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## Appendix B

## DATA ON GOVERNMENT EMPLOYMENT

## The Two Sources of Information

Government employment can be measured in two ways. One is to ask people what kind of work they do or for whom they work, as in the Census of Population and the Census Bureau's Monthly Report on the Labor Force (census data). The other is to ask employers, in this case government units, how many people are on their payrolls on a certain date, or on the average for a period, as in the questionnaires sent out by the Governments Division of the Census Bureau (payroll data).
Aside from errors in reporting, conceptual differences will cause these two methods to yield different estimates. For example, census data cover only persons devoting all or most of their time to government work: a person with two or more attachments is requested to report only the one taking the major portion of his time. Payroll data, on the other hand, include everyone - with some minor exceptions - who does any work at all for the government during the period covered. ${ }^{1}$ Further, payroll data count a person twice when he is on two government payrolls during the period covered; for exam-

[^0]ple, when he regularly works (full- or part-time) for two government units, or transfers from one to another during a single payroll period.

## Census Data

The only attempt by the Bureau of the Census to make a complete count of government workers was in the 1940 Population Census. All employees, except those on emergency work, were asked whether they were working for the government. The total, plus an estimate for United States troops and other government employees stationed outside the continental United States who were not covered by the census, yields an estimate of regular government employment. To this may be added the number of public emergency workers, if they are considered to be employed by government. Figures after 1944, based on a sample of households, appear in the Monthly Report on the Labor Force. ${ }^{2}$

Censuses prior to 1940 did not report separately the number of employed government workers. It was necessary for us to estimate first, the number of workers (employed and unemployed) attached to government, and second, the number of these actually employed. The methods and data are described in the notes to Table B1. Only two points need comment.

First, until 1940 the Census asked workers only what their occupation and industry were, not whether they worked for government. Daniel Carson estimated, mainly from census data, the number of persons, employed and unemployed, attached to three major categories of government service - the Post Office, public schools, and "government, not elsewhere classified" - during 1870-1940. The third category omits government workers in industries such as medical and health services, public utilities, construction, and shipbuilding, which accounted for 1.3 million of the workers attached to government in 1940. For this reason Carson's series is only a crude index of change in the total number attached to government, and is possibly biased downward. ${ }^{3}$

[^1]Second, with respect to the number "attached" to government, but actually unemployed, the 1930 Census supplied such information only for the three government "industries" Carson distinguished, and even these required some manipulation before they could be put on something like the 1940 basis. The 1920 Census gave no information whatever on unemployment. Gladys L. Palmer and Ann Ratner have published census data on the percentage employed in 1910 for industries sufficiently comparable with Carson's groups. ${ }^{4}$ The 1900 Census provided employment data only by occupation and on a basis different from that of later censuses. ${ }^{5}$

## Payroll Data

Payroll data have several advantages over census data: they are available at more frequent intervals; they relate directly to employment


#### Abstract

the census figures on total educational employees as relating to a "characteristic" occupation of the kind mentioned in the next paragraph. The resulting census estimate would be substantially the same as Carson's. "Government, not elsewhere classified", an assortment of such activities as general government administration and regulation, national defense, police and fire protection, and the courts, not covered by the usual industrial classification, is given by the census as an industry only in 1910, 1930, and 1940. For all the other years it must be estimated from data on characteristic occupations such as policemen and firemen, soldiers and sailors, and officials (government).

In Table B1, line 2, we used Carson's estimates as they stand only back to 1910. As Carson's 1900 figures depend to a considerable extent on payroll data, we replaced them with our own estimates, based on census data. Extrapolating Carson's 1910 figures for the three divisions of government back to 1900 by the census data for characteristic occupations, such as teachers and professors, mail carriers, soldiers, sailors, and marines, policemen and detectives, we got a 1900 estimate almost entirely independent of payroll data, which we can use as a check on the estimates based on payroll data. For years before 1900 we extrapolated our 1900 estimate by Carson's figures. The characteristic occupations for government covered about 84 percent of the number Carson reported for "government" in 1910. The percentages were 64, 104, and 70 for postal service, education, and government n.e.c., respectively. The important clerical occupations could not be used directly in estimating government employees because they consist largely of nongovernment workers. Carson's methods, however, do permit the relative increase in clerical occupations in total gainful workers to influence his estimate before 1910.


'Industrial and Occupational Trends in National Employment, Research Report No. 11, Industrial Research Department, Wharton School of Finance and Commerce, 1949.

[^2]and exclude unemployed workers; they cover all types of government activity, rather than only the selected industries or occupations covered in the censuses before 1940; and, coming from the records of employing agencies, they are probably more reliable than the reports of workers or their relatives. On the other hand, there are many individual government units, and even some whole types, for which there is no payroll information at all. Data for counties and minor civil divisions are lacking before 1929, and the samples for state and city governments rapidly shrink as we go back of 1929, almost disappearing by 1900 .

A few points about the payroll data need to be brought to the attention of the reader of the tables that follow.

The data for the Post Office Department in Table B4 are the figures for several types of Post Office employees distinguished in the annual reports of the Postmaster General. We use their sum instead of the totals in the annual reports of the Civil Service Commission because the latter vary considerably from year to year in their treatment of such employees as third and fourth class clerks and those whose relation to the Post Office Department is more that of contractor than of employee. We eliminated contractors, such as star route contractors, from our figures, but we included certain employees, such as third and fourth class clerks, who were actually employees of the postmasters, paid out of their salaries and allowances, not government employees. Since these clerks were numerous in the earlier years, omitting them would cause the Post Office series to rise more rapidly than we show. The third class clerks became government employees only in 1946. Because of irregular reporting, we excluded temporary and substitute employees whenever possible, but they could not always be separated from regular employees. The number of fourth class postmasters and clerks in third and fourth class offices, who are almost entirely part-time workers, has been decreasing steadily; the other categories of postal workers, all full-time, have been almost continuously increasing. For this reason our rough estimate of the full-time equivalent number of postal workers, made by reducing the number of postmasters in fourth class offices and clerks in third and fourth class offices 75 percent, rises much more rapidly than total postal workers. ${ }^{6}$

[^3]The armed forces series shows the number in the Army, Navy, and Marine Corps, usually as of June 30. However, during the SpanishAmerican War, World War I, and the period from 1939 on, when the number was changing rapidly, we present annual averages and add, whenever possible, active members of the Reserve, the National Guard, U.S. Volunteers, etc.

The rest of the data for the executive branch of the federal government are almost entirely from compilations of the Civil Service Commission. For the most part, we used the unrevised figures from the original Annual Reports instead of the revised series in recent Statistical Abstracts and Civil Service Commission reports because most of the revisions appeared to be in the Post Office Department, which we had treated separately, and it was usually not possible to decide the extent or the nature of the revisions applying to the rest of the data. ${ }^{7}$

The sources for nonschool state and local government employment from 1929 to 1949 are Census Bureau periodic reports on Government Employment, and the WPA-BLS State, County, and Municipal Survey. Government Employment, which supplied the 1940-49 figures, reports the results of a survey made each quarter by a direct mail canvass of a carefully selected sample of local governments and all state governments. The figures for the missing units are estimated from employment per capita in reporting units, except for any states or cities over 100,000 which may not report. In such cases the figures are estimated individually on the basis of previous reports.

Government Employment shows figures for permanent full-time employment and total employment. We derive our estimate for fulltime equivalent employment by adding to permanent full-time em-

[^4]ployees a third of the number of temporary and part-time employees, the fraction used for the same purpose by the Department of Commerce.

The data for 1929 to 1939 are from the State, County, and Municipal Survey. Monthly data were collected by field agents from payroll records of all state governments, all cities with populations of 50,000 or more in 1930, and a stratified sample of smaller cities, counties, townships, and special purpose government units such as school districts and housing authorities.

Since the two series do not overlap, we linked them by using the Department of Commerce figures for state and local nonschool employment, excluding work relief. According to the Department of Commerce (Technical Notes on Sources and Methods Used in the Derivation of National Income Statistics), figures on payrolls from the two sources seemed comparable, but the figures on employment did not. The Department attributes the discrepancy to the inclusion of more nominal employees in the later figures. In the earlier survey, part-time employees were included, but nominal employees (persons with brief or intermittent employment) were, when possible, either scaled down in terms of time worked or excluded. The Government Employment figures apparently specifically exclude only members of school boards as nominal employees.

The state government nonschool employment figures (Table B8) were extrapolated back from 1929 to 1920, 1910 and 1900 by per capita employment in a varying sample of states ranging in number from three to six. A similar procedure was used to derive the earlier figures on municipal employment (Table B9). For counties and minor civil divisions (Table B10) we could estimate employment in only one year before 1929 and even that, 1902, only roughly via nonschool expenditures. ${ }^{8}$
School employment (Table B11) rests on a more substantial foundation for the period as a whole, the primary sources for all the data being the annual reports of the Commissioner of Education, the Biennial Survey of Education, and the State, County, and Municipal Survey. The original figures for the earlier years had to be stepped up to take account of noninstructional staff, but this group was small compared with teachers, for whom figures are available for the entire period.

[^5]Table B12 shows, by program, the number of emergency workers, none of whom is included in any of the preceding tables based on payroll data.

Functional classifications of government workers, in the maximum detail available, appear in Tables B15-18.

## Comparison with Other Estimates

A word may be desirable on why our estimates differ from (a) earlier estimates published by the National Bureau, ${ }^{9}$ (b) current estimates of the Department of Commerce, National Income Division. Kuznets' estimates differ from ours mainly because we could use more recent data, notably the WPA-BLS survey and the compilations of the Governments Division of the Bureau of the Census. We also adjusted the postal service workers to a full-time basis, increased somewhat the sample of state and local governments for which employment data were obtained, and applied somewhat different methods in passing from the sample to our final estimate.

The Department of Commerce estimates for 1929-49 differ from ours mainly because we include all federal employees abroad. The main effect is to put the peak of government employment in 1945 instead of 1944.

[^6]Table B1
Government Labor Force and Total Labor Force


|  | March | March |
| :---: | :---: | :---: |
| April 1 | $24-30$ | $5-11$ |
| 1930 | 1940 | 1950 |
| Comparable with |  |  |
| earlier | later |  |
| years | years |  |


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## Notes to Table B1

Line
1 The total labor force attached to government in 1940 is estimated as follows (figures are in thousands): Reported total, government workers employed (excluding
those in emergency work)
Reported total, government workers, experienced, seeking work 363
Less:
NYA student workers erroneously reported as employed -14
Public emergency workers erroneously reported as employed -257
NYA and public emergency workers "usually" government
workers, erroneously reported as seeking work
Plus:
U. S. armed forces overseas 150

Public emergency workers "usually" government workers 371
Omitted entries "usually" government workers 42
Total 4,480
The reported totals are from 16th Census: 1940, Population, Vol. III, The Labor Force, Table 78. The estimates of the number of persons erroneously reported as employed are from 16th Census: 1940, Population, Estimates of Labor Force, Employment, and Unemployment in The United States, 1940 and 1930 (1944), by John D. Durand and Edwin D. Goldfield. The same source estimated the total number erroneously reported as seeking work and we assumed that the proportion of those who were "usually" government workers was the same as the proportion of government workers to all employed workers: 8.5 percent (see Table B3). U. S. armed forces overseas are from Census Release, P-44, No. 12. We estimated the number of public emergency workers who had "usually" been government workers from an industrial classification of the last jobs of public emergency workers (Census Release, P-14, No. 13), assuming that the ratio of government to total in each industry was the same as in Table B3. We estimated the number of omitted entries (persons for whom employment status was not reported) usually attached to government by taking 8.5 percent of the estimated number who were actually employed or seeking work (see Durand and Goldfield, op. cit.).

A different figure for troops overseas, 119,000, is given in the 1940 Census, Population, Vol. I, p. 6, but this seems low because even the higher figure is based on an estimated total military strength of 417,000 , compared with a BLS estimate of 433,000 as of April 1, 1940.

2 Data for 1910-40 from Table I of Daniel Carson, "Changes in the Industrial Composition of Manpower Since the Civil War," Studies in Income and Wealth, Vol. XI, to which we added U. S. armed forces overseas. The 1900 estimate was derived from Carson's 1910 figures for the three government "industries", public education, the Postal Service, and government n.e.c., by extrapolating them back by data on occupations characteristic of government (16th Census: 1940, Comparative Occupation Statistics for the U. S., 1870-1940 by Alba M. Edwards), and then adding armed forces overseas. For 1870-90

## Notes to Table B1 (continued)

Line
the figures are extrapolated back from 1900 by Carson's totals. The figure for armed forces overseas in 1940, 150,000, is from Census Release P-44, No. 12. The earlier figures are as follows (see Historical Statistics of the U. S., p. 25) : 1930, 89,453; 1920, 117,238; 1910, 55,608; 1900, 91,219. Since the data for 1870-90 do not include troops overseas, the figure for 1900 comparable with earlier years would be 849,000 .
31940 Census, The Labor Force, Table 78. We added U. S. troops and other employees outside the continental U. S. (see note to line 2) and 8.5 percent of the estimated number of employed persons for whom no employment status was shown, and subtracted NYA student workers and public emergency workers erroneously reported as employed, assuming that all were reported as government workers (see Durand and Goldfield, op. cit. and Table B3). Figures for 1930 and earlier years except 1920 were estimated by extrapolation via line 4, and 1920 was interpolated via line 2. The figure for 1950 is from the Monthly Report on the Labor Force, March 1950, with U. S. armed forces overseas included.
1940: for employees other than education, 1940 Census, The Labor Force, Table 74, "government". For education employees, Carson's total labor force in public education multiplied by the ratio of employed to total labor force in all education, from Census Release P-14, No. 13. We added armed forces overseas (see note to line 2).

1930: for employees other than education, 1930 Census, Unemployment, Table 3, ratio (for public service, n.e.c.) of gainful workers other than Class A unemployed to total gainful workers, multiplied by Carson's government employees other than public school. To these we added U. S. troops and some others stationed outside the continental U. S. For school employees the same method, using Carson's public school employment. Class A unemployment in 1930 was assumed to be approximately equivalent to the 1940 concept of experienced workers seeking work, and the government occupations for which data are presented for 1930 are assumed to be representative of the industries Carson included. For support of the assumption about unemployment, see Durand and Goldfield, op. cit.

1910: Carson's figure for government workers, multiplied by the ratio of employed to gainfully occupied in the part of government employment shown in Gladys L. Palmer and Ann Ratner, Industrial and Occupational Trends in National Employment, Research Report No. 11, Industrial Research Department, Wharton School of Finance and Commerce, 1949, App. Table 1C. To this figure we added the armed forces overseas (see note to line 2).

1900: for education employees, the number attached multiplied by minimum and maximum ratios of manmonths worked to available manmonths. The ratios are based on the figures for "teachers and professors" in the 1900 Census, Special Report on Occupations, Tables 1 and 25. Since school teachers not at work during the summer were reported as unemployed, teachers "unemployed" 1 to 3 months were counted as working 12 months. For other employees, except troops

Notes to Table B1 (concluded)
Line
serving overseas, employment was estimated using the ratios in Solomon Fabricant, "The Changing Industrial Distribution of Gainful Workers', Studies in Income and Wealth, Vol. XI, derived similarly to school employment, above, using occupations attached wholly or largely to government. For armed forces outside the continental U. S., see note to line 2.
5 Figures for 1870-1930 (comparable with earlier years) except 1910, are from Carson, op. cit., Table 1. The 1910 figure is from Fabricant, op. cit., Table 2. The figures for 1940 and 1930 (comparable with 1940) are from Durand and Goldfield, op. cit. The 1940 total is not exactly comparable with that for 1950 because of changes in the schedule in July 1945. The 1940 figure comparable with 1950 would be 54,890,000 (Census Release P-50, No. 2). The 1950 figure is from the Monthly Report on the Labor Force for March 1950. We adjusted all these totals, beginning with 1900 , to include U. S. armed forces overseas (see note to line 2) ; the 1900 figure excluding these is $29,073,000$.
6 The 1950 figure, which includes armed forces overseas, is from the Monthly Report on the Labor Force, March 1950. Those for 1940 and 1930 are from Durand and Goldfield, op. cit., plus armed forces overseas. The 1940 figure comparable with 1950, adjusted for the schedule change in July 1945, would be 46,530,000 (Census Release $P-50, N o .2, ~ p . ~ 4) . ~ T h e ~ 1920 ~ t o t a l ~ i s ~ f u l l-t i m e ~ e q u i v a l e n t ~ e m-~$ ployment from Simon Kuznets, National Income and Its Composition, pp. 334 and 340. The figures for 1900 and 1910 are line 5 less armed forces overseas, multiplied by the ratio of employed workers to total gainful workers, plus armed forces overseas. The 1910 ratio is from Palmer and Ratner, op. cit., and the 1900 ratio is from Fabricant, op. cit., Table 1. The 1900 estimate excluding armed forces overseas is $26,166,000-27,619,000$.
7 Line 3 as a percentage of line 6. The 1940 ratio comparable with 1950 would be 8.1 percent (see note to line 6).
8 Line 2 as a percentage of line 5 . The 1900 ratio comparable with earlier years is 2.8 percent (see note to lines 2 and 5 ).
Government and Total Employment, excluding Emergency Workers Census Data, 1940-1950

|  | $\begin{gathered} \text { March } \\ 24-30 \end{gathered}$ | $\begin{gathered} \text { March } \\ 3.9 \end{gathered}$ | $\begin{gathered} \text { March } \\ 2-8 \end{gathered}$ | March 7-13 | March 6-12 | March 5-11 | Annual Average | Annual Average | Annual Average | Annual Average | Annual Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1940 | 1946 | 1947 | 1948 | 1949 | 1950 | 1946 | 1947 | 1948 | 1949 | 1950 |
| Workers employed by |  |  |  |  |  |  |  |  |  |  |  |
| Civilian | 3,332 | 5,530 | 5,240 | 5,470 | 5,425 | 5,899 | 5,309 | 5,041 | 5,288 | 5,440 | 5,817 |
| Armed forces | 430 | 4,620 | 1,570 | 1,236 | 1,491 | 1,346 | 3,450 | 1,440 | 1,306 | 1,466 | 1,500 |
| All employed workers | 46,530 | 57,080 | 57,630 | 58,565 | 59,138 | 58,897 | 58,700 | 59,467 | 60,684 | 60,175 | 61,457 |
| Civilian | 46,100 | 52,460 | 56,060 | 57,329 | 57,647 | 57,551 | 55,250 | 58,027 | 59,378 | 58,709 | 59,957 |
| Armed forces | 430 | 4,620 | 1,570 | 1,236 | 1,491 | 1,346 | 3,450 | 1,440 | 1,306 | 1,466 | 1,500 |
| Employed government workers as \% of all employed |  |  |  |  |  |  |  |  |  |  |  |
| Employed civilian government workers as \% of all employed civilian workers | 7.2 | 10.5 | 9.3 | 9.5 | 9.4 | 10.3 | 9.6 | 8.7 | 8.9 | 9.3 | 9.7 |
| The 1940 data are from the 1940 Census, The Labor Force, Table 78, revised for omitted entries and for public emergency and NYA student workers on the basis of data in Durand and Goldfield, op. cit. (see notes to Table B1). The armed forces |  |  |  |  | figure is from Census Release P-50, No. 2, p. 2 and Table II. The |  |  |  |  |  |  |
|  |  |  |  |  | 1946 fig | ures are | om Labor | Force B | Bulletin 7, | April 1 | 947, and |
|  |  |  |  |  | Census | Release P | 0, No. 2. | The figg No. 19, | No. 31. | 1947-50 | from |

Table B3

## Industral Distribution of Government and Total Employment, 1940 (Census Data)

(Unit: 1,000 persons or 1 percent)

|  | Government Workers |  | All Workers |  | Government Workers as \% of Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | number | \% | number | \% | Workers |
| Agriculture | 23 | 0.5 | 8,750 | 17.7 | 0.3 |
| Forestry, except logging, \& fishery | 26 | 0.6 | 120 | 0.2 | 22.0 |
| Mining | 4 | 0.1 | 1,044 | 2.1 | 0.4 |
| Construction | 462 | 11.0 | 2,765 | 5.6 | 16.7 |
| Manufacturing | 123 | 2.9 | 11,470 | 23.2 | 1.1 |
| Printing, publishing, \& allied industries | 7 | 0.2 | 673 | 1.4 | 1.0 |
| Iron \& steel products other than blast furnaces, steel works, \& rolling mills | 25 | 0.6 | 776 | 1.6 | 3.2 |
| Ship \& boat building \& repairing | 59 | 1.4 | 163 | 0.3 | 36.2 |
| Apparel \& accessories | 20 | 0.5 | 824 | 1.7 | 2.4 |
| Other manufacturing | 13 | 0.4 | 9,034 | 18.3 | 0.1 |
| Transportation, comm., \& public utilities | 174 | 4.1 | 3,337 | 6.7 | 5.2 |
| Street railways \& bus lines | 16 | 0.4 | 210 | 0.4 | 7.6 |
| Water transportation | 12 | 0.3 | 213 | 0.4 | 5.6 |
| Utilities | 135 | 3.2 | 565 | 1.1 | 23.9 |
| Other | 11 | 0.3 | 2,348 | 4.7 | 0.5 |
| Wholesale trade | 11 |  | 1,284 | 2.6 |  |
| Retail trade | 11 | 0.3 | 6,839 | 13.8 | 0.2 |

Table B3 (continued)

|  | Government Workers number \% |  | All <br> Workers number | \% | Government Workers as \% of Total Workers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Banking \& other finance | 15 | 0.4 | 494 | 1.0 | 3.0 |
| Insurance \& real estate | 3 | 0.1 | 1,041 | 2.1 | 0.3 |
| Business \& repair services | 1 | * | 948 | 1.9 | 0.1 |
| Personal services | 5 | 0.1 | 4,379 | 8.8 | 0.1 |
| Amusement, recreation, \& related services | 11 | 0.3 | 460 | 0.9 | 2.4 |
| Professional \& related services | 1,497 | 35.6 | 3,422 | 6.9 | 43.7 |
| Educational services | 1,256 | 29.8 | 1,606 | 3.2 | 78.2 |
| Medical \& other health services | 225 | 5.3 | 1,052 | 2.1 | 21.4 |
| Charitable, religious \& membership organizations | 16 | 0.4 | 395 | 0.8 | 4.1 |
| Other professional services | 1 | * | 369 | 0.7 | 0.3 |
| Government | 1,811 | 43.0 | 1,811 | 3.7 | 100.0 |
| Postal service | 310 | 7.4 | 310 | 0.6 | 100.0 |
| National defense | 310 | 7.4 | 310 | 0.6 | 100.0 |
| Federal government (n.e.c.) | ) 307 | 7.3 | 307 | 0.6 | 100.0 |
| State \& local government (n.e.c.) | 884 | 21.0 | 884 | 1.8 | 100.0 |
| Industry not reported | 41 | 1.0 | 1,329 | 2.7 | 3.1 |
| Total | 4,208 | 100.0 | 49,493 | 100.0 | 8.5 |

* Less than 05 percent.

Data are from the 1940 Census, Population, Vol. III; The Labor Force, Part 1, Tables 74 and 78. Figures include employed workers (except emergency) and experienced workers seeking work, and are the original census figures, not revised as in Table B1.

## Table B4

Post Office Department Employees, 1896-1949



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## Notes to Table B4

These figures exclude most temporary employees and certain classes of parttime employees, contractors, and contractors' employees, such as star route contractors, screen wagon drivers, and mail messengers. Part-time employees are of some importance, but temporary employees seem unimportant, at least before 1940 (see BLS Bulletin 574 and notes below). A series for the number of part-time employees, 1926-49, is given in the Annual Report of the Postmaster General, 1949.

Not all the persons we included have been direct employees of the federal government during the entire period covered. Clerks in fourth class post offices, for example, are employees of the postmaster rather than of the government. Clerks in third class offices became government employees only in 1946.

Figures are as of June 30, except when otherwise noted.
Notes to each column, when necessary, follow:

## Column

1 \& 2 The number of postmasters of each class is measured by the number of post offices. Figures for 1896-1912, 1921-34, and 1937-49 are given in the Annual Report of the Postmaster General for 1905, 1912, 1921-34, 1944, and 1949. For 1913-20, we used the figures as of July 1 in the reports for 1919 and 1921. For 1935 and 1936 we calculated the number of post offices in each class on June 30 by adding the increases and decreases during the year to the July 1 figures for the preceding years.
3 Figures for 1913-49 from the Annual Report of the Postmaster General, 1949; those for 1899-1904 and 1907-12 from reports for the individual years. The 1896 figure is from the U. S. Civil Service Commission report, Tables Showing the Number of Positions in the Executive Civil Service of the U. S., 1896. Those for 1897, 1898, 1905, and 1906 were derived by straight-line interpolation. Until 1901 assistant postmasters were paid out of appropriations for clerks; there may, therefore, be some duplication between columns 3 and 4.
4 1915-49: Annual Report of the Postmaster General, 1949; 1906-15: 1915 Annual Report. 1899-1905: annual reports for each year; 1896: Civil Service Commission Tables for 1896; 1897-98: straight-line interpolations between 1896 and 1899. Temporary clerks, not included, ranged from 3.1 thousand in 1906 to 1.2 thousand in 1910.
5 1906: Annual Report of the Postmaster General; 1913-17 and 1923-32: various issues of the Annual Report of the Civil Service Commission. All other figures are interpolated and extrapolated by the number of third and fourth class post offices.
6, 7 Figures for 1913-49 for city and village delivery carriers, and for
\& 8 1926-49 for rural delivery carriers are from the Annual Report of the Postmaster General, 1949; other figures for 1896-1925 are from Postal Statistics of the United States, 1789-1940. Delivery by rural carriers was inaugurated in October, 1896, delivery by village carriers in 1913. Temporary rural carriers are not included.
9 1926-49: Annual Report of the Postmaster General, 1949, including only regular full-time employees. All the other figures, except 1906, 1907, 1917, and 1920, are from the annual reports for the individual

Notes to Table B4 (concluded)

## Column

years, and exclude acting employees but include all regular employees. The figures for the four missing years are interpolations based on total Railway Mail Service employment.
10 1913-49: Annual Report of the Postmaster General, 1949; 1908, 1910, and 1912: BLS Bulletin 574. The 1909 and 1911 figures are straight-line interpolations. Those for 1897-1907 are interpolated between 1908 and 1896 by number of clerks and supervisory employees in first and second class offices. The 1896 source is the Civil Service Commission Tables for 1896. Until 1909, watchmen, messengers and mail handlers were paid from the appropriation for clerks; there may therefore be some duplication between columns 10 and 4.
11 Government-owned motor vehicle service was inaugurated in October 1914, but no data on employment are given for years before 1918. The figures for 1926-49 are from the Annual Report of the Postmaster General, 1949; those for 1918-25, from the annual reports for the individual years. Substitutes are included in the figures for 1918-23.
12 1926-49: Annual Report of the Postmaster General, 1949; 1925: the annual report for that year; 1908, 1910, and 1912: BLS Bulletin 574; 1896: Civil Service Commission Tables for 1896. Figures for all other years are straight-line interpolations.
13 Until October 1933, when they were transferred to the Post Office payroll, the operating force for public buildings housing post offices and other government agencies was on the rolls of the Treasury Department. The decrease in 1946 was due to the fact that a number of employees were transferred from the full-time category to part-time. Figures are from the Annual Report of the Postmaster General, 1949.
14 Includes foreign mail transportation, domestic air mail, manufacture and distribution of stamps, equipment shop employees, etc. Figures for 1926-49 are from the Annual Report of the Postmaster General, 1949; the 1896 figure is from the Civil Service Commission Tables for 1896. Other figures are interpolations.
15 Sum of the preceding 14 columns.
16 Column 15, with the number of 4th class postmasters and 3 rd and 4th class clerks reduced by $9 / 4$. This ratio is arbitrary; in part, however, it is supported by the evidence supplied by earnings.

Table B5
Armed Forces, 1896-1949
(Unit: 1,000 persons)

| Year | Army <br> (1) | Navy <br> (2) | Marine Corps <br> (3) | Coast Guard <br> (4) | Total <br> (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1896 | 27.0 | 10.5 | 2.5 |  | 40.0 |
| 1897 | 27.5 | 11.9 | 2.7 |  | 42.1 |
| 1898 | 155.4 | 25.4 | 3.7 |  | 184.5 |
| 1899 | 102.4 | 16.4 | 3.7 |  | 122.5 |
| 1900 | 101.2 | 19.0 | 5.7 |  | 125.9 |
| 1901 | 84.9 | 21.1 | 5.9 |  | 111.9 |
| 1902 | 80.5 | 24.3 | 6.0 |  | 110.8 |
| 1903 | 69.0 | 30.4 | 6.1 |  | 105.5 |
| 1904 | 69.8 | 32.7 | 7.3 |  | 109.8 |
| 1905 | 67.0 | 34.3 | 7.0 |  | 108.3 |
| 1906 | 68.4 | 35.7 | 8.2 |  | 112.3 |
| 1907 | 63.6 | 36.8 | 8.2 |  | 108.6 |
| 1908 | 76.4 | 43.4 | 9.0 |  | 128.8 |
| 1909 | 84.5 | 48.3 | 9.7 |  | 142.5 |
| 1910 | 80.7 | 49.3 | 9.6 |  | 139.6 |
| 1911 | 83.3 | 52.1 | 9.8 |  | 145.2 |
| 1912 | 91.5 | 52.0 | 9.9 |  | 153.4 |
| 1913 | 92.0 | 53.0 | 10.1 |  | 155.1 |
| 1914 | 97.8 | 58.0 | 10.2 |  | 166.0 |
| 1915 | 106.0 | 58.0 | 10.3 | 2.5 | 176.8 |
| 1916 | 107.6 | 60.4 | 10.6 | 4.3 | 182.9 |
| 1917 | 527.3 | 159.9 | 23.1 | 4.6 | 714.9 |
| 1918 | 2,399.9 | 419.0 | 53.4 | 5.9 | 2,878.2 |
| 1919 | 836.9 | 272.3 | 48.8 | 5.1 | 1,163.1 |
| 1920 | 200.4 | 121.8 | 17.2 | 4.3 | 343.7 |
| 1921 | 227.4 | 132.8 | 23.0 | 4.5 | 387.7 |
| 1922 | 146.1 | 100.2 | 21.2 | 4.7 | 272.2 |
| 1923 | 131.0 | 94.1 | 19.7 | 4.7 | 249.5 |
| 1924 | 140.6 | 98.3 | 20.3 | 6.0 | 265.2 |
| 1925 | 134.6 | 95.3 | 19.5 | 9.4 | 258.8 |
| 1926 | 133.0 | 93.4 | 19.2 | 9.9 | 255.5 |
| 1927 | 133.1 | 95.0 | 19.2 | 11.2 | 258.5 |
| 1928 | 134.3 | 96.0 | 19.0 | 11.8 | 261.1 |
| 1929 | 137.4 | 97.3 | 18.8 | 12.4 | 265.9 |
| 1930 | 137.5 | 97.1 | 19.4 | 12.4 | 266.4 |
| 1931 | 138.6 | 93.4 | 18.8 | 12.3 | 263.1 |
| 1932 | 133.0 | 93.4 | 16.6 | 12.8 | 255.8 |
| 1933 | 135.0 | 91.4 | 16.1 | 11.3 | 253.8 |
| 1934 | 137.0 | 92.5 | 16.4 | 10.4 | 256.3 |
| 1935 | 138.0 | 95.5 | 17.3 | 10.7 | 261.5 |
| 1936 | 166.1 | 106.2 | 17.2 | 10.0 | 299.5 |
| 1937 | 178.1 | 113.4 | 18.2 | 10.5 | 320.2 |
| 1938 | 183.4 | 118.6 | 18.4 | 10.4 | 330.8 |

## Table B5 (continued)

| Year | Army | Navy | Marine <br> Corps | Coast <br> Guard | Total |
| :--- | :---: | :---: | :---: | :---: | ---: |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| 1939 | 192.0 | 124.0 | 19.0 | 10.0 | 345.0 |
| 1940 | 324.0 | 163.0 | 31.0 | 14.0 | 532.0 |
| 1941 | $1,291.0$ | 278.0 | 55.0 | 20.0 | $1,644.0$ |
| 1942 | $3,071.0$ | 684.0 | 146.0 | 67.0 | $3,968.0$ |
| 1943 | $6,733.0$ | $1,744.0$ | 311.0 | 156.0 | $8,944.0$ |
| 1944 | $7,889.0$ | $2,860.0$ | 453.0 | 170.0 | $11,372.0$ |
| 1945 | $7,734.0$ | $3,248.0$ | 464.0 | 162.0 | $11,608.0$ |
| 1946 | $2,291.0$ | $1,226.0$ | 186.0 | 48.0 | $3,751.0$ |
| 1947 | $1,059.0$ | 494.0 | 98.0 | 20.0 | $1,671.0$ |
| 1948 | 964.0 | 424.0 | 84.0 | 20.0 | $1,492.0$ |
| 1949 | $1,090.0$ | 443.0 | 86.0 | 23.0 | $1,642.0$ |

Data for years prior to 1939 are from annual reports of the War Department, for the Army; of the Navy Department, for the Navy and Marine Corps; and of the Treasury Department, for the Coast Guard; or from compilations from these reports by the Bureau of the Census published in the Statistical Abstract of the U.S. Data for 1939 and following years are from BLS compilations.

It is not always clear to what extent reserves, militia, and volunteers are included, especially during the Spanish War and the Philippine Islands insurrection. We tried to include such auxiliary personnel, if active, whenever possible.

Figures are as of June 30, except those for 1939-49 and occasional years noted below, which are annual averages.

## Column

1 All figures for 1900-38 except 1917 and 1918 are from the 1924 and 1949 Statistical Abstract. The figures for 1898 and 1899 are annual averages from the reports of the War Department for 1898, 1899, and 1900. U. S. volunteers are included from May 1898 to 1902. The 1917 and 1918 figures are annual averages and include the National Guard, federalized in May 1917, and members of reserve forces on active duty. The 1919 figure seems close to the average for the year, judging from reported data on discharges; it excludes reserve forces and national guardsmen not serving in the U.S. Army.
2 Figures from the 1948 and 1949 Statistical Abstract are interpolated and extrapolated by earlier series on the number of Navy personnel. Figures for 1917 and 1918 are annual averages. The Coast Guard is not included in the 1917 and 1918 figures, though it was part of the Navy. The 1919 figure includes members of the naval reserve on active duty.
3 Figures from the 1948 and 1949 Statistical Abstract are interpolated and extrapolated by earlier series on the number of Marine personnel. The 1917 and 1918 figures are annual averages.
4 The Coast Guard was formed in 1915 from the Revenue Cutter Service and the Life Saving Service of the Treasury Department. Until 1915 these employees were included among civilian personnel. Our 1915 figure is the number on July 1, 1914 as reported in the Annual Report of the U. S. Civil Service Commission, 1915. Civilians are included, except in 1920 and 1921, but the number is very small.

## Table B6

Federal Government Total Employees and Their Distribution by Major Branches, 1896-1949




$$
\begin{gathered}
\text { Executive Branch, } \\
\text { Civilian }
\end{gathered}
$$

$$
\begin{aligned}
& \text { Govern- } \\
& \text { ment Cor- } \\
& \text { porations }
\end{aligned}
$$

rotal total fullivalent BER NUMBER
出き















## Notes to Table B6

## Column

1 Most of the data are from tables published in U. S. Civil Service Commission annual reports and in the Statistical Abstract of the U.S. Other data are from Tables Showing the Number of Positions in the Executive Civil Service of the U. S., 1896; The Classified Executive Civil Service of the U. S. Government, 1933, and annual reports of the Post Office Department. Our estimates of Post Office employment (Table B4) were substituted for the postal figures in the Civil Service Commission tables. All paid employees within the continental U. S. and abroad are included. The numbers are as of June 30 except in 1903 (July 1), 1918 (Nov. 11), 1920 and 1921 (July 31).
There are no Civil Service Commission totals for 1897-1900 or separate Post Office figures for 1897-1900 or 1918-19. The earlier figures are estimated by interpolation between 1896 and 1901 via salary expenditures from various issues of the Annual Report of the Secretary of the Treasury. For 1918-19, employment other than postal is interpolated by total employment.

For 1933 we added to the reported total 9.2 thousand employees of certain new agencies not reporting to the Civil Service Commission until a later date (see Statistical Abstract, 1936, p. 156); and for 1943, we subtracted from the reported total 3 thousand unpaid employees (see Statistical Abstract, 1946, p. 208). Because the reported figures for 1896, 1901-12, 1914, and 1917 apparently do not include State Department employees abroad, we added estimates for them (in thousands: 1896, 1901, 1902, .8; 1903, 1.1; 1904-12, 1.2; 1914, 1.0 ; 1917, 2.4).
2 Column 1, with the full-time equivalent number of post office employees (Table B4) substituted for the total number of such employees.
3 \& 4 Data for 1929-49 are from the Bureau of Labor Statistics, and for 1901, 1904, and 1912, from annual reports of the Civil Service Commission. Figures for other years are straight-line interpolations or extrapolations; those for 1929-49 are annual averages.
5 Covers corporations not already included in the Executive Branch, among which are the Panama Railroad Company, the Federal Reserve Banks (which employed 10,000 in 1929), and banks of the Farm Credit Administration. Data are annual averages (except for 1949, which is as of July 1), and are from the Bureau of Labor Statistics. Figures for earlier years are not available.
6 Sum of columns $1,3,4$, and 5.
7 Sum of columns 2, 3, 4, and 5 .
8 See Table $B 5$.
9 Sum of columns 6 and 8.
10 Sum of columns 7 and 8.
Table B7
Federal Government
Main Functional Distribution of Employees, 1896-1949
(Unit: 1,000 persons)

| Year | National Defense | Post Office Full-time Equivalent Number | Other | Total, Full-time Equivalent Number |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| 1896 | 61.3 | 77.8 | 48.9 | 188.0 |
| 1897 | 63.5 | 78.9 | 48.6 | 191.0 |
| 1898 | 210.6 | 82.0 | 51.8 | 344.4 |
| 1899 | 159.9 | 84.8 | 54.3 | 299.0 |
| 1900 | 165.9 | 89.4 | 56.8 | 312.1 |
| 1901 | 156.4 | 96.6 | 59.2 | 312.2 |
| 1902 | 155.3 | 105.7 | 61.0 | 322.0 |
| 1903 | 150.7 | 116.5 | 56.6 | 323.8 |
| 1904 | 157.0 | 129.4 | 61.5 | 347.9 |
| 1905 | 156.1 | 138.6 | 79.2 | 373.9 |
| 1906 | 162.6 | 141.8 | 90.2 | 394.6 |
| 1907 | 159.2 | 147.4 | 101.9 | 408.5 |
| 1908 | 179.5 | 153.2 | 107.9 | 440.6 |
| 1909 | 196.9 | 158.3 | 114.8 | 470.0 |
| 1910 | 197.9 | 162.8 | 123.6 | 484.3 |
| 1911 | 205.5 | 165.0 | 126.4 | 496.9 |
| 1912 | 213.4 | 167.8 | 127.8 | 509.0 |
| 1913 | 210.6 | 172.0 | 129.1 | 511.7 |
| 1914 | 224.0 | 179.1 | 133.1 | 536.2 |
| 1915 | 235.1 | 180.3 | 126.4 | 541.8 |
| 1916 | 256.3 | 181.5 | 119.7 | 557.5 |
| 1917 | 806.9 | 184.2 | 134.4 | 1,125.5 |
| 1918 |  | 185.6 |  | 3,684.3 |
| 1919 |  | 188.0 |  | 1,911.4 |
| 1920 | 580.9 | 195.1 | 180.5 | 956.5 |
| 1921 | 526.0 | 206.2 | 176.4 | 908.6 |
| 1922 | 379.3 | 210.6 | 176.9 | 766.8 |
| 1923 | 343.5 | 212.1 | 174.5 | 730.1 |
| 1924 | 357.5 | 222.9 | 171.9 | 752.3 |
| 1925 | 353.5 | 228.0 | 174.1 | 755.6 |
| 1926 | 347.7 | 231.3 | 168.2 | 747.2 |
| 1927 | 344.2 | 234.4 | 170.4 | 749.0 |
| 1928 | 350.7 | 236.8 | 173.9 | 761.4 |
| 1929 | 363.7 | 239.6 | 195.9 | 799.2 |

Table B7 (continued)

| Year | National <br> Defense | Post Ofice <br> Full-time <br> Equivalent <br> Number | Other | Total, Full-time <br> Equivalent |
| :---: | :---: | :---: | :---: | :---: |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| 1930 | 364.4 | 241.1 | 214.8 | 820.3 |
| 1931 | 365.2 | 240.4 | 219.2 | 824.8 |
| 1932 | 351.3 | 237.0 | 225.4 | 813.7 |
| 1933 | 348.5 | 229.3 | 235.4 | 813.2 |
| 1934 | 386.0 | 224.4 | 306.2 | 916.6 |
| 1935 | 398.7 | 223.9 | 353.1 | 975.7 |
| 1936 | 449.1 | 237.1 | 440.6 | $1,126.8$ |
| 1937 | 480.9 | 241.5 | 455.2 | $1,177.6$ |
| 1938 | 493.6 | 246.2 | 432.6 | $1,172.4$ |
| 1939 | 540.6 | 249.0 | 469.4 | $1,259.0$ |
| 1940 | 787.5 | 254.6 | 489.7 | $1,531.8$ |
| 1941 | $2,207.4$ | 262.2 | 529.8 | $2,999.4$ |
| 1942 | $5,326.7$ | 267.5 | 569.6 | $6,163.8$ |
| 1943 | $11,223.2$ | 257.9 | 595.0 | $12,076.1$ |
| 1944 | $13,811.0$ | 263.0 | 557.3 | $14,631.3$ |
| 1945 | $14,415.5$ | 270.0 | 618.8 | $15,304.3$ |
| 1946 | $5,262.2$ | 288.2 | 757.1 | $6,307.5$ |
| 1947 | $2,572.2$ | 293.8 | 788.7 | $3,654.7$ |
| 1948 | $2,380.3$ | 321.7 | 731.0 | $3,433.0$ |
| 1949 | $2,524.5$ | 342.4 | 741.4 | $3,608.3$ |

Column
1 Sum of armed forces (Table B5) and employees in the War Department, Navy Department, and World War II agencies (annual reports of the U. S. Civil Service Commission). Including the Veterans Administration, the Maritime Commission, Panama Canal, etc., the figures would, of course, be larger.

The 1900 figure is interpolated between 1896 and 1901 by the number in the armed forces.

Figures are as of June 30 with some exceptions (see Tables B5 and B6).
2 From Table B4. Figures are as of June 30.
3 Column 4 minus columns 1 and 2.
4 From Table B6.

# Table B8 <br> State Governments, Nonschool Employees <br> Total and Full-time Equivalent Number, 1900-1949 

Annual Averages
(Unit: 1,000 persons)
$\left.\begin{array}{cccccc}\text { Year } & \begin{array}{c}\text { Total } \\ \text { Number }\end{array} & \begin{array}{c}\text { Full-time } \\ \text { Equivalent } \\ \text { Number }\end{array} & & \begin{array}{c}\text { Total } \\ \text { Number }\end{array} & \begin{array}{c}\text { Full-time } \\ \text { Equivalent }\end{array} \\ \text { Number }\end{array}\right\}$

1940-49: Bureau of the Census, Governments Division, Government Employment, January, April, July, and October 1950. We computed annual averages for each year from the figures for January, April, July, October, and January of the following year, weighting each January by $1 / 2$.

Full-time equivalent employment is estimated as the sum of permanent fulltime employees and $1 / 3$ of the number of temporary and part-time employees.

These estimates were extrapolated back to 1900 by the following series:
1939-40: Department of Commerce, Survey of Current Business, National Income Supplement, 1951, total state and local government employees (other than work relief and public education).
1929-39: WPA-BLS, State, County, and Municipal Survey, Employment and Payrolls of State and Local Governments, 1929-1939, nonschool state government employment.
1900-29: Population-weighted average state government employment per capita in a sample of states, multiplied by population in all states: 1929-20, Massachusetts, Illinois, New Jersey, New York, and Vermont; 1910-1900, Alabama, New York, and Vermont.

Between 1920 and 1929, the figures were interpolated by employment in a somewhat different sample of states: 1929-28, Maryland, Massachusetts, Illinois, Michigan, New Jersey, New York, and North Carolina; 1928-26: Mary-

## Notes to Table B8 (concluded)

land, Massachusetts, Illinois, Michigan, New Jersey, and New York; 1926-24: Maryland, Massachusetts, New Jersey, and New York; 1924-23: Maryland, Massachusetts, Illinois, New Jersey, and New York; 1923-22: Maryland, Massachusetts, and New York; 1922-21: Maryland, Massachusetts, and New York; 1921-20: Illinois and New York.

The employment figures exclude education with the exception of those for Colorado and Maryland, which are classified employment only, including education. Most of the data are from annual reports of state civil service commissions or letters from them. The figures for Ohio, 1921-26, are derived from total wages as given in auditors' reports, and estimates of average wages prepared by Simon Kuznets. The figures for Massachusetts, 1921-24, are derived from total wages as given in the Massachusetts Commission on Administration and Finance, Payroll Statistics, and Kuznets' estimates of average wages.

The 1902 figures are rough estimates derived by straight-line interpolation between 1900 and 1910.

State government employment per 1,000 population in the states included in our decennial sample is as follows:

|  | 1929 | 1920 | 1910 | 1900 |
| :--- | ---: | ---: | ---: | ---: |
| Massachusetts | 3.13 | 2.70 |  |  |
| Illinois | 1.64 | 1.18 | .45 |  |
| New Jersey | 2.26 | 1.42 | .99 |  |
| Colorado |  | 1.33 | .38 |  |
| Alabama |  | .59 | .48 | .34 |
| New York | 2.19 | 1.82 |  |  |
| Vermont | 5.06 | 1.61 | 1.38 | 1.06 |
| Total sample | 2.23 | 3.78 | 1.03 | .83 |
|  |  | 1.76 |  |  |
|  |  |  |  | .94 |
|  |  |  | 1.20 | .91 |

Table B9
Municipal Governments, Nonschool Employees Total and Full-time Equivalent Number, 1900-1949

Annual Averages
(Unit: 1,000 persons)

| Year | Total Number | Full-time Equivalent Number |  | Total Number | Full-time Equivalent Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1900 | 230 | 194 | 1935 | 785 | 663 |
| 1902 | 256 | 216 | 1936 | 837 | 707 |
| 1905 | 296 | 250 | 1937 | 852 | 719 |
| 1910 | 398 | 336 | 1938 | 877 | 740 |
| 1915 | 497 | 420 | 1939 | 887 | 749 |
| 1920 | 508 | 429 | 1940 | 893 | 754 |
| 1921 | 541 | 457 | 1941 | 901 | 764 |
| 1922 | 578 | 488 | 1942 | 890 | 754 |
| 1923 | 612 | 517 | 1943 | 871 | 736 |
| 1924 | 667 | 563 | 1944 | 861 | 736 |
| 1925 | 713 | 602 | 1945 | 874 | 745 |
| 1926 | 745 | 629 | 1946 | 944 | 805 |
| 1927 | 779 | 658 | 1947 | 1,004 | 855 |
| 1928 | 808 | 682 | 1948 | 1,046 | 894 |
| 1929 | 805 | 680 | 1949 | 1,082 | 933 |
| 1930 | 832 | 702 |  |  |  |
| 1931 | 864 | 730 |  |  |  |
| 1932 | 817 | 690 |  |  |  |
| 1933 | 783 | 661 |  |  |  |
| 1934 | 778 | 657 |  |  |  |

1940-49: Bureau of the Census, Governments Division, Government Employment, January, April, July, and October 1950. We computed annual averages from figures for these months of each year and January of the following year, weighting each January $1 / 2$.
Full-time equivalent employment is the sum of permanent full-time employees and $1 / 3$ of the number of temporary and part-time employees.

These estimates were extrapolated back to 1900 by the following series: 1939-40: Department of Commerce, Survey of Current Business, National Income Supplement, 1951, total state and local government employees (other than work relief and public education).
1929-39: WPA-BLS, State, County, and Municipal Survey, Employment and Pay Rolls of State and Local Governments, 1929-1939. Data are for cities with populations of 50,000 and over.
1900-29: Population-weighted average city nonschool employment per capita in a sample of cities, multiplied by population in all cities; 1929-20: St. Paul, Los Angeles, Milwaukee, Trenton, Jersey City, Paterson, Newark, Chicago, Minneapolis, Detroit, and cities in New York State including New York City;

Notes to Table B9 (concluded)
1920-15: St. Paul, Los Angeles, Milwaukee, Chicago, Minneapolis, Detroit, and cities in New York State; 1915-10: Los Angeles, Milwaukee, Chicago, Detroit, and cities in New York State; 1910-05: Los Angeles, Milwaukee, and cities in New York State; 1905-1900: Milwaukee and New York City.

Most of the city employment figures are from the annual reports of the Civil Service Commissions of the cities, or as derived from these annual reports by C. H. Wooddy in "The Growth of Governmental Functions," Recent Social Trends in the United States (McGraw-Hill, 1933). The exceptions are New York State cities other than New York City, which are from the annual reports of the State Civil Service Commission; and the Philadelphia figures for 1920-22, from Bureau of Municipal Research, The Turnover Among City Employees, Citizens' Business, No. 880. The 1920 figures for Trenton, Jersey City, Paterson, and Newark are estimated by interpolation between figures for 1918 and 1921.

The figures are for total nonschool city employees, except for Milwaukee and Chicago, which include schools; New York State cities other than New York City, which include only the classified service; and Philadelphia, 1920-22, which include only competitive positions.

The 1902 figure is a rough estimate derived by straight-line interpolation between 1900 and 1905.

Cities used to interpolate between 1920 and 1929 include St. Paul, Cincinnati, Baltimore, San Diego, Philadelphia, Detroit, Minneapolis, Los Angeles, New York State cities, for 1929-27; St. Paul, Cincinnati, Baltimore, San Diego, Philadelphia, Minneapolis, Los Angeles, New York State cities, for 1927-25; St. Paul, San Diego, Philadelphia, Minneapolis, Los Angeles, New York State cities, for 1925-21; and St. Paul, Philadelphia, Minneapolis, Los Angeles, New York State cities, for 1921-20.

Municipal employment per 100 population in the cities included in our quinquennial sample is as follows:

|  | 1929 | 1920 | 1915 | 1910 | 1905 | 1900 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| St. Paul | 1.05 | 1.14 | .81 |  |  |  |
| Los Angeles | 1.48 | 1.16 | 1.03 | .96 | 1.02 |  |
| Milwaukee | 1.94 | 1.29 | 1.60 | 1.37 | 1.15 | 1.12 |
| Trenton | 1.08 | .76 |  |  |  |  |
| Jersey City | 1.26 | .83 |  |  |  |  |
| Paterson | .74 | .60 |  |  |  |  |
| Newark | 1.41 | 1.06 |  | 1.03 |  |  |
| Chicago | 1.40 | 1.17 | 1.31 | 1.03 |  |  |
| Minneapolis | 1.16 | 1.14 | 1.20 | .90 |  |  |
| Detroit | 1.26 | .95 | 1.19 | .90 |  |  |
| N. Y. C. | 1.27 | .97 | 1.05 | 1.11 | .98 | .90 |
| N. Y. State cities |  |  |  |  |  |  |
| $\quad$ (excl. N. Y. C.) | 1.01 | .86 |  |  |  |  |
|  |  | .84 | .98 |  |  |  |
|  |  |  | .97 | .80 |  |  |
|  |  |  |  | .79 | .63 |  |
| Total sample | 1.28 | 1.01 |  |  |  |  |
|  |  | 1.02 | 1.12 | 1.03 |  |  |
|  |  |  |  | 1.04 | .90 |  |
|  |  |  |  |  | .99 | .92 |

Table B10
Local Governments Other than Municipalities
Nonschool Employees
Total and Full-time Equivalent Number, 1900-1949
Annual Averages
(Unit: 1,000 persons)

|  |  | ties | отHe | local ments |  | tal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Full-time |  | Full-time |  | Full-t |
|  |  | Equiva- |  | Equiva- |  | Equiva- |
|  | Total | lent | Total | lent | Total | lent |
| Year | Number | Number | Number | Number | Number | Number |
| 1900 |  |  |  |  | 170 | 123 |
| 1902 |  |  |  |  | 189 | 137 |
| 1929 |  |  |  |  | 451 | 326 |
| 1930 |  |  |  |  | 477 | 345 |
| 1931 |  |  |  |  | 500 | 362 |
| 1932 |  |  |  |  | 521 | 377 |
| 1933 |  |  |  |  | 511 | 370 |
| 1934 |  |  |  |  | 544 | 394 |
| 1935 |  |  |  |  | 580 | 420 |
| 1936 |  |  |  |  | 573 | 415 |
| 1937 |  |  |  |  | 586 | 424 |
| 1938 |  |  |  |  | 615 | 445 |
| 1939 |  |  |  |  | 609 | 441 |
| 1940 | 339 | 286 | 274 | 158 | 613 | 444 |
| 1941 | 331 | 284 | 260 | 152 | 591 | 436 |
| 1942 | 337 | 283 | 226 | 138 | 563 | 421 |
| 1943 | 318 | 273 | 228 | 139 | 546 | 412 |
| 1944 | 322 | 275 | 222 | 135 | 544 | 410 |
| 1945 | 315 | 271 | 242 | 140 | 557 | 411 |
| 1946 | 352 | 296 | 223 | 130 | 575 | 426 |
| 1947 | 368 | 319 | 247 | 150 | 615 | 469 |
| 1948 | 402 | 343 | 270 | 176 | 672 | 519 |
| 1949 | 408 | 355 | 278 | 180 | 686 | 535 |

Notes to Table B10
1940-49: Bureau of the Census, Governments Division, Government Employment, January, April, July, and October 1950. We computed annual averages from the figures for January, April, July, October, and January of the following year, weighting each January by $1 / 2$.

Full-time equivalent employment is the sum of permanent full-time employees and $1 / 3$ of the number of temporary and part-time employees.

These estimates were extrapolated back to 1900 by the following series: 1939-40: Department of Commerce, Survey of Current Business, National Income Supplement, 1951, total state and local government employees (other than work relief and public education) minus our estimates of the number of state and municipal government employees.
1929-39: WPA-BLS, State, County and Municipal Survey, Employment and Pay Rolls of State and Local Governments, 1929-1939, total nonschool local employees minus our estimates for municipal nonschool employees.
1902-32: Nonschool expenditures data for minor civil divisions (Wealth, Debt and Taxation, 1902 and 1932) divided by expenditures per employee for states and cities, 1932 and 1902.
1900-02: State and municipal government employment, 1900-02.

## Table B11

## Schools

Total and Full-time Equivalent Number of Persons Employed by State and Local Governments, 1900-1949

Annual Averages
(Unit: 1,000 persons)

| Year | Total <br> Number | Full-time <br> Equivalent <br> Number |  | Total <br> Number | Full-time <br> Equivalent <br> Number |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1900 | 483 | 467 | 1925 | 1,010 | 976 |
| 1901 | 493 | 476 | 1926 | 1,047 | 1,011 |
| 1902 | 505 | 488 | 1927 | 1,071 | 1,035 |
| 1903 | 514 | 497 | 1928 | 1,090 | 1,053 |
| 1904 | 520 | 502 | 1929 | 1,120 | 1,082 |
| 1905 | 525 | 507 | 1930 | 1,150 | 1,110 |
| 1906 | 532 | 514 | 1931 | 1,160 | 1,120 |
| 1907 | 549 | 530 | 1932 | 1,148 | 1,109 |
| 1908 | 565 | 546 | 1933 | 1,122 | 1,084 |
| 1909 | 578 | 558 | 1934 | 1,122 | 1,083 |
| 1910 | 596 | 576 | 1935 | 1,152 | 1,112 |
| 1911 | 612 | 591 | 1936 | 1,174 | 1,134 |
| 1912 | 631 | 610 | 1937 | 1,206 | 1,165 |
| 1913 | 650 | 628 | 1938 | 1,239 | 1,196 |
| 1914 | 675 | 652 | 1939 | 1,267 | 1,224 |
| 1915 | 700 | 676 | 1940 | 1,273 | 1,228 |
| 1916 | 723 | 698 | 1941 | 1,281 | 1,234 |
| 1917 | 755 | 729 | 1942 | 1,270 | 1,223 |
| 1918 | 786 | 759 | 1943 | 1,244 | 1,198 |
| 1919 | 807 | 780 | 1,226 | 1,181 |  |
| 1920 | 835 | 807 | 1945 | 1,224 | 1,181 |
| 1921 | 880 | 850 | 1946 | 1,277 | 1,224 |
| 1922 | 917 | 886 | 1947 | 1,334 | 1,277 |
| 1923 | 942 | 910 | 1948 | 1,369 | 1,312 |
| 1924 | 971 | 938 | 1,433 | 1,368 |  |

1929-49: U. S. Department of Commerce, Survey of Current Business, National Income Supplement, 1951.

These estimates were extrapolated back to 1900 by the following series: 1919-29: Simon Kuznets, National Income and Its Composition, 1919-1938 (National Bureau of Economic Research, 1941), p. 814.
1909-19: W. I. King, The National Income and Its Purchasing Power (National Bureau of Economic Research, 1930), p. 361.
1900-09: Bureau of Education, as given in the Statistical Abstract, 1922, p. 103; figures include teachers in public elementary and secondary schools.
Table B12
Public Emergency Employment under Work Relief Programs Excluding Administrative Employees, 1933-1943

|  | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Federal |  |  |  |  |  |  |  |  |  |  |  |
| Civilian Conservation Corps | 168 | 311 | 396 | 348 | 293 | 274 | 281 | 272 | 195 | 42 | 0 |
| National Youth Administration |  |  |  |  |  |  |  |  |  |  |  |
| Student work program | 0 | 0 | 61 | 277 | 272 | 246 | 288 | 325 | 305 | 136 | 39 |
| Out-of-school work program | 0 | 0 | 0 | 151 | 159 | 195 | 235 | 281 | 364 | 105 | 0 |
| Works Projects Administration | 0 | 0 | 482 | 2,544 | 1,792 | 2,761 | 2,407 | 1,912 | 1,328 | 625 | 46 |
| Civil Works Program | 427 | 992 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other federal agency projects financed from emergency funds | 57 | 394 | 351 | 592 | 343 | 194 | 199 | 64 | 8 | 0.4 | 0 |
| Total of above | 652 | 1,697 | 1,290 | 3,912 | 2,859 | 3,670 | 3,410 | 2,854 | 2,200 | 908 | 85 |
| Full-time equivalent | 373 | 787 | 728 | 2,334 | 1,627 | 2,130 | 1,996 | 1,789 | 1,364 | 601 | 47 |
| State and Local |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,724 | 1,834 | 2,097 | 91 | 56 | 19 | 39 | 38 | 17 | 5 | 0 |
| Full-time equivalent | 299 | 603 | 765 | 55 | 33 | 6 | 11 | 11 | 6 | 2 | 0 |

U. S. Federal Security Agency, Social Security Administration, Wages, Salaries and Employment; they are on a 40 -hour week
Department of Commerce estimates for earlier years for state and local government full-time equivalent workers are: 1929, 0 ; 1930, $4 ; 1931,44 ; 1932,87$; and for state and local total number including part-time: 1929, 0; 1930, 20; 1931, 299; 1932, 592. Before 1933 the federal figures, and after 1943 all the figures, are 울

| Table B13 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Government Employment, 1900-1949 Full-time Equivalent Number <br> (Unit: 1,000 persons) |  |  |  |  |  |  |
|  | 1900 | 1910 | 1920 | 1921 | 1922 | 1923 |
| Federal Government | 312 | 484 | 956 | 909 | 767 | 730 |
| Civilian | 186 | 345 | 613 | 521 | 495 | 481 |
| Armed forces | 126 | 140 | 344 | 388 | 272 | 250 |
| State \& Local Government | 852 | 1,209 | 1,654 | 1,738 | 1,821 | 1,893 |
| Nonschool | 385 | 633* | 847* | 888* | 935* | 983* |
| States | 68 | 108 | 183 | 187 | 192 | 200 |
| Cities, towns, \& villages | 194 | 336 | 429 | 457 | 488 | 517 |
| $\left.\begin{array}{l}\text { Counties } \\ \text { Townships, spec. dist. }\end{array}\right\}$ | 123 |  |  |  |  |  |
| School | 467 | 576 | 807 | 850 | 886 | 910 |
| Total Regular Employees | 1,164 | 1,693 | 2,610 | 2,647 | 2,588 | 2,623 |
| Public Emergency Workers | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 1,164 | 1,693 | 2,610 | 2,647 | 2,588 | 2,623 |
| National defense | 166 | 198 | 581 | 526 | 379 | 344 |
| Other, incl. public emergency | 998 | 1,495 | 2,029 | 2,121 | 2,209 | 2,279 |
| Other, excl. public emergency | 998 | 1,495 | 2,029 | 2,121 | 2,209 | 2,279 |
|  | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 |
| Federal Government | 917 | 976 | 1,127 | 1,178 | 1,172 | 1,259 |
| Civilian | 660 | 714 | 827 | 857 | 842 | 914 |
| Armed forces | 256 | 262 | 300 | 320 | 331 | 345 |
| State \& Local Government | 2,465 | 2,545 | 2,642 | 2,716 | 2,834 | 2,868 |
| Nonschool | 1,382 | 1,433 | 1,508 | 1,551 | 1,638 | 1,644 |
| States | 331 | 350 | 386 | 408 | 453 | 454 |
| Cities, towns, \& villages | 657 | 663 | 707 | 719 | 740 | 749 |
| $\left.\begin{array}{l}\text { Counties } \\ \text { Townships, spec. dist. }\end{array}\right\}$ | 394 | 420 | 415 | 424 | 445 | 441 |
| School | 1,083 | 1,112 | 1,134 | 1,165 | 1,196 | 1,224 |
| Total Regular Employees | 3,382 | 3,521 | 3,769 | 3,894 | 4,006 | 4,127 |
| Public Emergency Workers | 1,390 | 1,493 | 2,389 | 1,660 | 2,136 | 2,007 |
| Grand Total | 4,772 | 5,014 | 6,158 | 5,554 | 6,142 | 6,134 |
| National defense | 386 | 399 | 449 | 481 | 494 | 541 |
| Other, incl. public emergency | 4,386 | 4,615 | 5,709 | 5,073 | 5,648 | 5,593 |
| Other, excl. public emergency | 2,996 | 3,122 | 3,320 | 3,413 | 3,512 | 3,586 |

* Interpolated between 1900 and 1929 by data for states and cities.

Based on Tables B6-12.

| 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 752 | 756 | 747 | 749 | 761 | 799 | 820 | 825 | 814 | 813 |
| 487 | 497 | 492 | 490 | 500 | 533 | 554 | 562 | 558 | 559 |
| 265 | 259 | 256 | 258 | 261 | 266 | 266 | 263 | 256 | 254 |
| 1,989 | 2,089 | 2,163 | 2,262 | 2,307 | 2,352 | 2,436 | 2,511 | 2,482 | 2,422 |
| $1,051^{*}$ | $1,13^{*}$ | $1,152^{*}$ | $1,227^{*}$ | $1,254^{*}$ | 1,270 | 1,326 | 1,391 | 1,373 | 1,338 |
| 206 | 215 | 219 | 248 | 247 | 264 | 279 | 299 | 306 | 307 |
| 563 | 602 | 629 | 658 | 682 | 680 | 702 | 730 | 690 | 661 |
|  |  |  |  |  | 326 | 345 | 362 | 377 | 370 |
| 938 | 976 | 1,011 | 1,035 | 1,053 | 1,082 | 1,110 | 1,120 | 1,109 | 1,084 |
| 2,741 | 2,845 | 2,910 | 3,011 | 3,068 | 3,151 | 3,256 | 3,336 | 3,296 | 3,235 |
| 0 | 0 | 0 | 0 | 0 | 0 | 4 | 44 | 87 | 672 |
| 2,741 | 2,845 | 2,910 | 3,011 | 3,068 | 3,151 | 3,260 | 3,380 | 3,383 | 3,907 |
| 358 | 354 | 348 | 344 | 3551 | 364 | 364 | 365 | 351 | 348 |
| 2,383 | 2,491 | 2,562 | 2,667 | 2,717 | 2,787 | 2,896 | 3,015 | 3,032 | 3,559 |
| 2,383 | 2,491 | 2,562 | 2,667 | 2,717 | 2,787 | 2,892 | 2,971 | 2,945 | 2,887 |


| 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1,532 | 2,999 | 6,164 | 12,076 | 14,631 | 15,304 | 6,308 | 3,655 | 3,433 | 3,608 |
| 1,000 | 1,355 | 2,196 | 3,132 | 3,259 | 3,696 | 2,556 | 1,984 | 1,941 | 1,966 |
| 532 | 1,644 | 3,968 | 8,944 | 11,372 | 11,608 | 3,751 | 1,671 | 1,492 | 1,642 |
| 2,883 | 2,903 | 2,837 | 2,759 | 2,731 | 2,747 | 2,941 | 3,156 | 3,322 | 3,478 |
| 1,655 | 1,669 | 1,614 | 1,561 | 1,550 | 1,566 | 1,717 | 1,879 | 2,010 | 2,110 |
| 457 | 469 | 439 | 413 | 404 | 410 | 486 | 555 | 597 | 642 |
| 754 | 764 | 754 | 736 | 736 | 745 | 805 | 855 | 894 | 933 |
| 286 | 284 | 283 | 273 | 275 | 271 | 296 | 319 | 343 | 355 |
| 158 | 152 | 138 | 139 | 135 | 140 | 130 | 150 | 176 | 180 |
| 1,228 | 1,234 | 1,223 | 1,198 | 1,181 | 1,181 | 1,224 | 1,277 | 1,312 | 1,368 |
| 4,415 | 5,902 | 9,001 | 14,835 | 17,362 | 18,051 | 9,249 | 6,811 | 6,755 | 7,086 |
| 1,800 | 1,370 | 603 | 47 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6,215 | 7,272 | 9,604 | 14,882 | 17,362 | 18,051 | 9,249 | 6,811 | 6,755 | 7,086 |
| 788 | 2,207 | 5,327 | 11,223 | 13,811 | 14,416 | 5,262 | 2,572 | 2,380 | 2,524 |
| 5,427 | 5,065 | 4,277 | 3,659 | 3,552 | 3,635 | 3,987 | 4,239 | 4,375 | 4,562 |
| 3,627 | 3,695 | 3,674 | 3,612 | 3,552 | 3,635 | 3,987 | 4,239 | 4,375 | 4,562 |

## Table B14 <br> Total Government Employment, 1900-1949 <br> Full-time and Part-time Number <br> (Unit: 1,000 persons)

|  | 1900 | 1910 | 1920 | 1930 | 1940 | 1949 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Federal Government | 438 | 579 | 1,032 | 880 | 1,585 | 3,650 |
| Civilian | 312 | 439 | 688 | 614 | 1,053 | 2,008 |
| Armed Forces | 126 | 140 | 344 | 266 | 532 | 1,642 |
| State \& Local Government | 963 | 1,385 | 1,888 | 2,787 | 3,317 | 3,909 |
| Nonschool | 480 | 789* | 1,053* | 1,637 | 2,044 | 2,476 |
| States | 80 | 127 | 215 | 328 | 538 | 708 |
| Cities, towns, \& villages | 230 | 398 | 508 | 832 | 893 | 1,082 |
| Counties |  |  |  |  | 339 | 408 |
| Townships, special districts | 170 |  |  | 477 | 274 | 278 |
| School | 483 | 596 | 835 | 1,150 | 1,273 | 1,433 |
| Total Regular Employe | 1,401 | 1,964 | 2,920 | 3,667 | 4,902 | ,559 |
| Public Emergency Workers | 0 | 0 | 0 | 20 | 2,892 | 0 |
| Grand Total | 1,401 | 1,964 | 2,920 | 3,687 | 7,794 | 7,559 |
| National Defense | 166 | 198 | 581 | 364 | 788 | 2,524 |
| Other, incl. public emergency | 1,235 | 1,766 | 2,339 | 3,323 | 7,006 | 5,035 |
| Other, excl. public emergency | 1,235 | 1,766 | 2,339 | 3,303 | 4,114 | 5,035 |

* Interpolated between 1900 and 1930 by data for states and cities.

Based on Tables B6-12.



 (Unit: 1,000 persons)


* Includes direct relief, social security, work programs, and Indian affairs.


## Notes to Table B15

Blank spaces indicate either zero or small amounts not shown separately but included in the figures for other functional categories. The federal government figures are for June 1940; the school figures (other than federal) for the school year 1939-40; the other figures, for Oct. 1940. Employment is measured by the total number of full- and part-time workers, with no adjustment to a full-time equivalent basis except in the case of the Post Office. Public emergency workers are excluded.

Federal government data (except for the Postal Service figure, which is from Table B4) are from "Federal Personnel by Types of Work Performed, June 1940 and 1941," Monthly Labor Review, Dec. 1941. State and local government data are from the Census Bureau's Public Employment and the War (State and Local Government Quarterly Employment Survey, Vol. 1: No. 31A, Feb. 1942), except that the breakdown of school employment by type of government and some details of the functional distribution of "all other local" employment were roughly estimated by us. We altered the classification of federal employees by distributing public works among the other functional categories, splitting Engineer Corps employment between highways and waterways and conservation and development, shifting soil conservation and development to conservation and development, and marketing and crop control to regulation, by placing the Veterans Administration and Indian affairs under welfare, and by making several other less important changes.
Functional Glassification of Federal Workers, 1896 and 1939

Table B17
Functional Classification of State Government Nonschool Personnel

| New York |  |  |  |  | Vermont |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no. of employees |  | percentage of total |  | $\begin{gathered} 1940 \\ \text { Relative } \\ \text { to } 1900 \end{gathered}$ | NO. Of BMPLOYEES |  | percentage of total |  | $\begin{gathered} 1945 \\ \text { RELATIVE } \\ \text { to } 1900 \end{gathered}$ |
| 1900 | 1940 | 1900 | 1940 |  | 1900 | 1945 | 1900 | 1945 |  |
| 351 | 3,321 | 4.6 | 6.6 | 9.5 | 11 | 94 | 3.8 | 4.8 | 8.5 |
| 455 | 1,200 | 5.9 | 2.4 | 2.6 | 74 | 97 | 25.8 | 4.9 | 1.3 |
| , | ${ }^{\text {a }}$ | a | a |  |  | 60 | . 0 | 3.0 | b |
| 225 | 2,946 | 2.9 | 5.8 | 13.1 | 2 | 41 | . 7 | 2.1 | 20.5 |
| 351 | 5,819 | 4.6 | 11.5 | 16.6 | 3 | 709 | 1.0 | 35.9 | 236.3 |
| 139 | 706 | 1.8 | 1.4 | 5.1 | 30 | 174 | 10.5 | 8.8 | 5.8 |
| 183 | 2,467 | 2.4 | 4.9 | 13.5 | 4 | 79 | 1.4 | 4.0 | 19.8 |
| 4,619 | 21,570 | 60.2 | 42.7 | 4.7 | 83 | 310 | 28.9 | 15.7 | 3.7 |
| 96 | 3,880 | 1.3 | 7.7 | 40.4 | * | 143 | ${ }^{*}$ | 7.2 | b |
| 695 | 4,702 | 9.1 | 9.3 | 6.8 | 58 | 141 | 20.2 | 7.1 | 2.4 |
| 345 | 731 | 4.5 | 1.4 | 2.1 | 22 | 63 | 7.7 | 3.2 | 2.9 |
| 29 | 536 | . 4 | 1.1 | 18.5 | a | a | a | . | .... |
| 170 | 1,116 | 2.2 | 2.2 | 6.6 | a | ${ }^{*}$ | * | ${ }^{\text {a }}$ |  |
| 19 | 1,488 | . 2 | 2.9 | 78.3 | * | 66 | a | 3.3 | b |
| 7,677 | 50,482 | 100.0 | 100.0 | 6.6 | 287 | 1,977 | 100.0 | 100.0 | 6.9 |
|  |  |  |  | 1.9 |  |  |  |  | $1.05{ }^{\text {c }}$ |

2 Not shown separately.
${ }^{\text {b }}$ Denominator is zero.
e 1940 relative to 1900 .
The data for New York State were classified by us using figures school employees subject to the State Civil Service Commission) is not included in 1900. The Vermont data were prepared by the
 David V. Anderson, Auditor of Accounts, for a copy of the figures. for individual agencies given in the annual reports of the New York State Civil Service Commission. The so-called "labd" clow of employee (who in 1922 accounted for 13 percent of $t: r$
Functional Classification of Municipal Nonschool Payrolls and Personnel, 1903 and 1940

| 1940 relative to 1903 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number$(1,000)$ |  |  | Est. by | \% of Total |  |
|  |  | Direct | deflation | 1903 |  |
| 1903 | $1940{ }^{\text {a }}$ | estimate | of payrolls | (est.) | 1940 |
|  | 31.9 |  | 2.3 | 8.8 | 5.3 |
|  | 3.7 |  | 1.5 | 1.6 | . 6 |
|  | 6.6 |  | 1.5 | 2.8 | 1.1 |
|  | 42.2 |  | 2.0 | 13.2 | 7.0 |
| $34.2{ }^{\text {b }}$ | 94.1 | 2.8 | 2.7 | 22.0 | 15.6 |
| $20.6{ }^{\text {b }}$ | 71.3 | 3.5 | 3.4 | 13.3 | 11.8 |
|  | 52.4 |  | 2.9 | 11.3 | 8.7 |
| 19.5 | 61.4 | 3.1 | 2.9 | 13.2 | 10.2 |
|  | 16.9 |  | 5.4 | 2.0 | 2.8 |
|  | 53.1 |  | 12.2 | 2.7 | 8.8 |
|  | 23.6 |  | 9.2 | 1.6 | 3.9 |
|  | 42.8 |  | 3.6 | 7.5 | 7.1 |
|  | 12.6 |  | 24.0 | . 3 | 2.1 |
|  | 133.1 |  | 6.5 | 12.9 | 22.1 |
| 170.3 | 603.5 | 3.5 |  | 100.0 | 100.0 |

1940 total of 601 thousand, but the revision is not broken down by function. The estimate of 1940 total employment relative to 1903 is derived from the data for all cities (Table B9) adjusted for the changing importance of cities over 25,000 , as measured by




[^0]:    ${ }^{1}$ According to unpublished data of the Bureau of the Census relating to January 3-9, 1943, 2.6 percent of all employed workers (including self-employed persons) held more than one "continued" job. Of these, the secondary job of 7.0 percent was in "government", and of 10.4 percent, in "professional service". Assuming half the professional service workers to be government employees (see Table B3) and the number of government workers in industries other than the two mentioned to be negligible, there were 160,000 secondary workers in government. These would appear in the payroll but not in the census data.
    Of those reporting themselves as government workers few, except some teachers, worked under 30 hours a week. It does not seem likely, therefore, that many persons were led by prestige considerations to report their government affiliation as primary when in fact it was secondary. (Hours of government workers as a whole were not tabulated separately in the 1940 Census, but less than 3 percent of those in "government" and less than 11 percent in "education", including private schools, worked fewer than 30 hours during the survey week.)

[^1]:    ${ }^{2}$ The 1950 Census of Population, when finally tabulated, will provide another figure based on a complete count.

    - Except for 1940 no separate data are given for public, as distinct from private, education, and Carson based the separation on Office of Education and National Education Association data, both "payroll data". For this reason, the payroll and the census data are not truly independent and comparison provides only an inadequate check on their accuracy. However, one could avoid using the payroll data on education in preparing the census estimate, treating

[^2]:    ${ }^{5}$ The 1900 question asked the number of months employed between June 1, 1899 and May 31, 1900, rather than whether unemployed at the time of the census. By using the ratios of manmonths employed to available manmonths, for occupations wholly or largely associated with government, employment was estimated for Carson's three industries in 1900.

[^3]:    ${ }^{0}$ The Census reports a much larger number of mail carriers in every year than the number of carriers shown in Table B4. The difference seems too large to be accounted for by the number of unemployed or substitute carriers;

[^4]:    the census may have put other types of postal employees and postal contractors into this category. Its figures for postmasters are lower than ours in every year, though the difference was small in 1940. This was to be expected, for some fourth class postmasters report themselves to the Census as engaged mainly in some other kind of work; and fourth class postmasters, who accounted for almost the entire number of postmasters in 1896, have declined until they were only about 50 percent of the total by 1949.
    "The figures before 1921 are dubbed "approximate" in Historical Statistics of the United States. Most were probably derived from benchmark years by adding and subtracting hirings and separations. The main benchmarks were counts of government employees in 1896 and 1903. For several years when the Civil Service Commission did not report any figures, or did not show the Post Office separately, we estimated the totals by interpolation, as described in the notes to Table B6.

[^5]:    ' It will be seen (App. D) that the expenditure data underlying the 1902 calendar year employment estimate are based on reports for fiscal years ending between July 1, 1902 and June 30, 1903, inclusive.

[^6]:    ${ }^{9}$ Simon Kuznets, National Income and Its Composition, 1919-1938 (National Bureau of Economic Research, 1941), Table G-7.

