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## Appendix $\mathrm{D}^{*}$

## DATA ON GOVERNMENT PURCHASES, PAYROLLS, TRANSFERS, AND EXPENDITURES

This appendix describes in detail the estimates, used in summary form in the text, of government outlays on capital goods, other purchases, and payrolls (the sum of which measures government's current purchases of goods and services) ; of government transfers to the public, and net government interest payments (which, together with the foregoing, make up total government expenditures not including intergovernment transfers) ; and of functional classifications of government expenditures.

## Definitions

Government expenditures are divided into five classes: Payrolls, Outlays, Other Purchases, Public to Private Transfers, and Interest. In addition, another category, Public to Public Transfers, is distinguished to insure its exclusion from government input and expenditures as we define them.

Payrolls are wage and salary payments on current account plus government contributions to pension funds or, in lieu thereof, pension payments to government workers less their contributions to pension funds. Wage and salary payments in kind are excluded from payrolls and classified as other purchases.

Outlays are expenditures on fixed plant and equipment, including land, roads and streets, improvements to waterways, etc., less sales of such property. Included is expenditure, other than payrolls, for forceaccount construction as well as contract construction and purchases of assets. Major alterations and replacements are also included. ${ }^{\mathbf{1}}$

Other Purchases are purchases of goods and services from the pub-

[^0]lic other than payrolls and outlays. Included are purchases of materials, rents, payments for contract labor (other than those covered by outlays), and payments for miscellaneous services such as telephone and power. Because the item is calculated as a residual, the figures often cover expenditures which should have been classified elsewhere, but could not be identified.

Public to Private Transfers are payments to the public not in return for any goods or services. For the federal government, they consist mainly of veterans' pensions, subsidies to agriculture, shipping, and other industries, work relief, and social insurance benefits. For state and local governments, public assistance and other charity payments are preponderant.

Interest includes the interest payments of all government agencies to both the public and other government agencies, less the interest receipts of all such agencies. All intra-government payments are thus eliminated, and the interest figure becomes in effect the difference between interest payments to the public and interest receipts from the public.

Public to Public Transfers are payments by one government unit to another, chiefly apportionments or grants-in-aid, and, since 1937, shared taxes. These transfers appear as government expenditures when the receiving government spends them.
Government Expenditures are equal to the sum of the preceding items other than public to public transfers. Therefore, all operations relating to the public debt and other loans and investments, except interest payments, also are excluded.

War Expenditures on payrolls, outlays and other purchases, which are distinguished from nonwar, include through 1939 only expenditures of the War and Navy Departments other than certain outlay payments for river and harbor improvements, flood control, and the Panama Canal. For 1942, the Census classification, which includes war expenditures of all federal agencies, was used. ${ }^{2}$
All payments by school systems, except interest and pension payments, are included under School Expenditures. School system interest payments, including those of school districts, are included under state or local nonschool expenditures. All other payments of school districts, no matter how classified by the Census, are included under school expenditures.

[^1]Government, as defined here, covers not only general government functions but also business enterprises owned by government units and independent funds, such as trust and pension funds.

## Sources

Main sources for federal expenditure data (Table D1) are the Census Bureau's Governmental Finances in the United States: 1942 and various issues of the Annual Report of the Secretary of the Treasury on the State of the Finances and The Budget of the United States Government. Some data are from issues of the Census Bureau's Wealth, Debt and Taxation, Financial Statistics of States (later State Finances or Compendium of State Government Finances), and Financial Statistics of Cities (later City Finances or Compendium of City Government Finances), and special reports on federal subsidies and federal corporation finances.

Federal payroll data for 1929 to 1942 are from the Bureau of Labor Statistics (published currently in the Monthly Labor Review), and earlier data are from a variety of sources, including the United States Budget, a census of the civil service, and reports of various government departments, with the addition of some very rough interpolations.

Most of the nonschool data for state and local governments (Tables D2-3) are from the Census Bureau's annual reports on state and city finances and the decennial censuses of governments, and the recent special census studies of state and local government finances. Payroll data are from the Census Bureau's quarterly surveys of state and local government employment and payrolls, the WPA-BLS State, County, and Municipal Survey (some of the results of which were published in BLS Serial No. R. 1732, "Public Employment and Pay Rolls in the United States, 1929-39, and Post-War Implications", by Carol P. Brainerd), and extrapolations back from these figures, using our employment estimates and payrolls per employee from Simon Kuznets, National Income and Its Composition (National Bureau of Economic Research, 1941), W. I. King, The National Income and Its Purchasing Power (National Bureau of Economic Research, 1930), and Paul Douglas, Real Wages in the United States (Houghton Mifflin, 1930).

The data for schools (Table D4) are from various issues of the Biennial Survey of Education and the Bulletin and Annual Report of the United States Office of Education.

## Deficiencies

The data suffer from two main types of deficiency: gaps in the coverage of various levels of government unit, and inconsistencies and difficulties in the classification of expenditures by type. ${ }^{3}$

Complete coverage of all levels of government is available from Census Bureau data only for 1903, 1932, and 1942. For 1913 there are no Census data for cities with populations under 2,500, special districts overlying these cities, and other minor civil divisions. It is not clear to what extent special independent districts, such as school, highway, and other districts, are included in the data for cities over 2,500. ${ }^{4}$ However, as expenditures of school districts, by far the most important of these special districts, are estimated from Office of Education data, the question is probably not important.
We estimate local nonschool expenditures in 1913 by interpolation between 1903 and 1932, using expenditures of cities over 30,000 and counties. Totals for all the levels of government for which figures are available are given in the notes to Table D3. No adequate data are available for expenditures on public higher education before 1932, and no estimates are made here, but data on other education expenditures by all levels of government are available for the whole period. In 1923 and 1929, no data are available for counties, cities with populations under 30,000, and other minor civil divisions. In 1939, no

[^2]data are available for counties, cities under 100,000, and other minor civil divisions.

The most serious difficulties, however, are not with the measurement of total expenditures, but rather with the breakdown of expenditures by type. The interest item is the most reliable throughout, since the figures are given in almost every case where total expenditures are shown.

The state and local outlay figures too are comparatively reliable, except for state outlays in 1902. In that year, Wealth, Debt, and Taxation did not contain any separate figures for state outlays, except for a small amount shown for "Buildings and Sites", and a rough probably excessive - estimate had to be made, mainly on the basis of 1912 proportions of dutlays to other expenditures (see notes to Table D2). Another possible source of error is in the distribution of state and local outlays between school and nonschool, where such a breakdown is not given in the source, as in 1932.

The federal outlay figures are less reliable than those for state and local governments. General government outlay figures, for 1923 to 1939 from United States Budgets, and for 1942 from Governmental Finances in the United States, are fairly accurate, but some corporation outlays in 1942 had to be estimated from changes in assets, and are probably too low because no allowance is made for the offsetting of outlays by depreciation. The 1903 and 1913 nonwar figures are merely sums of obvious outlay items from the annual reports of the Secretary of the Treasury and probably include some expenditures that were not really outlays; on the other hand, they omit a larger amount of expenditures including equipment that should be classified under outlays. The residual "other purchases" item for 1903 and 1912 is almost certainly overestimated on this account. The opposite is true of the estimates of war outlays for these two years, which are based partly on construction data that include maintenance and repairs.

The estimates for state and local public to private transfers almost always contain some items which properly should be classified elsewhere, particularly under payrolls. The upward trend in these transfers has been so strong as to be little affected by these inaccuracies. Underestimation of purchases on this account has probably increased in relative importance. ${ }^{6}$ Federal public to private transfers are easier to estimate because they are concentrated in a few well defined cate-

[^3]gories (military pensions and benefits in the earlier years, and the same plus work relief, social insurance benefits, and subsidies in more recent years) and because administration costs are usually separated from transfer payments.

Federal public to public transfers present no important difficulties, but state and local transfer figures suffer from two defects. The less important is a change in definition in 1937 so that shared taxes, formerly considered nongovernment cost payments and receipts, came to be treated as grants by the government that levies the tax. Since such items had not been considered government cost payments, however, the other categories were not affected by the change. The second defect is an upward bias (and therefore a downward bias in the other purchase series) because transfers are more easily identified in the later years. Some transfer payments other than for schools and highways are omitted from the transfer item and included with other purchases in the earlier years.
All the school payroll figures, and the other payroll figures from 1929 on are fairly reliable. But the federal payroll figure for 1903, based partly on payroll items picked from the reports of the Post Office, State, War, and Navy Departments, probably omits some payrolls in these departments not easily identified, and the pay of some low paid employees of other departments. The purchase figure is correspondingly overestimated. Because the payroll estimates for 1913 are based partly on the 1903 payroll per employee, they too may be a bit low.
The state payroll figures for 1903, 1912, and 1923 are extremely crude, for they are derived from other estimates already quite rough. If, as is likely, part-time work has been diminishing in importance, the earlier figures are probably too high because the average salary figures used to estimate them do not seem to take full account of this trend. The estimate of total local nonschool payrolls in 1903 is subject to a similar error, and probably to a greater degree because part-time work was more important at the local level. There are fairly reliable data, however, for large-city payrolls in 1903.

Because the figures for other purchases are residuals, almost all the previously described defects of the estimates for the other categories

[^4]of expenditure affect them. They are also distorted by the frequent inclusion of payrolls for force-account construction under both payrolls and outlays. It would be desirable to remove completely these expenditures from the outlay item, but sufficient data are not available. ${ }^{6}$

## Years Covered

For the federal government, the data uniformly relate to the twelvemonth period ending June 30 of the year specified. For state and local governments, however, the years to which the data relate might more appropriately be called "report years" than fiscal years. Generally, Census reports on state, city, and local finances use the fiscal year ending within a given calendar year, so that the one report year may include expenditures that took place as much as two years apart. Further, the report years themselves may not coincide for the different levels of government, so that the data are spread over an even longer period. The following is a brief description of the coverage of the different report years.
1903: States and territories, counties, and other minor civil divisions including cities with populations under 8,000: fiscal years ending between July 1, 1902 and June 30, 1903 inclusive. Cities with populations over 8,000: fiscal years ending between July 1, 1903 and June 30, 1904, inclusive. Schools: school year 1902-03.
1913: States, counties, and cities with populations over 2,500: fiscal years ending between July 1, 1912 and June 30, 1913, inclusive. Schools: school year 1912-13.
1923: States: fiscal years ending during the calendar year 1923, mostly between June and December. Cities with populations over 30,000 : fiscal years ending between March 1923 and January 1924, inclusive. Schools: school year 1921-22.

[^5]1929: States: fiscal years ending during the calendar year 1929, mostly between June and December. Cities with populations over 30,000: fiscal years ending between March 1929 and January 1930, inclusive. Schools: school year 1927-28.
1932: State and local governments: fiscal years ending between July 1, 1931 and June 30, 1932, inclusive. Schools: school year 1931-32.
1939: States: fiscal years ending during calendar year 1939, mostly June 30. Cities with populations over 100,000 : fiscal years ending during calendar year 1939 or January 1940. Schools: school year 1937-38.
1942: States: fiscal years ending in the 12 -month period ending with June 30, 1942; most of the fiscal years end on June 30, 1942. Cities with populations over 25,000 : fiscal years ending during the calendar year 1942 or January 1943. Counties: fiscal years ending during the calendar year 1942, December 1941, or January 1943. Schools: school year 1941-42.

The picture of trends in government input and expenditures that one gets from figures for these isolated years may be distorted by the peculiarities of the particular years chosen as "key years", especially since these were chosen mainly because data were available rather than because they were in any way representative. Fortunately, except for war periods (which affect seriously only the last of the "key years"), year-to-year fluctuations appear small compared with trends for all series except outlays. For years after 1929, this is shown clearly in the text charts that reproduce Department of Commerce annual data.

For outlays, available annual series indicate the following cases where the figure for a "key year" would seem to be considerably different from, say, a five year average around that year:

1903: Total and nonwar outlays are considerably lower than in following years for two main reasons: first, 1903 was just before the beginning of large outlays on reclamation and the Panama Canal, and second, there were unusually large land sales in that year, which further reduced the figure for net outlays. Before 1903, the trend of nonwar outlays was gradually upward. For war outlays, 1903 was about the end of a steep upward trend from the very low levels of the late 1870's and early 1880's, and the beginning of something like a plateau in military outlays which lasted, with some fluctuation, until about the beginning of the first World War.

[^6]1913: This was an extremely low year for military outlays, lower than any later year, and any earlier year since 1898, and almost 50 percent below the average of 1903-12.

1923: Federal nonwar outlays, higher in 1923 than they had been during the war, reached a peak in 1924 and then tapered off. War outlays continued the steep postwar decline through 1925, and then started to increase again. State and city outlays in 1923 were at the end of a very sudden postwar increase, and at the beginning of a more gradual, but still considerable, rate of growth. School outlays, after a very rapid war and postwar increase, grew slowly after 1922, and reached a peak in 1925.

1929: For most of the series, 1929 was one of the years in an upward movement that went from a postwar trough in 1923-25 to a peak in 1931 or 1932, or continued through the thirties. One exception was city outlays, which remained at about the same level from 1926 to 1930 after a sharp rise from 1919-26 and then dropped off rapidly. School outlays reached a peak in 1925 and 1926, dropped gradually until 1930, and then sharply.

## Comparisons with Other Estimates

Our estimates of government expenditures differ in several respects from those prepared by the National Industrial Conference Board (various issues of the Economic Almanac), the Department of Commerce (Survey of Current Business, National Income Supplement, 1951), and the Twentieth Century Fund (J. F. Dewhurst \& Associates, America's Needs and Resources, 1947, Chapter 20).

The main differences between our figures and those of the N.I.C.B. are: 1) The National Bureau figures include all transactions of government corporations and funds with the public, while the N.I.C.B. excludes all such transactions and includes only government subsidies to enterprises. 2) The National Bureau figures exclude public to public transfers from the expenditures of the grantor government and include them in the expenditures of the grantee government when they are spent. The N.I.C.B. figures include them as expenditures of the grantor government, and subtract the amount received from the expenditures of the grantee government. 3) The National Bureau interest figure is net, subtracting total interest receipts from total payments of general government and corporations. The N.I.G.B. figures include only general interest paid. Thus the National Bureau figure is in effect interest payments to the public less interest receipts from
the public, all intra-government payments being eliminated. The N.I.C.B. figure includes some payments by the government to its own agencies, and excludes some payments by government agencies to the public.

The main differences between our figures and those of the Department of Commerce are: 1) The National Bureau figures are for fiscal or report years, while the DC figures are for calendar years. 2) The National Bureau figures include work relief with public to private transfers; the DC includes it with payrolls. In Table D6 we have adjusted the DC payroll estimates to exclude work relief. 3) The National Bureau figures include all enterprise transactions with the public, while the DC includes enterprise interest payments and receipts, and outlays, but not current expenditures. The DC does include general government subsidies to enterprises, less their current surplus. 4) The National Bureau figures treat wage and salary payments in kind as other purchases, the DC treats them as part of payrolls. In the adjusted DC figures presented in Table D6 we have shifted wage and salary payments in kind by the federal government from payrolls to other purchases. 5) In the National Bureau figures, purchases from business are separated into "other purchases" and net outlays, sales of land, buildings, and equipment being subtracted from total outlay payments. Other purchases are gross. The DC separates purchases from business into new construction in the continental United States and "other purchases", which include purchases of equipment, government cash gifts and contributions abroad, and construction outside the United States. "Other purchases" are net, receipts from domestic sales of surplus consumption goods, sales of surplus property abroad, and cash and credit lend-lease being subtracted from payments. "New construction" is a gross figure. 6) The National Bureau treats unemployment insurance funds as state funds (as does the Census Bureau in State Finances) while the DC includes them under federal funds.

The National Bureau figures differ from those of the Twentieth Century Fund because of differences in concept, such as our exclusion of loans, and because we use later and revised data.

## Adjustment for Price Changes

Trends in government input are considerably affected by price changes. To observe changes in input, free of these price changes, we deflate by appropriate price indexes, expressing input in terms of 1929 prices. Since price indexes for individual components of government
input may move very differently, the deflation is applied separately to payrolls, outlays and other purchases. The deflating indexes for outlays and other purchases are only crude combinations of familiar construction cost and price indexes weighted so as to approximate roughly the average importance of the items in each component of government input over the whole period. Deflated payrolls are simply number employed multiplied by 1929 payrolls per employee.
The Department of Commerce has similarly deflated its estimates of government expenditures since 1929, but has published only the deflated total and a breakdown between payrolls and other expenditures.

## Functional Classification of Government Expenditures

In 'Tables D7-12 we show functional breakdowns of expenditures in so far as the data permit. The totals differ from those in Tables D1-6 because lack of information prevented us from adjusting expenditures on individual functions to fit the concepts defined above. Thus the federal figures in Tables D7-8 exclude interest payments, expenditures of enterprises other than the Postal Service, and trust fund payments, but include payments by the general fund to enterprises and trust funds and public to public and public to private transfers. The state and local functional data include public to private transfers, almost all of which are in the public welfare category.

The functional classification of federal expenditures (Table D8) is extremely crude; only a few of the more easily identified functions, not including some with large changes, are shown separately. The city figures suffer from discontinuity because overlying areas, such as school and other special districts, are omitted in 1941 and later years. The main effect of this omission is that the importance of school expenditures is much reduced, but highways, sanitation, and other functions are also affected.
For some years we show no figures at all, either because no data are available, as for states in most of the years before 1915, or because changes in classification from year to year were so numerous as to make it either impossible or not worth while.

Table D1
Federal Government Expenditures, by Type, 1903-1942

| (Unit: \$1 million) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1903 | 1913 | 1923 | 1929 | 1932 | 1939 | 1942 |
| War and Nonwar |  |  |  |  |  |  |  |
| Payrolls \& purchases | 437 | 758 | 1,882 | 2,245 | 2,423 | 4,294 | 33,556 |
| Payrolls | 219 | 441 | 1,083 | 1,362 | 1,407 | 2,107 | 5,931 |
| Outlays | 48 | 103 | 85 | 202 | 354 | 1,105 | 10,340 |
| Other purchases | 170 | 214 | 714 | 682 | 661 | 1,082 | 17,285 |
| Transfers |  |  |  |  |  |  |  |
| Public to private | 138 | 175 | 625 | 693 | 924 | 3,639 | 3,167 |
| Public to public | 6 | 10 | 89 | 118 | 229 | 1,010 | 837 |
| Net interest |  |  |  |  |  |  |  |
| Nonwar |  |  |  |  |  |  |  |
| Payrolls \& purchases | 251 | 505 | 1,215 | 1,593 | 1,716 | 3,115 | 3,070 |
| Payrolls | 143 | 315 | 674 | 955 | 998 | 1,488 | 1,799 |
| Outlays | 9 | 65 | 25 | 104 | 246 | 726 | 468 |
| Other purchases | 100 | 124 | 516 | 535 | 472 | 902 | 803 |
| War |  |  |  |  |  |  |  |
| Payrolls \& purchases | 185 | 253 | 667 | 652 | 707 | 1,179 | 30,486 |
| Payrolls | 76 | 126 | 409 | 407 | 410 | 619 | 4,132 |
| Outlays | 39 | 37 | 60 | 98 | 108 | 380 | 9,872 |
| Other purchases | 70 | 89 | 198 | 147 | 189 | 180 | 16,482 |

Totals for federal expenditures are based on the historical series published in the Treasury Department's annual reports, such as in the 1950 report, pp. 448-53. We adjusted this series in several ways so that it would be comparable over the whole period and would conform more closely to the definition of expenditures used here. The main adjustments were the addition of trust fund and enterprise expenditures where they were not included, and the elimination of transactions among government agencies, loans, and refunds.
1903: Payrolls and other purchases are total expenditures as shown by the Annual Report of the Secretary of the Treasury, less identifiable debt retirement, outlay, interest, and transfer items (the last consisting only of pensions and apportionments), and less expenditures of the District of Columbia. Payrolls, whenever possible, are from actual payroll data (the Postal Service, Army and Navy military pay, Navy Department civilian payrolls and the State Department). For other departments, average salaries and numbers of employees reported by the Census Bureau in "The Executive Civil Service of the United States", Bulletin 12, 1904, were used together with aggregate salaries of employees not reported by the census, as given in the Annual Report of the United States Civil Service Commission, 1904.

Outlays are net, receipts from sales of public lands having been subtracted from expenditures. These receipts were unusually large in 1903, almost $\$ 9$ million. War outlays are based on the series on military and naval construction from the Census Bureau's Historical Statistics of the United States (1949), with the addition of outlays on equipment from the Annual Report of the Secretary of the Navy, 1903 and the Annual Report of the Secretary of the Treasury, 1903. Navy outlay payrolls have been subtracted from outlays.

## Notes to Table D1 (continued)

War activities of civilian departments are classified as nonwar expenditures, while civilian activities of the War Department other than rivers and harbors and the Panama Canal are classified as war expenditures. Interest payments are from the series in recent issues of the Annual Report of the Secretary of the Treasury.
1913: Payrolls and other purchases are total expenditures as given in the Annual Report of the Secretary of the Treasury, less debt retirement, District of Columbia expenditures, interest, and identifiable outlay and transfer items. Payrolls of civilian departments other than the Post Office are estimated from employment, and payroll per employee interpolated between 1903 and 1923 by annual average earnings of government employees in the District of Columbia from Paul Douglas, Real Wages in the United States (Houghton Mifflin, 1930). Military pay is taken directly from the annual reports of the War and Navy Departments as is civilian pay of the Navy Department. Outlay payrolls are excluded from Navy and rivers and harbors outlays. Civilian pay of the War Department (except river and harbor improvement payroils) is estimated from employment in the same way as that of other civilian departments except the Post Office. Post Office payrolls are actual pay figures from the Annual Report of the Postmaster General, 1913. These payrolls are the sum of individual pay figures shown in the auditor's report, so they may be slightly underestimated if some small payroll items were not identified.

Outlays and interest are estimated in the same manner as in 1903.
1923: Payrolls and other purchases are estimated from total government expenditures by a method similar to that used in 1913, except that the classification of obligations by character and object of expenditure from The Budget of the United States Government, 1928 was used to eliminate certain types of expenditure, and certain data on government enterprises were derived from their annual reports and from 76th Congress, 3d Session, Senate Document No. 172, Financial Statements of Certain Government Agencies.

Payrolls are based mainly on obligations for net personal services as reported in the 1928 Budget with the addition of other payrolls and pension payments and the separation of war and nonwar payrolls from the 1925 Budget and other minor sources.
Transfers and outlays are also based on Budget data, with some adjustments, mostly minor except for the deduction from outlays of a large amount of ship sales by the United States Shipping Board reported in its Annual Report for 1923.
Interest is from the Treasury series cited above, with the addition of net interest payments of enterprises, from their own reports or the Financial Statements, and less trust fund interest receipts, shown in the 1923 Treasury Report. 1929: Payrolls and other purchases are derived as in 1923. Total civilian payrolls are the BLS figure for calendar 1929 extrapolated to fiscal 1929 by employment (the average of our employment estimates for 1928 and 1929), plus government contributions to pension funds. War and Navy Department civilian payrolls are estimated from the total by the ratio for civilian employment. Military payrolls are Department of Commerce estimates for calendar 1929 extrapolated to fiscal 1929 by military pay, subsistence, and transportation, etc., given in the Treasury report.

Transfers, outlays, and interest are estimated as for 1923.
1932: Payrolls and other purchases, transfers, and outlays are all estimated in the same way as in 1929, with very minor exceptions. Payrolls are estimated

## Notes to Table D1 (concluded)

by averaging the 1931 and 1932 calendar year figures of the BLS. Military cash pay is estimated from two Department of Commerce calendar year figures. 1939: Payrolls and other purchases are estimated as in 1929, except that the Budget classification was used only to eliminate outlays and some minor items from the total, while we used the annual reports of the Secretary of the Treasury for 1939 and 1940 to estimate transfers. Payrolls are derived from the same sources as in 1932, making use, however, of the monthly estimates of civilian payrolls which begin with January 1939.

Public to private transfers are the sum of a number of items listed in the 1939 Treasury report, chiefly WPA expenditures, agricultural subsidies, and veterans' pensions. Public to public transfers are based mainly on a special compilation in the 1940 Treasury report.

Outlays and interest are estimated as in earlier years, except that military outlay obligations are scaled down to match actual expenditures as reported by the Treasury Department.
1942: Payrolls and other purchases are the sum of federal general government and enterprise operation expenditures as reported in the Census Bureau's Governmental Finances in the United States: 1942, plus trust fund expenditures (other than transfers) and government contributions to civilian pension funds, and less public to private transfers classified by the Census Bureau as operation. The Census Bureau definition of war activities, wider than ours, was followed with one exception - we took veterans' care and similar items out of war and placed them under nonwar activities. Nonwar payrolls for the fiscal year are interpolated from BLS calendar year figures by monthly employment, and military pay, in the same way, by number of men in the armed forces. The war category is somewhat less inclusive than that for payrolls and other purchases so war purchases other than outlays are probably somewhat overstated.

Public to private transfers are the sum of Treasury figures for veterans' pensions and benefits, government civilian retirement pensions, work relief, Old-Age and Survivors Insurance and Railroad Retirement Benefits, and the Commodity Stamp Trust. Fund and an estimate for subsidies from a special compilation by the Bureau of the Budget. Public to public transfers are the Census figure for "Aid to other governments".

General outlays are based on Governmental Finances with the exception that the Veterans Administration has been shifted from war to nonwar. Enterprise outlays are from corporation reports where available, and in other cases are estimated from increases in assets, as reported by the Treasury Department.

## Table D2

State Government Nonschool Expenditures, by Type 1903-1942

| (Unit: $\$ 1$ million) |  |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | ---: | ---: | ---: | ---: |
|  | 1903 | 1913 | 1923 | 1929 | 1932 | 1939 | 1942 |
|  | 102 | 224 | 809 | 1,343 | 1,681 | 2,024 | 1,822 |
| Payrolls and Purchases | 57 | 107 | 257 | 385 | 446 | 711 | 738 |
| Payrolls | 18 | 43 | 322 | 618 | 848 | 699 | 613 |
| Outlays | 27 | 74 | 231 | 340 | 387 | 614 | 472 |
| $\quad$ Other purchases |  |  |  |  |  |  |  |
| Transfers | 4 | 2 | 50 | 37 | 48 | 979 | 932 |
| $\quad$ Public to private | 54 | 87 | 353 | 367 | 764 | 1,543 | 1,818 |
| $\quad$ Public to public | -1 | -3 | 3 | 20 | 40 | 17 | -47 |

1903: General operation and outlays were lumped together in the data for states in the Census Bureau's Wealth, Debt, and Taxation, 1903, except for a small item called "buildings and sites". To estimate total outlays we assumed that, for each department, expenses and outlays were in the same ratio as in 1915.

The payroll figure is the product of the National Bureau estimate of nonschool employment, and payrolls per employee, the latter roughly estimated by extrapolating the 1929 figure to 1909 by state payrolls per employee from Simon Kuznets, National Income and Its Composition (National Bureau of Economic Research, 1941), estimated annual pay of state and county employees, from W. I. King, The National Income and Its Purchasing Power (National Bureau of Economic Research, 1930), and average annual earnings of government employees in the District of Columbia, from Paul Douglas, Real Wages in the United States (Houghton Miflin, 1930).
Expenditures under "common schools" were treated as public to public transfers. The figure for other public to public transfers is the sum of all local receipts from subventions and grants, less District of Columbia receipts from the federal government.

Public to private transfers are the sum of "outdoor poor relief," estimated from "charities, hospitals, and corrections" by the 1915 ratio, and "aid to special classes" other than soldiers and sailors in state institutions, estimated from "miscellaneous and general" by the 1915 ratio.
1913: Net interest consists of corporate interest payments less corporate interest receipts. Payrolls and other purchases are the sum of expenses of general departments and public service enterprises less schools, apportionments, estimated public to private transfers, and pensions.
Payrolls and public to private transfers were estimated as for 1903.
Public to public transfers are education and highway apportionments from Wealth, Debt, and Taxation, 1913. Apportionments for purposes other than education and highways are included in operation expenditure. No estimate for total apportionments could be derived from receipts in 1913 because of the incompleteness of the census.
1923: Public to public transfers are highway and other apportionments as shown in the Census Bureau's Historical Review of State and Local Government Finances (1948). For the first time this figure includes local shares of state-imposed taxes, and is therefore not comparable with the figures for earlier

## Notes to Table D2 (concluded)

years. The figure for highway apportionments, comparable with those for earlier years, is $\$ 19$ million, instead of $\$ 68$ million. School apportionments are not affected by the change.
1929: Payrolls and purchases, outlays, and transfers are estimated as for 1913. No payments of locally shared state taxes or grants other than for highways and schools are included in public to public transfers and the transfer figure is therefore comparable with 1903 and 1913 rather than with 1923 and later years.

Payrolls are from the WPA-BLS State, County, and Municipal Survey (published in BLS Serial No. R. 1732, "Public Employment and Pay Rolls in the U. S., 1929-39, and Post-War Implications", by Carol P. Brainerd) shifted from calendar to fiscal 1929 by our employment estimates (using the average of calendar 1928 and calendar 1929 as fiscal 1929).
1932: Payrolls, outlays and other purchases, and transfers are estimated as for 1929, except that public to public transfers include local shares of state collected taxes and grants other than for highways and schools.
1939: Payrolls and other purchases are expenditures on general and public service enterprise operation less grants, unemployment and public assistance benefits, contributions to public service enterprises, and pensions. Payrolls are the average of calendar year figures for 1938 and 1939 from the WPA-BLS State, County, and Municipal Survey.

Public to private transfers are the sum of unemployment benefits, pension payments, and public assistance. Public to public transfers are the sum of grants, shared taxes, and shared alcoholic beverage monopoly system receipts. 1942: Payrolls and other purchases are the sum of expenditures on general and enterprise operation, administration of pension funds and workmen's compensation funds, and government contributions to state employee pension funds, less public assistance other than administration. Payrolls are wages and salaries from the Census Bureau's State and Local Government Quarterly Employment Survey plus government contributions to state employee pension funds.

Public to private transfers are the sum of public assistance less administration and unemployment compensation benefits. Public to public transfers are state aid, including shared taxes, grants by state school trust funds, and state contributions to pensions for local employees.

Net interest payments are general and public service enterprise interest payments, less general interest receipts and earnings on investments of sinking funds, pension funds, trust funds, unemployment compensation funds, and workmen's compensation funds.

Table D3
Local Government Nonschool Expenditures, by Type 1903-1942

|  | (Unit: $\$ 1$ million) |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 1903 | 1913 | 1932 | 1942 |
|  | 689 | 1,282 | 3,779 | 3,750 |
| Payrolls and Purchases | 269 | 452 | 1,647 | 2,028 |
| Payrolls | 212 | 451 | 1,143 | 519 |
| Outlays | 208 | 379 | 990 | 1,204 |
| $\quad$ Other purchases |  |  |  |  |
| Transfers | 12 | 5 | 181 | 797 |
| $\quad$ Public to private | 2 | n.a. | 65 | 48 |
| $\quad$ Public to public | 61 | 145 | 630 | 505 |

1903: Payrolls and other purchases are the sum of: 1) county expenses, less interest payments and outdoor poor relief; 2) payments by cities over 8,000 for general and municipal service, municipal investment, public trust fund, and municipal industrial expenses, less outdoor poor relief, payments to other civil divisions, net corporate interest payments, payments of Massachusetts cities for interest and sinking funds, and receipts from refunds; and 3) total expenditures, other than interest payments and outlays, of minor civil divisions and cities under 8,000 . Some public to public transfers are probably included with county other purchases and some public to private transfers with other purchases of cities under 8,000 and other minor civil divisions. Data for counties and minor civil divisions are from the Census Bureau's Wealth, Debt, and Taxation, 1903; data for cities with populations over 25,000 , from Census Bulletin 20 (1905); and data for cities 8,000-25,000, from Census Bulletin 45 (1906).

Payrolls are estimated by multiplying local public employment by payroll per employee. The employment figure is the average of the 1900 and 1905 National Bureau city full-time equivalent employment figure from Table B9 plus the 1902 estimate of other local employment from Table B10. The payroll per employee figure is a very rough guess, being an extrapolation back from the WPA-BLS State, County, and Municipal Survey 1929 estimate to 1919 by "wages and salaries per city and county nonschool employee", from Simon Kuznets, National Income and Its Composition (National Bureau of Economic Research, 1941) ; to 1909, by "payrolls per employee of police and fire departments, municipal utilities, and miscellaneous civil departments', from W. I. King, The National Income and Its Purchasing Power (National Bureau of Economic Research, 1930) ; and to 1903 by average annual earnings of federal employees in the District of Columbia, from Paul Douglas, Real Wages in the United States (Houghton Mifflin, 1930).

School outlays of cities under 8,000 and other minor civil divisions, not shown apart from other outlays in the source, were estimated by using the ratio of school expenses to total expenses in these cities and the ratios in cities $8,000-25,000$ of school expenses to total expenses and school outlays to total outlays. Receipts by cities over 8,000 from the sale of real property are subtracted from outlay payments.

Public to private transfers are outdoor poor relief payments of cities over 8,000, and county payments, estimated from expenditures for charities, hospi-

## Notes to Table D3 (continued)

tals, and corrections by the ratio for cities $8,000-25,000$. No estimate was made for cities under 8,000 ; their transfer payments are therefore included with other purchases.

Public to public transfers are payments by cities over 25,000 to other civil divisions for charities and correction.

Net interest is net corporate interest payments plus payments of Massachusetts cities for interest (see Census Bulletin 20), less net corporate interest receipts.
1913: All the 1913 figures in Table D3, except for payrolls, are interpolations between 1903 and 1932, via the data for cities over 30,000 and counties. Alternative figures, using all the data available for 1913, but not including cities under 2,500 or their overlying areas and possibly excluding overlying areas of some other cities, are given below.

County payrolls and other purchases in 1913 are expenses of general government departments and public service enterprises less outdoor poor relief. The data are from Wealth, Debt, and Taxation, 1913.

City payroils and other purchases are expenses of general departments and public service enterprises, less outdoor poor relief estimated from charities, hospitals, and corrections, and less pension assessments estimated from receipts from gifts and pension assessments by the 1912 ratios in cities over 30,000. The data are from Wealth, Debt, and Taxation, 1913 and the Census Bureau's Financial Statistics of Cities, 1912.

Payrolls are estimated as for 1903, using a figure for local employment other than municipal interpolated between 1902 and 1929 by municipal employment, and one for municipal employment interpolated between 1910 and 1915 by King's estimates.

School outlays of counties were separated from other outlays using the ratio of school operation to total operation and the 1903 ratios of school operation to total operation and school outlays to total outlays. City school outlays were estimated in a similar way, using 1912 ratios for cities over 30,000.

County interest receipts are estimated from interest and rents and carnings of government departments and public service enterprises by the 1903 ratio of interest receipts to total commercial revenue. City interest receipts were estimated from receipts of interest and rents by the 1912 ratio for cities over 30,000.

The data for cities over 30,000 in 1903 used in the interpolations are from Census Bulletin 20.

The figures for those units of government which were covered by the 1913 report are as follows (in millions of dollars) :

| Payrolls and purchases | 1,135 |
| :--- | ---: |
| Outlays | 415 |
| Other purchases and payrolls | 720 |

1932: Payrolls and other purchases are operation and maintenance of general departments and public service enterprises less public to private transfers and pension assessments, the latter estimated from receipts for donations, gifts, and pension assessments by the 1931 ratio for cities over 30,000 . No functional distribution is given in the source for operation expenditures of local governments other than counties in several of the states, and we assume that the operation expenditures of local governments in the missing states are distrib-

## Notes to Table D3 (continued)

uted in the same way as in those for which figures are available. The following are the percentages that operation expenditures in the states for which the functional breakdown is given are to the totals in the whole country for each type of government unit:

| Cities over 30,000 | 74.0 |
| :--- | :--- |
| Cities $8,000-30,000$ | 74.1 |
| Cities $2,500-8,000$ | 66.8 |
| Cities under 2,500 | 59.2 |
| Townships and towns | 80.3 |

Most of these data are from Wealth, Debt, and Taxation, 1932. The 1931 ratios for cities over 30,000 are from the Financial Statistics of Cities, 1931. All school district expenditures are considered to be for schools; all other special districts' expenditures are treated as nonschool.

Payrolls are based on the WPA-BLS State, County, and Municipal Survey.
School outlays were estimated by assuming that, for each level of local government, the ratio of school outlays to total outlays bore the same relationship to the ratio of school operation to total operation as in cities over 30,000 in 1931. The school operation figure we use for counties excludes $\$ 65$ million in apportionments to independent school districts (see the Census Bureau's Historical Review of State and Local Government Finances, 1948).

Public to private transfers are outdoor poor relief, estimated from charities, hospitals, and corrections by the 1931 ratio for cities over 30,000; and aid to special classes, estimated from miscellaneous expenditures by the 1931 ratio in cities over 30,000 .

Public to public transfers are county apportionments to independent school districts, from the Historical Review of State and Local Government Finances.

Interest receipts are estimated from receipts for highway privileges, rents, and interest by the 1931 ratio in cities over 30,000 .
1942: Payrolls and other purchases are general and enterprise operation plus state and local contributions to pensions for local employees, administration of pension and retirement funds and leased public service enterprises, less general relief and other public assistance, except administration.

Payrolls are wages and salaries from the Census Bureau's State and Local Government Quarterly Employment Survey plus state and local contributions to pension funds for local employees.
Outlays are general expenditures plus partly estimated public service enterprise expenditures. We estimated county enterprise outlays by assuming that, for each type of county public service enterprise, outlays in 1942 bore the same relationship to outlays in 1944 as in cities with populations over 100,000. (Out of total county outlays of about $\$ 76$ million, estimated enterprise outlays were less than $\$ 1$ million.) A similar method was used to estimate the enterprise outlays of cities of $25,000-100,000$ population, using 1943 instead of 1944.

Public to private transfers are general relief and other public assistance excluding administration, plus pension payments to local employees.

Public to public transfers are shown as "aid paid to other governments".
Net interest payments are general interest payments plus partly estimated public service enterprise interest payments, less partly estimated general interest receipts. County enterprise interest payments are estimated from payments by five counties, interpolated between 1941 and 1944 and raised by the 1944

Notes to Table D3 (concluded)
ratio of total county enterprise interest payments to the payments of the five countics. County general interest receipts are estimated from miscellaneous receipts by the 1941 ratio for 27 counties. General interest receipts of cities $25,000-100,000$ are estimated from earnings and miscellaneous receipts by the ratio for cities over 100,000. Sinking and pension fund interest receipts of local governments other than cities over 100,000 are estimated from data on fund assets from the Census Bureau's Governmental Finances in the United States: 1942 and Retirement Systems for State and Local Government Employees, 1941.

Other data, except for payrolls, are from Governmental Finances in the United States: 1942, the Revised Summary of State and Local Government Finances in 1942, City Finances, 1942, 1943, and 1944, and County Finances, 1941, 1942, 1943, and 1944 (all Census Bureau publications).

| Table D4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School Expenditures, excluding Higher Education, by Type 1903-1942 <br> (Unit: \$1 million) |  |  |  |  |  |  |  |
|  | 1903 | 1913 | 1922 | 1928 | 1932 | 1938 | 1942 |
| Payrolls and Purchases | 246 | 509 | 1,537 | 2,092 | 2,034 | 2,117 | 2,213 |
| Payrolls | 176 | 341 | 985 | 1,339 | 1,451 | 1,442 | 1,571 |
| Outlays | 46 | 84 | 306 | 383 | 211 | 239 | 138 |
| Other purchases | 24 | 85 | 246 | 371 | 372 | 436 | 505 |

Data for higher education, for the years available, are as follows:

|  | 1932 | 1938 | 1942 |
| :--- | :---: | :---: | :---: |
| Payrolls and purchases | 282 | 331 | 398 |
| Payrolls | 152 | 190 | 231 |
| Outlays | 39 | 41 | 29 |
| Other purchases | 91 | 100 | 138 |

1903 and 1913: Payrolls are extrapolated from 1922 by the ratio to total payments (other than outlays) of "salaries of superintendents, supervisors, principals, and teachers". Data are from issues of the Annual Report of the United States Office of Education.
1922 to 1942: Payrolls are salaries and per diem under general control, and salaries under instruction and operation of plant. Other purchases are supplies under general control, texts and supplies under instruction, fuel, light, and supplies under operation of plant, and maintenance, auxiliary charges, and fixed charges. Data are from various reports of the Office of Education's Biennial Survey of Education. Interest payments of school districts, school interest payments of other governments, and school pensions are included with nonschool expenditures.

| Table D5 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Government Expenditures by Type, in 1929 Prices, 1903-1942 (Unit: $\$ 1$ million) |  |  |  |  |  |  |  |
|  | 1903 | 1913 | 1923 | 1929 | 1932 | 1939 | 1942 |
| Federal Government, Nonwar |  |  |  |  |  |  |  |
| Payrolls and purchases | 578 | 1,037 | 1,422 | 1,594 | 1,882 | 3,321 | 3,090 |
| Payrolls | 383 | 674 | 874 | 955 | 1,041 | 1,577 | 1,839 |
| Outlays | 20 | 142 | 26 | 104 | 296 | 727 | 418 |
| Other purchases | 175 | 221 | 522 | 535 | 545 | 1,017 | 833 |
| Federal Government, War |  |  |  |  |  |  |  |
| Payrolls and purchases | 371 | 452 | 668 | 652 | 803 | 1,233 | 29,368 |
| Payrolls | 174 | 242 | 412 | 407 | 408 | 589 | 2,932 |
| Outlays | 73 | 69 | 59 | 98 | 139 | 416 | 8,958 |
| Other purchases | 124 | 141 | 197 | 147 | 256 | 228 | 17,478 |
| States, Nonschool |  |  |  |  |  |  |  |
| Payrolls and purchases | 188 | 371 | 794 | 1,343 | 2,094 | 2,274 | 1,755 |
| Payrolls | 117 | 191 | 295 | 385 | 454 | 683 | 683 |
| Outlays | 27 | 64 | 280 | 618 | 1,143 | 868 | 595 |
| Other purchases | 44 | 116 | 219 | 340 | 497 | 723 | 477 |
| Local, Nonschool |  |  |  |  |  |  |  |
| Payrolls and purchases | 1,280 | 2,310 |  |  | 4,242 |  | 3,329 |
| Payrolls | 542 | 888 |  |  | 1,521 |  | 1,631 |
| Outlays | 396 | 828 |  |  | 1,449 |  | 482 |
| Other purchases | 342 | 594 |  |  | 1,272 |  | 1,216 |
| Schools |  |  |  |  |  |  |  |
| Payrolls and purchases | 779 | 1,134 | 1,654 | 2,085 | 2,151 | 2,196 | 2,123 |
| Payrolls | 632 | 795 | 1,113 | 1,339 | 1,429 | 1,476 | 1,516 |
| Outlays | 106 | 190 | 319 | 383 | 275 | 261 | 131 |
| Other purchases | 41 | 149 | 222 | 363 | 447 | 459 | 476 |
| Total |  |  |  |  |  |  |  |
| Payrolls and purchases | 3,196 | 5,304 |  |  | 11,172 |  | 39,665 |
| Payrolls | 1,848 | 2,790 |  |  | 4,853 |  | 8,601 |
| Outlays | 622 | 1,293 |  |  | 3,302 |  | 10,584 |
| Other purchases | 726 | 1,221 |  |  | 3,017 |  | 20,480 |

Data do not include expenditures on higher education. For the years available, these are as follows (in millions of dollars, 1929 prices) :

|  | 1932 | 1938 | 1942 |
| :--- | :---: | :---: | :---: |
| Payrolls and purchases | 310 | 345 | 380 |
| $\quad$ Payrolls | 150 | 195 | 223 |
| Outlays | 51 | 45 | 27 |
| Other purchases | 109 | 105 | 130 |

Payrolls in constant prices are measured by full time equivalent employment multiplied by the 1929 payroll per employee. Most of the 1929 estimates for payrolls per employee use the figures given in earlier tables. Local payrolls per employee in 1929 are estimated by extrapolating from 1932 to calendar 1929 via the WPA-BLS figures (see notes to Table D1), and to fiscal 1929

Notes to Table D5 (continued)
using Simon Kuznets' data (National Income and its Composition, National Bureau of Economic Research, 1941).

Federal nonwar "other purchases" were deflated by a combination of two price indexes weighted equally: an index of the cost of transportation and travel, and an index of the cost of commodities and other services. The index of the cost of transportation and travel is composed of an index of the cost per mile of railway mail, weighted three, and indexes of the cost of rail freight and rail passenger service from Harold Barger, The Transportation Industries, 1889-1946 (National Bureau of Economic Research, 1951), each weighted one. The index of the cost of commodities and other services is a combination of four wholesale price indexes (foods, fuel and lighting, textiles, and paper) and two construction cost indexes, the American Appraisal Company (New) Index and a combination of the Engineering News-Record Construction Cost Index and the Associated General Contractors Index, each weighted one. The construction cost indexes are used to cover the cost of repairs and maintenance. Federal war "other purchases" were deflated by an index composed of the BLS wholesale food price index, weighted four, indexes of the wholesale price of fuel and lighting, textiles and the cost of transportation and travel, each weighted one, and a military construction cost index, weighted two. The travel and transportation index is the same as is used for nonwar purchases except that the cost of railway mail service is not included. The military construction cost index is an unweighted average of the George A. Fuller Company Index, the American Appraisal Company Index, the Turner Construction Company Index, and the Public Roads Administration Index. The weights used in constructing these indexes are only rough guesses as to the importance of the various items; the only item of government purchases which is available separately in every year is railway mail service which is given in the annual reports of the Postmaster General. Travel, transportation, and repairs and alterations are available for 1923 to 1939 in the United States Budgets. Other weights are based on a rough classification of the detailed distribution of commodity purchases by type of commodity given in TNEC Monograph No. 19, Government Purchasing - An Economic Commentary (1940).

State and local government nonschool "other purchases" were deflated by an index constructed of four wholesale price series (foods, and fuel and lighting, each weighted three; paper, and drugs and chemicals, each weighted one) and the deflator used for local outlays (see below), weighted three times. School "other purchases" were deflated by a combination of wholesale price indexes for fuel and lighting, and paper, and the American Appraisal Company Construction Cost Index, weighted in the proportions $3: 3: 2$. A very rough idea of the type of purchases by state and local governments was obtained from the TNEC report mentioned above, while for schools, the Biennial Surveys of Education show the proportions of school expenditure for "operation of plant, fuel, supplies, etc.", "general control and instruction, texts, supplies, etc.", and "maintenance".
The price indexes used for deflating outlays were constructed mainly from those in the Department of Commerce publication, Construction and Construction Materials, Statistical Supplement, May 1949, most of which were extrapolated back to 1903 by the Engineering News-Record Construction Cost and Building Cost Indexes. Weights were devised for each of the several levels of government to allow for the differences in type of outlay undertaken (mainly road construction as opposed to buildings or other types of outlays).

Notes to Table D5 (concluded)
For the federal government, the index used for military outlays was the one used also by the Department of Commerce, an unweighted average of the George A. Fuller Company Index, the American Appraisal Company Index, the Turner Construction Company Index, and the Public Roads Administration Index. For nonwar federal outlays, we used an unweighted average of the American Appraisal Company Index, the Engineering News-Record Construction Cost Index, and the Associated General Contractors Index. The Department of Commerce uses the first of these for hospital, institutional, and other nonresidential building, and the latter two for conservation and development, and "all other" public construction.

For state nonschool outlays, we used an average of the Public Roads Administration Index, and the American Appraisal Company Index, weighted in the ratio of $4: 1$. For local nonschool outlays, we used an unweighted average of the Public Roads Administration Index for roads and streets; an average of the Engineering News-Record Construction Cost Index and the Associated General Contractors Index for sewers, water supply, etc.; and the American Appraisal Company Index for nonresidential building. For school outlays, we used the American Appraisal Company Index, also used by the Department of Commerce in the source cited above.

| Table D6 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adjusted Department |  | of Commerce Estimates of and Purchases, 1929-1949 (Unit: $\$ 1$ million) |  |  |  | Governmen |  | Payrol |
|  | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
| Federal |  |  |  |  |  |  |  |  |
| Compensation of employees | 900 | 935 | 942 | 901 | 1,187 | 1,718 | 1,791 | 3,592 |
| Less: work relief, wages and salaries | 0 | 0 | 0 | 0 | 356 | 764 | 611 | 2,174 |
| Less: payment in kind | 61 | 58 | 52 | 47 | 47 | 46 | 54 | 63 |
| Payrolls (adjusted) | 839 | 877 | 890 | 854 | 784 | 908 | 1,126 | 1,355 |
| Outlays | 155 | 209 | 271 | 333 | 334 | 404 | 467 | 502 |
| Purchases from business except new construction | 186 | 195 | 244 | 186 | 448 | 830 | 618 | 656 |
| Plus: net purchases from abroad | 70 | 71 | 80 | 60 | 49 | 39 | 55 | 65 |
| Plus: payment in kind | 61 | 58 | 52 | 47 | 47 | 46 | 54 | 63 |
| in kind <br> Less: domestic sales of surplus consumption goods and materials | 61 0 | 58 0 | 52 0 | 47 0 | 47 0 | 46 0 | 54 0 |  |
| Other purchases (adjusted) | 317 | 324 | 376 | 293 | 544 | 915 | 727 | 78: |
| State and Local |  |  |  |  |  |  |  |  |
| Compensation of employees | 3,456 | 3,630 | 3,737 | 3,565 | 3,531 | 3,884 | 4,178 | 3,696 |
| Less: work relief, wages and salaries | 0 | 4 | 46 | 92 | 341 | 680 | 791 | 74 |
| Payrolls (adjusted) | 3,456 | 3,626 | 3,691 | 3,473 | 3,190 | 3,204 | 3,387 | 3,622 |
| Outlays | 2,236 | 2,544 | 2,293 | 1,445 | 884 | 1,131 | 974 | 1,592 |
| Other purchases | 1,469 | 1,585 | 1,651 | 1,587 | 1,525 | 1,744 | 1,803 | 1,640 |

The Department of Commerce estimates of government expenditures are adjusted to bring into closer conformity to the National Bureau measures. The original data are from the $S$ of Current Business, National Income Supplement, 1951, the Department's unpublished Tech Notes on Sources and Methods Used in the Derivation of National Income Statistics, Sectic Wages and Salaries and Employment, and some data received directly from the Departmen

| 18 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 29 | 3,444 | 3,537 | 5,046 | 10,836 | 21,255 | 27,905 | 30,614 | 14,741 | 9,356 | 8,922 | 9,979 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 1,875 | 1,579 | 1,213 | 580 | 50 | 0 | 0 | 0 | 0 | 0 | 0 |
| 68 | 77 | 127 | 442 | 1,375 | 2,639 | 3,729 | 4,088 | 1,364 | 653 | 613 | 695 |
| 51 | 1,492 | 1,831 | 3,391 | 8,881 | 18,566 | 24,176 | 26,526 | 13,377 | 8,703 | 8,309 | 9,284 |
| 76 | 537 | 974 | 3,588 | 9,279 | 5,363 | 1,761 | 1,440 | 931 | 957 | 1,186 | 1,490 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 1,116 | 1,581 | 7,966 | 30,735 | 53,261 | 58,624 | 42,221 | 6,716 | 5,751 | 8,832 | 10,253 |
| 64 | 64 | 84 | 330 | 1,193 | 1,411 | 925 | 943 | -726 | 13 | 2,225 | 3,834 |
| 68 | 77 | 127 | 442 | 1,375 | 2,639 | 3,729 | 4,088 | 1,364 | 653 | 613 | 695 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 4 | 6 | 7 | 16 | 67 | 209 | 422 | 716 | 293 | 143 | 83 |
| 43 | 1,253 | 1,786 | 8,731 | 33,287 | 57,244 | 63,069 | 46,830 | 6,638 | 6,124 | 11,527 | 14,699 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | 4,185 | 4,280 | 4,368 | 4,443 | 4,621 | 4,883 | 5,296 | 6,080 | 7,262 | 8,517 | 9,445 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 10 | 10 | 6 | 2, | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 4,175 | 4,270 | 4,362 | 4,441 | 4,621 | 4,883 | 5,296 | 6,080 | 7,262 | 8,517 | 9,445 |
| 88 | 1,809 | 1,559 | 1,416 | 1,092 | 672 | 552 | 652 | 1,431 | 2,539 | 3,721 | 4,913 |
| 61 | 1,917 | 1,924 | 1,997 | 2,162 | 2,114 | 2,082 | 2,092 | 2,459 | 3,027 | 3,338 | 3,768 |

Table D7
Functional Classification of Federal Government
Expenditures, 1900-1949
(Unit: $\$ 1$ million)

| Year | Post Office Expenditures | National Defense | Veterans' <br> Services and Benefits | International Affairs and Finance ${ }^{\circ}$ | Other Expenditures | Total Expendi tures |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1900 | 108 | 191 | 152 | 3 | 116 | 570 |
| 1901 | 116 | 206 |  |  |  | 589 |
| 1902 | 125 | 180 |  |  |  | 563 |
| 1903 | 139 | 202 | 151 | 3 | 114 | 609 |
| 1904 | 152 | 268 |  |  |  | 694 |
| 1905 | 167 | 244 |  |  |  | 682 |
| 1906 | 178 | 247 |  |  |  | 699 |
| 1907 | 190 | 247 |  |  |  | 726 |
| 1908 | 208 | 294 |  |  |  | 820 |
| 1909 | 221 | 308 |  |  |  | 862 |
| 1910 | 230 | 284 |  |  |  | 882 |
| 1911 | 238 | 283 |  |  |  | 894 |
| 1912 | 249 | 284 |  | 5 |  | 902 |
| 1913 | 262 | 293 | 192 | 5 | 199 | 951 |
| 1914 | 284 | 298 |  | 5 |  | 984 |
| 1915 | 299 | 297 | 176 | 5 | 236 | 1,013 |
| 1916 | 306 | 305 | 171 | 6 | 201 | 989 |
| 1917 | 320 | 602 | 171 | 891 | 263 | 2,247 |
| 1918 | 325 | 7,110 | 235 | 4,748 | 367 | 12,785 |
| 1919 | 363 | 13,548 | 324 | 3,500 | 458 | 18,193 |
| 1920 | 454 | 3,997 | 332 | 435 | 531 | 5,749 |
| 1921 | 621 | 2,581 | 646 | 83 | 615 | 4,546 |
| 1922 | 546 | 929 | 686 | 10 | 601 | 2,772 |
| 1923 | 557 | 680 | 747 | 14 | 607 | 2,605 |
| 1924 | 587 | 647 | 676 | 15 | 598 | 2,523 |
| 1925 | 639 | 591 | 741 | 15 | 629 | 2,615 |
| 1926 | 680 | 586 | 772 | 17 | 641 | 2,696 |
| 1927 | 715 | 578 | 786 | 17 | 652 | 2,748 |
| 1928 | 726 | 656 | 806 | 12 | 696 | 2,896 |
| 1929 | 782 | 696 | 812 | 14 | 748 | 3,052 |
| 1930 | 804 | 734 | 821 | 14 | 962 | 3,335 |
| 1931 | 803 | 733 | 1,040 | 16 | 1,015 | 3,607 |
| 1932 | 794 | 703 | 985 | 19 | 2,130 | 4,631 |
| 1933 | 700 | 648 | 863 | 16 | 2,278 | 4,505 |
| 1934 | 631 | 540 | 557 | 12 | 4,751 | 6,491 |
| 1935 | 697 | 711 | 607 | 19 | 4,294 | 6,328 |
| 1936 | 754 | 914 | 2,350 | 18 | 4,370 | 8,406 |
| 1937 | 773 | 937 | 1,137 | 18 | 4,753 | 7,618 |
| 1938 | 772 | 1,030 | 581 | 19 | 4,369 | 6,771 |
| 1939 | 785 | 1,074 | 559 | 19 | 6,327 | 8,764 |


| Year | Post <br> Office <br> Expendi- <br> tures | National <br> Defense | Veterans' Services and Benefits | International Affairs and Finance | Other Expenditures | Total Expendi tures |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1940 | 808 | 1,497 | 551 | 50 | 5,991 | 8,897 |
| 1941 | 837 | 6,370 | 564 | 141 | 5,161 | 13,073 |
| 1942 | 874 | 26,847 | 556 | 633 | 4,863 | 33,773 |
| 1943 | 953 | 70,243 | 605 | 166 | 6,771 | 78,738 |
| 1944 | 1,069 | 83,736 | 744 | 244 | 7,999 | 93,792 |
| 1945 | 1,145 | 84,532 | 2,094 | 677 | 7,741 | 96,189 |
| 1946 | 1,354 | 45,103 | 4,414 | 1,462 | 4,750 | 57,083 |
| 1947 | 1,505 | 14,281 | 7,370 | 6,542 | 5,846 | 35,544 |
| 1948 | 1,688 | 10,924 | 6,566 | 4,780 | 5,972 | 29,930 |
| 1949 | 2,149 | 11,865 | 6,668 | 6,458 | 9,097 | 36,237 |

Post Office data are from the Annual Report of the Secretary of the Treasury on the State of the Finances, 1945 and 1949.

For national defense, the 1915 to 1948 data are from a special tabulation by the Division of Fiscal Analysis of the Bureau of the Budget, and the 1900 to 1914 data are from the Congressional Record, Volume 94, Part 2, 80th Congress, Second Session, pp. 2576-7. The 1949 and 1950 figures for national defense are from The Budget of the United States Government, 1952, except that expenditures of the National Advisory Committee for Aeronautics (see The Budget of the United States Government, 1950 and 1951) have been subtracted from the published figure to maintain comparability with earlier years.

The 1915 to 1948 figures for veterans' services and benefits are from the special tabulation referred to above, and those for 1900, 1903, and 1913 are extrapolated from 1923 via our estimates (see Table D8). The Budget of the United States Government, 1952 is the source for the 1949 and 1950 figures.

For international affairs and finance the 1915 to 1948 data are from the special tabulation, and those for 1912 to 1914, from the issue of the Congressional Record referred to above. The 1900 and 1903 figures are extrapolated from 1913 via our estimates (Table D8). The 1949 and 1950 figures are from The Budget of the United States Government, 1952.

Total expenditures in this table are total budget expenditures other than interest payments and refunds on taxes, plus postal expenditures not included in budget expenditures, i.e., Post Office expenses payable from Post Office revenue. The special tabulation for 1915 to 1948, and The Budget of the United States Government, 1951 give comparable figures for total budget expenditures excluding tax refunds; we subtracted interest payments on the public debt shown in the same sources and actual or estimated interest on refunds, where necessary. For 1900 to 1914, the issue of the Congressional Record mentioned gives budget expenditures including both interest payments and tax refunds; we subtracted interest payments, given in the same source, and tax refunds, given in various issues of the Annual Report of the Secretary of the Treasury.

The category "other expenditures" is the difference between "total expenditures" described above, and the sum of the items shown separately in the table.

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[^7]Table D9
Functional Classification of State Government Expenditures, 1903-1949

|  | 1903 | 1913 | 1915 | 1916 | 1917 | 1918 | 1919 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General control | 28 | 44 | 50 | 53 | 51 | 56 | 56 | 86 | 84 | 95 | 97 | 111 | 110 | 130 | 128 |
| Public safety | 7 | 26 | 30 | 30 | 32 | 34 | 35 | 55 | 54 | 59 | 62 | 68 | 73 | 75 | 85 |
| Highways | 5 | 26 | 65 | 62 | 51 | 55 | 75 | 365 | 464 | 545 | 531 | 550 | 640 | 725 | 857 |
| Sanitation and health | 3 | 4 | 6 | 6 | 7 | 8 | 10 | 16 | 17 | 18 | 19 | 20 | 23 | 24 | 26 |
| $\left.\begin{array}{l} \text { Hospitals and } \\ \text { institutions for the } \\ \text { handicapped } \end{array}\right\}$ | 53 | 97 | $\{55$ | 56 | 59 | 66 | 72 | 118 | 124 | 126 | 136 | 151 | 160 | 170 | 187 |
| Public welfare |  |  | 34 | 35 | 39 | 43 | 47 | 79 | 148 | 114 | 69 | 66 | 72 | 72 | 76 |
| Correction |  |  | 32 | 37 | 39 | 45 | 55 | 66 | 54 | 53 | 56 | 63 | 68 | 72 | 80 |
| Schools | 16 | 57 | 59 | 64 | 65 | 69 | 76 | 159 | 170 | 178 | 186 | 190 | 209 | 220 | 229 |
| Natural resources Other general | 5 | 7 |  | 20 | 20 | 23 | 26 | 53 | 59 | 61 | 68 | 72 | 71 | 76 | 84 |
| expenditures |  |  | 111 | 9 | 9 | 17 | 18 | 12 | 17 | 14 | 15 | 18 | 20 | 22 | 25 |
| Total general operation and outlays | 117 | 261 | 360 | 371 | 371 | 416 | 469 | 1,008 | 1,190 | 1,261 | 1,238 | 1,309 | 1,444 | 1,585 | 1,775 |
| Public service enterprises | n.a. | 21 | 7 | 3 | 4 | 4 | 3 | 13 | 14 | 11 | 12 | 23 | 20 | 15 | 15 |
| Total operation, outlays, and public service enterprises | n.a. | 282 | 367 | 374 | 375 | 420 | 472 | 1,021 | 1,204 | 1,272 | 1,250 | 1,332 | 1,464 | 1,600 | 1,790 |


|  | 1931 | 1932 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General control | 151 | 138 | 161 | 168 | 186 | 172 | 175 | 172 | 172 | 172 | 189 | 204 | 258 | 273 | 314 |
| Public safety | 89 | 92 | 108 | 125 | 129 | 127 | 118 | 131 | 138 | 135 | 134 | 147 | 179 | 212 | 238 |
| Highways | 972 | 842 | 849 | 824 | 835 | 799 | 813 | 787 | 660 | 546 | 531 | 624 | 1,094 | 1,509 | 1,877 |
| Sanitation and health | 28 | 30 | 34 | 43 | 48 | 47 | 52 | 55 | 58 | 70 | 96 | 105 | 113 | 111 | 115 |
| Hospitals and institutions for the handicapped | 208 | 186 | 227 | 236 | 275 | 262 | 246 | 258 | 261 | 278 | 297 | 338 | 439 | 566 | 705 |
| Public welfare | 82 | 128 | 392 | 453 | 523 | 527 | 501 | 527 | 557 | 578 | 606 | 681 | 843 | 962 | 1,312 |
| Correction | 79 | 86 | 75 | 84 | 83 | 85 | 81 | 79 | 79 | 81 | 85 | 95 | 118 | 150 | 168 |
| Schools | 238 | 218 | 224 | 245 | 280 | 266 | 259 | 301 | 324 | 369 | 368 | 407 | 608 | 822 | 975 |
| Natural resources | 84 | 79 | 82 | 96 | 109 | 105 | 123 | 130 | 125 | 135 | 148 | 173 | 227 | 277 | 333 |
| Other general expenditures | 33 | 34 | 33 | 69 | 95 | 80 | 96 | 90 | 72 | 64 | 66 | 157 | 388 | 894 | 760 |
| Total general operation and outlays | 1,963 | 1,833 | 2,186 | 2,344 | 2,562 | 2,470 | 2,466 | 2,531 | 2,445 | 2,427 | 2,521 | 2,934 | 4,267 | 5,776 | 6,799 |
| Public service enterprises | 16 | n.a. | 214 | 220 | 221 | 245 | 86 | 62 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Total operation, outlays and public service enterprises | 1,979 | n.a. | 2,400 | 2,564 | 2,783 | 2,715 | 2,552 | 2,593 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |

The figures for public service enterprises, 1937-40, include the $\$ 265$ million in 1942. Outlays of alcoholic beverage monopoly cost of goods sold. Figures for other years do not. Cost of goods systems are omitted from the 1941-42 figures for public service sold by public service enterprises was $\$ 231$ million in 1941 and enterprises. Additional notes on p. 247.

## Notes to Table D8

Data for 1939 and 1949 are from The Budget of the United States Government, 1951 and 1952, with a few adjustments from the Annual Report of the Secretary of the Treasury (mainly the substitution of total Post Office expenditures for the Treasury's subsidy to the Post Office), and a reclassification of certain welfare activities. All the earlier figures are from issues of the Annual Report of the Secretary of the Treasury arranged, as far as possible, to fit the adjusted Budget Bureau classification.

Expenditures include payrolls, current purchases, outlays, loans and investments, grants-in-aid, and transfers to the public, but exclude interest. For this reason they differ from the data in other tables in Appendix D.

The totals for 1939 and 1949 in Table D8, although from the same source as those in Table D7, differ from them because the latter have been adjusted to the basis of the Daily Treasury Statement. The figures for earlier years in the two tables are from different sources.

Some notes on the classification, including departures from the Budget Bureau, follow:

Some expenditures under the social welfare, health, and security category may have been included under general government, especially in earlier years.

Educational aid to special groups is not comparable before and after 1939. Apparently, in the 1951 classification, education for Indians was shifted to some other title.

Some of the 1923 expenditure under promotion of the merchant marine should probably be classified under national defense.

Treasury Department expenditures are classified under Federal financial management.

Other general government in 1939 and 1949 includes payments of interest on uninvested trust funds, but not interest on refunds or on the public debt.

No contributions were made by the government to the retirement funds in 1923, though the funds made payments to beneficiaries which were shown in the Treasury Report.

It was assumed that a downward revision in international affairs and finance, 1949 (shown in the 1952 Budget), was completely accounted for by the largest component, International recovery and relief.

The National Advisory Committee for Aeronautics always is included under transportation and communication rather than under national defense.

## Notes to Table D9

Figures cover expenditures for operation, outlays, and public service enterprises, but do not include many of the adjustments of the original data made by us for Table D2, since these could not be broken down by function. Data for general government operation and outlays for 1903, 1915, 1919, 1923, 1927, 1932, and 1937 to 1946 are from the Census Bureau's Historical Review of State and Local Government Finances (1948). We have assumed here that all the 1902 outlays (which we call 1903) shown in that source are for general control. All the figures for 1913 are from the Census Bureau's Wealth, Debt, and Taxation, 1913. The data in that source are not given in sufficient detail to judge whether comparability with other years in the functional classification is complete, but any incomparabilities do not appear to be very substantial. We made one change in the published figures: operation expenditures for care of patients in state tuberculosis hospitals, included in "conservation of health and sanitation" in 1913, were transferred from that category to "charities, hospitals, and corrections", with the aid of detailed data for 1915.

For all the other years, the data are from various issues of the Census Bureau's Financial Statistics of States. The figures for expenditures on natural resources, public safety, and correction have been used as they appear in the source, but we have changed the other functional categories to match as closely as possible the classification in the Historical Review of State and Local Government Finances.
The first of the annual series on state finances was published for 1915. There was no report for 1920, and the 1921 report covered only 30 states. We did not use the 1922 figures because they were not given in sufficient detail for us to make the necessary adjustments in the functional classification. No reports on state finances were published in 1933-36.

## Table D10

Fungtional Glassifigation of Muniaipal Government Expenditures，1902－1945

| ి్రి |  | N | $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{n} \end{aligned}$ | F |
| :---: | :---: | :---: | :---: | :---: |
| ిి |  | む | N | ¢ |
| $\stackrel{\infty}{\aleph}$ |  | ก | $\begin{gathered} \text { N } \\ \underset{\sim}{N} \end{gathered}$ | 岕 |
|  |  | N | $\stackrel{\text { ®a }}{\underset{\sim}{n}}$ | \％ |
| $\stackrel{\circ}{\circ}$ |  | ก | $\stackrel{\infty}{\text { ¢ }}$ | ल |
|  |  | $\vec{\sim}$ | $\stackrel{0}{\infty}$ | \％ |
|  |  | 9 | $\begin{aligned} & 0 \\ & \stackrel{0}{0} \\ & \underset{\sim}{0} \end{aligned}$ | － |
|  |  | $\stackrel{10}{2}$ | $\underset{\sim}{\text { \％}}$ | $\stackrel{\circ}{\text { N }}$ |
|  |  | $\cdots$ | ¢ | ब |
|  | スペめホの | $\sim$ | 안 | N |
|  |  | r | $\bigcirc$ |  |
|  |  | N | $\underset{6}{\infty}$ | 9 |
|  | $\hat{\bullet} \Xi \underset{\sim}{\infty} \infty \infty \infty \sim \infty$ | 은 | ＋ | 8 |
|  |  | 0 | 芯 | 8 |
| ~ิ | ソิ\％ | $\infty$ | $\underset{\sim}{\sim}$ | n |


|  | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General control | 189 | 170 | 154 | 151 | 151 | 158 | 171 | 184 | 184 | 185 | 141 | 131 | 126 | 133 | 138 |
| Public safety | 365 | 338 | 302 | 304 | 314 | 340 | 344 | 361 | 359 | 362 | 359 | 369 | 372 | 376 | 381 |
| Highways | 413 | 289 | 201 | 199 | 184 | 203 | 225 | 259 | 272 | 241 | 168 | 145 | 126 | 122 | 133 |
| Sanitation | 206 | 168 | 125 | 134 | 141 | 155 | 169 | 171 | 169 | 156 | 129 | 129 | 124 | 136 | 143 |
| Health | 37 | 30 | 27 | 29 | 27 | 22 | 29 | 31 | 32 | 32 | 29 | 30 |  |  |  |
| Hospitals | 101 | 97 | 84 | 85 | 90 | 106 | 118 | 117 | 119 | 131 | 103 | 101 |  |  |  |
| Public welfare | 124 | 180 | 239 | 289 | 279 | 279 | 333 | 382 | 385 | 368 | 268 | 232 |  |  |  |
| Correction | 29 | 25 | 20 | 21 | 21 | 21 | 23 | 23 | 24 | 24 | 18 | 18 |  |  |  |
| Schools | 760 | 681 | 567 | 544 | 582 | 650 | 678 | 704 | 717 | 690 | 384 | 382 | 370 | 370 | 370 |
| Libraries | 31 | 27 | 22 | 23 | 24 | 25 | 25 | 28 | 29 | 28 | 22 | 22 |  |  |  |
| Recreation | 135 | 105 | 75 | 91 | 61 | 75 | 106 | 94 | 97 | 117 | 75 | 68 | 59 | 63 | 71 |
| Miscellaneous and unallocable | 21 | 20 | 19 | 22 | 100 | 20 | 24 | 27 | 27 | 28 | 30 | 32 | 389 | 385 | 394 |
| Total general operation and outlays | 2,408 | 2,128 | 1,834 | 1,892 | 1,975 | 2,057 | 2,246 | 2,381 | 2,413 | 2,363 | 1,726 | 1,659 | 1,566 | 1,585 | 1,630 |
| Public service enterprises | 409 | 295 | 204 | 211 | 243 | 315 | 343 | 307 | 394 | 844 | 426 | 404 | 406 | 394 | 426 |
| Total operation, outlays, and public service enterprises | 2,817 | 2,423 | 2,038 | 2,103 | 2,218 | 2,372 | 2,589 | 2,688 | 2,807 | 3,207 | 2,152 | 2,063 | 1,972 | 1,979 | 2,056 |

[^8]City corporations only, for 1941-1945. Earlier figures include over-
lying areas. The 1940 figure for General Operation and Outlays

## Notes to Table D10

Figures cover expenditures for operation, outlays, and public service enterprises, but do not include many of the adjustments of the original data made by us for Table D3, since these could not be broken down by function. The data for outlays after 1945 are not given in sufficient detail for us to show a functional breakdown of total operation and outlays. Data for general government operation and outlays for 1902, 1912, 1923, 1927 and 1931 to 1945 are from the Census Bureau's Historical Review of State and Local Government Finances (1948). For other years, and for all the public enterprise figures, the sources are various issues of the Census Bureau's Financial Statistics of Cities and, for 1902, Census Bulletin 20. The functional classification used in the Historical Review of State and Local Government Finances was taken as the starting point and, as far as possible, figures from the other sources were adjusted to match it.

The public enterprise figures are adjusted by us to include certain outlays in New York and Los Angeles omitted in the Financial Statistics but included in the Department of Commerce publication by Harold Wolkind, Fluctuations in Capital Outlays of Municipalities (1941). The missing items are derived by subtracting the outlays for these two cities shown in the Financial Statistics from the Department of Commerce figures.

The years to which the dates in the table apply are sets of overlapping fiscal years, rather than a uniform period for all cities. According to Fluctuations in Capital Outlays of Municipalities, p. 82, the reports for 1902, 1912, and 1923 and later years refer mainly to the same calendar year, while the reports for 1915 to 1919 refer mainly to the previous calendar year. We do not present annual data before 1915 because it was not possible to make the functional classifications sufficiently comparable to observe year to year movements. No report was published for 1920, the report for 1921 did not cover all cities over 100,000 , and the 1922 report did not show expenditures in sufficient detail for us to make adjustments in the functional classification, so we show no figures for those years.

The earlier figures include some service transfer payments and payments in error, but these could not be eliminated because they are not broken down by function in the sources.

Totals are available for some of the years not shown in this table from Census Bulletin 20 and various issues of the Financial Statistics of Cities. They are as follows (millions of dollars) :

|  | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General operation <br> and outlays | 326 | 347 | 358 | 381 | 449 | 490 | 489 |
| Public service enter- <br> prises, operation, <br> and outlays | 65 | 63 | 58 | 63 | 79 | 94 | 92 |
| General operation | 1910 | 1911 | 1913 | 1946 | 1947 | 1948 | 1949 |
| and outlays | 524 | 569 | 620 | 1,826 | 2,250 | 2,629 | 2,971 |
| Public service enter- <br> prises, operation, <br> and outlays | 101 | 105 | 98 | 493 | 618 | 769 | 910 |

Notes to Table D10 (concluded)
Figures for 1941 and later years are not comparable with earlier ones because data for overlying areas are excluded from the former. The 1940 figures for operation, by function, and for total outlays comparable with later years are available, but none for outlays by function. The available data, which give some idea of the effect of the change, are as follows (millions of dollars) :

Table D11
Expenditures of Local Governments, Classified by Function and by
Type of Government, 1903 and 1942
(Unit: $\$ 1$ million)

|  |  |
| :---: | :---: |
|  | MISCEL- |
|  | LANEOUS |
| REGREA- | AND |
| TION | UNALLOCABLE |
| 13 | 10 |
| 89 | 171 |
| *.. | 2 |
| 8 | 61 |
| 13 | 5 |
| 81 | 68 |
| .... | 2 |
| .... | 53 |

- 

Table D12
Total Government Expenditures Classified by Fungtion, Type, and Government Unit, 1942 (1939 for National Defense)
(Unit: \$1 million)

|  | feberal |  |  | state and logal |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Operation | Outlays | Total | Operation | Outlays | Total |
| General control | 438 | 33 | 471 | 667 | 19 | 686 |
| National defense | 799 | 380 | 1,179 |  |  |  |
| Public safety, other | 47 | ...... | 47 | 757 | 33 | 790 |
| Highways | 66 | 75 | 141 | 808 | 657 | 1,465 |
| Natural resources | 1,001 | 196 | 1,197 | 159 | 11 | 170 |
| Sanitation |  | ...... |  | 190 | 38 | 228 |
| Health and hospitals | 27 | ...... | 27 | 566 | 38 | 604 |
| Public welfare | 1,125 | ...... | 1,125 | 1,226 | 4 | 1,230 |
| Veterans' services and benefits | 556 | .... | 556 |  |  |  |
| Schools | 23 | ...... | 23 | 2,365 | 155 | 2,520 |
| Miscellaneous general operation | 115 | 7 | 122 | 476 | 61 | 538 |
| Public enterprises | 1,576 | 183 | 1,759 | 604 | 269 | 873 |
| Total | 5,773 | 874 | 6,647 | 7,820 | 1,286 | 9,106 |
|  | cities |  |  | TOWNSHIPS AND TOWNS |  |  |
|  | Operation | Outlays | Total | Operation | Outlays | Total |
| General control | 212 | 8 | 220 | 37 | 1 | 38 |
| National defense |  |  |  |  |  |  |
| Public safety, other | 547 | 17 | 564 | 25 | 3 | 28 |
| Highways | 219 | 65 | 284 | 81 | 8 | 89 |
| Natural resources |  |  |  |  |  |  |
| Sanitation | 166 | 31 | 197 | 6 | 2 | 8 |
| Health and hospitals | 154 | 8 | 162 | 6 | ...... | 6 |
| Public welfare | 272 | . 5 | 272 | 42 | $\ldots$ | 42 |
| Veterans' services and |  |  |  |  |  |  |
| Schools | 491 | 19 | 510 | 55 | 5 | 60 |
| Miscellaneous general operation | 204 | 36 | 240 | 14 | 5 | 19 |
| Public enterprises | 507 | 222 | 729 | 7 | 3 | 10 |
| Total | 2,773 | 404 | 3,177 | 273 | 26 | 299 |

With the exceptions noted below, the data are from the following Census Bureau publications: Revised Summary of State and Local Government Finances in 1942; Governmental Finances in the United States: 1942; and various issues of City Finances and State Finances.
Data for national defense are National Bureau of Economic Research estimates (see

| Operation | State |  | LOCAL |  |  | counties |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Outlays | Total | Operation | Outlays | Total | Opera tion | Outlays | Total |
| 169 | 3 | 172 | 498 | 16 | 514 | 249 | 7 | 256 |
| 123 | 8 | 131 | 635 | 25 | 660 | 57 | 2 | 59 |
| 260 | 527 | 787 | 547 | 130 | 677 | 244 | 56 | 300 |
| 123 | 7 | 130 | 35 | 5 | 40 | 16 | . 1 | 16 |
|  |  |  | 190 | 38 | 228 | 2 | 1 | 3 |
| 286 | 26 | 312 | 280 | 12 | 292 | 119 | 3 | 122 |
| 526 | 1 | 527 | 700 | 2 | 702 | 386 | 2 | 388 |
| 275 | 26 | 301 | 2,090 | 129 | 2,219 | 77 | 8 | 85 |
| 152 | 15 | 167 | 325 | 46 | 371 | 85 | 5 | 90 |
| 38 | 24 | 62 | 566 | 245 | 811 | 7 | 1 | 8 |
| 1,952 | 639 | 2,591 | 5,867 | 647 | 6,514 | 1,242 | 84 | 1,326 |


| SGhool districts |  |  | other special districts |  |  | all governments |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opera tion | Outlays | Total | Operation | Outlays | Total | Operation | Outlays | Total |
| ...... | ...... | ..... | ..... | ..... | ..... | 1,105 | 52 | 1,157 |
| ...... | ...... | ..... | ...... | :..... | .... | 799 | 380 | 1,179 |
| ...... | ..... | ..... | 6 | 4 | 10 | 804 | 33 | 837 |
| $\ldots$ | ...... | ..... | 4 | 1 | 5 | 874 | 732 | 1,606 |
| ..... | ...... | ...... | 20 | 4 | 24 | 1,160 | 207 | 1,367 |
| ..... | ...... | ..... | 16 | 5 | 21 | 190 | 38 | 228 |
| ...... | ...... | ...... | 1 | . 3 | 1 | 593 | 38 | 631 |
| ..... | ...... | ...... | ...... | ... | ...... | 2,351 | 4 | 2,355 |
|  |  |  | ...... | ...... | $\ldots$ | 556 |  | 556 |
| 1,467 | 97 | 1,564 | ...... | ...... | ...... | 2,388 | 155 | 2,543 |
| ...... | ..... | ..... | 21 | 1 | 22 | 591 | 68 | 659 |
| ...... | $\ldots$ | ...... | 45 | 20 | 65 | 2,180 | 452 | 2,632 |
| 1,467 | 97 | 1,564 | 112 | 36 | 148 | 13,593 | 2,160 | 15,753 |

Table D1). State and local government national defense expenditures are included with other public safety.

State and local expenditures for veterans are included under public welfare.
Data for public enterprises are partly estimated (see Notes to Tables D1-3). War corporations are excluded.


[^0]:    * Prepared by Robert E. Lipsey.
    ${ }^{1}$ The earlier data of the Bureau of the Census, on which we lean heavily, were so constructed as to imply the exclusion of replacements. However, it is likely that many such replacements were in fact included.

[^1]:    ${ }^{2}$ There is one exception: expenditures of the Veterans Administration were transferred by us to the nonwar category in keeping with the earlier classification.

[^2]:    ${ }^{8}$ The present discussion is confined to National Bureau estimates. Department of Commerce estimates for each year beginning with 1929, covering all levels of government, are described briefly below, and the DC and National Bureau estimates are compared. Reference is made there also to estimates by the National Industrial Conference Board that cover all levels of government.
    ' According to Wealth, Debt, and Taxation, 1913, Vol. II, p. 399, "payments for expenses of highways and schools do not include those made by independent road and school districts, the payments shown in these tables being only such as were made from municipal revenues'. However, a comparison of the figures in this source for cities over 30,000 with those in the Financial Statistics of Cities, 1912 indicates that, at least for the cities in this size group, overlying school and other districts were included in the Wealth, Debt, and Taxation figures and a statement in Wealth, Debt, and Taxation, 1932 suggests that schools, at least, were included with cities of all sizes. There does not seem to be any way of knowing whether the same is true of other overlying areas in cities with populations between 2,500 and 30,000 . In 1932, cities under 2,500 and townships, not including overlying areas, accounted for 7.4 percent of total expenditures for operation and outlays by local governments other than school districts. The proportion was probably higher in 1913, since about 8.9 percent of the population of the continental United States lived in incorporated places with populations under 2,500 in 1910, as compared with 7.5 percent in 1930.

[^3]:    ${ }^{5}$ In 1940 cities with populations over 100,000 showed expenditures for charities other than transfers - in other words, payrolls and purchases - of $\$ 16$ million (Financial Statistics of Cities). The October 1940 payroll figure under

[^4]:    "Administration of Charities", for cities over 100,000 (Public Employment and the War, State and Local Government Quarterly Employment Survey, Vol. 1: No. 31A, Feb. 1942), multiplied by 12, was $\$ 30$ million. The transfer figure for that year is therefore probably overestimated by something more than $\$ 14$ million, or over 3 percent.

[^5]:    ${ }^{-}$We can get some idea of the error involved in this duplication. For instance, in 1903, in cities with populations of 8,000 to 25,000 , payrolls included under outlays were a little over 5 percent of all outlays, about 4 percent of other payrolls, and over 6 percent of other purchases. In that same year, in cities with populations over 25,000 , payrolls included under outlays were about 4 percent of total outlays, over 4 percent of other payrolls and about 8 percent of other purchases.

    For the federal government, we have figures for force-account payrolls under public works, including the Corps of Engineers, the Public Works Administration, the Public Roads Administration, the United States Housing Authority, the Bureau of Reclamation, the Panama Canal, the Teinnessee Valley Authority, and others, for December 1939 and June 1940. The annual total estimated from these data (which apparently do not include any purely military construction) is about 8 percent of 1939 nonwar payrolls, almost 17 percent of nonwar outlays, and over 13 percent of other nonwar purchases.

[^6]:    Because the Corps of Engineers is so important, especially in the earlier years, we have adjusted the outlay item to exclude it (see notes to Table D1), thus removing more than half of the duplication. The remaining 1940 payrolls under outlays were less than 4 percent of other 1939 nonwar payrolls, less than 8 percent of outlays, and a little over 6 percent of other nonwar purchases.

[^7]:    Excess of repayments and collections over expenditures is indicated by parentheses． Additional notes on p． 246.

[^8]:    

