Chapter D

Labor

Labor Force (Series D 1-682)

D 1–74. General note.

The conceptual structure and techniques for measurement of current labor force data were developed during the late 1930's by the Work Projects Administration (see John N. Webb, "Concepts Used in Unemployment Surveys," *Journal of the American Statistical Association*, March 1939). However, prior to 1940, especially during the 1930's, the economically active sector was differentiated on the basis of its ability and willingness to work. Thus, most surveys during the 1930's counted as unemployed those persons not working but "willing and able to work." Willingness and ability, however, turned out to be extremely subjective in practice, and since these concepts were dependent on the attitudes of the persons involved, it was difficult to compile data on a comparable basis from place to place and from time to time.

The estimates shown here, prior to 1940, were prepared on as comparable a basis as possible with the concepts used since 1940. For the techniques used in preparing these data, see their source. In contrast, the decennial census data shown here are not directly comparable with annual data because of differences in collection techniques, time reference, and other factors.

For another set of labor force estimates, 1890–1950, see Clarence D. Long, *The Labor Force Under Changing Income and Employment*, National Bureau of Economic Research, New York, 1958, appendix tables A-4, A-6, and A-20.

The concepts and procedures used since 1940 are based principally upon an individual's actual activity, that is, whether he was working, looking for work, or doing something else during the time reference of the survey. Instead of questions about a person's attitudes with respect to his labor market status (e.g., "Are you able to work?" or "Are you willing to work?" or "Do you want work?"), the present concept makes labor market participation depend on the more overt test of working or actively seeking work.

Current labor force data are collected for the week containing the 12th of each month for the Bureau of Labor Statistics by the Bureau of the Census as a part of the latter's Current Population Survey. The Survey is based on a scientifically designed sample of households in 461 areas (1966–1970), with coverage in every State and the District of Columbia. From May 1956 through December 1966, the sample covered 330 areas, all of which were continued in the new and expanded sample. From January 1954 through April 1956, the sample covered 230 areas and, prior to 1954, the interviewed households were concentrated in 68 sample areas. The number of households interviewed totaled about 35,000 from May 1956 until January 1967, when it was raised to about 47,000. Before May 1956, a total of about 21,000 household interviews were conducted monthly.

The household interview method (population approach) involves direct enumeration and interrogation of individuals to obtain information on employment activity from workers or members of workers' households. This approach encompasses direct enumeration of all employed and unemployed persons including the self-employed, unpaid family workers, domestic servants, and others who do not ordinarily appear on the payrolls of any establishment. For a more detailed description of the concepts, techniques, estimation procedures, and adequacy and reliability of these data, see Bureau of the Census, *Current Population Reports*, series P-23, No. 22.

Labor force data have also been collected in the decennial censuses of population. The sample size for labor force data has varied from census to census (e.g., 20-percent sample in 1970, 25-percent sample in 1960). Also, the concepts have changed over time in a manner corresponding to the Current Population Survey. (See the Decennial Census reports cited for series D 11–25.)

In the surveys and censuses conducted by the Bureau of the Census, persons are currently classified with regard to employment status by the following criteria.

Employed persons comprise: (a) All those who, during the survey week, worked at all as paid employees, in their own business or profession or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a family member; 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 hold more than one job are counted in the job at which they worked the greatest number of hours during the survey week. Included are employed citizens of foreign countries, temporarily in the United States, but not living on the premises of an Embassy. Excluded are persons whose only activity consisted of work around the house (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; (b) were waiting to report to a new wage or salary job within 30 days.

The *civilian labor force* (persons 14 years old and over through 1966 and to persons 16 years old and over thereafter) is the sum of the employed and the unemployed. Data on the size of the Armed Forces (except for decennial data) is obtained from the Defense Department and added to the civilian labor force to provide the total labor force figures.

Persons not in the labor force include all persons 14 years old and over (or 16 years old and over) not classified as employed, unemployed, or in the Armed Forces.

The foregoing criteria or concepts of measuring employment and unemployment include several revisions made in January 1967 by the President's Committee to Appraise Employment and Unemployment Statistics. The principal revisions are as follows:

a. A specific jobseeking activity within the past 4 weeks must be reported in order to have a person counted as unemployed. Previously, the household interview questionnaire was ambiguous as to the time period for jobseeking, and there was no specific question concerning methods of seeking work.

b. A person must be currently available for work in order to be counted as unemployed. This revision in concept primarily affects the classification of students, who, for example, begin to look for work in the spring when they may not be available until June. They were previously counted as unemployed but are now classified as not in the labor force.

c. Persons with a job are classified as employed, even though they were absent from their jobs in the survey week and were looking for other jobs. Previously, persons absent from their jobs because of strikes, bad weather, etc., who were looking for other jobs were classified as unemployed.

d. The new definition of unemployment excludes those who would have been looking for work except for the belief that no work was available (theoretically counted in the past, but without explicit questions).

Historical data have not been revised to take account of these changes because the differences between the old and the new series are relatively small. For most analytical purposes, the data may be regarded as reasonably comparable. The table below presents comparisons for employment status in 1966, by sex and age. Additional tables comparing the published figures for 1966 on an annual average basis with the estimates derived from the new definitions and procedures appear in Bureau of Labor Statistics *Employment and Earnings and Monthly Report on the Labor Force,* Feb. 1967.

Item	*New definitions*	*Old definitions*
TOTAL, 16 YEARS AND OVER		
Civilian labor force	75,715	75,770
Employed	72,939	72,895
Agriculture	3,904	3,979
Nonagricultural industries	69,035	68,916
Unemployed	2,776	2,875
Not in labor force	52,343	52,288
MEN, 20 YEARS AND OVER		
Civilian labor force	44,637	44,786
Employed	43,650	43,667
Agriculture	2,901	2,894
Nonagricultural industries	40,750	40,773
Unemployed	987	1,119
Not in labor force	8,967	8,818
WOMEN, 20 YEARS AND OVER		
Civilian labor force	24,512	24,427
Employed	23,493	23,507
Agriculture	626	675
Nonagricultural industries	22,867	22,832
Unemployed	1,019	919
Not in labor force	36,348	36,434
BOTH SEXES, 16 TO 19 YEARS		
Civilian labor force	6,565	6,557
Employed	5,795	5,721
Agriculture	377	410
Nonagricultural industries	5,418	5,310
Unemployed	770	836
Not in labor force	7,029	7,036

D 1–10. Labor force and its components, 1900–1947.

Source: Stanley Lebergott, *Manpower in Economic Growth: The American Record Since 1800,* table A-3. (Copyright 1964; used with permission of McGraw-Hill Book Co., New York.)

Lebergott's estimates are designed to be comparable with those of the Current Population Survey. That survey, conducted by the Census Bureau, with its labor-force data presented by the Bureau of Labor Statistics (BLS) provides the continuing official source of reliable data on these subjects. Hence, Lebergott seeks to link to the levels it provides for the years since 1940, when it began. However, the Survey estimates are not wholly consistent with the decennial census levels for 1940. Lebergott's estimates, in consequence, will be at variance with studies tied to decennial census figures. Because the Survey estimates are not consistent with the farm-employment series of the Department of Agriculture, nor with the employees in nonagricultural establishment series of the Department of Labor, Lebergott's series will also not be consistent with them.

See source pp. 355–420. Lebergott's methods may be briefly described as follows: Preliminary annual labor force and employment estimates were derived by interpolating between detailed worker rates in the census years, and applying the resultant series to unpublished census estimates of population annually from 1900 to 1930. Special adjustments were made for labor force variation in World War I, and for immigration effects between 1900 and 1914. Tests of nonlinearity in the 1930's were made.

For 1900, 1910, 1920, and 1930, Lebergott computed worker rates separately for males and females in each of three nativity groups—native white, foreign-born white, and Negro—and within each group for the separate age intervals (10–13, 14–19, 20–24, 25–44, 45–64, 65 and over). For 1920 and 1930, he used the census data without adjustment. For 1900, minor adjustment was required in the reported data to develop estimates for the 10–13, 14–19, and 20–24 groups. For 1910, he used a preliminary set of rates roughly consistent with the adjusted U.S. estimate. The worker rates used for 1900, 1920, and 1930 necessarily differ from Durand's estimates (John Durand, *The Labor Force in the United States, 1890–1960*), as the latter are all adjusted to be comparable with the 1940 census totals, whereas the present series is comparable with the Current Population Survey estimates beginning 1940.

The worker rates for each age-sex-nativity group were interpolated to give annual estimates for 1900 to 1930, then applied to unpublished census data on population. Two adjustments were made in the data thus derived. Armed Forces overseas, excluded from the census series, were added to the preliminary labor-force series for 1917 to 1919. Secondly, the census estimates were based largely on school-attendance figures and other series not particularly sensitive to the inmigration of adult workers. Lebergott, therefore, computed a direct estimate for 1900 to 1914 of immigrant worker arrivals, and used that series as a measure of 1900 to 1914 labor-force trends among the foreign born.

The preliminary 1900 to 1930 employment trend series thus derived for persons aged 14 and over was used to interpolate between gainful-worker figures for 1900, 1910, 1920, and 1930. The decennial rates of gain were used to adjust from reported census date figures to annual averages. In addition, the reported 1910 figure was adjusted to allow for the overcount of that year. Lebergott estimated the adjustment for males 14 and over as for females, on the assumption that the overcounted group included only home-farm workers having the same age distribution as reported home-farm workers.

Interpolation between 1930 and 1940 benchmark totals was by means of the BLS total labor force series. The BLS series was derived by applying annual worker rates for age-sex groups to census population data for the corresponding groups. The worker rates were interpolations between estimated 1930 labor-force rates and those shown for 1940 by the Current Population Survey. The resultant series reflects changing proportions among the various age-sex groups, and these changes are reflected in the Lebergott series.

The unemployment series for 1900 to 1930 was derived by making direct benchmark estimates of unemployment in 1900, 1910, and 1930, using the population census data on unemployment in those years. Intercensal estimates were then obtained by estimating civilian labor force and employment and deducting one series from the other.

The estimate of unemployment in 1900 was based on data collected in two enumerations. One was the 1900 Census of Population, which secured information on unemployment during the year preceding the taking of the census. The second was a Cost of Living Survey made by the Commissioner of Labor of family income and expenditures that secured detailed information for about 25,000 families on cause and duration of unemployment during 1900–1901.

Although the census of 1910 secured data on unemployment of wage earners in the previous year, these data were not tabulated until 1948. The 1910 data on unemployment are in the form of distributions for unemployed wage earners 16 years and over by duration of unemployment. By applying the distribution to the total for wage earners 16 years and over, and deducting estimates made similarly for teachers and home-farm laborers (wage earners), Lebergott secured a preliminary estimate for the number of unemployed wage earners by duration group. The resultant distribution was reduced to exclude

unemployment that would not be counted by current definitions. He used the same proportions within each group as indicated in the 1901 Cost of Living Survey—multiplying by the same average duration figures, within each group, as used for 1900, and computing man-years of unemployment.

An annual average unemployment benchmark for 1930 was estimated as follows. Prior estimates (John Durand and Edwin Goldfield, *Estimates of Labor Force, Employment and Unemployment in the United States, 1940 and 1930*) indicated that 5.17 percent of the gainfully occupied total for April were unemployed. This ratio, applied to the census gainful-worker total for April, gives an April unemployment figure and, by subtraction, an employment figure. The annual average employment was estimated at 97.02 percent of the April level, using ratios for its agricultural, manufacturing, and other components. Adding Armed Forces overseas to this figure and subtracting from the annual average gainful-worker total gives an unemployment figure for 1930.

Following the procedure used for the original BLS estimates, but adopting a variety of revisions in the labor force and the component employment series, gives unemployment estimates for 1929–1939 that differ in trivial amount from those in the published BLS series except for 1929, which is approximately 20 percent different. Because of the widespread use of the BLS figures and because the differences are well within the error involved in the computation of the duplicating item, Lebergott adopted the BLS figures beginning 1930 as his unemployment totals, then subtracted these from the labor-force totals to give the employment series.

Beginning 1940, Lebergott adopted the Census Bureau's Current Population Survey reports, supplementing them for certain omissions. These data appear in *Current Population Reports*, series P-50.

See general note for series D 1–74 and also table and text for series D 11-25.

D 11–25. Labor force status of the population, 1870–1970.

Source: Annual data: 1947–1970, U.S. Bureau of Labor Statistics, **series D 11–19**, *Employment and Earnings*, monthly issues, tables A-1 and A-2; **series D 20–23**, unpublished data. Decennial data: U.S. Bureau of the Census, 1870–1930, *Twelfth Census of the United States: 1900*, Special Reports, *Occupations*, table IV, and *Fifteenth Census of the United States: 1930*, vol. IV, *Occupations by States*, tables 1.2 and 11; 1940–1950, *U.S. Census of Population: 1950*, vol. II, part 1, tables 52 and 118; 1960, *U.S. Census of Population: 1960*, vol. I, part 1, table 82; 1970, *U.S. Census of Population: 1970*, vol. I, part 1, table 90.

In 1953, population data from the 1950 census were introduced into the estimating procedure, affecting the comparability of the labor force figures with earlier years. Population levels were raised by 600,000; labor force, total employment, and agricultural employment levels were raised by 350,000, primarily in the figures for all persons and for males. Similarly, population data from the 1960 census were introduced in 1962, reducing the population totals by 50,000 and the labor force and employment totals by 200,000.

The inclusion of Alaska and Hawaii in 1960 resulted in an increase of about 600,000 in population and 300,000 in the labor force, four-fifths of which was in nonagricultural employment.

See general note for series D 1–74.

D 26–28. Gainful workers, by sex, by State, 1870–1950.

Source: Everett S. Lee, Ann Ratner Miller, Carol P. Brainerd, and Richard A. Easterlin, *Population Redistribution and Economic Growth, United States, 1870–1950*, vol. I, *Methodological Considerations and Reference Tables*, The American Philosophical Society, Philadelphia, 1957, table L-4. (Copyright.)

These series cover persons engaged in agricultural and nonagricultural occupations, shown separately in the source. The basic data are from the decennial censuses. To facilitate tabulation, the agriculture series was compiled directly and nonagricultural totals were obtained by subtraction from totals for all occupations.

Census tabulations of gainful workers during the period 1870–1930 included all persons 10 years of age and over. Beginning in 1940, however, tabulations of the labor force included only persons 14 years of age and over. The authors therefore constructed estimates of 10–13 year-old workers by sex for each State on the basis of the occupational distributions of 14–15 year-olds.

For 1870 through 1930 all gainful workers are included in the series. All experienced persons in the labor force are included for 1950, that is, all persons except those looking for their first jobs. The 1940 data refer to employed persons and to experienced workers seeking work but exclude persons on public emergency work.

For definition of "gainful workers," see text for series D 75–84.

D 29–41. Labor force, by age and sex, 1890–1970.

Source: Annual data, 1940–1946, U.S. Bureau of the Census, *Current Population Reports*, series P-50 and P-25; 1947–1970, U.S. Department of Labor, *Manpower Report of the President, March 1972*, pp. 158–159. Decennial census data, 1890–1930, John D. Durand, *The Labor Force in the United States, 1890–1960*, Social Science Research Council, New York, 1948; 1940 and 1960, U.S. Bureau of the Census, *U.S. Census of Population: 1960*, vol. I, part 1, tables 82–84; 1950, *U.S. Census of Population: 1950*, vol. IV, Special Reports, *Employment and Personal Characteristics*, p. 1A-62; and 1970, *U.S. Census of Population: 1970*, vol. I, part 1, table 215, and unpublished data.

The civilian labor force data are annual averages. However, the data on the Armed Forces and on the total population (the base for labor force participation rates) are estimates as of July 1 of the specified year.

See general note for series D 1–74 and also text for series D 11–25.

D 42–48. Civilian labor force as percent of civilian noninstitutional population, by race and sex, 1940–1970.

Source: See source for series D 29–41.

See general note for series D 1–74 and text for series D 11–25.

D 49–62. Marital status of women in the civilian labor force, 1890–1970.

Source: Annual data, 1940–1958, U.S. Bureau of the Census, *Current Population Reports*, series P-50; 1959–1970, U.S. Bureau of Labor Statistics, *Special Labor Force Reports*, various issues. Decennial data, U.S. Bureau of the Census, 1890–1930, *U.S. Census of Population: 1930*, vol. IV, table 25; 1940–1970, *U.S. Census of Population: 1970*, vol. I, tables 2, 3, and 5.

In the annual series, data for 1940 are based on complete count census data revised for comparability with the Current Population Survey; data for 1944–1970 are based on the Current Population Survey.

See general note for series D 1–74 and text for series D 11–25.

D 63–74. Married women (husband present) in the labor force, by age and presence of children, 1948–1970.

Source: U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, table 14.

Children refer to "own" children of the family head and include stepchildren and adopted children.

See general note for series D 1–74.

D 75–84. Gainful workers, by age, sex, and farm-nonfarm occupations, 1820–1930.

Source: U.S. Bureau of the Census, Sixteenth Census Reports, *Comparative Occupation Statistics for the United States, 1870–1940*, pp. 93, 100, and 142.

The gainful worker concept differs radically from current labor force concepts as described in the general note for series D 1–74. The primary purpose of the gainful worker statistics was a count of occupations. The data were based on a question relating to occupational status and not to employment status as currently defined. Census enumerators were instructed to find and enter the occupation of each person 10 years of age and over who followed an occupation in which he earned money or its equivalent, or in which he assisted in the production of marketable goods. Thus, the term "gainful workers" includes all persons who usually followed a gainful occupation although they may not have been employed when the census was taken. It does not include women doing housework in their own homes, without wages, and having no other employment, nor children working at home, merely on general household work, or chores, or at odd times on other work.

The question as posed by the enumerator made no reference to time. The response thus varied substantially with the individual. Many persons who were retired or permanently disabled and who had not worked for some time reported their former line of work and were counted as gainful workers. On the other hand, many employed persons did not enter themselves as gainful workers, because they considered themselves as students or housewives and their current employment as only temporary.

These and other factors made for incomparabilities among different age and occupational groups from one decennial census to the next. The gainful worker statistics, however, are considered as a generally reliable measure of long-term trends during the time period covered.

For a more detailed discussion of the gainful worker concept and the data themselves, see John D. Durand, *The Labor Force in the United States, 1890–1960*, Social Science Research Council, New York, 1948, p. 191 *et seq.*; John D. Durand, "Development of the Labor Force Concept, 1930–40," *Labor Force Definition and Measurement*, appendix A, Social Science Research Council, Bulletin 56, 1947; and U.S. Bureau of the Census, Sixteenth Census Reports, *Population*, "Estimates of Labor Force, Employment, and Unemployment in the U.S.: 1940 and 1930."

D 85–86. Unemployment, 1890–1970.

Source: 1890–1928, see source for series D 1–10, tables A-3 and A-15; 1929–1970, U.S. Bureau of Labor Statistics, *Employment and Earnings*, May 1972.

For data prior to 1900, an 1890 benchmark was derived from the unemployment data reported in the 1890 and 1900 censuses. Data for the primary male groups in the labor force showed unemployment in 1890 at 79.31 percent of that in 1900. Applying this ratio to the 1900 unemployment rate gives an 1890 rate of 3.96 percent. This rate applied to an estimated 1890 total for the labor force aged 14 and over gives the 1890 unemployment figure.

Intercensal unemployment figures for 1891–1899 were derived by deducting an employment series from a labor-force series. The employment series is the adjusted sum of a number of detailed series, whose derivation is described in *Manpower in Economic Growth*, pp. 421–478.

The figures for 1900–1939 represent estimates of unemployment on as comparable a basis as possible to current labor force concepts. There have been many estimates of unemployment for these years prepared by such agencies as the National Industrial Conference Board and by authors such as Paul Douglas in *Real Wages in the United States, 1890–1926* (these are discussed and compared in Lebergott, cited above). In all of these, including the series presented here, unemployment was calculated as a residual. That is, estimates were first made of the civilian labor force, then of employment; the difference between the two provides the estimates of unemployment. The figures for decennial census years were used as benchmarks, with interpolations made for intercensal years from a variety of available sources.

Beginning with 1940, figures were obtained from the U.S. Bureau of the Census Current Population Survey. These data appear in the Census Bureau's series P-50 reports and, beginning 1958, in the Bureau of Labor Statistics monthly *Employment and Earnings*.

See general note for series D 1–74 and text for series D 87–101.

D 87–101. Unemployment rates for selected groups, 1947–1970.

Source: U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, pp. 128–129, and 144.

The unemployment rate represents the percent of the civilian labor force reported as unemployed by the Current Population Survey during the survey week (the week containing the 12th of each month). Annual figures shown here are averages of monthly figures.

Duration of unemployment represents the length of time (through the end of 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 two weeks or more during which a person was employed or ceased looking for work breaks the continuity of the present period of seeking work. Series D 99 represents the unemployment rate calculated as a percent of the civilian labor force. Average duration, series D 100, is an arithmetic mean computed from a distribution by single weeks of unemployment.

State insured unemployment refers to persons seeking benefits under State unemployment insurance programs. Series D 101 represents the unemployment rate for the survey week calculated as a percent of average covered employment.

See general note for series D 1–74.

D 102–115. Unemployment rates, by industry, 1948–1970.

Source: U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, p. 151.

See general note for series D 1–74 and text for series D 87–101.

D 116–126. Persons with a job but not at work and civilians employed, by hours worked, 1950–1970.

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, May issues.

Hours of work statistics relate to the actual number of hours worked during the survey week. (See general note for series D 1–74.) For example, a person who normally works 40 hours a week but who was off on the Veterans 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, and all the hours are credited to the longest job.

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."

D 127–141. Employees on nonagricultural payrolls, by major industry divisions, 1900–1970.

Source: 1900–1928, see source for series D 1–10, table A-5; 1929–1970, U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, p. 89.

Data from payroll records, submitted voluntarily by over 160,000 employers, provide (1) current information on wage and salary employment, hours, and earnings in nonagricultural establishments, and (2) job vacancies and labor turnover in manufacturing, by industry and geographic location. These statistical programs are conducted by the Bureau of Labor Statistics (BLS) in cooperation with State agencies.

The two types of data collection documents used are of the "shuttle" type, with spaces for each month of the calendar year. The cooperating State agencies mail the reporting forms to the participating establishments each month, use the information to prepare State and area estimates, and then send the basic data to BLS in Washington for use in preparing national series.

Employment data refer to persons on establishment payrolls who receive pay for any part of the reference pay period, and include workers on paid sick leave (when pay is received directly from the firm), on paid holiday or paid vacation, and those who work during a part of the pay period and are unemployed or on strike during the rest of the period. Proprietors, the self-employed, unpaid family workers, farmworkers, and domestic workers in households are excluded. Government employment covers civilian employees only.

Periodically, the industry employment series are adjusted to recent benchmarks to improve their accuracy. These adjustments may also affect the hours, earnings, and labor turnover series since employment levels are used as weights. Industry data for these series have been adjusted to March 1970 benchmarks.

Total employment in nonagricultural establishments from the "payroll" survey is not directly comparable with the estimates of nonagricultural employment obtained from the monthly "household" survey (Current Population Survey). The household survey includes the self-employed, unpaid family workers, and private household workers and is basically a count of persons. The payroll series, in contrast, excludes these workers and is basically a count of jobs. Thus, the multiple jobholder, counted only once in the household survey, would be counted once for each job by the payroll survey. Employment estimates developed by quinquennial censuses may differ from payroll estimates due, primarily, to the reporting practices of multiproduct establishments, and administrative handling of central offices and auxiliary units.

For a more detailed description of these programs see Chapter 2, "Employment, Hours, and Earnings," of the *Handbook of Methods for Surveys and Studies*, BLS Bulletin 1711.

The data summarized in these series are available in considerable detail (estimates are provided for about 400 different industries each month). For a discussion of available historical data, see Bureau of Labor Statistics, *Employment and Earnings, United States, 1909–1971*, Bulletin No. 1312–8; for an analysis of historical trends, see Seymour L. Wolfbein, "Changing Patterns of Industrial Employment," *Monthly Labor Review*, March 1956.

D 142–151. Production or nonsupervisory workers on private nonagricultural payrolls, by industry division, 1909–1970.

Source: U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, p. 92.

See text for series D 127–141.

D 152–166. Industrial distribution of gainful workers, 1820–1940.

Source: Solomon Fabricant, "The Changing Industrial Distribution of Gainful Workers: Some Comments on the American Decennial Statistics for 1820–1940," *Studies in Income and Wealth*, vol. 11, National Bureau of Economic Research, New York, 1949, p. 42. (Copyright.)

For definition of "gainful workers," see text for series D 75–84.

The data are based almost entirely on estimates in the following monographs which were prepared mainly from data collected in the decennial censuses of population: P. K. Whelpton, "Occupational Groups in the United States, 1820–1920," *Journal of the American Statistical Association*, September 1926; U.S. Bureau of the Census, Sixteenth Census Reports, *Comparative Occupation Statistics for the United States, 1870 to 1940*; and Daniel Carson, "Industrial Composition of Manpower in the United States, 1870–1940," *Studies in Income and Wealth*, vol. 11.

D 167–181. Labor force and employment, by industry, 1800–1960.

Source: See source for series D 1–10, table A-1.

The individual series on labor force and employment for 1800 to 1960 were derived in extensive detail. A full description of the procedures used appears in a Conference on Research in Income and Wealth, *Studies in Income and Wealth*, vol. 30, pp. 132 ff. The data represent revisions of some of the materials used for series D 152–166 and are intended to be comparable with current official series.

D 182–232. Major occupation group of the experienced civilian labor force, by sex, 1900–1970.

Source: U.S. Bureau of the Census. 1900–1950 (1950 classification), David L. Kaplan and M. Claire Casey, *Occupational Trends in the United States, 1900–1950*, Working Paper No. 5, 1958; 1950–1960 (1960 classification), *U.S. Census of Population: 1960*, vol. I, part 1, table 201; 1960 (1970 classification)–1970, *U.S. Census of Population: 1970*, vol. I, part 1, table 221.

The data for 1900–1950 (1950 classification) constitute primarily an updating by Kaplan and Casey of the material in Sixteenth Census Reports, *Comparative Occupation Statistics in the United States, 1870–1940*. Separate series developed by Alba M. Edwards in that report were brought together and a number of new estimates were prepared to fill gaps. The appropriate figures were then adjusted to conform to the definitions used in the 1950 occupational classification system. Except where there was firm evidence to support a change, Edwards' basic assumptions and estimates were utilized throughout.

The source cautions that the data, particularly those for 1900, are approximations only. The estimates for 1900 "were included mainly for the purpose of rounding out a half-century of information, despite some obvious deficiencies. Particularly prior to 1910, there is little information available on the exact definitions used for the several occupational categories. And, even for fairly recent years, there is often only meager statistical intelligence on which to base adjustments for comparability with the 1950 definitions."

The universe covered in the Kaplan and Casey series is described as the "economically active population." Prior to 1940, this refers to civilian gainful workers 10 years old and over; for 1940 and 1950, it refers to persons 14 years old and over in the experienced civilian labor force (all employed and unemployed workers with previous work experience). Two incomparabilities should be noted. First, there are important differences between the gainful worker and labor force concepts (see general note for series D 1–74, and text for series D 75–84). Second, there is the difference in age limitation. The inclusion of the 10-to-13 group prior to 1940, and their exclusion in 1940 and 1950, follows the census practice in those years.

The occupation classification system used in the 1970 census is similar to that used in each decennial census since 1940. However, the changes made for each of the censuses affect the comparability of data from one census to another. For example, many of the larger 1960 occupation categories were divided into several smaller categories which increased the number of categories in the 1970 system to 441, compared with 297 in 1960.

A new major group, "transport equipment operatives," added to the occupation classification in 1970, includes occupations formerly part of the "operatives" major group. The arrangement of some

major groups was changed to form more "families" of occupations. This applies especially to the "professional" and "service" major groups. Although there was an effort to limit changes between major groups, there were many cases where such changes were necessary. One such change is the treatment of apprentices. They were moved from "operatives" to "craftsmen" and are classified as a subcategory of their craft.

Two other changes in the census have an important effect on comparability: (1) The allocation of "not reported" cases to the major groups in 1970 increased the size of those totals relative to the totals for 1950 and 1960 when there was no allocation of these characteristics; and (2) the age coverage for statistics on these subjects to accord with past and current definitions of the labor force, as indicated in the table for series D 182–232.

The population census occupational classification system is generally comparable with the system used in U.S. Bureau of Employment Security, *Dictionary of Occupational Titles* (DOT), 3d edition, with the exception of the blue collar workers (i.e. manual and service workers). The DOT structure for these occupations is quite different from that used by the Bureau of the Census. An important reason for this is that the two systems are designed to meet different needs and to be used under different circumstances. The DOT system is designed primarily for employment service needs, such as placement and counseling, and is ordinarily used to classify very detailed occupational information obtained in an interview with the worker himself. The census system, on the other hand, is designed for statistical purposes and is ordinarily used in the classification of limited occupational descriptions obtained in a self-enumeration questionnaire or in an interview with a member of the worker's family.

D 233–682. Detailed occupation of the economically active population, 1900–1970.

Source: See source for series D 182–232.

Dashes (------) are used in the columns of this table to denote that comparable data are not available because of changes in definitions and occupations.

See also text for series D 182–232.

Series D 1–10. Labor Force and Its Components: 1900 to 1947

[In thousands of persons 14 years old and over. Annual averages]

Year	Total labor force		Armed Forces	Civilian labor force	Employed			Unemployed		
	Number	Percent of noninstitutional population			Total	Farm	Nonfarm	Total	Percent of—	
									Civilian labor force	Nonfarm employees
	1	2	3	4	5	6	7	8	9	10
1947	61,758	57.4	1,590	60,168	57,812	8,256	49,557	2,356	3.9	5.4
1946	60,970	57.2	3,450	57,520	55,250	8,320	46,930	2,270	3.9	5.5
1945	65,290	61.9	11,430	53,860	52,820	8,580	44,240	1,040	1.9	2.7
1944	66,040	63.1	11,410	54,630	53,960	8,950	45,010	670	1.2	1.7
1943	64,560	62.3	9,020	55,540	54,470	9,080	45,390	1,070	1.9	2.7
1942	60,380	58.8	3,970	56,410	53,750	9,250	44,500	2,660	4.7	6.8
1941	57,530	56.7	1,620	55,910	50,350	9,100	41,250	5,560	9.9	14.4
1940	56,180	56.0	540	55,640	47,520	9,540	37,980	8,120	14.6	21.3
1939	55,588	56.0	370	55,218	45,738	9,710	36,028	9,480	17.2	25.2
1938	54,872	56.0	340	54,532	44,142	9,840	34,302	10,390	19.1	27.9
1937	54,088	55.9	320	53,768	46,068	10,000	36,068	7,700	14.3	21.3
1936	53,319	55.7	300	53,019	43,989	10,090	33,899	9,030	17.0	25.4
1935	52,553	55.6	270	52,283	41,673	10,110	31,563	10,610	20.3	30.2
1934	51,910	55.7	260	51,650	40,310	9,990	30,320	11,340	22.0	32.6
1933	51,132	55.6	250	50,882	38,052	10,090	27,962	12,830	25.2	37.6
1932	50,348	55.4	250	50,098	38,038	10,120	27,918	12,060	24.1	36.3
1931	49,585	55.2	260	49,325	41,305	10,240	31,065	8,020	16.3	25.2
1930	48,783	55.0	260	48,523	44,183	10,340	33,843	4,340	8.9	14.2
1929	48,017	55.1	260	47,757	46,207	10,541	35,666	1,550	3.2	5.3
1928	47,367	55.2	262	47,105	45,123	10,497	34,626	1,982	4.2	6.9
1927	46,634	55.2	259	46,375	44,856	10,529	34,327	1,519	3.3	5.4
1926	45,885	55.3	256	45,629	44,828	10,690	34,138	801	1.8	2.9
1925	45,431	55.4	262	45,169	43,716	10,662	33,054	1,453	3.2	5.4
1924	44,502	55.5	267	44,235	42,045	10,599	31,446	2,190	5.0	8.3
1923	43,699	55.8	255	43,444	42,395	10,621	31,774	1,049	2.4	4.1
1922	42,772	55.7	276	42,496	39,637	10,561	29,076	2,859	6.7	11.4
1921	42,341	55.9	362	41,979	37,061	10,443	26,618	4,918	11.7	19.5
1920	41,720	55.6	380	41,340	39,208	10,440	28,768	2,132	5.2	8.6
1919	41,239	56.4	1,543	39,696	39,150	10,498	28,652	546	1.4	2.4
1918	41,980	57.7	2,904	39,076	38,540	10,674	27,866	536	1.4	2.4
1917	40,742	56.6	719	40,023	38,175	10,788	27,387	1,848	4.6	8.2
1916	40,238	56.6	181	40,057	38,014	10,802	27,212	2,043	5.1	9.1
1915	39,774	56.8	174	39,600	36,223	10,953	25,270	3,377	8.5	15.6
1914	39,564	57.3	163	39,401	36,281	10,945	25,336	3,120	7.9	14.7
1913	38,832	57.3	157	38,675	37,004	10,974	26,030	1,671	4.3	8.2
1912	38,081	57.4	149	37,932	36,173	11,136	25,037	1,759	4.6	9.0
1911	37,628	57.6	145	37,478	34,960	11,107	23,853	2,518	6.7	13.0
1910	36,850	57.4	141	36,709	34,559	11,260	23,299	2,150	5.9	11.6
1909	35,855	57.2	134	35,721	33,897	11,163	22,734	1,824	5.1	10.3
1908	35,039	57.2	123	34,916	32,136	11,238	20,898	2,780	8.0	16.4
1907	34,295	57.2	112	34,183	33,238	11,493	21,745	945	2.8	6.0
1906	33,321	56.8	109	33,212	32,638	11,479	21,159	574	1.7	3.9
1905	32,408	56.5	109	32,299	30,918	11,187	19,731	1,381	4.3	9.5
1904	31,548	56.3	107	31,441	29,750	11,076	18,674	1,691	5.4	12.0
1903	30,804	56.2	106	30,698	29,494	10,869	18,625	1,204	3.9	9.0
1902	30,012	56.0	108	29,904	28,807	10,753	18,054	1,097	3.7	8.6
1901	29,268	55.8	115	29,153	27,948	10,916	17,032	1,205	4.0	10.1
1900	28,500	55.5	124	28,376	26,956	11,050	15,906	1,420	5.0	12.6

Series D 11–25. Labor Force Status of the Population: 1870 to 1970

[**In thousands of persons 16 years old and over, except as noted.** Annual estimates are averages of monthly figures. The introduction of data from the decennial censuses into the estimation procedure in 1953 and 1962 and the inclusion of Alaska and Hawaii beginning 1960 have resulted in 3 periods of noncomparability; see text]

Year	Total noninstitutional population [1]	Total labor force		Civilian labor force					Not in labor force				
		Number [2]	Percent of population	Total	Employed			Unemployed	Total	Keeping house	In school	Unable to work	Other
					Total	Agriculture	Nonagricultural						
	11	12	13	14	15	16	17	18	19	20	21	22	23
TOTAL													
1970	140,182	85,903	61.3	82,715	78,627	3,462	75,165	4,088	54,280	35,118	7,033	2,409	9,719
1969	137,841	84,240	61.1	80,734	77,902	3,606	74,296	2,832	53,602	34,888	7,013	2,328	9,373
1968	135,562	82,272	60.7	78,737	75,920	3,817	72,103	2,817	53,291	35,204	6,900	2,264	8,923
1967	133,319	80,793	60.6	77,347	74,372	3,844	70,527	2,975	52,527	34,993	6,657	2,341	8,536
1966	131,180	78,893	60.1	75,770	72,895	3,979	68,915	2,875	52,288	35,230	6,423	1,909	8,728
1965	129,236	77,178	59.7	74,455	71,088	4,361	66,726	3,366	52,058	35,463	6,399	1,727	8,468
1964	127,224	75,830	59.6	73,091	69,305	4,523	64,782	3,786	51,394	35,346	5,948	1,690	8,410
1963	125,154	74,571	59.6	71,833	67,762	4,687	63,076	4,070	50,583	35,209	5,476	1,813	8,085
1962	122,981	73,442	59.7	70,614	66,702	4,944	61,759	3,911	49,539	35,241	4,921	1,768	7,608
1961	121,343	73,031	60.2	70,459	65,746	5,200	60,546	4,714	48,312	34,802	4,739	1,747	7,024
1960*	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	47,617	34,464	4,489	1,772	6,893
1959	117,881	70,921	60.2	68,369	64,630	5,565	59,065	3,740	46,960	34,374	4,239	1,765	6,583
1958	116,363	70,275	60.4	67,639	63,036	5,586	57,450	4,602	46,088	34,135	3,929	1,777	6,246
1957	115,065	69,729	60.6	66,929	64,071	5,947	58,123	2,859	45,336	33,780	3,627	1,827	6,103
1956	113,811	69,409	61.0	66,552	63,802	6,283	57,517	2,750	44,402	33,291	3,468	1,932	5,711
1955	112,732	68,072	60.4	65,023	62,171	6,449	55,724	2,852	44,660	33,613	3,518	2,173	5,357
1954	111,671	66,993	60.0	63,643	60,110	6,206	53,903	3,532	44,678	33,752	3,378	2,288	5,260
1953	110,601	66,560	60.2	63,015	61,181	6,261	54,922	1,834	44,041	[3]	[3]	[3]	[3]
1952	108,823	65,730	60.4	62,138	60,254	6,501	53,753	1,883	43,093	33,197	3,177	2,272	4,446
1951	107,721	65,117	60.4	62,017	59,962	6,726	53,239	2,055	42,604	32,960	3,120	2,321	4,204
1950	106,645	63,858	59.9	62,208	58,920	7,160	51,760	3,288	42,787	32,912	3,542	2,363	3,970
1949	105,611	62,903	59.6	61,286	57,649	7,656	49,990	3,637	42,708	32,925	3,493	6,289	
1948	104,527	62,080	59.4	60,621	58,344	7,629	50,713	2,276	42,447	32,703	3,610	6,135	
1947	103,418	60,941	58.9	59,350	57,039	7,891	49,148	2,311	42,477				
Decennial census:													
1970 (April)	139,130	82,049	59.0	80,051	76,554	2,750	73,804	3,497	57,082	[3]	9,666	[3]	47,415
1960 (April)* [4]	124,517	69,877	56.1	68,144	64,639	4,257	60,383	3,505	54,639	[3]	10,327	[3]	44,312
1950 (April) [4]	110,267	59,643	54.1	58,646	55,788	[5] 6,876	[5] 48,912	2,858	50,624	32,338	[3]	4,620	13,666
1940 (April) [4]	[5] 100,147	53,011	52.9	52,705	45,070	8,449	36,621	7,635	[5] 47,136	28,932	9,013	5,269	3,922
1930 (April) [6]	98,723	48,830	49.5			10,472	38,358		49,893				
1920 (Jan.) [6]	82,739	41,614	50.3			10,666	30,948		41,125				
1910 (April) [6]	71,580	38,167	53.3			12,388	25,779		33,413				
1900 (June) [6]	57,950	29,073	50.2			10,382	18,691		28,877				
1890 (June) [6 7]	47,414	23,318	49.2			9,148	14,170		24,095				
1880 (June) [6]	36,762	17,392	47.3			7,714	9,678		19,370				
1870 (June) [6]	28,229	12,506	44.3			5,949	6,557		15,723				
MALE													
1970	67,409	54,343	80.6	51,195	48,960	2,861	46,099	2,235	13,066				
1969	66,365	53,688	80.9	50,221	48,818	2,963	45,855	1,403	12,677				
1968	65,345	53,030	81.2	49,533	48,114	3,157	44,957	1,419	12,315				
1967	64,316	52,398	81.5	48,987	47,479	3,164	44,315	1,508	11,919				
1966	63,351	51,560	81.4	48,471	46,919	3,243	43,675	1,551	11,792				
1965	62,473	50,946	81.5	48,255	46,340	3,547	42,792	1,914	11,527				
1964	61,556	50,387	81.9	47,679	45,474	3,691	41,782	2,205	11,169				
1963	60,627	49,835	82.2	47,129	44,657	3,809	40,849	2,472	10,792				
1962	59,626	49,395	82.8	46,600	44,177	4,069	40,108	2,423	10,231				
1961	58,826	49,193	83.6	46,653	43,656	4,298	39,359	2,997	9,633				
1960*	58,144	48,870	84.0	46,388	43,904	4,472	39,431	2,486	9,274				
1959	57,312	48,405	84.5	45,886	43,466	4,532	38,934	2,420	8,907				
1958	56,640	48,126	85.0	45,521	42,423	4,596	37,827	3,098	8,514				
1957	56,082	47,964	85.5	45,197	43,357	4,824	38,532	1,841	8,118				
1956	55,547	47,914	86.3	45,091	43,380	5,039	38,340	1,711	7,633				
1955	55,122	47,488	86.2	44,475	42,621	5,265	37,357	1,854	7,634				
1954	54,706	47,275	86.4	43,965	41,620	5,200	36,418	2,344	7,431				
1953	54,248	47,131	86.9	43,633	42,431	5,253	37,178	1,202	7,117				
1952	53,248	46,416	87.2	42,869	41,684	5,389	36,294	1,185	6,832				
1951	52,788	46,063	87.3	43,001	41,780	5,533	36,248	1,221	6,725				
1950	52,352	45,446	86.8	43,819	41,580	6,001	35,578	2,239	6,906				
1949	51,922	45,097	86.9	43,498	40,926	6,342	34,584	2,572	6,825				
1948	51,439	44,729	87.0	43,286	41,726	6,358	35,368	1,559	6,710				
1947	50,968	44,258	86.8	42,686	40,994	6,643	34,351	1,692	6,710				
Decennial census:													
1970 (April)	66,218	51,502	77.8	49,549	47,624	2,521	45,103	1,925	14,716				
1960 (April* [4]	60,274	47,468	78.8	45,763	43,467	3,846	39,621	2,296	12,807				
1950 (April) [4]	53,728	43,091	80.2	42,126	40,037	6,406	33,631	2,089	10,637				
1940 (April) [4]	50,770	40,123	79.0	39,818	33,892	7,887	26,005	5,926	10,647				
1930 (April) [6]	49,950	38,078	76.2			9,562	28,516		11,872				
1920 (Jan.) [6]	42,290	33,065	78.2			9,583	23,482		9,225				
1910 (April) [6]	37,028	30,092	81.3			10,582	19,510		6,936				
1900 (June) [6]	29,703	23,754	80.0			9,404	14,350		5,950				
1890 (June) [6 7]	24,353	19,313	79.3			8,379	10,934		5,040				
1880 (June) [6]	18,736	14,745	78.7			7,119	7,626		3,991				
1870 (June) [6]	14,259	10,670	74.8			5,552	5,118		3,589				

See footnotes at end of table.

Series D 11–25. Labor Force Status of the Population: 1870 to 1970—Con.

[In thousands of persons 16 years old and over, except as noted. Annual estimates are averages of monthly figures]

Year	Total noninstitutional population [1]	Total labor force		Civilian labor force					Not in labor force
		Number [2]	Percent of population	Total	Employed			Unemployed	
					Total	Agriculture	Nonagricultural		
	11	12	13	14	15	16	17	18	19
FEMALE									
1970	72,774	31,560	43.4	31,520	29,667	601	29,066	1,853	41,214
1969	71,476	30,551	42.7	30,513	29,084	643	28,441	1,429	40,924
1968	70,217	29,242	41.6	29,204	27,807	660	27,147	1,397	40,976
1967	69,003	28,395	41.2	28,360	26,893	680	26,212	1,468	40,608
1966	67,829	27,333	40.3	27,299	25,976	736	25,240	1,324	40,496
1965	66,763	26,232	39.3	26,200	24,748	814	23,934	1,452	40,531
1964	65,668	25,443	38.7	25,412	23,831	832	23,000	1,581	40,225
1963	64,527	24,736	38.3	24,704	23,105	878	22,227	1,598	39,791
1962	63,355	24,047	38.0	24,014	22,525	875	21,651	1,488	39,308
1961	62,517	23,838	38.1	23,806	22,090	902	21,187	1,717	38,679
1960*	61,615	23,272	37.8	23,240	21,874	986	20,887	1,366	38,343
1959	60,569	22,516	37.2	22,483	21,164	1,033	20,131	1,320	38,053
1958	59,723	22,149	37.1	22,118	20,613	990	19,623	1,504	37,574
1957	58,983	21,765	36.9	21,732	20,714	1,123	19,591	1,018	37,218
1956	58,264	21,495	36.9	21,461	20,422	1,244	19,177	1,039	36,769
1955	57,610	20,584	35.7	20,548	19,550	1,184	18,367	998	37,026
1954	56,965	19,718	34.6	19,678	18,490	1,006	17,486	1,188	37,247
1953	56,353	19,429	34.5	19,382	18,750	1,008	17,744	632	36,924
1952	55,575	19,314	34.8	19,269	18,570	1,112	17,459	698	36,261
1951	54,933	19,054	34.7	19,016	18,182	1,193	16,990	834	35,879
1950	54,293	18,412	33.9	18,389	17,340	1,159	16,182	1,049	35,881
1949	53,689	17,806	33.2	17,788	16,723	1,314	15,409	1,065	35,883
1948	53,088	17,351	32.7	17,335	16,618	1,271	15,347	717	35,737
1947	52,450	16,683	31.8	16,664	16,045	1,248	14,797	619	35,767
Decennial census:									
1970 (April)	72,913	30,547	41.9	30,502	28,930	319	28,611	1,572	42,366
1960 (April)* [4]	64,242	22,410	34.9	22,381	21,172	410	20,762	1,209	41,832
1950 (April) [4]	56,539	16,552	30.9	16,520	15,751	590	15,161	769	39,987
1940 (April) [4]	50,688	12,887	25.4	12,887	11,178	485	10,693	1,709	37,800
1930 (April) [6]	48,773	10,752	22.0	----	----	910	9,842	----	38,021
1920 (Jan.) [6]	40,449	8,550	21.0	----	----	1,083	7,467	----	31,900
1910 (April) [6]	34,553	8,076	23.4	----	----	1,807	6,269	----	26,477
1900 (June) [6]	28,246	5,319	18.8	----	----	977	4,342	----	22,927
1890 (June) [6 7]	23,061	4,006	17.4	----	----	770	3,236	----	19,055
1880 (June) [6]	18,026	2,647	14.7	----	----	595	2,053	----	15,378
1870 (June) [6]	13,970	1,836	13.1	----	----	397	1,439	----	12,134

Year	Civilian noninstitutional population [1]	Civilian labor force				Not in labor force	Civilian noninstitutional population [1]	Civilian labor force				Not in labor force
		Number	Percent of population	Employed	Unemployed			Number	Percent of population	Employed	Unemployed	
	24	14	25	15	18	19	24	14	25	15	18	19
	WHITE						NEGRO AND OTHER RACES					
1970	122,112	73,518	60.2	70,182	3,337	48,594	14,883	9,197	61.8	8,445	752	5,686
1969	119,913	71,779	59.9	69,518	2,261	48,133	14,422	8,954	62.1	8,384	570	5,468
1968	117,948	69,977	59.3	67,751	2,226	47,971	14,080	8,760	62.2	8,169	590	5,320
1967	116,099	68,699	59.2	66,361	2,338	47,401	13,775	8,648	62.8	8,011	638	5,127
1966	114,564	67,274	58.7	65,019	2,253	47,292	13,492	8,496	63.0	7,875	621	4,995
1965	113,284	66,136	58.4	63,445	2,691	47,148	13,230	8,319	62.9	7,643	676	4,912
1964	111,534	64,921	58.2	61,922	2,999	46,613	12,951	8,169	63.1	7,383	786	4,781
1963	109,705	63,830	58.2	60,622	3,208	45,875	12,710	8,004	63.0	7,140	864	4,707
1962	107,715	62,750	58.3	59,698	3,052	44,965	12,439	7,863	63.2	7,004	859	4,577
1961	106,603	62,654	58.8	58,912	3,742	43,950	12,168	7,802	64.1	6,832	970	4,364
1960*	105,282	61,913	58.8	58,850	3,063	43,369	11,965	7,714	64.5	6,927	787	4,250
1959	103,802	60,953	58.7	58,005	2,947	42,850	11,527	7,418	64.4	6,624	794	4,110
1958	102,391	60,293	58.9	56,614	3,679	42,099	11,334	7,347	64.8	6,422	925	3,987
1957	101,117	59,741	59.1	57,452	2,289	41,378	11,144	7,188	64.5	6,619	569	3,958
1956	99,976	59,427	59.4	57,265	2,162	40,549	10,978	7,127	64.9	6,535	592	3,850
1955	98,881	58,082	58.7	55,834	2,248	40,798	10,806	6,942	64.2	6,341	601	3,864
1954	97,705	56,817	58.2	53,957	2,860	40,888	10,615	6,824	64.3	6,150	674	3,791
Decennial census:												
1970 (April)	123,590	71,177	58.4	68,283	2,895	52,413	15,500	8,874	57.3	8,271	603	6,626
1960 (April)* [4]	111,530	60,885	54.6	58,010	2,875	50,645	13,013	7,259	55.8	6,629	630	5,754
1950 (April) [4]	100,732	53,178	52.8	50,804	2,374	47,553	11,044	6,125	55.5	5,645	480	4,918
1940 (April) [4]	91,407	47,052	51.5	40,369	6,683	44,355	9,772	5,680	58.1	4,728	952	4,092
1930 (April) [6]	87,981	42,584	48.4	39,776	2,808	45,396	10,742	6,245	58.1	5,866	379	4,497
1920 (Jan.) [6]	74,360	36,616	49.2	----	----	37,744	8,380	4,998	59.6	----	----	3,381
1910 (April) [6]	63,934	32,774	51.3	----	----	31,160	7,646	5,393	70.5	----	----	2,253
1900 (June) [6]	51,251	24,913	48.6	----	----	26,338	6,699	4,160	62.1	----	----	2,539
1890 (June) [6 7]	41,931	19,542	46.6	----	----	22,389	5,482	3,193	58.2	----	----	2,289

* Denotes first year for which figures include Alaska and Hawaii.
[1] 1870–1930, total population includes institutional.
[2] 1940–1970, includes Armed Forces.
[3] Not available on basis consistent with "total not in labor force."
[4] Data for persons 14 years old and over.
[5] Estimated from data based on different sample.
[6] Data for persons 10 years old and over reporting a gainful occupation.
[7] Revised figures for total and male and female; uncorrected figures for white and Negro and other races.

Series D 26–28. Gainful Workers, by Sex, by State: 1870 to 1950

[In thousands of workers 10 years old and over]

State and year	Total	Male	Female
	26	27	28
UNITED STATES			
1950	60,200.8	43,678.3	16,522.6
1940	49,625.4	37,511.9	12,113.4
1930	48,829.9	38,077.8	10,752.1
1920	41,614.2	33,064.7	8,549.5
1910	38,167.3	30,091.6	8,075.8
1900	29,073.2	23,753.8	5,319.4
1890	22,735.7	18,821.1	3,914.6
1880	17,392.1	14,744.9	2,647.2
1870	12,505.9	10,669.6	1,836.3
ALABAMA			
1950	1,099.2	807.8	291.5
1940	965.8	735.6	230.1
1930	1,026.3	772.3	254.0
1920	908.2	684.3	223.9
1910	997.5	683.2	314.3
1900	763.2	563.2	200.0
1890	541.6	411.6	130.0
1880	492.8	368.7	124.1
1870	365.3	275.6	89.6
ARIZONA			
1950	266.5	198.1	68.5
1940	168.8	133.2	35.6
1930	165.3	135.3	30.0
1920	130.6	112.2	18.4
1910	87.8	77.2	10.6
1900	53.4	46.6	6.8
1890	26.4	24.8	1.6
1880	22.3	21.8	.5
1870	6.0	5.7	.3
ARKANSAS			
1950	655.3	511.0	144.3
1940	634.3	525.6	108.7
1930	667.8	548.7	119.2
1920	684.6	518.8	115.8
1910	672.4	510.4	162.0
1900	485.8	407.9	77.9
1890	347.2	299.0	48.2
1880	260.7	230.1	30.6
1870	135.9	120.2	15.8
CALIFORNIA			
1950	4,417.5	3,163.5	1,253.9
1940	2,815.3	2,119.3	695.9
1930	2,500.6	1,943.3	557.4
1920	1,512.8	1,226.1	286.6
1910	1,107.7	932.8	174.9
1900	644.3	556.3	87.9
1890	544.2	483.6	60.5
1880	376.5	348.3	28.2
1870	238.6	224.9	13.8
COLORADO			
1950	514.7	377.8	136.9
1940	386.5	301.7	84.8
1930	402.9	321.9	81.0
1920	366.5	303.9	62.6
1910	338.7	285.1	53.6
1900	218.3	190.3	28.0
1890	191.9	172.8	19.1
1880	101.3	96.5	4.8
1870	17.6	17.1	.4
CONNECTICUT			
1950	880.6	603.6	277.0
1940	736.7	519.7	217.0
1930	677.2	499.2	178.0
1920	589.9	443.7	146.3
1910	490.5	370.5	120.0
1900	385.6	297.0	88.6
1890	317.0	245.6	71.4
1880	241.3	192.7	48.7
1870	193.4	159.5	34.0
DELAWARE			
1950	131.2	93.9	37.3
1940	110.3	82.0	28.3
1930	98.1	77.2	20.9
1920	91.2	73.1	18.1
1910	85.9	68.3	17.5
1900	73.0	60.0	13.0
1890	64.3	53.9	10.3
1880	54.6	46.7	7.9
1870	40.3	34.3	6.0
DISTRICT OF COLUMBIA			
1950	404.0	236.6	167.4
1940	300.0	202.8	127.1
1930	243.9	155.0	88.8
1920	236.0	143.4	92.6
1910	158.0	105.0	52.9
1900	126.9	85.8	41.2
1890	101.1	69.0	32.1
1880	66.6	47.0	19.7
1870	49.0	35.2	13.8
FLORIDA			
1950	1,102.9	769.2	333.7
1940	741.9	526.2	215.7
1930	598.9	449.0	150.0
1920	385.3	300.0	85.3
1910	322.1	248.9	73.2
1900	201.6	164.0	37.6
1890	136.8	110.4	26.4
1880	91.5	73.8	17.8
1870	60.8	50.9	9.8
GEORGIA			
1950	1,350.1	951.1	399.0
1940	1,176.7	853.7	323.0
1930	1,162.2	850.2	311.9
1920	1,129.2	840.4	288.7
1910	1,160.1	807.2	352.9
1900	864.5	645.9	218.5
1890	668.7	508.8	159.9
1880	597.9	445.5	152.3
1870	444.7	329.2	115.5
IDAHO			
1950	219.1	171.5	47.6
1940	177.2	149.2	28.0
1930	162.2	139.9	22.3
1920	153.5	136.0	17.5
1910	131.1	118.0	13.0
1900	62.7	58.2	4.5
1890	35.2	33.3	1.9
1880	15.6	15.3	.3
1870	10.9	10.8	.1
ILLINOIS			
1950	3,729.6	2,659.6	1,070.1
1940	3,132.0	2,328.8	803.2
1930	3,184.7	2,469.2	715.5
1920	2,627.7	2,086.8	540.9
1910	2,296.8	1,865.4	431.4
1900	1,804.0	1,509.4	294.6
1890	1,353.6	1,153.2	200.3
1880	999.8	893.7	106.1
1870	742.0	678.7	63.3
INDIANA			
1950	1,573.0	1,162.1	410.8
1940	1,242.9	977.3	265.6
1930	1,251.1	1,015.8	235.3
1920	1,117.0	931.6	185.4
1910	1,036.7	881.0	155.7
1900	899.0	782.2	116.7
1890	724.1	639.2	84.9
1880	635.1	583.7	51.4
1870	459.4	428.3	31.1
IOWA			
1950	1,024.8	775.0	249.9
1940	919.6	740.6	179.0
1930	912.8	749.3	163.5
1920	858.7	717.4	141.3
1910	826.3	694.8	131.5
1900	789.4	682.5	106.9
1890	631.8	551.4	80.4
1880	528.3	483.5	44.8
1870	344.3	321.2	23.1
KANSAS			
1950	740.8	562.8	178.0
1940	626.8	502.0	124.8
1930	694.3	575.1	119.2
1920	624.4	531.9	92.5
1910	621.3	540.6	80.7
1900	507.7	452.2	55.6
1890	452.3	406.8	45.5
1880	322.3	302.9	19.4
1870	123.9	117.3	6.5
KENTUCKY			
1950	1,018.9	804.0	214.8
1940	933.3	768.9	164.4
1930	907.1	760.4	146.7
1920	851.1	719.6	131.5
1910	867.0	719.4	147.6
1900	752.5	646.9	105.6
1890	590.3	506.9	83.4
1880	519.9	465.4	54.4
1870	414.6	364.3	50.3
LOUISIANA			
1950	934.3	694.1	240.2
1940	889.7	640.1	199.5
1930	815.6	624.2	191.4
1920	681.2	528.5	152.7
1910	679.2	501.6	177.6
1900	536.1	405.2	130.9
1890	423.1	314.3	108.8
1880	363.2	268.2	95.1
1870	256.5	198.2	58.3
MAINE			
1950	345.1	250.3	94.8
1940	314.7	233.4	81.4
1930	308.6	240.1	68.5
1920	309.9	245.0	64.8
1910	305.5	242.2	63.3
1900	276.8	224.8	51.9
1890	257.1	212.0	45.1
1880	232.0	198.5	33.5
1870	208.2	179.8	28.4
MARYLAND			
1950	972.0	698.1	274.0
1940	738.6	545.4	193.2
1930	672.9	515.2	157.7
1920	603.5	466.3	137.2
1910	541.2	410.9	130.3
1900	458.7	359.8	99.0
1890	393.3	308.5	84.8
1880	324.4	265.6	58.8
1870	258.5	213.7	44.9
MASSACHUSETTS			
1950	1,959.9	1,329.6	630.3
1940	1,703.1	1,174.5	528.6
1930	1,814.3	1,285.3	529.0
1920	1,728.3	1,225.2	503.2
1910	1,581.1	1,086.8	444.3
1900	1,208.4	879.4	329.0
1890	982.4	719.2	263.3
1880	720.8	546.6	174.2
1870	579.8	451.5	128.3
MICHIGAN			
1950	2,542.6	1,900.7	641.9
1940	1,989.8	1,561.4	428.4
1930	1,927.3	1,567.5	359.8
1920	1,474.0	1,228.6	245.4
1910	1,113.0	926.8	186.2
1900	906.0	772.3	133.7
1890	759.6	663.6	95.9
1880	569.2	514.2	55.0
1870	404.2	346.7	57.4
MINNESOTA			
1950	1,191.0	876.5	314.4
1940	1,028.3	802.2	226.0
1930	992.8	791.8	201.0
1920	907.0	742.9	164.1
1910	835.5	689.8	145.6
1900	645.9	548.9	96.9
1890	469.1	403.5	65.6
1880	255.1	230.0	25.1
1870	132.7	121.8	10.9
MISSISSIPPI			
1950	775.2	583.7	191.5
1940	780.1	590.1	190.0
1930	844.9	613.2	231.7
1920	721.4	526.4	195.0
1910	879.6	574.3	305.4
1900	645.1	466.8	178.4
1890	462.7	337.9	124.8
1880	415.5	305.1	110.4
1870	318.8	232.3	86.5

Series D 26–28. Gainful Workers, by Sex, by State: 1870 to 1950—Con.

[In thousands of workers 10 years old and over]

State and year	Total	Male	Female
	26	27	28
MISSOURI			
1950	1,579.6	1,143.1	436.5
1940	1,410.0	1,077.0	333.0
1930	1,458.0	1,158.7	299.2
1920	1,317.2	1,072.5	244.6
1910	1,288.3	1,076.8	211.6
1900	1,121.4	966.9	154.5
1890	884.4	771.6	112.8
1880	693.0	630.0	62.9
1870	505.6	466.8	38.7
MONTANA			
1950	232.9	181.8	51.1
1940	207.2	172.2	35.0
1930	216.5	184.2	32.3
1920	214.2	185.9	28.3
1910	178.7	159.9	18.9
1900	114.8	105.0	9.8
1890	72.2	67.6	4.6
1880	22.3	21.7	.5
1870	14.0	13.9	.2
NEBRASKA			
1950	528.2	398.7	129.5
1940	463.4	369.8	93.6
1930	507.0	417.3	89.7
1920	457.1	385.3	71.8
1910	441.1	377.8	63.3
1900	374.0	327.4	46.6
1890	368.1	325.4	42.6
1880	152.6	142.2	10.5
1870	43.8	41.9	1.9
NEVADA			
1950	71.1	53.3	17.8
1940	45.6	38.3	7.3
1930	42.9	37.0	5.9
1920	37.5	33.2	4.3
1910	44.9	40.5	4.4
1900	19.8	17.8	2.0
1890	23.4	21.6	1.8
1880	32.2	30.7	1.5
1870	26.9	26.5	.4
NEW HAMPSHIRE			
1950	217.3	149.5	67.8
1940	195.3	139.6	55.8
1930	192.7	142.7	50.0
1920	192.8	143.5	49.3
1910	191.7	143.4	48.3
1900	178.7	137.0	41.8
1890	164.7	127.8	36.9
1880	142.5	112.3	30.1
1870	120.2	96.0	24.1
NEW JERSEY			
1950	2,100.1	1,483.4	616.7
1940	1,745.2	1,252.1	493.1
1930	1,712.1	1,295.6	416.5
1920	1,310.7	1,014.7	296.0
1910	1,074.4	834.8	239.6
1900	757.8	603.2	154.5
1890	570.7	459.5	111.3
1880	396.9	330.1	66.8
1870	296.0	251.6	44.4
NEW MEXICO			
1950	231.0	179.6	51.4
1940	160.2	129.9	30.3
1930	142.6	120.5	22.1
1920	122.0	107.1	14.9
1910	121.5	106.4	15.1
1900	66.0	59.7	6.3
1890	54.2	50.2	3.9
1880	40.8	38.6	2.3
1870	29.4	26.3	3.1
NEW YORK			
1950	6,347.3	4,402.2	1,945.1
1940	5,676.8	4,051.5	1,625.3
1930	5,523.3	4,108.2	1,415.1
1920	4,503.2	3,367.9	1,135.3
1910	4,003.8	3,020.2	983.7
1900	2,996.5	2,324.4	672.0
1890	2,435.7	1,921.8	513.9
1880	1,884.6	1,524.3	360.4
1870	1,491.0	1,234.0	257.0
NORTH CAROLINA			
1950	1,564.9	1,122.3	442.6
1940	1,279.4	945.3	334.1
1930	1,141.0	868.0	273.0
1920	895.9	693.2	202.7
1910	947.8	674.8	273.0
1900	716.7	556.6	160.2
1890	537.4	422.2	115.2
1880	480.2	393.2	87.0
1870	351.3	292.4	58.9
NORTH DAKOTA			
1950	233.7	186.4	47.3
1940	216.5	180.3	36.2
1930	240.3	204.1	36.2
1920	207.1	178.8	28.3
1910	217.4	188.4	29.0
1900	117.6	103.5	14.1
1890	67.8	60.0	7.8
1880	[1] 57.8	[1] 55.0	[1] 2.9
1870	[1] 5.9	[1] 5.7	[1] .2
OHIO			
1950	3,216.2	2,352.5	863.7
1940	2,560.6	1,967.8	592.8
1930	2,615.8	2,076.2	539.6
1920	2,301.5	1,891.5	410.0
1910	1,919.1	1,572.3	346.7
1900	1,546.0	1,299.9	246.1
1890	1,272.8	1,088.6	184.2
1880	994.5	881.8	112.6
1870	840.9	757.4	83.5
OKLAHOMA			
1950	800.5	603.8	196.6
1940	734.6	592.9	141.7
1930	828.0	698.7	129.3
1920	681.4	586.8	94.6
1910	598.6	520.4	78.3
1900	266.4	243.9	22.5
1890	20.9	19.8	1.1
1880	----------	----------	----------
1870	----------	----------	----------
OREGON			
1950	621.3	458.9	162.4
1940	431.0	337.8	93.2
1930	409.6	328.5	81.1
1920	322.3	267.8	54.5
1910	305.2	264.7	40.5
1900	169.6	151.2	18.4
1890	126.8	116.0	10.8
1880	67.3	64.6	2.8
1870	30.7	30.0	.7
PENNSYLVANIA			
1950	4,168.3	3,022.8	1,145.5
1940	3,676.1	2,778.1	898.0
1930	3,722.1	2,918.2	803.9
1920	3,426.4	2,740.1	686.2
1910	3,130.7	2,525.2	605.4
1900	2,448.6	2,017.1	431.5
1890	1,959.1	1,635.1	323.9
1880	1,456.1	1,239.1	217.0
1870	1,020.5	886.2	134.3
RHODE ISLAND			
1950	343.9	233.9	110.0
1940	296.8	201.8	94.9
1930	297.2	209.3	87.8
1920	275.0	194.4	80.6
1910	251.9	181.0	70.9
1900	191.9	139.8	52.1
1890	155.9	113.2	42.7
1880	117.0	87.1	29.9
1870	88.6	66.9	21.7
SOUTH CAROLINA			
1950	808.7	560.5	248.2
1940	693.8	489.2	204.6
1930	687.7	481.0	206.8
1920	674.3	468.6	205.7
1910	728.6	460.8	267.8
1900	571.0	389.6	181.4
1890	440.9	311.4	129.4
1880	392.1	272.0	120.1
1870	263.3	182.4	80.9
SOUTH DAKOTA			
1950	253.0	198.9	54.0
1940	218.8	179.2	39.5
1930	247.7	210.3	37.3
1920	216.6	186.9	29.7
1910	219.1	190.4	28.7
1900	137.2	121.5	15.6
1890	114.1	102.6	11.5
1880	[1]	[1]	[1]
1870	[1]	[1]	[1]
TENNESSEE			
1950	1,206.7	894.8	311.9
1940	1,015.7	784.9	230.9
1930	958.4	763.1	195.3
1920	830.1	678.0	152.1
1910	855.5	682.2	173.3
1900	727.6	611.4	116.2
1890	553.8	473.2	80.6
1880	448.0	391.6	56.4
1870	368.0	322.6	45.4
TEXAS			
1950	2,991.0	2,235.1	755.9
1940	2,327.3	1,821.7	505.6
1930	2,206.8	1,785.1	421.7
1920	1,719.0	1,415.2	303.8
1910	1,556.9	1,228.4	328.4
1900	1,033.0	892.6	140.4
1890	696.2	610.2	86.0
1880	522.1	463.2	58.9
1870	237.1	208.5	28.6
UTAH			
1950	243.9	186.6	57.4
1940	165.0	134.1	31.0
1930	170.0	141.0	29.0
1920	149.2	127.4	21.8
1910	131.5	113.1	18.4
1900	84.6	73.8	10.8
1890	66.9	59.8	7.1
1880	40.1	37.2	2.9
1870	21.5	20.4	1.1
VERMONT			
1950	145.6	105.7	39.9
1940	134.5	103.9	30.6
1930	141.2	112.8	28.4
1920	138.5	111.6	26.9
1910	144.1	115.8	28.3
1900	134.9	112.2	22.8
1890	128.8	108.8	20.0
1880	118.6	102.4	16.2
1870	108.8	95.3	13.5
VIRGINIA			
1950	1,307.6	976.2	331.4
1940	989.8	764.0	225.8
1930	880.2	697.9	182.3
1920	833.6	677.4	156.2
1910	795.6	626.9	168.7
1900	662.4	536.9	125.5
1890	551.8	445.5	106.4
1880	494.2	411.0	83.2
1870	412.7	337.5	75.2
WASHINGTON			
1950	959.7	720.8	238.9
1940	672.4	532.0	140.4
1930	664.7	538.1	126.7
1920	578.7	485.8	92.9
1910	521.5	455.4	66.1
1900	225.4	204.6	20.8
1890	164.7	153.6	11.1
1880	30.1	29.1	1.1
1870	9.8	9.5	.2
WEST VIRGINIA			
1950	659.5	521.7	137.8
1940	574.4	472.4	101.9
1930	570.5	488.3	82.2
1920	491.1	433.7	57.4
1910	448.5	394.4	54.1
1900	325.7	294.5	31.2
1890	223.8	202.1	21.7
1880	176.2	164.7	11.5
1870	115.2	107.1	8.2

[1] South Dakota included with North Dakota.

Series D 26–28. Gainful Workers, by Sex, by State: 1870 to 1950—Con.

[In thousands of workers 10 years old and over]

State and year	Total	Male	Female	State and year	Total	Male	Female
	26	27	28		26	27	28
WISCONSIN				WYOMING			
1950	1,400.1	1,030.7	369.4	1950	120.4	94.6	25.8
1940	1,147.5	902.2	245.3	1940	94.9	80.0	14.9
1930	1,129.5	914.2	215.2	1930	92.4	79.7	12.7
1920	995.5	813.2	182.4	1920	81.5	72.1	9.4
1910	892.4	729.8	162.6	1910	73.6	67.6	6.0
1900	732.5	616.4	116.1	1900	44.3	41.3	3.0
1890	576.3	495.2	81.1	1890	30.6	28.7	1.9
1880	417.5	371.1	46.4	1880	8.9	8.4	.5
1870	292.8	267.3	25.5	1870	6.6	6.3	.3

Series D 29–41. Labor Force, by Age and Sex: 1890 to 1970

[**Labor force in thousands of persons 16 years old and over except, prior to 1947, 14 years old and over.** Annual estimates are averages of monthly figures. Includes Armed Forces overseas, except for decennial data. The introduction of data from the decennial censuses into the estimation procedure in 1953 and 1962 and the inclusion of Alaska and Hawaii beginning 1960 have resulted in 3 periods of noncomparability; see text for series D 11–25]

Year	Total labor force	Male						Female					
		Total	16 to 19 years[1]	20 to 24 years	25 to 44 years	45 to 64 years	65 and over	Total	16 to 19 years[1]	20 to 24 years	25 to 44 years	45 to 64 years	65 and over
	29	30	31	32	33	34	35	36	37	38	39	40	41
LABOR FORCE													
1970	85,903	54,343	4,395	7,378	22,792	17,614	2,164	31,560	3,250	4,893	11,675	10,686	1,056
1969	84,239	53,688	4,282	7,088	22,652	17,494	2,170	30,551	3,109	4,615	11,306	10,465	1,056
1968	82,272	53,030	4,195	6,788	22,498	17,394	2,154	29,242	2,948	4,251	10,973	10,070	999
1967	80,793	52,398	4,214	6,546	22,283	17,239	2,118	28,395	2,897	3,981	10,700	9,841	978
1966	78,893	51,560	4,123	6,139	22,156	17,054	2,089	27,333	2,880	3,601	10,277	9,612	963
1965	77,178	50,946	3,831	5,926	22,157	16,899	2,131	26,232	2,519	3,375	10,060	9,301	976
1964	75,830	50,387	3,575	5,704	22,195	16,788	2,123	25,443	2,321	3,220	9,805	9,129	966
1963	74,571	49,835	3,406	5,471	22,224	16,602	2,135	24,736	2,238	2,970	9,785	8,837	905
1962	73,442	49,395	3,252	5,272	22,262	16,368	2,241	24,047	2,152	2,814	9,590	8,581	911
1961	73,031	49,193	3,229	5,187	22,283	16,276	2,220	23,838	2,148	2,708	9,545	8,510	926
1960*	72,142	48,870	3,184	5,089	22,270	16,039	2,287	23,272	2,062	2,590	9,448	8,266	907
1959	70,921	48,405	3,042	4,987	22,216	15,838	2,321	22,516	1,902	2,484	9,328	7,966	836
1958	70,275	48,126	2,951	4,849	22,269	15,677	2,379	22,149	1,838	2,510	9,391	7,589	822
1957	69,729	47,964	2,985	4,781	22,293	15,428	2,477	21,765	1,866	2,453	9,384	7,249	813
1956	69,409	47,914	2,947	4,814	22,285	15,268	2,604	21,495	1,868	2,467	9,321	7,017	821
1955	68,072	47,488	2,812	4,851	22,297	15,002	2,526	20,584	1,729	2,458	9,069	6,546	780
1954	66,993	47,275	2,726	4,959	22,215	14,853	2,525	19,718	1,688	2,441	8,939	5,988	666
1953	66,560	47,131	2,777	5,084	22,138	14,591	2,544	19,429	1,713	2,447	8,843	5,730	693
1952	65,730	46,416	2,812	5,223	21,635	14,331	2,415	19,314	1,758	2,519	8,779	5,669	590
1951	65,117	46,063	2,865	5,267	21,325	14,136	2,469	19,054	1,763	2,670	8,612	5,458	551
1950	63,858	45,446	2,821	5,224	20,996	13,952	2,453	18,412	1,714	2,681	8,267	5,167	584
1949	62,903	45,097	2,899	5,198	20,746	13,798	2,454	17,806	1,813	2,662	7,999	4,778	556
1948	62,080	44,729	3,002	5,117	20,481	13,745	2,385	17,351	1,835	2,721	7,744	4,538	514
1947	60,941	44,258	3,053	5,094	20,201	13,532	2,376	16,683	1,835	2,725	7,426	4,252	445
1946	60,520	43,690	3,700	4,800	19,450	13,400	2,340	16,840	2,170	2,800	7,400	4,020	450
1945	66,210	46,910	4,610	5,850	20,620	13,370	2,460	19,304	2,720	3,310	8,370	4,410	490
1944	66,320	46,930	5,170	5,840	20,210	13,290	2,420	19,390	2,900	3,340	8,330	4,320	500
1943	64,780	45,950	4,950	5,740	19,770	13,170	2,320	18,830	2,930	3,180	8,260	3,970	490
1942	60,330	44,200	4,260	5,500	19,470	12,780	2,190	16,120	2,370	2,910	7,030	3,420	400
1941	57,720	43,070	9,380		[2]26,820		[3]6,880	14,650	4,840		[2]8,390		[3]1,410
1940	56,100	41,940	8,770		[2]26,560		[3]6,610	14,160	4,600		[2]8,270		[3]1,290
Decennial census:													
1970 (April)	82,049	51,502	3,593	6,271	22,111	17,434	2,092	30,547	2,609	4,683	11,652	10,432	1,171
1960 (April)*	69,234	47,013	2,634	4,554	21,829	15,765	2,231	22,222	1,703	2,475	9,382	7,742	919
1950 (April)	59,223	42,779	2,204	4,537	20,389	13,275	2,373	16,443	1,331	2,521	7,666	4,416	509
1940 (April)	52,966	39,959	2,565	4,993	18,705	11,859	1,838	13,007	1,396	2,698	6,081	2,554	279
1930 (April)	47,404	37,008	2,795	4,747	17,498	10,173	1,795	10,396	1,591	2,316	4,404	1,842	243
1920 (Jan.)	40,282	32,053	2,947	4,080	15,353	8,290	1,383	8,229	1,640	1,785	3,314	1,810	180
1900 (June)	27,640	22,641	2,334	3,302	10,560	4,958	987	4,999	1,230	1,179	1,791	672	127
1890 (June)	21,833	18,129	1,997	2,836	8,513	3,937	846	3,704	984	938	1,216	476	90
LABOR FORCE PARTICIPATION RATE (Percent)													
1970	61.3	80.6	58.4	86.6	96.8	89.3	26.8	43.4	44.0	57.8	47.9	49.3	9.7
1969	61.1	80.9	58.3	86.6	97.0	89.7	27.2	42.7	43.8	56.8	46.8	49.0	9.9
1968	60.7	81.2	58.3	86.5	97.2	90.3	27.3	41.6	42.0	54.6	45.8	48.0	9.6
1967	60.6	81.5	59.2	87.5	97.4	90.6	27.7	41.1	41.7	53.4	45.1	47.7	9.6
1966	60.1	81.4	58.1	87.9	97.4	90.7	27.0	40.3	41.5	51.5	43.5	47.4	9.6
1965	59.7	81.5	56.7	88.0	97.4	90.9	27.9	39.3	38.1	50.0	42.5	46.6	10.0
1964	59.6	81.9	56.1	88.2	97.4	91.4	28.0	38.7	37.1	49.5	41.4	46.5	10.1
1963	59.6	82.2	56.8	88.3	97.5	91.7	28.4	38.3	38.0	47.6	41.3	45.9	9.6
1962	59.7	82.8	57.7	89.1	97.5	91.6	30.3	38.0	39.1	47.4	40.4	45.1	9.9
1961	60.2	83.6	58.2	89.8	97.6	92.1	31.7	38.1	39.7	47.1	40.3	44.8	10.7

See footnotes at end of table.

Series D 29–41. Labor Force, by Age and Sex: 1890 to 1970—Con.

[In thousands of persons 16 years old and over except, prior to 1947, 14 years old and over. Annual estimates are averages of monthly figures.]

Year	Total labor force	Male						Female					
		Total	16 to 19 years	20 to 24 years	25 to 44 years	45 to 64 years	65 and over	Total	16 to 19 years	20 to 24 years	25 to 44 years	45 to 64 years	65 and over
	29	30	31	32	33	34	35	36	37	38	39	40	41
LABOR FORCE PARTICIPATION RATE (Percent) —Con.													
1960*	60.2	84.0	59.4	90.2	97.7	92.0	33.1	37.8	39.4	46.2	39.9	44.3	10.8
1959	60.2	84.5	59.7	90.1	97.7	92.4	34.2	37.2	40.7	45.2	39.4	43.6	10.2
1958	60.4	85.0	61.3	89.5	97.6	92.7	35.6	37.1	39.1	46.4	39.6	42.4	10.3
1957	60.6	85.5	64.2	89.8	97.6	92.6	37.5	36.9	41.1	46.0	39.4	41.3	10.5
1956	61.0	86.3	65.0	90.8	97.7	93.1	40.0	36.9	42.3	46.4	39.2	40.9	10.9
1955	60.4	86.2	63.0	90.8	97.9	92.8	39.6	35.7	39.8	46.0	38.2	38.9	10.6
1954	60.0	86.4	62.2	91.5	97.8	93.1	40.5	34.6	39.5	45.3	37.8	36.3	9.3
1953	60.2	86.9	64.9	92.2	97.9	92.8	41.6	34.5	40.8	44.5	37.5	35.5	10.0
1952	60.4	87.2	66.2	92.1	98.1	92.5	42.6	34.8	42.2	44.8	37.9	35.1	9.1
1951	60.4	87.3	67.9	91.1	97.6	92.2	44.9	34.7	42.5	46.6	37.5	34.4	8.9
1950	59.9	86.8	66.3	89.1	97.1	92.0	45.8	33.9	41.0	46.1	36.4	33.2	9.7
1949	59.6	86.9	65.7	87.8	97.2	92.1	46.9	33.2	42.3	45.0	35.6	31.3	9.6
1948	59.4	87.0	67.3	85.7	97.2	93.1	46.8	32.7	42.0	45.3	35.0	30.4	9.1
1947	58.9	86.8	67.0	84.9	97.1	93.0	47.8	31.8	41.1	44.9	34.0	29.1	8.1
1946	55.8	81.1	54.8	79.9	91.4	91.5	45.0	30.8	31.8	46.6	34.0	27.9	8.0
1945	61.6	87.6	66.4	96.8	97.9	92.4	48.7	35.8	39.2	55.3	39.0	31.2	9.0
1944	62.2	88.2	72.2	96.4	97.0	93.2	49.4	36.3	41.1	55.6	39.3	31.1	9.5
1943	61.5	87.4	68.9	94.5	96.4	93.8	48.6	35.7	41.0	53.1	39.5	29.2	9.6
1942	58.0	85.1	58.6	91.9	96.4	92.3	47.1	30.9	32.8	48.7	34.0	25.6	8.1
1941	56.1	83.8	[1] 70.8		[2] 95.5		[3] 68.0	28.5	[1] 36.6		[2] 29.9		[3] 13.9
1940	55.2	82.5	[1] 66.4		[2] 95.6		[3] 66.9	27.9	[1] 34.7		[2] 29.9		[3] 13.1
Decennial census:													
1970 (April)	58.2	76.6	47.2	80.9	94.3	87.2	24.8	41.4	34.9	56.1	47.5	47.8	10.0
1960 (April)*	57.3	80.4	50.0	86.2	95.3	89.0	30.5	35.7	32.6	44.8	39.1	41.6	10.3
1950 (April)	55.1	81.6	51.7	81.9	93.3	88.2	41.4	29.9	31.1	42.9	33.3	28.8	7.8
1940 (April)	52.4	79.1	34.7	88.1	94.9	88.7	41.8	25.8	18.9	45.6	30.5	20.2	6.1
1930 (April)	53.2	82.1	40.1	88.8	95.8	91.0	54.0	23.6	22.8	41.8	24.6	18.0	7.3
1920 (Jan.)	54.3	84.6	51.5	89.9	95.6	90.7	55.6	22.7	28.4	37.5	21.7	16.5	7.3
1900 (June)	53.7	85.7	62.0	90.6	94.7	90.3	63.1	20.0	26.8	31.7	17.5	13.6	8.3
1890 (June)	52.2	84.3	50.0	90.9	96.0	92.0	68.3	18.2	24.5	30.2	15.1	12.1	7.6
PERCENT DISTRIBUTION													
1970	100.0	63.3	5.1	8.6	26.5	20.5	2.5	36.7	3.8	5.7	13.6	12.4	1.2
1969	100.0	63.7	5.1	8.4	26.9	20.8	2.6	36.3	3.7	5.5	13.4	12.4	1.3
1968	100.0	64.5	5.1	8.3	27.3	21.1	2.6	35.5	3.6	5.2	13.3	12.2	1.2
1967	100.0	64.9	5.2	8.1	27.6	21.3	2.6	35.1	3.6	4.9	13.2	12.2	1.2
1966	100.0	65.4	5.2	7.8	28.1	21.6	2.6	34.6	3.7	4.6	13.0	12.2	1.2
1965	100.0	66.0	5.0	7.7	28.7	21.9	2.8	34.0	3.3	4.4	13.0	12.1	1.3
1964	100.0	66.4	4.7	7.5	29.3	22.1	2.8	33.6	3.1	4.2	12.9	12.0	1.3
1963	100.0	66.8	4.6	7.3	29.8	22.3	2.9	33.2	3.0	4.0	13.1	11.9	1.2
1962	100.0	67.3	4.4	7.2	30.3	22.3	3.1	32.7	2.9	3.8	13.1	11.7	1.2
1961	100.0	67.4	4.4	7.1	30.5	22.3	3.0	32.6	2.9	3.7	13.1	11.7	1.3
1960*	100.0	67.7	4.4	7.1	30.9	22.2	3.2	32.3	2.9	3.6	13.1	11.5	1.3
1959	100.0	68.3	4.3	7.0	31.3	22.3	3.3	31.7	2.7	3.5	13.2	11.2	1.2
1958	100.0	68.5	4.2	6.9	31.7	22.3	3.4	31.5	2.6	3.6	13.4	10.8	1.2
1957	100.0	68.8	4.3	6.9	32.0	22.1	3.6	31.2	2.7	3.5	13.5	10.4	1.2
1956	100.0	69.0	4.2	6.9	32.1	22.0	3.8	31.0	2.7	3.5	13.4	10.1	1.2
1955	100.0	69.8	4.1	7.1	32.8	22.0	3.7	30.2	2.5	3.6	13.3	9.6	1.1
1954	100.0	70.6	4.1	7.4	33.2	22.2	3.8	29.4	2.5	3.6	13.3	8.9	1.0
1953	100.0	70.8	4.2	7.6	33.3	21.9	3.8	29.2	2.6	3.7	13.3	8.6	1.0
1952	100.0	70.6	4.3	7.9	32.9	21.8	3.7	29.4	2.7	3.8	13.4	8.6	.9
1951	100.0	70.7	4.4	8.1	32.7	21.7	3.8	29.3	2.7	4.1	13.2	8.4	.8
1950	100.0	71.2	4.4	8.2	32.9	21.8	3.8	28.8	2.7	4.2	12.9	8.1	.9
1949	100.0	71.7	4.6	8.3	33.0	21.9	3.9	28.3	2.9	4.2	12.7	7.6	.9
1948	100.0	72.0	4.8	8.2	33.0	22.1	3.8	28.0	3.0	4.4	12.5	7.3	.8
1947	100.0	72.6	5.0	8.4	33.1	22.2	3.9	27.4	3.0	4.5	12.2	7.0	.7
1946	100.0	72.2	6.1	7.9	32.1	22.1	3.9	27.8	3.6	4.6	12.2	6.6	.7
1945	100.0	70.8	7.0	8.8	31.1	20.2	3.7	29.2	4.1	5.0	12.6	6.7	.7
1944	100.0	70.8	7.8	8.8	30.5	20.0	3.7	29.2	4.4	5.0	12.6	6.5	.8
1943	100.0	70.9	7.6	8.9	30.5	20.3	3.6	29.1	4.5	4.9	12.7	6.1	.8
1942	100.0	73.3	7.1	9.1	32.3	21.2	3.6	26.7	3.9	4.8	11.6	5.7	.7
1941	100.0	74.6	[1] 16.2		[2] 46.5		[3] 11.9	25.4	[1] 8.4		[2] 14.5		[3] 2.4
1940	100.0	74.8	[1] 15.6		[2] 47.3		[3] 11.8	25.2	[1] 8.2		[2] 14.7		[3] 2.3
Decennial census:													
1970 (April)	100.0	62.8	4.4	7.6	26.9	21.2	2.5	37.2	3.2	5.7	14.2	12.7	1.4
1960 (April)*	100.0	67.9	3.8	6.6	31.5	22.8	3.2	32.1	2.5	3.6	13.6	11.2	1.3
1950 (April)	100.0	72.2	3.7	7.7	34.4	22.4	4.0	27.8	2.2	4.3	12.9	7.5	.9
1940 (April)	100.0	75.4	4.8	9.4	35.3	22.4	3.5	24.6	2.6	5.1	11.5	4.8	.5
1930 (April)	100.0	78.1	5.9	10.0	36.9	21.5	3.8	21.9	3.4	4.9	9.3	3.9	.5
1920 (Jan.)	100.0	79.6	7.3	10.1	38.1	20.6	3.4	20.4	4.1	4.4	8.2	3.3	.4
1900 (June)	100.0	81.9	10.3	11.9	38.2	17.9	3.6	18.1	4.5	4.3	6.5	2.4	.5
1890 (June)	100.0	83.0	9.1	13.0	39.0	18.0	3.9	17.0	4.5	4.3	5.6	2.2	.4

* Denotes first year for which figures include Alaska and Hawaii.
[1] 14 to 19 years for 1940 through 1946.
[2] 25 to 54 years.
[3] 55 and over.

Series D 42–48. Civilian Labor Force as Percent of Civilian Noninstitutional Population, by Race and Sex: 1940 to 1970

[Based on persons 16 years old and over except, prior to 1947, 14 years old and over. See headnote for series D 11–25]

Year	Both sexes			Male		Female		Year	Total, both sexes
	Total	White	Negro and other races	White	Negro and other races	White	Negro and other races		
	42	43	44	45	46	47	48		42
1970	60.4	60.2	61.8	80.0	76.5	42.6	49.5	1953	58.9
1969	60.1	59.9	62.1	80.2	76.9	41.8	49.8	1952	59.0
1968	59.6	59.3	62.2	80.4	77.6	40.7	49.3	1951	59.3
1967	59.6	59.2	62.8	80.7	78.5	40.1	49.5		
1966	59.2	58.7	63.0	80.6	79.0	39.2	49.3	1950	59.2
								1949	58.9
1965	58.9	58.4	62.9	80.8	79.6	38.1	48.6	1948	58.8
1964	58.7	58.2	63.1	81.1	80.0	37.5	48.5	1947	58.3
1963	58.7	58.2	63.0	81.5	80.2	37.2	48.1	1946	55.2
1962	58.8	58.3	63.2	82.1	80.8	36.7	48.0		
1961	59.3	58.8	64.1	83.0	82.2	36.9	48.3	1945	56.5
								1944	57.9
1960	59.4	58.8	64.5	83.4	83.0	36.5	48.2	1943	58.0
1959	59.3	58.7	64.3	83.8	83.4	36.0	47.7	1942	56.5
1958	59.5	58.9	64.8	84.3	84.0	35.8	48.0	1941	55.3
1957	59.6	59.1	64.4	84.8	84.3	35.7	47.2		
1956	61.6	59.4	64.9	85.6	85.1	35.7	47.3	1940	55.1
1955	59.3	58.7	64.2	85.4	85.0	34.5	46.1		
1954	58.8	58.2	64.3	85.6	85.2	33.3	46.1		

Series D 49–62. Marital Status of Women in the Civilian Labor Force: 1890 to 1970

[Persons 15 years old and over, 1890–1930; 14 years old and over, 1940–1966; 16 years old and over, thereafter. As of March, except as indicated]

Year	Female labor force (1,000)					Percent distribution of female labor force				Female labor force as percent of female population				
	Total	Single	Married		Widowed or divorced	Single	Married		Widowed or divorced	Total	Single	Married		Widowed or divorced
			Total	Husband present			Total	Husband present				Total	Husband present	
	49	50	51	52	53	54	55	56	57	58	59	60	61	62
1970	31,233	6,965	19,799	18,377	4,469	22.3	63.4	58.8	14.3	42.6	53.0	41.4	40.8	36.2
1969	29,898	6,501	19,100	17,595	4,297	21.7	63.9	58.9	14.4	41.6	51.2	40.4	39.6	35.8
1968	28,778	6,357	18,234	16,821	4,187	22.1	63.4	58.5	14.6	40.7	51.3	39.1	38.3	35.8
1967	27,545	5,915	17,486	15,908	4,144	21.5	63.5	57.8	15.0	39.7	50.7	37.8	36.8	35.9
1966	26,820	6,106	16,676	15,178	4,038	22.7	62.2	56.6	15.1	37.3	40.8	36.5	35.4	36.4
1965	25,952	5,912	16,154	14,708	3,886	22.8	62.2	56.7	15.0	36.7	40.5	35.7	34.7	35.7
1964	25,399	5,781	15,790	14,461	3,828	22.8	62.2	56.9	15.1	36.5	40.9	35.3	34.4	36.1
1963	24,675	5,614	15,362	14,061	3,699	22.8	62.3	57.0	15.0	36.1	41.0	34.6	33.7	35.8
1962	23,978	5,481	14,770	13,485	3,727	22.9	61.6	56.2	15.5	35.7	41.7	33.7	32.7	36.6
1961	24,199	5,663	14,612	13,266	3,924	23.4	60.4	54.8	16.2	36.8	44.4	34.0	32.7	39.0
1960*	22,516	5,401	13,485	12,253	3,629	24.0	59.9	54.4	16.1	34.8	44.1	31.7	30.5	37.1
1959	22,376	5,162	13,586	12,205	3,628	23.1	60.7	54.5	16.2	35.2	43.4	32.3	30.9	38.0
1958	22,000	5,365	13,032	11,826	3,604	24.4	59.2	53.8	16.4	35.0	45.4	31.4	30.2	37.9
1957	21,524	5,378	12,696	11,529	3,450	25.0	59.0	53.6	16.0	34.8	46.8	30.8	29.6	37.6
1956	20,842	5,167	12,278	11,126	3,397	24.8	58.9	53.4	16.3	34.2	46.4	30.2	29.0	36.9
1955 [1]	20,154	5,087	11,839	10,423	3,227	25.2	58.7	51.7	16.0	33.5	46.4	29.4	27.7	36.0
1954 [1]	19,726	5,412	11,209	9,923	3,105	27.4	56.8	50.3	15.7	33.1	49.0	28.1	26.6	36.0
1953 [1]	19,304	5,223	10,908	9,763	3,174	27.1	56.5	50.6	16.4	32.8	48.5	27.7	26.3	36.3
1952 [1]	18,812	5,532	10,350	9,222	2,930	29.4	55.0	49.0	15.6	32.4	50.0	26.8	25.3	35.3
1951 [1]	18,602	5,430	10,182	9,086	2,990	29.2	54.7	48.8	16.1	32.4	49.6	26.7	25.2	36.1
1950	17,795	5,621	9,273	8,550	2,901	31.6	52.1	48.0	16.3	31.4	50.5	24.8	23.8	36.0
1949 [1]	17,167	5,682	8,739	7,959	2,746	33.1	50.9	46.4	16.0	30.7	50.9	23.6	22.5	35.1
1948 [1]	17,155	5,943	8,281	7,553	2,931	34.6	48.3	44.0	17.1	31.0	51.1	23.1	22.0	36.8
1947 [1]	16,323	6,181	7,545	6,676	2,597	37.9	46.2	40.9	15.9	29.8	51.2	21.4	20.0	34.6
1944 [1]	18,449	7,542	8,433	6,226	2,474	40.9	45.7	33.7	13.4	35.0	58.6	25.6	21.7	35.7
1940	13,840	6,710	5,040	[1] 4,200	2,090	48.5	36.4	[1] 30.3	15.1	27.4	48.1	16.7	[1] 14.7	32.0
Decennial census:														
1970 (April)	30,756	6,936	19,178	17,583	4,642	22.5	62.3	57.1	15.0	41.6	50.9	40.2	39.6	36.8
1960 (April)*	22,410	5,282	13,610	12,365	3,518	23.6	60.7	55.2	15.7	34.5	42.9	31.7	30.6	36.1
1950 (April)	16,553	5,274	8,635	7,697	2,644	31.9	52.2	46.5	16.0	29.0	46.3	23.0	21.6	32.7
1940 (April)	13,007	6,377	4,675	3,918	1,955	49.0	35.9	30.1	15.0	25.8	45.5	15.6	13.8	30.2
1930 (April)	10,632	5,735	3,071	---	1,826	53.9	28.9	---	17.2	24.8	50.5	11.7	---	34.4
1920 (Jan.)	8,347	[2] 6,427	1,920	---	(3)	[2] 77.0	23.0	---	(3)	23.7	[2] 46.4	9.0	---	(3)
1910 (April) [3]	7,640	4,602	1,891	---	1,147	60.2	24.7	---	15.0	25.4	51.1	10.7	---	34.1
1900 (June)	4,997	3,307	769	---	920	66.2	15.4	---	18.4	20.6	43.5	5.6	---	32.5
1890 (June)	3,712	2,531	515	---	665	68.2	13.9	---	17.9	18.9	40.5	4.6	---	29.9

* Denotes first year for which figures include Alaska and Hawaii.
[1] As of April. [2] Single includes widowed or divorced.
[3] Data not comparable with earlier or later censuses due to difference in basis of enumeration. The importance of returning "the occupation, if any, followed by a child of any age or by a woman," was emphasized in the printed instructions to census enumerators in 1910, but not in instructions in other censuses, and it is believed that enumerators in 1910 enumerated as gainful workers many women who would not have been enumerated in other censuses—particularly as agricultural laborers.

Series D 63–74. Married Women (Husband Present) in the Labor Force, by Age and Presence of Children: 1948 to 1970

[As of March, except as noted]

Year	Number in labor force (1,000)						Labor force participation rate [1]					
	Total	With no children under 18 years	With children 6 to 17 years only	With children under 6 years			Total	With no children under 18 years	With children 6 to 17 years only	With children under 6 years		
				Total	No children 6 to 17 years	Also children 6 to 17 years				Total	No children 6 to 17 years	Also children 6 to 17 years
	63	64	65	66	67	68	69	70	71	72	73	74
1970	18,377	8,174	6,289	3,914	1,874	2,040	40.8	42.2	49.2	30.3	30.2	30.5
1969	17,595	7,853	6,146	3,596	1,756	1,840	39.6	41.0	48.6	28.5	29.3	27.8
1968	16,821	7,564	5,693	3,564	1,641	1,923	38.3	40.1	46.9	27.6	27.8	27.4
1967	15,908	7,158	5,269	3,480	1,629	1,851	36.8	38.9	45.0	26.5	26.9	26.2
1966	15,178	7,043	4,949	3,186	1,431	1,755	35.4	38.4	43.7	24.2	24.0	24.3
1965	14,708	6,755	4,836	3,117	1,408	1,709	34.7	38.3	42.7	23.3	23.8	22.8
1964	14,461	6,545	4,866	3,050	1,408	1,642	34.4	37.8	43.0	22.7	23.6	21.9
1963	14,061	6,366	4,689	3,006	1,346	1,660	33.7	37.4	41.5	22.5	22.4	22.5
1962	13,485	6,156	4,445	2,884	1,282	1,602	32.7	36.1	41.8	21.3	21.1	21.5
1961	13,266	6,186	4,419	2,661	1,178	1,483	32.7	37.3	41.7	20.0	19.6	20.3
1960*	12,253	5,692	4,087	2,474	1,123	1,351	30.5	34.7	39.0	18.6	18.2	18.9
1959	12,205	5,679	4,055	2,471	1,118	1,353	30.9	35.2	39.8	18.7	18.3	19.0
1958	11,826	5,713	3,714	2,399	1,122	1,277	30.2	35.4	37.6	18.2	18.4	18.1
1957	11,529	5,805	3,517	2,208	961	1,247	29.6	35.6	36.6	17.0	15.9	17.9
1956	11,126	5,694	3,384	2,048	971	1,077	29.0	35.3	36.4	15.9	15.6	16.1
1955 [2]	10,423	5,227	3,183	2,012	927	1,086	27.7	32.7	34.7	16.2	15.1	17.3
1954 [2]	9,923	5,096	3,019	1,808	883	925	26.6	31.6	33.2	14.9	14.3	15.5
1953 [2]	9,763	5,130	2,749	1,884	1,047	837	26.3	31.2	32.2	15.5	15.8	15.2
1952 [2]	9,222	5,042	2,492	1,688	916	772	25.3	30.9	31.1	13.9	13.7	14.1
1951 [2]	9,086	5,016	2,400	1,670	886	784	25.2	31.0	30.3	14.0	13.6	14.6
1950	8,550	4,946	2,205	1,399	748	651	23.8	30.3	28.3	11.9	11.2	12.6
1949 [2]	7,959	4,544	2,130	1,285	654	631	22.5	28.7	27.3	11.0	10.0	12.2
1948 [2]	7,553	4,400	1,927	1,226	594	632	22.0	28.4	26.0	10.8	9.2	12.7

* Denotes first year for which figures include Alaska and Hawaii.
[1] Married women in the labor force as percent of married women in the population.
[2] As of April.

Series D 75–84. Gainful Workers, by Age, Sex, and Farm-Nonfarm Occupations: 1820 to 1930

[In thousands of persons 10 years old and over]

Year	Total workers	Occupation		Sex		Age (in years)					Year	Total workers	Occupation	
		Farm	Non-farm	Male	Female	10 to 15	16 to 44	45 to 64	65 and over	Unknown			Farm	Non-farm
	75	76	77	78	79	80	81	82	83	84		75	76	77
1930	48,830	10,472	38,358	38,078	10,752	667	33,492	12,422	2,205	44	1860	10,533	6,208	4,325
1920	42,434	11,449	30,985	33,797	8,637	1,417	29,339	9,914	1,691	73	1850	7,697	4,902	2,795
1910	37,371	11,592	25,779	29,926	7,445	1,622	26,620	7,606	1,440	83	1840	5,420	3,720	1,700
1900	29,073	10,912	18,161	23,754	5,319	1,750	20,223	5,804	1,202	94	1830	3,932	2,772	1,160
											1820	2,881	2,069	812
1890	23,318	9,938	13,380	19,313	4,006	1,504	16,162	4,547	1,009	97				
1880	17,392	8,585	8,807	14,745	2,647	1,118	16,274							
1870	12,925	6,850	6,075	11,008	1,917	765	12,160							

Series D 85–86. Unemployment: 1890 to 1970

[In thousands of persons 16 years old and over except, prior to 1947, 14 years old and over. Annual averages]

Year	Unemployed	Percent of civilian labor force	Year	Unemployed	Percent of civilian labor force	Year	Unemployed	Percent of civilian labor force	Year	Unemployed	Percent of civilian labor force	Year	Unemployed	Percent of civilian labor force
	85	86		85	86		85	86		85	86		85	86
1970	4,088	4.9	1954	3,532	5.5	1938	10,390	19.0	1922	2,859	6.7	1906	574	1.7
1969	2,832	3.5	1953 [1]	1,834	2.9	1937	7,700	14.3	1921	4,918	11.7	1905	1,381	4.3
1968	2,817	3.6	1952	1,883	3.0	1936	9,030	16.9				1904	1,691	5.4
1967	2,975	3.8	1951	2,055	3.3				1920	2,132	5.2	1903	1,204	3.9
1966	2,875	3.8				1935	10,610	20.1	1919	546	1.4	1902	1,097	3.7
			1950	3,288	5.3	1934	11,340	21.7	1918	536	1.4	1901	1,205	4.0
1965	3,366	4.5	1949	3,637	5.9	1933	12,830	24.9	1917	1,848	4.6			
1964	3,786	5.2	1948	2,276	3.8	1932	12,060	23.6	1916	2,043	5.1	1900	1,420	5.0
1963	4,070	5.7	1947	2,311	3.9	1931	8,020	15.9				1899	1,819	6.5
1962 [1]	3,911	5.5	1946	2,270	3.9				1915	3,377	8.5	1898	3,351	12.4
1961	4,714	6.7				1930	4,340	8.7	1914	3,120	7.9	1897	3,890	14.5
			1945	1,040	1.9	1929	1,550	3.2	1913	1,671	4.3	1896	3,782	14.4
1960 [1] *	3,852	5.5	1944	670	1.2	1928	1,982	4.2	1912	1,759	4.6	1895	3,510	13.7
1959	3,740	5.5	1943	1,070	1.9	1927	1,519	3.3	1911	2,518	6.7			
1958	4,602	6.8	1942	2,660	4.7	1926	801	1.8				1894	4,612	18.4
1957	2,859	4.3	1941	5,560	9.9				1910	2,150	5.9	1893	2,860	11.7
1956	2,750	4.1				1925	1,453	3.2	1909	1,824	5.1	1892	728	3.0
			1940	8,120	14.6	1924	2,190	5.0	1908	2,780	8.0	1891	1,265	5.4
1955	2,852	4.4	1939	9,480	17.2	1923	1,049	2.4	1907	945	2.8	1890	904	4.0

* Denotes first year for which figures include Alaska and Hawaii.

[1] See headnote for series D 11–25.

Series D 87–101. Unemployment Rates for Selected Groups in the Labor Force: 1947 to 1970

[Percent of each group specified of persons 16 years old and over in the civilian labor force]

Year	All civilian workers			White			Negro and other races			Both sexes, 16–19 years old	Men, 20 years and over	Women, 20 years and over	Unemployed 15 weeks and over, total	Average duration of unemployment, weeks	State insured unemployment
	Total	Male	Female	Total	Male	Female	Total	Male	Female						
	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101
1970	4.9	4.4	5.9	4.5	4.0	5.4	8.2	7.3	9.3	15.2	3.5	4.8	0.8	8.8	3.4
1969	3.5	2.8	4.7	3.1	2.5	4.2	6.4	5.3	7.8	12.2	2.1	3.7	.5	8.0	2.2
1968	3.6	2.9	4.8	3.2	2.6	4.3	6.7	5.6	8.3	12.7	2.2	3.8	.5	8.5	2.2
1967	3.8	3.1	5.2	3.4	2.7	4.6	7.4	6.0	9.1	12.9	2.3	4.2	.6	8.8	2.5
1966	3.8	3.2	4.8	3.3	2.8	4.3	7.3	6.3	8.6	12.8	2.5	3.8	.7	10.4	2.4
1965	4.5	4.0	5.5	4.1	3.6	5.0	8.1	7.4	9.2	14.8	3.2	4.5	1.0	11.8	3.0
1964	5.2	4.6	6.2	4.6	4.1	5.5	9.6	8.9	10.6	16.2	3.9	5.2	1.3	13.3	3.7
1963	5.7	5.2	6.5	5.0	4.7	5.8	10.8	10.5	11.2	17.2	4.5	5.4	1.5	14.0	4.3
1962	5.5	5.2	6.2	4.9	4.6	5.5	10.9	10.9	11.0	14.7	4.6	5.4	1.6	14.7	4.4
1961	6.7	6.4	7.2	6.0	5.7	6.5	12.4	12.8	11.8	16.8	5.7	6.3	2.2	15.6	5.7
1960	5.5	5.4	5.9	4.9	4.8	5.3	10.2	10.7	9.4	14.7	4.7	5.1	1.4	12.8	4.8
1959	5.5	5.3	5.9	4.8	4.6	5.3	10.7	11.5	9.4	14.6	4.7	5.2	1.5	14.4	4.4
1958	6.8	6.8	6.8	6.1	6.1	6.2	12.6	13.8	10.8	15.9	6.2	6.1	2.1	13.9	6.3
1957	4.3	4.1	4.7	3.8	3.6	4.3	7.9	8.3	7.3	11.6	3.6	4.1	.8	10.5	3.7
1956	4.1	3.8	4.8	3.6	3.4	4.2	8.3	7.9	8.9	11.1	3.4	4.2	.8	11.3	3.4
1955	4.4	4.2	4.9	3.9	3.7	4.3	8.7	8.8	8.4	11.0	3.8	4.4	1.1	13.0	3.5
1954	5.5	5.3	6.0	5.0	4.8	5.6	9.9	10.3	9.3	12.6	4.9	5.5	1.3	11.8	5.1
1953	2.9	2.8	3.3	2.7	2.5	3.1	4.5	4.8	4.1	7.6	2.5	2.9	.3	8.0	2.8
1952	3.0	2.8	3.6	2.8	2.5	3.3	5.4	5.2	5.7	8.5	2.4	3.2	.4	8.4	3.0
1951	3.3	2.8	4.4	3.1	2.6	4.2	5.3	4.9	6.1	8.2	2.5	4.0	.5	9.7	3.0
1950	5.3	5.1	5.7	4.9	4.7	5.3	9.0	9.4	8.4	12.2	4.7	5.1	1.3	12.1	4.8
1949	5.9	5.9	6.0	5.6	5.6	5.7	8.9	9.6	7.9	13.4	5.4	5.3	1.1	10.0	6.0
1948	3.8	3.6	4.1	3.5	3.4	3.8	5.9	5.8	6.1	9.2	3.2	3.6	.5	8.6	3.1
1947	3.9	4.0	3.7												

Series D 102–115. Unemployment Rates, by Industry: 1948 to 1970

[Percent of each industry specified of persons 16 years old and over in the civilian labor force]

Year	Total unemployed [1]	Experienced wage and salary workers												
		Total	Agriculture	Wage and salary workers in private nonagricultural industries										Government
				Total	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, real estate	Service industries	
							Total	Durable	Nondurable					
	102	103	104	105	106	107	108	109	110	111	112	113	114	115
1970	4.9	4.8	7.5	5.2	3.1	9.7	5.6	5.7	5.4	3.2	5.3	2.8	4.7	2.2
1969	3.5	3.3	6.0	3.0	2.8	5.4	3.3	3.0	3.7	2.1	4.1	2.1	3.5	1.9
1968	3.6	3.4	6.3	3.0	3.1	6.2	3.3	3.0	3.7	1.9	4.0	2.2	3.6	1.8
1967	3.8	3.6	6.9	3.9	3.4	6.6	3.6	3.4	4.1	2.3	4.2	2.5	3.9	1.8
1966	3.8	3.5	6.6	3.8	3.5	7.1	3.2	2.7	3.8	2.0	4.4	2.1	3.9	1.8
1965	4.5	4.3	7.5	4.6	5.3	10.1	4.0	3.5	4.7	2.9	5.0	2.3	4.6	1.9
1964	5.2	5.0	9.7	5.4	6.7	11.2	5.0	4.7	5.4	3.5	5.7	2.6	5.3	2.1
1963	5.7	5.6	9.2	6.1	7.3	13.3	5.7	5.5	6.0	4.2	6.2	2.7	5.7	2.2
1962	5.5	5.6	7.5	6.1	7.7	13.5	5.8	5.7	6.0	4.1	6.3	3.0	5.5	2.1
1961	6.7	6.8	9.6	7.5	11.1	15.7	7.8	8.5	6.8	5.3	7.3	3.3	6.2	2.5
1960	5.5	5.7	8.3	6.2	9.5	13.5	6.2	6.4	6.1	4.6	5.9	2.4	5.1	2.4
1959	5.5	5.7	9.0	6.1	9.7	13.4	6.1	6.2	6.0	4.4	5.8	2.5	5.3	2.2
1958	6.8	7.3	10.3	7.9	10.9	15.3	9.3	10.6	7.7	6.1	6.8	2.8	5.7	2.5
1957	4.3	4.6	6.9	4.9	5.8	10.9	5.1	4.9	5.3	3.3	4.5	1.8	4.2	1.9
1956	4.1	4.4	7.3	4.7	6.8	10.0	4.7	4.4	5.2	3.0	4.5	1.7	4.6	1.7
1955	4.4	4.8	7.2	5.1	9.0	10.9	4.7	4.4	5.2	4.0	4.7	2.3	5.2	2.0
1954	5.5	7.0	8.9	6.7	14.4	12.9	7.1	7.3	6.9	5.6	5.7	2.3	5.5	2.2
1953	2.9	3.2	5.6	3.4	4.6	7.2	3.1	2.6	3.8	2.2	3.4	1.7	3.4	1.5
1952	3.0	3.3	4.8	3.6	3.8	6.7	3.5	3.0	4.1	2.3	3.5	1.7	3.6	1.6
1951	3.3	3.7	4.3	3.9	4.0	7.2	3.8	3.1	4.7	2.3	3.9	1.5	4.2	1.8
1950	5.3	6.0	9.0	3.9	6.7	12.2	6.2	5.7	6.8	4.7	6.0	2.2	6.4	3.0
1949	5.9	6.8	7.1	7.3	8.9	13.9	8.0	8.1	7.8	5.9	6.2	2.1	6.7	3.1
1948	3.8	4.3	5.5	4.5	3.0	8.7	4.2	4.0	4.4	3.5	4.7	1.8	4.8	2.2

[1] Also includes the self-employed, unpaid family workers, and those with no previous work experience, not shown separately.

Series D 116–126. Persons With a Job but Not at Work and Civilians Employed, by Hours Worked: 1950 to 1970

[In thousands of persons 14 years old and over through 1965; 16 years old and over, thereafter. Data are for the survey week in May of each year]

Year	Persons with a job but not at work			Civilians employed							
				In nonagricultural industries [1]					In agriculture [1]		
	All industries, total	Reasons for not working		Total	Worked 1–14 hours	Worked 15–34 hours	Worked 35 or more hours		Total	Worked 35 or more hours	
		Vacation	Illness				Total	Percent of total		Total	Percent of total
	116	117	118	119	120	121	122	123	124	125	126
1970	3,140	974	1,321	74,632	4,354	11,383	55,827	74.8	3,725	2,533	68.0
1969	2,801	933	1,120	73,370	3,845	10,775	56,019	76.4	3,894	2,661	68.3
1968	2,694	917	1,021	71,935	3,984	10,198	55,176	76.7	3,996	2,663	66.6
1967	2,485	758	1,033	69,812	3,827	9,646	53,950	77.3	3,824	2,578	67.4
1966	2,415	808	947	69,472	4,363	8,407	54,392	78.2	4,293	2,806	65.4
1965	2,402	759	1,063	67,278	4,403	7,563	53,008	78.8	5,128	3,475	67.8
1964	2,396	833	911	66,094	4,466	7,817	51,507	77.9	5,007	3,450	68.9
1963	2,172	643	921	63,883	4,147	7,261	50,382	78.9	5,178	3,490	67.4
1962	2,032	663	870	62,775	3,912	7,209	49,711	79.2	5,428	3,801	70.0
1961	2,026	641	902	61,234	3,858	7,533	47,926	78.3	5,544	3,701	66.8
1960*	2,086	645	873	61,371	3,578	7,203	48,594	79.2	5,837	4,128	70.7
1959	2,007	661	918	59,608	3,349	6,431	47,936	80.4	6,408	4,488	70.0
1958	1,902	584	836	57,789	3,224	7,147	45,619	78.9	6,272	4,452	71.0
1957	2,056	707	810	58,519	2,942	6,576	47,115	80.5	6,659	4,615	69.3
1956	1,803	535	859	58,092	2,980	6,557	46,587	80.2	7,146	5,185	72.6
1955	1,783	575	736	55,740	2,440	5,617	45,831	82.2	6,963	5,176	74.3
1954	1,752	470	809	54,297	2,133	6,214	43,959	81.0	6,822	4,955	72.6
1953	1,715	364	738	55,557	1,926	5,608	45,988	82.8	6,422	4,346	67.7
1952	1,930	398	750	54,216	1,934	4,946	45,284	83.5	6,960	5,416	77.8
1951	1,585	462	659	53,753	2,071	4,930	45,055	83.8	7,440	5,797	77.9
1950	1,475	353	629	51,669	1,949	5,149	43,034	83.3	8,062	5,970	74.1

* Denotes first year for which figures include Alaska and Hawaii.

[1] Includes persons who had a job or business, but did not work at all during entire survey week because of illness, bad weather, vacation, industrial dispute, or various personal reasons.

Series D 127–141. Employees on Nonagricultural Payrolls, by Major Industry Divisions: 1900 to 1970

[In thousands. Annual averages of monthly figures]

Year	Total	Goods-producing					Service-producing								
		Mining	Contract construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade			Finance, insurance, and real estate	Services	Government		
				Total	Durable	Nondurable		Total	Wholesale trade	Retail trade			Total	Federal	State and local
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141
1970	70,616	622	3,345	19,369	11,198	8,171	4,504	14,922	3,824	11,098	3,690	11,630	12,535	2,705	9,830
1969	70,284	619	3,435	20,167	11,895	8,272	4,429	14,639	3,733	10,906	3,564	11,229	12,202	2,758	9,444
1968	67,915	606	3,285	19,781	11,626	8,155	4,310	14,084	3,611	10,473	3,382	10,623	11,845	2,737	9,109
1967	65,857	613	3,208	19,447	11,439	8,008	4,261	13,606	3,525	10,081	3,225	10,099	11,398	2,719	8,679
1966	63,955	627	3,275	19,214	11,284	7,930	4,151	13,245	3,437	9,808	3,100	9,551	10,792	2,564	8,227
1965	60,815	632	3,186	18,062	10,406	7,656	4,036	12,716	3,312	9,404	3,023	9,087	10,074	2,378	7,696
1964	58,331	634	3,050	17,274	9,816	7,458	3,951	12,160	3,189	8,971	2,957	8,709	9,596	2,348	7,248
1963	56,702	635	2,963	16,995	9,616	7,380	3,903	11,778	3,104	8,675	2,877	8,325	9,225	2,358	6,868
1962	55,596	650	2,902	16,853	9,480	7,373	3,906	11,566	3,056	8,511	2,800	8,028	8,890	2,340	6,550
1961	54,042	672	2,816	16,326	9,070	7,256	3,903	11,337	2,993	8,344	2,731	7,664	8,594	2,279	6,315
1960	54,234	712	2,885	16,796	9,459	7,336	4,004	11,391	3,004	8,388	2,669	7,423	8,353	2,270	6,083
1959	53,313	732	2,960	16,675	9,373	7,303	4,011	11,127	2,946	8,182	2,594	7,130	8,083	2,233	5,850
1958	51,363	751	2,778	15,945	8,830	7,116	3,976	10,750	2,848	7,902	2,519	6,806	7,839	2,191	5,648
1957	52,894	828	2,923	17,174	9,856	7,319	4,241	10,886	2,893	7,992	2,477	6,749	7,616	2,217	5,399
1956	52,408	822	2,999	17,243	9,834	7,409	4,244	10,858	2,884	7,974	2,429	6,536	7,277	2,209	5,069
1955	50,675	792	2,802	16,882	9,541	7,340	4,141	10,535	2,796	7,740	2,335	6,274	6,914	2,187	4,723
1954	49,022	791	2,612	16,314	9,129	7,185	4,084	10,235	2,739	7,496	2,234	6,002	6,751	2,188	4,567
1953	50,232	866	2,623	17,549	10,110	7,438	4,290	10,247	2,727	7,520	2,146	5,867	6,645	2,305	4,340
1952	48,825	898	2,634	16,632	9,349	7,284	4,248	10,004	2,687	7,317	2,069	5,730	6,609	2,420	4,188
1951	47,849	929	2,603	16,393	9,089	7,304	4,226	9,742	2,606	7,136	1,991	5,576	6,389	2,302	4,087
1950	45,222	901	2,333	15,241	8,094	7,147	4,034	9,386	2,518	6,868	1,919	5,382	6,026	1,928	4,098
1949	43,778	930	2,165	14,441	7,489	6,953	4,001	9,264	2,487	6,778	1,857	5,264	5,856	1,908	3,948
1948	44,891	994	2,169	15,582	8,326	7,256	4,189	9,272	2,489	6,783	1,829	5,206	5,650	1,863	3,787
1947	43,881	955	1,982	15,545	8,385	7,159	4,166	8,955	2,361	6,595	1,754	5,050	5,474	1,892	3,582
1946	41,674	862	1,661	14,703	7,742	6,962	4,061	8,376	2,190	6,186	1,697	4,719	5,595	2,254	3,341
1945	40,394	836	1,132	15,524	9,074	6,450	3,906	7,314	1,862	5,452	1,497	4,241	5,944	2,808	3,137
1944	41,883	892	1,094	17,328	10,856	6,472	3,829	7,058	1,762	5,296	1,476	4,163	6,043	2,928	3,116
1943	42,452	925	1,567	17,602	11,084	6,518	3,647	6,982	1,741	5,241	1,502	4,148	6,080	2,905	3,174
1942	40,125	992	2,170	15,280	8,823	6,458	3,460	7,118	1,821	5,297	1,538	4,084	5,483	2,213	3,270
1941	36,554	957	1,790	13,192	6,968	6,225	3,274	7,210	1,873	5,338	1,549	3,921	4,660	1,340	3,320
1940	32,376	925	1,294	10,985	5,363	5,622	3,038	6,750	1,754	4,996	1,502	3,681	4,202	996	3,206
1939	30,618	854	1,150	10,278	4,715	5,564	2,936	6,426	1,684	4,742	1,462	3,517	3,995	905	3,090
1938	29,209	891	1,055	9,440	----	----	2,863	6,179	----	----	1,425	3,473	3,883	829	3,054
1937	31,026	1,015	1,112	10,794	----	----	3,134	6,265	----	----	1,432	3,518	3,756	833	2,923
1936	29,082	946	1,145	9,827	----	----	2,973	5,809	----	----	1,388	3,326	3,668	826	2,842
1935	27,053	897	912	9,069	----	----	2,786	5,431	----	----	1,335	3,142	3,481	753	2,728
1934	25,953	883	862	8,501	----	----	2,750	5,281	----	----	1,319	3,058	3,299	652	2,647
1933	23,711	744	809	7,397	----	----	2,672	4,755	----	----	1,295	2,873	3,166	565	2,601
1932	23,628	731	970	6,931	----	----	2,816	4,683	----	----	1,341	2,931	3,225	559	2,666
1931	26,649	873	1,214	8,170	----	----	3,254	5,284	----	----	1,407	3,183	3,264	560	2,704
1930	29,424	1,009	1,372	9,562	----	----	3,685	5,797	----	----	1,475	3,376	3,148	526	2,622
1929	31,339	1,087	1,497	10,702	----	----	3,916	6,123	----	----	1,509	3,440	3,065	533	2,532
1928	30,539	1,038	1,704	9,942	----	----	3,886	6,047	----	----	1,484	3,399	3,039	----	----
1927	30,481	1,100	1,761	9,996	----	----	3,997	5,942	----	----	1,380	3,360	2,945	----	----
1926	30,599	1,168	1,756	10,156	----	----	4,077	5,864	----	----	1,328	3,397	2,853	----	----
1925	29,751	1,065	1,680	9,942	----	----	4,018	5,717	----	----	1,264	3,300	2,765	----	----
1924	28,577	1,091	1,556	9,675	----	----	4,063	5,047	----	----	1,211	3,298	2,636	----	----
1923	29,231	1,181	1,408	10,317	----	----	4,185	5,194	----	----	1,175	3,247	2,524	----	----
1922	26,616	880	1,315	9,129	----	----	3,897	4,708	----	----	1,081	3,151	2,455	----	----
1921	24,542	906	1,035	8,262	----	----	3,929	3,960	----	----	968	3,085	2,397	----	----
1920	27,434	1,180	850	10,702	----	----	4,317	4,012	----	----	902	3,100	2,371	----	----
1919	27,270	1,067	1,011	10,702	----	----	4,055	4,213	----	----	868	2,905	2,449	----	----
1918	26,432	1,311	928	10,167	----	----	3,877	4,110	----	----	809	2,769	2,461	----	----
1917	25,762	1,267	1,027	9,872	----	----	3,722	4,320	----	----	771	2,783	2,000	----	----
1916	25,510	1,168	1,208	9,629	----	----	3,579	4,476	----	----	738	2,796	1,916	----	----
1915	23,149	1,022	1,195	8,210	----	----	3,439	4,091	----	----	694	2,637	1,861	----	----
1914	23,190	1,027	1,267	8,210	----	----	3,445	4,128	----	----	657	2,647	1,809	----	----
1913	24,143	1,182	1,412	8,751	----	----	3,570	4,232	----	----	613	2,626	1,757	----	----
1912	23,191	1,083	1,337	8,322	----	----	3,552	4,073	----	----	568	2,539	1,717	----	----
1911	22,093	1,052	1,249	7,870	----	----	3,426	3,813	----	----	520	2,491	1,672	----	----
1910	21,697	1,068	1,342	7,828	----	----	3,366	3,570	----	----	483	2,410	1,630	----	----
1909	21,203	998	1,376	7,661	----	----	3,229	3,585	----	----	464	2,326	1,564	----	----
1908	19,259	900	1,308	6,570	----	----	3,069	3,299	----	----	442	2,164	1,507	----	----
1907	20,523	1,051	1,436	7,322	----	----	3,114	3,486	----	----	423	2,243	1,448	----	----
1906	20,069	894	1,391	7,226	----	----	3,110	3,442	----	----	405	2,215	1,386	----	----
1905	18,707	889	1,208	6,739	----	----	2,905	3,170	----	----	385	2,076	1,335	----	----
1904	17,640	801	1,257	6,199	----	----	2,743	2,992	----	----	369	2,002	1,277	----	----
1903	17,858	834	1,290	6,527	----	----	2,666	2,979	----	----	351	1,982	1,229	----	----
1902	17,395	685	1,393	6,305	----	----	2,754	2,827	----	----	337	1,903	1,191	----	----
1901	16,294	703	1,274	5,817	----	----	2,404	2,765	----	----	322	1,880	1,129	----	----
1900	15,178	637	1,147	5,468	----	----	2,282	2,502	----	----	308	1,740	1,094	----	----

Series D 142–151. Production or Nonsupervisory Workers on Private Nonagricultural Payrolls, by Industry Division: 1909 to 1970

[In thousands. Relates to production workers in mining and manufacturing, to construction workers in contract construction, and to nonsupervisory workers in other industries]

Year	Total private [1]	Mining	Contract construction	Manufacturing			Wholesale and retail trade			Finance, insurance, and real estate [2]
				Total	Durable goods	Nondurable goods	Total	Wholesale	Retail trade	
	142	143	144	145	146	147	148	149	150	151
1970	47,950	472	2,790	14,033	8,043	5,990	13,269	3,212	10,057	2,919
1969	48,105	472	2,896	14,767	8,651	6,116	13,034	3,139	9,895	2,835
1968	46,475	461	2,768	14,514	8,457	6,056	12,528	3,036	9,492	2,687
1967	45,169	469	2,708	14,308	8,364	5,944	12,121	2,971	9,151	2,566
1966	44,281	487	2,784	14,297	8,370	5,926	11,820	2,911	8,909	2,476
1965	42,309	494	2,710	13,434	7,715	5,719	11,358	2,814	8,544	2,426
1964	40,589	497	2,597	12,781	7,213	5,569	10,869	2,719	8,151	2,386
1963	39,553	498	2,523	12,555	7,027	5,527	10,560	2,656	7,904	2,329
1962	38,979	512	2,462	12,488	6,935	5,553	10,400	2,625	7,775	2,274
1961	37,989	532	2,390	12,083	6,618	5,465	10,234	2,584	7,650	2,225
1960	38,516	570	2,459	12,586	7,028	5,559	10,315	2,605	7,710	2,181
1959*	38,080	590	2,538	12,603	7,033	5,570	10,087	2,562	7,525	2,121
1958	36,608	611	2,384	11,997	6,579	5,419	9,736	2,477	7,259	2,063
1957	38,384	695	2,537	13,189	7,550	5,638	9,923	2,541	7,382	2,031
1956	38,495	701	2,613	13,436	7,669	5,767	9,933	2,547	7,386	1,994
1955	37,500	680	2,440	13,288	7,548	5,740	9,675	2,479	7,196	1,920
1954	36,276	686	2,281	12,817	7,194	5,623	9,456	2,442	7,014	1,837
1953	37,694	765	2,305	14,055	8,154	5,901	9,510	2,459	7,051	1,771
1952	36,643	801	2,324	13,359	7,550	5,810	9,333	2,439	6,894	1,711
1951	36,225	840	2,308	13,368	7,480	5,888	9,091	2,365	6,726	1,649
1950	34,349	816	2,069	12,523	6,705	5,817	8,742	2,294	6,448	1,591
1949	33,159	839	1,919	11,790	6,122	5,669	8,595	2,267	6,328	1,542
1948	34,489	906	1,924	12,910	6,925	5,986	8,629	2,274	6,355	1,521
1947	33,747	871	1,759	12,990	7,028	5,962	8,241	2,165	6,076	1,460
1946				12,274	6,412	5,862				
1945				13,009	7,541	5,468				
1944				14,740	9,197	5,543				
1943				15,147	9,548	5,599				
1942				12,996	7,589	5,407				
1941				11,016	5,947	5,070				
1940				8,940	4,477	4,463				
1939				8,318	3,895	4,423				

Year	Manufacturing, total
	145
1938	7,478
1937	8,791
1936	8,014
1935	7,374
1934	6,909
1933	5,924
1932	5,351
1931	6,301
1930	7,464
1929	8,567
1928	8,051
1927	8,037
1926	8,214
1925	8,061
1924	7,789
1923	8,388
1922	7,327
1921	6,622
1920	8,652
1919	8,617
1914	6,624
1909	6,272

* Denotes first year for which figures include Alaska and Hawaii.
[1] Beginning 1964, includes "transportation and public utilities" and "service industries," not shown separately.
[2] Excludes nonoffice salesmen.

Series D 152–166. Industrial Distribution of Gainful Workers: 1820 to 1940

[In thousands]

Year	Total	Agriculture	Forestry and fisheries	Mining	Manufacturing and hand trades	Construction	Transportation and other public utilities	Trade	Finance and real estate	Educational service	Other professional service	Domestic service	Personal service	Government not elsewhere classified	Not allocated
	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166
1940	53,300	9,000	140	1,110	11,940	3,510	4,150	7,180	1,550	1,680	2,320	2,610	3,100	1,690	3,330
1930 [1]	47,400	10,180	120	1,160	10,770	3,080	4,810	6,190	1,470	1,630	1,720	2,550	2,500	1,130	[2] 145
1930 [3]	48,830	10,480	270	1,150	10,990	3,030	4,850	6,030	1,420	1,650	1,760	2,330	2,490	1,050	1,340
1920	41,610	11,120	280	1,230	10,880	2,170	4,190	4,060	800	1,170	1,080	1,700	1,630	920	380
1910	36,730	11,340	250	1,050	8,230	2,300	3,190	3,370	520	900	770	2,150	1,520	540	600
1900	29,070	10,710	210	760	6,340	1,660	2,100	2,760		650	500	1,740	970	300	370
1890	23,740	9,990	180	480	4,750	1,440	1,530	1,990		510	350	1,520	640	190	170
1880	17,390	8,610	95	310	3,170	830	860	1,220		330	190	1,080	360	140	195
1870 [4]	12,920	6,430	60	200	2,250	750	640	830		190	140	940	250	100	140
1870 [3]	12,920	6,850	60	180	2,750		1,350			[5] 1,700					30
1860	10,530	6,210	50	170	1,930		780			1,310					80
1850	7,700	4,900	25	90	1,260		420			940					65
1840	5,420	3,720		15	790										895
1830	3,930	2,770													1,160
1820	2,880	2,070			350										460

[1] Comparable with 1940.
[2] Difference between number of persons not reporting industrial affiliation (1,335,000) and excess of the "gainful worker" total over the "labor force" total (1,190,000).
[3] Comparable with data for earlier years.
[4] Comparable with data for later years.
[5] Figure corrected for apparent error in source; components now add to total, series D 152.

Series D 167–181. Labor Force and Employment, by Industry: 1800 to 1960

[In thousands of persons 10 years old and over]

Year	Labor force			Employment										
								Manufacturing				Transport		Service	
	Total	Free	Slave	Agriculture	Fishing	Mining	Construction	Total persons engaged	Cotton textile wage earners	Primary iron and steel wage earners	Trade	Ocean vessels	Railway	Teachers	Domestics
	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181
1960	74,060			5,970	45	709	3,640	17,145	300	530	14,051	135	883	1,850	2,489
1950	65,470			7,870	77	901	3,029	15,648	350	550	12,152	130	1,373	1,270	1,995
1940	56,290			9,575	60	925	1,876	11,309	400	485	9,328	150	1,160	1,086	2,300
1930	48,830			10,560	73	1,009	1,988	9,884	372	375	8,122	160	1,659	1,044	2,270
1920	41,610			10,790	53	1,180	1,233	11,190	450	460	5,845	205	2,236	752	1,660
1910	37,480			11,770	68	1,068	1,949	8,332	370	306	5,320	150	1,855	595	2,090
1900	29,070			11,680	69	637	1,665	5,895	303	222	3,970	105	1,040	436	1,800
1890	23,320			9,960	60	440	1,510	4,390	222	149	2,960	120	750	350	1,580
1880	17,390			8,920	41	280	900	3,290	175	130	1,930	125	416	230	1,130
1870	12,930			6,790	28	180	780	2,470	135	78	1,310	135	160	170	1,000
1860	11,110	8,770	2,340	5,880	31	176	520	1,530	122	43	890	145	80	115	600
1850	8,250	6,280	1,970	4,520	30	102	410	1,200	92	35	530	135	20	80	350
1840	5,660	4,180	1,480	3,570	24	32	290	500	72	24	350	95	7	45	240
1830	4,200	3,020	1,180	2,965	15	22	---	(NA)	55	20	---	70	---	30	160
1820	3,135	2,185	950	2,470	14	13	---	(NA)	12	5	---	50	---	20	110
1810	2,330	1,590	740	1,950	6	11	---	75	10	5	---	60	---	12	70
1800	1,900	1,370	530	1,400	5	10	---	---	1	1	---	40	---	5	40

NA Not available.

Series D 182–232. Major Occupation Group of the Experienced Civilian Labor Force, by Sex: 1900 to 1970

[In thousands of persons 14 years old and over, except as indicated. Census data for 1900, June 1; 1910, April 15; 1920, Jan. 1; 1930–1970, April 1]

Series No.	Major occupation group and sex	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
	BOTH SEXES											
182	**Total**	[1] 79,802	[2] 80,603	[3] 67,990	[3] 67,990	[4] 59,230	58,999	51,742	48,686	42,206	37,291	29,030
183	White-collar workers	37,857	36,131	27,028	27,244	21,253	21,601	16,082	14,320	10,529	7,962	5,115
184	Professional, technical, and kindred workers	11,561	11,018	7,090	7,336	5,000	5,081	3,879	3,311	2,283	1,758	1,234
185	Managers, officials, and proprietors [5]	6,463	6,224	5,708	5,489	5,096	5,155	3,770	3,614	2,803	2,462	1,697
186	Clerical and kindred workers	14,208	13,457	9,431	9,617	7,132	7,232	4,982	4,336	3,385	1,987	877
187	Salesworkers	5,625	5,433	4,799	4,801	4,025	4,133	3,450	3,059	2,058	1,755	1,307
188	Manual and service workers	39,420	36,947	33,377	33,207	29,749	30,445	26,666	24,044	20,287	17,797	13,027
189	Manual workers	29,169	27,356	25,475	25,617	23,733	24,266	20,597	19,272	16,974	14,234	10,401
190	Craftsmen, foremen, and kindred workers	11,082	10,435	9,465	9,241	8,205	8,350	6,203	6,246	5,482	4,315	3,062
191	Operative and kindred workers	14,335	13,406	12,254	12,846	11,754	12,080	9,518	7,691	6,587	5,441	3,720
192	Laborers, except farm and mine	3,751	3,515	3,755	3,530	3,774	3,885	4,875	5,335	4,905	4,478	3,620
193	Service workers	10,251	9,591	7,902	7,590	6,015	6,180	6,069	4,772	3,313	3,562	2,626
194	Private household workers	1,204	1,143	1,817	1,825	1,492	1,539	2,412	1,998	1,411	1,851	1,579
195	Service workers, exc. private household	9,047	8,449	6,086	5,765	4,524	4,641	3,657	2,774	1,901	1,711	1,047
196	Farmworkers	2,448	2,345	4,132	4,085	6,858	6,953	8,995	10,321	11,390	11,533	10,888
197	Farmers and farm managers	1,428	1,350	2,528	2,526	4,325	4,375	5,362	6,032	6,442	6,163	5,763
198	Farm laborers and foremen	1,022	995	1,604	1,560	2,533	2,578	3,632	4,290	4,948	5,370	5,125
	MALE											
199	**Total**	[1] 49,455	[2] 50,002	[3] 45,686	[3] 45,686	[4] 42,722	42,554	39,168	37,933	33,569	29,847	23,711
200	White-collar workers	19,428	18,693	15,316	15,413	12,798	12,974	10,434	9,564	7,176	6,019	4,166
201	Professional, technical, and kindred workers	6,917	6,621	4,366	4,543	3,025	3,074	2,271	1,829	1,275	1,032	800
202	Managers, officials, and proprietors [5]	5,386	5,189	4,864	4,695	4,408	4,456	3,356	3,321	2,612	2,312	1,623
203	Clerical and kindred workers	3,748	3,547	3,024	3,120	2,723	2,730	2,282	2,090	1,771	1,300	665
204	Salesworkers	3,378	3,336	3,063	3,055	2,642	2,715	2,525	2,323	1,518	1,376	1,079
205	Manual and service workers	27,807	26,154	24,477	24,422	22,746	23,228	20,247	18,956	16,172	13,469	9,664
206	Manual workers	23,760	22,315	21,465	21,612	20,159	20,581	17,877	17,138	14,923	12,320	8,924
207	Craftsmen, foremen, and kindred workers	10,530	9,911	9,170	8,973	7,959	8,098	6,069	6,140	5,377	4,209	2,985
208	Operative and kindred workers	9,789	9,183	8,733	9,234	8,566	8,743	7,067	5,822	4,839	3,739	2,456
209	Laborers, except farm and mine	3,440	3,221	3,562	3,405	3,634	3,740	4,742	5,177	4,707	4,372	3,482
210	Service workers	4,048	3,839	3,012	2,810	2,587	2,647	2,370	1,818	1,250	1,149	740
211	Private household workers	38	40	65	65	78	80	135	89	51	67	53
212	Service workers, exc. private household	4,010	3,800	2,947	2,745	2,509	2,568	2,235	1,729	1,199	1,082	687
213	Farmworkers	2,205	2,123	3,737	3,696	6,271	6,352	8,487	9,414	10,221	10,359	9,880
214	Farmers and farm managers	1,357	1,288	2,408	2,406	4,207	4,255	5,205	5,769	6,165	5,884	5,451
215	Farm laborers and foremen	848	835	1,329	1,290	2,064	2,097	3,282	3,645	4,056	4,475	4,429

See footnotes at end of table.

Series D 182–232. Major Occupation Group of the Experienced Civilian Labor Force, by Sex: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Major occupation group and sex	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
	FEMALE											
216	**Total**	[1] 30,347	[2] 30,601	[3] 22,304	[3] 22,304	[4] 16,507	16,445	12,574	10,752	8,637	7,445	5,319
217	White-collar workers	18,430	17,438	11,711	11,831	8,456	8,627	5,648	4,756	3,353	1,943	949
218	Professional, technical, and kindred workers	4,644	4,398	2,724	2,793	1,976	2,007	1,608	1,482	1,008	726	434
219	Managers, officials, and proprietors [5]	1,077	1,034	844	794	688	700	414	292	191	150	74
220	Clerical and kindred workers	10,461	9,910	6,407	6,497	4,408	4,502	2,700	2,246	1,614	688	212
221	Salesworkers	2,247	2,097	1,736	1,746	1,383	1,418	925	736	541	379	228
222	Manual and service workers	11,612	10,793	8,900	8,786	7,003	7,217	6,419	5,088	4,115	4,327	3,363
223	Manual workers	5,409	5,041	4,010	4,006	3,574	3,685	2,720	2,134	2,052	1,914	1,477
224	Craftsmen, foremen, and kindred workers	552	524	295	268	246	253	135	106	105	106	76
225	Operative and kindred workers	4,546	4,223	3,521	3,612	3,188	3,287	2,452	1,870	1,748	1,702	1,264
226	Laborers, except farm and mine	311	295	193	125	140	145	133	158	199	106	137
227	Service workers	6,203	5,752	4,890	4,780	3,429	3,532	3,699	2,954	2,063	2,413	1,886
228	Private household workers	1,166	1,103	1,752	1,760	1,414	1,459	2,277	1,909	1,360	1,784	1,526
229	Service workers, exc. private household	5,037	4,649	3,139	3,020	2,015	2,073	1,422	1,045	703	629	359
230	Farmworkers	245	222	395	390	587	601	508	908	1,169	1,175	1,008
231	Farmers and farm managers	72	63	120	120	118	120	157	263	277	279	311
232	Farm laborers and foremen	173	160	275	270	469	481	351	645	892	895	697

[1] Includes 74,911 unemployed persons whose occupations were not reported; 14,781 males and 60,130 females.
[2] Includes 5,179,626 unemployed persons whose occupations were not reported; 3,032,524 males and 2,147,102 females.
[3] Includes 3,453,279 unemployed persons whose occupations were not reported; 2,155,586 males and 1,297,693 females.
[4] Includes 1,369,621 unemployed persons whose occupations were not reported; 907, 615 males and 462,006 females. [5] Except farm.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970

[In thousands of persons 14 years old and over, except as indicated. "N.e.c." means not elsewhere classified. Census data for 1900 as of June 1; 1910, April 15; 1920, Jan. 1; 1930–1970, April 1]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
233	**Total**	[1] 79,802	[1] 80,603	[1] 67,990	[1] 67,990	[1] 59,230	58,999	51,742	48,686	42,206	37,291	29,030
234	**Professional, technical, and kindred workers**	[2] 11,561	[2] 11,018	[2] 7,090	7,336	5,000	5,081	3,879	3,311	2,283	1,758	1,234
235	Accountants and auditors	712	713	496	477	385	390	238	192	118	39	23
236	Actors and actresses	15	15	12	13	18	20	21				
237	Athletes				5	12	13	9				
238	Dancers and dancing teachers				22	17	18	14	76	48	48	31
239	Entertainers (n.e.c.)				12	16	17	12				
240	Sports instructors and officials				78	46	47	25				
241	Airplane pilots and navigators	52	52	28	28	15	14	5	6	1		
242	Architects	57	57	38	31	24	25	22	23	17	16	11
243	Artists and art teachers				105	81	83	66	57	35	34	25
244	Authors	26	26	29	29	16	17	14	12	7	4	3
245	Chemists	110	110	96	84	76	77	57	45	28	16	9
246	Clergymen	219	219	202	202	169	171	141	149	127	118	
247	Religious workers	36	36	61	57	42	42	42				114
248	Recreation and group workers	53	54	29	38	17	95	77	71	46	19	
249	Social and welfare workers, except group	221	221	95	98	77						
250	College presidents, professors, and instructors (n.e.c.)				179	126	127	77	62	33	16	7
251	Dentists	91	91	83	83	76	76	71	71	56	40	30
252	Designers	112	112	69	68	29	41	32	98	67	45	18
253	Draftsmen	294	295	219	219	136	127	82				
254	Editors and reporters	151	151	106	103	73	93	66	61	39	36	32
255	Engineers, technical	1,230	1,231	871	872	535	543	297	217	134	77	38
256	Engineers, civil	175	175	158	158	126	128	97	88	56	40	20
257	Engineers, chemical	53	53	42	41	33	34	13				
258	Engineers, metallurgical, and metallurgists	16	16	9	19	12	23	12	14	11	7	3
259	Engineers, mining	5	5	7	12	14						
260	Engineers, electrical	286	286	188	185	108	110	65	58	27	15	
261	Engineers, industrial	188	188	115	98	41	42	13				
262	Engineers, aeronautical	69	69	53	53	18						14
263	Engineers, mechanical	181	181	162	160	115	207	97	58	39	15	
264	Engineers (n.e.c.)	259	259	137	145	67						
265	Farm and home management advisors	13	13	14	14	12	13	12	4	3	1	
266	Funeral directors and embalmers	41	41	39	37	40	41	40	34	24	21	16
267	Lawyers and judges	273	274	218	213	182	184	182	161	123	115	108
268	Librarians	124	124	76	85	56	57	39	30	15	7	3
269	Musicians and music teachers				198	162	166	167	165	130	139	92
270	Nurses, professional	841	842	630	592	406	491	377	294	149	82	12
271	Nurses, student professional				58	77						
272	Optometrists	17	17	16	16	15	15	10	8	7	1	
273	Pharmacists	110	110	96	93	89	90	88	84	64	54	46
274	Photographers	67	67	53	53	55	56	38	33	29	30	25
275	Physicians and surgeons	282	282	233	230	193	195	168	157	146	152	
276	Osteopaths				4	5	5	6	6	5		131
277	Chiropractors	14	14	14	14	13	13	11	12	12	5	
278	Therapists and healers (n.e.c.)				37	25	25	18	14			

See footnotes at end of table.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
	Professional, technical, and kindred workers—Con.											
279	Radio operators	29	29	18	29	17	17	7	5	5	4	----
280	Surveyors	62	62	47	46	27	27	17	15	9	8	6
281	Teachers (n.e.c.)	----	----	----	1,684	1,133	1,149	1,086	1,044	752	595	436
282	Technicians, medical and dental	264	264	129	141	78	158	73	20	4	----	----
283	Technicians, testing	471	471	346	281	104						
284	Technicians (n.e.c.)	74	74	73	67	19	28	11				
285	Veterinarians	20	20	15	15	14	14	11	12	13	12	8
286	Dietitians and nutritionists	41	41	27	27	23						
287	Foresters and conservationists	42	42	34	34	27						
288	Natural scientists (n.e.c.)	95	95	62	67	43	302	153	73	32	20	12
289	Personnel and labor relations workers	296	296	103	99	53						
290	Social scientists	110	110	42	57	36						
291	Professional, technical, and kindred workers (n.e.c.)	----	----	----	345	108						
292	**Farmers and farm managers**	[1] 1,428	1,350	2,528	2,526	4,325	4,375	5,362	6,032	6,442	6,163	5,763
293	Farmers (owners and tenants)	1,286	1,289	2,503	2,501	4,290	4,339	5,324	5,992	6,384	6,132	5,752
294	Farm managers	61	61	25	25	35	36	38	40	58	31	10
295	**Managers, officials, and proprietors, exc. farm**	[2] 6,463	[2] 6,224	[2] 5,708	5,489	5,096	5,155	3,770	3,614	2,803	2,462	1,697
296	Buyers and department heads, store	387	387	210	238	145	147	74	35	20	15	----
297	Buyers and shippers, farm products	20	20	31	18	29	29	43	42	48	51	12
298	Conductors, railroad	40	40	45	45	56	57	48	73	75	66	43
299	Credit men	60	60	48	48	33	34	30	22	14	2	2
300	Floormen and floor managers, store	----	----	----	11	11	11	7	6	4	4	2
301	Inspectors (n.e.c.), public administration	[3] 81	[3] 82	[3] 62	[3] 77	[3] 58	[3] 58	[3] 43	124	100	72	58
302	Officials (n.e.c.), public administration	[4] 248	[4] 248	[4] 195	[4] 201	[4] 156	[4] 158	[4] 122				
303	Inspectors (n.e.c.), Federal public administration and postal service	51	51	43	41	29	28	20	40	42	20	18
304	Officials and administrators (n.e.c.), Federal public administration and postal service	120	120	79	69	51	51	40				
305	Inspectors (n.e.c.), State public administration	20	20	10	14	10	10	11	15	9	7	4
306	Officials & admins. (n.e.c.), State public admin	49	49	37	37	23	24	21				
307	Inspectors (n.e.c.), local public administration	10	10	9	22	20	20	12	70	49	44	35
308	Officials and admins. (n.e.c.), local public admin	79	79	79	96	82	83	61				
309	Managers and superintendents, building	85	85	46	54	67	68	72	71	43	32	----
310	Officers, pilots, pursers, and engineers, ship	26	26	31	37	42	43	35	49	49	45	43
311	Officials, lodge, society, union, etc	51	51	43	34	27	28	26	15	12	8	----
312	Postmasters	35	36	38	37	39	39	40	34	29	25	19
313	Purchasing agents and buyers (n.e.c.)	164	164	111	105	64	65	34	29	18	8	7
314	Managers, officials, and proprietors (n.e.c.)	3,753	3,756	4,268	4,586	4,368	4,419	3,197	3,113	2,390	2,135	1,511
315	Construction	399	397	378	378	293	296	175	199	107	183	58
316	Manufacturing	760	752	801	826	669	665	432	447	406	350	174
317	Transportation	164	164	167	159	150	151	90	98	83	82	66
318	Telecommunications, utilities, & sanitary services	117	115	108	108	86	68	54	39	25	19	6
319	Wholesale trade	312	310	340	338	338	343	225	152	143	104	78
320	Retail trade	1,122	1,119	1,341	1,628	1,943	1,977	1,620	1,592	1,220	1,119	930
321	Eating and drinking places	----	----	----	287	365	370	270	165	106	129	110
322	Food & dairy products stores, & milk retailing	255	255	327	327	495	512	469	540	444	395	
323	General merchandise and five and ten cent stores	128	128	136	135	139	128	111	184	162	167	
324	Apparel and accessories stores	82	82	108	108	128	130	99	96	97	85	
325	Motor vehicles and accessories retailing	130	130	143	143	117	119	65	62	29	5	820
326	Gasoline service stations	169	170	197	197	184	186	183	89	15	2	
327	Furniture, home furnishings, and equipment stores	71	71	81	81	97	98	57				
328	Hardware, farm implement, & bldg. material, retail	81	81	122	122	129	131	95	456	368	336	
329	Other retail trade	206	202	228	229	288	305	271				
330	Banking and other finance	214	212	397	227	142	143	126	174	122	75	76
331	Insurance and real estate				191	116	117	65	66	38	29	14
332	Automobile repair services and garages	[5] 196	[5] 195	[5] 191	60	85	86	66	93	56	5	----
333	Miscellaneous repair services	225	223	212	28	34	35	14	9	8	7	----
334	Personal services	[6]	[6]	[6]	211	213	216	129	105	76	88	72
335	Business services				103	59	63	33	140	107	74	36
336	All other industries (incl. not reported)	245	270	332	330	241	259	169				
337	**Clerical and kindred workers**	14,208	13,457	9,431	9,617	7,132	7,232	4,982	4,336	3,385	1,987	877
338	Agents (n.e.c.)	----	----	----	163	126	128	73	102	64	28	59
339	Collectors, bill and account	53	53	34	32	24	24	45	43	31	36	
340	Attendants and assistants, library	126	129	37	33	13	13	24	2	2	3	1
341	Attendants, physician's and dentist's office	----	----	----	73	42	43	35	28	14	6	----
342	Baggagemen, transportation	----	----	----	6	8	8	6	9	12	12	19
343	Bookkeepers	1,572	1,574	951	936	739	994	721	738	616	447	232
344	Cashiers	869	878	510	492	239						
345	Express messengers and railway mail clerks	----	----	----	7	19	19	23	26	25	22	----
346	Mail carriers	256	256	199	202	168	171	124	121	91	81	28
347	Stenographers, typists, and secretaries	3,914	3,920	2,316	2,313	1,629	1,661	1,223	1,097	786	387	134
348	Messengers and office boys	59	61	63	63	59	60	64	80	110	103	66
349	Telegraph messengers				5	8	8	17	16	9	9	
350	Telegraph operators	13	13	21	21	35	36	42	68	75	66	56
351	Telephone operators	420	421	372	372	367	375	214	249	190	98	19
352	Ticket, station, and express agents	100	100	75	73	68	61	47	38	37	35	27
353	Office machine operators	571	572	322	318	146	150	66	38			
354	Shipping and receiving clerks	427	427	325	295	297	304	233		1,323	654	235
355	Bank tellers	253	254	135	131	65	3,178	2,026	1,681			
356	Dispatchers and starters, vehicle	61	61	48	59	32						
357	Clerical and kindred workers (n.e.c.)	5,514	4,737	4,025	4,026	3,047						

See footnotes at end of table.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
358	**Salesworkers**	[1] 5,625	5,433	4,799	4,801	4,025	4,133	3,450	3,059	2,058	1,755	1,307
359	Advertising agents and salesmen	64	65	35	35	34	35	41	40	25	11	12
360	Auctioneers	5	5	4	4	5	6	4	4	5	4	3
361	Demonstrators	40	40	29	26	14	14	10	8	5	4	3
362	Hucksters and peddlers	122	122	62	57	24	24	55	57	50	80	77
363	Insurance agents and brokers	460	461	371	369	276	312	253	257	120	88	78
364	Newsboys	65	188	197	197	100	101	58	39	28	30	7
365	Real estate agents and brokers	266	266	196	196	143	145	119	150	89	78	34
366	Stock and bond salesmen	99	99	35	29	11	11	18	22	11	6	4
	Salesmen and sales clerks (n.e.c.):											
367	Manufacturing	419	420	475	474	334						
368	Wholesale trade	650	651	508	504	413	3,485	2,893	2,482	1,724	1,454	1,089
369	Retail trade	2,845	2,868	2,669	2,724	2,536						
370	Other industries (incl. not reported)	244	247	217	186	136						
371	**Craftsmen, foremen, and kindred workers**	[2] 11,082	[2] 10,435	[2] 9,465	9,241	8,205	8,350	6,203	6,246	5,482	4,315	3,062
372	Bakers	112	113	117	113	125	128	139	141	98	90	70
373	Boilermakers	31	31	28	27	39	40	33	50	74	45	31
374	Bookbinders	36	36	30	28	32	33	19	19	19	17	26
375	Brickmasons, stonemasons, and tile setters	213	213	222	208	177	181	141	171	135	160	149
376	Cabinetmakers	70	70	71	69	77	78	60	63	50	43	36
377	Carpenters	922	923	936	924	993	1,016	776	917	885	815	596
378	Cement and concrete finishers	75	75	48	48	33	34	32	15	8	9	----
379	Electrotypers and stereotypers	7	7	9	9	12	12	8	8	5	4	3
380	Engravers, except photoengravers	9	9	12	12	10	10	9	28	23	22	136
381	Photoengravers and lithographers	33	33	28	25	29	29	23				
382	Compositors and typesetters	163	163	193	183	179	182	181	184	140	128	
383	Pressmen and plate printers, printing	160	160	85	75	50	51	36	31	19	20	
384	Decorators and window dressers	72	73	53	53	45	46	30	20	9	5	3
385	Electricians	483	483	365	356	326	332	221	253	192	108	51
386	Cranemen, derrickmen, and hoistmen	159	159	133	132	108	223	123	294	258	219	134
387	Excavating, grading, and road machinery operators	345	346	284	226	111						
388	Stationary engineers	173	173	293	276	219	222	201				
389	Blacksmiths	10	10	20	21	45	60	99	136	209	238	220
390	Forgemen and hammermen	16	16	13	12	14						
391	Foremen (n.e.c.)	1,617	1,618	1,186	1,199	856	867	585	551	485	318	162
392	Construction	159	158	103	103	61	62	79	43	14	15	----
393	Manufacturing	938	934	662	756	520	525	310	293	296	164	90
394	Metal industries	----	----	----	131	84	218	112	293	296	164	90
395	Machinery, including electrical	----	----	----	134	81						
396	Transportation equipment	----	----	----	82	51						
397	Textiles, textile products, and apparel	----	----	----	76	70	72	53				
398	Other durable goods	----	----	----	102	77	235	144				
399	Other nondurable goods (incl. not specified mfg.)	----	----	----	230	157						
400	Railroads and railway express service	157	156	202	36	54	55	51	83	81	69	38
401	Transportation, except railroad				28	20	20	15	44	31	24	10
402	Telecommunications, utilities, & sanitary services				58	41	41	27				
403	Other industries (incl. not reported)	363	369	218	218	161	164	104	88	63	45	24
404	Furriers	3	3	5	4	13	14	16	12	9	8	7
405	Painters, construction and maintenance	359	361	384	416	433	447	451	446	265	288	221
406	Glaziers	26	26	18	16	11	11	8				
407	Heat treaters, annealers, and temperers	21	21	22	20	18	19	11	6	3	2	----
408	Inspectors, scalers, and graders, log and lumber	18	18	22	21	20	18	17	7	7	7	2
409	Inspectors (n.e.c.)	121	121	101	102	98	99	82	78	77	53	22
410	Construction	23	23	15	15	8	8	9	7	3	4	1
411	Railroads and railway express service	25	25	30	30	37	37	30	39	43	28	20
412	Transp. exc. railroad, commun., & other pub. util	72	73	56	15	13	13	14	14	10	8	1
413	Other industries (incl. not reported)				42	40	40	30	17	21	14	----
414	Jewelers, watchmakers, goldsmiths, and silversmiths	38	38	38	38	48	49	36	39	40	33	23
415	Linemen & servicemen, telegraph, telephone, & power	397	397	273	278	217	219	116	106	51	35	18
416	Locomotive engineers	50	50	60	58	73	74	67	104	113	99	107
417	Locomotive firemen	14	14	39	39	56	57	50	67	91	76	
418	Loom fixers	21	21	24	24	31	32	25	19	16	13	9
419	Job setters, metal	----	----	----	41	25	571	535	1,387	1,168	520	304
420	Machinists	390	390	521	516	535						
421	Mechanics and repairmen, airplane	146	146	116	119	74	75	28				
422	Mechanics and repairmen, automobile	936	938	684	703	682	693	448				
423	Mechanics and repairmen, railroad and car shop	56	57	62	41	48	49	46				
424	Mechanics and repairmen, office machine	40	40	30	30	31						
425	Mechanics and repairmen, radio and television	140	141	105	106	79	987	436				
426	Mechanics and repairmen (n.e.c.)	1,135	1,165	1,185	1,302	875						
427	Toolmakers, and die makers and setters	207	207	188	187	157	160	100				
428	Millers, grain, flour, feed, etc	7	7	9	9	10	10	16	16	23	23	25
429	Millwrights	81	81	69	68	60	61	44	42	38	17	8
430	Molders, metal	57	57	53	52	64	65	86	105	124	121	97
431	Motion picture projectionists	16	16	18	18	27	27	24	20	10	4	----
432	Opticians, and lens grinders and polishers	28	28	21	21	20	20	12	13	11	9	6
433	Paperhangers	11	11	27	11	23	23	31	28	19	26	22
434	Pattern and model makers, except paper	40	40	42	40	37	38	30	30	28	24	15
435	Piano and organ tuners and repairmen	7	7	6	6	8	8	5	7	7	7	4
436	Plasterers	31	31	54	53	64	66	53	70	38	48	35
437	Plumbers and pipefitters	398	398	340	331	298	304	211	238	207	148	92
438	Rollers and roll hands, metal	20	20	20	31	31	32	33	31	25	18	6
439	Roofers and slaters	65	65	57	55	49	50	33	24	12	14	9
440	Shoemakers and repairers, except factory	32	32	43	37	59	60	68	76	79	70	102
441	Stone cutters and stone carvers	7	7	7	7	9	9	15	23	23	36	37

See footnotes at end of table.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
	Craftsmen, foremen, and kindred workers—Con.											
442	Structural metalworkers	79	79	66	66	55	57	47	33	31	18	4
443	Tailors and tailoresses	71	71	87	43	86	88	120	169	192	205	134
444	Tinsmiths, coppersmiths, and sheet metal workers	162	162	150	145	130	133	91	83	75	60	49
445	Upholsterers	65	65	63	62	64	65	43	42	24	20	26
446	Craftsmen and kindred workers (n.e.c.)	996	335	281	112	74	76	47	43	66	78	60
447	Members of the Armed Forces [2]	36	36	18	18	30	38	3				
448	**Operatives and kindred workers**	[2] 14,335	[2] 13,406	[2] 12,254	[2] 12,846	[2] 11,754	12,030	9,518	7,691	6,587	5,441	3,720
449	Apprentice carpenters				6	11	11	8	4	5	6	2
450	Apprentice electricians				10	9	9	3	5	10	3	
451	Apprentice plumbers and pipefitters				8	12	13	5	6	7	10	3
452	Apprentices, printing trades				12	16	16	10	11	12	12	4
453	Apprentice machinists and toolmakers				16	16	16	20	14	39		
454	Apprentice auto mechanics				2	4						
455	Apprentice bricklayers and masons				3	6						
456	Apprentice mechanics, except auto				4	7	42	33	49	66	86	57
457	Apprentices, building trade (n.e.c.)				3	4						
458	Apprentices, metalworking trades (n.e.c.)				6	7						
459	Apprentices, other specified trades				9	13						
460	Apprentices, trade not specified				10	15	15	12				
461	Asbestos and insulation workers	26	26	20	20	15	17	6	3	1	2	
462	Attendants, auto service and parking				378	248	253	245	144	18		
463	Blasters and powdermen	8	8	6	7	12	12	7	7	7	2	1
464	Boatmen, canalmen, and lock keepers				7	8	9	6	6	6	5	13
465	Brakemen, railroad	49	49	65	65	81	82	77	173	208	160	107
466	Switchmen, railroad	53	53	60	60	62	63	50				
467	Chainmen, rodmen, and axmen, surveying	12	12	11	11	8	8	11	4	3	4	
468	Conductors, bus and street railway	10	10	12	4	11	12	18	37	64	57	24
469	Deliverymen and routemen	643	649	462	438	249	253	294	187	170	230	167
470	Dressmakers and seamstresses, except factory	102	102	126	124	147	147	172	198	259	467	413
471	Dyers	25	25	19	19	25	26	28	18	15	14	5
472	Filers, grinders, and polishers, metal	123	123	152	159	156	160	117	79	60	50	17
473	Fruit, nut, & veget. graders & packers, exc. factory				28	34	37	25	10	8	5	
474	Furnacemen, smeltermen, and pourers	67	68	56	57	58	59	33	20	24	26	13
475	Heaters, metal	7	7	8	8	10	10	10	15	16	10	5
476	Laundry and dry cleaning operatives				412	451	462	314	265	142	132	91
477	Meatcutters, except slaughter and packing house	205	206	189	186	177	180	160	120	61	41	33
478	Milliners	2	2	4	4	13	13	15	25	50	100	75
	Mine operatives and laborers (n.e.c.):											
479	Coal mining	164	164	247	140	381	620	845	892	995	907	660
480	Crude petroleum and natural gas extraction				102	108						
481	Mining and quarrying, except fuel				89	116						
482	Motormen, mine, factory, logging camp, etc	10	10	15	15	24	25	20	17	12	3	
483	Motormen, street, subway, and elevated railway				8	27	27	39	58	63	56	37
484	Oilers and greasers, except auto	49	49	57	57	62	63	40	31	25	14	
485	Painters, except construction and maintenance				148	123	126	104	83	61	49	55
486	Photographic process workers	67	67	47	44	29	30	15	8	3	2	2
487	Power station operators	18	18	27	27	22	22	22	29	21	12	
488	Sailors and deckhands	29	29	41	41	52	55	47	65	55	47	40
489	Sawyers	108	108	104	95	99	100	50	36	34	43	18
490	Spinners, textile				52	85	88	113	81	83	74	56
491	Stationary firemen	97	97	106	93	128	130	128	127	144	111	73
492	Bus drivers	239	239	185	185	158						
493	Taxicab drivers and chauffeurs	158	158	171	171	214	1,808	1,515	972	285	46	
494	Truck and tractor drivers	[6] 1,453	[6] 1,455	[6] 1,550	1,663	1,397						
495	Weavers, textile	52	52	69	66	103	105	109	225	219	202	155
496	Welders and flame-cutters	566	566	388	387	277	283	137	37	54	3	
497	Operatives and kindred workers (n.e.c.)				4,993	4,752	6,627	4,654	3,634	3,284	2,451	1,592
498	Manufacturing				4,305	4,079	5,847	4,225	3,189	3,076	2,318	1,443
499	Sawmills, planing mills, and millwork				104	144	151	63	91	92	105	75
500	Miscellaneous wood products				38	39	46	36				
501	Furniture and fixtures				107	112	132	82	72	52	44	19
502	Glass and glass products				55	56	76	54	41	45	42	25
503	Cement & concrete, gypsum, & plaster products				35	28	30	13	11	8	9	5
504	Structural clay products				21	21	23	16	13	10	13	7
505	Pottery and related products				21	32	35	25	23	17	16	10
506	Miscellaneous nonmetallic mineral & stone prod				38	24	28	18	8	6	9	9
507	Motor vehicles and motor vehicle equipment				174	216	371	208	170	125	21	
508	Ship and boat building and repairing				20	15	15	19	11	53	6	
509	Blast furnaces, steelworks, and rolling mills				100	120	133	105				
510	Other primary iron and steel industries				65	65	324	209				
511	Fabricated steel products				288	216						121
512	Office and store machines and devices				26	28	40	24				
513	Miscellaneous machinery				231	165	273	123	397	370	286	
514	Not specified metal industries				2	4	4	12				
515	Agricultural machinery and tractors				24	36	52	21				
516	Aircraft and parts				78	31	67	27				
517	Railroad & miscellaneous transportation equipment				18	17	19	11				
518	Primary nonferrous industries				85	66	98	48	34	32	27	11
519	Fabricated nonferrous metal products				313	218	356	150	117	65	25	18
520	Electrical machinery, equipment, and supplies				44	30	60	29				
521	Professional equipment and supplies				11	10			172	192	133	102
522	Photographic equipment and supplies				10	16	258	172				
523	Watches, clocks, and clockwork-operated devices				140	141						
524	Miscellaneous manufacturing industries											

See footnotes at end of table.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
	Operatives and kindred workers—Con.											
	Operatives and kindred workers (n.e.c.)—Con.											
	Manufacturing—Con.											
525	Meat products				134	93	132	91	53	50	26	11
526	Canning & preserving fruits, veget., & seafood				92	65	95	52	26	18	8	
527	Dairy products				57	58	62	36	26	19	12	13
528	Grain-mill products				30	29	33	17	7	8	4	4
529	Bakery products				44	33	68	45	28	20	9	5
530	Confectionery and related products				26	27	51	49	44	52	31	27
531	Beverage industries				48	51	57	36	7	10	20	13
532	Miscellaneous food preparations & kindred products				35	32	51	29	30	21	16	2
533	Not specified food industries				5	5						
534	Tobacco manufacturers				41	54	70	86	104	145	152	116
535	Knitting mills				62	26	154	192	129	104	85	41
536	Dyeing and finishing textiles, except knit goods				24	25	26	24	20	18	16	13
537	Carpets, rugs, and other floor covering				12	20	26	21	17	14	15	10
538	Yarn, thread, and fabric mills				251	373	477	426	324	323	269	202
539	Miscellaneous textile mill products				21	28	32	35	35	46	48	31
540	Apparel and accessories				395	384	824	734	422	365	336	225
541	Miscellaneous fabricated textile products				42	37	58	53	15	21	18	21
542	Pulp, paper, and paperboard mills				110	99	106	87	64	55	36	
543	Miscellaneous paper and pulp products				48	50	61	28	17	14	10	21
544	Paperboard containers and boxes				69	58	64	41	14	20	18	19
545	Printing, publishing, and allied industries				97	71	80	59	51	48	42	16
546	Synthetic fibers				23	26	27	31	21			
547	Paints, varnishes, and related products				17	16	18	12	8	6	4	3
548	Drugs and medicines				17	13	149	72	53	51	33	9
549	Miscellaneous chemicals and allied products				136	113						
550	Petroleum refining				44	43	48	30	27	14	4	1
551	Miscellaneous petroleum and coal products				6	7	7	5	2	2	2	2
552	Rubber products				162	136	127	85	81	86	32	15
553	Leather: tanned, curried, and finished				18	30	32	35	29	32	34	26
554	Footwear, except rubber				148	169	226	228	210	206	181	98
555	Leather products, except footwear				31	39	50	44	26	33	29	31
556	Not specified manufacturing industries				10	19	43	74	139	207	93	67
557	Nonmanufacturing industries (incl. not reported)				688	673	780	429	445	208	132	149
558	Construction				102	72	71	40	15	4	8	7
559	Railroads and railway express service				56	94	96	73	98	111	61	
560	Transportation, except railroad				36	31	37	24	57	30	19	137
561	Telecommunications, utilities, and sanitary serv				50	52	52	24				
562	Wholesale and retail trade				220	224	311	145	74	40	27	
563	Business and repair services				72	50	54	38	30	8	6	
564	Public administration				46	51	54	11	6	4	3	
565	Personal services				15	20	105	75	165	12	9	5
566	All other industries (incl. not reported)				90	80						
567	**Private household workers**	1,204	1,143	1,817	[7] 1,825	[7] 1,492	1,539	2,412	1,998	1,411	1,851	1,579
568	Laundresses, private household—living in	12	13	41	(Z)	1	76	203	344	375	513	280
569	Laundresses, private household—living out				41	73						
570	Housekeepers, private household—living in	105	105	156	56	53	150	410	1,654	1,036	1,338	1,299
571	Housekeepers, private household—living out				96	93						
572	Private household workers (n.e.c.)—living in	1,087	1,025	1,619	104	163	1,313	1,799				
573	Private household workers (n.e.c.)—living out				1,178	1,034						
574	**Service workers, except private household**	9,047	8,449	6,086	5,765	4,524	4,641	3,657	2,774	1,901	1,711	1,047
575	Attendants, hospital and other institution	746	749	420	409	212	216	102	198	157	133	109
576	Midwives	1	1	1	1	2	151	115				
577	Practical nurses	242	242	175	217	145						
578	Attendants, professional & personal service (n.e.c.)	64	65	84	75	43	52	42	4	3	2	
579	Attendants, recreation and amusement	76	83	74	63	65	66	64	29	13	9	6
580	Ushers, recreation and amusement	15	16	16	16	25	26	22				
581	Barbers, beauticians, and manicurists	650	651	489	487	391	396	449	371	214	193	133
582	Bartenders	199	199	184	184	209	214	131		26	101	89
583	Boarding and lodging housekeepers	7	8	30	30	29	30	74	144	133	165	71
584	Bootblacks	4	5	10	10	15	15	16	19	15	14	8
585	Charwomen and cleaners	461	470	402	192	124	128	72	52	31	29	29
586	Cooks, except private household	873	886	603	597	466	478	349	292	200	174	117
587	Elevator operators	37	37	77	77	94	97	87	68	41	25	13
588	Firemen, fire protection	178	178	139	139	112	112	82	73	51	36	15
589	Guards, watchmen, and doorkeepers	329	329	259	258	250	255	216	148	116	78	
590	Policemen and detectives, government	378	378	262	238	175	176	135	145	94	68	116
591	Policemen and detectives, private				17	21	21	21				
592	Marshals and constables	5	5	6	6	7	7	9	9	7	9	
593	Housekeepers and stewards, except private household				152	110	112	90	61	52	45	34
594	Janitors and sextons	1,274	1,301	785	621	475	482	377	310	179	113	57
595	Porters				155	174	179	182	151	102	96	42
596	Sheriffs and bailiffs	35	35	24	24	19	19	16	15	11	7	5
597	Counter and fountain workers	161	168	168	167	93	836	636	415	242	200	107
598	Waiters and waitresses	1,100	1,127	899	896	717						
599	Watchmen (crossing) and bridge tenders	42	42	29	26	9	12	10	13	13	10	4
600	Service workers, except private household (n.e.c.)	2,168	1,472	950	709	544	561	360	259	203	203	93
601	**Farm laborers and foremen**	[1] 1,022	995	1,604	1,560	2,533	2,578	3,632	4,290	4,948	5,370	5,125
602	Farm foremen	33	34	25	25	18	17	17	28	35	19	7
603	Farm laborers, wageworkers	808	848	1,288	1,244	1,584	1,617	2,405	2,597	2,271	2,832	5,115
604	Farm laborers, unpaid family workers	94	109	286	284	921	934	1,208	1,660	2,633	2,514	
605	Farm service laborers, self-employed	4	4	5	5	10	10	3	5	10	6	4

See footnotes at end of table.

Series D 233–682. Detailed Occupation of the Economically Active Population: 1900 to 1970—Con.

[In thousands of persons 14 years old and over, except as indicated]

Series No.	Occupation	1970		1960		1950		1940	1930	1920	1910	1900
		16 years old and over	14 years old and over	1970 classification	1960 classification	1960 classification	1950 classification					
606	**Laborers, except farm and mine**	[8] 3,751	[8] 3,515	[8] 3,755	[8] 3,530	[8] 3,774	3,885	4,875	5,335	4,905	4,478	3,620
607	Fishermen and oystermen	31	31	41	41	78	75	64	73	53	68	69
608	Garage laborers, and car washers and greasers				93	70	72	63	77	33	4	
609	Gardeners, except farm, and groundskeepers				216	156	159	163	168	71	65	24
610	Longshoremen and stevedores	47	47	61	61	73	73	74	74	86	63	29
611	Lumbermen, raftsmen, and woodchoppers	89	90	132	136	189	196	169	147	180	139	117
612	Teamsters	8	8	22	22	22	23	31	120	412	441	374
613	Laborers (n.e.c.)	675	688	1,165	2,763	2,997	3,288	4,312	4,675	4,070	3,696	3,007
614	Manufacturing	349	347	662	961	1,154	1,209	1,598	1,960	2,169	1,487	723
615	Sawmills, planing mills, and millwork	26	26	47	97	147	152	230	292	280	289	139
616	Miscellaneous wood products				13	18	18	27				
617	Furniture and fixtures	7	7	13	18	20	21	35	40	35	24	7
618	Glass and glass products	24	24	53	14	14	16	21	28	29	25	15
619	Cement & concrete, gypsum, & plaster products				28	24	24	26	39	30	36	13
620	Structural clay products				26	28	29	39	60	49	78	42
621	Pottery and related products				5	7	7	7	11	12	9	6
622	Miscellaneous nonmetallic mineral & stone products				10	9	9	14	8	5	7	7
623	Motor vehicles and motor vehicle equipment	13	13	20	36	50	51	71	124	83	16	145
624	Ship and boat building and repairing				14	16	16	23	17	69	12	
625	Blast furnaces, steelworks, and rolling mills	43	43	109	119	141	145	201				
626	Other primary iron and steel industries				42	52	111	128				
627	Fabricated steel products				62	60						
628	Office and store machines and devices				2	2	2	2				
629	Miscellaneous machinery				37	39	43	46	492	544	419	
630	Not specified metal industries				(Z)	1	1	6				
631	Agricultural machinery and tractors				7	13	14	11				
632	Aircraft and parts				6	4	4	4				
633	Railroad & miscellaneous transportation equipment				6	6	6	8				
634	Primary nonferrous industries				25	27	33	43	39	43	33	15
635	Fabricated nonferrous metal products											
636	Electrical machinery, equipment, and supplies	13	13	23	33	34	33	30	37	27	11	8
637	Professional equipment and supplies	2	2	3	3	3	4	4	74	101	43	30
638	Photographic equipment and supplies				1	1						
639	Watches, clocks, and clockwork-operated devices				(Z)	1	18	27				
640	Miscellaneous manufacturing industries	11	11	13	12	15						
641	Meat products	44	44	90	30	36	37	47	43	60	34	12
642	Canning & preserving fruits, veget., & seafood				24	23	27	34	26	19	10	
643	Dairy products				18	23	15	17	17	15	5	5
644	Grain-mill products				17	18	20	21	16	18	9	10
645	Bakery products				9	5	10	8	12	8	5	3
646	Confectionery and related products				3	4	4	8	6	7	3	3
647	Beverage industries				17	21	25	22	9	11	19	12
648	Miscellaneous food preparations & kindred prod.				17	29	24	29	26	32	17	3
649	Not specified food industries				2	2						
650	Tobacco manufacturers	2	2	4	7	7	10	17	21	35	16	14
651	Knitting mills	12	12	14			3	5	9	12	8	4
652	Dyeing and finishing textiles, except knit goods						3	5	8	11	10	9
653	Carpets, rugs, and other floor coverings						6	7	5	4	4	2
654	Yarn, thread, and fabric mills				30	45	50	71	94	120	59	44
655	Miscellaneous textile mill products				10	14	4	7	5	8	8	5
656	Apparel and accessories	4	4	4	11	11	9	10	14	12	8	5
657	Miscellaneous fabricated textile products						3	3	1	1	1	1
658	Pulp, paper, and paperboard mills	15	15	29	25	28	29	44	52	52	31	14
659	Miscellaneous paper and pulp products				5	8	9	6	4	3	2	
660	Paperboard containers and boxes				9	10	10	10	3	3	1	1
661	Printing, publishing, and allied industries	5	5	7	13	12	12	10	11	8	5	4
662	Synthetic fibers				3	3	3	5	5			
663	Paints, varnishes, and related products				3	5	5	6	6	5	3	2
664	Drugs and medicines				2	2	61	77	80	79	45	15
665	Miscellaneous chemical and allied products				41	45						
666	Petroleum, refining				14	24	25	28	41	32	11	5
667	Miscellaneous petroleum and coal products				3	3	6	8	5	9	11	11
668	Rubber products				18	21	17	20	29	51	14	6
669	Leather: tanned, curried, and finished	4	4	8	11	15	8	11	17	27	21	16
670	Footwear, except rubber						6	12	18	19	10	5
671	Leather products, except footware						2	3	3	8	4	3
672	Not specified manufacturing industries	3	3	2	2	11	11	44	114	191	109	79
673	Nonmanufacturing industries (incl. not reported)				1,802	1,843	2,079	2,714	2,715	1,901	2,210	2,284
674	Construction	645	649	802	751	699	788	1,340	710	391	531	20
675	Railroads and railway express service	105	105	191	136	284	293	278	490	543	599	284
676	Transportation, except railroad				91	87	119	98	249	199	195	86
677	Telecommunications, utilities, & sanitary serv.				123	132	135	103				
678	Wholesale and retail trade	96	98	130	372	270	345	250	253	182	152	68
679	Business and repair services	22	23	15	24	16	15	7	15	2	2	1
680	Public administration	95	95	74	77	98	107	52	134	93	56	
681	Personal services				77	79	83	64	864	490	675	1,825
682	All other industries (incl. not reported)	83	95	128	151	179	194	520				

Z Less than 500.
[1] Includes persons for whom occupations were not reported.
[2] Includes occupations not shown separately.
[3] Includes data in series D 303, D 305, and D 307.
[4] Includes data in series D 304, D 306, and D 308.
[5] Business services included with automobile and miscellaneous repair services and garages.
[6] Excludes tractor drivers.
[7] Includes babysitters, not shown separately.
[8] Includes carpenters' helpers, truck drivers, helpers, and warehousemen, not shown separately.

Chapter D

Earnings, Hours, and Working Conditions (Series D 683-1036)

D 683–688. Indexes of employee output (NBER), 1869–1969.

Source: U.S. Bureau of Economic Analysis, *Long Term Economic Growth, 1860–1970*, pp. 210–211.

The productivity indexes in the source publication are from John W. Kendrick, *Productivity Trends in the United States*, 1961, and *Postwar Productivity Trends in the United States, 1948–1969*, National Bureau of Economic Research, New York (copyright).

D 683 and **D 684–686**, indexes of output per man-hour. Kendrick derived these series by dividing the appropriate output series (gross private domestic product, gross nonfarm product, manufacturing output, and gross farm product) by the corresponding man-hours series.

D 689–704. Indexes of output, man-hours, compensation per man-hour, and unit labor cost (BLS), 1947–1970.

Source: U.S. Council of Economic Advisors, *Economic Report of the President*, January 1972, p. 234. Data are from the U.S. Bureau of Labor Statistics (BLS).

These series are based primarily on BLS surveys of establishments. The output measure, gross national product (GNP), represents the market value, in 1958 dollars, of final goods and services produced in the economy. It includes the purchases of goods and services by consumers, business establishments, foreign investors, and various government agencies. The GNP data (see series F 3) were prepared by the U.S. Bureau of Economic Analysis. In developing the man-hour series, data from labor force reports and national income series were used to supplement BLS payrolls series data.

The indexes of compensation per man-hour and unit labor cost were developed from man-hour estimates based on data from establishments. Compensation includes wages and salaries, plus supplemental payments such as contributions of employers to social security and private health and pension funds. The compensation data include an estimate for proprietors' salaries and contributions for supplementary benefits. Real compensation per man-hour can be derived by adjusting the compensation data by the consumer price index to reflect changes in purchasing power. The indexes of unit labor costs were developed by dividing compensation per man-hour by output per man-hour (see series W 22–25).

See also general note for series D 1–74 and data and text for series W 22–29.

D 705–714. Farm laborers—average monthly earnings with board, by geographic divisions, 1818–1948.

Source: Stanley Lebergott, *Manpower in Economic Growth: The American Record Since 1800*, tables A-23 and A-24, pp. 257ff. (Copyright 1964; used with permission of McGraw-Hill Book Co., New York.)

For most of the nineteenth century and well into the twentieth, the common method of wage payment in agriculture was monthly, with board included. Reasonably satisfactory data for individual States are available at something like decennial intervals for the entire period beginning with 1818. These figures have been supplemented with partial information to provide national estimates for the years for which this is not so. State data for 1818–1919 were combined into division and U.S. averages using weights from the population census. For 1909 and 1919, they therefore differ from U.S. Department of Agriculture (USDA) division totals.

For 1818, 1826, and 1830, estimates were made in 1832 by Senator John Holmes of Maine, and reported by him in the Congressional *Register of Debates*. For certain States there are, in addition, the results of a survey in 1832–1834 on 1832 farm wages made by Secretary of State Edward Livingstone, drawing on returns from many individual towns in these States—i.e., 59 of 134 towns in Connecticut, 101 of 444 in Maine, 109 of 230 in New Hampshire, etc. Given the broader basis of the Secretary's survey, his figures were used to represent the 1830 average (other data indicating virtually no 1830–1832 change) with the Holmes series used to extrapolate these values to 1818 and 1826. For 1818, 1826, and 1830, the total number of persons reported by the 1820 census as having agricultural occupations was used for weighting.

For 1850 and 1860, special wage-rate inquiries made in connection with census reports on social statistics gave monthly rates paid to farmhands (with board) and were used here.

For 1850, the number of free white male farmers aged 15 and over was used for weighting, and for 1860, the number of farm laborers. Examination of the ratios of farmers to farm laborers in 1860 indicated a marked degree of intrastate uniformity so that the shift from one type of weights to the other would not make a marked difference.

The source used for 1870 was a study made by Edward Young, Chief of the Bureau of Statistics of the Treasury Department, in which figures on wage rates in a host of occupations were collected. Because of the timing, it is possible that these data were collected in connection with the 1870 census. The data were more probably developed as the other materials in the volume were, from information secured by the assistant assessors of internal revenue in the various States. Their issuance, however, under the sponsorship of a competent statistician, who was experienced in data evaluation and presentation and who had worked under David A. Wells, entitles them to serious consideration.

For 1880 and 1890, the crop-reporter surveys of the USDA were used to provide State estimates.

For 1899, the USDA survey reported not rates for men hired "by the year"—as do the reports used for earlier periods—but "by the year or season." In examining the extent of noncomparability, Lebergott was limited to a comparison between the two types of rates for 1909, that being the only year for which the USDA reported both types of rates.

Day rates (other than harvest) were charted against monthly rates by the year and season for the years 1891 to 1909. The scatter showed a close and simple correlation for all years except 1909. Given the scatter and the day rate for 1909, Lebergott deduced a 1909 rate for the year and season that is virtually the same as the enumerated "year" rate for that date. On this basis he took the year-season rate for 1899 as roughly identical with the desired year rate for that date. He secured the same result by charting the year rates for 1866 to 1890 and 1909 against the daily rate (other than harvest) and interpolating for 1899 by the daily rate. It was therefore concluded that the "year-season" State rates for 1899 as actually reported could be used as satisfactory approximations of the year rates for that date.

For 1870 and 1880, the population census counts of agricultural laborers aged 16 to 59 were used as weights. For 1890 and 1899, the census count of male agricultural laborers aged 16 and over in

1900 was used. For 1909 and 1919, the division estimates of the USDA were not used because they were weighted by the number of farms employing hired labor at any time during the year. Such weights will distort the relative importance of States that characteristically hired above (or below) average proportions of migrant labor, or short-term labor. Thus, while New Jersey reported roughly as many farms with hired labor in the agricultural census as it did hired laborers in the population census, North Dakota reported almost twice as many. The population census count of farm laborers (working off-farm) was therefore used to compute regional and U.S. averages.

For 1929 and 1940, the USDA division figures were used, these having been weighted by the count of hired farm workers derived from the surveys themselves. For 1948, the 1950 Census of Agriculture count of hired farm workers was used.

D 715–717. Average daily wage rates of artisans, laborers, and agricultural workers, in the Philadelphia area, 1785–1830.

Source: Donald R. Adams, Jr., "Wage Rates in the Early National Period: Philadelphia, 1785–1830," *The Journal of Economic History*, Economic History Association, New York, September 1968. (Copyright.)

The ranges of wage rates shown for certain years are the result of multiple observations within those years. Single rates for a given year indicate that all observations for that date were identical.

The principal manuscript sources utilized in constructing these series are as follows: Pennsylvania Historical Society, *Joshua Humphreys Shipyard Accounts*, and *Moses Lancaster Account Book*; American Philosophical Society, *Treasurer's Account Book*; Records of the Ship *North Carolina, American State Papers, I*, Class VI (Washington: Gales and Seaton, 1834), p. 836; Stephen Girard Collection: *Ship Disbursements and Repair Records* (Ship *Good Friends*, Ship *Liberty*, Brig *Polly*, Brig *Kitty*, Ship *Two Brothers*, Ship *North America*, Ship *Helvetius*, and Ship *Superb*); *Bills and Receipts; Bills and Receipts Alphabetically; Place Accounts; New Houses and Stores in Water Street No. 2*; and *Real Estate Accounts*. Wage rates were obtained from the actual receipts, bills, day books, and account books.

Wage contracts in agriculture were often stated on a monthly or annual basis. The problem of determining average monthly wage rates was enhanced by the wide range of rates observable within any given year. Since the manuscript sources do not indicate any discernible seasonal trend, the differences encountered most likely lie in the differences in payment in kind or "found." In practice, the averages are simple arithmetic means of the observations for a given year.

A few examples of the variety in the content of such nonmonetary payments from the *Peale Day Book* and the *Peale-Sellers Belfield Farm Book* indicate the difficulty of making total wage estimates:

Date	*Wage Rate ($)*	*Content of Found*
June 1810	100/yr.	Mending, washing, and lodging
Oct. 1810	120/yr.	Meat, drink, washing, and lodging
Apr. 1811	10/mo.	Board and washing
July 1818	11/mo.	Finding his own wash

Special daily rates often applied at harvest time or for particular tasks:

Date	*Wage Rate ($)*	*Sex*	*Function*
1812	0.50/day	Female	Mowing hay
1814	1.25/day	Male	Mower
1814	0.625/day	Male	Making hay
1815	1.25/day	Male	Reaper

Examples of piece rates can also be found. During harvest periods in 1817 and 1818, according to the Girard *Place Accounts*, mowers were paid at the rate of $2.00 per acre.

As indicated in the manuscripts, $8.00 to $12.00 per month was perhaps the most common range for agricultural laborers—falling below $8.00 in only three years and rising above $12.00 in only four years—while the average monthly wage fell into the narrower range of $9.00 to $11.00 per month.

D 718–721. Daily wage rates on the Erie Canal, 1828–1881.

Source: Walter B. Smith, "Wage Rates on the Erie Canal, 1828–1881," *The Journal of Economic History*, Economic History Association, New York, September 1963, p. 298. (Copyright.)

The original sources of Smith's data are the check-rolls and workmen's receipts for payment for repair and maintenance work on the canal, as given in the Erie Canal Papers on deposit in the New York State Library in Albany. The tasks of the work gangs were such enterprises as: Leveling the tow path, cleaning the canal each spring, raising sunken boats, making emergency repairs of breaches caused by floods, breaking the ice in late autumn and keeping the locks and "feeders" in good working order. The data come largely from work of repair rather than of enlargement and new construction. On the check-rolls are the names of the workmen, their classification, the number of days worked, the daily wage rates, and the total wages paid. Most reports contain brief descriptions of the kinds of projects undertaken by the gangs. The reports in 1828 and later years are much clearer than those of earlier dates. The attempt accurately to determine the wage rates before 1828 was frustrated by the earlier practice of recording a man's name and the amount paid to him without specifying clearly the kind of work done. In 1819, it seems probable that the common labor rate was $1.00 a day and in 1823 and 1826, 75 cents. But there is a certain amount of conjecture in these statements, and not until 1828 were wage payments accompanied by a clear indication of occupational status.

For operation and maintenance purposes the 350-odd miles of the Erie Canal (the main line) were administered in three main divisions: The first extended from Albany to Utica (later to a point a little farther west), the second from Utica to Montezuma, and the third from Montezuma to Buffalo. The divisions were subdivided into sections of about 25 miles each, for which a Superintendent of Repairs was responsible. Under their control were the gang foremen, who not merely hired the men and supervised the work but who usually prepared the check-rolls. The gangs were by no means all alike; some were specialized, for example, carpenters; others were general purpose groups; some worked regularly month after month for full months, others worked only occasionally and only for a few days; and some included several hundred men (usually for emergency employment), others consisted of only five or six. The check-rolls, an integral part of the accounting and payments process on the canal, were forwarded bimonthly by the superintendents of repairs to the canal auditor as vouchers attached to his Abstract of Returns. From these records were collected about 30,000 cases of wage rates, a number sufficiently large to give a stable and dependable average rate, by months, for each of the three main divisions of the canal. The continuity of the record is, unfortunately, broken between 1867 and 1870 owing to the adoption of the "contracting-out system" for repairs in those years.

The Erie Canal was important not only as a carrier, but also as an institution of great interest to the politicians concerned with patronage. The outcome of numerous legislative inquiries was a statute specifying that repair work be let to contractors; the statistical consequence was an almost complete absence of reports of wages for the interesting years of post-Civil War price adjustment, January 1867 to April 1870. The contracting-out system did not work very well, and the former system of making repairs was soon restored. Beginning with April 1870, wage statistics once more became abundant and continuous, and continued to be so until 1879 when the responsibility for repairs was taken over by the New York State Superintendent of Public Works.

Eight hours became the legal workday in April 1870. In the midst of the confusion attendant on a return to the older method of making repairs, it became necessary to adjust the reporting system to this

eight-hour day regulation. Actually, the effect of the law regarding the length of the working day was nominal rather than substantive. Men continued to work for ten hours a day on the canal as they had for many years and the only immediately observable change was the quotation of daily wage rates at four-fifths of the previous amount and a recording of all workmen as working at time-and-a-quarter a day. In series D 718–721, the check-roll quotations beginning with May 1870 were multiplied by five-fourths in order that the rates shown be for a ten-hour day.

About nine-tenths of the wage quotations in the vouchers were for male common labor, and almost all of the remainder were for carpenters, masons, foremen, and that combination of a team of horses and their driver consistently recorded as "teamwork." The large number of reported wage payments to common labor made it easily possible to determine a modal wage rate by months for each of the three divisions of the canal. The annual wage rate figures for series D 718–721 were derived from the monthly rates. Carpenters and teamworkers were sufficiently numerous to warrant confidence in the annual wage rate series for the canal as a whole. The reports about masons were less satisfactory: the number was small and there are gaps in the reports extending for months at a time. The data for masons suggest that masons' wages were about the same as those of carpenters. The only wages for women on the rolls were for cooks. They were invariably employed on the State scow and generally they received wages half those of common labor.

The mode was used to represent the central tendency in the wage returns. In over 60 percent of the months *all* common laborers received identical wages and in the remaining months the deviations from the mode were small both in number and amount. Wage records on the canal were specified in New York shillings (eight to the dollar) and pence, and when deviations from the mode occurred or when wages changed generally the amount of change was sometimes a sixpence but more often a shilling. Owing to the size of the unit in which wage changes took place, the mode seems to be unstable in periods of transition. A computed mean would have been more continuous but would not necessarily have been more representative of the general wage rate than the mode.

The difference between the mode and the arithmetic mean was not great. The average deviation of the means from the corresponding modes for common labor in the eastern division for the month of June (1828–81) was eight-tenths of a cent. In 31 out of 48 years for which data existed, the means and the modes were identical. The record for 1857, a good year for testing the differences between the mean and the mode, disclosed that out of 778 cases of wage rates for common labor in the eastern division, 759 men received $1.00 a day and only 19 received $1.125. The mean exceeded the mode by three-tenths of a cent.

The sampling procedure used in this study was dominated by the condition of the surviving records and by the practical difficulty of finding the reports of the superintendents of repairs among the thousands of bundles of manuscripts. The surviving data are ample for some times and places of employment and very scarce or non-existent for others. The author made a complete tabulation of all the data on rolls when only a few were found; when abundant, the data on five or six rolls were transcribed in entirety. Rolls containing several hundreds of cases were not used. Further search for data after the total number of wage rates approached a thousand in a given year hardly seemed worthwhile.

Lack of elegance in sampling technique was less significant for the validity of the results than were the occasional gaps in the continuity of the records. For example, no statistics could be found for the period between October 1849 and 1851 for the eastern division of the canal. This and other similar gaps in the records affected the geographical composition of the sample.

To test the reliability of the findings, the modal wage rates, by months, were subjected to an internal check. The rates for the eastern and western divisions were compared and found to be in agreement in 45 percent of the cases. Where differences existed they were small and temporary—rarely by more than a New York shilling or for more than a month or two. Wages tended to be lower in the western division than in the eastern part of the canal, but this was far from being consistently the case. The agreement between wages in the eastern and the middle divisions was close. This internal agreement suggests that the quotation of an annual wage for the canal as a whole is not seriously misleading.

D 722–727. Average annual earnings of employees, 1900–1970.

Source: **Series D 722**, U.S. Office of Business Economics (OBE), 1929–1963, *The National Income and Product Accounts of the United States, 1929–65, Statistical Tables;* 1964–1967, *U.S. National Income and Product Accounts, 1964–67;* 1968–1970, U.S. Bureau of Economic Analysis, *Survey of Current Business*, July 1971, table 6.5. **Series D 723–727**, see source for series D 705–714, table A-16.

See also text for series D 739–764.

Full-time earnings, series D 722, were computed as weighted averages of the series for individual industries as described in text for series D 739–764. The weights were the numbers employed by industry. The income loss from unemployment was estimated by applying to the full-time earnings figure the relevant unemployment percentage—for civilian labor force or nonfarm employees. This income loss, when subtracted from the full-time earnings (i.e., "when employed"), gave the earnings after deduction for unemployment. Both series D 723 and D 724 were deflated by the consumer price index to yield real earnings when employed and after deduction for unemployment, series D 725 and D 726. The price index was the Bureau of Labor Statistics index 1913–1960 extrapolated by Albert Rees to 1900. (Albert Rees, *Real Wages in Manufacturing, 1890 to 1914*, National Bureau of Economic Research, New York, 1961.)

D 728–734. Daily wages of five skilled occupations and of laborers, in manufacturing establishments, 1860–1880.

Source: Clarence D. Long, *Wages and Earnings in the United States, 1860–1890*, National Bureau of Economic Research, New York, 1960, p. 144 (copyright).

These series were compiled from Tenth Census Reports, *Report on the Statistics of Wages in the Manufacturing Industries With Supplementary Reports on the Average Retail Prices of Necessaries of Life and on Trade Societies, and Strikes and Lockouts*, vol. XX, 1886, by Joseph D. Weeks.

Weeks gathered his data from payroll records to give a continuous wage history of the same occupations in the same firms for some one date each year over a considerable period. In each of the more prominent manufacturing, mechanical, and mining industries in various sections of the country, "typical" establishments were selected, based on their age, standing, productive capacity, and general reputation. The mailing list of firms was said to be prepared after much correspondence with experts in each industry and recourse to trade directories and publications. No important branch of manufacturing was overlooked, but information on some was not returned or was unsatisfactory. Of the more than 50 industries with satisfactory returns, less than 20 could be used in Weeks' investigation, for only that many had wage data covering the entire period 1860–1880. The data do not usually cover overtime, holiday and Sunday work, and other extra earnings, and any payments to helpers and underhands have been deducted, so that the worker's wage covers what he received only for his own work. Weeks attempted to convert piece rates into daily wages wherever the firms could furnish information on time put in by piece workers.

For these series, Long used 85 establishments to compute the average daily wage: 26 for blacksmiths' wage; 10 for carpenters'; 25 for engineers'; 15 for machinists'; 9 for painters'; and 78 for laborers'.

D 735–738. Average annual and daily earnings of nonfarm employees, 1860–1900.

Source: See source for series D 705–714, table A-19 and pp. 289ff.

See also text for series D 722–727, D 728–734, and D 739–764.

There are two sets of data collected in the 1880–1890 period relative to the course of wage rates during and after the Civil War. One, "Report on Wholesale Prices, on Wages and on Transportation" (52d Cong., 2d Sess., 1893), termed the "Aldrich reports," was based on reports collected by the Commissioner of Labor in the early nineties; the other, "Report on the Statistics of Wages in Manufacturing Industries" (1886), collected as part of the 1880 census, is termed the "Weeks reports."

Lebergott rejected the Aldrich reports with their geographic, industrial, and occupational biases and relied on the Weeks reports, which have an enormously broader scope because they come from many more establishments, in more States, without the occupational biases in some of the key Aldrich reports. He used the Weeks reports primarily for interpolating between benchmarks derived from the population census and other reports and checked the movement of the series thus derived against an extensive set of contemporary investigations made by David A. Wells as Special Commissioner of the Revenue.

The wider scope of the Weeks reports has made them attractive to previous investigators. Their lack of use reflects the fact that, although many wage series are reported, no occupational weights are attached to them. To develop reasonable weights for the Weeks materials from the population census data on gainful workers by occupation, Lebergott utilized the occupational wage series to measure the trend of wages within a given occupation. Thus, he used a report for the trend of earnings by common labor in Pennsylvania and combined it with other Weeks reports on common-labor rate trends in Pennsylvania machine shops, blast furnaces, rolling mills, hardware, paper, tanneries, furniture, etc. He treated each of these as random observations of the trend for wages of that group and combined these series to interpolate between benchmark estimates for common labor in Pennsylvania. Similar combinations and interpolations were made for common labor in the other States. The State benchmarks for 1850 and 1860 are from the population census reports for those years; for 1870 from the Treasury *Report on Immigration*; and for 1880 from the census data on rates paid in iron and steel, coke, stone, and other industries.

Employees in other nonfarm occupations were allocated to 1860 wage intervals and the trend in the Weeks data for these wage intervals was used as the trend series for these groups. This amounts to saying that the trend of earnings for machinists, wheelwrights, carpenters, painters, and others reported by Weeks, who were classifiable in the $1.50 to $1.99 wage interval in 1860, should be similar to the trend for all other workmen in that interval.

The parallelism of wage movement for individual occupations within a wage-rate interval can be verified by study of the trend for individual occupations, such trends being apparent in the raw data.

The key figures involved are summarized below:

1860 Census

(In thousands)

Total nonfarm employees	2,983
Laborers	972
Miners, boatmen, and others earning $1.00 to $1.49	453
Carpenters, blacksmiths, and others earning $1.50 to $1.99	744
Domestic servants	566
All others	248

Given the above distribution of employees and their derived average daily earnings in 1860, Lebergott utilized the Weeks data (as summarized in Wesley Mitchell, *Gold Prices and Wages Under the Greenback Standard*, 1908) as follows. Mitchell had combined the hundreds of quotations into wage-interval groups and computed indices of medians for each interval—e.g., 25–99 cents, $1–$1.49, etc.—for 1860 to 1880. Lebergott weighted these indices by the 1860 employment distribution shown above and computed an index for all nonfarm employees. Then, for each year, he computed the ratio of the resultant median to that shown by Mitchell as the median for the $1–$1.49 interval.

This ratio was then applied to the series for laborers previously derived to give an overall average. Because the trend in medians would not be satisfactory as a measure of the trend in averages, the median data were used only to derive adjustment ratios with which to step down the laborers trend to an all-employees trend.

D 739–764. Average annual earnings per full-time employee, by industry, 1900–1970.

Source: 1900–1928, see source for series D 705–714, table A-18 and pp. 480ff. 1929–1967, U.S. Office of Business Economics, 1929–1963, *The National Income and Product Accounts of the United States, 1929–1965, Statistical Tables;* 1964–1967, *U.S. National Income and Product Accounts, 1964–67;* 1968–1970, U.S. Bureau of Economic Analysis, *Survey of Current Business*, July 1971, table 6.5.

These estimates are ratios of aggregate wage and salary payments, by industry, to the aggregate number of full-time equivalent employees, by industry. Wages and salaries include executives' compensation, bonuses, tips, and payments in kind, and exclude those sources of labor income appearing in series D 893–912 as "supplements to wages and salaries."

Full-time equivalent employment measures man-years of full-time employment of wage and salary earners and its equivalent in work performed by part-time workers. For a discussion of the concept of full-time equivalent employment and the methods of estimation involved in converting part-time work to its full-time equivalent, see the *Survey of Current Business*, June 1945, pp. 17–18.

Since 1939, private industry employment and payrolls have been based principally upon records of the Social Security programs. For 1929–1938, the employment and payrolls figures are extrapolations backward from 1939, based on sources and methods similar to those used by Lebergott. The mainstay of the private industry estimates has been data of the State Unemployment Insurance (UI) programs as compiled by the U.S. Department of Labor. Additions were made for employment covered by Old-Age, Survivors, Disability, and Health Insurance (OASDHI) but not by UI—e.g. employment in small firms omitted from UI coverage under some State laws. Railroad Retirement Act coverage came from the Interstate Commerce Commission's *Transport Statistics* except that certain employment covered by the Railroad Retirement Act but not reported to the Interstate Commerce Commission was estimated from Railroad Retirement Board data.

This general method was followed except for categories for which more reliable data were available from other sources or where the proportion of firms not covered by Social Security programs was large: Agriculture, forestry, and fisheries; hospitals; private higher education; religious organizations; and private households. Data for these were obtained from the U.S. Department of Agriculture (USDA), the American Hospital Association, the Office of Education, and various governmental censuses and surveys.

Employment and payroll figures used as a basis for earnings in government and in private households were: (1) For the Federal Government, reports of the Civil Service Commission, records of the Armed Services, and (for 1933–1943) records of the Federal work relief projects; (2) for State and local governments, reports of the Bureau of the Census, the Office of Education, etc.; and (3) for private households, the Census of Population and the Current Population Survey of the Bureau of the Census. For further details, see U.S. Office of Business Economics, *National Income: 1954 Edition.*

The earnings figures for 1900–1928 were computed to link to those of the U.S. Department of Commerce national income accounts beginning 1929. Substantial use was made of a wide variety of sources, including special census reports, Simon Kuznets, *National Income and Its Composition, 1919 to 1938*; and Paul Douglas, *Real Wages in the United States, 1890–1926*.

The following summaries from Lebergott's book cover the derivation of estimates for individual industries for the 1900–1928 period:

D 739, agriculture, forestry, and fisheries. For 1910 to 1928, average earnings were computed from estimates of wages of hired labor (including the value of perquisites) and the average employment of such labor. For 1899, the total cost of hired labor as reported in the agriculture census and total employment of hired labor as reported in the population census were used for computing an earnings figure. For 1902, 1906, and 1909, figures were interpolated between 1899 and 1910 averages by the average monthly farm wage rates as derived from the surveys of the USDA.

Analysis by Louis Ducoff indicates the close relationship over the 1910–1943 period between farm wage-rate changes and prices received by farmers. Lebergott therefore used the U.S. Bureau of Labor Statistics wholesale price index component for farm prices for interpolating between the above estimates.

D 740, manufacturing. For manufacturing employees, Lebergott relied on the census of manufactures series for census years, interpolating for the pre-1919 years by the State data as combined by Paul Douglas, and for the post-1919 years by similar data as combined by Simon Kuznets.

D 741, mining, total. The estimates for all mining were computed as the weighted sum of series for anthracite, bituminous, metal, and oil mining for 1902, 1909, and the years 1914 to 1928. For the remaining years in the 1900–1913 period, total mining was estimated from the trend in coal mining, the ratio of one average to the other being much the same in 1902, 1909, and 1914. All mining earnings were 108.5 percent of coal mining in 1914 and 107.8 percent in 1909. For 1902 they were 11.3 percent, a difference explained by the anthracite strike of that year. The 1909 ratio was therefore used for 1900 to 1913.

D 742 and **D 743,** anthracite and bituminous coal. Separate estimates were computed for each industry for the years 1900 to 1928. For 1919 to 1928, the averages can be readily derived from Kuznets' estimates. For earlier years, the census data were interpolated by Paul Douglas on the basis of the relevant State series; his figures were used for extrapolation after some adjustments. For both the anthracite coal strike of 1902 and the bituminous coal strike of 1919, Lebergott followed Douglas in showing a decline in earnings, relating total payrolls to the average number customarily employed in the nonstrike months. Since this decline is also reflected in employment data, the two may not be multiplied together for these years to give total payrolls.

D 744, metal mining. For metal mining, Lebergott interpolated between census benchmark data by the weighted trend of earnings in copper and iron mining. Because the precious metals, lead, and zinc, were mined primarily in the West during this period, the employment weight for these industries was given to the series for copper, which is primarily one for the Mountain States.

D 745, construction. The 1929 Department of Commerce average was extrapolated to 1919 by the implicit full-time earnings figures in the Kuznets' estimates. Lebergott then extrapolated to 1900 by an adjusted index of weekly earnings, using Douglas' series for building tradesmen and for unskilled laborers, and weighting these together by population census weights. To adjust this series for the varying volume of employment from year to year, Lebergott multiplied by an adjustment ratio—computed as the ratio of an index of weekly to one of annual earnings in manufacturing.

D 746–752, transport and utilities. The group average, as those for utilities and for communications, is a weighted average of earnings in individual industry sectors. The weights used were the employment estimates derived above. The average earnings were in general the Department of Commerce 1929 figure extrapolated to 1919 by Kuznets' series, and to 1900 by Douglas' series. There were three partial exceptions to this primary procedure: (1) For gas and electricity, alternative estimates of the 1900 to 1904 trend were made because Douglas' figures, based on Wisconsin reports, show an unreasonable trend; (2) for telephone and telegraph, the 1902 estimate was extrapolated to 1900 by the trend for street-railway earnings, the two showing similar trends in immediately subsequent years; and (3) for water transport, the 1900 to 1918 trend of average weekly earnings of seamen was adjusted to the trend for annual earnings by the ratios of weekly to annual series for earnings on steam railroads.

D 753, wholesale and retail trade. Direct estimates for trade were made, using as basic sources a variety of direct studies of earnings made in the period 1900 to 1919. Benchmark estimates were made for 1900 using the 1901 Cost of Living Survey (of 24,000 families), an 1895–1896 study by the Commissioner of Labor on earnings in the various industries of 30 States, and the 1899 Census of Manufactures. Benchmark estimates for 1909 and 1919 were developed from censuses of manufactures, laundries, and the telephone industry, from a massive 1909 Bureau of Labor study of women's earnings, and from a 1921 study by the National Bureau of Economic Research and the Census Bureau. Interpolations were then made between these benchmark averages.

D 754, finance, insurance, and real estate. Earnings were computed as the weighted sum of earnings in the two major occupational categories, agents and clerical personnel. Estimates of the number of agents who were employees were made from population census data. Average earnings of agents in 1900, 1905, 1910, and 1920 were available for Metropolitan Life Insurance Company agents, the largest company in the field. Interpolation for 1901 to 1904 and 1910 to 1920 was by the movement of earnings in trade. For 1906 to 1909, a linear trend was used to reflect the readjustment of agents' earnings after the Armstrong investigation, leading to a much greater 1905 to 1910 growth than appears in trade earnings.

Unpublished figures on earnings of salaried clerical employees in one of the five largest insurance companies were used for the years 1909 and 1914 to 1919. These were extrapolated to 1900 and interpolated for 1910 to 1913 by the trend in earnings of salaried clerical personnel in manufacturing. The two series thus estimated were combined with employment weights derived from the 1910 census, giving a trend series for 1900 to 1919. This series was used to extrapolate the 1919 to 1929 figures derived from Kuznets' estimates.

D 756, personal services. The first step in developing this series was to make a benchmark earnings estimate for 1900, by estimating averages for key occupations and industries, then weighting them together by the number of employees in each. (Consistent weights were available from the special class-of-worker tabulations from the 1910 census.)

For 1920 and 1921, the results of a Census-National Bureau of Economic Research nationwide survey for the President's Conference on Unemployment were used.

The personal-service earnings figures thus derived for 1900 and 1920, as well as that for 1929 shown in Department of Commerce estimates, are virtually identical with the average earnings in laundries for those years. Therefore, the census of manufactures data on laundry earnings in 1909, 1914, 1919, 1925, and 1927 were used to extrapolate the 1919 service earnings figure to these additional years.

Ratios of personal service earnings to those for trade, a segment for which yearly estimates had already been made and which is similar in certain key respects to that of service, were computed. The ratios were as follows: 1900, 65; 1909, 69; 1914, 67; 1921, 73; 1925, 69; 1927, 70. The relationship appears to be quite reasonable and steady, even to the extent of indicating a relatively greater rise for the lower-paid industry than the higher during World War I and

after—a phenomenon apparent in other series based on very solid annual or biennial reports. These ratios were, therefore, interpolated and applied to the trade series to give the estimates of earnings in personal service.

D 762, State and local government. An initial benchmark for earnings in 1905 was established as follows:

(1) For policemen and firemen, the largest single group, averages of earnings data available for cities of 30,000 and over in population in 1905 were adjusted to apply to all cities on the basis of the ratio of teachers' earnings in larger and smaller cities. (2) For the next largest occupation group, city labor, the 1905 census data for employees of street-cleaning departments were used, after an adjustment similar to that noted for policemen and firemen to make the figures apply to the United States as a whole. (3) For city officials and other city employees, the average for policemen and firemen was used. (4) For State and county officials, the Office of Education data on average earnings of teachers were used since the two were very similar in level during stable periods in the 1920's. (5) In addition, an estimate of the number employed in State mental hospitals and institutions for the feebleminded was prepared as part of the employment estimates. The average salary for this group was assumed the same as that for all hospitals, computed as part of the estimates for service. These five earnings averages were then weighted together by the occupation data for local government in 1910 as shown by the Census of Population.

For 1919 to 1928, Kuznets' estimates based on a review of available reports for individual cities and States were used. The 1905–1919–1928 data show a close similarity of trend to that for the earnings of urban teachers, suggesting that the latter could be used for interpolation. In the critical overlap period of 1919 to 1921, however, the rate of change in teachers' salaries was not proportionate to that for other State employees, salaries of the former lagging behind increases previously granted to other local employees and, in addition, reflecting the impact of heavy postwar enrollments. The procedure used, therefore, was to extrapolate the 1919 estimate to 1916 by the movement of earnings for policemen and firemen in selected cities as estimated by W. I. King, *The National Income and Its Purchasing Power* (1930). The resultant estimate of local government earnings in 1916 was 91 percent of the average salary of urban teachers, a ratio almost identical with the 88 percent implicit in the 1905 figures estimated earlier. By extrapolating and interpolating these percentages and those for 1905 and 1919 and applying them to the urban teachers' salary estimates, the final series for local government was derived.

D 763, public education. For this series, the biennial surveys of the Office of Education provide the basic raw materials. These were developed into consistent estimates by Douglas and Kuznets; their series were used to extrapolate the 1929 Department of Commerce benchmark.

D 764, Federal civilian government. Separate earnings series were derived for postal and for nonpostal civilian employees of the Federal government, the two series being weighted together and then used to interpolate between benchmark estimates for 1899 and 1929. The 1899 benchmark was derived by sampling the complete list of Federal employees and their salaries as recorded in the U.S. *Official Register* for 1899. For 1929, Department of Commerce data were used.

A benchmark estimate for 1899 earnings in postal service was computed by sampling from the *Official Register* for that year, with interpolation between that figure and the implicit Department of Commerce 1929 average by a series for all postal employees. Benchmark averages for all Federal employees outside the postal service were computed for 1899 and 1919 by sampling from the complete list of employees shown in the *Official Register* for those years. The procedure was identical with that used for postal employees. Interpolation from 1899 to 1919 was by the trend of salaries of government employees in the District of Columbia. For 1920 to 1928, Lebergott interpolated between the 1919 figure and Kuznets' 1929 figure.

D 765–778. Average hours and average earnings in manufacturing, in selected nonmanufacturing industries, and for "lower-skilled" labor, 1890–1926.

Source: Paul H. Douglas, *Real Wages in the United States, 1890–1926*, Houghton Mifflin Company, New York, 1930 (copyright).

D765–766 are weighted averages of series D 767 and D 769, and series D 768 and D 770, respectively. The union scales of wages are substantially higher and less flexible than the wages of all workers in the "union" industries. Since the weight of the "union" industries in the all-manufacturing average is based on the total number of skilled and semiskilled workers in the industries, the total manufacturing average is too high (see Leo Wolman, "American Wages," *Quarterly Journal of Economics*, XLVI, 1932, pp. 398–406).

D 767–768, beginning in 1907, are weighted averages of trade union scales for occupations. The weights are union membership by crafts. The series are extrapolated back to 1890 by use of payroll data from the sources of series D 769 and D 770.

D 769–770, average hours and earnings for "payroll" manufacturing industries, are averages weighted by employment data from employer payrolls (see text for series D 794–801), given in various U.S. Bureau of Labor Statistics (BLS) bulletins and in the *Nineteenth Annual Report of the Commissioner of Labor*. Until 1913, the original data are for selected occupations only, and exclude most laborers and some other unskilled workers. Therefore, for 1890–1913, the series are extrapolations backward from the 1914 level.

Differences between series D 767–768 and D 769–770 are not necessarily reliable indicators of differences in wages and hours between workers in union and nonunion industries. Because the biases in series D 767–768 are probably much greater than those in series D 769–770, it may sometimes be desirable to use only the latter to represent all manufacturing.

D 771, average hours (standard) in bituminous coal mining, is estimated from union contracts and their coverage for 1890–1903; after 1903, it is based on data from the U.S. Geological Survey.

D 772, average hourly earnings, was obtained by dividing series D 788, average annual earnings, by average days worked, as reported by the U. S. Geological Survey; the resulting series was divided by daily hours worked.

D 773, average full-time earnings on railroads, is based on average daily wages by occupations, 1895–1914; for 1914–1926, it is based on average hourly wages as reported by the U.S. Interstate Commerce Commission and estimated daily hours.

D 774–775, average hours and earnings in the building trades, were obtained in the same way as series D 767–768.

D 776, average hours for postal employees, is based on nominal hours as set by law, adjusted (after 1920) for sick leave.

D 777, average hourly earnings, is estimated by dividing series D 791 by 52 to obtain weekly earnings and then by dividing again by series D 776 to obtain hourly earnings.

D 778, average full-time weekly earnings for "lower-skilled" labor, is reproduced in the source from Whitney Coombs, *The Wages of Unskilled Labor in Manufacturing Industries in the United States, 1890–1924*, Columbia University Press, New York, 1926, p. 99. It is based on the wages of the least skilled or lowest paid occupations reported for each industry in BLS bulletins and in the *Nineteenth Annual Report of the Commissioner of Labor*, except that the figure for 1920 is based on the data of the National Industrial Conference Board. Since these sources exclude most laborers before 1914, the series is labeled here as "lower skilled," though it is called "unskilled" by Coombs and by Douglas.

D 779–793. Average annual earnings in all and selected industries and in occupations, 1890–1926.

Source: See source for series D 765–778.

D 779–780, all industries averages, are weighted averages of series D 781–793 and an additional series beginning in 1902 for anthracite coal. The weights change annually and are based on decennial

census employment estimates. Interpolations of weights for intercensal years are based on State employment data when available; elsewhere they are linear.

The weights for decennial census years and 1926 are shown in the source, p. 390.

D 781, wage earners in manufacturing, is based on data from the census of manufactures for census years (total wages paid and wage earners). Figures for intercensal years are interpolated using similar data from the labor bureaus of a number of States. Census data for 1890 are adjusted to eliminate the hand trades.

D 782, wage earners in steam railroads, is based on Interstate Commerce Commission data since 1905, and extrapolated back to 1890 using data from several State railroad commissions.

D 783, street railways, is based on the Eleventh Census (1890) and the censuses of electrical industries. Figures for intercensal years are interpolations based on data from several State railroad and public utility commissions and State labor bureaus.

D 784–785, telephone and telegraph industries, are based on censuses of electrical industries. Figures for intercensal years are interpolations based on data published by the Pennsylvania Department of Internal Affairs.

D 786, gas and electricity, is based on the censuses of electrical industries (electricity) and on the censuses of manufactures (gas). Figures for intercensal years are interpolations based on data for New York City, Wisconsin, Illinois, and Pennsylvania, from State sources.

D 787, clerical workers in manufacturing and steam railroads, is based on: Average earnings of salaried workers in manufacturing computed from the censuses of manufactures for census years, with data from three States used to interpolate for other years; and, beginning in 1895, earnings of salaried workers in railroads from the Interstate Commerce Commission, with data from two State railway commissions and one railroad used to extrapolate back to 1890.

D 788, bituminous coal mining, is based on aggregate wage payments from the censuses of mines and quarries of 1889, 1902, 1909, and 1919 as revised in the Fourteenth Census (1920), divided by employment figures reported by the U. S. Geological Survey. Figures for intercensal years are interpolations based on data from the State labor bureaus or departments of mines of five major coal-producing States.

D 789, farm labor, is based on the U.S. Department of Agriculture series of daily wages of farm labor without board and of monthly wages of farm labor without board. Data for 1900–1909 are linear interpolations covering from one to three years each.

D 790, Federal employees, covers employees of Federal executive departments in Washington, D.C., only. The data are from the *Official Register*, adjusted to include bonuses paid during 1917–1924.

D 791, postal employees, covers letter carriers and, beginning in 1906, postal clerks in first and second class post offices. The data are from the *Annual Reports of the Postmaster General*, adjusted to calendar years.

D 792, public school teachers, covers teachers, principals, and supervisors in public elementary and secondary schools. The data are from the *Annual Reports of the U.S. Commissioner of Education*, adjusted to a calendar-year basis. Data for some years after 1915 are interpolations based on studies of the National Education Association.

D 793, ministers, covers salaries of Methodist and Congregational ministers as reported in the *Methodist Year Book* and the *Annual Congregational Gray Book*.

D 794–801. Indexes of wages, hours, and earnings in manufacturing and in the building trades, 1890–1907.

Source: **Series D 794–796**, U.S. Department of Commerce and Labor, *Bulletin of the Bureau of Labor, No. 77*, 1908, p. 7. **Series D 797**, Leo Wolman, "Hours of Work in American Industry," *Bulletin 71*, National Bureau of Economic Research, New York, 1938, p. 2 (copyright).

Beginning in 1900, the Bureau of Labor of the Department of Commerce and Labor undertook, in somewhat modified form, a continuation of the Aldrich reports (see text for series D 735–738). The *Nineteenth Annual Report of the Commissioner of Labor*, 1904, contains the results of the studies for 1890–1903. Somewhat similar surveys were made for 1904–1907 and the information for the entire period was summarized in *Bulletin No. 77*, cited above. The *Nineteenth Annual Report* and the subsequent *Bulletins* (Nos. 59, 65, 71, and 77) show the basic wage, hour, and employment averages for each of the individual occupations and industries and for selected occupations by States and for large cities.

The Bureau of Labor figures, series D 794–796, include the building and other hand and neighborhood trades. Wolman's figures, series D 797, exclude the building and hand trades.

The data in the *Nineteenth Annual Report* are based on information obtained from 3,475 establishments in 67 industries, covering 519 occupations. Agents of the Bureau of Labor collected wages, hours, and employment data separately by occupation and sex from the records of each establishment. Such data were taken only for what were judged principal occupations in each industry and only for the period within each year that was judged "normal" for the establishment. By and large, the basic data for each occupation (separately by sex) were for establishments whose records were complete enough to supply the data for each year 1890–1903.

For 1890–1903, average hourly wages and average full-time weekly hours, weighted by employment, were computed for each occupation, separately by sex. Each of the occupational series was converted to an index number with the average for 1890–1899 as the base. Within each industry, simple arithmetic means of the individual occupational indexes were then computed. Series D 798 and D 800 are unweighted means of the occupational indexes in the building trades. The "all manufacturing" index numbers (series D 794 and D 796), however, are weighted means of the indexes of the 67 separate industries included, each industry weighted by the payroll of that industry as estimated from the 1900 census. Series D 795 is the product of series D 794 and D 796; series D 799 is the product of series D 798 and D 800.

For 1904–1907, the procedures used by the Bureau of Labor were similar to those used for 1890–1903, with the following exceptions: (1) Some small industries covered in 1890–1903 were dropped although the number of establishments covered was increased; and (2) the indexes were chain-linked to those for 1890–1903.

Series D 797 and D 801, for average full-time weekly hours, are based on Wolman's reworking of the basic data for series D 796 and D 800. Series D 797 shows the index numbers computed from the weighted average of the hours figures in the *Nineteenth Annual Report* for 456 occupations in 48 manufacturing industries and excludes the building trades and other hand and neighborhood trades covered in the report. The weight for each occupation in each year is the number of employees covered in the survey of that occupation in the year. Series D 801 is the index number calculated from the similarly weighted average computed by Wolman for the 19 building trades occupations. For the building trades, Wolman expressed the opinion that the hours data in the *Nineteenth Annual Report* were those established by unions.

Wolman's report is a basic source of information of hours of work in American industry. It contains 15 summary tables of historical data on hours of work in manufacturing, building construction, steam railroads, and coal mining for various dates, 1890–1937.

D 802–810. Earnings and hours of production workers in manufacturing, 1909–1970.

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings, United States, 1909–71*, Bulletin No. 1312–8.

The figures for 1909–1931 represent estimates based largely on periodic wage and hour surveys conducted by the Bureau of Labor Statistics (BLS) during that period for a narrow list of manufacturing

industries. These figures are an extension of, and are adjusted for comparability with, the figures for 1932–1957. For a discussion of the methods and data used to derive the figures for 1909–1931, see BLS, *Monthly Labor Review*, July 1955, pp. 801–806.

The estimates of average weekly earnings for 1909–1931, based primarily on census data, tend to be more accurate than those for average hourly earnings and average weekly hours. It is likely that the hourly earnings figures are overstated and the weekly hours understated because the BLS surveys of wages tended to sample large firms more heavily than small firms.

For 1932–1970, the underlying employment, payroll, and man-hour figures were obtained by means of a mail questionnaire sent monthly to cooperating establishments. Each establishment reported the following information: (1) The number of production workers or nonsupervisory employees who worked or received pay for any part of the payroll period which includes the 12th of the month; (2) the total gross payrolls for these employees before such deductions as Social Security taxes, withholding taxes, union dues, etc. (the payroll figures include pay for overtime, shift premiums, sick leave, holidays, vacations, and production bonuses, but exclude payments in kind, retroactive pay, nonproduction bonuses, employer contributions to private welfare funds, insurance and pension plans, and similar fringe payments); and (3) total man-hours paid for these employees including hours paid for vacations, holidays, sick leave, travel time, lunch time, etc.

Within each detailed industry the payroll, employment, and man-hours figures for reporting establishments are aggregated, and average hourly earnings, average weekly hours, and average weekly earnings are computed. The average hourly earnings and average weekly hours for a group of industries are weighted arithmetic means of the corresponding averages for the industries within the group. The weights used for earnings are estimates of aggregate production-worker man-hours and those used for hours are estimates of aggregate production-worker employment. Average weekly earnings for the group is the product of the average hourly earnings and the average weekly hours for the group.

Average weekly hours worked or paid for differ from average full-time or standard hours (before payment at overtime premium rates) and from average hours worked per week. During periods of substantial unemployment, average weekly hours paid for often may be considerably below the full-time level of hours or the level at which premium payments for overtime begin. On the other hand, during periods of relatively full employment, overtime hours tend to raise the average weekly hours above the full-time level.

Until the 1940's, the distinction in most industries between hours paid for and hours actually worked was relatively unimportant. The widespread adoption of paid vacations of increasing length and of an increasing number of paid holidays (and in some industries paid travel time, lunch time, etc.), however, has raised average weekly hours (which are hours paid for) above average hours worked by increasing amounts.

Average hourly earnings figures exclude such fringe payments as employer contributions to private health, welfare, and insurance funds and include premium payments for overtime and for night work.

D 811–813. Earnings and hours for bituminous coal-lignite mining (BLS), 1909–1970.

Source: See source for series D 802–810.

For 1909–1931, estimates are based on a variety of sources including special studies by the BLS and data collected by the Bureau of the Census, the Bureau of Mines, and reports of State coal commissions. For 1932–1970, figures are strictly comparable in concept and method of estimation with those for manufacturing in series D 802–810. See text for same series regarding hours paid for in contrast to hours worked and the exclusion from average hourly earnings of fringe payments which are particularly applicable to coal mining.

Before 1945, lunch time was not paid for in the mines. Beginning April 1945, mine operators paid for 15 minutes of lunch time per day; in July 1947, the lunch time paid for was increased to one-half hour. Similarly, before November 1943, working time was computed on a "face-to-face" basis. From November 1943 to April 1945, inside mine workers were paid for 45 minutes of travel time per day at two-thirds of the regular rate. Since April 1945, inside workers have been paid for all travel time at the applicable hourly rate.

Data published by the Bureau of Mines (*Minerals Yearbook*, 1946, p. 81) show that in 1944 travel time amounted, on the average, to 10–15 percent of total time paid for. Therefore, average weekly hours figures since 1945 may have a serious upward bias if used to measure hours actually worked, and the average hourly earnings figures may have a correspondingly serious downward bias if used to measure average earnings per hour actually worked.

Average hourly earnings figures exclude contributions of coal mine employers to the miners' welfare and retirement fund, established in 1946. This fund was financed by mine operators through contributions of 5 cents for each ton of coal produced. In 1947, the contribution was raised to 10 cents. The medical and hospital fund, previously financed by miners, was combined with the welfare and retirement fund, and the rate of contribution was raised several more times until, in 1952, it reached the current (1970) rate of 40 cents a ton. In 1969, wage supplements in bituminous coal mining, chiefly employer contributions to the welfare and retirement fund, amounted to 20 percent of total compensation.

D 814. Earnings for bituminous coal mining (Lewis), 1890–1957.

Source: H. G. Lewis, *Unionism and Relative Wages in the United States*, pp. 75–76 (© 1963, by The University of Chicago).

In constructing this series, Lewis used the following sources: 1890–1928, Rush V. Greenslade, "The Economic Effects of Collective Bargaining in Bituminous Coal Mining," unpublished Ph. D. dissertation, University of Chicago, 1952, table 8; 1929–1957, Ethel B. Jones, "Hours of Work in the United States, 1900–1957," unpublished Ph. D. dissertation, University of Chicago, 1961, table 2.

Average hourly compensation includes wage supplements.

D 815–817. Earnings and hours for Class I railroads, 1939–1970.

Source: See source for series D 802–810.

Figures for Class I railroads are based on their monthly reports to the Interstate Commerce Commission. Until 1951, the figures covered all hourly rated employees of Class I railroads excluding Class I switching and terminal companies. Since 1951, the figures cover all employees (excluding switching and terminal companies) except executives, officials, and staff assistants. Although the figures since 1951 are not strictly comparable with those for earlier years, the difference is not large.

Average hourly earnings are computed by dividing the total compensation of covered employees by total man-hours paid for. Average weekly earnings are derived by multiplying average weekly hours by average hourly earnings. Average weekly hours equal total man-hours paid for (during a month) reduced to a weekly basis, divided by the full-month count of employees on the payroll. The full-month count generally tends to be somewhat larger than a count for the payroll period which includes the 12th of the month and is used for other industries. For this reason both the weekly earnings and the weekly hours figures tend to be slightly lower than they would be if computed on the latter basis.

D 818–829. Indexes of union hourly wage rates and weekly hours, building and printing trades, 1907–1970.

Source: U.S. Bureau of Labor Statistics, *Union Wages and Hours: Building Trades, 1970*, BLS Bulletin No. 1709, pp. 3 and 6; and

Union Wages and Hours: Printing Industry, 1970, BLS Bulletin No. 1707, pp. 3 and 6.

Studies by the Bureau of Labor Statistics of union wage rates and hours prior to 1936 included at various times building and printing trades, barbers, linemen, longshoremen, and workers employed in breweries, laundries, metal trades, millwork, restaurants, soft drink production, theaters, baking, trucking, and local transit. Since 1936, the studies have been confined to the printing and building trades, trucking, local transit, and baking. The baking study was discontinued in 1953.

For each trade, the local union is asked to submit data on the minimum union wage rate, the weekly hours (before overtime becomes effective), and the number of active union members working or available for work on a single specified date (recently July 1) each year.

The earliest studies covered 13 journeymen and 7 helper and labor classifications in building construction, and 7 book and job and 4 newspaper classifications in the printing trades in 39 cities. Since 1964, the studies have covered 24 journeymen and 9 helper and labor classifications in the building trades in 68 cities of over 100,000 population; and 12 book and job and 8 newspaper classifications, and, since 1968, 6 lithographic crafts in the printing trades in 69 such cities.

Indexes for all years were computed by the chain-link relative method, except 1921–1929, which were based on weighted arithmetic means for each year. The figures reflect minimum union contract rates and exclude premium pay for overtime. During periods of unemployment, the contract rates may be higher than the actual wage rates paid. Wage rates above contract rates may be paid during periods of high employment or rapid inflation. Thus, the union figures tend to have smaller cyclical fluctuations than actual wage rates paid to union employees. Furthermore, since overtime pay is excluded, union wage rates fluctuate less cyclically than average hourly earnings.

The hours figures also reflect union contract straight-time hours. They do not measure hours actually worked, which for the building trades vary with climatic conditions and the amount of construction work available.

D 830–844. Earnings and hours of production workers in 25 manufacturing industries, by sex and degree of skill, 1914–1948.

Source: The Conference Board, Inc., *The Economic Almanac for 1950,* New York, 1950, pp. 336–344 (copyright).

The underlying data were collected by the National Industrial Conference Board (NICB) from a sample of companies representing 25 industries (durable and nondurable goods) by means of a monthly mail questionnaire. The number of firms included in the sample, as well as the distribution of these firms by size and geographical location, varied somewhat from time to time. In 1936, the sample included 1,886 firms employing about one-third of all wage earners in the 25 industries covered and about one-fifth of all wage earners in all manufacturing industries. The average firm in the sample (in most of the 25 industries) was substantially larger (in terms of employment) than the average firm in the population from which the sample was taken. Although some tendency toward an upward bias in the level of earnings of the sample firms may exist, it is not clear that this bias also had a trend or varied with the business cycle.

Within each industry, average hourly earnings was obtained by dividing the aggregate payroll for reporting companies by the aggregate man-hours. Average weekly hours and average weekly earnings were obtained in a similar manner. The averages for all industries taken together were weighted means of the separate industry averages with fixed employment weights estimated for each industry with the help of the 1923 Census of Manufactures.

The distinction in classification between unskilled males and other male workers was not precisely stated by NICB and the classification was made by the reporting firms.

D 845–876. Average days in operation per year, average daily hours, and annual and hourly earnings, in manufacturing, by industry, 1889–1914.

Source: Albert Rees, *Real Wages in Manufacturing, 1890–1914,* National Bureau of Economic Research, New York, 1961, Princeton University Press, tables 10 and 13. (Copyright.)

Rees' estimates of hourly earnings of wage earners in all manufacturing begin with estimates of average annual earnings in census years (1889, 1899, 1904, 1909, and 1914 are considered census years). To obtain average annual earnings he divided total wage payments by the average number of wage earners after adjusting the data to conform to the definition of manufacturing in effect for the 1958 census. This meant deducting industries no longer considered manufacturing, the most important of which are railroad repair shop products, with 366,000 workers in 1914, and illuminating gas, with 44,000 workers. The effect of the adjustment was to reduce average annual earnings by $6 in each census year, except in 1889, when it reduced annual earnings by $4.

For 1889, Rees also had to adjust the original census figures to eliminate the hand and custom trades. This adjustment was made for each industry and was based on separate data on factory industries for 1899 given in the *Census of Manufactures* of 1904. When the 1899 data showed that an industry was partly a factory industry and partly a hand or custom trade, Rees applied the 1899 proportions to the 1889 figures.

The nature of the census employment concepts have an important effect on annual earnings figures for census years. The figures Rees would have preferred were total payrolls divided by the number of workers in average daily attendance when the plant was in operation because, at a later step, he divided annual earnings by the number of days in operation to get average daily earnings. The nature of the appropriate average employment concept can be seen more easily by reversing the order of the division: total payrolls divided by days in operation would give average daily payrolls, which, divided by the number of workers in average daily attendance, would give average daily earnings.

The actual census employment figures differ from this ideal in two opposite ways. In 1914 and 1909, employers were asked to report, from time or payroll records, the number of workers employed on the 15th day of each month or the nearest representative day. The employment figures for the 12 months were then added, employment in any month in which the plant was not in operation was counted as zero, and the sum was divided by 12. The first source of error was the inclusion of these zero figures, which resulted in too low an average employment and too high a daily earnings figure. In effect, time lost during whole months in which an establishment was not in operation was counted twice: once in employment and once in the number of days worked. In seasonal industries such as glass, where the error on this account is large, Rees made special corrections to allow for it.

The second source of error was that employers probably included in their count some workers who were on the payroll on the 15th day of the month but were not at work or receiving pay on that day. This source of error resulted in too high an average employment and too low an average daily wage. Checks of the hourly earnings figures against data built up from hourly wage rates did not suggest any consistent bias in the estimates and thus led Rees to conclude that the two sources of error were, in general, roughly offsetting.

Prior to 1909, the census employment concepts were somewhat different. In 1899 and 1904, employers reported average employment for each month without reference to a particular day. In 1889, the average employment concept was essentially average employment during the time the plant was in operation. Thus the first of the two sources of error is absent in 1889, while the second is not. For this reason, the earnings estimates for the early 1890's may be slightly too low.

For the intercensal years, Rees used data for Massachusetts, New

Jersey, and Pennsylvania as interpolators. The Massachusetts series covers the full period, the Pennsylvania series begins in 1892, and the New Jersey series in 1895. He linked the series at these points to prevent the changes in coverage from affecting the movement of the series.

The average number of days per year that establishments were in operation is a weighted average of data for the same States used in interpolating annual earnings. Within each State, Rees computed employment-weighted averages of days in operation by industries; the all-manufacturing averages published by some of the States are weighted by the number of establishments. The weights for combining States in census years were census employment in manufacturing; for other years, linear interpolations of the census weights. The full-time work year during the period 1889–1914 was apparently 312 days—365 minus 52 Sundays and one holiday.

Rees used the series on average full-time hours per day in all manufacturing again in deriving some of his industry data on hourly earnings, referring to it as the "general hours series." Throughout the study he converted weekly hours to daily hours by dividing by six. The daily hours figures for 1914 and 1909 were computed from the frequency distributions of full-time hours per week in the census of manufactures.

From 1903 to 1914 the movement of the "general hours series" was based on U.S. Bureau of Labor Statistics (BLS) data for seven industries, using Douglas' processing for six of them (Paul Douglas, *Real Wages in the United States, 1890–1926*, Boston, 1930). The industries are cotton, silk, hosiery and knit goods, woolen and worsted, boots and shoes, lumber, and iron and steel. These were combined by census employment weights, using linear interpolation of these weights for intercensal years. The resulting series was then adjusted to pass through the points computed from census data for 1909 and 1914.

This segment of the "general hours series" used the hours data for all of Douglas' payroll industries except clothing (for which Douglas interpolated the data for 1907–12) and slaughtering and meat-packing (for which he assumed a constant 60-hour week on the basis of information other than the BLS data). Rees added the silk industry, for which he computed average hours from the BLS bulletins following Douglas' method.

For 1890–1902, the movement of the "general hours series" was taken from Wolman's series for all manufacturing (*Hours of Work in American Industry*, Bulletin 71, NBER, 1938). This was linked to the segment of the general hours series for 1903–09 by means of an overlap of one year at 1903. The resulting change in the level of Wolman's series was an increase of 0.2 hour per week. Wolman's series uses all the hours data for manufacturing in the *Nineteenth Annual Report of the Commissioner of Labor*; it thus has much broader coverage (48 industries) than Douglas' series, which was derived from the same source for this period, but is confined to 14 industries.

Rees' estimates of money earnings for individual industries were derived in essentially the same way as the estimates for all manufacturing. However, he used data from several additional States to estimate the number of days in operation per year and to interpolate annual earnings between census years. These States provided usable data only for some industries or only for short periods of time. See source for additional detail.

The choice of industries was dictated by the availability of State data. None of the State sources provide definitions or descriptions of the industries to which their industry series refer, and the industry titles at times proved quite misleading. Large differences between State and census data in the movement of annual earnings from one census year to the next were often grounds for not using a series. Because it was possible for Rees to combine series given separately in his sources, but not to break them down, the industry coverage of his series is always that of the broadest of their components.

The levels of average daily hours for individual industries for 1909 and 1914 were computed from census data. In two industries, Rees made special assumptions about the means of the open-end classes in the census distributions. For glass, short workweeks were common for part of the work force, apparently because of the heat and physical strain of some jobs. In this industry he assumed that the mean of the weekly-hours class "48 hours and under" was 44 hours. For iron and steel the means of the open-end class "over 72 hours" were computed from BLS data.

The movement of hours, except for the trend from 1909 to 1914, was based ultimately on BLS data, combined in several different ways. In five industries (cotton, woolens, hosiery and knit goods, boots and shoes, and iron and steel) Rees used the Douglas payroll series adjusted to the census levels of 1909 and 1914. For silk, he computed an hours series using Douglas' methods; this was then adjusted to census levels. The hours series for "all textiles" is the weighted averages of the series for cotton, woolen, silk, and hosiery and knit goods, with no new adjustment to census levels. In the remaining industries, except dyeing and finishing textiles, he used the general hours series to estimate the movement of hours from 1903 to 1914, adjusting it to the census levels of each industry. For dyeing and finishing textiles he used the "all textiles" series.

In five industries (dyeing and finishing textiles, leather, paper, glass, and foundries and machine shops) for the period before 1903, Rees used the data for individual industries in the *Nineteenth Annual Report of the Commissioner of Labor*. For the two remaining industries (rubber and electrical machinery) the data in that report covered four establishments or fewer, and were considered too unreliable to use. Therefore, he used the "general hours series" in these industries before 1903 as well as after.

D 877–892. Earnings and hours of construction and non-supervisory workers in selected nonmanufacturing industries, 1932–1970.

Source: See source for series D 802–810.

See also text for series D 802–810.

D 893–904. Average annual supplements to wages and salaries per full-time employee, by major industry, 1929–1970.

Source: Computed from the following: U.S. Office of Business Economics, 1929–1963, *The National Income and Product Accounts of the United States, 1929–1965, Statistical Tables*; 1964–1967, *U.S. National Income and Product Accounts, 1964–1967*; 1968–1970, U.S. Bureau of Economic Analysis, *Survey of Current Business*, July 1971, tables 6.4 and 6.7.

These figures were computed by dividing estimates of aggregate supplements to wages and salaries, by industry, by the corresponding estimates of the aggregate number of full-time equivalent employees. For discussion of estimates of full-time equivalent employees, see text for series D 739–764; for discussion of supplements to wages and salaries, see text for series D 905–912.

D 905–912. Average annual supplements to wages and salaries per full-time equivalent employee, by type of supplement, 1929–1970.

Source: See source for series D 893–904, tables 1.10, 3.8, and 6.4.

These figures were computed by dividing estimates of aggregate supplements to wages and salaries, by type, by estimates of full-time equivalent employees in all industries. For discussion of estimates of full-time equivalent employees, see text for series D 739–764. The source presents figures for a more detailed classification of supplements.

The averages shown for the different types of supplements may tend to be somewhat lower than they should be because the employment figures used to obtain the averages include employees for whom no contributions or payments were made and who would not therefore be recipients of supplemental compensation.

Data for "employer contributions for social insurance," series D 906–909, have a high degree of reliability since they are obtained

almost exclusively from the accounting records of the agencies administering the programs. Estimates for "other labor income," series D 910–912, are less reliable.

Data on supplements to wages and salaries are obtained from a variety of sources. Reports filed by employers with the administrative agencies or with the U.S. Treasury are the sources of figures for employer contributions under old-age and survivors insurance, State unemployment insurance and cash sickness compensation, railroad retirement and unemployment insurance, and the Federal unemployment tax. Payments made by the Federal Government to its civilian employee retirement systems are obtained from U.S. Department of the Treasury records and the records of the administrative agencies. Estimates of Federal Government contributions made to Government life insurance programs are based on monthly reports of the Veterans Administration.

Contributions to State and local retirement systems are based on data supplied, since 1936, by the U.S. Department of Health, Education, and Welfare. Estimates for 1929–1935 are extrapolations from the 1936 figure based on a sample survey of State and local government units.

Estimates of compensation for injuries are based on data in the annual *Insurance Yearbook* (Spectator Company), on reports of State insurance funds, and on information furnished by State accident compensation commissions.

Employer contributions to private pension plans are estimated for 1945–1970 chiefly from tabulations prepared by the Internal Revenue Service. Contributions to health and welfare funds are estimated from data obtained from the Amalgamated Clothing Workers of America, the International Ladies' Garment Workers' Union, the United Mine Workers of America, and the American Telephone and Telegraph Company. Employer contributions for group insurance, series D 911, are based upon studies made by the U.S. Department of Health, Education, and Welfare and upon reports from the Institute of Life Insurance.

Data on the pay of military reservists were obtained from the Armed Services or from the annual *Budget of the United States Government*; data on Federal payments to enemy prisoners of war were obtained from the U.S. Department of Defense. Other items in "other labor income" have always been small in amount.

D 913. Annual salary of college teachers, 1929–1970.

Source: 1929–1952, George J. Stigler, *Trends in Employment in the Service Industries*, Princeton University Press, Princeton, 1956, p. 134, (copyright; reprinted by permission of Princeton University Press). 1956–1970, National Education Association (NEA), Research Report, 1960–R3, 1962-R2, and 1972-R5 (copyright © 1960, 1962, and 1972, respectively, by the National Education Association; all rights reserved).

The figures for 1929–1952 represent the average annual salary of college teachers in large public institutions. The average salary is the weighted arithmetic mean of median salaries estimated separately for the four ranks of instructional staff: Instructors, assistant professors, associate professors, and professors.

For 1929–1932, the median salaries by rank are based on Viva Boothe's *Salaries and the Cost of Living in Twenty-seven State Universities and Colleges, 1913–1932*, Ohio State University Press, 1932. For 1935–1942, 1950, and 1952, Stigler estimated median salaries by rank from data in various reports of the Office of Education. The weights used in calculating the weighted mean of the median salaries by rank were the relative numbers in each of the ranks in public universities, colleges, and professional schools in New York State as shown in annual reports of the University of the State of New York. For 1943–1949, the figures were interpolated by Stigler on the basis of expenditures on resident instruction per teacher.

Figures for 1908–1928 approximately comparable to those shown here and for median salaries for each of the four college teaching ranks for 1908–1942 appear in George J. Stigler, *Employment and Compensation in Education*, National Bureau of Economic Research, New York, 1950.

The NEA figures for 1956–1970 represent median annual salaries for all four ranks of instructional staff engaged in full-time teaching in four-year colleges and institutions. They cover the academic year of nine months—two semesters or three quarters—even when the compensation is paid over a 12-month period. The data exclude salaries paid to part-time employees and to administrative officers regardless of the amount of time they may have spent in teaching.

D 914 and D 917. Annual net income of nonsalaried lawyers, 1929–1954.

Source: U.S. Office of Business Economics, *Survey of Current Business*: 1929–1946, August 1949 issue, p. 18; 1947–1954, December 1956 issue, p. 27.

Nonsalaried lawyers are those who engage in private practice as entrepreneurs. The average shown, series D 914, is the arithmetic mean. Estimates of median net income are presented in series D 917. Net income is excess of gross receipts from legal practice over the total of the payroll, rent, and other costs of legal practice. Part-year incomes have been converted to full-year equivalents.

The estimates are based on a series of sample mail surveys of the legal profession made by the U.S. Department of Commerce. The results of the various surveys are reported in the *Survey of Current Business* for April 1938, August 1943, May 1944, August 1949, July 1952, and December 1956. These reports, particularly those of August 1949 and December 1956, contain the mean and median net income figures shown here and also, for selected years, detailed frequency distributions by size of income for nonsalaried, salaried, and part-salaried lawyers. Tabulations by various other characteristics are also shown.

D 915 and D 918. Annual net income of nonsalaried physicians, 1929–1970.

Source: 1929–1951, U.S. Office of Business Economics, *Survey of Current Business*: 1929–1949, July 1951 issue, p. 16; 1950–1951, July 1952 issue, p. 6. 1959–1970, Medical Economics Co., Oradell, N. J., *Medical Economics*, various issues (copyright © 1959–1970; reprinted by permission).

In the *Survey*, nonsalaried physician is defined as one whose sole source of medical income is from independent practice. The average shown, series D 915, is the arithmetic mean. The 1929–1951 *Survey* estimates of median net income, series D 918, are presented for linkage with the *Medical Economics* data for later years. Net income is the gross receipts from medical practice less the total of payroll, rent, supplies, equipment depreciation, and other expenses of medical practice. Part-year incomes have not been converted to full-year equivalents.

The 1929–1951 estimates of net income are based chiefly on a series of sample mail surveys of the medical profession made by the Department of Commerce. The results of the various surveys are reported in the *Survey of Current Business* for April 1938, October 1943, July 1951, and July 1952. These reports, particularly July 1951, show the mean and median net income figures shown here and also, for selected years, gross incomes and income distributions by size of income for nonsalaried, salaried, and part-salaried physicians. Tabulations by various other characteristics are also shown.

The 1959–1970 *Medical Economics* data in series D 918 relate to self-employed medical doctors under age 65; they represent income from practice after payment of tax-deductible professional expenses but before payment of income taxes.

D 916 and D 919. Annual net income of nonsalaried dentists, 1929–1970.

Source: 1929–1951, U.S. Office of Business Economics, *Survey of Current Business*: 1929–1948, January 1950 issue, p. 9; 1949–1951,

July 1952 issue, p. 6. 1952–1970, American Dental Association, Chicago, Ill., *The . . . Survey of Dental Practice* for the years 1953, 1956, 1959, 1962, 1965, 1968, and 1971 (copyright by the American Dental Association; reprinted by permission).

In the *Survey*, nonsalaried dentists are defined as those who engage in private practice as entrepreneurs. The average shown, series D 916, is the arithmetic mean. The 1929–1951 *Survey* estimates of median net income, series D 919, are presented for linkage with the American Dental Association data for later years. Net income is gross receipts from dental practice less the total of the payroll, rent, and other costs of dental practice. Part-year incomes have not been converted to full-year equivalent incomes.

The estimates of average annual net income are based on a series of sample mail surveys made by the Department of Commerce. The 1938 survey of dental incomes is reported in Herman Lasken, *Economic Conditions in the Dental Profession, 1929–37*, U.S. Department of Commerce, September 1939; the 1942 and 1949 surveys in the *Survey of Current Business*, April 1944 and January 1950, respectively. These reports contain, for selected years, mean and median net and gross incomes and detailed income distributions by size of income not only for nonsalaried dentists but also for salaried and part-salaried dentists. Tabulations by various other characteristics are also shown in the sources.

The 1952–1970 American Dental Association data cover gross income (total collected fees) minus professional expenses. Reports received from dentists who worked only part of the year are included in the survey results. In the source report, the term "independent dentists" is used for 1970 and is defined to include self-employed dentists and dentists who are shareowners of incorporated dental practices. The source states that, for practical purposes, the term "independent dentists" is equivalent to "nonsalaried dentists" used in previous dental practice surveys.

D 920. Median monthly salary rate, engineers, 1929–1970.

Source: 1929–1953, David M. Blank and George J. Stigler, *The Demand and Supply of Scientific Personnel*, National Bureau of Economic Research, New York, 1957, pp. 114 and 116 (copyright); 1956–1970, Engineering Manpower Commission of Engineers Joint Council, *Professional Income of Engineers, 1972*, New York, 1972, p. 13 (copyright).

Blank and Stigler's estimates for 1929, 1932, and 1934 were based on data obtained by the U.S. Bureau of Labor Statistics from a 1935 survey of all professional engineers in the United States who could be located. The survey placed heavy reliance on membership lists of engineering societies for its mailing list. Approximately 173,000 questionnaires were mailed and about one-third were returned with usable data. The estimates for 1939, 1943, and 1946 are for all engineers, both graduate and nongraduate, who were members of the six engineering societies of the Engineers Joint Council in May 1946. The Council obtained income data from a mail questionnaire sent to 87,000 member engineers. Approximately 47,000 questionnaires were returned. The tabulations made by the Council were based on returns from engineers who had maintained residence as civilians in the United States continuously during 1939–1946. The estimate for 1953 is for graduate engineers only and is the monthly equivalent of the annual rate given in the source used by Blank and Stigler. It is based on data obtained by the Engineers Joint Council from a sample survey of graduate engineers employed in industry and government.

Blank and Stigler give not only median monthly salary rates, but also first and third quartile monthly salary rates. In addition, other tables, particularly in appendix A, provide average income data for selected years (in some cases as far back as 1890) for engineers classified by years of experience and engineering specialization.

The data for 1956–1970 relate to salaries paid to graduate engineers 20 years after the baccalaureate degree. The 20-year medians were selected arbitrarily as representative of engineers who had achieved a high level of experience and who were approaching their peak periods of professional activity and earning power. The annual medians shown in the source report were divided by 12 (and rounded to the nearest $10) to represent the monthly equivalent. These figures comprise base salary before deductions plus regular allowances including cost-of-living differential, if any, but not unpredictable payments for overtime work, stock options, etc.

The samples used in the biennial surveys conducted by the Engineering Manpower Commission may not be exactly comparable because of changes in the participating groups. However, according to the source report, the size of the total sample (1,109 establishments covering over 230,000 graduate engineers in 1970, or about 32 percent of all degree-holding engineers) and the consistency with which many companies and agencies have participated throughout the survey series suggest that changes in the composition of the survey group have not materially altered the reported medians.

Salary figures were reported by employers on two questionnaires designed to obtain information on earnings of all employed engineering graduates in both supervisory and nonsupervisory positions. All salary information was reported in relation to the year of baccalureate degree as a measure of experience. The source report gives the U.S. annual medians at 2-year intervals up to 10 years after graduation and at 5-year intervals thereafter, terminating at 30 years after graduation.

D 921–926. Military annual pay rates, 1865–1970.

Source: 1865–1955, The President's Commission on Veterans' Pensions, *Veterans' Benefits in the United States*, vol. I, Staff Report No. IV, p. 79, 1956 (House Committee Print No. 261, 84th Congress, 2d session). 1960, U.S. Department of Defense, Office of the Secretary (based on the President's 1960 budget estimate); 1964 to 1970, U.S. Office of Management and Budget, unpublished data.

These rates are as of June 30 and are based on weighted averages. For enlisted men, basic pay represents only that part of the total compensation which is paid in cash. For officers, basic pay rates are supplemented by cash allowances for quarters and subsistence.

Basic pay plus allowances, series D 924–926, includes the value of quarters, food, and clothing, both in the form of cash allowances to officers and "in kind" to enlisted men. However, it does not include the value of medical care; income tax exemptions; recreational facilities; flight, combat, and other hazardous-duty pays; transportation; Government insurance benefits; etc. The omission of these latter items results in an understatement of the level of military compensation; also, to the extent that these subsidiary items have been introduced in recent years or improved in quality and extent, the upward trend in military compensation is not fully reflected. The data are not strictly comparable from year to year due to changes in coverage of allowances.

D 927–939. Labor union membership, by affiliation, 1935–1970.

Source: **Series D 927–934**, U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics, 1972*, p. 332. **Series D 935–939**, Leo Troy, *Trade Union Membership, 1897–1962*, National Bureau of Economic Research, New York, 1965, p. 8 (copyright).

See also text for series D 940–951.

The following text is excerpted, with minor editorial changes, from the Troy study.

The Committee for Industrial Organization (CIO) was formed in November 1935 by eight unions affiliated with the American Federation of Labor (AFL). The new organization maintained its identity until it merged with the AFL in December 1955 as the American Federation of Labor and Congress of Industrial Organizations (AFL–CIO).

Although there are a variety of ways of defining union membership, Troy adhered, whenever possible, to the definition that only those paying dues to a union or for whom dues are paid to a federation such as the AFL, the CIO, or the AFL–CIO are members. Conse-

quently, to the fullest possible extent, he reported union membership on a dues-paying basis.

This concept of membership has greater precision than some other concepts, but it is not ideal for all purposes. For example, to a union, total membership may include persons paying regular dues, whether in arrears or up to date in their payments; the unemployed, whether or not they pay any dues; those on strike, honorary members, persons in the Armed Forces, and retired, sick, disabled, or inactive persons. All or many of those categories may be regarded and reported by a union as membership in good standing.

Persons holding withdrawal cards are not counted as members in Troy's study. Withdrawal cards show that a member was in good standing when he left the union; therefore he is permitted to apply for reinstatement rather than required to apply as a new member.

For purposes of collective bargaining, a union may report on the number it represents. Typically, representation is larger than membership since it includes persons whom the union represents, but who are not members of the union. However, it also excludes members not in a represented unit and whom the union does include in its count of total membership.

Newly organized units may not be charged dues until a collective bargaining agreement is signed. This may show up as a lag in membership, as Troy measures it, but his count will include the newly organized once an agreement is signed and dues are collected.

For such vital purposes of determining voting rights at conventions, unions allot representation on the basis of membership dues received from locals. Thus, the International Ladies' Garment Workers, while defining a member as in good standing even though no dues are paid for 39 weeks, nevertheless changes its definition to a current dues-paying basis to count members for convention purposes.

For enumeration purposes at conventions, unions rely primarily on the average membership paying full per capita dues. The Steelworkers Union bases convention representation upon the average of the paid and exonerated membership of the local union. The United Automobile Workers allots representation at conventions by the *average* number of monthly per capita taxes paid by the local union to the international union.

For the concept of membership he adopted, Troy wanted to estimate the number of active members regularly paying either full-time or part-time dues, plus those who may temporarily not be required to pay dues because of a strike, unemployment, or other reasons recognized by the union. The method actually used, where dues receipts were available, was to divide the receipts by full-time dues per capita. This method can lead to an underestimate of a union's membership as defined above. Thus, should there be a prolonged strike during which dues are not collected, the estimate will underreport the membership for the period. Furthermore, union reports of dues receipts sometimes include amounts obtained at reduced rates from unemployed, retired, or honorary members, and also include dues paid for only part of a year. But, since the annual total is divided by the full-time rate, the estimate will be less than the total number of individuals who were members at some time during the year, though it will exceed the number who paid a full year's dues.

Two general methods of estimating total union membership have been used by the Bureau of Labor Statistics. Prior to 1951, the BLS derived its series by aggregating reports of the AFL and the CIO, to which were added estimates of independent membership derived from a number of sources. Membership by individual union in the BLS series is therefore not available before 1951. Since 1951, the BLS has compiled an annual series on total membership based primarily on replies of individual unions to biennial questionnaires. BLS figures of membership by union became available in 1951 and thereafter in alternate years beginning in 1954.

Basically, the BLS obtained its data from questionnaires which requested the correspondent union to report the average annual dues-paying membership, but it is likely that what was reported was not dues-paying as defined by Troy. If a union failed to respond, the BLS filled the gap with estimates taken from other sources. Troy relied primarily on financial reports to obtain dues-paying membership but, like the BLS, used other sources when the necessary information was unavailable.

When the two methods of preparing membership figures are compared, the BLS figures are nearly always larger. It appears that the BLS often obtained membership figures that were rounded upward or inflated for prestige or strategic reasons, or that included members exempted from all or part of their dues because of unemployment, retirement, strikes, or other reasons. Representation figures, which include workers who are not members but are represented in collective bargaining by the union, also appear to be reported to the BLS, and these, too, usually exceed actual membership.

Differences in coverage account for only minor discrepancies between the BLS and NBER series. With the exception of one organization added to the BLS list of national unions in 1960, the Truck Drivers, Chauffeurs and Helpers Union of Chicago and Vicinity (membership for 1960 reported by the BLS as 9,770), both series include the same national and international unions. The new addition came too late for inclusion in the NBER series. On the other hand, Troy's totals include estimates for about fifty local and regional independent unions with a membership of about 140,000, and about half of these are not included in the BLS series.

Organizations excluded by the BLS are those which do not meet its definition of a national union. From time to time, a union qualifies or fails to qualify, and as a result is added to or dropped from the BLS directory. For example, the Industrial Trades Union was reported by the BLS as a national union in its directory covering the year 1951 and then dropped from subsequent directories, although the union continued to function. After 1951, it apparently lost contracts with employers outside the State of Rhode Island (where the union is largely concentrated), and did not meet the BLS definition of a national union.

In contrast, once Troy obtained information on a union and had some indication that it continued to function, it was retained in his series. Thus the Industrial Trades Union is included in the NBER series after 1951.

D 940–941. Total union membership, 1897–1934.

Source: See source for series D 942–945.

Series D 940 is the sum of series D 943 and D 945; series D 941 is the sum of series D 944 and D 945.

D 942–945. Unions and membership of American Federation of Labor, and membership in independent or unaffiliated unions, 1897–1934.

Source: *Proceedings*, 65th Convention of the American Federation of Labor (AFL), 1946, p. 43; Lewis L. Lorwin, *The American Federation of Labor*, Brookings Institution, Washington, 1933, p. 488 (copyright); *Proceedings* of the AFL. Conventions of 1897, 1898, and 1933–34; and Leo Wolman, *Ebb and Flow in Trade Unionism*, National Bureau of Economic Research, New York, 1936 (copyright).

D 943 represents "total paid membership of the affiliated national and international organizations and directly chartered trade and federal labor unions" based on "the actual per capita tax" remitted by affiliated unions. Such per capita tax payments can and frequently do cover either fewer or more members than the affiliated union reports in its own statements.

Total membership in series D 944 differs from that in series D 943 because series D 944 uses the direct reports of affiliated unions where available in preference to the membership indicated by per capita tax payments.

D 945, membership of independent and unaffiliated unions, covers national and international unions not affiliated with the AFL. It excludes independent unions that are purely local in character or whose jurisdiction is confined to the employees of a single employer. In most years about half the workers covered by this series were members of the four brotherhoods of workers in the railroad train and

engine service. This series is from Wolman, cited above, pp. 138–139, adjusted in 1929–1934 to include the membership of the Trade Union Unity League. For 1932 and 1934, the membership of the Trade Union Unity League has been interpolated from figures for adjacent years.

For Wolman's estimates of union membership by industry, see series D 952–969. Annual estimates of the membership of individual national and international unions for 1897–1934 may be found in Wolman's book cited above and in his *The Growth of American Trade Unions, 1880–1923*, National Bureau of Economic Research, 1924.

D 946–951. Labor union membership and membership as percent of total labor force and of nonagricultural employment, 1930–1970.

Source: U.S. Bureau of Labor Statistics (BLS), *Handbook of Labor Statistics, 1972*, p. 333.

See also text for series D 940–945.

D 946, total union membership, is a continuation of series D 940. For 1935–1947, the membership of AFL–CIO unions is based on per capita taxes; the membership of independent unions was estimated by BLS from fragmentary data. For 1948, 1949, and 1950, the figure shown is the midpoint of an estimated range of 14 million to 16 million. For 1951 and 1952, the figure shown is the midpoint of an estimated range of 16.5 million to 17 million. These ranges are based on membership data from surveys of national and international unions made by BLS. The level of the series may be more accurate during 1948–1952 than during 1939–1947. Prior to 1947, the series seems to include substantially inflated membership claims of some unions. The year-to-year movement of this series from 1947–1953 and, in particular, the drop in membership from 1947–1948 should not be considered as reliable.

Beginning 1953, estimates are based on biennial surveys of national and international unions. (See BLS *Directory of National and International Labor Unions in the United States*, for odd-numbered years from 1953 to 1971.) The figures also include the members of directly chartered local labor unions affiliated with the AFL–CIO and members of unaffiliated national unions. The *Directory* also gives membership by sex, white-collar occupations, industry, and State, and discusses aspects of union administration and activities.

The 1971 BLS *Directory of National Unions and Employee Associations* included, with its union membership count, members of professional and State employee associations engaging in collective bargaining. Combined union and association membership for 1970 yields (for series D 946) 22,558,000, (D 947) 1,371,000, (D 948) 21,243,000, (D 949) 24.7 percent, (D 950) 70,644,000, and (D 951) 30.1 percent.

D 947, Canadian membership of U.S. unions, is from the Department of Labour of Canada, except for even-numbered years beginning in 1954 which are from the BLS directories as cited.

D 948–949, union membership, excluding Canada, is obtained by subtracting series D 947 from D 946. The year-to-year movement for 1947–1953 is unreliable for the reasons given above for series D 946. A better estimate might be obtained for these years by holding the percentage in series D 951 constant at 34.0 and by applying this figure to series D 950.

D 950, nonagricultural employment. See series D 127–141.

D 951, union membership (excluding Canada) as a percent of employees in nonagricultural establishments is computed from series D 948 and D 950. Wolman (see series D 940–945) has also estimated for three decennial census years the number of trade union members, exclusive of Canada, as a percentage of the total number of nonagricultural employees. These percentages are 9.9 in 1910, 19.4 in 1920, and 10.2 in 1930. The percentage shown for 1930 in series D 951 is larger than the corresponding percentage given by Wolman because his estimated union membership figure, exclusive of Canada (3,190,000), is smaller than that shown in series D 948, and also because his nonagricultural employment estimate (30,247,000), based on census data, is larger than the number of employees in nonagricultural establishments shown in series D 950. Wolman's figure excludes many salaried professional and managerial workers included in series D 950, and includes domestic servants, who are excluded from series D 950.

D 952–969. Labor union membership, by industry, 1897–1934.

Source: Leo Wolman, *Ebb and Flow in Trade Unionism*, National Bureau of Economic Research, New York, 1936, pp. 172–193 (copyright).

These figures were obtained by classifying national and international unions into industrial categories and totaling the membership of the unions in each category in each year.

In the latter part of the period, series D 969, "Miscellaneous," consists largely of two unions, the Firemen and Oilers and the Operating Engineers. The Industrial Workers of the World is included from 1905–1914, and is the largest union in the series for some years. The Horseshoers are important in the early years, declining rapidly in the 1920's. Unions affiliated with the Trade Union Unity League in 1929–1934 are excluded.

Some errors of classification arise when a union has membership in more than one category. For example, the Meat Cutters and Butcher Workmen, classified in food, liquor, and tobacco had many members in retail meat stores; the Operating Engineers, classified as miscellaneous, had many members in building construction. These problems are less important in 1897–1934 than they would be in recent years.

The source gives annual estimates of the percentage distribution of union membership by industrial categories. For 1910, 1920, and 1930, it gives estimates of the percentage of employees organized in each of the industrial categories shown here, and in more detailed categories.

D 970–985. Work stoppages, workers involved, man-days idle, major issues, and average duration, 1881–1970.

Source: U.S. Bureau of Labor Statistics (BLS), *Handbook of Labor Statistics, 1972*.

Work stoppages include strikes and lockouts. A strike is defined as a temporary stoppage of work by a group of employees to express a grievance or to enforce a demand. A lockout is defined as a temporary withholding of work from a group of employees by an employer (or a group of employers) to enforce acceptance of the employer's terms. Most work stoppages are strikes rather than lockouts. Strikes involving fewer than six workers or lasting less than a full shift, strikes of American seamen in foreign ports, and strikes of foreign crews on foreign ships in American ports are excluded.

Figures for workers involved include all workers made idle in the establishment where the stoppage occurs, even though they may not all be participants in the controversy. The figures exclude indirect or secondary idleness in other establishments which suspend or curtail operations because of shortages of materials or services resulting from a stoppage. The number of workers involved is the number on the day of maximum idleness; however, the figures for man-days idle, series D 973, take into account variations in the number idle during the strike and include all days on which work was scheduled.

The duration of stoppages, series D 981, is counted in calendar days rather than working days. Strikes that are never formally settled are considered ended when a majority of vacant jobs are filled, whether by former strikers or by others, or when the establishment affected is permanently closed.

The classification of causes of strikes, series D 978–980 and D 983–985, necessarily lacks precision, since many strikes involve more than one issue. In particular, strikes for union organization often involve demands concerning wages or hours.

In computing the number of workers involved in strikes as a percent of total employment and idleness as a percent of total working time, the following employment figures were used: From 1927 to 1950, all employees were counted, except those in occupations and professions in which little, if any, union organization existed or in which

stoppages rarely, if ever, occurred. From 1951 to 1966, BLS estimates of total employment in nonagricultural establishments, exclusive of government, were used. Beginning in 1967, two measures of employment have been used. One is the former series of nonagricultural employment (exclusive of government), which is used to calculate "private nonfarm" working time. The second measure —working time in the "total economy"—is the BLS estimate of nonagricultural employment (including government) plus agricultural wage and salaried workers. The total economy measure was recomputed to 1939.

Estimated working time is computed by multiplying the average number of workers employed each year by the days worked by most employees during the year. To facilitate comparisons, the private nonfarm series was recalculated for all years beginning with 1950.

Unions are involved in the great majority of work stoppages. In 1970, no union was involved in 95 of 5,716 stoppages, accounting for 7,900 workers of the 3,305,000 involved in work stoppages during the year. For some purposes, therefore, workers involved in strikes as a percent of union membership is a more useful statistic than workers involved as a percent of all workers.

Data for 1881–1886 were first published in the *Third Annual Report of the Commissioner of Labor, 1887*. This report also gives fragmentary information for earlier years. Data for 1887–1894 are given in the *Tenth Annual Report, 1894*; for 1895–1900, in the *Sixteenth Annual Report, 1901*; and for 1900–1905, in the *Twenty-first Annual Report, 1906*. References to strikes and lockouts during 1881–1905 were located by the Bureau of Labor by examination of the daily and trade press. Agents of the Bureau then collected data from the parties involved.

No government agency collected data on work stoppages for 1906–1913. For 1914–1915, BLS collected data on the number of stoppages and major issues. For 1916–1926, the count of stoppages was made from press notices, and questionnaires were sent to determine the number of workers involved. This number was reported for only about two-thirds of the known stoppages.

Methods of compiling the series have been fairly uniform since 1927. Information on the existence of a stoppage is obtained from press clippings from a large number of newspapers throughout the country and from reports from unions, employers, and a number of Federal and State agencies. Improvement in the sources of these "leads," especially through State employment security agencies, increased the number of strikes reported over previous years and the number of workers involved and man-days idle. When the existence of a strike is known, a questionnaire is mailed to the parties reported as involved to obtain data on the number of workers involved, duration, issues, etc. In some instances, field representatives of the BLS call on the parties.

D 986–1021. Work stoppages, by major industry group, 1937–1970.

Source: U.S. Bureau of Labor Statistics, *Analysis of Work Stoppages*, annual issues.

See text for series D 970–985.

D 1022–1028. Average monthly labor turnover rates in manufacturing, by class of turnover, 1919–1970.

Source: U.S. Bureau of Labor Statistics (BLS), 1919–1929, *Monthly Labor Review*, July 1929, pp. 64–65; 1930–1970, *Employment and Earnings, United States, 1909–1971*, Bulletin 1312-8, table 8.

The figures for 1919–1929 are those of the Metropolitan Life Insurance Company which pioneered in collecting labor turnover data on a regular basis, beginning in January 1926. Subsequently, the Company secured data that enabled it to estimate turnover rates monthly back to January 1919.

The Company obtained its turnover data by means of a mail questionnaire sent monthly to reporting firms. (The sample of reporting firms, 160 in November 1926, had grown to 350 by mid-1929.) Each firm was asked to report each month: (1) The daily average number of employees on the payroll, and the total number of (2) accessions, (3) voluntary quits, (4) discharges, and (5) layoffs during the month. The accession rate for each company was computed by dividing the total number of accessions during the month by the daily average number on the payroll during the month. The composite or average accession rate for all reporting firms was the unweighted median of the accession rates computed for individual firms. The annual average was the arithmetic mean of the 12 monthly median accession rates. Discharges, quits, and layoffs were handled in a similar fashion. (The total separation rate, however, was computed as the sum of the median discharge rate, the median quit rate, and the median layoff rate.)

The figures for 1919–1929 are stated as equivalent annual rates rather than monthly rates. They have been converted in series D 1022–1027 to monthly rates by dividing by 12.

In July 1929, BLS took over the work of the Metropolitan Life Insurance Company. At that time approximately 350 large manufacturers employed 700,000 workers in the sample of reporting firms. Over the years the list of cooperating firms has grown greatly, the amount of industry detail has expanded, and methods of computation have been somewhat changed.

BLS turnover rate estimates are based on reports made monthly on a mail questionnaire by a sample of cooperating firms. In 1970, the sample covered approximately 38,000 establishments in manufacturing employing nearly 10.4 million workers. The reporting firms are considerably larger on the average than all firms within the population sampled. This large-firm bias may cause underestimation of turnover rates. Furthermore, the BLS sample of manufacturing firms and its estimates of turnover for manufacturing exclude printing, publishing, and allied industries (since April 1943); canning and preserving fruits, vegetables, and seafoods; women's and misses' outerwear; and fertilizers. The last three industries tend to have exceptionally high turnover rates seasonally. Plants experiencing work stoppages are excluded.

Each cooperating firm is asked to report each month: (1) Total accessions, (2) new hires, (3) other accessions, (4) total separations, (5) quits, (6) layoffs, (7) discharges, (8) other separations, and (9) the total number of employees who worked or received pay for any part of the payroll period which includes the 12th of the month. Prior to 1940, "miscellaneous" separations were included with "quits." Since January 1943 the labor turnover rates pertain to all employees; before that date the rates were for production workers only. Furthermore, before October 1945 the employment base was the average of the number of employees on the payroll the last day of the preceding month and the last day of the current month. The effect of changing the employment base to the number on the payroll for the period including the 12th of the month was negligible. Layoffs are terminations of employment for more than a week, initiated by management, without prejudice to the worker. Discharges are terminations of employment by management for cause (incompetence, laziness, etc.). Quits are terminations of employment initiated by employees; they include unauthorized absences of more than a week. Miscellaneous separations are terminations of employment for military duty of over 30 days and separations other than those itemized (deaths, retirements, etc.).

D 1029. Work-injury frequency rates in manufacturing, 1926–1970.

Source: U.S. Bureau of Labor Statistics (BLS), 1926–1949 and 1958–1970, *Handbook of Labor Statistics*, 1950 and 1972 editions; 1950–1952, *Work Injuries in the United States, 1950*, and subsequent annual issues; 1953–1957, U.S. Department of Labor, news releases.

The Bureau of Labor Statistics' first continuing compilation of injury-rate statistics began in 1910 for the iron and steel industry. In 1925, the injury-rate compilations were expanded to cover 24 industries. In 1952, the compilations covered over 200 manufacturing

and nonmanufacturing industry classifications. At present (1970) the survey provides injury-frequency rates for 490 manufacturing and 180 nonmanufacturing categories.

Efforts to standardize the compilation of work-injury statistics were initiated by BLS in 1911 and resulted in 1920 in the first standardized procedures. In 1926, the American Engineering Standards Committee, later the American Standards Association, undertook a revision of these procedures. Their work led to the publication in 1937 of the first American Standard Method of Compiling Industrial Injury Rates. This standard was revised in 1954 and again in 1967.

The standard injury-frequency rate is the average number of disabling injuries per million man-hours worked. A disabling injury is an injury incurred in the course of and arising out of employment, which results in death or permanent physical impairment, or renders the injured person unable to perform any regularly established job, open and available to him, during the entire time interval corresponding to the hours of his regular shift on one or more days after the injury.

The BLS annual injury-rate estimates are based on a sample mail survey conducted once a year. Cooperating firms are asked to report for all employees (1) average employment, (2) aggregate man-hours worked by all employees, (3) aggregate number of disabling work injuries by extent of disability, and (4) time lost because of disabilities. The manufacturing sample covers approximately 50,000 establishments. The injury-rate series for manufacturing excludes petroleum refining, smelting and refining of nonferrous metals, cement and lime manufacturing, and coke production, which are covered in similar surveys conducted by the Bureau of Mines (see text for series D 1030–1034).

Prior to 1936, the data in series D 1029 are based on surveys covering only wage earners in 30 manufacturing industries. Since 1936 the data refer to all employees in all manufacturing industries. Separate injury-frequency rates have been computed since 1936 for component industries by dividing aggregate injuries by aggregate man-hours in reporting establishments. In computing the average rate for all manufacturing the separate averages for the component industries are weighted by estimated total employment in these industries. Before 1936 the weights implicitly were aggregate man-hours in the reporting firms in each industry.

D 1030–1034. Work-injury frequency rates in mining, 1924–1970.

Source: U.S. Bureau of Mines, *Minerals Yearbook*, 1970, and earlier annual issues.

Except for coal mining since 1941, the Bureau of Mines estimates of work-injury frequency rates in "mining" industries are based on reports made voluntarily by mining establishments. Coal mining firms since 1941 have been obliged by Federal law to report work-injury and related data to the Bureau of Mines.

D 1035–1036. Work-injury frequency rates on Class I railroads, 1922–1970.

Source: U.S. Federal Railroad Administration (prior to 1966, Interstate Commerce Commission), *Accident Bulletin*, various issues.

Both series exclude work injuries suffered by employees of Class I switching and terminal companies after 1932. They are based on monthly accident reports that the Class I railroads are required by Federal law to make to the Federal Railroad Administration. The two series thus result from essentially complete censuses of man-hours worked and of reportable work injuries.

Before 1936 a reportable work-injury was either a fatality or a nonfatal injury to an employee "sufficient to incapacitate him from performing his ordinary duties for more than 3 days in the aggregate in the 10 days immediately following the accident." Series D 1036 includes only such work-injuries. From 1936 through 1956, the railroads were required to report work injuries incapacitating employees for 1–3 days immediately following an accident as well as more serious injuries. Series D 1035 is series D 1036 plus the average work-injury frequency rate for "1–3 day" injuries.

In an effort to narrow the field of reportable accidents while conforming with the intent of the Accident Reports Act, significant changes, affecting the reportability of certain types of railroad accidents, were made in Rules Governing Monthly Reports of Railroad Accidents, effective January 1, 1957. Minor revisions of these rules have been made from time-to-time. Therefore, data for accidents occurring prior to 1957 are not necessarily comparable with those for later years.

The concept of "disabling injury" underlying series D 1029–1034 is essentially the same as that underlying series D 1035. Series D 1036, which excludes "1–3 day" injuries, is not comparable to series D 1029–1034 in level, and series D 1035 also tends to have a downward bias in trend relative to series D 1029–1034. It has been included to indicate at least crudely the trend in the average injury-frequency rates on Class I railroads before 1936.

Both series cover all employees of Class I railroads. The man-hour base of both series is the aggregate number of straight-time hours actually worked and overtime hours paid for in millions of man-hours. Days worked by daily-rated employees have been converted to man-hours worked by multiplying days worked by 8. The average injury-frequency rate is the ratio of the aggregate number of work-injuries to the man-hour base.

★ ★ ★ ★ ★ ★ ★ ★ ★ **More Recent Data for *Historical Statistics* Series** ★ ★ ★ ★ ★ ★ ★ ★ ★

Statistics for more recent years in continuation of many of the still-active series shown here appear in annual issues of the *Statistical Abstract of the United States*, beginning with the 1975 edition. For direct linkage of the historical series to the tables in the *Abstract*, see Appendix I in the *Abstract*.

Series D 683–688. Indexes of Employee Output (NBER): 1869 to 1969

[NBER = National Bureau of Economic Research]

Year	1958=100				1958 dollars	
	Output per man-hour [1]	Nonfarm output per man-hour [2]	Manufacturing output per man-hour	Farm output per man-hour	Output per employee [3]	Output per person engaged [4]
	683	684	685	686	687	688
1969	136.4	----------	145.7	177.5	----------	----------
1968	135.3	----------	142.0	164.6	----------	----------
1967	131.3	----------	135.0	163.5	----------	----------
1966	129.5	127.1	134.2	149.4	$9,190	$9,435
1965	125.7	123.8	131.0	144.2	8,930	9,190
1964	121.6	120.3	125.6	131.7	8,635	8,855
1963	117.4	116.3	121.5	128.7	8,386	8,522
1962	113.5	113.0	116.6	118.2	8,188	8,247
1961	108.5	107.8	112.6	115.8	7,841	7,845
1960	104.9	104.7	108.8	106.5	7,705	7,647
1959	103.5	103.5	106.2	101.1	7,640	7,535
1958	100.0	100.0	100.0	100.0	7,367	7,196
1957	97.2	97.6	98.8	89.8	7,292	7,068
1956	94.6	95.6	96.5	84.6	7,207	6,976
1955	94.2	95.9	94.9	81.0	7,236	6,976
1954	89.9	91.2	88.3	80.1	6,924	6,587
1953	87.4	88.8	86.9	76.6	6,830	6,467
1952	83.5	85.6	83.0	68.0	6,586	6,246
1951	82.0	85.1	81.3	62.3	6,497	6,132
1950	80.1	83.8	81.4	61.9	6,308	6,000
1949	74.0	78.4	74.9	54.3	5,958	5,601
1948	71.4	74.8	72.1	56.2	5,955	5,430
1947	68.7	72.8	69.6	49.6	5,920	5,292
1946	68.7	73.3	65.8	51.4	6,060	5,418
1945	70.7	76.8	71.5	47.9	6,807	5,892
1944	67.2	72.7	72.5	47.6	6,439	5,800
1943	63.0	67.4	73.4	47.9	5,769	5,395
1942	62.0	66.7	72.4	49.9	5,487	5,168
1941	61.8	67.2	71.2	47.7	5,355	5,003
1940	58.5	66.1	68.7	42.7	4,998	4,695
1939	56.9	63.6	65.4	44.2	4,803	4,490
1938	54.7	61.4	59.9	43.3	4,587	4,241
1937	53.1	59.7	60.7	40.3	4,603	4,282
1936	53.2	60.2	61.6	37.0	4,560	4,194
1935	50.6	57.7	61.2	39.2	4,230	3,852
1934	49.0	55.9	57.4	36.2	3,998	3,609
1933	44.5	50.4	54.9	38.9	3,891	3,539
1932	45.4	51.6	50.5	39.8	3,935	3,616
1931	47.2	53.3	54.0	39.5	4,196	3,935
1930	46.8	52.5	52.3	35.6	4,215	3,994
1929	48.6	54.1	52.0	37.3	4,444	4,260
1928	46.5	52.0	49.7	36.3	4,422	4,118
1927	46.5	51.6	47.6	37.2	4,398	4,113
1926	45.7	51.4	46.5	34.8	4,359	4,079
1925	44.5	50.1	45.6	34.9	$4,218	$3,934
1924	44.6	50.5	42.8	33.7	4,256	3,950
1923	42.7	47.5	40.2	34.7	4,101	3,768
1922	40.3	45.4	41.8	33.0	3,871	3,525
1921	40.7	46.6	36.9	32.2	3,899	3,513
1920	38.1	43.0	32.0	31.3	3,774	3,402
1919	38.4	43.1	30.2	31.9	3,713	3,388
1918	36.0	40.1	31.7	31.3	3,607	3,259
1917	33.3	35.7	31.7	33.1	3,525	3,123
1916	35.1	38.6	34.1	31.2	3,676	3,308
1915	32.7	34.8	34.7	34.2	3,382	3,085
1914	31.4	33.9	30.7	31.9	3,279	3,015
1913	33.6	37.1	30.6	29.9	3,482	3,238
1912	32.5	34.8	29.2	33.1	3,425	3,159
1911	31.9	35.3	25.4	28.9	3,384	3,103
1910	31.3	33.9	26.6	31.0	3,317	3,051
1909	31.9	35.0	26.9	30.4	3,347	3,100
1908	29.7	32.1	23.8	31.1	3,146	2,897
1907	31.2	33.9	25.5	30.7	3,316	3,094
1906	31.3	33.7	26.4	32.2	3,325	3,117
1905	29.1	31.3	26.1	30.7	3,146	2,898
1904	28.4	30.6	26.0	30.5	3,041	2,820
1903	28.4	30.6	24.8	29.9	3,108	2,848
1902	27.8	30.1	25.6	29.1	3,030	2,793
1901	28.9	31.6	24.4	29.5	3,093	2,890
1900	27.0	29.0	22.9	29.8	2,873	2,695
1899	26.6	28.6	23.7	29.8	2,903	2,667
1898	26.1	27.9	24.6	30.0	2,890	2,585
1897	25.7	27.7	22.2	28.9	2,965	2,565
1896	24.1	25.9	21.3	27.2	2,763	2,402
1895	24.6	27.4	22.5	25.5	2,858	2,469
1894	23.2	25.8	21.1	24.2	2,764	2,310
1893	23.0	25.5	20.1	23.6	2,687	2,334
1892	24.0	26.7	21.4	24.4	2,636	2,447
1891	22.6	24.3	21.2	25.9	2,523	2,295
1890	22.2	23.9	21.2	25.1	2,438	2,251
1889	21.2	22.2	20.5	25.8	----------	2,158
1884 [5]	21.8	23.9	(NA)	(NA)	----------	2,183
1879	(NA)	(NA)	16.2	23.9	----------	(NA)
1874 [6]	16.0	15.8	(NA)	(NA)	----------	1,613
1869	----------	----------	14.7	20.1	----------	----------

NA Not available.
[1] For total private domestic economy.
[2] For nonfarm business economy.
[3] Derived by dividing gross national product (in 1958 dollars) by total employment.
[4] Derived by dividing gross private domestic product by persons engaged in the private domestic economy.
[5] Decade average, 1879–1888.
[6] Decade average, 1869–1878.

Series D 689–704. Indexes of Output, Man-Hours, Compensation Per Man-Hour, and Unit Labor Cost (BLS): 1947 to 1970

[1967 = 100. BLS = Bureau of Labor Statistics]

Year	Output (GNP) [1]				Man-hours [2]				Compensation per man-hour [3]				Unit labor cost			
	Total	Nonfarm industries			Total	Nonfarm industries			Total	Nonfarm industries			Total	Nonfarm industries		
		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing
	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704
1970	106.8	107.1	105.7	107.8	102.4	103.5	98.1	106.0	124.0	122.7	121.6	123.9	118.9	118.6	112.9	121.9
1969	107.5	107.8	109.9	106.7	104.0	104.9	103.6	105.6	115.6	114.7	114.1	115.2	111.9	111.6	107.5	114.0
1968	104.8	105.1	106.7	104.2	101.8	102.1	101.9	102.2	107.6	107.3	107.2	107.3	104.6	104.3	102.3	105.3
1967	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	100.0	100.0	100.0
1966	97.7	97.9	100.1	96.7	99.7	99.5	100.2	99.1	94.5	94.6	95.3	94.2	96.5	96.2	95.5	96.5
1965	91.8	91.5	92.7	90.9	97.4	96.3	94.3	97.2	88.4	89.2	91.2	88.3	93.8	93.9	92.8	94.4
1964	86.2	85.9	84.5	86.6	94.5	92.9	89.4	94.6	84.9	86.1	89.0	84.8	93.1	93.2	94.1	92.7
1963	81.5	80.9	79.0	81.9	92.9	90.9	87.7	92.3	80.8	82.2	85.0	80.9	92.1	92.3	94.4	91.2
1962	78.2	77.6	75.2	78.9	92.4	89.8	86.9	91.2	77.7	79.3	82.3	77.9	91.8	91.8	95.0	90.1
1961	73.2	72.5	68.3	74.6	90.6	87.7	83.5	89.6	74.4	76.3	79.0	75.2	92.1	92.3	96.5	90.2

See footnotes at end of table.

Series D 689–704. Indexes of Output, Man-Hours, Compensation Per Man-Hour, and Unit Labor Cost (BLS): 1947 to 1970—Con.

[1967 = 100. BLS = Bureau of Labor Statistics]

Year	Output (GNP) [1]				Man-hours [2]				Compensation per man-hour [3]				Unit labor cost			
	Total	Nonfarm industries			Total	Nonfarm industries			Total	Nonfarm industries			Total	Nonfarm industries		
		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing		Total	Manufacturing	Nonmanufacturing
	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704
1960	71.9	71.1	68.6	72.5	92.0	88.6	85.8	89.9	71.7	73.9	76.6	72.6	91.8	92.0	95.9	90.0
1959	70.2	69.5	67.6	70.4	91.2	87.6	86.1	88.3	69.0	71.0	73.5	69.7	89.8	89.5	93.7	87.3
1958	65.6	64.8	60.2	67.2	88.4	84.5	80.9	86.1	66.0	68.1	70.6	67.0	88.9	88.7	94.9	85.9
1957	66.5	65.7	65.5	65.9	92.3	87.9	88.1	87.8	63.3	65.5	67.7	64.3	87.9	87.6	91.1	85.7
1956	65.6	64.7	65.3	64.4	93.7	88.4	89.5	87.9	59.5	62.0	63.9	60.8	85.0	84.7	87.6	82.9
1955	64.3	63.4	65.0	62.5	92.1	86.1	88.2	85.2	55.9	58.6	60.0	57.6	80.1	79.6	81.4	78.4
1954	59.3	58.3	58.2	58.3	88.6	82.6	83.7	82.2	54.5	56.6	57.8	55.9	81.5	80.3	83.2	78.8
1953	60.1	59.1	62.6	57.3	92.0	85.9	91.6	83.2	52.9	54.9	55.3	54.2	81.0	79.7	80.9	78.7
1952	57.2	56.3	57.8	55.5	91.2	84.1	87.3	82.6	49.8	52.0	52.4	51.5	79.4	77.6	79.1	76.6
1951	55.8	55.0	56.5	54.1	90.7	82.9	85.9	81.5	46.9	49.3	49.3	49.1	76.3	74.3	74.8	73.9
1950	52.5	51.3	51.3	51.4	87.9	79.0	79.8	78.6	42.8	45.3	44.7	45.7	71.7	69.7	69.5	69.9
1949	47.6	46.4	44.2	47.6	86.2	76.0	73.7	77.1	40.1	43.0	42.6	43.3	72.5	70.3	71.0	70.0
1948	47.8	46.5	46.9	46.3	89.2	79.1	80.9	78.2	39.5	41.8	40.7	42.3	73.7	71.0	70.3	71.4
1947	45.6	44.5	44.7	44.5	88.8	78.0	81.5	76.4	36.2	38.3	37.1	38.9	70.6	67.1	67.7	66.9

[1] Refers to gross national product in 1958 prices.
[2] Hours of all persons in private industry engaged in production; includes man-hours of proprietors and unpaid family workers.
[3] Wages and salaries of employees plus employers' contribution for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

Series D 705–714. Farm Laborers—Average Monthly Earnings With Board, by Geographic Divisions: 1818 to 1948

[For composition of divisions, see text for series A 172–194]

Year	United States	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	705	706	707	708	709	710	711	712	713	714
1948	$91.00	$104.00	$99.00	$101.00	$107.00	$57.00	$49.00	$73.00	$129.00	$158.00
1940	28.05	33.54	30.00	29.40	28.12	17.46	16.34	19.61	36.11	42.84
1929	40.40	50.93	45.72	41.73	42.10	25.23	23.28	27.67	49.96	59.90
1919	41.52	46.16	41.17	42.21	50.81	30.23	29.09	36.19	59.20	65.30
1909	21.30	25.82	22.21	23.59	26.47	14.64	15.05	17.33	34.34	34.28
1899	14.56	18.20	15.98	16.90	18.04	9.32	10.72	11.86	26.33	25.10
1890	13.93	17.78	15.76	15.92	15.84	9.46	10.58	12.84	21.67	22.64
1880	11.70	13.94	13.71	15.48	14.88	8.81	10.16	12.90	24.74	24.77
1870	16.57	19.84	17.89	16.94	17.10	9.95	12.78	14.05	----	29.19
1860	13.66	14.73	12.75	13.79	13.76	11.08	14.06	15.53	----	34.16
1850	10.85	12.98	11.17	11.44	12.00	8.20	9.60	11.28	----	68.00
1830	8.85	11.60	8.52	8.73	10.15	7.16	9.37	----	----	----
1826	8.83	11.65	8.38	8.73	10.15	7.18	9.39	----	----	----
1818	9.45	11.90	9.82	8.86	10.15	8.10	10.36	----	----	----

Series D 715–717. Average Daily Wage Rates of Artisans, Laborers, and Agricultural Workers, in the Philadelphia Area: 1785 to 1830

Year	Artisans	Laborers	Agricultural workers, male	Year	Artisans	Laborers	Agricultural workers, male	Year	Artisans	Laborers	Agricultural workers, male
	715	716	717		715	716	717		715	716	717
1830	$1.73	$1.00	----	1815	$1.91	$1.00	$.40	1800	$1.64	$1.00	----
1829	1.80	1.00	$.50	1814	1.63	1.00	.50	1799	1.62	1.00	----
1828	1.74	1.00	----	1813	1.52	1.00	.40–.67	1798	1.57	1.00	$.40
1827	1.73	1.00	.40	1812	1.58	1.00	----	1797	1.83	1.00	----
1826	1.70	1.00	----	1811	1.77	1.00	.365	1796	1.74	1.00	----
1825	1.74	1.00	.40	1810	1.72	1.00	.40	1795	1.66	1.00	----
1824	1.55	1.00	.40	1809	1.56	1.00	.40	1794	1.39	1.00	----
1823	1.47	1.00	----	1808	1.47	.75	.40	1793	1.25	.80	----
1822	1.65	.75	.30–.40	1807	1.68	1.00	.40–.50	1792	1.00	.66	----
1821	1.37	.75	.40	1806	1.66	1.00	.40	1791	1.05	.53	----
1820	1.55	----	.40	1805	1.57	1.00	----	1790	1.01	.50	----
1819	1.63	1.00	----	1804	1.60	1.00	----	1789	1.00	.50–.53	----
1818	1.86	1.00	.40	1803	1.43	.75	----	1788	.97	----	----
1817	1.71	1.00	----	1802	1.31	.75	.40–.41	1787	1.00	.53	----
1816	1.89	1.00	----	1801	1.55	1.00	.40–.47	1786	1.00	----	----
								1785	1.33	.67–.72	----

Series D 718–721. Daily Wage Rates on the Erie Canal: 1828 to 1881

Year	Common labor	Carpenters	Masons	Teamwork	Year	Common labor	Carpenters	Masons	Teamwork	Year	Common labor	Carpenters	Masons	Teamwork
	718	719	720	721		718	719	720	721		718	719	720	721
1881	$1.25	$2.50	$2.25	$3.00	1863	$1.25	$2.00	$2.00	$3.50	1845	$.75	$1.00	$1.25	$1.75
1880	1.25	2.50	2.00	3.00	1862	1.00	1.50	1.88	3.00	1844	.75	1.25	1.25	2.00
1879	1.13	2.50	2.25	3.00	1861	1.00	1.63	1.50	3.00	1843	.75	1.25	1.25	1.75
1878	1.00	2.00	2.50	3.00						1842	.88	1.50	1.50	2.44
1877	1.25	2.00	2.50	3.00	1860	1.00	1.75	2.00	3.00	1841	.88	1.50	1.75	2.25
1876	1.50	2.50	2.00	4.00	1859	1.00	1.50	1.50	2.50					
					1858	1.00	1.50	1.50	2.50	1840	.88	1.50	1.75	2.40
1875	1.50	2.50	----------	4.00	1857	1.00	1.75	1.50	2.50	1839	1.00	1.50	----------	2.25
1874	1.50	2.50	----------	4.00	1856	1.00	1.75	1.75	2.50	1838	.90	1.25	----------	2.00
1873	1.75	2.50	----------	4.00						1837	.88	1.25	----------	2.25
1872	1.50	2.50	2.50	4.00	1855	1.00	1.75	2.00	2.50	1836	.88	1.25	1.50	2.00
1871	1.50	2.50	----------	5.00	1854	1.00	1.75	1.75	2.50					
					1853	1.00	1.50	1.75	2.25	1835	.75	1.25	1.75	2.00
1870	1.75	2.50	3.00	5.00	1852	1.00	1.50	1.75	2.25	1834	.75	1.25	1.50	2.00
1869	1.75	3.00	----------	4.00	1851	.88	1.50	----------	2.25	1833	.75	1.25	1.50	1.75
1868	----------	2.50	----------	5.00						1832	.75	1.00	1.50	1.75
1867	----------	2.75	----------	4.00	1850	.88	1.50	1.50	2.00	1831	.75	1.25	1.50	1.75
1866	1.50	3.00	3.50	4.00	1849	.88	1.63	1.75	2.00					
					1848	.88	1.38	1.75	2.25	1830	.75	1.25	1.31	1.75
1865	1.50	2.50	2.50	4.00	1847	.88	1.25	1.50	2.00	1829	.75	1.25	1.25	1.50
1864	1.50	2.25	2.50	4.00	1846	.75	1.00	----------	2.00	1828	.71	1.00	1.50	1.50

Series D 722–727. Average Annual Earnings of Employees: 1900 to 1970

Year	Full-time employees (OBE–BEA) [1]	All employees (Lebergott) [2]				Consumer price index (1914 = 100)	Year	All employees (Lebergott) [2]				Consumer price index (1914 = 100)
		Money earnings		Real earnings (1914 dollars)				Money earnings		Real earnings (1914 dollars)		
		After deduction for unemployment	When employed	After deduction for unemployment	When employed			After deduction for unemployment	When employed	After deduction for unemployment	When employed	
	722	723	724	725	726	727		723	724	725	726	727
1970	$7,564	----------	----------	----------	----------	----------	1928	$1,297	$1,384	$759	$810	170.9
1969	7,095	----------	----------	----------	----------	----------	1927	1,312	1,380	759	799	172.8
1968	6,657	----------	----------	----------	----------	----------	1926	1,310	1,346	743	764	176.2
1967	6,230	----------	----------	----------	----------	----------	1925	1,253	1,317	717	753	174.8
1966	5,967	----------	----------	----------	----------	----------						
							1924	1,196	1,293	702	759	170.3
1965	5,710	----------	----------	----------	----------	----------	1923	1,231	1,278	725	753	169.7
1964	5,503	----------	----------	----------	----------	----------	1922	1,067	1,190	639	718	166.9
1963	5,243	----------	----------	----------	----------	----------	1921	1,009	1,227	566	689	178.1
1962	5,065	----------	----------	----------	----------	----------	1920	1,236	1,342	619	672	199.7
1961	4,884	----------	----------	----------	----------	----------						
							1919	1,117	1,142	648	662	172.5
1960	4,743	$4,780	$5,130	$1,620	$1,750	294.9	1918	972	994	648	663	150.0
1959	4,594	4,626	4,965	1,592	1,709	290.5	1917	748	807	586	632	127.7
1958	4,375	4,308	4,707	1,550	1,635	287.9	1916	647	705	595	648	108.7
1957	4,230	4,301	4,546	1,534	1,622	280.3	1915	547	635	541	628	101.1
1956	4,055	4,115	4,342	1,519	1,603	270.9						
							1914	555	639	555	639	100.0
1955	3,851	3,899	4,128	1,461	1,547	266.9	1913	587	633	594	640	98.9
1954	3,667	3,679	3,953	1,375	1,478	267.5	1912	554	601	570	618	97.2
1953	3,581	3,710	3,852	1,391	1,444	266.7	1911	520	587	546	616	95.2
1952	3,402	3,518	3,660	1,331	1,384	264.4	1910	517	575	546	607	94.7
1951	3,217	3,305	3,452	1,279	1,335	258.5						
							1909	496	545	543	597	91.3
1950	2,992	2,963	3,180	1,237	1,328	239.5	1908	446	519	487	567	91.5
1949	2,844	2,769	3,000	1,167	1,265	237.2	1907	502	529	535	564	93.8
1948	2,786	2,788	2,933	1,164	1,225	239.5	1906	488	504	541	559	90.2
1947	2,589	2,468	2,602	1,108	1,168	222.7	1905	451	490	510	554	88.5
1946	2,359	2,343	2,473	1,205	1,272	194.4						
							1904	432	482	486	541	88.8
1945	2,190	2,303	2,364	1,284	1,318	179.3	1903	441	477	501	542	88.0
1944	2,109	2,260	2,292	1,289	1,307	175.3	1902	437	472	506	547	86.3
1943	1,951	2,053	2,107	1,190	1,221	172.5	1901	401	438	470	513	85.4
1942	1,709	1,665	1,778	1,025	1,094	162.5	1900	375	418	445	496	84.3
1941	1,443	1,261	1,492	861	1,018	146.5						
1940	1,299	1,052	1,315	754	943	139.5						
1939	1,264	967	1,266	699	915	138.4						
1938	1,230	901	1,221	641	868	140.6						
1937	1,258	1,008	1,259	704	880	143.1						
1936	1,184	874	1,146	633	830	138.1						
1935	1,137	799	1,115	584	816	136.7						
1934	1,091	758	1,066	569	800	133.3						
1933	1,048	678	1,045	526	811	128.8						
1932	1,120	754	1,141	554	838	136.1						
1931	1,275	995	1,298	657	857	151.5						
1930	1,368	1,207	1,388	725	834	166.4						
1929	1,405	1,356	1,425	793	834	170.9						

[1] OBE = Office of Business Economics (1929–1967); BEA = Bureau of Economic Analysis (1928–1970).

[2] Excludes Armed Forces.

Series D 728–734. Daily Wages of Five Skilled Occupations and of Laborers, in Manufacturing Establishments: 1860 to 1880

Year	Skilled occupations						Laborers	Year	Skilled occupations						Laborers
	Average daily wage [1]	Blacksmiths	Carpenters	Engineers	Machinists	Painters			Average daily wage [1]	Blacksmiths	Carpenters	Engineers	Machinists	Painters	
	728	729	730	731	732	733	734		728	729	730	731	732	733	734
1880	$2.26	$2.31	$2.15	$2.17	$2.45	$2.21	$1.32	1870	$2.61	$2.68	$2.64	$2.47	$2.67	$2.67	$1.52
1879	2.16	2.21	2.05	2.08	2.35	2.08	1.27	1869	2.60	2.73	2.68	2.40	2.66	2.61	1.53
1878	2.15	2.23	2.03	2.06	2.29	2.04	1.26	1868	2.58	2.73	2.67	2.35	2.66	2.52	1.51
1877	2.18	2.27	2.06	2.11	2.29	2.09	1.28	1867	2.59	2.69	2.75	2.38	2.73	2.47	1.53
1876	2.24	2.32	2.12	2.17	2.34	2.20	1.33	1866	2.62	2.74	2.77	2.44	2.73	2.40	1.53
1875	2.39	2.41	2.42	2.33	2.47	2.35	1.39	1865	2.50	2.61	2.68	2.33	2.56	2.31	1.48
1874	2.48	2.52	2.42	2.40	2.53	2.60	1.43	1864	2.33	2.42	2.58	2.19	2.28	2.25	1.39
1873	2.62	2.70	2.52	2.50	2.73	2.68	1.52	1863	2.00	2.07	2.09	1.87	2.05	2.02	1.20
1872	2.64	2.69	2.59	2.53	2.72	2.70	1.52	1862	1.78	1.77	1.97	1.72	1.77	1.76	1.08
1871	2.58	2.66	2.57	2.38	2.72	2.67	1.50	1861	1.67	1.65	1.80	1.65	1.66	1.64	1.04
								1860	1.62	1.64	1.65	1.61	1.61	1.62	1.03

[1] Weighted by number of establishments; unweighted within each occupation.

Series D 735–738. Average Annual and Daily Earnings of Nonfarm Employees: 1860 to 1900

Year	Annual earnings		Consumer price index (1914 = 100)	Year	Annual earnings		Consumer price index (1914 = 100)	Daily earnings
	Money (when employed)	Real (1914 = 100)			Money (when employed)	Real (1914 = 100)		
	735	736	737		735	736	737	738
1900	$483	$573	84.3	1880	$386	$395	97.8	$1.16
1899	470	563	83.5	1879	373	391	95.4	1.12
1898	440	527	83.5	1878	379	397	95.4	1.14
1897	442	529	83.5	1877	389	388	100.2	1.17
1896	439	521	84.3	1876	403	393	102.6	1.21
1895	438	520	84.3	1875	423	403	105.0	1.27
1894	420	484	86.7	1874	439	403	109.0	1.32
1893	458	505	90.7	1873	466	407	114.5	1.40
1892	482	527	91.5	1872	486	416	116.9	1.46
1891	480	525	91.5	1871	482	386	116.9	1.45
1890	475	519	91.5	1870	489	375	124.9	1.47
1889	471	510	92.3	1869	496	380	130.4	1.49
1888	466	505	92.3	1868	499	367	136.0	1.50
1887	462	509	90.7	1867	479	338	141.6	1.44
1886	453	499	90.7	1866	489	322	151.9	1.47
1885	446	492	90.7	1865	512	328	155.9	1.54
1884	441	478	92.3	1864	506	421	150.3	1.52
1883	438	459	95.4	1863	459	382	120.1	1.38
1882	428	431	99.4	1862	383	398	96.2	1.15
1881	409	415	98.6	1861	370	439	84.3	1.11
				1860	363	457	79.5	1.09

Series D 739–764. Average Annual Earnings Per Full-Time Employee, by Industry: 1900 to 1970

[In current dollars]

Year	Agriculture, forestry, and fisheries [1]	Manufacturing	Mining				Construction	Transportation				Communications and public utilities		
			Total	Anthracite coal	Bituminous coal	Metal		Total	Railroad	Water	Local	Total	Gas and electric	Telephone and telegraph
	739	740	741	742	743	744	745	746	747	748	749	750	751	752
1970	3,063	8,150	9,262	9,555		9,137	9,293	9,928	9,775	10,750	6,614	8,897	9,695	8,141
1969	2,848	7,775	8,619	8,522		8,615	8,615	9,318	9,230	9,990	6,296	8,388	9,013	7,721
1968	2,633	7,347	7,964	7,602		8,205	7,953	8,676	8,585	9,120	6,101	7,878	8,435	7,227
1967	2,434	6,880	7,556	7,326		7,700	7,417	8,129	8,034	8,619	5,801	7,413	7,964	6,796
1966	2,260	6,643	7,134	6,878		7,432	7,033	7,785	7,660	8,310	5,615	7,166	7,605	6,616
1965	2,053	6,389	6,785	6,444		7,212	6,595	7,485	7,415	7,770	5,438	6,899	7,292	6,379
1964	1,920	6,196	6,521	6,063		7,012	6,332	7,163	7,025	7,507	5,286	6,704	7,070	6,190
1963	1,771	5,920	6,240	5,669		6,667	6,018	6,852	6,762	7,317	5,120	6,440	6,751	5,888
1962	1,728	5,730	6,017	5,434		6,560	5,846	6,638	6,610	7,059	4,985	6,194	6,493	5,668
1961	1,678	5,507	5,828	5,289		6,337	5,618	6,361	6,392	6,597	4,854	5,928	6,236	5,402
1960	1,658	5,352	5,676	4,533	5,376	6,147	5,443	6,185	6,228	6,488	4,771	5,681	5,992	5,130
1959	1,596	5,221	5,518	4,368	5,322	5,845	5,213	5,995	6,054	6,014	4,646	5,445	5,753	4,902
1958	1,549	4,946	5,203	4,261	4,831	5,452	5,020	5,691	5,812	5,866	4,442	5,111	5,426	4,558
1957	1,518	4,786	5,197	4,345	5,162	5,504	4,881	5,432	5,416	5,912	4,332	4,883	5,212	4,344
1956	1,454	4,589	5,004	4,167	4,944	5,393	4,645	5,129	5,080	5,524	4,177	4,676	4,971	4,174
1955	1,376	4,356	4,689	3,871	4,550	5,076	4,388	4,823	4,697	5,299	4,030	4,471	4,704	4,046
1954	1,346	4,123	4,383	3,550	4,044	4,723	4,301	4,603	4,541	5,093	3,833	4,278	4,540	3,827
1953	1,412	4,053	4,361	3,389	4,194	4,972	4,207	4,476	4,415	5,142	3,746	4,087	4,356	3,654
1952	1,423	3,832	4,062	3,500	3,760	4,612	3,978	4,269	4,335	4,552	3,594	3,844	4,088	3,443
1951	1,387	3,608	3,885	3,386	3,831	4,147	3,702	4,044	4,161	4,141	3,462	3,583	3,803	3,220
1950	1,282	3,302	3,460	3,107	3,268	3,608	3,333	3,714	3,778	3,732	3,274	3,346	3,534	3,036
1949	1,312	3,095	3,216	2,896	2,930	3,421	3,209	3,568	3,703	3,421	3,155	3,180	3,344	2,911
1948	1,340	3,038	3,396	3,420	3,383	3,327	3,126	3,468	3,607	3,467	3,101	3,028	*3,187	2,776
1947	1,276	2,793	3,113	3,125	3,212	3,000	2,829	3,169	3,211	3,748	3,020	2,815	2,994	2,583
1946	1,200	2,517	2,719	2,890	2,724	2,636	2,537	2,973	3,049	3,415	2,886	2,582	2,697	2,413
1945	1,125	2,517	2,621	2,685	2,629	2,551	2,600	2,734	2,711	3,583	2,596	2,446	2,596	2,246
1944	1,021	2,517	2,499	2,525	2,535	2,458	2,602	2,679	2,714	3,624	2,458	2,275	2,467	2,035
1943	860	2,349	2,162	2,119	2,115	2,333	2,503	2,493	2,585	3,388	2,280	2,098	2,284	1,878
1942	669	2,023	1,796	1,753	1,715	2,045	2,191	2,183	2,303	2,729	1,990	1,891	2,040	1,715
1941	496	1,653	1,579	1,467	1,500	1,771	1,635	1,885	2,030	1,854	1,664	1,766	1,870	1,633
1940	407	1,432	1,388	1,297	1,235	1,610	1,330	1,756	1,906	1,648	1,559	1,717	1,795	1,610
1939	385	1,363	1,367	1,409	1,197	1,515	1,268	1,723	1,877	1,557	1,569	1,691	1,766	1,600
1938	369	1,296	1,282	1,315	1,050	1,453	1,193	1,676	1,849	1,299	1,529	1,673	1,749	1,580
1937	360	1,376	1,366	1,388	1,170	1,630	1,278	1,644	1,774	1,536	1,505	1,600	1,705	1,481
1936	308	1,287	1,263	1,408	1,103	1,380	1,178	1,582	1,724	1,373	1,433	1,520	1,615	1,420
1935	288	1,216	1,154	1,414	957	1,239	1,027	1,492	1,645	1,088	1,361	1,483	1,589	1,378
1934	253	1,153	1,108	1,500	900	1,133	942	1,393	1,505	1,055	1,310	1,424	1,510	1,338
1933	232	1,086	990	1,435	748	1,040	869	1,334	1,439	1,059	1,219	1,351	1,453	1,245
1932	250	1,150	1,016	1,452	723	1,060	907	1,373	1,461	1,038	1,328	1,440	1,542	1,335
1931	315	1,369	1,221	1,602	909	1,291	1,238	1,549	1,661	1,153	1,500	1,514	1,600	1,436
1930	388	1,488	1,424	1,750	1,119	1,551	1,526	1,610	1,717	1,214	1,587	1,499	1,603	1,410
1929	401	1,543	1,526	1,728	1,293	1,613	1,674	1,643	1,749	1,275	1,598	1,478	1,589	1,386
1928	385	1,534	1,478	1,825	1,342	1,516	1,719	1,607	1,720	1,255	1,553	1,474	1,591	1,378
1927	387	1,502	1,590	1,851	1,446	1,485	1,708	1,579	1,687	1,220	1,549	1,440	1,558	1,343
1926	386	1,476	1,597	2,124	1,434	1,463	1,664	1,562	1,671	1,238	1,530	1,427	1,571	1,317
1925	382	1,450	1,580	2,129	1,427	1,455	1,655	1,539	1,655	1,227	1,502	1,378	1,552	1,257
1924	375	1,427	1,703	2,117	1,621	1,378	1,620	1,509	1,627	1,219	1,472	1,371	1,544	1,250
1923	372	1,403	1,822	2,014	1,848	1,497	1,614	1,484	1,631	1,132	1,413	1,292	1,429	1,199
1922	331	1,283	1,300	1,814	1,165	1,345	1,297	1,461	1,630	1,088	1,394	1,265	1,423	1,176
1921	344	1,346	1,757	1,868	1,808	1,482	1,380	1,533	1,664	1,339	1,470	1,276	1,497	1,161
1920	528	1,532	1,684	1,777	1,633	1,639	1,710	1,645	1,807	1,499	1,435	1,238	1,489	1,115
1919	463	1,293	1,370	1,508	1,276	1,611	1,387	1,352	1,477	1,305	1,172	1,035	1,278	906
1918	401	1,107	1,399	1,426	1,427	1,499	1,191	1,265	1,393	1,086	938	866	1,081	753
1917	327	883	1,138	1,019	1,150	1,352	1,001	885	968	851	737	727	844	675
1916	259	751	889	711	884	1,152	882	768	848	669	674	640	672	647
1915	236	661	716	671	694	976	827	711	797	581	632	607	637	614
1914	234	696	666	636	640	923	838	695	778	484	623	579	644	557
1913	236	689	749	659	743	----	827	667	743	467	595	560	654	515
1912	232	651	723	616	723	----	791	634	705	437	570	527	635	467
1911	225	632	671	633	652	----	779	624	690	417	579	658	641	488
1910	223	651	668	604	657	----	804	607	662	420	575	516	616	461
1909	221	599	625	556	617	865	731	583	630	423	567	531	612	488
1908	220	548	590	553	574	----	721	591	652	427	549	516	589	482
1907	220	598	697	633	688	----	714	592	646	427	556	521	617	471
1906	219	577	636	550	633	----	693	560	594	417	559	497	575	460
1905	199	561	610	579	589	----	659	543	576	410	546	477	538	450
1904	221	538	599	638	554	----	644	540	587	407	516	487	550	448
1903	191	548	619	544	615	----	637	528	580	403	492	483	544	443
1902	191	537	582	289	577	794	611	472	550	400	487	473	518	444
1901	182	511	531	420	548	----	590	505	537	393	508	496	506	433
1900	178	487	479	340	516	----	593	505	536	390	510	470	506	433

See footnotes at end of table.

Series D 739–764. Average Annual Earnings Per Full-Time Employee, by Industry: 1900 to 1970—Con.

[In current dollars]

Year	Wholesale and retail trade	Finance, insurance, and real estate	Services						Government			
			Total	Personal [2]	Medical and other health services	Domestic	Nonprofit	Educational services	Total	State and local [3]	Public education	Federal civilian [4]
	753	754	755	756	757	758	759	760	761	762	763	764
1970	6,886	8,026	5,946	5,410	5,687	3,535	5,492	5,494	7,965	7,818	8,141	10,597
1969	6,540	7,680	5,505	5,177	5,043	3,307	5,177	5,083	7,189	7,231	7,529	9,442
1968	6,206	7,235	5,088	4,919	4,579	3,104	4,794	4,718	6,717	6,796	7,092	8,746
1967	5,870	6,717	4,770	4,653	4,197	2,952	4,537	4,410	6,222	6,324	6,605	7,985
1966	5,636	6,347	4,514	4,422	3,884	2,781	4,346	4,132	5,988	5,906	6,155	7,841
1965	5,436	6,055	4,295	4,253	3,736	2,655	4,171	3,887	5,717	5,616	5,847	7,614
1964	5,261	5,851	4,130	4,120	3,641	2,556	4,035	3,684	5,488	5,394	5,663	7,267
1963	5,071	5,595	3,924	3,935	3,452	2,470	3,843	3,465	5,205	5,180	5,448	6,792
1962	4,894	5,410	3,783	3,805	3,317	2,416	3,724	3,257	4,993	5,017	5,314	6,450
1961	4,719	5,260	3,642	3,664	3,184	2,363	3,640	3,078	4,859	4,787	5,097	6,274
1960	4,597	5,030	3,513	3,550	3,061	2,356	3,538	2,913	4,676	4,550	4,752	5,895
1959	4,442	4,882	3,364	3,414	2,907	2,213	3,475	2,802	4,499	4,345	4,522	5,682
1958	4,246	4,628	3,220	3,240	2,787	2,154	3,371	2,677	4,328	4,171	4,343	5,501
1957	4,109	4,432	3,110	3,122	2,660	2,075	3,239	2,599	4,045	3,980	4,085	4,960
1956	3,936	4,243	2,963	2,975	2,523	2,017	3,073	2,507	3,892	3,775	3,827	4,798
1955	3,755	4,051	2,831	2,827	2,497	1,956	3,004	2,380	3,708	3,599	3,608	4,589
1954	3,595	3,897	2,736	2,717	2,405	1,874	2,935	2,326	3,499	3,479	3,510	4,311
1953	3,470	3,716	2,623	2,609	2,338	1,805	2,801	2,265	3,385	3,317	3,314	4,217
1952	3,298	3,539	2,489	2,469	2,230	1,707	2,644	2,210	3,279	3,177	3,169	4,028
1951	3,178	3,390	2,321	2,336	2,099	1,588	2,524	2,169	3,113	2,981	2,998	3,768
1950	3,045	3,223	2,183	2,223	1,998	1,502	2,412	2,099	3,014	2,786	2,794	3,494
1949	2,899	3,038	2,138	2,158	1,912	1,498	2,319	2,056	2,862	2,700	2,671	3,348
1948	2,824	2,951	2,082	2,084	1,824	1,500	2,200	2,002	2,755	2,563	2,538	3,137
1947	2,632	2,740	1,996	1,978	1,821	1,463	2,077	2,113	2,575	2,327	2,261	3,065
1946	2,378	2,570	1,863	1,854	1,605	1,411	1,984	1,802	2,351	2,117	2,025	2,801
1945	2,114	2,347	1,688	1,709	1,401	1,312	1,876	1,641	2,052	1,962	1,882	2,646
1944	1,946	2,191	1,538	1,570	1,262	1,140	1,795	1,562	1,924	1,822	1,780	2,677
1943	1,781	2,041	1,347	1,384	1,127	919	1,679	1,469	1,777	1,713	1,608	2,628
1942	1,608	1,885	1,132	1,196	1,036	706	1,482	1,344	1,623	1,592	1,512	2,226
1941	1,478	1,777	1,020	1,075	955	601	1,379	1,264	1,388	1,534	1,462	1,970
1940	1,382	1,725	953	1,042	927	554	1,408	1,240	1,344	1,502	1,435	1,894
1939	1,360	1,729	952	1,034	908	544	1,546	1,234	1,337	1,476	1,403	1,843
1938	1,352	1,731	942	992	899	527	1,529	1,228	1,336	1,472	1,406	1,832
1937	1,352	1,788	938	978	876	558	1,497	1,211	1,355	1,441	1,367	1,797
1936	1,295	1,713	898	940	851	506	1,465	1,180	1,279	1,402	1,329	1,896
1935	1,279	1,632	873	915	829	485	1,435	1,162	1,292	1,290	1,293	1,759
1934	1,228	1,601	857	905	801	473	1,440	1,175	1,284	1,295	1,265	1,717
1933	1,183	1,555	854	889	810	460	1,442	1,189	1,328	1,338	1,300	1,673
1932	1,315	1,652	918	996	865	497	1,545	1,279	1,477	1,432	1,399	1,824
1931	1,495	1,858	1,008	1,136	919	584	1,653	1,323	1,547	1,500	1,463	1,895
1930	1,569	1,973	1,066	1,200	933	676	1,698	1,329	1,553	1,521	1,455	1,768
1929	1,594	2,062	1,079	1,219	925	731	1,712	1,312	1,551	1,504	1,445	1,933
1928	1,573	2,043	1,065	1,164	930	725	1,675	1,284	1,550	1,500	1,433	1,916
1927	1,480	2,019	1,046	1,095	931	756	1,647	1,252	1,581	1,488	1,393	1,907
1926	1,416	2,008	1,005	1,048	857	748	1,607	1,214	1,482	1,422	1,342	1,888
1925	1,359	1,997	984	1,006	916	741	1,578	1,173	1,425	1,377	1,299	1,762
1924	1,314	1,944	965	972	845	732	1,507	1,148	1,400	1,346	1,269	1,747
1923	1,272	1,896	942	941	845	711	1,454	1,130	1,378	1,336	1,239	1,704
1922	1,261	1,932	908	933	912	649	1,446	1,109	1,358	1,316	1,206	1,694
1921	1,260	1,860	905	932	983	649	1,392	1,022	1,317	1,296	1,109	1,683
1920	1,270	1,758	912	940	752	665	1,286	894	1,245	1,164	970	1,707
1919	1,070	1,589	757	780	606	538	1,104	784	1,156	1,022	852	1,609
1918	941	1,438	646	669	520	432	1,058	721	1,023	902	725	1,415
1917	828	1,439	571	580	451	389	953	679	880	832	682	1,318
1916	760	1,406	523	524	407	357	907	631	844	826	636	1,273
1915	720	1,399	493	490	381	342	876	623	753	804	608	1,224
1914	706	1,368	487	471	366	355	837	610	798	788	593	1,197
1913	685	1,349	479	459	357	357	802	603	788	779	575	1,169
1912	666	1,338	469	453	352	350	784	568	757	724	556	1,140
1911	666	1,355	462	453	352	343	763	560	739	712	535	1,113
1910	630	1,301	447	435	338	337	715	549	725	699	518	1,096
1909	609	1,263	439	420	326	331	741	546	710	696	501	1,071
1908	593	1,218	429	403	313	328	743	545	683	695	479	1,001
1907	580	1,180	420	394	306	316	741	544	675	694	453	1,014
1906	569	1,146	393	381	296	286	689	528	651	664	430	999
1905	561	1,115	385	376	292	278	677	511	628	646	412	976
1904	551	1,099	379	364	283	277	677	509	614	640	397	971
1903	537	1,078	370	354	275	270	679	532	602	621	377	1,009
1902	521	1,051	361	344	267	264	657	489	584	612	364	967
1901	510	1,037	344	332	258	243	651	483	572	605	354	974
1900	508	1,040	340	330	256	240	652	469	584	590	345	940

[1] Prior to 1929, agriculture only.
[2] Data prior to 1929 not comparable with later figures: 1900–1928, Lebergott estimates; 1929–1970, BLS estimates. See text.
[3] Prior to 1929, general government only.
[4] Prior to 1929, includes work relief.

Series D 765–778. Average Hours and Average Earnings in Manufacturing, in Selected Nonmanufacturing Industries, and for "Lower-Skilled" Labor 1890 to 1926

Year	Manufacturing industries						Bituminous coal mining		Railroads, full-time weekly earnings	Building trades (union)		Postal employees		"Lower-skilled" labor, full-time weekly earnings
	Total		Union		Payroll									
	Weekly hours	Hourly earnings	Weekly hours	Hourly earnings	Weekly hours	Hourly earnings	Weekly hours	Hourly earnings		Weekly hours	Hourly earnings	Weekly hours	Hourly earnings	
	765	766	767	768	769	770	771	772	773	774	775	776	777	778
1926	50.3	$0.647	45.9	$1.007	52.2	$0.488	48.4	$0.719	$32.16	43.8	$1.313	47.2	$0.867	----
1925	50.3	.645	45.9	.989	52.2	.493	48.5	.724	31.80	43.9	1.229	47.2	.836	----
1924	50.4	.656	46.1	.970	52.1	.502	48.5	.811	30.66	43.8	1.188	47.2	.788	----
1923	51.0	.620	46.3	.913	53.0	.491	48.4	.864	30.24	43.9	1.107	47.2	.762	----
1922	51.2	.574	46.2	.873	53.4	.443	48.4	.834	30.30	43.8	1.006	47.4	.748	----
1921	50.7	.607	46.1	.921	52.7	.467	48.2	.846	31.14	43.8	1.076	47.4	.759	----
1920	51.0	.663	45.7	.884	53.5	.561	48.2	.784	34.14	43.8	1.052	48.0	.739	$25.98
1919	52.3	.529	46.2	.706	55.1	.448	48.4	.699	27.66	44.0	.780	48.0	.648	23.83
1918	53.6	.448	47.2	.602	56.6	.374	48.7	.599	26.40	44.1	.684	48.0	.536	21.69
1917	54.6	.364	47.6	.499	57.9	.299	49.8	.484	18.84	44.4	.624	48.0	.484	17.18
1916	54.9	.320	48.0	.464	58.2	.250	51.6	.379	16.62	44.5	.587	48.0	.471	13.78
1915	55.0	.287	48.6	.459	58.2	.212	51.6	.337	15.78	44.8	.569	48.0	.466	10.65
1914	55.2	.287	48.8	.438	58.3	.213	51.6	.323	15.36	44.7	.567	48.0	.464	10.78
1913	55.5	.285	49.2	.430	58.8	.211	51.6	.316	15.12	44.9	.557	48.0	.450	10.84
1912	56.0	.274	49.5	.416	59.3	.200	51.6	.320	14.79	45.0	.544	48.0	.437	10.32
1911	56.4	.263	49.8	.411	59.6	.191	51.6	.305	14.49	45.0	.531	48.0	.429	10.13
1910	56.6	.260	50.1	.403	59.8	.188	51.6	.299	14.07	45.2	.520	48.0	.420	10.65
1909	56.8	.252	50.3	.392	60.2	.179	51.6	.292	13.59	45.6	.510	48.0	.409	10.37
1908	56.8	.250	50.4	.388	60.3	.175	51.6	.293	13.47	45.6	.505	48.0	.395	10.22
1907	57.3	.257	50.8	.396	60.6	.186	51.6	.288	13.35	45.7	.498	48.0	.378	10.76
1906	57.3	.248	51.0	.385	60.7	.176	51.6	.293	12.84	45.9	.481	48.0	.369	10.34
1905	57.7	.239	51.1	.378	61.1	.168	51.6	.276	12.45	46.1	.454	48.0	.375	9.91
1904	57.7	.236	51.1	.374	61.1	.164	51.6	.271	12.36	46.1	.443	48.0	.373	9.84
1903	57.9	.256	51.4	.372	61.2	.167	52.2	.267	12.12	46.3	.436	48.0	.372	9.64
1902	58.3	.227	51.8	.362	61.5	.162	52.3	.244	11.73	46.7	.413	48.0	.374	9.25
1901	58.7	.219	52.4	.350	61.9	.153	52.4	.231	11.49	47.5	.391	48.0	.375	9.05
1900	59.0	.216	53.0	.341	62.1	.152	52.6	.204	11.43	48.3	.374	48.0	.371	8.83
1899	59.1	.209	53.0	.338	62.1	.146	52.7	.185	11.37	48.9	.361	48.0	.370	8.70
1898	59.3	.204	53.4	.331	62.2	.143	52.8	.170	11.31	49.5	.348	48.0	.376	8.53
1897	59.1	.203	53.4	.330	61.9	.141	60.0	.138	11.25	49.8	.346	48.0	.381	8.40
1896	59.2	.205	53.5	.330	62.1	.143	60.0	.147	11.22	50.1	.343	48.0	.378	8.46
1895	59.5	.200	53.5	.327	62.3	.141	60.0	.158	11.22	50.3	.341	48.0	.375	7.45
1894	59.1	.200	53.6	.326	61.7	.140	60.0	.171	11.25	50.5	.339	48.0	.368	8.34
1893	59.7	.205	53.9	.331	62.2	.151	60.0	.188	11.37	50.4	.347	48.0	.361	8.73
1892	59.8	.203	54.0	.333	62.3	.147	60.0	.179	11.46	50.6	.348	48.0	.360	8.75
1891	59.7	.202	54.0	.328	62.1	.148	60.0	.169	11.27	51.0	.341	48.0	.358	9.74
1890	60.0	.199	54.4	.324	62.2	.149	60.0	.180	11.38	51.3	.341	48.0	.352	8.71

Series D 779–793. Average Annual Earnings in All and Selected Industries and in Occupations: 1890 to 1926

Year	All industries		Wage earners, manufacturing	Wage earners, steam railroads	Street railways	Telephones	Telegraphs	Gas and electricity	Clerical workers, mfg. and steam railroads	Bituminous coal mining	Farm labor	Federal employees [1]	Postal employees	Public school teachers	Ministers
	Incl. farm labor	Excl. farm labor													
	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793
1926	$1,376	$1,473	$1,309	$1,613	$1,566	$1,117	$1,215	$1,477	$2,310	$1,247	$593	$1,809	$2,128	$1,277	$1,826
1925	1,336	1,434	1,280	1,597	1,565	1,108	1,161	1,448	2,239	1,141	587	1,776	2,051	1,263	1,769
1924	1,303	1,402	1,240	1,570	1,544	1,104	1,150	1,436	2,196	1,120	574	1,708	1,934	1,247	1,678
1923	1,299	1,393	1,254	1,585	1,493	1,069	1,133	1,355	2,126	1,246	572	1,658	1,870	1,224	1,620
1922	1,201	1,305	1,149	1,591	1,436	1,064	1,110	1,343	2,067	954	508	1,625	1,844	1,188	1,622
1921	1,233	1,349	1,180	1,632	1,539	1,038	1,159	1,364	2,134	1,013	522	1,593	1,870	1,082	1,556
1920	1,407	1,489	1,358	1,817	1,608	980	1,145	1,432	2,160	1,386	810	1,648	1,844	936	1,428
1919	1,201	1,272	1,158	1,509	1,387	844	967	1,291	1,914	1,097	706	1,520	1,618	810	1,238
1918	1,047	1,115	980	1,424	1,111	690	831	1,092	1,697	1,211	604	1,380	1,339	689	1,186
1917	830	887	774	989	872	616	769	853	1,477	976	481	1,295	1,207	648	1,069
1916	708	765	651	867	798	567	806	679	1,359	750	388	1,211	1,175	605	1,017
1915	633	687	568	815	748	529	792	644	1,267	589	355	1,152	1,162	578	984
1914	627	682	580	795	737	476	742	651	1,257	543	351	1,140	1,157	564	938
1913	621	675	578	760	704	438	717	661	1,236	631	360	1,136	1,124	547	899
1912	592	646	550	721	674	438	669	641	1,209	614	348	1,128	1,091	529	879
1911	575	629	537	705	685	419	670	648	1,213	553	338	1,116	1,071	509	856
1910	574	630	558	677	681	417	649	622	1,156	558	336	1,108	1,049	492	802
1909	543	594	518	644	671	430	622	618	1,136	524	328	1,106	1,021	476	831
1908	516	563	475	667	650	420	639	595	1,111	487	324	1,102	987	455	833
1907	542	595	522	661	658	412	635	623	1,091	580	319	1,094	944	431	831
1906	520	569	506	607	662	412	592	581	1,074	537	315	1,084	921	409	773
1905	503	554	494	589	646	401	581	543	1,076	500	302	1,072	935	392	759
1904	490	540	477	600	610	392	601	556	1,056	470	290	1,066	931	377	759
1903	489	543	486	593	582	397	573	----	1,037	522	277	1,067	928	358	761
1902	467	519	473	562	576	408	544	----	1,025	490	264	1,061	934	346	737
1901	454	508	456	549	601	----	----	615	1,009	465	255	1,047	936	337	730
1900	438	490	435	548	604	----	----	620	1,011	438	247	1,033	925	328	781
1899	428	480	426	543	591	----	----	612	1,004	379	239	1,017	924	318	722
1898	417	468	412	542	558	----	----	698	1,010	316	228	1,025	939	306	739
1897	411	462	408	543	552	----	----	703	970	270	224	1,057	950	298	750
1896	411	462	406	544	531	----	----	665	954	282	220	1,084	944	294	764
1895	415	468	416	546	509	----	----	640	941	307	216	1,104	935	289	787
1894	400	448	386	546	508	----	----	670	928	292	214	1,110	919	283	824
1893	430	480	420	563	526	----	----	627	923	383	232	1,101	902	276	809
1892	445	495	446	563	535	----	----	625	885	393	238	1,096	899	270	793
1891	438	487	442	554	529	----	----	587	882	377	236	----	894	264	786
1890	438	486	439	560	557	----	----	687	848	406	233	----	878	256	794

[1] Executive departments.

Series D 794–801. Indexes of Wages, Hours, and Earnings in Manufacturing and in the Building Trades: 1890 to 1907

[1890–1899 = 100]

Year	All manufacturing				Building trades				Year	All manufacturing				Building trades			
	Average hourly wages [1]	Average full-time weekly earnings [1]	Average full-time weekly hours		Average hourly wages	Average full-time weekly earnings	Average full-time weekly hours			Average hourly wages [1]	Average full-time weekly earnings [1]	Average full-time weekly hours		Average hourly wages	Average full-time weekly earnings	Average full-time weekly hours	
			Bureau of Labor [1]	Wolman			Bureau of Labor	Wolman				Bureau of Labor [1]	Wolman			Bureau of Labor	Wolman
	794	795	796	797	798	799	800	801		794	795	796	797	798	799	800	801
1907	128.8	122.4	95.0	.....	144.6	131.0	90.6	87.8	1898	100.2	99.9	99.7	100.0	102.8	100.8	98.1	98.7
1906	124.2	118.5	95.4	.....	140.2	127.4	90.9	.....	1897	99.6	99.2	99.6	99.6	101.3	99.9	98.6	99.2
									1896	99.7	99.5	99.8	99.8	99.9	99.1	99.2	99.6
1905	118.9	114.0	95.9	.....	132.2	120.6	91.2	.....									
1904	117.0	112.2	95.9	.....	129.7	118.4	91.3	.....	1895	98.3	98.4	100.1	100.0	98.4	98.7	100.3	100.0
1903	116.3	112.3	96.6	97.3	126.8	116.4	91.8	93.1	1894	97.9	97.7	99.8	99.5	97.6	98.3	100.7	100.5
1902	112.2	109.2	97.3	98.1	121.1	112.1	92.6	92.9	1893	100.9	101.2	100.3	100.1	100.0	100.5	100.5	100.4
1901	108.0	105.9	98.1	98.6	114.5	108.1	94.4	94.4	1892	100.8	101.3	100.5	100.6	99.9	100.6	100.7	100.5
									1891	100.3	100.8	100.5	100.3	97.9	99.7	101.8	101.5
1900	105.5	104.1	98.7	99.1	109.9	105.0	95.5	96.3	1890	100.3	101.0	100.7	100.5	97.0	99.4	102.5	102.2
1899	102.0	101.2	99.2	99.6	105.3	102.7	97.5	97.4									

[1] Includes the building trades and other hand and neighborhood trades.

Series D 802–810. Earnings and Hours of Production Workers in Manufacturing: 1909 to 1970

Year	All manufacturing			Durable goods			Nondurable goods		
	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings
	802	803	804	805	806	807	808	809	810
1970	$3.36	39.8	$133.73	$3.56	40.3	$143.47	$3.08	39.1	$120.43
1969	3.19	40.6	129.51	3.38	41.3	139.59	2.91	39.7	115.53
1968	3.01	40.7	122.51	3.19	41.4	132.07	2.74	39.8	109.05
1967	2.83	40.6	114.90	3.00	41.2	123.60	2.57	39.7	102.03
1966	2.72	41.3	112.34	2.90	42.1	122.09	2.45	40.2	98.49
1965	2.61	41.2	107.53	2.79	42.0	117.18	2.36	40.1	94.64
1964	2.53	40.7	102.97	2.71	41.4	112.19	2.29	39.7	90.91
1963	2.46	40.5	99.63	2.63	41.1	108.09	2.22	39.6	87.91
1962	2.39	40.4	96.56	2.56	40.9	104.70	2.17	39.6	85.93
1961	2.32	39.8	92.34	2.49	40.3	100.35	2.11	39.3	82.92
1960	2.26	39.7	89.72	2.43	40.1	97.44	2.05	39.2	80.36
1959*	2.19	40.3	88.26	2.36	40.7	96.05	1.98	39.7	78.61
1958	2.11	39.2	82.71	2.26	39.5	89.27	1.91	38.8	74.11
1957	2.05	39.8	81.59	2.19	40.3	88.26	1.85	39.2	72.52
1956	1.95	40.4	78.78	2.08	41.0	85.28	1.77	39.6	70.09
1955	1.86	40.7	75.70	1.99	41.3	82.19	1.67	39.9	66.63
1954	1.78	39.6	70.49	1.90	40.1	76.19	1.62	39.0	63.18
1953	1.74	40.5	70.47	1.86	41.2	76.63	1.58	39.6	62.57
1952	1.65	40.7	67.16	1.75	41.5	72.63	1.51	39.7	59.95
1951	1.56	40.6	63.34	1.65	41.5	68.48	1.44	39.5	56.88
1950	1.44	40.5	58.32	1.52	41.1	62.43	1.35	39.7	53.48
1949	1.38	39.1	53.88	1.45	39.4	57.25	1.30	38.9	50.38
1948	1.33	40.0	53.12	1.40	40.4	56.36	1.25	39.6	49.50
1947	1.22	40.4	49.17	1.28	40.5	51.76	1.15	40.2	46.03
1946	1.08	40.3	43.32	1.14	40.4	46.22	1.00	40.5	40.30
1945	1.02	43.5	44.20	1.10	44.0	48.36	.89	42.3	37.48
1944	1.01	45.2	45.70	1.11	46.5	51.38	.84	43.1	36.38
1943	.96	45.0	43.07	1.05	46.5	48.73	.79	42.5	33.45
1942	.85	43.1	36.68	.94	45.0	42.17	.71	40.3	28.57
1941	.73	40.6	29.48	.80	42.0	33.56	.63	38.9	24.39
1940	.66	38.1	24.96	.72	39.2	28.07	.59	37.0	21.83
1939	.63	37.7	23.64	.69	37.9	26.19	.57	37.4	21.36
1938	.62	35.6	22.07	.68	34.9	23.70	.57	36.1	20.65
1937	.62	38.6	23.82	.67	39.9	26.61	.57	37.4	21.17
1936	.55	39.2	21.56	.58	40.9	28.72	.52	37.7	19.57

* Denotes first year for which figures include Alaska and Hawaii.

Series D 802–810. Earnings and Hours of Production Workers in Manufacturing: 1909 to 1970—Con.

Year	All manufacturing			Durable goods			Nondurable goods		
	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings
	802	803	804	805	806	807	808	809	810
1935	$0.54	36.6	$19.91	$0.57	37.2	$21.24	$0.52	36.1	$18.77
1934	.53	34.6	18.20	.55	33.8	18.59	.51	35.1	17.73
1933	.44	38.1	16.65	.47	34.7	16.20	.42	40.0	16.76
1932	.44	38.3	16.89	.49	32.5	15.99	.41	41.9	17.26
1931	.51	40.5	20.64			20.98			20.09
1930	.55	42.1	23.00			24.42			21.40
1929	.56	44.2	24.76			26.84			22.47
1928	.56	44.4	24.70			26.86			22.42
1927	.54	45.0	24.47			26.28			22.55
1926	.54	45.0	24.38			26.23			22.29
1925	.54	44.5	24.11			26.02			21.99
1924	.54	43.7	23.67			25.48			21.63
1923	.52	45.6	23.56			25.42			21.50
1922	.48	44.2	21.28						
1921	.51	43.1	21.94						
1920	.55	47.4	26.02						
1919	.47	46.3	21.84						
1918			19.12						
1917			14.97						
1916			12.63						
1915			11.22						
1914	.22	49.4	10.92						
1909	.19	51.0	9.74						

Series D 811–817. Earnings and Hours for Bituminous Coal–Lignite Mining and Class I Steam Railroads: 1890 to 1970

Year	Bituminous coal–lignite mining (BLS) [1]			Bituminous coal mining—average hourly compensation (Lewis)	Class I railroads [2]		
	Average weekly earnings	Average weekly hours	Average hourly earnings		Average weekly earnings	Average weekly hours	Average hourly earnings
	811	812	813	814	815	816	817
1970	$186.41	[3] 40.8	[3] $4.58		$171.94	44.2	$3.89
1969	169.18	[3] 40.1	[3] 4.24		162.66	44.2	3.68
1968	155.17	[3] 40.2	[3] 3.86		151.02	43.9	3.44
1967	153.28	[3] 40.7	[3] 3.75		139.97	43.2	3.24
1966	149.74	[3] 40.8	[3] 3.66		135.65	43.9	3.09
1965	140.26	[3] 40.2	[3] 3.49		130.80	43.6	3.00
1964	128.91	[3] 39.2	[3] 3.30		121.80	43.5	2.80
1963	121.43	[3] 38.9	[3] 3.15		118.40	42.9	2.76
1962	114.46	[3] 37.0	[3] 3.12		115.87	42.6	2.72
1961	112.01	35.9	3.12		112.94	42.3	2.67
1960	112.41	35.8	3.14		108.84	41.7	2.61
1959	111.34	35.8	3.11		106.43	41.9	2.54
1958	97.57	33.3	2.93		101.50	41.6	2.44
1957	106.00	36.3	2.92	$3.93	94.24	41.7	2.26
1956	102.00	37.5	2.72	3.66	88.40	41.7	2.12
1955	92.13	37.3	2.47	3.37	82.12	41.9	1.96
1954	77.52	32.3	2.40	3.20	78.74	40.8	1.93
1953	81.84	34.1	2.40	3.14	76.33	40.6	1.88
1952	75.04	33.8	2.22	2.84	74.30	40.6	1.83
1951	74.69	34.9	2.14	2.73	70.93	41.0	1.73
1950	67.46	34.7	1.94	2.46	64.14	40.8	1.57
1949	60.63	32.3	1.88	2.29	62.36	43.7	1.43
1948	69.18	37.7	1.84	2.20	60.11	46.2	1.30
1947	63.75	40.3	1.58	1.81	55.03	46.4	1.19
1946	56.04	41.3	1.36	1.48	50.00	46.0	1.09
1945	50.36	42.0	1.20	1.28	46.32	48.5	.96
1944	49.32	43.0	1.15	1.20	46.36	48.9	.95
1943	39.97	36.3	1.10	1.10	41.49	48.7	.85
1942	33.37	32.4	1.03	1.01	39.34	47.0	.84
1941	29.47	30.7	.96	.94	34.03	45.8	.74
1940	23.74	27.8	.85	.83	32.47	44.3	.73
1939	22.99	26.8	.86	.83	31.90	43.7	.73

Year	Bituminous coal–lignite mining (BLS) [1]			Bituminous coal mining—average hourly compensation (Lewis)
	Average weekly earnings	Average weekly hours	Average hourly earnings	
	811	812	813	814
1938	$19.78	23.3	$0.85	$0.87
1937	22.94	27.7	.83	.82
1936	21.89	28.5	.77	.74
1935	18.86	26.2	.72	.70
1934	17.45	26.8	.65	.68
1933	14.21	29.3	.49	.47
1932	13.58	27.0	.50	.51
1931	17.59	28.1	.63	.61
1930	22.04	33.3	.66	.65
1929	25.11	38.1	.66	.66
1928	24.46	35.3	.69	.67
1927	24.18	33.3	.73	.69
1926	28.42	37.4	.76	.72
1925	26.24	33.9	.77	.72
1924	23.42	29.8	.79	.81
1923	25.41	31.1	.82	.92
1922				.90
1921				.92
1920				.94
1919	25.84	35.2	.73	.70
1918				.60
1917				.48
1916				.37
1915				.33
1914	12.11	34.9	.35	.32
1913				.31
1912				.31
1911				.29
1910				.29
1909	11.70	37.5	.31	.28

Year	Bituminous coal mining—average hourly compensation (Lewis)
	814
1908	$0.28
1907	.28
1906	.29
1905	.27
1904	.27
1903	.27
1902	.24
1901	.24
1900	.21
1899	.19
1898	.17
1897	.14
1896	.15
1895	.16
1894	.17
1893	.19
1892	.18
1891	.17
1890	.18

[1] Data relate to production workers.
[2] Hours and earnings based upon monthly data and relate to all employees except executives, officials, and staff assistants. For 1939–1955, data for railroads with operating revenues of $4 million or more; 1956–1964, $3 million or more; thereafter, $5 million or more.
[3] 11-month average.

Series D 818–829. Indexes of Union Hourly Wage Rates and Weekly Hours, Building and Printing Trades: 1907 to 1970

[1967 = 100]

Year	Building trades						Printing trades					
	All trades		Journeymen		Helpers and laborers		All printing		Book and job		Newspaper	
	Hourly wage rate	Weekly hours	Hourly wage rate	Weekly hours	Hourly wage rate	Weekly hours	Hourly wage rate	Weekly hours	Hourly wage rate	Weekly hours	Hourly wage rate	Weekly hours
	818	819	820	821	822	823	824	825	826	827	828	829
1970	128.8	99.9	128.9	99.9	128.1	99.9	121.2	99.6	121.0	99.7	120.8	99.7
1969	115.4	100.1	115.7	100.1	113.9	100.0	111.9	99.7	111.8	99.7	112.0	99.8
1968	106.6	100.0	106.7	100.0	105.9	100.0	[1] 105.0	[1] 99.9	105.2	99.9	105.1	100.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1966	94.7	100.1	94.7	100.2	94.6	100.1	96.1	100.2	96.6	100.2	95.4	100.3
1965	90.9	100.2	90.9	100.4	90.8	100.1	93.0	100.4	93.5	100.5	92.5	100.6
1964	87.3	100.3	87.4	100.5	86.8	100.1	90.4	100.6	90.7	100.8	90.1	100.6
1963	84.2	100.3	84.4	100.5	83.2	100.1	88.1	100.7	88.2	100.8	88.1	100.9
1962	81.3	100.5	81.4	100.7	80.3	100.2	85.6	100.8	85.6	100.9	85.7	101.0
1961	78.4	100.6	78.4	100.8	77.5	100.2	83.2	100.9	83.1	101.0	83.4	101.1
1960	75.4	100.7	75.5	100.9	74.0	100.2	80.6	101.1	80.3	101.2	81.1	101.2
1959	72.4	100.8	72.7	101.0	70.7	100.2	78.3	101.2	77.8	101.4	79.4	101.2
1958	69.0	100.8	69.5	101.0	66.5	100.2	75.8	101.5	75.1	101.8	77.1	101.3
1957	66.0	100.9	66.5	101.1	63.4	100.2	73.3	101.8	72.6	102.1	74.6	101.5
1956	62.8	100.9	63.3	101.1	59.9	100.2	70.8	102.1	70.0	102.5	72.3	101.7
1955	60.0	100.9	60.6	101.1	56.5	100.2	69.0	102.2	68.1	102.7	70.5	101.8
1954	58.0	100.9	58.6	101.1	54.2	100.2	67.1	102.4	66.2	103.0	68.9	101.9
1953	55.9	100.9	56.5	101.1	52.0	100.2	65.2	102.5	64.3	103.1	66.9	102.0
1952	53.2	100.9	53.9	101.1	48.6	100.2	62.7	102.5	61.9	103.1	64.4	102.0
1951	50.1	100.9	50.8	101.1	45.6	100.0	59.4	102.7	58.2	103.4	61.7	102.1
1950	47.0	101.0	47.8	101.2	42.7	100.1	56.9	102.8	56.1	103.7	58.7	102.2
1949	45.1	100.9	45.9	101.1	40.5	100.1	55.8	102.9	54.8	103.8	57.8	102.4
1948	43.3	100.8	44.0	101.0	39.1	100.1	49.8	103.1	48.9	104.0	51.6	103.0
1947	39.1	100.8	39.9	100.9	34.6	100.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1946	34.2	100.9	35.0	101.1	29.6	100.2	39.2	105.2	38.5	106.4	40.7	104.1
1945	30.7	101.9	31.6	102.2	25.5	100.9	33.5	107.8	32.8	110.3	35.1	104.5
1944	30.1	101.9	31.0	102.2	24.3	100.9	33.1	107.8	32.3	110.3	34.6	104.5
1943	29.8	101.7	30.8	102.0	24.1	100.9	32.2	107.8	31.5	110.3	33.9	104.5
1942	29.6	101.8	30.7	101.8	23.8	101.6	31.3	107.5	30.7	110.0	32.5	104.5
1941	27.9	101.0	29.0	100.5	21.7	102.5	30.0	107.8	29.4	110.0	31.1	104.6
1940	26.9	100.6	28.0	100.0	20.7	102.2	29.6	107.8	29.1	110.0	30.7	105.1
1939	26.5	100.7	27.6	100.0	20.3	102.8	29.3	108.0	28.8	110.2	30.1	105.4
1938	26.3	100.9	27.5	100.1	20.1	103.0	29.0	108.3	28.6	111.5	29.7	105.9
1937	24.1	102.6	25.2	101.9	18.3	104.7	28.1	108.9	27.6	111.0	28.9	106.4
1936	22.5	102.2	23.6	101.5	16.8	104.3	27.2	109.4	26.7	111.2	27.9	107.4
1935	21.8	102.2	22.9	101.5	15.9	104.1	26.5	109.8	26.1	111.1	27.5	108.7
1934	21.6	103.0	22.6	102.3	15.8	104.8	25.6	111.8	25.5	112.7	25.9	110.5
1933	21.4	107.0	22.5	106.2	15.3	108.2	25.1	117.8	24.8	116.9	25.6	120.2
1932	22.0	107.3	23.1	106.6	16.1	108.7	26.7	118.8	26.2	118.0	27.3	120.8
1931	25.7	109.3	27.0	108.5	18.8	111.2	26.8	122.8	26.5	122.8	27.4	123.9
1930	25.7	110.6	26.9	110.0	18.9	112.1	26.7	122.9	26.4	122.8	27.3	123.9
1929	24.6	113.8	25.8	113.3	18.0	114.7	26.3	123.0	25.9	122.9	27.1	124.1
1928	24.3	114.8	25.5	114.0	17.7	117.0	25.9	123.1	25.5	123.0	26.6	124.3
1927	24.2	115.5	25.3	114.8	17.5	117.1	25.5	123.1	25.2	123.0	25.9	124.6
1926	23.4	115.7	24.5	115.2	17.2	117.1	24.7	123.2	24.6	123.0	25.3	124.9
1925	21.9	115.9	22.9	115.4	15.8	117.4	24.2	123.4	24.0	123.2	24.7	124.7
1924	21.1	115.9	22.1	115.4	15.3	117.6	23.8	123.4	23.8	123.1	24.2	125.0
1923	19.6	115.9	20.5	115.4	14.1	117.6	22.7	123.9	22.9	123.1	22.9	126.7
1922	17.7	115.8	18.6	115.3	13.3	117.4	22.1	124.5	22.0	123.8	22.6	127.1
1921	18.9	115.8	19.7	115.2	14.6	117.7	21.8	124.9	21.9	125.5	22.4	124.6
1920	18.5	115.9	19.3	115.3	14.5	117.7	19.9	133.0	19.9	136.4	20.6	124.9
1919	13.8	116.4	14.5	115.8	10.0	118.5	15.5	137.0	15.3	141.6	16.9	125.0
1918	12.0	117.0	12.7	116.2	8.6	119.6	12.7	137.0	12.4	141.8	13.9	124.8
1917	10.8	117.6	11.5	116.9	7.5	120.0	11.7	137.0	11.1	141.8	13.3	124.8
1916	10.2	117.9	10.8	117.1	6.8	120.5	11.3	137.0	10.8	141.8	12.9	124.8
1915	9.9	118.3	10.5	117.6	6.6	120.8	11.2	137.0	10.7	141.8	12.9	124.9
1914	9.8	118.4	10.4	117.7	6.5	120.9	11.1	137.0	10.6	141.8	12.9	125.0
1913	9.5	119.0	10.2	118.0	6.4	121.6	10.9	137.1	10.4	141.8	12.7	125.3
1912	9.3	119.2	9.9	118.3	6.2	121.6	10.7	137.2	10.1	141.8	12.5	125.4
1911	9.1	119.6	9.7	118.7	6.2	122.0	10.5	137.3	10.0	141.9	12.2	125.6
1910	9.0	120.0	9.6	119.1	6.2	122.2	----------	----------	9.8	141.9	12.0	125.6
1909	8.6	121.5	9.2	120.5	6.0	124.4	----------	----------	9.2	142.3	11.6	125.9
1908	8.2	123.2	8.8	122.0	5.8	127.1	----------	----------	8.6	143.5	11.2	126.2
1907	7.7	125.1	8.2	123.8	5.6	129.8	----------	----------	7.8	150.5	10.6	127.0

NA Not available.

[1] Lithography workers were included in the indexes for the first time in 1968. The wage rate index excluding those workers was 138.7; the weekly hours index was not affected.

Series D 830–844. Earnings and Hours of Production Workers in 25 Manufacturing Industries, by Sex and by Degree of Skill: 1914 to 1948

Year	All production workers			Male			Female			Unskilled, male			Skilled and semiskilled, male		
	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly earnings
	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844
1948 [1]	$1.431	40.3	$57.22	$1.503	40.7	$60.98	$1.090	38.4	$41.86	$1.227	40.7	$49.88	$1.567	40.6	$63.52
1947	1.342	40.4	54.27	1.414	40.9	57.77	1.007	38.7	38.99	1.147	40.9	46.80	1.478	40.9	60.35
1946	1.190	40.1	47.55	1.260	40.4	50.72	.876	39.0	34.14	1.015	40.4	40.86	1.320	40.3	53.10
1945	1.097	44.2	48.46	1.185	45.2	53.47	.787	40.8	32.18	.917	44.8	41.03	1.248	45.2	56.39
1944	1.067	45.6	48.83	1.164	46.9	54.65	.752	41.3	31.21	.892	46.0	41.07	1.227	47.1	57.85
1943	1.014	45.0	45.88	1.103	46.2	51.05	.699	41.1	28.83	.854	45.4	38.86	1.164	46.4	54.10
1942	.924	43.0	40.03	.987	43.9	43.46	.609	39.2	23.95	.773	43.1	33.49	1.043	44.3	46.31
1941	.814	41.2	33.62	.867	41.8	36.18	.533	38.0	20.29	.682	41.4	28.19	.914	42.0	38.32
1940	.739	38.6	28.54	.784	39.2	30.64	.491	35.5	17.43	.611	39.3	23.91	.827	39.2	32.41
1939	.720	37.6	27.05	.765	38.0	28.96	.475	35.8	17.02	.594	38.6	22.82	.808	37.9	30.53
1938	.716	34.3	24.43	.758	34.6	26.07	.482	32.6	15.69	.586	35.5	20.67	.802	34.4	27.49
1937	.695	38.7	26.80	.735	39.3	28.72	.473	36.1	17.02	.570	39.6	22.41	.777	39.3	30.39
1936	.619	39.5	24.39	.651	40.1	26.02	.434	36.2	15.74	.501	40.0	20.00	.689	40.1	27.58
1935	.599	37.2	22.23	.628	37.5	23.49	.437	35.2	15.37	.495	37.0	18.32	.665	37.7	24.98
1934	.580	34.7	20.06	.607	34.8	21.07	.427	34.0	14.50	.479	34.4	16.46	.643	35.0	22.45
1933	.491	36.4	17.71	.518	36.3	18.69	.340	36.6	12.35	.401	37.4	14.91	.550	37.1	20.27
1932	.498	34.8	17.05	.526	34.4	17.96	.325	36.3	11.73	.400	36.4	14.48	.559	35.1	19.48
1931	.564	40.4	22.62	.597	40.4	24.00	.371	39.8	14.69	.460	41.8	19.18	.634	39.7	25.05
1930	.589	43.9	25.84	.622	44.5	27.66	.395	40.5	15.98	.478	45.9	21.90	.663	44.0	29.17
1929	.590	48.3	28.55	.625	49.1	30.64	.398	44.2	17.61	.486	50.2	24.40	.668	48.8	32.60
1928	.579	47.9	27.80	.614	48.8	29.95	.396	43.4	17.15	.474	50.4	23.89	.659	48.5	31.94
1927	.576	47.7	27.53	.610	48.5	29.59	.398	43.7	17.37	.471	49.9	23.54	.656	48.1	31.51
1926	.568	48.1	27.42	.601	49.1	29.51	.398	43.5	17.27	.461	50.2	23.21	.652	48.5	31.61
1925	.561	48.2	27.08	.592	49.0	29.00	.389	44.1	17.17	.455	50.3	22.93	.644	48.6	31.29
1924	.562	46.9	26.43	.592	47.8	28.27	.393	42.6	16.75	.458	48.9	22.41	.644	47.5	30.55
1923	.541	49.2	26.61	.570	50.0	28.39	.383	45.0	17.24	.443	50.3	22.28	.619	49.9	30.81
1922 [2]	.494	49.2	24.29	.520	50.0	25.90	.352	45.0	15.84	.402	50.5	20.30	.566	49.8	28.11
1921	.524	45.6	23.77	.554	46.0	25.35	.362	43.2	15.63	.437	46.5	20.28	.599	45.9	27.36
1920 [3]	.606	48.2	29.39	.642	49.2	31.69	.414	43.0	17.71	.529	49.2	26.06	.687	49.4	34.10
1914 [4]	.247	51.5	12.68	.262	52.2	13.65	.155	50.1	7.75	.203	52.9	10.71	.291	51.7	14.99

[1] Average of 7 months, January-July.
[2] Average of 6 months, July-December.
[3] Average of 7 months, June-December.
[4] July.

Series D 845–876. Average Days in Operation Per Year, Average Daily Hours, and Annual and Hourly Earnings, in Manufacturing, by Industry: 1889 to 1914

Year	All industries				All textiles		Cotton		Wool		Silk		Hosiery and knit goods		Dyeing and finishing textiles	
	Average annual earnings [1]	Average days in operation per year	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)
	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860
1914	$574	281	9.28	22.0	9.35	16.0	9.50	14.1	9.23	19.0	9.18	16.9	9.18	16.0	9.31	20.1
1913	585	283	9.36	22.1	9.48	15.9	9.60	14.1	9.37	17.3	9.36	17.9	9.27	14.6	9.43	19.1
1912	564	290	9.39	20.7	9.49	15.0	9.57	13.6	9.38	17.1	9.40	15.5	9.43	14.0	9.43	18.2
1911	545	284	9.47	20.2	9.63	14.3	9.72	13.0	9.51	16.1	9.48	15.0	9.57	13.3	9.56	17.5
1910	538	286	9.49	19.8	9.60	14.1	9.69	13.0	9.48	16.1	9.51	14.3	9.54	13.0	9.52	18.0
1909	512	289	9.56	18.6	9.76	13.4	9.90	11.8	9.63	15.6	9.53	13.8	9.70	12.4	9.66	17.4
1908	482	274	9.55	18.4	9.75	13.2	9.90	12.1	9.63	15.5	9.55	12.4	9.68	12.2	9.65	16.7
1907	538	294	9.60	19.1	9.83	13.4	10.01	12.4	9.66	15.4	9.57	13.8	9.73	12.3	9.73	16.6
1906	526	297	9.63	18.4	9.89	12.7	10.11	11.0	9.70	14.9	9.57	13.0	9.75	12.7	9.76	16.8
1905	487	292	9.70	17.2	9.93	11.9	10.16	10.3	9.73	13.9	9.57	13.0	9.80	11.2	9.82	16.4
1904	471	288	9.68	16.9	9.92	11.8	10.16	10.7	9.66	13.7	9.55	12.0	9.82	10.7	9.79	15.4
1903	481	291	9.71	17.0	9.95	12.2	10.18	10.9	9.73	13.9	9.63	12.3	9.82	11.0	9.77	15.7
1902	474	294	9.79	16.5	9.99	11.6	10.20	10.4	9.75	13.5	9.65	11.6	9.92	10.4	9.77	15.7
1901	446	287	9.84	15.8	10.05	11.2	10.25	10.1	9.86	13.2	9.68	10.8	9.92	10.2	9.77	15.0
1900	432	289	9.89	15.1	10.06	11.0	10.26	10.0	9.86	13.0	9.70	10.9	9.92	10.2	9.77	14.9
1899	420	290	9.94	14.6	10.10	10.6	10.30	9.2	9.86	12.4	9.70	11.4	10.05	10.2	9.77	14.8
1898	394	288	9.97	13.7	10.09	10.4	10.30	9.1	9.86	12.3	9.68	11.3	10.05	9.6	9.77	15.1
1897	395	284	9.94	14.0	9.99	10.5	10.16	9.7	9.73	12.0	9.67	11.5	10.05	9.5	9.60	15.0
1896	393	274	9.96	14.4	10.05	10.8	10.21	9.7	9.88	12.3	9.65	12.3	10.05	10.0	9.75	15.8
1895	392	284	9.97	13.8	10.06	10.5	10.25	9.5	9.88	11.8	9.60	11.2	10.05	9.9	9.75	15.4
1894	376	272	9.92	13.9	9.83	11.0	10.01	10.4	9.78	11.7	9.60	12.3	9.47	10.3	9.57	16.2
1893	410	271	9.99	15.1	10.06	11.7	10.26	10.4	9.83	13.3	9.63	13.2	10.07	10.6	9.74	16.8
1892	431	296	10.04	14.5	10.20	10.7	10.40	9.8	9.96	11.9	9.92	11.7	10.13	10.1	9.89	15.5
1891	429	297	10.01	14.4	10.19	10.7	10.37	9.9	9.96	11.8	10.02	12.2	10.13	9.6	9.96	15.7
1890	425	294	10.02	14.4	10.16	10.6	10.31	9.9	9.98	11.6	9.95	12.0	10.13	9.4	9.96	15.4
1889	417															

[1] Per full-time equivalent worker.

Series D 845–876. Average Days in Operation Per Year, Average Daily Hours, and Annual and Hourly Earnings, in Manufacturing, by Industry: 1889 to 1914—Con.

Year	Boots and shoes		Leather		Electrical machinery		Paper and paper products		Rubber		Glass		Foundry and machine shops		Iron and steel	
	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)	Average daily hours	Average hourly earnings (cents)
	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876
1914	9.15	21.2	9.50	21.4	9.03	24.0	9.51	20.5	9.18	23.9	8.91	26.3	9.20	25.3	10.12	26.6
1913	9.21	21.0	9.56	22.3	9.09	24.1	9.59	19.5	9.25	22.2	8.99	26.2	9.27	25.1	10.29	27.4
1912	9.27	20.4	9.56	18.9	9.10	23.5	9.61	18.9	9.27	21.7	9.01	25.0	9.29	24.1	10.31	24.8
1911	9.39	19.8	9.63	19.4	9.18	22.3	9.70	18.1	9.35	21.0	9.08	24.4	9.36	23.5	10.39	24.7
1910	9.40	19.4	9.62	18.8	9.18	22.1	9.71	17.3	9.36	20.8	9.09	23.9	9.37	23.0	10.58	23.2
1909	9.42	18.4	9.67	18.2	9.23	20.8	9.78	16.7	9.42	19.5	9.17	22.3	9.43	22.0	10.64	22.0
1908	9.44	18.4	9.66	17.8	9.22	21.0	9.76	17.7	9.41	19.6	9.16	23.5	9.42	21.9	10.53	21.4
1907	9.44	18.5	9.71	17.8	9.27	20.9	9.81	15.8	9.46	18.0	9.21	22.8	9.47	21.8	10.67	21.5
1906	9.46	17.6	9.70	17.2	9.30	20.6	10.23	14.2	9.50	18.1	9.26	22.1	9.50	21.3	10.67	20.3
1905	9.51	17.2	9.70	15.9	9.37	19.8	10.27	14.2	9.57	16.6	9.23	22.5	9.54	20.2	10.69	19.4
1904	9.52	16.3	9.67	16.1	9.35	19.6	10.17	14.1	9.55	16.4	9.15	21.4	9.52	20.0	10.57	19.2
1903	9.51	16.5	9.70	15.7	9.38	20.5	10.22	13.3	9.57	16.1	9.11	19.9	9.57	20.2	10.67	20.2
1902	9.62	15.4	9.71	15.4	9.45	18.7	10.13	13.6	9.65	16.0	8.92	21.0	9.69	19.4	10.66	20.3
1901	9.74	15.1	9.71	15.3	9.50	18.3	10.20	13.0	9.70	16.3	8.94	20.4	9.81	18.3	10.66	19.6
1900	9.72	14.8	9.71	15.2	9.55	17.4	10.38	12.7	9.75	15.7	9.01	19.5	9.96	18.0	10.74	18.7
1899	9.76	14.5	9.70	15.1	9.60	17.2	10.38	12.3	9.80	15.8	9.00	18.1	10.01	17.3	10.57	17.9
1898	9.76	14.2	9.74	15.5	9.63	17.4	10.99	11.2	9.83	15.9	------	------	10.05	17.5	10.69	15.8
1897	9.76	14.7	9.72	16.0	9.60	16.5	10.94	11.9	9.80	15.7	------	------	10.01	17.3	10.66	15.4
1896	9.79	15.0	9.69	16.2	9.62	16.3	10.87	12.1	9.82	16.0	------	------	10.03	17.8	10.59	15.8
1895	9.79	15.4	9.69	16.1	------	------	10.89	11.9	9.83	15.2	------	------	10.05	18.0	10.74	15.3
1894	9.79	16.0	9.67	15.9	------	------	10.89	12.3	9.78	15.4	------	------	10.01	18.6	10.75	15.8
1893	9.79	16.4	9.67	17.1	------	------	10.83	12.5	9.85	16.3	------	------	10.03	18.8	10.67	17.2
1892	9.81	16.1	9.65	17.3	------	------	10.87	12.2	9.90	15.3	------	------	10.06	18.6	10.67	17.0
1891	9.84	15.9	9.67	17.5	------	------	10.87	11.9	9.87	15.5	------	------	10.10	19.0	------	------
1890	9.81	16.1	9.67	16.9	------	------	10.90	12.0	9.88	15.8	------	------	10.10	18.5	------	------

Series D 877–892. Average Earnings and Average Hours of Construction and Nonsupervisory Workers in Selected Nonmanufacturing Industries: 1932 to 1970

Year	Contract construction [1]			Wholesale trade			Retail trade [2]			Electric company systems [3]			Finance, insurance, and real estate [4]			Insurance carriers, weekly earnings [5]
	Hourly earnings	Weekly hours	Weekly earnings	Hourly earnings	Weekly hours	Weekly earnings	Hourly earnings	Weekly hours	Weekly earnings	Hourly earnings	Weekly hours	Weekly earnings	Hourly earnings	Weekly hours	Weekly earnings	
	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892
1970	$5.25	37.4	$196.35	$3.44	40.0	$137.60	$2.44	33.8	$82.47	$4.22	41.8	$176.40	$3.08	36.8	$113.34	[6] 121.40
1969	4.79	37.9	181.54	3.23	40.2	129.85	2.30	34.2	78.66	3.95	41.9	165.51	2.93	37.1	108.70	[6] 114.02
1968	4.41	37.4	164.93	3.05	40.1	122.31	2.16	34.7	74.95	3.71	41.6	154.34	2.75	37.0	101.75	[6] 107.16
1967	4.11	37.7	154.95	2.88	40.3	116.06	2.01	35.3	70.95	3.50	41.5	145.25	2.58	37.0	95.46	[6] 103.14
1966	3.89	37.6	146.26	2.73	40.7	111.11	1.91	35.9	68.57	3.35	41.7	139.70	2.47	37.3	92.13	[6] 99.32
1965	3.70	37.4	138.38	2.61	40.8	106.49	1.82	36.6	66.61	3.22	41.4	133.31	2.39	37.2	88.91	[6] 95.86
1964	3.55	37.2	132.06	2.52	40.6	102.31	1.75	37.0	64.75	3.09	41.3	127.62	2.30	37.3	85.79	[6] 92.01
1963	3.41	37.3	127.19	2.45	40.6	99.47	1.68	37.3	62.66	2.97	41.2	122.36	2.25	37.5	84.38	96.21
1962	3.31	37.0	122.47	2.37	40.6	96.22	1.63	37.4	60.96	2.87	41.2	118.24	2.17	37.3	80.94	93.45
1961	3.20	36.9	118.08	2.31	40.5	93.56	1.56	37.6	58.66	2.75	41.0	112.75	2.09	36.9	77.12	89.75
1960	3.08	36.7	113.04	2.24	40.5	90.72	1.52	38.0	57.76	2.66	41.3	109.86	2.02	37.2	75.14	87.37
1959*	2.93	37.0	108.41	2.18	40.6	88.51	1.47	38.2	56.15	2.55	41.1	104.81	1.95	37.3	72.74	85.28
1958	2.82	36.8	103.78	2.09	40.2	84.02	1.42	38.1	54.10	2.43	41.0	99.63	1.89	37.1	70.12	82.93
1957	2.71	37.0	100.27	2.02	40.3	81.41	1.37	38.1	52.20	2.30	41.4	95.22	1.84	36.7	67.53	80.83
1956	2.57	37.5	96.38	1.94	40.5	78.57	1.30	38.6	50.18	2.20	41.6	91.52	1.78	36.9	65.68	77.59
1955	2.45	37.1	90.90	1.83	40.7	74.48	1.25	39.0	48.75	2.09	41.3	86.32	1.70	37.6	63.92	73.39
1954	2.39	37.2	88.91	1.76	40.5	71.28	1.20	39.2	47.04	2.01	41.4	83.21	1.65	37.6	62.04	70.17
1953	2.28	37.9	86.41	1.70	40.6	69.02	1.16	39.1	45.36	1.93	41.5	80.10	1.58	37.7	59.57	67.38
1952	2.13	38.9	82.86	1.61	40.7	65.53	1.09	39.8	43.38	1.80	41.5	74.70	1.51	37.8	57.08	63.46
1951	2.02	38.1	76.96	1.52	40.8	62.02	1.06	40.4	42.82	1.70	42.0	71.40	1.45	37.7	54.67	61.39
1950	1.86	37.4	69.68	1.43	40.7	58.08	.98	40.4	39.71	1.58	41.6	65.85	1.34	37.7	50.52	58.57
1949	1.79	37.7	67.56	1.36	40.8	55.49	.95	40.4	38.42	1.53	41.6	63.73	1.26	37.8	47.63	56.54
1948	1.71	38.1	65.27	1.31	41.0	53.63	.90	40.2	36.22	1.44	42.1	60.54	1.20	37.9	45.48	55.00
1947	1.54	38.2	58.87	1.22	41.1	50.14	.84	40.3	33.77	1.34	42.0	56.41	1.14	37.9	43.21	52.65
1946	1.48	38.1	56.24	1.11	41.6	46.05	.80	41.3	32.92	1.26	41.6	52.04	------	------	------	50.94
1945	1.38	39.0	53.73	.99	42.8	42.37	.70	40.9	28.59	1.14	43.5	50.05	------	------	------	47.13
1944	1.32	39.6	52.18	.95	43.0	40.76	.65	41.0	26.77	1.11	43.1	48.04	------	------	------	44.87
1943	1.25	38.4	48.13	.90	42.3	37.99	.61	40.9	24.79	1.05	41.6	44.16	------	------	------	41.87
1942	1.15	36.4	41.80	.83	41.4	34.28	.56	41.8	23.37	.98	40.1	39.60	------	------	------	38.37
1941	1.01	34.8	35.14	.76	41.1	31.36	.52	42.8	22.17	.92	39.8	36.54	------	------	------	37.54
1940	.96	33.1	31.70	.71	41.3	29.36	.49	43.2	21.34	.88	39.7	35.10	------	------	------	36.55
1939	.93	32.6	30.39	.69	41.8	28.76	.48	43.4	21.01	.87	39.6	34.38	------	------	------	36.32
1938	.91	32.1	29.19	.67	42.3	28.51	------	------	------	.86	39.9	34.15	------	------	------	36.30
1937	.90	33.4	30.14	.66	43.1	28.36	------	------	------	.85	40.3	34.22	------	------	------	39.29
1936	.82	32.8	27.01	.63	42.9	26.96	------	------	------	.80	40.1	32.22	------	------	------	37.99
1935	.82	30.1	24.51	.61	41.6	25.38	------	------	------	.79	39.3	31.07	------	------	------	36.22
1934	.80	28.9	22.97	------	------	25.44	------	------	------	.78	38.8	29.98	------	------	------	35.02
1933	------	------	------	------	------	25.19	------	------	------	.69	42.0	29.23	------	------	------	34.29
1932	------	------	------	------	------	26.75	------	------	------	.70	44.0	30.78	------	------	------	36.99

* Denotes first year for which figures include Alaska and Hawaii.

[1] Beginning 1947, data cover both on-site and off-site workers on both private and public projects; prior to 1947, they refer only to on-site workers on privately financed construction. [2] Beginning 1947, includes eating and drinking places.

[3] Beginning 1947, includes only companies engaged exclusively in producing and distributing electricity; prior to 1947, includes combined gas and electric utilities whose income results primarily from sale of electricity. [4] Excludes nonoffice salemen.

[5] Beginning 1947, data are for "insurance carriers"; prior to 1947, for "insurance."

Series D 893–904. Average Annual Supplements to Wages and Salaries Per Full-Time Employee, by Major Industry: 1929 to 1970

Year	All industries	Private industries										Government and government enterprises
		Total	Agriculture, forestry, and fisheries	Mining	Contract construction	Manufacturing	Wholesale and retail trade	Finance, insurance, and real estate	Transportation	Communications and public utilities	Services	
	893	894	895	896	897	898	899	900	901	902	903	904
1970	$845	$852	$220	$1,140	$948	$1,202	$569	$1,085	$1,203	$1,464	$384	$814
1969	779	797	206	1,067	871	1,113	536	1,014	1,113	1,301	358	708
1968	712	732	162	979	775	1,032	486	948	1,030	1,153	319	636
1967	650	667	150	880	723	928	443	879	928	1,084	293	586
1966	620	641	132	821	704	894	423	826	900	1,036	276	537
1965	556	571	98	744	611	822	366	733	800	963	227	496
1964	528	538	90	750	573	769	355	704	756	909	215	486
1963	504	515	81	738	563	723	350	714	726	802	212	458
1962	471	482	68	708	498	682	327	665	685	769	191	423
1961	431	436	58	659	471	607	293	616	654	726	169	410
1960*	410	411	56	618	422	579	272	552	612	653	157	401
1959	372	375	46	582	381	534	243	468	564	617	134	359
1958	326	324	40	511	319	475	204	395	466	536	113	334
1957	307	308	37	508	298	441	195	345	431	482	109	302
1956	271	276	32	503	258	396	168	316	383	448	96	245
1955	241	250	28	452	243	354	156	294	343	419	89	196
1954	214	228	19	401	231	316	142	280	308	408	85	156
1953	196	207	16	392	209	284	125	246	286	372	74	147
1952	188	196	15	349	193	271	122	228	274	367	69	155
1951	180	186	13	348	188	255	120	210	255	350	66	156
1950	159	158	8	305	168	210	112	190	235	315	53	167
1949	138	127	7	212	147	160	91	170	218	267	45	199
1948	118	116	6	205	141	141	84	152	202	243	42	135
1947	124	113	6	160	133	134	86	134	224	235	42	191
1946	123	99	6	117	120	117	77	132	176	221	41	229
1945	104	102	5	106	137	129	72	120	164	221	37	109
1944	81	97	4	100	134	120	68	130	157	194	34	44
1943	69	85	3	97	128	102	59	128	151	152	30	28
1942	66	73	3	87	120	87	55	105	139	132	26	36
1941	63	67	2	83	98	81	55	105	117	131	25	43
1940	60	61	3	79	87	75	54	103	110	127	23	55
1939	60	61	2	81	85	74	56	104	108	123	24	53
1938	58	60	2	80	84	72	56	102	106	123	25	49
1937	50	50	2	66	74	58	44	88	99	97	20	51
1936	28	26	1	32	45	27	19	59	59	61	10	40
1935	20	16	1	19	36	15	10	42	40	47	5	45
1934	19	15	1	19	36	12	8	35	55	39	5	41
1933	20	15	1	20	40	13	9	35	45	40	5	48
1932	21	16	2	22	44	16	10	42	41	31	6	55
1931	20	17	2	22	43	16	10	45	40	31	5	50
1930	19	16	2	24	42	15	10	47	36	28	5	49
1929	18	15	1	24	38	14	9	50	33	28	4	49

* Denotes first year for which figures include Alaska and Hawaii.

Series D 905–912. Average Annual Supplements to Wages and Salaries Per Full-Time Equivalent Employee, by Type of Supplement: 1929 to 1970

Year	Total supplements	Employer contributions for social insurance				Other labor income		
		Total	Public retirement systems [1]	Unemployment insurance [2]	Other [3]	Total	Employer contributions to private pension and welfare funds	Compensation for injuries and other [4]
	905	906	907	908	909	910	911	912
1970	$845	$414	$365	$48	$1	$431	$361	$70
1969	779	387	339	47	(Z)	393	330	63
1968	712	349	300	48	(Z)	364	306	58
1967	650	322	272	50	(Z)	328	273	55
1966	620	307	249	57	(Z)	313	261	52
1965	556	258	197	60	(Z)	298	249	50
1964	528	254	192	62	(Z)	274	225	49
1963	504	254	185	68	(Z)	251	205	45
1962	471	234	162	71	(Z)	237	194	43
1961	431	207	153	54	(Z)	224	182	42

See footnotes at end of table.

Series D 905–912. Average Annual Supplements to Wages and Salaries Per Full-Time Equivalent Employee, by Type of Supplement: 1929 to 1970—Con.

Year	Total supplements	Employer contributions for social insurance				Other labor income		
		Total	Public retirement systems [1]	Unemployment insurance [2]	Other [3]	Total	Employer contributions to private pension and welfare funds	Compensation for injuries and other [4]
	905	906	907	908	909	910	911	912
1960*	$410	$199	$150	$44	(Z)	$210	$170	$41
1959	372	172	127	45	(Z)	200	161	39
1958	326	145	110	35	(Z)	181	143	37
1957	307	138	104	34	(Z)	168	133	35
1956	271	120	87	33	(Z)	150	118	33
1955	241	108	78	28	$2	133	104	30
1954	214	97	70	26	1	118	90	28
1953	196	88	57	29	1	108	83	25
1952	188	90	58	30	3	98	74	24
1951	180	90	55	33	3	90	67	23
1950	159	81	49	30	2	78	56	22
1949	138	74	38	27	10	64	43	21
1948	118	63	36	25	2	56	37	19
1947	124	75	33	29	13	49	33	16
1946	123	84	28	26	30	40	26	14
1945	104	71	23	25	24	34	21	12
1944	81	53	22	27	5	28	17	10
1943	69	49	20	29	(Z)	20	11	9
1942	66	48	19	28	1	18	8	10
1941	63	46	18	28	(Z)	17	7	9
1940	60	42	17	26	(Z)	18	7	11
1939	60	42	16	26	(Z)	17	7	10
1938	58	41	15	25	(Z)	17	7	11
1937	50	34	15	18	(Z)	16	6	10
1936	28	12	5	7	(Z)	16	7	9
1935	20	5	5	(Z)	(Z)	15	6	9
1934	19	5	5	(Z)	(Z)	14	5	9
1933	20	5	5	----	(Z)	15	5	10
1932	21	5	4	----	(Z)	17	5	11
1931	20	4	3	----	(Z)	17	5	11
1930	19	3	3	----	(Z)	16	5	12
1929	18	3	3	----	(Z)	16	5	11

* Denotes first year for which figures include Alaska and Hawaii.
Z Less than $0.50.
[1] Old-age, survivors, and disability insurance; railroad retirement insurance; Federal civilian employee retirement systems; and State and local employee retirement systems, which include hospital insurance beginning 1966.
[2] State unemployment insurance, Federal unemployment tax, and railroad unemployment insurance.
[3] Cash sickness compensation funds and government life insurance.
[4] Includes pay of military reservists, directors' fees, jury and witness fees, compensation of prison inmates, and marriage fees to justices of the peace.

Series D 913–926. Earnings in Selected Occupations: 1865 to 1970

Year	Average annual salary, college teachers [1]	Average annual net income			Annual median net income			Median monthly salary rate, engineers	Military annual pay rates					
									Basic pay			Basic pay plus allowances		
		Non-salaried lawyers	Non-salaried physicians	Non-salaried dentists	Non-salaried lawyers	Non-salaried physicians	Non-salaried dentists		All personnel	Officers	Enlisted personnel	All personnel	Officers	Enlisted personnel
	913	914	915	916	917	918	919	920	921	922	923	924	925	926
1970	$11,745	----	----	$30,770	----	$41,500	$28,100	$1,480	$4,205	$9,861	$3,399	$5,759	$12,947	$4,734
1969	----	----	----	----	----	40,550	----	----	3,539	8,425	2,867	5,016	11,341	4,146
1968	10,235	----	----	----	----	37,620	----	1,360	3,227	7,813	2,621	4,658	10,684	3,862
1967	----	----	----	24,740	----	34,730	22,850	----	3,055	7,765	2,473	4,399	10,684	3,622
1966	9,081	----	----	----	----	32,170	----	1,250	3,088	7,526	2,472	4,640	10,286	3,856
1965	----	----	----	----	----	28,960	----	----	2,917	7,130	2,301	4,368	9,763	3,567
1964	8,163	----	----	14,852	----	28,380	12,650	1,160	2,749	6,763	2,182	4,165	9,334	3,439
1963	----	----	----	----	----	25,050	----	----	----	----	----	----	----	----
1962	7,486	----	----	----	----	24,300	----	1,060	----	----	----	----	----	----
1961	----	----	----	*16,020	----	----	*14,747	----	----	----	----	----	----	----
1960	*6,711	----	----	----	----	----	----	1,000	2,512	5,972	2,013	3,743	8,734	3,034
1959	----	----	----	----	----	22,100	----	----	----	----	----	----	----	----
1958	6,015	----	----	14,311	----	----	13,366	900	----	----	----	----	----	----
1957	----	----	----	----	----	----	----	----	----	----	----	----	----	----
1956	5,243	----	----	----	----	----	----	820	----	----	----	----	----	----
1955	----	----	----	12,480	----	----	11,533	----	2,067	5,004	1,672	3,222	6,787	2,742
1954	----	$10,258	----	----	$7,382	----	----	----	----	----	----	----	----	----
1953	----	9,392	----	----	6,780	----	----	[2] 518	----	----	----	----	----	----
1952	5,106	9,021	----	10,873	6,383	----	9,961	----	1,776	4,453	1,473	2,940	6,234	2,584
1951	----	8,855	$13,432	7,820	6,112	11,191	6,684	----	----	----	----	----	----	----

See footnotes at end of table.

Series D 913–926. Earnings in Selected Occupations: 1865 to 1970—Con.

Year	Average annual salary, college teachers [1]	Average annual net income			Annual median net income			Median monthly salary rate, engineers	Military annual pay rates					
									Basic pay			Basic pay plus allowances		
		Non-salaried lawyers	Non-salaried physicians	Non-salaried dentists	Non-salaried lawyers	Non-salaried physicians	Non-salaried dentists		All personnel	Officers	Enlisted personnel	All personnel	Officers	Enlisted personnel
	913	914	915	916	917	918	919	920	921	922	923	924	925	926
1950	$4,354	$8,349	$12,324	$7,436	$5,722	$10,518	$6,342							
1949	4,234	7,971	11,744	7,146		9,561	6,140							
1948	4,123	8,003	11,327	7,039	5,719	8,939	5,939							
1947	3,736	7,437	10,726	6,610	5,199	8,256	5,544							
1946	3,465	6,951	10,202	6,381	4,696	7,523	5,142	$409						
1945	3,277	6,861	10,975	6,922	4,660	8,073	5,439		$1,017	$2,442	$856	$1,811	$3,777	$1,587
1944	3,331	6,504	9,802	6,649	4,273		5,353							
1943	3,039	5,945	8,370	5,715	3,892			334						
1942	2,914	5,527	6,735	4,625										
1941		4,794	5,047	3,782	2,960	3,756	3,281							
1940	2,906	4,507	4,441	3,314		3,245								
1939		4,391	4,229	3,096	2,704	3,083		277						
1938	2,861	4,273	4,093	2,870		3,027								
1937	2,843	4,483	4,285	2,883	2,757	3,229	2,462							
1936	2,732	4,394	4,204	2,726	2,665	3,234	[3] 2,371							
1935	2,666	4,272	3,695	2,485			[3] 2,173							
1934		4,218	3,382	2,391		*		210						
1933		3,868	2,948	2,188			[3] 1,880							
1932	3,111	4,156	3,178	2,479				235						
1931	3,134	5,090	4,178	3,422										
1930	3,065	5,194	4,870	4,020										
1929	3,056	5,534	5,224	4,267		3,758	[3] 3,676	289						
1918									510	2,141	417	968	2,698	870
1898									282	2,101	205	528	2,489	444
1865									231	717	202	510	1,912	427

* Denotes first year for which figures include Alaska and Hawaii.
[1] Beginning 1956, represents median salaries. For salary data for public elementary and secondary instructional staff, see series H 524.
[2] The 1953 figure comparable with data for later years is $646.
[3] For all dentists rather than for nonsalaried only. However, the differences are probably quite minor; they amount to less than 1 percent in 1937 and 1948.

Series D 927–939. Labor Union Membership, by Affiliation: 1935 to 1970

[**Membership in thousands.** Includes members outside the United States, primarily in Canada. AFL = American Federation of Labor; CIO = Congress of Industrial Organizations]

Year	Labor unions (BLS)								Labor union membership (NBER)				
	All unions, membership	AFL		CIO		AFL-CIO		Independent or unaffiliated, membership [1]	All unions	AFL [2]	CIO [2]	AFL-CIO [2]	Independent or unaffiliated, membership [1]
		Number of affiliated unions	Membership	Number of affiliated unions	Membership	Number of affiliated unions	Membership						
	927	928	929	930	931	932	933	934	935	936	937	938	939
1970	20,752					120	15,978	4,773					
1969	20,382					120	15,642	4,740					
1968	20,258					126	15,608	4,650					
1967	19,712					128	16,638	3,074					
1966	19,181					129	16,198	2,983					
1965	18,519					128	15,604	2,915					
1964	17,976					129	15,150	2,825					
1963	17,586					130	14,818	2,768					
1962	17,630					130	14,835	2,794	15,928	9,238	3,958	13,576	2,352
1961	17,328					131	14,572	2,756	16,143	9,312	3,866	13,568	2,575
1960	18,117					134	15,072	3,045	16,607	9,378	4,134	13,881	2,726
1959	18,169					135	15,124	3,044	16,501	9,338	3,983	13,715	2,787
1958	18,081					137	14,993	3,088	16,702	9,417	4,060	13,891	2,812
1957	18,431					139	16,954	1,476	17,687	11,226	4,640	16,078	1,609
1956	18,477					137	16,904	1,573	17,383	11,015	4,624	15,639	1,744
1955	17,749					139	16,062	1,688	16,990	10,593	4,608		1,788
1954	17,955	109	10,929	32	[3] 5,200			1,826	16,612	10,258	4,494		1,860
1953	17,860	110	10,778	35	5,252			1,830	17,316	10,438	4,838		2,040
1952	[4]	109	9,500	33	5,000			[5]	16,310	9,977	4,261		2,071
1951	[4]	108	9,500	33	5,000			[5]	15,772	9,497	4,183		2,092

See footnotes at end of table.

Series D 927–939. Labor Union Membership, by Affiliation: 1935 to 1970—Con.

[Membership in thousands]

Year	Labor unions (BLS)						Labor union membership (NBER)			
	All unions, membership	AFL		CIO		Independent or unaffiliated, membership [1]	All unions	AFL	CIO	Independent or unaffiliated, membership [1]
		Number of affiliated unions	Membership	Number of affiliated unions	Membership					
	927	928	929	930	931	934	935	936	937	939
1950	(4)	107	7,143	30	(NA)	(5)	14,823	8,494	3,713	2,616
1949	(4)	107	7,241	39	(NA)	(5)	14,695	8,143	4,314	2,238
1948	(4)	105	7,221	40	(NA)	(5)	15,020	8,095	4,451	2,474
1947	15,414	105	7,578	40	6,000	1,836	14,595	8,467	4,451	1,677
1946	14,974	102	7,152	40	6,000	1,822	13,263	7,652	3,847	1,764
1945	14,796	102	6,931	40	6,000	1,865	12,562	6,890	3,928	1,744
1944	14,621	100	6,807	41	5,935	1,879	12,628	6,877	3,937	1,814
1943	13,642	99	6,564	40	5,285	1,793	11,812	6,779	3,303	1,729
1942	10,762	102	5,483	39	4,195	1,084	10,200	6,076	2,493	1,631
1941	10,489	106	4,569	41	5,000	920	8,698	5,179	2,654	865
1940	8,944	105	4,247	42	3,625	1,072	7,282	4,343	2,154	785
1939	8,980	104	4,006	45	4,000	974	6,556	3,878	1,838	840
1938	8,265	102	3,623	42	4,038	604	6,081	3,547	1,958	575
1937	----------	----------	----------	----------	----------	----------	5,780	3,180	1,991	609
1936	----------	----------	----------	----------	----------	----------	4,107	3,516	----------	591
1935	----------	----------	----------	----------	----------	----------	3,753	3,218	----------	535

NA Not available.
[1] Excludes members of single-firm and local unaffiliated unions.
[2] New unions are included in merged Federation only. Beginning 1956, AFL and CIO show membership of unions affiliated with the AFL and CIO in 1955.
[3] Estimate.
[4] Source gives following estimates: 1948–1950, 14–16 million each year; 1951 and 1952, 16.5–17 million each year.
[5] Source gives following estimates: 1948, 2.2–2.5 million; 1949, 2–2.3 million; 1950, 2.4–2.8 million; 1951 and 1952, 2–2.5 million each year.

Series D 940–945. Labor Union Membership, by Affiliation: 1897 to 1934

[Includes Canadian members of labor unions with headquarters in U.S. BLS = U.S. Bureau of Labor Statistics]

Year	Total union membership (1,000)		American Federation of Labor			Independent or unaffiliated unions, total membership (1,000), Wolman	Year	Total union membership (1,000)		America Federation of Labor			Independent or unaffiliated unions, total membership (1,000), Wolman
	BLS	Wolman	Number of affiliated unions, BLS	Total membership (1,000)				BLS	Wolman	Number of affiliated unions, BLS	Total membership (1,000)		
				BLS	Wolman						BLS	Wolman	
	940	941	942	943	944	945		940	941	942	943	944	945
1934	3,728	3,713	109	3,045	3,030	683	1915	2,560	2,583	110	1,946	1,968	614
1933	2,857	3,048	108	2,127	2,318	730	1914	2,647	2,687	110	2,021	2,061	626
1932	3,226	3,191	106	2,532	2,497	694	1913	2,661	2,716	111	1,996	2,051	665
1931	3,526	3,379	105	2,890	2,743	636	1912	2,405	2,452	112	1,770	1,818	635
							1911	2,318	2,343	115	1,762	1,787	556
1930	3,632	3,416	104	2,961	2,745	671							
1929	3,625	3,461	105	2,934	2,770	691	1910	2,116	2,140	120	1,562	1,587	554
1928	3,567	3,480	107	2,896	2,809	671	1909	1,965	2,006	119	1,483	1,524	482
1927	3,600	3,546	106	2,813	2,759	787	1908	2,092	2,131	116	1,587	1,625	505
1926	3,592	3,502	107	2,804	2,715	788	1907	2,077	2,080	117	1,539	1,542	538
							1906	1,892	1,907	119	1,454	1,469	438
1925	3,566	3,519	107	2,877	2,831	689							
1924	3,549	3,536	107	2,866	2,853	683	1905	1,918	2,022	118	1,494	1,598	424
1923	3,629	3,622	108	2,926	2,919	703	1904	2,067	2,073	120	1,676	1,682	391
1922	3,950	4,027	112	3,196	3,273	754	1903	1,824	1,914	113	1,466	1,556	358
1921	4,722	4,781	110	3,907	3,967	815	1902	1,335	1,376	97	1,024	1,065	311
							1901	1,058	1,125	87	788	854	270
1920	5,034	5,048	110	4,079	4,093	955							
1919	4,046	4,125	111	3,260	3,339	786	1900	791	868	82	548	625	243
1918	3,368	3,467	111	2,726	2,825	642	1899	550	611	73	349	410	201
1917	2,976	3,061	111	2,371	2,457	605	1898	467	501	67	278	312	189
1916	2,722	2,773	111	2,073	2,124	649	1897	440	447	58	265	272	175

Series D 946–951. Labor Union Membership and Membership as Percent of Total Labor Force and of Nonagricultural Employment: 1930 to 1970

[In thousands, except percent]

Year	Union membership		Excluding Canadian members		Nonagricultural employment		Year	Union membership		Excluding Canadian members		Nonagricultural employment	
	Total	Canadian members of U. S. unions	Number	Percent of total labor force	Total	Membership as percent of total [1]		Total	Canadian members of U. S. unions	Number	Percent of total labor force	Total	Membership as percent of total [1]
	946	947	948	949	950	951		946	947	948	949	950	951
1970	20,752	1,371	19,381	22.6	70,644	27.4	1950	15,000	733	[2] 14,300	22.3	45,222	31.5
1969	20,382	1,346	19,036	22.6	70,274	27.1	1949	15,000	718	[2] 14,300	22.7	43,778	32.6
1968	20,258	1,342	18,916	23.0	67,915	27.9	1948	15,000	681	[2] 14,300	23.1	44,891	31.9
1967	19,712	1,343	18,367	22.7	65,857	27.9	1947	15,414	627	14,787	23.9	43,881	33.7
1966	19,181	1,241	17,940	22.7	63,955	28.1	1946	14,974	579	14,395	23.6	41,674	34.5
1965	18,519	1,220	17,299	22.4	60,815	28.4	1945	14,796	474	14,322	21.9	40,394	35.5
1964	17,976	1,135	16,841	22.2	58,331	28.9	1944	14,621	475	14,146	21.4	41,883	33.8
1963	17,586	1,062	16,524	22.2	56,702	29.2	1943	13,642	429	13,213	20.5	42,452	31.1
1962	17,630	1,044	16,586	22.6	55,596	29.8	1942	10,762	382	10,380	17.2	40,125	25.9
1961	17,328	1,025	16,303	22.3	54,042	30.2	1941	10,489	288	10,201	17.7	36,554	27.9
1960	18,117	1,068	17,049	23.6	* 54,234	* 31.4	1940	8,944	227	8,717	15.5	32,376	26.9
1959	18,169	1,052	17,117	24.1	53,313	32.1	1939	8,980	217	8,763	15.8	30,618	28.6
1958	18,081	1,052	17,029	24.2	51,363	33.2	1938	8,265	231	8,034	14.6	29,209	27.5
1957	18,431	1,062	17,369	24.9	52,894	32.8	1937	7,218	217	7,001	12.9	31,026	22.6
1956	18,477	987	17,490	25.2	52,408	33.4	1936	4,164	175	3,989	7.4	29,082	13.7
1955	17,749	947	16,802	24.7	50,675	33.2	1935	3,728	144	3,584	6.7	27,053	13.2
1954	17,955	933	17,022	25.4	49,022	34.7	1934	3,249	161	3,088	5.9	25,953	11.9
1953	17,860	912	16,948	25.5	50,232	33.7	1933	2,857	168	2,689	5.2	23,711	11.3
1952	16,750	858	[2] 15,900	24.2	48,825	32.5	1932	3,226	176	3,050	6.0	23,628	12.9
1951	16,750	804	[2] 15,900	24.5	47,849	33.3	1931	3,526	216	3,310	6.5	26,649	12.4
							1930	3,632	231	3,401	6.8	29,424	11.6

* Denotes first year for which figures include Alaska and Hawaii.
[1] Excludes Canadian members.
[2] Rounded to nearest hundred thousand.

Series D 952–969. Labor Union Membership, by Industry: 1897 to 1934

[In thousands]

Year	Total	Mining, quarrying, and oil	Building construction	Metals, machinery, shipbuilding	Textiles	Leather and shoes	Clothing	Lumber and woodworking	Paper, printing, and bookbinding	Chemicals, clay, glass, stone	Food, liquor, tobacco	Transportation and communication	Public service	Theaters and music	Trade	Hotel and restaurant services	Domestic and personal service	Miscellaneous
	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969
1934	[1] 3,609	579	605	222	40	117	405	10	162	47	82	645	299	127	6	53	64	137
1933	2,973	355	583	180	16	76	336	8	153	27	58	609	296	127	5	32	55	57
1932	3,144	357	806	173	29	29	211	8	160	29	56	699	300	128	9	31	63	57
1931	3,358	309	890	191	34	38	224	12	166	33	60	816	276	132	10	38	70	60
1930	3,393	230	904	203	35	44	230	13	165	35	62	882	264	134	10	44	73	64
1929	3,443	271	919	211	35	47	218	13	162	38	65	892	247	135	10	45	67	67
1928	3,480	333	905	205	35	45	239	13	162	39	66	890	224	132	10	46	66	69
1927	3,546	397	903	204	35	49	267	13	162	41	70	889	212	113	10	47	66	68
1926	3,502	386	867	202	36	55	292	11	158	42	75	884	204	112	10	46	63	61
1925	3,519	439	837	205	36	54	292	10	156	42	75	893	193	110	10	46	60	60
1924	3,536	493	814	218	38	47	282	11	154	45	76	893	185	108	10	46	57	61
1923	3,622	530	790	257	37	56	295	11	151	50	76	907	180	104	10	45	56	67
1922	4,027	387	826	506	37	90	310	12	160	50	99	1,039	171	107	17	60	61	95
1921	4,781	470	869	728	88	96	323	20	182	53	146	1,240	172	106	21	69	55	143
1920	5,048	439	888	859	149	113	374	24	164	52	181	1,256	161	99	21	60	51	157
1919	4,125	419	802	618	60	104	324	16	148	48	168	959	137	88	15	61	42	119
1918	3,467	433	701	396	49	75	258	14	144	51	137	777	105	87	15	65	44	114
1917	3,061	373	606	310	41	73	222	18	137	52	120	695	102	82	15	65	44	105
1916	2,773	338	553	267	29	61	210	18	126	52	117	623	96	87	15	59	40	82
1915	2,583	332	533	224	22	53	174	21	116	53	119	576	90	87	15	61	38	69
1914	2,687	380	542	226	30	58	158	25	111	58	145	562	91	92	15	72	37	86
1913	2,716	432	553	219	29	55	164	25	107	56	141	557	86	82	15	69	34	92
1912	2,452	343	509	204	23	56	131	26	102	60	137	530	67	77	15	48	32	94
1911	2,343	311	479	210	21	50	145	29	97	59	128	513	66	69	15	43	31	76
1910	2,140	275	459	196	21	47	98	28	90	60	123	480	58	60	15	37	29	64
1909	2,006	307	426	178	14	40	80	19	83	57	119	438	44	52	15	37	29	66
1908	2,131	290	445	200	17	40	73	20	87	55	112	470	39	47	50	39	30	118
1907	2,080	312	433	212	16	40	65	27	86	55	110	460	31	45	50	36	27	73
1906	1,907	265	389	187	14	40	54	36	88	55	103	422	26	43	50	34	29	72
1905	2,022	297	373	166	14	41	63	42	91	51	104	446	24	38	50	39	27	158
1904	2,073	279	392	213	15	43	78	52	92	49	136	444	23	28	50	49	30	100
1903	1,914	280	369	205	19	42	77	48	88	46	122	389	22	20	50	39	29	119
1902	1,376	197	263	137	15	24	59	34	70	39	93	258	19	15	30	19	20	84
1901	1,125	218	192	104	7	15	38	32	55	33	77	216	18	13	25	10	14	59
1900	868	131	153	81	8	10	25	26	48	30	69	189	15	9	20	5	7	42
1899	611	75	97	59	7	8	15	16	43	27	51	158	11	9	8	2	4	22
1898	501	44	74	46	8	12	15	12	39	25	46	130	11	8	6	2	3	18
1897	447	21	67	50	8	15	15	6	38	23	46	116	11	7	4	2	2	17

[1] Includes 11,000 union members in the professional service industry, not shown separately.

Series D 970–985. Work Stoppages, Workers Involved, Man-Days Idle, Major Issues, and Average Duration: 1881 to 1970

Year	Work stoppages and man-days idle							Major issues and average duration							
	Stoppage beginning in year			Man-days idle				Stoppages [1]					Workers involved (1,000)		
	Total	Workers involved		Number (1,000)	Percent of estimated total working time		Per worker involved	Total	Major issues			Average duration of stoppages (days)	Total	Major issues	
		Number (1,000)	Percent of total employed		Total economy	Private nonfarm			Wages and hours [2]	Union organization	Other and not reported [2]			Wages and hours [2]	Union organization [3]	Other and not reported [2]
	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985
1970	5,716	3,305	4.7	66,414	0.37	0.44	20.1	5,716	3,132	587	1,997	25.0	3,305	2,147	106	1,053
1969	5,700	2,481	3.5	42,869	.24	.28	17.3	5,700	3,199	593	1,908	22.5	2,481	1,425	250	806
1968	5,045	2,649	3.8	49,018	.28	.32	18.5	5,045	2,891	513	1,641	24.5	2,649	1,676	112	861
1967	4,595	2,870	4.3	42,100	.25	.30	14.7	4,595	2,433	586	1,576	22.8	2,870	1,966	114	790
1966	4,405	1,960	3.0	25,400	.15	.18	12.9	4,405	2,259	596	1,550	22.2	1,960	1,114	130	718
1965	3,963	1,550	2.5	23,300	.15	.18	15.1	3,963	1,923	594	1,446	25.0	1,550	821	154	571
1964	3,655	1,640	2.7	22,900	.15	.18	14.0	3,655	1,700	556	1,399	22.9	1,640	699	87	854
1963	3,362	941	1.1	16,100	.11	.13	17.1	3,362	1,573	531	1,258	23.0	941	470	94	376
1962	3,614	1,230	2.2	18,600	.13	.16	15.0	3,614	1,824	582	1,208	24.6	1,230	725	106	403
1961	3,367	1,450	2.6	16,300	.11	.12	11.2	3,367	1,664	518	1,185	23.7	1,450	565	92	795
1960	3,333	1,320	2.4	19,100	.14	.17	14.5	3,333	1,592	538	1,203	23.4	1,320	568	246	504
1959*	3,708	1,880	3.3	69,000	.50	.61	36.7	3,708	1,872	664	1,172	24.6	1,880	1,320	154	400
1958	3,694	2,060	3.9	23,900	.18	.22	11.6	3,694	1,875	583	1,236	19.7	2,060	1,380	73	603
1957	3,673	1,390	2.6	16,500	.12	.14	11.4	3,673	1,730	751	1,192	19.2	1,390	752	72	563
1956	3,825	1,900	3.6	33,100	.24	.29	17.4	3,825	1,821	774	1,230	18.9	1,900	1,270	183	447
1955	4,320	2,650	5.2	28,200	.22	.26	10.7	4,320	2,154	844	1,322	18.5	2,650	1,780	244	625
1954	3,468	1,530	3.1	22,600	.18	.19	14.7	3,468	1,726	588	1,154	22.5	1,530	886	54	591
1953	5,091	2,400	4.7	28,300	.22	.26	11.8	5,091	2,825	745	1,521	20.3	2,400	1,460	162	781
1952	5,117	3,540	7.3	59,100	.48	.57	16.7	5,117	2,447	839	1,831	19.6	3,540	1,450	841	1,244
1951	4,737	2,220	4.5	22,900	.18	.21	10.3	4,737	2,102	888	1,747	17.4	2,220	1,180	136	904
1950	4,843	2,410	5.1	38,800	.33	.40	16.1	4,843	2,559	919	1,365	19.2	2,410	1,460	130	819
1949	3,606	3,030	6.7	50,500	.44	.59	16.7	3,606	1,682	781	1,143	22.5	3,030	1,540	82	1,410
1948	3,419	1,960	4.2	34,100	.28	.37	17.4	3,419	1,737	780	902	21.8	1,960	1,210	228	518
1947	3,693	2,170	4.7	34,600	.30	.41	15.9	3,693	1,707	1,102	884	25.6	2,170	805	931	431
1946	4,985	4,600	10.5	116,000	1.04	1.43	25.2	4,990	2,238	1,617	1,135	24.2	4,940	3,710	568	663
1945	4,750	3,470	8.2	38,000	.31	.47	11.0	4,616	1,956	946	1,714	9.9	3,070	1,340	671	1,060
1944	4,956	2,120	4.8	8,720	.07	.09	4.1	4,958	2,146	808	2,004	5.6	2,130	810	395	922
1943	3,752	1,980	4.6	13,500	.10	.15	6.8	3,734	1,906	585	1,243	5.0	1,970	1,220	226	523
1942	2,968	840	2.0	4,180	.04	.05	5.0	3,036	1,423	943	670	11.7	852	429	191	232
1941	4,288	2,360	6.1	23,000	.23	.32	9.8	4,314	1,535	2,138	641	18.3	2,360	1,110	744	512
1940	2,508	577	1.7	6,700	.08	.10	11.6	2,493	753	1,243	497	20.9	573	235	190	148
1939	2,613	1,170	3.5	17,800	.21	.28	15.2	2,639	699	1,411	529	23.4	1,180	352	641	185
1938	2,772	688	2.8	9,150	-------	.15	13.3	2,772	776	1,385	611	23.6	688	252	224	211
1937	4,740	1,860	7.2	28,400	-------	.43	15.3	4,720	1,410	2,728	582	20.3	1,950	436	1,160	347
1936	2,172	789	3.1	13,900	-------	.21	17.6	2,156	756	1,083	317	23.3	710	251	365	94
1935	2,014	1,120	5.2	15,500	-------	.29	13.8	2,003	760	945	298	23.8	1,102	663	288	151
1934	1,856	1,470	7.2	19,600	-------	.38	13.4	1,817	717	835	265	19.5	1,480	346	762	372
1933	1,695	1,170	6.3	16,900	-------	.36	14.4	1,672	926	533	213	16.9	1,144	544	465	135
1932	841	324	1.8	10,500	-------	.23	32.4	852	560	162	130	19.6	325	234	73	18
1931	810	342	1.6	6,890	-------	.11	20.2	796	447	221	128	18.8	346	155	116	74
1930	637	183	.8	3,320	-------	.05	18.1	651	284	207	160	22.3	182	73	76	33
1929	921	289	1.2	5,350	-------	.07	18.5	924	373	382	169	22.6	286	104	102	80
1928	604	314	1.3	12,600	-------	.17	40.2	620	222	226	172	27.6	323	140	95	88
1927	707	330	1.4	26,200	-------	.37	79.5	666	273	240	153	26.5	319	232	45	43

Year	Stoppages [1]				Workers involved (1,000)				Year	Stoppages [1]				Workers involved (1,000)			
	Total	Major issues			Total	Major issues				Total	Major issues			Total	Major issues		
		Wages and hours	Union organization	Other and not reported		Wages and hours	Union organization [3]	Other and not reported			Wages and hours	Union organization	Other and not reported		Wages and hours	Union organization [3]	Other and not reported
	977	978	979	980	982	983	984	985		977	978	979	980	982	983	984	985
1926	1,035	478	206	351	-------	-------	-------	-------	1899	1,838	1,014	471	353	432	288	66	79
1925	1,301	537	219	545	-------	-------	-------	-------	1898	1,098	645	236	217	263	184	30	49
1924	1,249	537	244	468	-------	-------	-------	-------	1897	1,110	680	193	237	416	335	36	45
1923	1,553	721	308	524	-------	-------	-------	-------	1896	1,066	547	297	222	249	160	53	36
1922	1,112	583	208	321	-------	-------	-------	-------									
1921	2,385	1,501	373	511	-------	-------	-------	-------	1895	1,255	810	217	228	407	305	51	51
									1894	1,404	865	206	333	690	469	25	196
1920	3,411	2,038	622	751	-------	-------	-------	-------	1893	1,375	783	257	335	288	162	59	66
1919	3,630	2,036	869	725	-------	-------	-------	-------	1892	1,359	693	261	405	239	122	59	57
1918	3,353	1,869	584	900	-------	-------	-------	-------	1891	1,786	867	334	585	330	221	55	54
1917	4,450	2,268	799	1,383	-------	-------	-------	-------									
1916	3,789	2,036	721	1,032	-------	-------	-------	-------	1890	1,897	1,039	318	540	373	276	32	66
1915	1,593	770	312	511	-------	-------	-------	-------	1889	1,111	662	173	276	260	207	29	24
1914	1,204	403	253	548	-------	-------	-------	-------	1888	946	540	163	243	163	100	23	41
									1887	1,503	836	299	368	439	249	91	99
1906–13	-------	-------	-------	-------	-------	-------	-------	-------	1886	1,572	1,073	210	289	610	445	79	87
1905	2,186	942	800	444	302	191	57	54									
1904	2,419	944	964	511	574	272	210	92	1885	695	486	67	142	258	214	14	30
1903	3,648	1,778	1,200	670	788	396	235	156	1884	485	341	50	94	165	145	4	16
1902	3,240	1,604	1,051	585	692	279	279	134	1883	506	372	55	79	170	131	28	12
1901	3,012	1,413	1,016	583	564	288	161	115	1882	476	353	38	85	159	133	12	14
1900	1,839	931	414	494	568	210	282	76	1881	477	382	32	63	130	118	5	7

* Denotes first year for which figures include Alaska and Hawaii.

[1] For 1881–1927 and 1947–1970, data for stoppages beginning in calendar years; 1928–1946, data for those ending in calendar years.

[2] Beginning 1961, other contractual matters included under "Other and not reported" rather than "Wages and hours" as in previous years.

[3] Wages and hours were important issues in many of these stoppages also.

Series D 986–1021. Work Stoppages, by Major Industry Group: 1937 to 1970

[Workers and man-days idle in thousands]

Year	Stoppages beginning in year		Man-days idle during year (all stoppages)		Stoppages beginning in year		Man-days idle during year (all stoppages)		Stoppages beginning in year		Man-days idle during year (all stoppages)	
	Number	Workers involved	Number	Percent of estimated working time	Number	Workers involved	Number	Percent of estimated working time	Number	Workers involved	Number	Percent of estimated working time
	986	987	988	989	990	991	992	993	994	995	996	997
	MANUFACTURING				FABRICATED METAL PRODUCTS EXCEPT ORDNANCE, MACHINERY, AND TRANSPORTATION EQUIPMENT				MACHINERY, EXCEPT ELECTRICAL			
1970	2,481	1,128	38,006	0.77	323	118.0	3,444	0.97	292	119.0	3,603	0.72
1969	2,822	1,308	24,107	.47	381	74.0	1,378	.37	361	148.0	3,168	.62
1968	2,664	1,180	24,000	.47	349	78.4	2,040	.57	414	180.0	3,940	.79
1967	2,328	1,350	27,800	.57	274	107.0	2,270	.66	260	177.0	4,010	.80
1966	2,296	922	13,700	.28	277	76.1	1,290	.37	301	136.0	2,440	.51
1965	2,080	913	14,300	.31	269	86.8	1,430	.45	266	118.0	1,870	.43
1964	1,794	994	15,700	.35	228	79.9	1,550	.50	191	120.0	1,140	.27
1963	1,685	555	10,400	.24	193	40.8	516	.18	171	58.5	845	.22
1962	1,789	638	10,100	.24	220	42.5	651	.23	196	63.3	1,200	.32
1961	1,677	897	9,780	.24	191	96.6	1,130	.41	176	89.1	1,240	.34
1960	1,598	707	11,200	.27	195	44.2	597	.21	144	68.5	1,240	.30
1959	2,043	1,280	55,500	1.34	276	100.0	3,150	1.14	217	82.7	2,820	.68
1958	1,955	1,490	15,400	.39	256	147.0	1,220	.46	223	152.0	2,760	.72
1957	1,965	778	9,390	.22	237	58.5	713	.25	231	89.9	1,380	.32
1956	1,986	1,360	12,700	.63	229	87.7	1,420	.50	211	113.0	2,630	.83
1955	2,406	2,000	18,800	.45	282	131.0	1,590	.57	306	230.0	3,800	.95
1954	1,703	772	13,700	.33	175	42.0	1,200	.45	175	64.0	1,350	.34
1953	2,612	1,320	15,600	.36	291	102.0	1,690	.57	286	126.0	2,150	.50
1952	2,665	1,880	42,300	1.03	282	111.0	2,430	.95	323	167.0	3,990	.96
1951	2,548	1,370	17,500	.43	242	84.2	1,300	.51	268	158.0	3,370	.83
1950	2,705	1,450	22,900	.66	278	85.8	969	.45	317	224.0	4,410	1.40
1949	1,661	1,220	24,200	.73	134	54.0	1,050	.52	176	116.0	2,720	.89
1948	1,675	959	17,600	.46	151	37.0	496	----	189	152.0	2,090	.59
1947	1,993	801	15,700	.43	218	51.3	883	----	252	114.0	2,910	.59
1946	2,887	2,210	81,700	2.42	----	----	----	----	324	244.0	13,700	4.51
1945	3,185	2,510	28,800	.78	----	----	----	----	335	228.0	2,970	.91
1944	3,257	1,680	6,150	.14	----	----	----	----	311	141.0	508	.13
1943	2,491	1,220	3,430	.07	----	----	----	----	210	62.1	139	.04
1942	1,879	616	2,680	.08	----	----	----	----	87	46.8	104	----
1941	2,652	1,270	12,500	.49	----	----	----	----	199	102.0	1,680	----
1940	1,410	352	4,400	.17	----	----	----	----	87	24.3	396	----
1939	1,389	394	7,180	.31	----	----	----	----	63	20.4	337	----
1938	1,436	410	5,820	.27	----	----	----	----	55	13.9	333	----
1937	2,779	1,230	20,000	.79	----	----	----	----	175	48.3	546	----
	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009
	TRANSPORTATION EQUIPMENT [1]				NONMANUFACTURING				MINING			
1970	158	327.0	14,034	3.02	3,241	2,177	28,407	0.21	544	211.0	850	0.54
1969	202	264.0	4,500	.87	2,893	1,174	18,763	.14	495	220.0	1,157	.72
1968	241	255.0	2,990	.58	2,396	1,470	25,000	.20	301	213.0	2,550	1.60
1967	165	347.0	5,530	1.13	2,267	1,580	14,300	.15	254	102.0	3,030	1.95
1966	162	150.0	1,330	.27	2,110	1,040	11,700	.14	194	96.1	794	.50
1965	140	196.0	2,630	.60	1,886	633	9,020	.11	188	71.6	431	.27
1964	120	386.0	6,410	1.53	1,865	646	7,210	.09	155	83.4	808	.49
1963	101	71.5	678	.16	1,678	386	5,730	.07	153	45.8	481	.30
1962	100	81.5	1,410	.34	1,825	596	8,460	.11	159	51.8	983	.60
1961	98	297.0	2,500	.65	1,694	555	6,500	.08	154	37.7	310	.18
1960	122	189.0	3,550	.85	1,740	610	7,900	.11	154	48.5	700	.41
1959	108	76.5	1,390	.32	1,672	600	13,500	.19	187	120.0	5,650	3.26
1958	210	551.0	4,310	1.06	1,739	574	8,520	.12	168	38.6	302	.16
1957	154	167.0	1,170	.24	1,711	610	7,080	.10	198	56.3	240	.11
1956	145	123.0	1,800	.40	1,856	544	6,020	.09	321	129.0	1,320	.65
1955	200	440.0	1,910	.40	1,913	646	9,390	.14	343	114.0	1,080	.57
1954	84	107.0	656	.15	1,762	761	8,900	.14	248	111.0	845	.44
1953	179	300.0	2,730	.55	2,479	1,090	12,700	.19	460	156.0	846	.40
1952	199	216.1	2,230	.53	2,452	1,660	16,800	.27	650	547.0	4,310	1.92
1951	194	230.0	2,600	.68	2,189	844	5,470	.11	622	284.0	1,290	.55
1950	171	368.0	8,540	2.88	2,138	959	15,900	.30	508	196.0	9,700	4.37
1949	89	230.0	2,190	.78	1,945	1,820	26,300	.39	476	1,380.0	19,200	8.39
1948	107	278.0	3,170	.89	1,744	996	16,500	.31	614	651.0	10,400	4.51
1947	106	171.0	4,200	1.18	1,700	1,370	18,900	.39	478	517.0	2,440	1.12
1946	193	222.0	17,300	----	2,108	2,360	34,100	.72	570	974.0	21,400	10.35
1945	407	834.0	9,740	----	1,569	958	9,270	.21	670	678.0	6,230	2.88
1944	549	752.0	2,260	----	1,700	434	2,570	.05	893	278.0	1,410	.56
1943	345	341.0	823	----	1,261	763	10,100	.21	463	610.0	9,370	4.25
1942	115	97.1	211	----	1,089	224	1,500	.03	156	83.3	516	.31
1941	185	394.0	2,290	----	1,642	1,090	10,600	.23	143	737.0	7,230	----
1940	51	49.6	270	----	1,098	225	2,300	.05	65	42.3	269	----
1939	56	134.0	2,660	----	1,224	777	10,600	.25	64	383.0	7,460	----
1938	49	82.7	318	----	1,336	278	3,330	.08	63	37.5	529	----
1937	165	372.0	4,720	----	1,961	663	8,450	.20	111	163.0	2,620	----

[1] For 1937–1958, includes municipally operated utilities.

Series D 986–1021. Work Stoppages, by Major Industry Group: 1937 to 1970—Con.

[Workers and man-days idle in thousands]

Year	Stoppages beginning in year		Man-days idle during year (all stoppages)		Stoppages beginning in year		Man-days idle during year (all stoppages)		Stoppages beginning in year		Man-days idle during year (all stoppages)	
	Number	Workers involved	Number	Percent of estimated working time	Number	Workers involved	Number	Percent of estimated working time	Number	Workers involved	Number	Percent of estimated working time
	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021
	CONTRACT CONSTRUCTION				TRANSPORTATION, COMMUNICATIONS, ELECTRIC, GAS, AND SANITARY SERVICES				WHOLESALE AND RETAIL TRADE			
1970	1,137	621.0	15,240	1.79	400	858.0	7,208	0.63	487	74.0	1,876	0.05
1969	973	433.0	10,386	1.19	320	212.0	4,031	.36	470	93.0	1,310	.04
1968	912	364.0	8,720	1.05	303	571.0	9,310	.84	417	75.1	972	.03
1967	867	305.0	5,160	.62	345	866.0	3,450	.32	431	87.2	994	.03
1966	977	455.0	6,140	.73	240	312.0	3,390	.32	365	42.3	508	.02
1965	943	301.0	4,630	.57	216	185.0	3,000	.29	336	42.6	570	.02
1964	944	248.0	2,790	.35	257	205.0	1,900	.19	309	61.6	1,340	.04
1963	840	208.0	1,930	.25	205	63.4	2,540	.25	293	34.1	498	.02
1962	913	284.0	4,150	.60	213	182.0	2,490	.25	364	29.7	535	.02
1961	824	217.0	3,490	.50	243	211.0	1,710	.17	308	62.4	716	.02
1960	773	269.0	4,470	.63	266	200.0	1,750	.18	290	32.6	451	.02
1959	771	251.0	4,120	.58	233	140.0	1,910	.19	311	72.2	1,570	.05
1958	844	326.0	4,790	.71	242	132.0	2,270	.23	358	57.0	942	.03
1957	785	308.0	3,970	.51	209	169.0	2,010	.19	372	63.0	654	.02
1956	784	231.0	2,680	.35	243	130.0	1,170	.11	336	37.1	558	.02
1955	783	204.0	1,810	.28	275	253.0	4,860	.47	409	52.3	1,090	.04
1954	804	437.0	4,800	.71	282	146.0	1,410	.14	298	53.4	1,690	.06
1953	1,039	574.0	8,000	1.22	372	256.0	2,380	.22	408	71.2	1,050	.04
1952	794	634.0	6,700	1.03	406	372.0	4,170	.39	397	75.8	1,050	.04
1951	651	232.0	1,190	.18	387	231.0	1,790	.17	277	40.0	289	.01
1950	611	237.0	2,460	.44	386	405.0	2,380	.25	381	70.1	927	.04
1949	615	197.0	2,760	.53	347	154.0	2,320	.25	329	46.2	1,440	.07
1948	380	108.0	1,430	.29	293	160.0	3,290	.34	241	30.2	557	.03
1947	382	175.0	2,770	.66	282	468.0	11,500	1.19	336	60.6	1,010	.05
1946	351	146.0	1,450	.40	479	1,020.0	9,020	.94	385	64.1	882	.05
1945	206	45.8	447	.20	342	157.0	1,550	.15	182	34.8	336	.02
1944	168	22.5	120	.06	335	73.4	345	.03	139	31.5	270	.01
1943	188	35.7	141	.04	284	55.6	183	----	119	25.5	90	----
1942	239	31.0	164	.04	221	42.3	171	----	260	30.0	304	----
1941	395	186.0	923	----	280	51.5	433	----	----	----	----	----
1940	310	71.3	493	----	185	45.4	596	----	----	----	----	----
1939	320	70.1	633	----	256	87.4	867	----	----	----	----	----
1938	315	44.4	405	----	216	76.7	730	----	----	----	----	----
1937	328	71.9	848	----	379	138.0	1,890	----	----	----	----	----

Series D 1022–1028. Average Monthly Labor Turnover Rates in Manufacturing, by Class of Turnover: 1919 to 1970

[Monthly rate per 100 employees. Beginning 1930, averages are arithmetic means; prior to that, unweighted medians. See text for further discussion]

Year	Accession rates		Separation rates			Year	Accession rates	Separation rates		
	Total	New hires	Total	Quits	Layoffs		Total	Total	Quits	Layoffs
	1022	1023	1024	1025	1026		1022	1024	1025	1026
1970	4.0	2.8	4.8	2.1	1.8	1949	4.3	5.0	1.9	2.9
1969	4.7	3.7	4.9	2.7	1.2	1948	5.4	5.4	3.4	1.6
1968	4.6	3.5	4.6	2.5	1.2	1947	6.2	5.7	4.1	1.1
1967	4.4	3.3	4.6	2.3	1.4	1946	8.1	7.2	5.2	1.4
1966	5.0	3.8	4.6	2.6	1.2	1945	7.7	9.6	6.1	2.6
1965	4.3	3.1	4.1	1.9	1.4	1944	7.4	8.1	6.2	.7
1964	4.0	2.6	3.9	1.5	1.7	1943 [2]	9.1	8.6	6.3	.7
1963	3.9	2.4	3.9	1.4	1.8	1942	9.3	7.8	4.6	1.3
1962	4.1	2.5	4.1	1.4	2.0	1941	6.5	4.7	2.4	1.6
1961	4.1	2.2	4.0	1.2	2.2	1940	5.4	4.0	[3] 1.1	2.6
1960	3.8	2.2	4.3	1.3	2.4	1939	5.0	3.7	1.0	2.6
1959 [1] *	4.2	2.6	4.1	1.5	2.0	1938	4.7	4.8	.8	3.9
1958	3.6	1.7	4.1	1.1	2.6	1937	4.3	5.2	1.5	3.5
1957	3.6	2.2	4.2	1.6	2.1	1936	5.3	4.0	1.3	2.4
1956	4.2	2.8	4.2	1.9	1.7	1935	5.1	4.3	1.1	3.0
1955	4.5	3.0	3.9	1.9	1.5	1934	5.7	4.9	1.1	3.7
1954	3.6	1.9	4.1	1.4	2.3	1933	6.5	4.5	1.1	3.2
1953	4.8	3.6	5.1	2.8	1.6	1932	4.1	5.2	.9	4.2
1952	5.4	4.1	4.9	2.8	1.4	1931	3.7	4.8	1.1	3.5
1951	5.3	4.1	5.3	2.9	1.4	1930	3.8	5.9	1.9	3.6
1950	5.3	----	4.1	2.3	1.3					

See footnotes at end of table.

Series D 1022–1028. Average Monthly Labor Turnover Rates in Manufacturing, by Class of Turnover: 1919 to 1970—Con.

[Monthly rate per 100 employees. Beginning 1930, averages are arithmetic means; prior to that, unweighted medians. See text for further discussion]

Year	Accession rates	Separation rates					Year	Accession rates	Separation rates				
		Total	Layoffs	Discharges	Quits	Miscellaneous			Total	Layoffs	Discharges	Quits	Miscellaneous
	1022	1024	1026	1027	1025	1028		1022	1024	1026	1027	1025	1028
1929 [4]	5.1	3.9	0.4	0.5	3.0		1923	9.0	7.5	0.3	1.0	6.2	
1928	3.7	3.1	.5	.4	2.2		1922	8.0	5.3	.4	.7	4.2	
1927	3.3	3.3	.7	.5	2.1		1921	2.8	4.4	1.8	.4	2.2	
1926	4.5	3.9	.5	.6	2.9		1920	10.1	10.3	.8	1.1	8.4	
1925	5.2	4.0	.4	.5	3.1		1919	10.1	7.5	.6	1.1	5.8	
1924	3.3	3.8	.6	.5	2.7								

* Denotes first year for which figures include Alaska and Hawaii.
[1] Beginning 1959, transfers between establishments of the same firm are included in total accessions and total separations; 1959–1970 figures therefore not strictly comparable with prior data.
[2] Beginning 1943, labor turnover rates refer to all employees; previously, to production workers only.
[3] Prior to 1940, quits include miscellaneous separations.
[4] January to May average.

Series D 1029–1036. Work-Injury Frequency Rates in Manufacturing, Mining, and Class I Railroads: 1922 to 1970

[Rate is average number of disabling injuries per million man-hours worked]

Year	Manufacturing [1]	Mining					Class I railroads		Year	Manufacturing [1]	Mining					Class I railroads	
		Total	Coal [2]	Metals [3]	Nonmetals [4]	Stone quarries [5]	All injuries	Excluding 1-3 day injuries			Total	Coal [2]	Metals [3]	Nonmetals [4]	Stone quarries [5]	All injuries	Excluding 1-3 day injuries
	1029	1030	1031	1032	1033	1034	1035	1036		1029	1030	1031	1032	1033	1034	1035	1036
1970	15.2	28.9	42.6	25.6	26.1	19.8	11.5	----	1945	18.6	55.5	60.7	44.9	47.2	32.8	20.5	11.9
1969	14.8	28.0	42.6	23.9	24.2	18.4	12.2	----	1944	18.4	57.2	60.3	55.4	50.5	34.9	20.6	11.8
1968	14.0	27.8	42.5	23.1	25.3	17.8	12.5	----	1943	20.0	59.4	63.8	56.9	53.4	34.0	20.3	11.9
1967	14.0	28.0	42.8	24.8	24.0	17.8	12.2	----	1942	19.9	61.2	66.8	56.6	55.5	35.7	17.6	10.2
1966	13.6	28.4	43.8	25.1	23.3	19.1	12.0	----	1941	18.1	63.2	67.6	64.2	51.6	40.1	14.6	8.3
1965	12.8	28.3	45.8	23.8	23.0	17.3	12.1	----	1940	15.3	65.2	70.4	66.8	44.2	35.7	11.5	6.7
1964	12.3	28.8	44.8	25.0	23.4	18.2	12.6	----	1939	14.9	64.8	69.5	69.4	42.2	36.5	11.1	6.7
1963	11.9	28.8	45.1	25.1	21.8	18.2	12.0	----	1938	15.1	67.5	73.0	71.3	41.1	38.2	11.1	6.8
1962	11.9	28.6	45.1	25.0	21.9	17.4	11.7	----	1937	17.8	70.5	74.2	78.9	48.7	40.6	13.6	8.2
1961	11.8	29.5	45.0	26.6	21.5	22.4	12.0	----	1936	16.6	70.2	74.4	76.3	48.6	39.5	13.7	8.3
1960	12.0	29.8	43.4	25.2	23.4	23.3	7.3	----	1935	17.9	72.7	79.0	65.8	50.7	38.2	----	6.7
1959	12.4	29.2	42.1	26.7	25.6	24.3	7.2	----	1934	20.2	73.8	78.1	71.5	52.4	41.8	----	7.0
1958	[6] 11.4	[7] 31.9	45.1	26.7	23.3	24.7	6.7	----	1933	19.3	71.7	75.9	65.8	53.3	42.1	----	6.9
1957	11.4	35.8	47.2	28.0	27.1	23.3	[8] 5.3	----	1932	19.6	74.8	82.2	57.2	45.2	38.5	----	7.4
1956	12.0	37.1	46.7	32.9	29.7	21.3	14.7	7.7	1931	18.9	79.9	89.9	58.0	47.5	41.0	----	7.5
1955	12.1	38.3	46.0	38.0	32.0	22.0	13.9	7.2	1930	23.1	----	----	----	----	40.3	----	9.4
1954	11.9	37.7	46.7	34.3	32.6	22.0	12.6	6.5	1929	24.0	----	----	----	----	46.9	----	13.8
1953	13.4	40.3	48.1	34.8	47.3	23.7	13.6	6.7	1928	22.5	----	----	----	----	47.5	----	16.2
1952	14.3	43.6	51.6	38.3	40.9	24.5	13.7	7.0	1927	22.6	----	----	----	----	59.2	----	19.4
1951	15.5	45.1	52.1	38.8	45.4	26.2	14.7	7.5	1926	24.2	----	----	----	----	58.0	----	23.9
1950	14.7	46.3	53.3	41.0	44.2	25.4	14.2	7.3	1925	----	----	----	----	----	61.4	----	26.1
1949	14.5	48.3	56.0	43.6	42.1	26.8	13.7	7.0	1924	----	----	----	----	----	62.9	----	27.3
1948	17.2	53.2	60.6	43.4	42.9	28.3	16.2	8.5	1923	----	----	----	----	----	----	----	30.9
1947	18.8	55.8	61.9	48.1	45.8	32.4	18.2	9.7	1922	----	----	----	----	----	----	----	27.1
1946	19.9	58.0	64.0	51.2	51.9	32.8	19.0	10.5									

[1] Excludes petroleum refining, smelting and refining of nonferrous metals, cement and lime manufacturing, and coke production.
[2] Includes data on coal-mine mechanical-cleaning plants and mill data for metal, nonmetal, and stone quarries. Excludes coke production.
[3] Copper, gold-silver, iron, lead-zinc, uranium, and miscellaneous.
[4] Clay-shale, gypsum, phosphate rock, potash, salt, sulfur, and miscellaneous.
[5] Cement, granite, lime, limestone, marble, sandstone, slate, traprock, and miscellaneous.
[6] Industry definition revised to conform to the 1957 edition of the *Standard Industrial Classification Manual*. Comparisons to prior years should be made with caution.
[7] Beginning 1958, includes data on sand and gravel operations.
[8] Beginning 1957, accidents reported on different basis; data not comparable with prior years.