34	403.47	45.1	45.3	47.5	7.60	8.42	8.49
Grand Rapids	233.58	257.23	265.18	40.7	41.9	42.3	5.74	6.14	6.27
Jackson	247.65	278.76	268.44	40.9	42.5	40.3	6.06	6.56	6.66
Kalamazoo—Portage	251.33	271.84	282.66	40.9	40.0	41.3	6.15	6.80	6.84
Lansing—East Lansing	318.43	334.28	337.42	44.0	43.1	42.7	7.24	7.76	7.90
Muskegon—Norton Shores—Muskegon Heights	246.19	286.60	274.79	41.5	43.5	41.8	5.96	6.62	6.57
Saginaw	356.77	378.11	383.62	45.5	44.8	45.1	7.84	8.44	8.51
MINNESOTA	223.28	238.00	242.99	39.8	39.6	39.9	5.61	6.01	6.09
Duluth—Superior	199.43	211.84	213.36	38.0	37.1	37.3	5.14	5.71	5.72
Minneapolis—St. Paul	238.80	259.53	261.79	40.0	40.3	40.4	5.97	6.44	6.48
MISSISSIPPI	153.24	167.23	170.08	39.7	40.2	40.4	3.86	4.16	4.21
Jackson	154.83	187.50	189.11	39.0	41.5	41.2	3.97	4.54	4.59

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS

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

State and area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
MISSOURI ²	\$213.59	\$232.87	\$239.90	39.7	40.5	40.8	\$5.38	\$5.75	\$5.88
Kansas City ²	244.99	258.04	268.66	40.9	40.7	40.4	5.99	6.34	6.65
St. Joseph ²	192.47	212.00	210.54	39.2	40.0	39.5	4.91	5.30	5.33
St. Louis ²	251.51	272.83	277.97	40.5	41.4	41.8	6.21	6.59	6.65
Springfield ²	171.50	200.59	192.27	38.8	39.6	39.4	4.42	5.04	4.88
MONTANA	260.65	236.07	(*)	40.6	36.6	(*)	6.42	6.45	(*)
NEBRASKA	205.14	223.04	224.81	41.2	41.0	40.8	4.98	5.44	5.51
Lincoln	196.89	212.06	211.48	39.8	37.8	37.9	4.95	5.61	5.58
Omaha	231.96	236.93	248.59	42.9	40.5	41.5	5.41	5.85	5.99
NEVADA	224.47	241.55	249.16	39.8	38.1	39.3	5.64	6.34	6.34
Las Vegas	268.92	305.72	(*)	40.5	40.6	(*)	6.64	7.53	(*)
NEW HAMPSHIRE	173.53	183.71	187.05	39.8	40.2	40.4	4.36	4.57	4.63
Manchester	154.41	163.90	166.74	38.7	39.4	39.7	3.99	4.16	4.20
Nashua	196.18	206.32	210.31	40.2	41.1	41.4	4.88	5.02	5.08
NEW JERSEY	217.76	241.53	242.43	40.4	41.5	41.3	5.39	5.82	5.87
Atlantic City	169.86	176.75	193.29	38.0	36.9	38.2	4.47	4.79	5.06
Camden ³	206.68	230.58	(*)	39.9	40.1	(*)	5.18	5.75	(*)
Hackensack ⁴	209.20	226.53	230.35	40.7	42.5	42.5	5.14	5.33	5.42
Jersey City	210.98	232.64	228.57	38.5	40.6	40.1	5.48	5.73	5.70
New Brunswick—Perth Amboy—Sayreville ⁴	244.95	259.34	258.33	41.8	42.1	41.8	5.86	6.16	6.18
Newark ⁴	223.71	247.97	(*)	40.6	42.1	(*)	5.51	5.89	(*)
Paterson—Clifton—Passaic ⁴	206.25	221.90	(*)	40.6	40.2	(*)	4.88	5.52	(*)
Trenton	227.14	252.70	263.89	41.6	41.7	42.7	5.46	6.06	6.18
NEW MEXICO	164.35	172.54	180.90	38.4	38.6	40.2	4.28	4.47	4.50
Albuquerque	170.21	177.32	183.64	39.4	38.8	40.9	4.32	4.57	4.49
NEW YORK	211.33	223.57	227.88	39.5	39.5	39.7	5.35	5.66	5.74
Albany—Schenectady—Troy	235.34	244.20	248.87	41.0	40.7	41.0	5.74	6.00	6.07
Binghamton	199.20	200.00	206.73	41.5	40.0	41.1	4.80	5.00	5.03
Buffalo	282.99	302.94	313.76	41.6	41.9	42.4	6.77	7.23	7.40
Elmira	213.19	221.92	224.00	40.3	39.7	40.0	5.29	5.59	5.60
Monroe County ⁵	271.12	286.90	301.75	42.1	41.4	42.5	6.44	6.93	7.10
Nassau—Suffolk ⁶	196.50	201.61	205.15	39.3	39.3	39.3	5.00	5.13	5.22
New York—Northeastern New Jersey	200.72	216.61	(*)	38.9	39.6	(*)	5.16	5.47	(*)
New York and Nassau—Suffolk ⁴	187.37	196.94	197.02	37.7	37.8	37.6	4.97	5.21	5.24
New York SMSA ⁶	185.01	196.13	195.30	37.3	37.5	37.2	4.96	5.23	5.25
New York City ⁷	183.64	193.07	191.36	37.1	37.2	36.8	4.95	5.19	5.20
Poughkeepsie	230.30	241.23	241.96	43.7	43.0	42.9	5.27	5.61	5.64
Rochester	253.57	270.52	281.23	41.5	41.3	42.1	6.11	6.55	6.68
Rockland County ⁷	203.69	220.17	224.17	41.4	41.0	41.9	4.92	5.37	5.35
Syracuse	233.45	251.30	255.85	41.1	41.4	41.4	5.68	6.07	6.18
Utica—Rome	204.83	211.74	220.73	40.4	39.6	40.8	5.07	5.32	5.41
Westchester County	199.02	226.40	233.95	39.1	40.0	40.9	5.09	5.66	5.72
NORTH CAROLINA	150.54	165.57	167.62	38.7	39.8	40.1	3.89	4.16	4.18
Asheville	147.04	161.57	164.39	38.9	39.6	39.9	3.78	4.08	4.12
Charlotte—Gastonia	156.39	168.49	171.38	40.1	40.6	41.0	3.90	4.15	4.18
Greensboro—Winston-Salem—High Point	162.39	179.39	179.14	38.3	39.6	39.2	4.24	4.53	4.57
Raleigh—Durham	170.17	186.66	187.07	39.3	39.8	39.3	4.33	4.69	4.76
NORTH DAKOTA	193.33	211.29	215.28	36.9	39.2	39.0	4.97	5.39	5.52
Fargo—Moorhead	211.07	226.00	232.26	39.6	39.1	39.3	5.33	5.78	5.91
OHIO	259.79	282.83	287.96	41.7	41.9	42.1	6.23	6.75	6.84
Akron	263.22	292.24	293.51	42.8	42.6	42.6	6.15	6.86	6.89
Canton	250.73	282.00	280.59	39.3	40.0	39.8	6.38	7.05	7.05
Cincinnati	241.53	258.13	264.81	41.5	41.5	41.9	5.82	6.22	6.32
Cleveland	269.24	289.49	297.19	42.2	42.2	42.7	6.38	6.86	6.96
Columbus	233.86	247.86	247.82	40.6	40.5	40.1	5.76	6.12	6.18
Dayton	284.24	299.53	302.93	44.0	43.6	43.4	6.46	6.87	6.98
Toledo	266.48	300.88	301.89	41.9	42.8	42.7	6.36	7.03	7.07
Youngstown—Warren	274.28	317.16	325.54	38.2	40.3	41.0	7.18	7.87	7.94

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		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
OKLAHOMA	\$196.89	\$216.84	\$224.54	40.1	41.7	40.9	\$4.91	\$5.20	\$5.49
Oklahoma City	196.34	213.56	221.14	40.4	40.6	40.8	4.86	5.26	5.42
Tulsa	213.33	230.75	238.95	40.1	40.2	40.5	5.32	5.74	5.90
OREGON	238.61	252.04	262.09	38.3	37.9	38.6	6.23	6.65	6.79
Eugene—Springfield	263.41	270.13	(*)	40.4	38.1	(*)	6.52	7.09	(*)
Jackson County	250.67	263.27	264.96	39.6	38.1	38.4	6.33	6.91	6.90
Portland	233.02	245.05	250.80	38.2	37.7	38.0	6.10	6.50	6.60
PENNSYLVANIA	216.15	233.83	237.41	39.3	39.7	39.9	5.50	5.89	5.95
Allentown—Bethlehem—Easton	215.63	227.74	234.30	38.3	38.0	38.6	5.63	5.90	6.07
Altoona	178.13	189.38	195.70	37.9	37.8	38.6	4.70	5.01	5.07
Delaware Valley ⁸	228.31	244.55	249.60	39.5	39.7	40.0	5.78	6.16	6.24
Erie	228.22	246.33	249.42	40.9	41.4	41.5	5.58	5.95	6.01
Harrisburg	190.30	211.46	213.46	38.6	39.6	40.2	4.93	5.34	5.31
Johnstown	238.20	247.33	243.18	39.7	39.7	38.6	6.00	6.23	6.30
Lancaster	187.20	205.65	210.00	39.0	39.7	40.0	4.80	5.18	5.25
Northeast Pennsylvania	155.73	171.76	172.65	35.8	36.7	36.5	4.35	4.68	4.73
Philadelphia SMSA ¹	224.47	(*)	(*)	39.8	(*)	(*)	5.64	(*)	(*)
Pittsburgh	263.21	296.43	303.37	39.7	41.0	41.5	6.63	7.23	7.31
Reading	194.50	214.58	222.61	38.9	39.3	39.4	5.00	5.26	5.65
Scranton ⁹	160.15	180.30	182.30	30.9	38.2	37.9	4.34	4.72	4.81
Wilkes—Barre—Hazleton ¹⁰	151.03	165.65	164.15	34.8	35.7	35.3	4.34	4.64	4.65
Williamsport	190.32	205.67	207.50	39.0	39.4	39.3	4.88	5.22	5.28
York	194.14	213.50	217.65	40.7	40.9	41.3	4.77	5.22	5.27
RHODE ISLAND	166.27	171.83	174.94	39.4	38.7	39.4	4.22	4.44	4.44
Providence—Warwick—Pawtucket	167.11	172.66	175.78	39.6	38.8	39.5	4.22	4.45	4.45
SOUTH CAROLINA	162.00	176.61	178.73	40.1	40.6	40.9	4.04	4.35	4.37
Charleston—North Charleston	185.14	197.47	201.88	40.6	40.8	41.2	4.56	4.84	4.90
Columbia	155.50	178.70	180.26	38.3	40.8	40.6	4.06	4.38	4.44
Greenville—Spartanburg	158.80	174.50	176.58	39.8	40.3	40.5	3.99	4.33	4.36
SOUTH DAKOTA	189.98	184.47	193.43	41.3	39.0	39.8	4.60	4.73	4.86
Sioux Falls	243.87	239.84	238.46	44.1	42.3	41.4	5.53	5.67	5.76
TENNESSEE	176.11	188.87	194.55	40.3	40.1	40.7	4.37	4.71	4.78
Chattanooga	185.08	195.86	201.06	40.5	40.3	40.7	4.57	4.86	4.94
Knoxville	207.11	227.84	229.36	39.6	41.5	41.4	5.23	5.49	5.54
Memphis	216.63	226.46	232.41	41.5	41.4	41.8	5.22	5.47	5.56
Nashville—Davidson	188.14	206.23	203.81	40.2	40.2	40.2	4.68	5.13	5.07
TEXAS	206.25	221.68	229.07	40.6	40.9	41.2	5.08	5.42	5.56
Amarillo	188.57	225.29	233.46	38.8	44.7	44.3	4.86	5.04	5.27
Austin	176.26	185.57	191.25	40.8	41.7	42.5	4.32	4.45	4.50
Beaumont—Port Arthur—Orange	293.15	317.02	330.30	41.7	40.8	41.6	7.03	7.77	7.94
Corpus Christi	242.36	251.49	245.44	41.5	41.5	41.6	5.84	6.06	5.90
Dallas—Fort Worth	192.92	205.44	212.90	40.7	40.6	41.1	4.74	5.06	5.18
El Paso	147.07	142.16	141.98	38.5	40.5	40.8	3.82	3.51	3.48
Galveston—Texas City	333.43	338.65	334.15	43.7	40.9	40.9	7.63	8.28	8.17
Houston	253.62	287.08	284.03	42.2	43.3	43.1	6.01	6.63	6.59
Lubbock	136.88	170.13	168.89	37.4	40.7	40.5	3.66	4.18	4.17
San Antonio	160.72	174.30	175.56	41.0	42.0	42.1	3.92	4.15	4.17
Waco	165.82	180.45	187.62	39.2	40.1	41.6	4.23	4.50	4.51
Wichita Falls	187.68	195.23	194.04	39.1	39.6	39.5	4.80	4.93	4.90
UTAH	196.42	210.29	210.25	39.0	39.8	39.9	4.96	5.28	5.27
Salt Lake City—Ogden	190.72	157.12	197.40	39.9	39.9	39.9	4.78	4.94	4.95
VERMONT	184.50	193.93	195.35	41.0	41.0	41.3	4.50	4.73	4.73
Burlington	222.40	226.55	231.86	43.1	43.4	43.5	5.16	5.22	5.33
Springfield	192.58	219.18	222.07	40.8	41.2	41.9	4.72	5.22	5.30
VIRGINIA	175.16	188.94	192.16	39.9	40.2	40.2	4.39	4.70	4.78
Bristol	154.82	177.38	168.63	38.9	38.9	38.5	3.98	4.56	4.38
Lynchburg	176.71	194.21	199.20	39.8	40.8	41.5	4.44	4.76	4.80
Norfolk—Virginia Beach—Portsmouth	188.20	200.59	218.18	40.3	39.8	41.4	4.67	5.04	5.27
Northern Virginia ¹¹	203.31	224.80	224.13	40.1	41.4	41.2	5.07	5.43	5.44
Petersburg—Colonial Heights—Hopewell	212.53	250.32	229.90	40.1	42.5	39.3	5.30	5.89	5.85
Richmond	203.71	218.57	226.16	39.1	39.1	39.4	5.21	5.59	5.74

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		
	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P	SEP. 1976	AUG. 1977	SEP. 1977P
VIRGINIA—Continued									
Roanoke	\$158.80	\$165.09	\$172.43	39.7	39.4	40.1	\$4.00	\$4.19	\$4.30
WASHINGTON	253.62	270.27	277.29	39.2	39.0	39.5	6.47	6.93	7.02
Seattle—Everett	259.77	274.31	279.35	39.3	39.3	39.4	6.61	6.98	7.09
Spokane	223.09	237.61	241.80	38.2	39.8	40.1	5.84	5.97	6.03
Tacoma	255.57	273.14	278.64	39.5	39.3	39.3	6.47	6.95	7.09
WEST VIRGINIA	209.28	241.13	245.60	38.9	39.4	38.8	5.38	6.12	6.33
Charleston	255.63	278.81	278.21	40.9	41.8	41.4	6.25	6.67	6.72
Huntington—Ashland	240.37	269.39	252.96	39.6	39.5	37.2	6.07	6.82	6.80
Parkersburg—Marietta	241.84	254.97	256.07	41.2	40.6	40.2	5.87	6.28	6.37
Wheeling	224.37	259.53	261.63	40.5	41.0	40.5	5.54	6.33	6.46
WISCONSIN	236.12	248.87	253.51	40.8	40.4	40.9	5.78	6.15	6.20
Appleton—Oshkosh	225.06	248.75	251.30	41.2	42.3	42.4	5.46	5.88	5.92
Green Bay	239.51	249.87	250.74	42.6	41.8	41.7	5.62	5.98	6.01
Kenosha	272.43	289.90	284.69	39.9	39.8	39.5	6.82	7.29	7.20
La Crosse	204.44	210.40	211.30	41.1	39.8	39.8	4.98	5.29	5.31
Madison	268.33	268.90	268.42	42.1	40.7	40.4	6.38	6.61	6.64
Milwaukee	259.43	261.83	284.47	40.4	41.0	41.1	6.42	6.88	6.91
Racine	249.64	264.58	269.47	40.4	40.3	40.1	6.19	6.57	6.71
WYOMING	223.60	230.92	239.03	40.0	40.3	41.0	5.59	5.73	5.83
Casper	276.71	269.45	271.62	42.9	39.8	40.3	6.45	6.77	6.74
Cheyenne	246.19	240.26	(*)	40.9	42.6	(*)	6.02	5.64	(*)

¹ Based on the 1967 Standard Industrial Classification Manual.
² Based on 1972 Standard Industrial Classification and adjusted to 1976 benchmark; not strictly comparable with previously published data.
³ Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Burlington, Camden, and Gloucester Counties, New Jersey.
⁴ Subarea of New York—Northeastern New Jersey.
⁵ Subarea of Rochester Standard Metropolitan Statistical Area.
⁶ Area included in New York and Nassau-Suffolk combined SMSA's.
⁷ Subarea of New York Standard Metropolitan Statistical Area.
⁸ Subarea of Philadelphia, Pennsylvania Standard Metropolitan Statistical Area: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pennsylvania.

⁹ Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Lackawanna County.
¹⁰ Subarea of Northeast Pennsylvania Standard Metropolitan Statistical Area: Luzerne County.
¹¹ 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 1965 to date

[Per 100 employees]

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions													
1965	4.3	3.8	3.5	4.0	3.8	4.1	5.6	4.5	5.4	5.5	4.5	3.9	3.1
1966	5.0	4.6	4.2	4.9	4.6	5.1	6.7	5.1	6.4	6.1	5.1	3.9	2.9
1967	4.4	4.3	3.6	3.9	3.9	4.6	5.9	4.7	5.5	5.3	4.7	3.7	2.8
1968	4.6	4.2	3.8	4.0	4.3	4.7	5.9	5.0	5.8	5.7	5.1	3.9	3.1
1969	4.7	4.6	3.9	4.4	4.5	4.8	6.6	5.1	5.6	5.9	c 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	4.4	4.1	3.7	4.0	4.0	4.9	5.3	4.6	6.0	5.3	4.8	3.6	2.7
1973	4.8	4.6	4.0	4.4	4.5	5.3	5.9	5.1	6.2	5.7	5.2	3.8	2.6
1974	4.2	4.2	3.6	4.0	4.4	5.1	5.4	4.8	5.4	4.9	3.8	2.4	1.8
1975	3.7	3.0	2.7	3.2	3.7	3.9	4.5	4.5	5.1	4.6	3.7	2.8	2.2
1976	3.9	3.8	3.5	4.2	3.9	4.4	4.8	4.2	5.1	4.4	3.5	3.0	2.2
1977	-	3.7	3.7	4.0	3.8	4.6	4.9	4.2	5.2	4.6	P		
New hires													
1965	3.1	2.4	2.4	2.8	2.6	3.0	4.3	3.2	3.9	4.0	3.5	2.9	2.2
1966	3.8	3.2	3.1	3.7	3.6	4.1	5.6	3.9	4.8	4.7	4.2	3.1	2.1
1967	3.3	3.0	2.7	2.8	2.8	3.3	4.6	3.3	4.0	4.1	3.7	2.8	2.0
1968	3.5	3.0	2.7	2.9	3.2	3.6	4.7	3.7	4.3	4.6	4.0	2.9	2.2
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	2.4	2.7	2.9	3.6	4.1	3.4	4.4	4.3	3.8	2.9	2.0
1973	3.9	3.5	3.1	3.5	3.6	4.4	5.0	4.1	5.0	4.7	4.3	3.0	2.0
1974	3.2	3.2	2.7	3.0	3.3	3.9	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	3.0	2.4	1.7	1.3
1976	2.6	2.1	2.1	2.6	2.5	3.0	3.6	2.8	3.5	3.2	2.5	1.9	1.3
1977	-	2.2	2.1	2.6	2.7	3.4	3.7	3.0	3.9	3.5	P		
Total separations													
1965	4.1	3.7	3.1	3.4	3.7	3.6	3.6	4.3	5.1	5.6	4.5	3.9	4.1
1966	4.6	4.0	3.6	4.1	4.3	4.3	4.4	5.3	5.8	6.6	4.8	4.3	4.2
1967	4.6	4.5	4.0	4.6	4.3	4.2	4.3	4.8	5.3	6.2	4.7	4.0	3.9
1968	4.6	4.4	3.9	4.1	4.1	4.3	4.1	5.0	6.0	6.3	5.0	4.1	3.8
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	4.2	4.0	3.5	3.8	3.8	3.9	4.2	4.8	5.4	5.3	4.3	3.7	3.7
1973	4.6	4.3	3.7	4.2	4.1	4.4	4.5	5.1	6.5	5.7	4.9	4.2	3.9
1974	4.8	4.9	4.0	4.4	4.2	4.4	4.2	4.9	6.1	5.4	5.0	5.0	5.2
1975	4.2	6.2	4.5	4.2	4.0	3.9	3.6	4.4	4.6	4.3	4.0	3.5	3.4
1976	3.8	3.7	3.1	3.5	3.5	3.4	3.5	4.3	4.9	4.6	4.1	3.4	3.5
1977	-	3.9	3.4	3.4	3.4	3.5	3.5	4.3	5.1	4.8	P		
Quits													
1965	1.9	1.4	1.3	1.5	1.7	1.7	1.7	1.8	2.6	3.5	2.2	1.7	1.4
1966	2.6	1.9	1.8	2.3	2.5	2.5	2.5	2.5	3.6	4.5	2.8	2.1	1.7
1967	2.3	2.1	1.9	2.1	2.2	2.2	2.3	2.1	3.2	4.0	2.5	1.9	1.5
1968	2.5	2.0	1.9	2.1	2.2	2.4	2.3	2.4	3.8	4.2	2.8	2.1	1.6
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	2.2	1.7	1.6	1.9	2.0	2.2	2.2	2.2	3.6	3.5	2.5	1.9	1.6
1973	2.7	2.2	2.1	2.5	2.5	2.7	2.8	2.8	4.5	3.9	3.0	2.2	1.6
1974	2.3	2.2	1.9	2.3	2.4	2.6	2.5	2.5	4.0	3.2	2.2	1.4	.9
1975	1.4	1.1	.9	1.0	1.1	1.3	1.3	1.5	2.4	2.0	1.6	1.2	.9
1976	1.7	1.3	1.2	1.5	1.6	1.7	1.8	1.8	2.8	2.4	1.7	1.2	1.0
1977	-	1.4	1.3	1.6	1.7	1.9	1.9	1.9	3.1	2.8	P		
Layoffs													
1965	1.4	1.6	1.2	1.2	1.3	1.1	1.1	1.8	1.6	1.3	1.4	1.5	1.9
1966	1.2	1.3	1.0	1.0	1.0	.9	1.0	2.0	1.1	1.0	1.1	1.3	1.7
1967	1.4	1.5	1.3	1.5	1.3	1.1	1.1	1.9	1.2	1.2	1.3	1.3	1.6
1968	1.2	1.5	1.2	1.1	1.0	1.0	.9	1.8	1.3	1.1	1.2	1.2	1.4
1969	1.2	1.2	1.0	1.0	.9	.9	c 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	1.4	1.1	1.1	1.0	.8	1.1	1.7	.9	.9	.9	1.0	1.3
1973	.9	1.0	.7	.8	.7	.6	.6	1.4	.8	.7	.8	1.1	1.5
1974	1.5	1.7	1.2	1.1	.9	.8	.8	1.4	1.1	1.2	1.8	2.8	3.6
1975	2.1	4.1	2.9	2.5	2.1	1.8	1.5	2.0	1.3	1.4	1.6	1.7	1.9
1976	1.3	1.6	1.1	1.1	1.1	.9	.9	1.6	1.1	1.3	1.5	1.5	1.8
1977	-	1.7	1.4	1.0	.9	.8	.8	1.5	1.0	1.1	P		

p=preliminary.

c = corrected

**ESTABLISHMENT DATA
LABOR TURNOVER**

D-2. Labor turnover rates, by industry

[Per 100 employees]

SIC Code	Industry	Accession rates				Separation rates					
		Total		New hires		Total		Quits		Layoffs	
		Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P
-	MANUFACTURING	5.2	4.6	3.9	3.5	5.1	4.8	3.1	2.8	1.0	1.1
19,24,25,32-39	DURABLE GOODS	4.7	4.2	3.5	3.1	4.6	4.1	2.6	2.3	1.0	.9
20-23,26-31	NONDURABLE GOODS	6.0	5.1	4.6	4.0	5.8	5.7	3.8	3.4	1.1	1.4
	DURABLE GOODS										
19	ORDNANCE AND ACCESSORIES	2.3	1.6	1.5	1.1	2.0	2.0	1.0	.9	.4	.6
192	Ammunition, except for small arms	2.3	-	1.2	-	1.8	-	.8	-	.5	-
24	LUMBER AND WOOD PRODUCTS	6.9	5.8	6.1	5.1	7.0	6.2	5.1	4.6	.7	.5
242	Sawmills and planing mills	6.3	-	5.5	-	6.2	-	4.5	-	.7	-
2421	Sawmills and planing mills, general	5.8	-	4.9	-	5.7	-	4.0	-	.7	-
243	Millwork, plywood and related products	7.6	-	7.0	-	7.8	-	5.9	-	.4	-
2431	Millwork	8.5	-	8.0	-	8.3	-	6.4	-	.6	-
2432	Veneer and plywood	5.6	-	5.1	-	5.4	-	4.0	-	.1	-
244	Wooden containers	10.4	-	9.3	-	10.8	-	8.2	-	1.4	-
2441,2	Wooden boxes, shooks, and crates	10.7	-	9.6	-	11.1	-	8.4	-	1.5	-
249	Miscellaneous wood products	7.3	-	6.1	-	7.4	-	5.6	-	.7	-
25	FURNITURE AND FIXTURES	8.4	6.8	7.4	5.8	7.6	5.7	5.4	3.9	.7	.7
251	Household furniture	9.3	-	8.2	-	8.4	-	6.1	-	.8	-
2511	Wood household furniture	9.7	-	8.9	-	8.7	-	6.6	-	.3	-
2512	Upholstered household furniture	8.1	-	7.3	-	7.1	-	5.6	-	.5	-
2515	Mattresses and bedsprings	8.6	-	7.3	-	6.9	-	5.0	-	.6	-
252	Office furniture	5.7	-	4.8	-	4.7	-	3.6	-	.2	-
32	STONE, CLAY, AND GLASS PRODUCTS	4.6	3.7	3.7	3.1	5.1	4.5	3.1	2.6	.8	.9
321	Flat glass	2.1	-	1.2	-	2.7	-	2.0	-	(1)	-
322	Glass and glassware, pressed or blown	3.6	-	2.5	-	4.7	-	2.2	-	1.2	-
3221	Glass containers	3.8	-	3.1	-	4.7	-	2.9	-	.7	-
3229	Pressed and blown glass, nec	3.4	-	1.6	-	4.8	-	1.2	-	2.0	-
324	Cement, hydraulic	1.5	-	1.1	-	3.3	-	2.2	-	.2	-
325	Structural clay products	6.8	-	6.2	-	7.8	-	5.7	-	.9	-
3251	Brick and structural clay tile	8.7	-	8.4	-	9.4	-	7.6	-	.6	-
326	Pottery and related products	5.6	-	4.5	-	5.2	-	3.5	-	.3	-
3291	Abrasive products	2.2	-	1.9	-	3.5	-	1.7	-	.3	-
33	PRIMARY METAL INDUSTRIES	3.1	2.6	2.0	1.6	3.8	3.9	1.6	1.3	1.1	1.6
331	Blast furnace and basic steel products	2.3	-	.9	-	3.9	-	1.0	-	1.7	-
3312	Blast furnaces and steel mills	2.2	-	.7	-	4.0	-	.9	-	1.8	-
332	Iron and steel foundries	4.5	-	3.6	-	4.1	-	2.3	-	.7	-
3321	Gray iron foundries	4.2	-	3.7	-	4.1	-	2.4	-	.7	-
3322	Malleable iron foundries	4.1	-	3.2	-	3.9	-	2.1	-	.9	-
3323	Steel foundries	5.3	-	3.6	-	4.3	-	2.2	-	.7	2
333,4	Nonferrous metals	2.6	-	2.0	-	3.1	-	1.8	-	.6	-
335	Nonferrous rolling and drawing	2.5	-	1.8	-	2.9	-	1.3	-	.7	-
3351	Copper rolling and drawing	2.4	-	1.9	-	3.8	-	1.9	-	.7	-
3352	Aluminum rolling and drawing	2.3	-	1.8	-	2.6	-	1.0	-	.7	-
3357	Nonferrous wire drawing, and insulating	2.8	-	1.8	-	2.7	-	1.2	-	.7	-
336	Nonferrous foundries	6.8	-	5.3	-	5.6	-	3.8	-	.5	-
3361	Aluminum castings	6.7	-	5.9	-	6.2	-	4.1	-	.6	-
3362,9	Other nonferrous castings	7.0	-	4.5	-	4.7	-	3.4	-	.3	-
339	Miscellaneous primary metal products	3.1	-	2.1	-	3.6	-	1.9	-	.6	-
3391	Iron and steel forgings	3.2	-	2.0	-	3.2	-	1.5	-	.4	-
34	FABRICATED METAL PRODUCTS	5.6	4.4	4.4	3.7	5.0	4.7	3.1	2.6	.8	1.0
341	Metal cans	4.6	-	2.1	-	4.7	-	2.1	-	1.4	-
342	Cutlery, hand tools, and hardware	5.5	-	4.5	-	4.1	-	2.8	-	.4	-
3421,3,5	Cutlery and hand tools, incl. saws	5.5	-	4.2	-	4.2	-	2.9	-	.4	-
3429	Hardware, nec	5.5	-	4.6	-	4.1	-	2.8	-	.5	-
343	Plumbing and heating, except electric	4.9	-	4.3	-	4.4	-	3.0	-	.6	-
3431,2	Sanitary ware and plumbers' brass goods	3.6	-	3.2	-	5.0	-	3.7	-	.6	-
3433	Heating equipment, except electric	6.0	-	5.3	-	3.9	-	2.4	-	.7	-
344	Fabricated structural metal products	6.6	-	5.7	-	5.6	-	3.6	-	.8	-
3441	Fabricated structural steel	5.8	-	4.7	-	5.6	-	3.2	-	1.2	-
3443	Fabricated plate work (boiler shops)	3.5	-	2.8	-	3.1	-	1.8	-	.5	-
3446,9	Architectural and misc. metal work	7.4	-	6.1	-	5.7	-	4.0	-	.4	-
345	Screw machine products, bolts, etc.	4.3	-	3.6	-	4.4	-	2.9	-	.5	-
3452	Bolts, nuts, rivets, and washers	3.6	-	3.1	-	3.8	-	2.4	-	.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA
LABOR TURNOVER**

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

[Per 100 employees]

SIC Code	Industry	Accession rates				Separation rates					
		Total		New hires		Total		Quits		Layoffs	
		Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p
	DURABLE GOODS — Continued										
	FABRICATED METAL PRODUCTS — Continued										
346	Metal stampings	5.5	-	3.1	-	4.1	-	2.1	-	1.2	-
348	Miscellaneous fabricated wire products	6.8	-	5.0	-	6.2	-	4.0	-	1.0	-
349	Miscellaneous fabricated metal products	3.7	-	3.2	-	4.4	-	2.7	-	.8	-
3494,8	Valves, pipe, and pipe fittings	3.2	-	2.7	-	3.7	-	2.1	-	.6	-
35	MACHINERY, EXCEPT ELECTRICAL	3.4	3.2	2.6	2.5	3.3	3.0	1.8	1.8	.6	0.5
351	Engines and turbines	2.8	-	1.5	-	2.2	-	.8	-	1.2	-
3511	Steam engines and turbines	1.0	-	.3	-	1.4	-	.4	-	(¹)	-
3519	Internal combustion engines, nec	3.8	-	2.3	-	3.8	-	1.0	-	1.8	-
352	Farm machinery	3.9	-	2.2	-	5.5	-	1.9	-	2.6	-
353	Construction and related machinery	3.3	-	2.6	-	2.8	-	1.9	-	.3	-
3531,2	Construction and mining machinery	2.6	-	1.8	-	2.0	-	1.2	-	.2	-
3533	Oil field machinery	4.3	-	3.8	-	4.4	-	3.2	-	.3	-
3535,6	Conveyors, hoists, cranes, monorails	3.2	-	2.6	-	3.2	-	1.8	-	.6	-
354	Metal working machinery	3.4	-	2.8	-	3.4	-	2.0	-	.5	-
3541	Machine tools, metal cutting types	2.2	-	1.9	-	2.3	-	1.4	-	.3	-
3545	Machine tool accessories	3.2	-	2.8	-	3.0	-	2.1	-	.1	-
3542,8	Miscellaneous metal working machinery	3.1	-	2.4	-	3.6	-	1.9	-	1.0	-
355	Special industry machinery	3.1	-	2.4	-	2.9	-	1.7	-	.5	-
3551	Food products machinery	3.4	-	2.5	-	3.0	-	1.5	-	.7	-
3552	Textile machinery	4.0	-	2.7	-	4.5	-	2.4	-	1.4	-
356	General industrial machinery	2.7	-	2.1	-	2.7	-	1.6	-	.4	-
3561	Pumps and compressors	2.5	-	2.1	-	2.3	-	1.4	-	.2	-
3562	Ball and roller bearings	2.1	-	1.7	-	2.1	-	.9	-	.5	-
3566	Power transmission equipment	2.6	-	2.0	-	2.9	-	2.0	-	.2	-
357	Office and computing machines	3.3	-	2.6	-	2.5	-	1.6	-	.1	-
3573	Electronic computing equipment	3.2	-	2.7	-	2.4	-	1.6	-	.1	-
358	Service industry machines	4.3	-	3.3	-	4.4	-	2.2	-	1.0	-
3585	Refrigeration machinery	4.3	-	3.3	-	4.7	-	2.1	-	1.2	-
36	ELECTRICAL EQUIPMENT AND SUPPLIES	4.3	3.9	2.9	3.0	4.1	3.6	2.3	2.1	.8	.6
361	Electric test and distributing equipment	3.4	-	2.5	-	3.5	-	2.1	-	.6	-
3611	Electric measuring instruments	3.1	-	2.5	-	2.5	-	1.8	-	.2	-
3612	Transformers	3.2	-	2.0	-	3.8	-	1.9	-	.8	-
3613	Switchgear and switchboard apparatus	3.7	-	2.9	-	4.4	-	2.6	-	.8	-
362	Electrical industrial apparatus	2.8	-	1.9	-	3.3	-	2.0	-	.5	-
3621	Motors and generators	2.8	-	1.7	-	3.5	-	1.7	-	.9	-
3622	Industrial controls	2.7	-	1.8	-	3.2	-	2.2	-	.1	-
363	Household appliances	6.0	-	3.8	-	6.5	-	3.4	-	2.0	-
3632	Household refrigerators and freezers	5.6	-	1.4	-	13.3	-	5.2	-	6.4	-
3633	Household laundry equipment	1.8	-	1.1	-	5.1	-	1.2	-	3.0	-
3634	Electric housewares and fans	9.0	-	6.9	-	5.5	-	4.3	-	.3	-
364	Electric lighting and wiring equipment	4.8	-	3.3	-	4.4	-	2.3	-	1.1	-
3641	Electric lamps	4.4	-	1.7	-	2.1	-	.9	-	.1	-
3642	Lighting fixtures	5.9	-	4.6	-	5.8	-	2.4	-	2.2	-
3643,4	Wiring devices	4.1	-	3.1	-	4.3	-	2.7	-	.7	-
365	Radio and TV receiving equipment	8.1	-	3.8	-	7.8	-	2.8	-	2.7	-
366	Communication equipment	2.4	-	1.7	-	2.1	-	1.2	-	.3	-
3661	Telephone and telegraph apparatus	2.1	-	1.6	-	1.4	-	.8	-	.2	-
3662	Radio and TV communication equipment	2.5	-	1.7	-	2.4	-	1.4	-	.4	-
367	Electronic components and accessories	5.3	-	3.9	-	4.7	-	3.1	-	.6	-
3671-3	Electron tubes	4.4	-	1.8	-	2.8	-	1.6	-	.4	-
3674,9	Other electronic components	5.4	-	4.2	-	5.0	-	3.3	-	.7	-
369	Miscellaneous electrical equipment and supplies	4.7	-	3.4	-	4.0	-	2.3	-	.4	-
3694	Engine electrical equipment	4.2	-	3.0	-	3.9	-	2.3	-	.4	-
37	TRANSPORTATION EQUIPMENT	5.3	-	3.3	-	5.2	-	2.2	-	1.8	-
371	Motor vehicles and equipment	4.9	-	2.7	-	5.3	-	1.8	-	2.5	-
3711	Motor vehicles	5.9	-	2.6	-	6.8	-	1.5	-	4.4	-
3712	Passenger car bodies	1.3	-	.6	-	2.1	-	.6	-	.5	-
3713	Truck and bus bodies	5.4	-	4.8	-	8.8	-	4.0	-	3.8	-
3714	Motor vehicle parts and accessories	4.1	-	2.3	-	3.9	-	1.8	-	1.1	-
372	Aircraft and parts	2.5	-	1.7	-	2.1	-	1.0	-	.5	-
3721	Aircraft	2.2	-	1.5	-	2.1	-	1.0	-	.6	-
3722	Aircraft engines and engine parts	2.1	-	1.4	-	1.6	-	.7	-	.3	-
3723,9	Other aircraft parts and equipment	3.5	-	2.7	-	2.9	-	1.5	-	.7	-
373	Ship and boat building and repairing	7.3	-	4.8	-	7.2	-	3.5	-	1.9	-
3731	Ship building and repairing	7.6	-	4.7	-	7.2	-	3.3	-	2.2	-
374	Railroad equipment	4.3	-	2.3	-	5.6	-	1.1	-	2.3	-
375,9	Other transportation equipment	13.3	-	9.3	-	11.3	-	6.8	-	2.0	-

See footnotes at end of table.

**ESTABLISHMENT DATA
LABOR TURNOVER**

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

[Per 100 employees]

SIC Code	Industry	Accession rates				Separation rates					
		Total		New hires		Total		Quits		Layoffs	
		Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P	Aug. 1977	Sept. 1977 ^P
DURABLE GOODS — Continued											
38	INSTRUMENTS AND RELATED PRODUCTS	2.9	3.0	2.4	2.5	3.5	3.4	2.2	2.0	0.5	0.5
381	Engineering and scientific instruments	2.9	-	2.7	-	2.6	-	2.0	-	.1	-
382	Mechanical measuring and control devices	3.3	-	2.7	-	3.8	-	2.5	-	.3	-
3821	Mechanical measuring devices	2.8	-	2.2	-	3.5	-	2.4	-	.3	-
3822	Automatic temperature controls	4.4	-	3.5	-	4.4	-	2.8	-	.4	-
383.5	Optical and ophthalmic goods	3.6	-	3.1	-	3.8	-	2.8	-	.3	-
384	Medical instruments and supplies	3.2	-	2.6	-	4.1	-	2.6	-	.4	-
386	Photographic equipment and supplies	1.0	-	.8	-	2.4	-	.9	-	.9	-
387	Watches, clocks, and watchcases	6.4	-	4.8	-	5.8	-	4.0	-	.7	-
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	7.2	6.7	5.7	5.3	6.5	6.8	4.0	4.1	1.2	1.2
391	Jewelry, silverware, and plated ware	7.2	-	5.1	-	5.0	-	3.2	-	.8	-
394	Toys and sporting goods	9.4	-	7.4	-	8.8	-	5.3	-	1.5	-
3941-3	Games, toys, dolls and play vehicles	10.9	-	9.2	-	10.1	-	6.2	-	1.1	-
3949	Sporting and athletic goods, nec	7.4	-	5.0	-	7.2	-	4.1	-	2.0	-
395	Pens, pencils, office and art supplies	5.4	-	4.5	-	5.1	-	3.4	-	.4	-
396	Costume jewelry and notions	7.1	-	5.9	-	5.9	-	3.6	-	1.3	-
393.9	Other manufacturing industries	6.0	-	4.7	-	5.8	-	3.6	-	1.2	-
NONDURABLE GOODS											
20	FOOD AND KINDRED PRODUCTS	9.5	8.1	7.2	6.1	8.0	9.6	5.2	5.3	1.8	3.2
201	Meat products	7.9	-	6.3	-	8.9	-	6.1	-	1.7	-
2011	Meat packing plants	4.7	-	2.6	-	5.4	-	2.5	-	1.9	-
2015	Poultry dressing plants	14.6	-	13.1	-	15.3	-	13.1	-	.7	-
204	Grain mill products	4.1	-	3.3	-	4.7	-	3.3	-	.7	-
2041	Flour and other grain mill products	4.0	-	3.6	-	4.1	-	3.4	-	.2	-
2042	Prepared feeds for animals and fowls	4.3	-	3.6	-	5.5	-	3.9	-	.9	-
205	Bakery products	4.0	-	3.5	-	3.9	-	3.0	-	.3	-
2051	Bread, cake, and related products	4.0	-	3.6	-	4.0	-	3.1	-	.3	-
2052	Cookies and crackers	4.2	-	3.1	-	3.4	-	2.2	-	.3	-
207	Confectionery and related products	9.4	-	4.6	-	6.9	-	3.8	-	2.2	-
2071	Confectionery products	11.7	-	5.2	-	7.4	-	4.6	-	2.2	-
208	Beverages	5.3	-	4.3	-	6.3	-	3.9	-	1.1	-
2082	Malt liquors	3.4	-	1.7	-	6.2	-	1.5	-	2.8	-
21	TOBACCO MANUFACTURES	9.8	-	3.8	-	3.3	-	2.1	-	.2	-
211	Cigarettes	1.0	-	.4	-	2.3	-	1.4	-	(¹)	-
212	Cigars	8.7	-	5.7	-	4.2	-	3.2	-	.5	-
22	TEXTILE MILL PRODUCTS	5.7	4.8	4.7	4.0	6.3	5.2	4.2	3.5	.8	.7
221	Weaving mills, cotton	3.9	-	3.0	-	4.8	-	3.3	-	.2	-
222	Weaving mills, synthetics	4.4	-	3.6	-	6.2	-	3.7	-	1.3	-
223	Weaving and finishing mills, wool	5.1	-	4.1	-	5.8	-	3.8	-	1.0	-
224	Narrow fabric mills	5.5	-	4.2	-	4.7	-	3.1	-	.5	-
225	Knitting mills	6.8	-	5.7	-	6.8	-	4.9	-	.8	-
2251	Women's hosiery, except socks	5.4	-	4.5	-	6.2	-	4.9	-	.4	-
2252	Hosiery, nec	6.9	-	6.4	-	6.6	-	5.8	-	.3	-
2254	Knit underwear mills	6.0	-	5.2	-	6.5	-	4.9	-	.2	-
226	Textile finishing, except wool	4.3	-	3.4	-	5.1	-	3.2	-	.9	-
227	Floor covering mills	6.3	-	5.5	-	5.4	-	3.8	-	.4	-
228	Yarn and thread mills	7.5	-	6.5	-	8.4	-	5.9	-	1.1	-
229	Miscellaneous textile goods	4.9	-	3.8	-	6.1	-	2.9	-	1.7	-
23	APPAREL AND OTHER TEXTILE PRODUCTS	7.4	5.9	5.3	4.4	7.1	6.2	4.7	4.0	1.4	1.4
231	Men's and boys' suits and coats	5.7	-	3.2	-	4.6	-	2.7	-	1.0	-
232	Men's and boys' furnishings	7.8	-	5.9	-	7.5	-	5.9	-	.7	-
2321	Men's and boys' shirts and nightwear	7.5	-	5.0	-	7.0	-	5.5	-	.7	-
2327	Men's and boys' separate trousers	6.5	-	5.0	-	6.5	-	5.4	-	.2	-
2328	Men's and boys' work clothing	9.1	-	7.7	-	9.0	-	7.4	-	.5	-
234	Women's and children's undergarments	8.7	-	6.5	-	7.5	-	5.8	-	.6	-
2341	Women's and children's underwear	9.1	-	7.1	-	8.1	-	6.5	-	.4	-
2342	Corsets and allied garments	7.0	-	4.7	-	5.7	-	3.3	-	1.4	-
26	PAPER AND ALLIED PRODUCTS	3.3	3.0	2.5	2.4	4.1	3.9	2.3	2.1	.9	1.0
261,2,6	Paper and pulp mills	1.9	-	1.4	-	3.1	-	1.7	-	.6	-
263	Paperboard mills	2.1	-	1.5	-	3.2	-	1.9	-	.7	-

See footnotes at end of table.

**ESTABLISHMENT DATA
LABOR TURNOVER**

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

[Per 100 employees]

SIC Code	Industry	Accession rates				Separation rates					
		Total		New hires		Total		Quits		Layoffs	
		Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p	Aug. 1977	Sept. 1977 ^p
	NONDURABLE GOODS—Continued										
	PAPER AND ALLIED PRODUCTS—Continued										
264	Miscellaneous converted paper products	4.0	-	3.1	-	4.4	-	2.3	-	1.1	-
2643	Bags, except textile bags	4.4	-	3.9	-	4.7	-	2.8	-	.9	-
265	Paperboard containers and boxes	4.3	-	3.3	-	5.0	-	3.0	-	.9	-
2651,2	Folding and setup paperboard boxes	5.5	-	3.9	-	5.4	-	2.8	-	1.4	-
2653	Corrugated and solid fiber boxes	3.5	-	2.9	-	4.3	-	2.9	-	.4	-
27	PRINTING AND PUBLISHING	4.0	3.8	3.3	3.3	4.0	3.9	2.8	2.7	0.6	0.6
28	CHEMICALS AND ALLIED PRODUCTS	2.1	1.9	1.6	1.5	2.6	2.4	1.5	1.2	.3	.5
281	Industrial chemicals	1.5	-	1.2	-	2.2	-	1.3	-	.1	-
282	Plastics materials and synthetics	1.5	-	1.1	-	2.2	-	1.2	-	.3	-
2821	Plastics materials and resins	2.1	-	1.7	-	2.9	-	1.8	-	.4	-
2823,4	Synthetic fibers .....	.9	-	.6	-	1.6	-	.8	-	.2	-
283	Drugs	1.8	-	1.5	-	2.4	-	1.4	-	.4	-
2834	Pharmaceutical preparations	1.9	-	1.6	-	2.4	-	1.4	-	.5	-
284	Soap, cleaners, and toilet goods	4.0	-	2.6	-	3.2	-	1.5	-	.7	-
2841	Soap and other detergents	2.5	-	1.6	-	2.0	-	1.2	-	.2	-
2844	Toilet preparations	5.4	-	3.3	-	3.8	-	1.7	-	.8	-
285	Paints and allied products	2.5	-	2.1	-	3.8	-	2.5	-	.5	-
286,9	Other chemical products	3.0	-	2.4	-	3.5	-	2.4	-	.3	-
29	PETROLEUM AND COAL PRODUCTS	2.4	2.4	2.1	2.2	3.6	2.9	2.0	1.5	.9	.6
291	Petroleum refining	1.5	-	1.3	-	3.0	-	1.4	-	.9	-
295,9	Other petroleum and coal products	5.0	-	4.4	-	5.8	-	3.9	-	.8	-
30	RUBBER AND PLASTICS PRODUCTS, NEC	5.9	5.1	4.8	4.3	6.4	5.6	4.0	3.5	1.0	.9
301	Tires and inner tubes	1.7	-	.9	-	2.7	-	1.2	-	.6	-
302,3,6	Other rubber products	4.6	-	3.7	-	5.4	-	3.2	-	.9	-
307	Miscellaneous plastics products	7.8	-	6.6	-	8.1	-	5.3	-	1.2	-
31	LEATHER AND LEATHER PRODUCTS	9.8	7.1	6.6	6.0	8.7	8.1	6.1	5.3	1.3	1.7
311	Leather tanning and finishing	6.9	-	4.7	-	7.3	-	4.2	-	2.1	-
314	Footwear, except rubber	11.0	-	7.1	-	9.5	-	7.1	-	1.1	-
	NONMANUFACTURING										
10	METAL MINING	3.5	3.1	2.7	2.2	8.3	4.3	3.7	2.3	3.4	1.0
101	Iron ores	4.7	-	1.6	-	22.6	-	3.3	-	17.4	-
102	Copper ores	2.0	-	1.4	-	5.3	-	2.7	-	1.5	-
11,12	COAL MINING	1.6	1.8	1.2	1.3	2.7	2.3	1.2	1.7	.8	(¹)
12	Bituminous coal and lignite mining	1.6	-	1.2	-	2.7	-	1.2	-	.8	-
481	COMMUNICATION: Telephone communication	1.0	-	-	-	1.0	-	.6	-	.2	-
482	Telegraph communication ²	1.0	-	-	-	.8	-	.5	-	.1	-

¹ Less than 0.05.

p = preliminary.

² Data relate to all employees except messengers.

ESTABLISHMENT DATA
SEASONALLY ADJUSTED LABOR TURNOVER

D-3. Labor turnover rates in manufacturing, 1965 to date, seasonally adjusted

[Per 100 employees]

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions												
1965	4.1	4.2	4.3	4.1	4.1	4.2	4.2	4.3	4.5	4.4	4.7	4.9
1966	4.9	5.0	5.3	5.1	5.0	4.9	4.9	5.0	5.0	4.9	4.7	4.7
1967	4.5	4.4	4.3	4.3	4.4	4.5	4.4	4.3	4.4	4.4	4.5	4.6
1968	4.4	4.4	4.6	4.6	4.6	4.5	4.5	4.7	4.6	4.8	4.9	4.9
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	4.3	4.4	4.2	4.3	4.4	4.4	4.5	4.5	4.9
1973	5.0	5.1	5.0	4.8	4.7	4.6	4.6	4.7	4.6	4.8	4.9	4.7
1974	4.6	4.5	4.5	4.6	4.6	4.3	4.3	4.1	3.9	3.6	3.1	3.1
1975	3.1	3.2	3.2	3.7	3.6	3.7	4.0	3.9	3.8	3.7	3.7	3.9
1976	4.1	4.2	4.4	4.1	4.0	3.8	3.8	3.8	3.6	3.5	3.8	4.0
1977	4.0	4.6	4.3	4.1	4.1	3.9	3.9	3.7	3.7 ^p			
New hires												
1965	2.9	3.0	3.1	2.9	2.9	3.0	3.0	3.1	3.1	3.3	3.5	3.7
1966	3.7	3.8	4.1	4.0	4.0	3.9	3.8	3.7	3.7	3.9	3.7	3.6
1967	3.4	3.4	3.2	3.1	3.1	3.3	3.2	3.1	3.3	3.3	3.4	3.5
1968	3.3	3.3	3.4	3.5	3.5	3.4	3.4	3.5	3.6	3.6	3.6	3.7
1969	3.7	3.8	3.9	3.8	3.7	3.9	3.6	3.5	3.7	3.6	3.5	3.5
1970	3.4	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	3.0	3.1	3.2	3.2	3.1	3.2	3.2	3.4	3.4	3.6	3.8
1973	4.0	4.2	4.1	3.9	3.9	3.8	3.7	3.7	3.6	3.8	3.9	3.8
1974	3.7	3.6	3.6	3.6	3.5	3.3	3.3	3.1	2.9	2.6	2.2	1.9
1975	1.6	1.6	1.5	1.7	1.8	1.9	2.3	2.3	2.2	2.2	2.2	2.5
1976	2.6	2.8	3.0	2.8	2.7	2.7	2.5	2.5	2.4 ^p	2.3	2.4	2.5
1977	2.7	2.9	3.0	3.0	3.0	2.8	2.8	2.7	2.6 ^p			
Total separations												
1965	3.8	3.8	3.8	4.0	4.0	4.0	3.9	4.4	4.1	4.3	4.3	4.5
1966	4.3	4.3	4.5	4.5	4.6	4.7	4.9	4.8	4.6	4.6	4.8	4.9
1967	4.8	4.9	4.9	4.7	4.6	4.6	4.5	4.3	4.5	4.5	4.4	4.5
1968	4.7	4.6	4.5	4.5	4.4	4.5	4.6	4.7	4.7	4.6	4.6	4.6
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	4.0	4.3	4.2	4.5	4.4	4.1	4.0	4.2	4.2	4.5
1973	4.5	4.6	4.6	4.5	4.6	4.6	4.7	4.6	4.5	4.7	4.7	4.7
1974	4.9	4.9	4.8	4.7	4.6	4.6	4.5	4.5	4.5	4.9	5.1	4.9
1975	5.2	5.0	4.5	4.4	4.6	4.3	3.9	3.8	3.9	3.8	3.8	3.6
1976	3.5	3.6	3.8	3.8	3.8	3.9	3.9	4.0	4.1 ^p	4.0	3.6	3.6
1977	3.9	4.1	3.7	3.8	3.8	3.9	3.9	4.0	4.0 ^p			
Quits												
1965	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.1	2.2
1966	2.3	2.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7
1967	2.5	2.5	2.4	2.4	2.3	2.4	2.2	2.2	2.3	2.3	2.3	2.4
1968	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.5	2.6	2.6
1969	2.7	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6
1970	2.5	2.5	2.3	2.3	2.1	2.1	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	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.6
1973	2.7	2.9	2.8	2.8	2.7	2.7	2.8	2.7	2.6	2.8	2.8	2.7
1974	2.7	2.7	2.7	2.7	2.6	2.5	2.4	2.3	2.1	2.0	1.8	1.6
1975	1.4	1.3	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.4	1.6	1.6
1976	1.6	1.7	1.8	1.8	1.7	1.8	1.7	1.7	1.6	1.5	1.5	1.7
1977	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8 ^p			
Layoffs												
1965	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.7	1.4	1.4	1.4	1.4
1966	1.2	1.1	1.1	1.1	1.1	1.2	1.5	1.2	1.0	1.1	1.2	1.3
1967	1.4	1.5	1.6	1.5	1.4	1.3	1.4	1.3	1.3	1.3	1.2	1.2
1968	1.4	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1
1969	1.0	1.1	1.1	1.0	1.1	1.3	1.1	1.2	1.2	1.3	1.3	1.4
1970	1.5	1.7	1.8	1.9	1.9	1.9	1.6	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	1.1	1.4	1.3	1.1	1.0	1.0	.9	.9
1973	.8	.7	.8	.8	.8	.8	.8	.9	.9	.9	.9	1.0
1974	1.3	1.2	1.1	1.0	1.1	1.2	1.2	1.3	1.5	2.0	2.4	2.4
1975	2.9	2.9	2.6	2.4	2.5	2.2	1.7	1.6	1.8	1.7	1.5	1.3
1976	1.1	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.7	1.6	1.3	1.1
1977	1.3	1.4	1.0	1.0	1.1	1.2	1.3	1.3	1.4 ^p			

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		Total		Quits		Layoffs	
	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P
ALABAMA:										
Birmingham	2.9	3.1	2.0	2.1	2.9	4.0	1.5	1.8	0.6	1.3
Mobile ¹	7.9	10.7	2.2	2.5	8.4	6.7	1.8	3.1	5.9	2.7
ALASKA	31.1	9.1	27.2	7.8	15.4	27.7	7.8	12.8	6.9	13.8
ARIZONA	5.4	6.2	3.9	4.9	4.7	5.6	2.4	3.5	.7	1.0
Phoenix	5.7	5.8	4.0	4.5	4.7	5.5	2.2	3.4	.8	.9
ARKANSAS	6.8	9.3	5.9	7.5	7.5	9.3	4.8	7.3	1.1	.5
Fort Smith	8.2	9.6	7.0	8.5	8.8	14.3	6.5	11.7	.1	.6
Little Rock—North Little Rock	4.9	7.3	4.6	6.3	4.8	6.7	3.4	4.8	.1	.2
Pine Bluff	5.6	4.5	4.2	4.1	6.1	5.9	3.9	4.7	1.3	.9
COLORADO²	4.8	5.0	4.3	4.4	4.1	6.1	2.5	4.2	.7	.7
Denver—Boulder	4.0	4.9	3.7	4.5	3.8	5.8	2.3	4.0	.5	.3
CONNECTICUT	2.0	2.8	1.5	2.0	2.3	3.1	1.0	1.7	.5	.6
Hartford	1.8	1.8	1.2	1.4	2.4	1.9	1.4	1.1	.4	.2
DELAWARE¹	2.1	8.4	1.3	1.8	2.6	7.9	.7	1.2	1.3	5.9
Wilmington	1.9	8.1	1.1	1.5	2.5	7.9	.7	1.0	1.3	6.1
DISTRICT OF COLUMBIA:										
Washington SMSA	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
FLORIDA	5.4	6.0	4.7	5.1	5.2	5.6	2.9	3.5	1.2	.8
Fort Lauderdale—Hollywood	5.3	6.7	4.8	6.2	4.9	5.7	3.4	4.1	.4	.3
Jacksonville	5.1	7.0	4.6	5.3	5.2	5.3	2.2	2.8	1.7	1.2
Miami	5.3	5.9	4.6	4.9	4.6	5.7	2.8	3.1	.9	1.1
Orlando	5.2	5.6	3.7	4.2	5.6	4.4	2.4	2.7	2.2	.9
Pensacola	1.6	1.9	1.5	1.9	1.6	3.1	1.2	2.2	(³)	(³)
Tampa—St. Petersburg	7.0	6.1	6.3	4.5	6.4	5.8	3.9	3.6	1.2	1.1
West Palm Beach—Boca Raton	3.0	4.2	2.9	3.6	2.8	2.9	1.5	2.0	.7	(³)
GEORGIA	4.2	5.4	3.5	4.6	3.8	5.0	2.6	3.6	.3	.4
Atlanta ⁴	4.1	5.0	3.3	4.4	3.2	4.2	1.8	2.9	.5	.3
HAWAII⁵	2.3	2.1	1.4	1.7	1.7	2.7	1.0	1.5	.3	.5
IDAHO⁶	6.5	7.4	5.2	7.0	5.5	8.1	3.2	7.0	1.1	.5
ILLINOIS:										
Chicago SMSA	3.0	3.4	2.8	2.7	3.4	4.3	1.8	2.4	.5	.7
INDIANA	2.9	4.3	2.1	3.3	2.9	4.7	1.4	2.8	.6	.8
Indianapolis ⁷	2.2	3.7	1.6	2.6	2.0	3.5	1.0	2.4	.1	.2
IOWA²	3.2	4.2	2.3	3.4	2.8	5.6	1.6	3.0	.6	1.8
Cedar Rapids ²	3.2	3.0	1.8	2.1	2.1	2.8	1.0	1.4	.8	1.0
Des Moines ²	3.4	4.3	2.7	3.7	3.5	6.6	1.8	2.8	.7	2.6
KANSAS	4.4	6.3	3.6	5.4	4.4	6.2	3.1	4.7	.5	.5
Topeka	2.9	2.9	2.3	2.7	4.0	5.6	1.5	3.9	2.0	1.3
Wichita	4.6	6.7	3.7	5.6	3.8	5.0	2.9	3.9	(³)	(³)
KENTUCKY	3.9	4.7	2.7	3.4	4.5	5.1	2.0	3.1	1.5	.9
Louisville	2.8	2.9	1.5	1.9	2.5	3.2	.9	1.6	.6	.4
LOUISIANA:										
New Orleans	4.1	4.8	3.6	4.1	4.9	7.0	2.4	4.2	1.3	1.5
MAINE	6.2	8.0	4.7	6.6	5.5	7.1	3.5	4.9	1.1	1.1
Portland	3.2	3.8	2.5	3.5	3.4	4.9	2.3	2.8	.3	.7
MARYLAND	3.2	4.9	1.9	2.4	4.2	4.4	1.2	1.9	2.3	1.7
Baltimore	2.8	5.2	1.5	2.0	4.6	4.5	1.0	1.5	2.9	2.1
MASSACHUSETTS	4.0	6.1	3.0	3.2	3.2	3.9	1.5	2.4	.8	.7
Boston	3.5	7.0	2.7	2.7	2.6	3.5	1.2	2.1	.5	.6
MICHIGAN	3.1	(*)	2.1	(*)	5.1	(*)	1.0	(*)	3.3	(*)
Detroit	3.5	(*)	2.5	(*)	4.0	(*)	1.2	(*)	1.8	(*)
Flint	2.4	(*)	1.9	(*)	13.0	(*)	.5	(*)	11.6	(*)
Grand Rapids	3.0	(*)	2.0	(*)	4.1	(*)	1.4	(*)	1.3	(*)
Lansing—East Lansing	4.8	(*)	3.3	(*)	36.1	(*)	.8	(*)	32.3	(*)

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		Total		Quits		Layoffs	
	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P
MINNESOTA	4.1	4.7	3.2	3.8	3.1	4.4	1.7	2.9	0.8	0.8
Minneapolis—St. Paul	2.9	3.5	2.4	2.9	2.4	3.6	1.4	2.3	.4	.6
MISSISSIPPI:										
Jackson	5.9	4.2	3.1	2.8	4.4	4.4	2.5	3.3	1.2	.2
MISSOURI ²	3.6	4.5	2.8	3.7	3.2	5.8	1.8	3.2	.6	1.7
Kansas City ²	3.5	4.5	3.0	4.0	3.0	8.3	1.9	3.2	.3	4.0
St. Louis ²	2.7	3.3	2.0	2.5	2.4	4.0	1.0	2.2	.6	.9
MONTANA	3.4	4.4	3.2	4.0	2.7	4.7	1.5	2.7	.6	.5
NEBRASKA	3.8	5.3	3.1	4.7	4.1	6.2	2.6	4.5	.9	.7
NEVADA	3.9	8.1	3.2	7.1	7.2	8.7	1.9	5.4	4.1	.3
NEW HAMPSHIRE	3.7	5.1	2.6	3.9	3.6	4.7	2.1	3.2	.8	.8
NEW JERSEY:										
Camden ⁸	4.3	3.9	2.2	2.5	3.7	3.5	1.0	1.7	1.9	.5
Hackensack	5.2	5.5	2.5	3.5	8.0	4.5	1.8	2.3	5.0	1.1
Jersey City	4.0	4.4	2.5	2.7	5.2	4.2	1.1	1.5	3.4	1.9
Newark	3.0	3.8	1.9	2.6	3.6	4.1	1.0	2.0	1.6	1.0
New Brunswick—Perth Amboy—Sayreville	4.7	4.0	2.9	3.1	4.0	4.6	1.2	2.3	1.6	.9
Paterson—Clifton—Passaic	4.8	5.8	2.7	3.5	5.8	6.4	1.5	2.7	3.3	2.1
Trenton	2.6	4.1	1.6	2.8	3.6	3.0	.8	1.4	1.5	.8
NEW YORK	4.5	4.8	2.4	2.9	4.9	4.4	1.2	1.9	2.9	1.5
Albany—Schenectady—Troy	3.0	3.3	1.8	1.9	2.7	3.3	.7	1.4	1.1	.9
Binghamton	2.8	6.2	1.9	2.6	5.7	4.6	1.0	2.0	3.9	1.8
Buffalo	2.9	3.0	1.8	1.6	3.9	3.8	.7	1.2	2.2	1.5
Elmira	2.5	2.7	1.7	1.9	2.2	3.2	.7	2.3	.7	.1
Monroe County ⁹	1.8	1.7	1.4	1.4	2.3	2.4	.7	1.4	.8	.5
Nassau—Suffolk ¹⁰	4.7	6.0	3.0	4.4	5.2	5.4	1.9	3.1	2.2	1.2
New York and Nassau—Suffolk	5.2	5.8	2.6	3.3	6.1	4.8	1.3	1.9	4.0	1.9
New York SMSA ¹⁰	5.3	5.8	2.5	3.1	6.3	4.7	1.2	1.6	4.4	2.1
New York City ¹¹	5.6	6.1	2.6	3.2	6.8	4.9	1.2	1.6	4.8	2.3
Rochester	3.3	2.9	2.4	2.3	2.5	3.1	.8	1.8	.8	.6
Syracuse	3.2	3.7	1.9	2.7	3.1	3.7	.8	1.8	1.7	1.1
Utica—Rome	4.6	4.1	1.6	2.5	5.1	4.1	1.2	1.9	3.5	1.5
Westchester County ¹¹	3.8	3.4	2.4	2.5	3.2	3.5	1.0	1.7	1.5	.9
NORTH CAROLINA	4.5	6.3	3.8	5.2	4.3	6.2	3.2	4.7	.3	.3
Charlotte—Gastonia	4.6	6.4	4.2	5.6	4.7	6.6	3.7	5.3	.1	.2
Greensboro—Winston-Salem—High Point	4.5	5.7	3.9	5.1	4.3	6.2	3.1	4.9	.4	.2
NORTH DAKOTA	4.5	6.2	3.2	4.3	4.1	6.6	2.5	4.5	.8	1.4
Fargo—Moorhead	4.2	4.1	3.4	3.9	2.9	4.2	2.2	3.1	.1	.8
OHIO	2.6	3.7	1.8	2.5	2.6	3.5	1.0	1.6	.8	1.0
Akron	1.9	2.0	1.2	1.2	1.4	2.6	.6	.9	.2	1.3
Canton	2.4	3.2	1.4	1.8	2.6	2.9	.8	1.2	.6	.5
Cincinnati	2.4	5.4	1.9	2.1	2.1	5.8	1.1	1.8	.3	3.4
Cleveland	2.6	3.0	1.9	2.3	2.5	2.9	1.3	1.5	.3	.5
Columbus	2.9	2.5	2.0	1.9	3.0	3.1	1.0	1.3	1.2	1.1
Dayton	2.1	3.1	1.6	2.5	2.4	2.7	1.0	1.7	.5	.2
Toledo	3.4	2.4	2.0	1.5	2.5	2.9	1.0	1.4	.8	.7
Youngstown—Warren	2.3	3.2	1.0	1.0	4.8	3.2	.4	.7	3.5	1.2
OKLAHOMA	6.0	8.1	5.3	7.2	6.2	8.0	4.4	6.2	.7	.6
Oklahoma City	5.4	8.2	4.8	7.4	5.6	6.8	4.0	5.1	.7	.7
Tulsa ¹²	5.8	5.2	5.3	4.7	5.9	5.3	3.9	4.0	.8	.3
OREGON ¹	4.5	5.5	3.7	4.6	4.2	5.0	2.1	3.1	1.1	1.0
Portland ¹	4.6	5.5	3.6	4.5	4.4	4.6	1.9	2.8	1.6	1.0
PENNSYLVANIA	3.6	3.6	1.6	2.2	3.5	4.0	1.0	1.8	1.9	1.3
Allentown—Bethlehem—Easton	3.6	3.6	1.6	2.1	4.0	3.9	.9	1.7	2.4	1.6
Alltoona	4.6	5.8	1.3	2.4	6.8	4.3	1.8	2.0	4.5	1.6
Erie	3.3	4.3	1.5	2.7	3.4	4.2	1.0	2.1	1.7	1.1
Harrisburg	6.4	3.2	2.6	2.5	4.1	3.9	1.4	2.4	2.1	.8
Johnstown	2.1	3.2	1.4	1.7	3.5	7.9	1.0	1.5	2.3	5.1
Lancaster	2.6	3.9	2.1	2.7	2.5	4.4	1.6	3.2	.5	.6

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA LABOR TURNOVER

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

[Per 100 employees]

State and area	Accession rates				Separation rates					
	Total		New hires		Total		Quits		Layoffs	
	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P	July 1977	Aug. 1977 ^P
PENNSYLVANIA—Continued										
Northeast Pennsylvania	5.8	5.3	1.3	2.3	8.0	5.9	1.0	1.9	6.6	3.6
Philadelphia SMSA	2.9	3.1	1.6	2.0	3.0	3.6	.9	1.6	1.5	1.0
Pittsburgh	2.7	2.5	1.0	1.3	2.9	3.4	.5	1.2	1.6	1.3
Reading	4.5	4.5	2.5	2.9	4.7	4.7	1.4	2.7	2.6	1.3
Scranton ¹³	3.2	4.7	1.6	2.4	4.1	4.4	1.2	2.0	2.5	2.1
Wilkes-Barre—Hazleton ¹³	7.3	4.4	1.0	1.7	10.7	5.1	.9	1.7	9.3	2.9
Williamsport	3.0	6.0	1.0	2.2	4.3	3.0	.7	1.4	3.0	1.0
York	3.5	5.2	2.3	3.4	3.7	4.2	1.4	2.8	1.7	.6
RHODE ISLAND										
Providence—Warwick—Pawtucket	4.9	7.0	3.5	5.7	4.9	5.6	2.3	3.6	1.3	1.0
.....	5.0	6.8	3.4	5.5	5.4	5.3	2.3	3.5	1.8	.8
SOUTH CAROLINA										
Charleston—North Charleston	4.2	4.8	3.1	4.1	4.4	5.3	2.6	3.8	.8	.3
Columbia	3.6	5.0	3.2	4.4	3.8	5.2	2.2	3.6	.3	(³)
Greenville—Spartanburg	4.0	5.3	3.7	4.9	3.2	4.1	2.2	3.1	.1	(³)
.....	3.9	5.4	3.3	4.8	4.0	5.9	2.7	4.4	.4	.3
SOUTH DAKOTA										
Sioux Falls	5.0	5.6	3.9	4.6	3.9	6.6	2.6	4.6	.8	1.2
.....	4.9	5.4	3.3	3.6	4.6	6.2	2.1	3.2	2.2	2.1
TENNESSEE:										
Memphis	4.3	5.0	3.5	4.0	4.2	5.1	2.0	2.9	1.1	.9
TEXAS:										
Dallas—Fort Worth	5.2	6.5	4.8	6.0	5.0	8.2	3.7	5.3	.4	1.6
Houston	4.1	5.2	3.8	4.8	3.8	5.1	2.6	3.7	.2	.2
San Antonio	4.6	6.0	4.2	5.5	4.9	6.4	3.4	5.2	.4	.4
UTAH⁵										
Salt Lake City—Ogden ⁵	4.5	6.1	3.8	5.2	4.0	6.4	2.8	4.2	.4	1.1
.....	4.2	5.3	3.7	4.9	3.5	5.4	2.6	4.2	.2	.3
VERMONT										
Burlington	5.1	5.0	2.7	3.8	5.0	4.4	1.6	2.2	2.7	1.4
Springfield	2.4	4.4	1.9	3.2	2.4	3.2	.7	1.2	1.3	1.8
.....	3.1	2.8	1.9	2.3	2.9	2.2	.7	1.0	1.5	.3
VIRGINIA										
Richmond	3.5	4.8	2.8	3.4	3.5	4.5	2.0	3.0	.5	.4
.....	2.1	2.6	1.3	1.9	1.3	2.1	.8	1.3	(³)	.1
WASHINGTON:										
Seattle—Everett ¹⁴	4.1	4.4	2.9	3.2	2.6	3.3	1.3	1.7	.8	1.0
WISCONSIN										
Milwaukee	3.5	4.2	2.3	3.1	2.8	4.5	1.3	2.9	.8	.7
.....	2.7	3.4	1.7	2.4	2.5	3.7	1.0	2.2	.8	.5
WYOMING										
.....	7.7	6.7	6.9	5.9	7.6	11.6	5.6	8.5	.2	.8

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		
	SEPT. 1976	AUG. 1977 R	SEPT. 1977 P	SEPT. 1976	AUG. 1977 R	SEPT. 1977 P	SEPT. 1976	AUG. 1977 R	SEPT. 1977 P
ALABAMA	1,491.2	1,537.9	1,532.1	95.2	89.0	85.4	6.4	5.8	5.6
Birmingham	352.3	367.8	363.3	21.9	20.8	19.7	6.2	5.6	5.4
Huntsville	122.9	125.9	126.3	8.7	6.6	6.7	7.0	5.2	5.3
Mobile	168.0	171.9	172.2	10.4	11.1	10.7	6.2	6.4	6.2
Montgomery	102.7	108.0	107.2	5.5	4.7	4.9	5.4	4.4	4.6
Tuscaloosa	51.5	51.6	52.0	3.0	2.9	2.9	5.8	5.4	5.5
ALASKA	168.8	147.7	145.7	11.0	14.9	13.6	6.5	10.1	9.3
ARIZONA	938.8	951.0	961.3	80.2	68.6	66.6	8.5	7.2	6.9
Phoenix	545.4	554.1	560.5	47.3	36.3	33.9	8.7	6.5	6.1
Tucson	178.1	180.0	179.5	12.3	13.1	13.0	6.9	7.3	7.3
ARKANSAS	884.8	920.3	921.6	52.7	47.9	45.7	6.0	5.2	5.0
Fayetteville-Springdale	64.7	67.0	67.6	2.7	2.6	2.4	4.2	3.8	3.6
Fort Smith ¹	75.4	79.0	79.8	4.6	4.1	4.2	6.1	5.2	5.2
Little Rock-North Little Rock	167.2	176.2	174.5	8.0	7.1	6.4	4.8	4.0	3.7
Pine Bluff	33.7	33.8	34.0	2.3	1.9	1.6	6.3	5.6	4.6
CALIFORNIA	9,841.3	10,073.2	10,127.6	807.9	720.3	675.2	8.2	7.2	6.7
Anaheim-Santa Ana-Garden Grove	827.4	863.8	864.3	45.6	37.0	35.2	5.5	4.3	4.1
Bakersfield	152.5	161.3	157.5	12.4	11.6	9.8	8.1	7.2	6.2
Fresno	276.2	255.3	294.2	18.3	16.2	15.9	6.6	6.3	5.4
Los Angeles-Long Beach	3,282.9	3,323.0	3,331.4	272.8	229.8	224.8	8.3	6.9	6.7
Modesto	126.1	136.0	135.1	8.5	9.5	7.4	6.7	7.0	5.5
Oxnard-Simi Valley-Ventura	177.6	190.8	189.3	13.4	15.2	13.0	7.5	8.0	6.9
Riverside-San Bernardino-Ontario	478.3	479.9	492.8	45.6	42.6	40.5	9.5	8.9	8.2
Sacramento	399.4	426.7	426.6	29.3	28.2	24.7	7.3	6.6	5.8
Salinas-Seaside-Monterey	115.9	123.1	123.8	6.9	7.2	5.9	6.0	5.8	4.8
San Diego	655.3	664.8	667.5	73.0	62.7	61.1	11.1	9.4	9.2
San Francisco-Oakland	1,526.0	1,522.2	1,518.1	145.5	126.4	117.3	9.5	8.3	7.7
San Jose	575.7	592.3	590.8	35.5	30.6	28.5	6.2	5.2	4.8
Santa Barbara-Santa Maria-Lompoc	126.4	132.3	130.7	8.8	7.9	7.3	7.0	6.0	5.6
Santa Rosa	102.6	109.2	108.3	9.8	8.7	7.5	9.6	8.0	6.9
Stockton	152.8	159.9	162.8	10.0	10.2	8.6	6.5	6.4	5.3
Vallejo-Fairfield-Napa	110.0	115.6	115.9	7.3	7.1	6.8	6.6	6.1	5.9
COLORADO	1,239.4	1,256.5	1,248.8	66.8	68.4	65.4	5.4	5.4	5.2
Denver-Boulder	727.8	732.8	735.0	42.1	42.7	39.9	5.8	5.6	5.4
CONNECTICUT	1,476.9	1,471.1	1,466.7	133.4	100.2	87.9	9.0	6.8	6.0
Bridgeport	184.7	178.0	178.4	19.2	13.0	11.3	10.4	7.3	6.3
Hartford	350.3	348.3	348.8	30.4	23.2	19.3	8.7	6.7	5.5
New Britain	69.3	70.4	68.6	7.1	5.2	4.2	10.2	7.5	6.1
New Haven-West Haven	197.1	193.1	193.4	19.1	15.3	13.9	9.7	7.9	7.2
Stamford	107.8	109.2	108.3	7.6	5.3	4.8	7.1	4.9	4.5
Waterbury	106.6	104.9	104.4	10.4	7.7	7.5	9.7	7.3	7.2
DELAWARE	259.3	259.2	255.3	22.1	19.9	16.9	8.5	7.7	6.6
Wilmington ¹	226.9	225.0	222.8	19.6	17.2	14.5	8.6	7.7	6.5
DISTRICT OF COLUMBIA	332.6	339.8	334.9	29.1	27.7	25.6	8.7	8.2	7.6
Washington SMSA ¹	1,456.1	1,491.8	1,473.6	72.7	69.3	64.0	5.0	4.6	4.3
FLORIDA	3,403.0	3,441.5	3,450.3	297.5	236.2	232.2	8.7	6.9	6.7
Fort Lauderdale-Hollywood	332.2	342.8	340.6	34.2	25.7	26.2	10.3	7.5	7.7
Jacksonville	293.2	303.1	302.8	18.6	16.3	16.4	6.4	5.4	5.4
Miami	662.8	653.4	652.8	60.0	45.7	45.1	9.1	7.0	6.9
Orlando	268.5	273.5	272.2	23.7	18.9	18.6	8.8	6.9	6.8
Pensacola	106.7	113.0	113.1	5.9	4.9	4.9	5.5	4.3	4.3
Tampa-St. Petersburg	535.3	526.7	536.2	48.5	35.1	32.8	9.1	6.7	6.1
West Palm Beach-Boca Raton	186.8	186.4	187.9	19.6	15.2	14.8	10.5	8.1	7.9
GEORGIA	2,240.3	2,279.0	2,279.0	170.6	140.7	132.4	7.6	6.2	5.8
Atlanta	888.3	889.7	894.3	64.8	50.8	47.8	7.2	5.7	5.3
Augusta ¹	116.1	118.7	118.4	9.4	8.1	7.6	8.1	6.8	6.4
Columbus ¹	79.6	83.4	81.4	6.4	5.8	5.3	8.0	7.0	6.5
Macon	102.2	100.1	99.3	11.4	7.9	8.2	11.1	7.9	8.3
Savannah	82.9	83.7	82.5	6.9	6.2	5.8	8.3	7.4	7.0

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		
	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P
HAWAII	392.4	403.5	387.6	39.1	29.0	30.1	10.0	7.2	7.8
Honolulu	313.9	321.6	309.1	31.1	22.5	23.4	9.9	7.0	7.6
IDAHO	377.5	400.6	395.0	17.5	19.8	16.3	4.6	5.0	4.1
Boise City	71.5	77.7	77.6	2.4	2.2	2.1	3.4	2.9	2.6
ILLINOIS	5,093.7	5,223.0	5,177.0	304.6	253.8	233.8	6.0	4.9	4.5
Bloomington—Normal	58.9	58.2	59.3	2.0	1.8	1.6	3.3	3.1	2.7
Champaign—Urbana—Rantoul	77.5	70.8	73.1	2.8	2.7	2.4	3.6	3.8	3.2
Chicago	3,192.4	3,260.6	3,228.6	197.8	147.2	140.3	6.2	4.5	4.3
Davenport—Rock Island—Moline ¹	177.4	174.1	174.3	7.7	6.8	6.0	4.3	3.9	3.5
Decatur	60.7	58.0	56.3	3.9	3.6	3.1	6.4	6.2	5.2
Peoria	172.4	170.9	169.8	6.8	6.8	6.9	3.9	4.8	4.1
Rockford	136.1	129.2	128.6	8.7	8.7	7.7	6.4	6.7	6.0
Springfield	92.3	97.4	92.8	4.3	4.4	3.8	4.6	4.5	4.1
INDIANA	2,441.2	2,482.5	2,482.9	120.7	108.4	103.6	4.9	4.4	4.2
Evansville	131.5	134.3	132.4	6.1	5.4	5.4	4.7	4.0	4.0
Fort Wayne	179.2	181.8	181.6	8.1	6.4	6.0	4.5	3.5	3.3
Gary—Hammond—East Chicago	278.6	288.6	282.4	14.9	13.6	12.9	5.4	4.7	4.6
Indianapolis	555.8	565.8	565.4	32.3	29.2	28.3	5.8	5.2	5.0
Muncie	54.6	55.2	55.8	2.5	2.0	2.4	4.5	3.7	4.3
South Bend	132.5	132.5	133.3	5.6	4.4	4.4	4.2	3.3	3.3
Terre Haute	75.7	75.7	77.6	3.6	2.8	2.7	4.8	3.7	3.5
IOWA	1,349.7	1,370.2	1,362.0	42.2	38.8	31.0	3.1	2.8	2.3
Cedar Rapids	78.5	78.9	78.9	2.2	2.1	1.9	2.9	2.6	2.4
Des Moines	163.3	167.0	164.8	6.2	5.2	4.1	3.8	3.1	2.5
Dubuque	41.3	42.2	41.4	1.8	1.8	1.4	4.4	4.4	3.5
Sioux City ¹	57.0	56.1	55.7	1.7	1.7	1.4	3.0	3.0	2.5
Waterloo—Cedar Falls	61.6	61.2	61.5	2.8	2.0	1.7	4.6	3.3	2.7
KANSAS	1,091.3	1,120.3	1,120.4	43.3	42.4	41.9	4.0	3.8	3.7
Topeka	85.1	86.5	87.1	3.9	3.2	3.4	4.6	3.7	3.9
Wichita	191.2	194.9	193.6	9.6	9.1	8.2	5.0	4.6	4.2
KENTUCKY	1,483.7	1,501.3	1,517.2	70.1	68.5	62.6	4.7	4.6	4.1
Lexington—Fayette	154.5	151.3	156.5	4.3	4.8	4.4	2.8	3.2	2.8
Louisville ¹	388.6	397.1	396.3	21.7	18.4	17.0	5.6	4.4	4.3
LOUISIANA	1,517.6	1,517.6	1,549.0	96.1	109.3	105.4	6.3	7.2	6.8
Baton Rouge	188.2	191.2	196.0	9.9	15.1	15.0	5.3	7.0	7.6
Lake Charles	59.9	60.2	60.0	4.2	4.9	4.8	7.0	8.2	8.1
Monroe	48.8	47.0	48.1	3.4	3.7	3.1	7.1	7.9	6.5
New Orleans	441.4	444.1	443.9	32.8	35.5	33.7	7.4	8.0	7.6
Shreveport	140.0	141.3	142.5	9.1	8.9	8.5	6.5	6.3	6.0
MAINE	487.9	508.9	504.0	34.2	36.3	34.0	7.0	7.1	6.7
Lewiston—Auburn	37.0	38.7	38.6	2.5	2.9	2.6	6.9	7.6	6.7
Portland	86.4	89.1	87.4	6.7	6.0	5.5	7.8	6.7	6.3
MARYLAND	1,907.3	1,935.7	1,913.0	120.7	104.0	93.8	6.3	5.4	4.9
Baltimore	962.3	975.1	962.7	73.6	65.2	59.0	7.7	6.7	6.1
MASSACHUSETTS	2,767.0	2,743.4	2,735.5	231.0	161.2	144.4	8.3	5.9	5.3
Boston	1,340.7	1,320.2	1,316.8	108.2	75.8	69.4	8.1	5.7	5.3
Brockton	75.8	76.1	75.9	7.5	5.4	4.7	9.8	7.1	6.2
Fall River ¹	74.7	74.1	75.6	6.5	4.4	4.0	8.7	5.9	5.3
Lawrence—Haverhill ¹	128.8	128.4	127.0	14.8	9.4	8.5	11.5	7.3	6.7
Lowell ¹	105.2	105.5	104.7	9.8	6.7	5.9	9.3	6.4	5.6
New Bedford	78.8	79.5	79.2	7.6	5.9	5.5	9.6	7.4	6.9
Springfield—Chicopee—Holyoke ¹	268.4	261.4	264.1	21.0	13.6	11.9	7.8	5.2	4.5
Worcester	191.8	186.2	190.0	15.2	9.5	8.0	7.9	5.1	4.2
MICHIGAN	4,030.7	4,083.5	4,090.5	333.5	285.2	235.4	8.3	7.0	5.8
Ann Arbor	128.3	127.2	130.9	9.2	6.8	6.2	7.2	5.4	4.7
Battle Creek	83.0	81.9	81.1	7.1	5.3	4.7	8.6	6.5	5.7
Bay City	51.5	52.1	52.2	4.3	3.1	3.0	8.3	5.9	5.7
Detroit	1,915.6	1,927.0	1,927.4	158.3	137.1	111.0	8.3	7.1	5.8
Flint	213.9	217.0	220.7	17.6	19.0	13.0	8.2	8.8	5.9

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		
	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P
MICHIGAN—Continued									
Grand Rapids	267.1	279.6	282.0	16.3	13.4	12.4	6.9	4.8	4.4
Jackson	66.6	65.3	65.1	6.0	4.1	3.6	9.0	6.3	5.6
Kalamazoo—Portage	128.6	129.0	130.6	8.7	6.3	6.0	6.8	4.9	4.6
Lansing—East Lansing	208.9	215.4	215.3	15.4	19.5	11.3	7.4	9.1	5.2
Muskegon—Norton Shores—Muskegon Heights	77.5	76.5	76.1	6.6	5.2	4.7	8.5	6.8	6.1
Saginaw	100.6	100.2	99.6	8.2	5.7	4.7	8.1	5.7	4.8
MINNESOTA									
Duluth—Superior	1,889.8	1,918.8	1,896.5	92.4	79.6	71.5	4.9	4.1	3.8
Minneapolis—St. Paul	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
.....	1,011.9	1,025.5	1,022.7	61.3	49.9	46.9	6.1	4.9	4.6
MISSISSIPPI									
Jackson	951.2	988.4	995.4	56.9	57.5	56.2	6.0	5.8	5.6
.....	134.4	139.3	138.0	7.0	6.8	6.7	5.2	4.9	4.8
MISSOURI									
Kansas City ¹	2,146.0	2,132.8	2,142.7	115.9	117.1	103.5	5.4	5.5	4.8
St. Joseph	602.5	615.6	613.1	33.5	37.6	31.6	5.6	6.1	5.2
St. Louis ¹	47.1	45.2	45.5	2.7	2.7	2.6	5.7	6.0	5.7
Springfield	1,036.1	1,029.8	1,035.2	71.4	59.7	58.4	6.9	5.8	5.6
.....	95.1	97.8	98.0	4.0	4.3	3.6	4.2	4.4	3.6
MONTANA									
Billings	331.4	N.A.	N.A.	15.6	N.A.	N.A.	4.7	N.A.	N.A.
Great Falls	48.9	N.A.	N.A.	1.8	N.A.	N.A.	3.6	N.A.	N.A.
.....	33.3	N.A.	N.A.	1.6	N.A.	N.A.	4.9	N.A.	N.A.
NEBRASKA									
Lincoln	726.1	756.4	740.1	18.6	17.3	15.8	2.6	2.3	2.1
Omaha ¹	98.8	103.3	106.3	2.4	1.8	1.8	2.4	1.7	1.7
.....	253.9	260.1	260.6	11.3	9.0	9.0	4.4	3.5	3.5
NEVADA									
Las Vegas	311.9	331.3	329.6	24.6	21.0	19.7	7.9	6.3	6.0
Reno	169.0	177.8	177.9	15.2	13.1	12.7	9.0	7.4	7.1
.....	86.4	92.4	92.6	4.5	3.9	3.6	5.2	4.2	3.9
NEW HAMPSHIRE									
Manchester	392.1	421.0	416.4	19.9	18.6	17.7	5.1	4.4	4.2
.....	64.4	71.4	73.1	3.5	3.4	3.2	5.5	4.7	4.4
NEW JERSEY									
Atlantic City	3,300.8	3,380.6	3,304.2	313.5	276.5	254.2	9.5	8.2	7.7
Jersey City	80.7	89.2	81.7	6.1	7.7	7.3	10.0	8.7	8.9
Long Branch—Asbury Park	251.8	250.8	241.7	32.0	29.2	26.0	12.7	11.6	10.7
Newark	207.5	220.5	209.8	17.8	17.1	15.4	8.6	7.7	7.4
New Brunswick—Perth Amboy—Sayreville	913.6	933.3	914.4	85.7	73.8	69.1	9.4	7.9	7.6
Paterson—Clifton—Passaic	283.8	290.2	288.2	27.5	22.3	20.8	9.7	7.7	7.2
Trenton	203.2	203.3	198.9	24.9	20.6	18.6	12.3	10.1	9.4
Vineland—Millville—Bridgeton	147.0	149.7	149.9	10.7	9.3	8.9	7.2	6.2	5.9
.....	57.0	57.7	56.0	6.5	6.4	5.2	11.4	11.1	9.3
NEW MEXICO									
Albuquerque	473.4	497.8	494.2	40.4	38.6	35.4	8.5	7.8	7.2
.....	172.0	183.3	181.8	15.5	15.6	13.6	9.0	8.5	7.5
NEW YORK									
Albany—Schenectady—Troy	7,700.3	7,708.3	7,598.3	739.4	624.3	590.7	9.6	8.1	7.6
Binghamton ¹	359.0	361.4	353.2	28.4	24.1	22.7	7.9	6.7	6.4
Buffalo	131.6	135.3	134.0	9.0	9.5	8.7	6.9	7.0	6.5
Elmira	568.6	567.1	556.7	52.0	46.5	39.8	9.2	8.2	7.2
Nassau—Suffolk	41.5	41.4	41.1	3.6	4.1	3.6	8.8	9.9	8.7
New York	1,121.4	1,130.4	1,110.4	111.4	84.1	77.6	9.9	7.4	7.0
Poughkeepsie	3,613.2	3,578.9	3,529.7	370.1	310.0	300.5	10.2	8.7	8.5
Rochester	97.8	99.3	99.1	5.8	5.6	5.2	6.0	5.6	5.3
Syracuse	451.9	453.9	449.9	33.2	30.2	27.7	7.3	6.6	6.2
Utica—Rome	288.3	288.1	289.8	27.1	21.1	20.5	9.4	7.3	7.1
.....	140.6	139.8	138.0	14.1	11.6	11.0	10.0	8.3	8.0
NORTH CAROLINA									
Asheville	2,600.5	2,653.7	2,615.6	153.8	125.5	119.8	5.9	4.7	4.6
Charlotte—Gastonia	78.2	84.1	80.9	3.8	3.1	3.0	4.9	3.7	3.7
Greensboro—Winston-Salem—High Point	313.8	315.2	314.3	17.5	13.1	12.2	5.6	4.2	3.9
Raleigh—Durham	398.0	404.1	402.3	20.9	17.2	16.4	5.3	4.3	4.1
.....	251.5	258.8	260.2	10.2	9.3	8.4	4.1	3.6	3.2
NORTH DAKOTA									
Fargo—Moorhead ¹	289.6	319.6	301.7	7.6	9.9	7.4	2.6	3.1	2.4
.....	65.7	66.6	66.2	1.8	1.6	1.4	2.7	2.4	2.1

See footnotes at end of table.

STATE AND AREA UNEMPLOYMENT DATA

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

(Numbers in thousands)

State and area	Labor force			Unemployment					
				Number			Percent of labor force		
	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P
OHIO	4,725.8	4,795.0	4,811.1	315.2	286.4	274.2	6.7	6.0	5.7
Akron	288.7	291.2	288.9	20.9	17.3	16.2	7.2	5.9	5.6
Canton	174.9	176.0	176.9	12.1	10.5	10.5	6.9	6.0	5.9
Cincinnati ¹	584.5	592.7	595.1	44.2	43.4	40.2	7.6	7.3	6.8
Cleveland	988.3	900.3	903.9	54.6	47.4	46.1	6.1	5.3	5.1
Columbus	501.0	516.1	515.7	29.9	28.6	25.5	6.0	5.5	4.9
Dayton	360.5	363.8	368.3	20.0	17.5	17.7	5.5	4.8	4.8
Toledo ¹	349.5	358.1	359.6	24.4	22.3	22.0	7.0	6.2	6.1
Youngstown—Warren	233.6	233.4	235.5	19.5	19.3	16.3	8.3	8.3	6.9
OKLAHOMA	1,158.7	1,214.2	1,214.9	58.0	55.3	51.7	5.0	4.6	4.3
Oklahoma City	342.9	368.6	370.8	17.7	14.9	13.9	5.1	4.1	3.7
Tulsa	280.5	293.9	290.5	13.7	13.6	13.0	4.9	4.6	4.5
OREGON	1,084.5	1,110.4	1,111.1	84.9	84.0	80.0	7.8	7.6	7.2
Eugene—Springfield	111.4	118.5	118.4	10.8	10.5	10.0	9.7	8.8	8.5
Portland ¹	518.3	526.0	524.2	39.2	35.3	34.3	7.6	6.7	6.5
Salem	104.7	107.1	103.7	6.6	7.1	6.3	6.3	6.6	6.1
PENNSYLVANIA	5,112.4	5,100.6	5,062.2	357.1	328.6	293.6	7.0	6.4	5.8
Allentown—Bethlehem—Easton ¹	300.5	299.1	295.3	18.7	15.9	15.2	6.2	5.3	5.2
Altoona	56.4	58.5	57.5	3.3	3.0	2.8	5.9	5.1	4.9
Erie	122.0	120.1	120.7	8.7	6.5	5.8	7.1	5.4	4.8
Harrisburg	208.1	212.9	208.0	9.3	10.0	8.3	4.5	4.7	4.0
Johnstown	106.2	112.3	106.5	7.0	19.2	9.5	6.6	17.1	8.9
Lancaster	162.5	165.0	163.1	6.9	6.0	5.1	4.2	3.6	3.1
Northeast Pennsylvania	275.3	276.3	269.4	23.2	19.9	18.2	8.4	7.2	6.8
Philadelphia ¹	2,025.4	2,002.0	1,999.7	168.8	147.7	138.0	8.3	7.4	6.9
Pittsburgh	991.1	982.4	983.3	71.2	64.5	60.2	7.2	6.6	6.1
Reading	146.5	144.7	144.8	7.6	7.0	6.2	5.2	4.8	4.3
Williamsport	49.9	50.2	50.1	3.8	3.1	2.9	7.6	6.3	5.8
York	159.1	159.5	160.6	8.7	7.6	6.4	5.4	4.8	4.0
RHODE ISLAND	430.5	444.0	435.0	30.3	29.2	25.3	7.0	6.6	5.8
Providence—Warwick—Pawtucket ¹	434.7	448.9	440.2	30.8	29.6	25.7	7.1	6.6	5.8
SOUTH CAROLINA	1,275.6	1,305.9	1,296.6	79.5	69.6	64.1	6.2	5.3	4.9
Charleston—North Charleston	140.9	145.9	145.0	9.5	8.9	8.3	6.8	6.1	5.7
Columbia	158.3	163.6	166.1	8.1	7.5	6.5	5.1	4.6	3.9
Greenville—Spartanburg	249.1	250.0	251.4	13.7	12.3	11.6	5.5	4.9	4.6
SOUTH DAKOTA	314.4	339.6	333.7	9.2	9.2	6.6	2.9	2.7	2.0
Sioux Falls	56.3	57.1	57.5	1.4	1.2	1.0	2.4	2.2	1.7
TENNESSEE	1,832.0	1,884.6	1,906.0	97.2	86.6	83.2	5.3	4.6	4.4
Chattanooga ¹	177.0	181.4	181.2	9.4	9.1	8.8	5.3	5.0	4.8
Knoxville	188.8	198.6	198.6	9.4	7.6	7.0	5.0	3.8	3.5
Memphis ¹	354.7	366.5	369.7	20.0	18.7	18.8	5.6	5.1	5.1
Nashville—Davidson	363.4	374.7	376.7	15.4	13.1	12.5	4.2	3.5	3.3
TEXAS	5,579.5	5,728.8	5,726.1	311.7	290.5	285.4	5.6	5.1	5.0
Amarillo	83.6	86.3	86.0	3.1	3.0	3.3	3.7	3.5	3.9
Austin	194.4	200.4	202.0	9.2	9.5	9.6	4.7	4.7	4.7
Beaumont—Port Arthur—Orange	163.1	162.8	162.1	11.9	12.0	11.0	7.3	7.4	6.8
Corpus Christi	128.5	130.9	129.1	8.4	8.2	8.3	6.5	6.3	6.4
Dallas—Fort Worth	1,263.4	1,296.6	1,299.4	53.8	49.0	44.3	4.3	3.8	3.4
El Paso	164.5	160.8	162.3	20.6	19.0	19.3	12.5	11.8	11.9
Galveston—Texas City	87.6	94.6	92.6	6.5	6.9	5.9	7.5	7.3	6.4
Houston	1,160.7	1,247.2	1,236.7	65.9	58.4	56.4	5.7	4.7	4.6
Lubbock	96.2	99.8	100.2	3.1	3.0	3.0	3.2	3.0	3.0
San Antonio	388.0	389.9	390.4	30.0	28.3	29.1	7.7	7.3	7.4
Waco	74.6	76.1	76.3	3.9	3.8	3.5	5.3	5.0	4.6
Wichita Falls	57.0	58.4	58.6	2.3	2.0	2.0	4.1	3.3	3.4
UTAH	528.9	535.6	532.9	25.6	23.4	22.4	4.8	4.4	4.2
Salt Lake City—Ogden	346.3	353.3	352.0	17.4	16.0	15.2	5.0	4.5	4.3
VERMONT	220.2	224.3	223.6	16.6	14.4	13.6	7.5	6.4	6.1

See footnotes at end of table.

STATE AND AREA UNEMPLOYMENT DATA

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

(Numbers in thousands)

State and area	Labor force			Unemployment ¹					
				Number			Percent of labor force		
	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P	SEPT. 1976	AUG. 1977R	SEPT. 1977P
VIRGINIA	2,330.6	2,412.0	2,407.8	131.8	122.7	117.6	5.7	5.1	4.9
Lynchburg	69.2	71.3	72.4	3.8	3.4	3.2	5.5	4.8	4.5
Newport News—Hampton	157.8	163.9	163.8	10.9	9.5	9.1	6.9	5.8	5.6
Norfolk—Virginia Beach—Portsmouth ¹	305.0	325.6	319.7	20.8	19.2	18.7	6.8	5.9	5.9
Richmond	306.6	323.0	321.4	14.5	13.0	12.6	4.7	4.0	3.9
Roanoke	110.3	112.7	113.4	6.6	5.7	5.6	6.0	5.1	4.9
WASHINGTON	1,615.2	1,675.9	1,675.6	122.3	112.1	98.3	7.6	6.7	5.9
Seattle—Everett	710.1	740.6	740.5	62.9	48.3	44.7	8.9	6.5	6.0
Spokane	126.3	131.5	131.9	7.5	7.4	6.8	6.0	5.6	5.2
Tacoma	153.7	157.9	159.9	13.1	10.8	10.3	8.5	6.8	6.4
WEST VIRGINIA	683.6	694.3	699.9	43.2	43.0	41.0	6.3	6.2	5.9
Charleston	109.2	109.1	108.0	5.2	4.4	4.2	4.7	4.0	3.9
Huntington—Ashland ¹	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Parkersburg—Marietta ¹	63.2	63.4	62.8	4.2	3.6	3.1	6.6	5.7	4.9
Wheeling ¹	76.7	77.7	76.8	4.2	3.8	3.6	5.4	4.8	4.7
WISCONSIN	2,209.3	2,266.4	2,259.0	95.7	94.4	90.2	4.3	4.2	4.0
Appleton—Oshkosh	142.4	146.7	145.2	5.4	4.9	4.7	3.8	3.3	3.2
Green Bay	86.3	90.6	89.4	3.9	3.4	3.1	4.5	3.7	3.5
Kenosha	63.5	62.1	62.6	3.1	4.3	4.1	4.9	7.0	6.5
La Crosse	43.0	44.3	44.1	1.8	1.6	1.5	4.2	3.5	3.3
Madison	172.9	176.8	180.0	5.6	4.8	4.7	3.2	2.7	2.6
Milwaukee	689.4	682.9	684.0	37.0	34.9	34.0	5.4	5.1	5.0
Racine	88.2	94.7	92.5	4.0	5.1	4.2	4.5	5.3	4.5
WYOMING	188.1	203.3	201.9	5.7	5.4	5.6	3.0	2.7	2.8

¹ Includes interstate portion of Area located in adjacent State(s).

NOTE: All data are subject to revision as new benchmark information becomes available. Estimates have been benchmarked to 1976 Current Population Survey annual averages. Data refer to place of residence.

p=preliminary.
r=revised.
N.A.=not available.

SOURCE: 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, January-August 1977 (NTISUB/C/143-77/010)," "State and County Employment and Unemployment January-August 1977" (NTISUB/C/144-77/010) or "Unemployment Rates for States and Local Governments, Second Quarter, 1977" (PB271672). 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, household 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 47,000 households, representing 461 areas in 923 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 detailed 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. Sam-

pling 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 em-

ployers. 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, some State and local government, domestic service, self-employment, unpaid family work, and religious organizations).

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, churches and most local government activities are not covered by unemployment insurance whereas these are included in BLS establishment statistics.

Household data

(A tables)

COLLECTION AND COVERAGE

Statistics on the employment status of the population, the personal, occupational, and other characteristics of the employed, the unemployed, and persons not in the labor force, and related data are compiled for the BLS by the Bureau of the Census in its Current Population Survey (CPS). A detailed description of this survey appears in *Concepts and Methods Used in Labor Force Statistics derived from the Current Population Survey*, BLS Report 463. This report is available from BLS on 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 calen-

dar 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, 47,000 occupied units are eligible for interview. About 2,000 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 47,000 occupied units, there are 8,000 sample units in an average month which are visited but found to be vacant or otherwise not to be enumerated. Part of

the sample is changed each month. The rotation plan provides for three-fourths of the sample to be common from 1 month to the next, and one-half to be common with the same month a year earlier.

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 (a) were waiting to be called back to a job from which they had been laid off; or (b) were waiting to report to a new wage or salary job within 30 days.

Duration of unemployment represents the length of time (through the current survey week) during which persons classified as unemployed had been continuously looking for work. For persons on layoff, duration of unemployment represents the number of full weeks since the termination of their most recent employment. A period of 2 weeks or more during which a person was employed or ceased looking for work is considered to break the continuity of the present period of seeking work. Average duration is an arithmetic mean computed from a distribution by 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) Re-entrants are persons who previously worked at a full-time job lasting 2 weeks or longer but were out of the labor force prior to beginning to look for work. (4) New entrants are persons who never worked at a full-time job lasting 2 weeks or longer.

Jobseekers are all unemployed persons who made specific efforts to find a job, sometime during the 4-week period preceding the survey week. Jobseekers do not include persons unemployed because they (a) were waiting to be called back to a job from which they had been laid off or (b) were waiting to report to a new wage or salary job within 30 days. Jobseekers are grouped by the methods used to seek work, including going to a public or private employment agency or to an employer directly, seeking assistance from friends or relatives, placing or answering ads, or utilizing some "other" method. Examples of the "other" category include being on a union or professional register, obtaining assistance from a community

organization, or waiting at a designated pick-up point.

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

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

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-hours 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 had been identified as "Negro and other races" and prior to 1969 as "nonwhite," includes all persons who are observed 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, Eskimos, Orientals, 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.

Spanish 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 Spanish 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 activities are published every month in table A-7 for 16-21 year-olds by employment status, race,

sex, and, if unemployed, whether seeking full- or part-time work.

Household head. One person in each household is designated as the head. The head is usually the person regarded as the head by the members of the group. If a husband and wife family occupy the unit, the husband is designated as the head. The number of heads is equal to the number of households.

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.

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 job-seeking 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.

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 nonfarm laborers group increased by 420,000, and changes in other groups amounted to 220,000 or less.

An additional major group was created by splitting the operatives category into two: operatives, except transport, and transport equipment operatives. Separate data for these two groups first became available in January 1972. At the same time, several changes in titles, as well as in order of presenta-

tion, 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*.

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.

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 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 Nation as a whole, in such characteristics as age, race, sex, and residence. Since these population 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.* This is a procedure in which the sample proportions are weighted by the known 1970 Census data on the race-residence distribution of the population. This step takes into account the differences existing at the time of the 1970 census between the race-residence distribution for the Nation and for the sample areas.

b. *Second-stage ratio estimate.* In this step, the sample pro-

portions are applied to independent current estimates of the population by age, sex, and race. Prior to January 1974 these estimates 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. In this procedure, the most recent census population adjusted to include estimated net census undercount by age, sex, and race (i.e., "inflated") is carried forward to each subsequent month and later age by adding births, subtracting deaths, and adding net migration. These postcensal 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. This procedure reduces the sampling variability of month-to-month changes especially and of the levels for most items also.

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

Since the estimates are based on a sample, they may differ from the figures that would have been obtained if it were possible to take a complete census using the same schedules and procedures.

The standard error is a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. The chances are about 2 out of 3 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 19 out of 20 that the difference would be less than twice the standard error.

Table A shows the average standard error for the major employment status categories, by sex, computed from data for past months. Estimates of change derived from the survey are also subject to sampling variability. The standard error of change for consecutive months is also shown in table A. The standard errors of level shown in table A are acceptable approximations of the standard errors of year-to-year change.

The figures presented in table B are to be used for other characteristics and are approximations of the standard errors of all such characteristics. They should be interpreted as providing an indication of the order of magnitude of the standard errors rather than as the precise standard error for any specific item.

The standard error of the change in an item from one month to the next month is more closely related to the standard error of the monthly level for that item than to the size of the specific month-to-month change itself. Thus, in order to use the approximations to the standard errors of month-to-month changes as presented in table C, it is first necessary to obtain the standard error of the monthly level of the item in table B, and then find

Table A. Average standard error of major employment status categories

(In thousands)

Employment status and sex	Average standard error of—	
	Monthly level	Month-to-month change (consecutive months only)
BOTH SEXES		
Labor force	205	150
Total employment	210	155
Agriculture	95	60
Nonagricultural employment	210	155
Unemployment	109	106
MALES		
Labor force	115	95
Total employment	125	100
Agriculture	85	55
Nonagricultural employment	130	105
Unemployment	81	89
FEMALES		
Labor force	140	110
Total employment	140	110
Agriculture	35	25
Nonagricultural employment	140	110
Unemployment	74	83

Table B. Standard error of level of monthly estimates

(In thousands)

Size of estimate	Both sexes		Males		Females	
	Total or white	Black and other	Total or white	Black and other	Total or white	Black and other
10	4	4	6	4	6	4
50	9	9	11	9	11	9
100	12	12	16	12	16	12
250	20	17	25	17	25	17
500	30	25	34	25	34	25
1,000	40	35	50	35	50	35
2,500	60	40	75	40	75	40
5,000	85	45	90	—	90	—
10,000	115	—	115	—	115	—
20,000	150	—	125	—	125	—
30,000	170	—	—	—	—	—
40,000	180	—	—	—	—	—

the standard error of the month-to-month change in table C corresponding to this standard error of level. It should be noted that table C applies to estimates of change between 2 consecutive months. For changes between the current month and the same month last year, the standard errors of level shown in table B are acceptable approximations.

Illustration. Assume that the tables showed the total number of persons working a specific number of hours as 15,000,000, an increase of 500,000 over the previous month. Linear interpolation in the first column of table B shows that the standard error of 15,000,000 is about 133,000. Consequently, the chances are about 68 out of 100 that the sample estimate differs by less than 133,000 from the figure which would have been obtained from a complete count of the number of persons working the given number of hours. Using the 133,000 as the standard error of the monthly level in table C, it may be seen that the standard error of the 500,000 increase is about 126,000.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total

Table C. Standard error of estimates of month-to-month change

[In thousands]

Standard error of monthly level	Standard error of month-to-month change
10	12
25	28
50	55
100	100
150	140
200	155
250	160
300	190

upon which the percentage is based. Where the numerator is a subclass of the denominator, estimated percentages are relatively more reliable than the corresponding absolute estimates of the numerator of the percentage, particularly if the percentage is large (50 percent or greater). Table D shows the standard errors for unemployment percentages derived from the survey. Linear interpolation may be used for percentages and base figures not shown in table D. As a general rule, percentages will not be published when the monthly base is less

Table D. Standard error of unemployment percentages

Base of percentages (thousands)	Estimated percentage									
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	20 or 80	25 or 75	35 or 65	50	
75	1.5	2.1	3.2	4.5	5.4	6.1	6.7	7.5	8.3	
150	1.1	1.5	2.4	3.3	4.0	4.5	4.9	5.5	6.1	
250	9	1.3	2.0	2.8	3.3	3.7	4.1	4.6	5.1	
500	6	8	1.3	1.7	2.1	2.4	2.6	2.9	3.2	
1,000	4	6	9	12	15	17	1.8	2.1	2.3	
2,000	3	4	6	9	10	12	1.3	1.5	1.6	
3,000	2	3	5	7	9	10	1.1	1.2	1.3	
5,000	2	3	4	6	7	7	8	9	1.0	
10,000	1	2	3	4	5	5	6	7	.7	
25,000	1	1	2	3	3	3	4	4	.4	
50,000	1	1	1	2	2	2	3	3	.3	
75,000	1	1	1	1	2	2	2	2	.3	

than 75,000 or the annual base is less than 35,000. Table E shows the standard error of percentage of monthly levels and consecutive month change for frequently analyzed unemployment rate series. These errors are computed from data for recent months. Errors on change for nonconsecutive months are slightly greater (by roughly a factor of 1.1 times the month-to-month error).

Table E. Standard error of percentages for major unemployment rates

Selected categories	Monthly level	Consecutive month change	Selected categories	Monthly level	Consecutive month change
Total (all civilian workers)	.12	.14	OCCUPATION — Continued		
Males, 20 years and over	.14	.17	Blue-collar workers	.23	.28
Females, 20 years and over	.19	.24	Craft and kindred workers	.32	.39
Both sexes, 16-19 years	.56	.72	Operatives	.36	.46
White workers	.12	.15	Nonfarm laborers	.66	.84
Black (and other) workers	.43	.55	Service workers	.32	.40
Household heads	.12	.15	Farm workers	.43	.53
Married men	.13	.16	INDUSTRY		
Full-time workers	.12	.15	Nonagricultural private wage and salary workers	.14	.17
Part-time workers	.35	.44	Construction	.75	.95
Unemployed 15 weeks and over	.06	.07	Manufacturing	.27	.34
Labor force time lost	.12	.15	Durable goods	.36	.45
OCCUPATION			Nondurable goods	.43	.54
White-collar workers	.13	.15	Transportation and public utilities	.41	.52
Professional and technical	.20	.24	Wholesale and retail trade	.28	.35
Managers and administrators except farm	.23	.28	Finance and service industries	.23	.29
Sales workers	.39	.48	Government wage and salary workers	.19	.24
Clerical workers	.24	.30	Agricultural wage and salary workers	1.11	1.39

Establishment data

(B, C, and D tables)

COLLECTION

Payroll reports provide current information on wage and salary employment, hours, earnings, and labor turnover in non-agricultural 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 for use in preparing the national series.

Shuttle schedules

Two types of data collection schedules are used: Form BLS 790—Monthly Report on Employment, Payroll, and Hours; and Form DL 1219—Monthly Report on Labor Turnover. These schedules are of the "shuttle" type, with space for each month of the calendar year. The collection agency returns the schedule to the respondent each month so that the next month's data can be entered. This procedure assures maximum comparability

and accuracy of reporting, since the respondent can see the figures he has 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 most important product or activity.

All data on employment, hours, earnings, and labor turnover for the Nation and for a few States and areas are classified in accordance with the 1967 *Standard Industrial Classification Manual* (SICM), Office of Management and Budget. Most States and areas have converted their series to the 1972 SICM.

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.

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 and 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 contract 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 plant's own use (e.g., power plant), and recordkeeping and other services closely associated with the above production operations.

Construction workers include the following employees in the contract construction division: Working supervisors, qualified craft workers, mechanic's apprentices, laborers, etc., whether working at the site of construction or in shops or yards, at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.

Nonsupervisory employees include employees (not above the working supervisory level) such as office and clerical workers, repairers, salespersons, operators, drivers, physicians, lawyers, accountants, nurses, social workers, research aides, teachers, drafters, photographers, beauticians, musicians, restaurant workers, custodial workers, attendants, line installers and repairers, laborers, janitors, guards, and similar occupational levels, and other employees 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, reflecting 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. Shifts in the volume of employment between relatively high-paid and low-paid work and changes in workers' earnings in individual establishments also affect the general earnings averages. 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 causes, 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 service 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 the portion of the gross average weekly hours which were in excess of regular hours and for which overtime premiums were paid. If an employee worked 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 gross 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 service 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.

Railroad hours and earnings. The figures for class I railroads (excluding switching and terminal companies) are based on monthly data summarized in the M-300 report of the Interstate Commerce Commission and relate to all employees except executives, officials, and staff assistants (ICC group I) who received pay during the month. 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 and his marital status, as well as on the level of his gross income. To reflect these variables, spendable earnings are computed for a worker with no dependents and a married worker with three dependents. 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 either none 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 are computed by dividing the current Consumer Price Index into the earnings averages for the current month. This is done for gross average weekly earnings and for spendable average weekly earnings. The level of earnings is thus adjusted for changes in purchasing power 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 nonagricultural payrolls. These indexes measure the percent of industries which posted increases in employment over the specified time span. The indexes are calculated from 172 unpublished seasonally adjusted employment series (two-digit nonmanufacturing industries and three-digit manufacturing

industries) covering all nonagricultural payroll employment in the private sector. A more detailed discussion of these indexes appears in "Introduction of Diffusion Indexes," in the December, 1974 issue of *Employment and Earnings*.

Labor turnover

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

Other accessions, which are not published separately but are included in total accessions, are all additions to the employment roll which are not classified as new hires, including transfers from other establishments of the company and employees recalled from layoff.

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, 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 F. Summary of methods for 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 1974 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 relating to the benchmark month are compared with new benchmark levels, industry by industry. If revisions are necessary, the monthly series of estimates are adjusted between the new benchmark and the preceding one, and the new benchmark for each industry is then carried forward progressively to the current month by use of the sample trends. Thus, under this procedure, the benchmark is used to establish the level of employment; the sample is used to measure the month-to-month changes in the level. A comparison of the actual amounts of revisions due to benchmark adjustment for the last 3 years is shown in table G.

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.

Table F. Summary of methods for computing industry statistics on employment, hours, 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.	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) ratio of women to all employees.	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.	Average, weighted by production or nonsupervisory employment, of the average weekly hours for component cells.
Average weekly overtime hours	Production worker overtime hours divided by number of production workers.	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.	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 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.
Gross average hourly earnings	Annual total of aggregate payrolls (production or nonsupervisory worker employment multiplied by weekly 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	Sum of monthly rates divided by 12.	Sum of monthly rates divided by 12.

Table G. Nonagricultural payroll employment estimates, by industry divisions, as a percentage of the benchmark for 1971, 1973, and 1974

Industry division	1971	1973 ¹	1974
Total	100.2	98.4	99.9
Mining	99.8	96.5	97.0
Contract construction	96.9	90.4	100.6
Manufacturing	100.4	98.9	99.9
Transportation and public utilities	100.9	99.3	100.0
Wholesale and retail trade	100.3	97.8	100.1
Finance, insurance, and real estate	100.2	99.5	98.9
Services	100.4	99.1	99.3
Government	100.0	99.5	100.6

¹ 2-year revision.

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. The universe of establishments is stratified first by industry and then within each industry by size of establishment in terms of employment. For each industry, the number of sample units is distributed among the size class cells on the basis of average employment per establishment in each cell. In practice, this is equivalent to distributing the predetermined total number of establishments required in the sample among the cells on the basis of the ratio of employment in each cell to total employment in the industry. Within each noncertainty stratum the sample members are selected at random.

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 accept samples in these divisions with a smaller proportion of universe employment than is the case for most manufacturing industries. Since individual establishments in these nonmanufacturing divisions generally show less fluctuation from regular cyclical or seasonal patterns than 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 H 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 I shows the approximate coverage, in terms of employment, of the labor turnover sample.

Table H. Approximate size and coverage of BLS employment and payrolls sample, March 1974¹

Industry division	Number of establishments in samples	Employees	
		Number reported	Percent of total
Total	158,400	31,637,000	41
Mining	2,100	307,000	46
Contract construction	16,500	771,000	20
Manufacturing	47,000	11,821,000	59
Transportation and public utilities:			
Railroad transportation (ICC)	95	537,000	94
Other transportation and public utilities	7,300	2,181,000	53
Wholesale and retail trade	38,200	3,050,000	18
Finance, insurance, and real estate	10,100	1,507,000	36
Services	23,500	2,740,000	20
Government:			
Federal (Civil Service Commission) ²	3,200	2,691,000	100
State and local	10,400	6,032,000	52

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 3,200 reports covering about 53 percent of employment in Federal establishments.

Table I. Approximate size and coverage of BLS labor turnover sample, March 1974

Industry	Employees	
	Number reported	Percent of total
Total	10,873,730	52
Manufacturing	10,007,800	51
Metal mining	61,850	66
Coal mining	56,770	35
Communications:		
Telephone	734,270	74
Telegraph	13,040	61

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. Improvements brought about by the most recent expansion in unemployment insurance coverage were the major cause of differences in the March 1973 benchmark adjustments. (See article by Carol M. Utter, "BLS Establishment Estimates Revised to March 1973 Benchmark Levels", in the December 1974 issue.) Table J presents the average percent revisions of the 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 for major industries are presented in table J and for individual industries with the specified number of employees in table K. 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

Table J. Average benchmark percent revision in employment estimates and relative errors¹ for average weekly hours and average hourly earnings by industry division

Industry division	Average benchmark revision in estimates of employment ²	Relative errors (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 goods .....	.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 ³ .....	.6	-	-

¹ Relative errors relate to March 1971 data.

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

³ 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.

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) of differences between final estimates and benchmarks are presented in table K.

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 L presents root-mean-square errors of the amounts of revisions that may be expected between the preliminary and final levels of employment and preliminary and final month-to-month changes. Revisions of preliminary hours and earnings estimates are normally not greater than .1 of an hour for weekly hours and 1 cent for hourly earnings.

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

Size of employment estimate	Root-mean-square error of employment estimates ¹	Relative errors (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 Assuming 12-month intervals between benchmark revisions.

Table L. Errors of preliminary employment estimates

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

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.

Definitions

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

Output is the constant dollar market value of final goods and services produced in a given period. Indexes of *output per hour* of labor input, or labor productivity, measure changes in the volume of goods and services produced per unit of labor.

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

Real compensation per hour is compensation per hour adjusted to eliminate the effect of changes in the Consumer Price Index.

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* includes 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 businesses.

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)

Since November 1972, the Bureau of Labor Statistics has been responsible for developing the concepts and methods used by State employment security agencies to estimate State and local area labor force, employment, and unemployment. In December 1975, the Office of Management and Budget extended this responsibility to include the publication of State and local area labor force and unemployment estimates. Prior to 1972, State agencies prepared estimates using a method developed by the Department of Labor in 1950, generally referred to as the Handbook method (BES Report No. R-185). The new system combines the Handbook method with a set of procedures based on the concepts and definitions used in the national Current Population Survey (CPS). Improvements have been in two areas: (1) The estimating methodology previously used by State agencies has been modified to more closely approximate CPS definitions; and (2) The State-prepared monthly estimates are benchmarked to annual average totals from the CPS.

Federal-State cooperative program

Labor force and unemployment estimates for States, labor market areas (LMA), and other areas specifically defined for fund allocation purposes are developed under a Federal-State cooperative program and transmitted each month to BLS. The local area unemployment estimates approved by BLS are the basis for determining eligibility of an area for benefits under Federal economic assistance programs, such as those established by the Comprehensive Employment and Training Act (CETA).

ESTIMATING METHODS

Monthly employment and unemployment estimates 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 Current Population Survey. Adjustment factors for the major categories of employment by class of worker and industry have been developed on the basis of employment relationships which existed at the time of the 1970 Decennial Census. These factors are applied to the payroll employment estimates for the current period to obtain adjusted employment estimates.

2. *Preliminary estimate—Unemployment:* In the current month, the estimate of unemployment is an aggregate of the estimates

for each of three building block categories: (1) Persons who were previously employed in industries covered by State unemployment insurance (UI) laws; (2) those previously employed in industries not covered by these laws; and (3) those who were either entering the labor force for the first time or reentering after a period of separation.

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 the current ratio of covered unemployment to covered employment to the employment estimate for each industry or class of worker subgroup in the State, weighted by factors reflecting national historical relationships.

For the third category, new entrants and reentrants into the labor force, a composite estimate is developed from equations that relate the total entrants into the labor force to the experienced unemployed and the experienced labor force. For each month, the estimate of entrants into the labor force is a function of: (a) the month of the year; (b) the level of the experienced unemployed; (c) the level of the experienced labor force; and (d) the proportion of the working age population that is considered "youth". 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. *Adjustment for additivity.* Using the Handbook method, States prepare independent employment and unemployment estimates for the State, and for many substate areas. An adjustment is applied to all substate estimates to ensure that the substate estimates add to the independent State totals. Specific additivity adjustment procedures vary from State to State, but are generally one of the three following basic methods: (a) If a State is comprised of mutually exclusive and exhaustive LMA's, then the difference between the independent State estimate and the sum of the estimates for the LMA's is prorated over all LMA's in the State, to produce a set of substate estimates which add to the independent State estimate; (b) If the

mutually exclusive LMA's do not exhaust the geographic area of the State, then the difference between the independent State estimate and the sum of the LMA estimates, or residual, becomes the balance-of-State estimate; (c) If a State contains LMA's which are benchmarked independently (see below), estimates for these areas are subtracted from the independent State estimate and the additivity adjustment is then applied to the remaining areas in the balance of the State.

4. *Benchmark correction and extrapolation procedures.* Once each year all monthly estimates prepared by State employment security agencies under the Handbook method are adjusted, or benchmarked, by BLS to the annual average estimates resulting from the CPS. This adjustment is necessary because the State-prepared estimates are not as reliable as the CPS estimates, due to differences in State UI laws, the structural limitations of the Handbook method, and errors in the UI data. The benchmarked estimates are produced in three stages.

First, the monthly Handbook estimates are adjusted by the ratio of the CPS and Handbook 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.

The benchmarked estimates are extrapolated into the current year by applying the latest relevant correction factor to the current Handbook estimates of employment and unemployment. The employment factor used in year (t) is the quotient of the December employment benchmarked and Handbook estimates in year (t-1). The unemployment factor for year (t) is the algebraic difference between the December unemployment benchmarked and Handbook estimates in year (t-1). The preliminary estimate in the current year is then the result of applying the correction factor by multiplication (for employment), or by addition (for unemployment) to the current Handbook estimate.

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 methods used for these series are an adaptation of the standard ratio-to-moving average method, with a provision for moving "adjustment factors" to take account of changing seasonal patterns. A detailed description of the method 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. All other series are adjusted following past procedures.

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 1976, 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 1977 *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, 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 average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing seasonally adjusted average weekly earnings by the seasonally adjusted Consumer Price Index. 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 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 August 1976. Seasonal factors to be used for current adjustment appear in the December 1976 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*.

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