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## CHAPTER 4

### Functional Classification of Government Activity

To understand the big increase in government's input since 1900 we need to know more about the uses to which it has been turned. Government engages in activities as diverse as those of housewives, ministers, or handymen. Many are as well known, but the ordinary citizen's notion of their relative importance is likely to be shaped by his range of experience with them. To get a more balanced view, let us look at the pre-World War II functional distribution of government input, then consider major changes during the last half century.

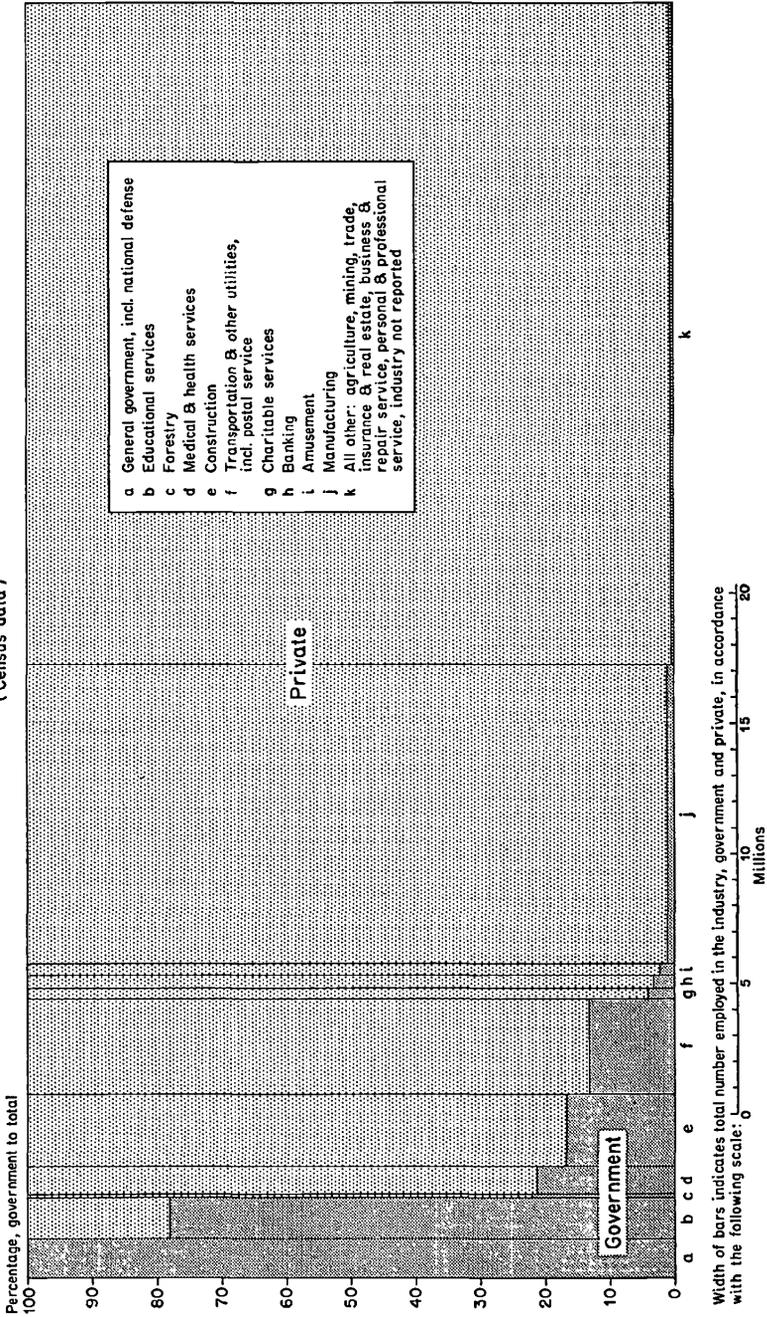
#### *Industries in Which Government Operates and Its Share in the Employment Offered by Each*

Two-thirds of all government workers in 1940, although on government payrolls, were employed in producing goods and services also produced by nongovernmental industries. The largest part was in education, as the reader will have gathered from the preceding chapter: education occupied close to a third of all government workers in 1940. Medical and health services, transport and public utilities (including the postal service), construction, and shipbuilding also occupied considerable numbers of government employees. The rest were scattered over almost all other industries.

Only a third were in the group labeled, for want of a better title, "general government" (Chart 8). This group carries on functions rated in this country as peculiarly governmental — protection by the armed forces, police, and fire departments, regulation of business and other social relations, maintenance of roads, and similar functions.

That "general government" and education are entirely or largely

Chart 8  
Industrial Distribution of Government and Total Employment, 1940  
(Census data)



manned by government workers is obvious. It is less well known that government employees constituted a substantial fraction, over 10 percent, of workers in forestry, medical and health services, construction, and transportation and public utilities. In 1940, 21 percent of all persons performing health and medical services were on government payrolls; the percentage was 22 for forestry, 17 for construction, 24 for electric and gas utilities, and 37 for shipbuilding (classified in Chart 8 under manufacturing).

Table 12  
MAIN FUNCTIONAL CLASSES OF GOVERNMENT INPUT  
JUST BEFORE WORLD WAR II

	FULL- AND PART-TIME WORKERS, 1940	CAPITAL ASSETS, 1939	EXPENDITURES, 1942 (1939 FOR NA- TIONAL DEFENSE)
<i>Percentage Distribution</i>			
General control	9	11 <sup>a</sup>	7
National defense	14	8	7
Public safety, other	7	1	5
Highways	10	32	10
Sanitation & waste removal	2	5	1
Health & hospitals	6	3	4
Public welfare	6	0.5	18
Correction	1	1	<sup>b</sup>
Development & conservation of natural resources	2	8	9
Recreation & parks	1	5	<sup>b</sup>
Schools	28	14	16
Other general functions	4	<sup>a</sup>	4
Public enterprises	10	12 <sup>a</sup>	17
Total	100	100	100
<i>Absolute Numbers</i>			
Total	4.8 million persons	\$63 billion	\$16 billion

<sup>a</sup> "Other general functions" and the postal system are included under general control.

<sup>b</sup> Not shown separately but included in the figures for other functional categories.

Capital assets include land, subsoil assets, construction, and equipment; and cover items not included in other tables, such as property in the hands of the armed forces and sewage systems. Expenditures cover costs of operation (including transfers to the public), outlays on capital assets, and enterprises; and exclude grants-in-aid, interest, and contributions to trust funds and enterprises.

*Major Functional Classes of Government Input:  
the Prewar Pattern*

Such government functions as administration, legislation, tax collection, and regulation<sup>1</sup>— which tend to bulk large in the eyes of some — actually accounted for only a small fraction of all government workers in 1940. When the third of all government employees classed under the heading “general government” in Chart 8 is broken down among specific functions, as in Table 12, the number of employees occupied in these administrative and regulatory activities is found to be only 9 percent of all government employment. Even the 9 percent or so shown in the table is an overstatement. Because “full-time equivalents” could not be computed for each functional group, the large number of part-time county, township, and village workers inflates the figure.

To judge by employment, the important functions of government were: schools, national defense (including the activities of civilian as well as military personnel), highways (in Chart 8 many highway workers are shown under construction), and public enterprises. Together these accounted for three-fifths of government workers. Police and fire departments (“other public safety”), health and hospitals, and public welfare, together with general control, employed most of the remaining employees.

The patterns of use to which government’s property and expenditures are put differ in a number of ways from those which engage its employees.<sup>2</sup> Lines of communication — roads and streets, rivers

<sup>1</sup> Regulation is not shown separately in Table 12. The somewhat more detailed data which it summarizes indicate that fewer than one percent of government workers were assigned to this function; see Table B15.

<sup>2</sup> The three columns of Table 12 relate, it is true, to periods a year or more apart; the functional classes are not identical in content, partly because a good deal of government property is devoted to various uses (e.g., many customs houses also include a post office and provide space for the field operations of still other federal agencies); and the estimates, especially those of capital assets, are very rough. Yet these defects seem minor: even by 1942 (which relates mainly to the fiscal year ending June 30) the war could not have had any serious effect on any function except national defense, as is clear from information on the federal government, state governments, and large cities; see charts below and the detailed appendix tables. (However, transfers to the public were much smaller in 1942 than in 1939.) To show the expenditure pattern as

and harbors — are far more important as users of capital assets than of workers. This is also true of other resource development, including reclamation and flood control projects, recreation centers and parks, sanitation and waste disposal works (which cover sewage systems), and public enterprises as a whole. Less important as users of capital assets than of workers are education, social welfare, and protection (other than national defense).

Expenditures consist in part of payrolls and capital outlays, and in this way overlap — and may confirm — our labor and capital data. On the other hand, the expenditure data also include purchases from private industry and transfers to the public, which explains some of the differences among the patterns in Table 12. Because public welfare expenditures include heavy cash transfers to the public, this class bulks larger in expenditures than in employment or capital assets; indeed, it leads all the other expenditure classes. Public enterprises as well as natural resources are more important judged by expenditures than by employment because of the large proportion of purchases from private industry. Other functions show much smaller percentages in the expenditure column than in the other columns: schools, because purchases and outlays were small compared with payrolls (Table 11); and national defense, because rates of pay are low. These differences are all to be expected; they are not due to inconsistencies in the data. Since expenditure data are the usual source to which people turn for information on government functions, it is well to remember that they give only one view.<sup>3</sup>

The viewpoints provided by Table 12 are close enough to the

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it was before the great expansion in war spending, we substituted the 1939 national defense figure in computing the percentage breakdown of government expenditures. The other deficiencies do not account for the prominent differences we observe.

<sup>3</sup> For our present purpose, to determine the functional pattern of input, the best single measure would be expenditures as in Table 12, adjusted, however, to exclude transfers and outlays and include the rental value of capital assets. Because this is not available, we need to make shift with all three measures in Table 12.

The three do not merit equal weights. As we saw in Chapter 2, the cost of labor is some three times the use value of capital assets; and it is possible to impute weights accordingly. We cannot say anything as definite about the weight of the expenditure data in relation to that of the others.

object of our interest for us to be able to discern major proportions. For finer details of the pattern, however, we need to move closer and scan the list of government activities included in each major functional group.

### *Kinds of Current Government Activities*

The scope and variety of government services have become so wide as to require systematic stocktaking if we are to comprehend them. This is recognized in the appearance of *An Inventory of Governmental Activities in the United States*<sup>4</sup> listing some 400 broad activities classified into 15 major groups.<sup>5</sup> Under the major heading protection to persons and property, for example, "police protection and law enforcement" appears as one of eight items. And under police protection and law enforcement the inventory further shows records and statistics, crime control, vice and morals controls, detention and custody of prisoners, traffic control, control of international borders, and fish and game protection. Specific types of vice and morals control are the regulation of prostitution, liquor and narcotic distribution, dance halls, poolrooms, etc., censoring of motion pictures and books, and supervision of athletic contests and racing. Traffic control includes engineering and research, highway patrols, establishing and maintaining traffic signals, motor vehicle inspection, and conducting drivers' examinations.

But no formal listing can begin to convey a notion of the rich variety of government activities today. One must sit back and reflect upon the life cycle of an inhabitant of this country.<sup>6</sup> Note

<sup>4</sup> By Carl H. Chatters and Margorie Leonard Hoover (Municipal Finance Officers Association, 1947).

<sup>5</sup> The number of activities does not have any significance as a measure of the relative importance of the category. The activities of government, as of any operating unit, can be subdivided almost *ad infinitum* and the count extended beyond any specified limit. To measure importance we need a list of the services of government with the value of each. (In the absence of a market value for most government services, cost would do.) But no such detailed listing is available. In a sense, therefore, "inventory" is a misnomer, since no indication of relative importance — an essential characteristic of an inventory — is provided in the mere listing or even count of activities. We are thrown back on the rather broad functional groups of workers, assets, and expenditures.

<sup>6</sup> It would have to be the life cycle of a person born this year, assuming no further changes in the scope of government activity during his lifetime.

how and to what extent government activity impinges on every phase of his existence from before birth through death: prenatal clinics, birth certificates, maternal aid, milk inspection, inoculation, schools and playgrounds, protection at street crossings, working papers, factory inspection, minimum wages, conciliation and mediation of labor disputes, examination for licensed occupations, elections, marriage license, insurance of bank deposits, low rent housing, community planning, fire-fighting, hospitals, unemployment compensation, old age and survivors insurance, death certificates, and, when necessary, the morgue and surrogates court. A farmer would have a slightly different list, and a businessman still another. Or one could follow the cycle of day and night — with its round of police protection, time observation, radio programs, street cleaning, postal deliveries, traffic regulation, and subway service; or of the seasons — in the summer, for example, special school sessions, noxious weed, mosquito, and flood control, fish and game protection, crop insurance, highway construction, inspection of public bathing places, and auto and trailer camps.

We may also view the multitude of government services in terms of their ultimate objectives: (1) maintenance of order; (2) promotion of economic activity; (3) production to meet current needs; (4) development of the nation's capacity to defend itself and satisfy its needs; and (5) distribution of the nation's income.

Maintenance of order is an objective of national defense — usually so big an activity as to be designated separately as an objective in itself. Maintenance of a military establishment makes up the bulk of it, but covered also are many of the activities connected with our international relations, control of resident aliens, immigration regulation, and operation of arsenals.

Apart from national defense, maintenance of order involves the establishment and enforcement of many of the rules necessary when large groups live and work together. It is a basic objective of such activities as conducting elections, passing laws, administering courts, police protection, corrections, regulation of poolrooms and athletic contests, traffic control, protective inspections (buildings, elevators, banks, drugs, weights and measures), securities and ex-

change regulation, coinage and regulation of money, establishment and administration of standards.

Promotion of economic activity, including its stabilization, is the objective of activities such as planning, the work of the Council of Economic Advisers, banking regulation, crop insurance, "triple A" activities, price fixing, oil production control, public works in some part, and many informational and research activities.

Production to meet current needs is the prime objective of the operation of public enterprises (the postal service, subways, electric light and power plants, water works, liquor stores, airports, terminals, warehouses, harbor facilities, canals and waterways, toll bridges, municipal auditoriums), streets and roads, fire fighting, insurance, recreation facilities, schools, employment bureaus, sanitation, hospitals and clinics, serum and vaccine production, housing, banking. The consular service also might be included here.

Developmental activities are concerned with improving people and natural resources, and fostering education and the pursuit of private business. Schools, libraries, banks, recreation appear here as well as in other classes. Other items are antitrust regulation, patent laws, forestry, reclamation, irrigation, prescription of working conditions for women and children, agricultural experiment stations, geological surveys, statistics collection and analysis, control of disease, prenatal clinics, school lunches.

The distribution of income involves what are usually called "transfer" activities — e.g., public assistance, agricultural price support (in part), social insurance, veterans' aid, school lunches, disaster relief, and the host of productive services provided free or for a small fee.

The reader will have observed that this classification has the defect common to many: the classes are not mutually exclusive. For example, economic stabilization and income redistribution may themselves be viewed as a means of maintaining order. Indeed, since we have to look beyond the information supplied by the description of an activity or by its usual functional classification, there are great difficulties in identifying the specific objectives of any particular government activity. Many, if not all, of the individual activities of government are aimed at several ends. Public

education is justified as essential to the maintenance and development of the country, it produces a currently needed service, supervision of child play, and it is a vehicle by which national income is transferred. Antitrust legislation has been supported as a means of controlling the distribution of national income, of stabilizing business, of stimulating economic development, and of promoting the nation's defense (recall the Congressional hearings on cartels). The examples are endless. This means, of course, that the growth of an activity is usually the result of several causes, a matter that will concern us more closely in later chapters.

When we inquire into the relative importance of the several activities and objectives, we encounter a related difficulty: many an agency of government performs more than one function, but only the total input of the agency can be ascertained.

For these and other reasons it is extraordinarily difficult to classify government input by objectives. Perhaps all that can be done is to indicate how the various objectives rank by current expenditures. National defense is first today, as it has been since the onset of World War II. Together with expenditures on police, general control, and other public safety, it puts maintenance of order way out front as the major product of government. Production of current services is next: highways, sanitation, health and hospitals, and the activities of public enterprises. Some part of this expenditure might be allocated to development, but it is doubtful if that objective, largely the aim of expenditures on schools and natural resources, would move up past third place. Distribution of income, the fourth, is chiefly furthered by public welfare expenditures (which now include a considerable amount for veterans) but also by some agriculture expenditures (included under natural resources). Promotion and stabilization of economic activity is clearly last, being represented mainly by a small part of the expenditure on general control and regulation.

#### *Distribution of Functions among Types of Government*

The several types of government unit do not all engage in each of the activities mentioned. The differences among them are shown in Table 13, where the structure of government is laid out in some

Table 13  
 FUNCTIONAL CLASSIFICATION OF GOVERNMENT EXPENDITURES, BY TYPE OF EXPENDITURE AND GOVERNMENT UNIT  
 1942 (1939 FOR NATIONAL DEFENSE)

	FEDERAL	STATE AND LOCAL	STATES	COUNTIES	CITIES	TOWNSHIPS AND TOWNS	SCHOOL DISTRICTS	OTHER SPECIAL DISTRICTS
		<i>P e r c e n t a g e D i s t r i b u t i o n</i>						
General control	7.1	7.5	6.6	19.3	6.9	12.7	.....	.....
National defense	17.7	.....	.....	.....	.....	.....	.....	.....
Public safety, other	.7	8.7	5.1	4.4	17.8	9.4	.....	6.8
Highways	2.1	16.1	30.4	22.6	8.9	29.8	.....	3.4
Natural resources	18.0	1.9	5.0	1.2	.....	.....	.....	16.2
Sanitation	.....	2.5	.....	.2	6.2	2.7	.....	14.2
Health & hospitals	.4	6.6	12.0	9.2	5.1	2.0	.....	.7
Public welfare	16.9	13.5	20.3	29.3	8.6	14.0	.....	.....
Veterans' services & benefits	8.4	.....	.....	.....	.....	.....	.....	.....
Schools	.3	27.7	11.6	6.4	16.1	20.1	100.0	.....
Miscellaneous operation	1.8	5.9	6.4	6.8	7.6	6.4	.....	14.9
Public enterprises	26.5	9.6	2.4	.6	22.9	3.3	.....	43.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		<i>M i l l i o n s o f D o l l a r s</i>						
Total	6,647	9,106	2,591	1,326	3,177	299	1,564	148

Blank spaces indicate either zero or small amounts not shown separately but included in the figures for other functional categories. Expenditures cover operation and outlays, including all expenditures of enterprises, and include various kinds of transfer to the public. Aid paid to other governments, interest, and contributions to trust funds and enterprises are excluded. Data for the federal government are for the fiscal year ending June 30, 1942, except national defense, which is for the year ending June 30, 1939. State and local government data are usually for the fiscal year ending June 30 or December 31, 1942.

detail, together with the functional pattern of expenditures characteristic of each type of unit.<sup>7</sup>

When we list the three leading functions of each type of government unit, we find they accounted for the following percentages of expenditures:

<i>Type of Government Unit</i>	<i>Three Leading Functional Groups (in order of importance)</i>	<i>Percentage of Expenditures</i>
Federal	Public enterprises, natural resources, national defense	62
State	Highways, public welfare, health & hospitals	63
County	Public welfare, highways, general control	71
Municipal	Public enterprises, public safety, schools	57
Township & town	Highways, schools, public welfare	64
School district	Schools (sole function)	100
Other special district	Public enterprises, natural resources, misc. general operation	75

A difference of emphasis is clear. In part, this reflects a "division of labor" among the several levels of government stemming from the nature of our government structure. The federal government undertakes the national defense, regulates interstate commerce, and operates the postal system; state and local governments provide hospitals, roads, and other local services. State governments may occasionally vote veterans a bonus, but the continuing burden of veterans' services and benefits is carried by the federal government and is large enough to warrant a separate line in the table.<sup>8</sup> The distribution of functions reflects in part also assignments of responsibility by state to local governments and by one type of local government to another, for example, city and county governments

<sup>7</sup> However, and this comment applies to later tables as well, not all the government units of a specific type provide each and every one of the services listed for that type of unit. Further, of the units that do provide a certain class of service, not all do it on the same level of adequacy or with the same qualitative content.

Something is said in Chapter 6 about variation among government units in service provided.

<sup>8</sup> We must remember that the federal government makes substantial contributions in support of state and, indirectly, local services, and state governments help finance local services. These grants-in-aid are not distributed among the expenditures of the grantor agency in Table 13; they are distributed only among expenditures of the grantee, by whom the service is "produced" for the

to special school, sanitary, and other districts. These assignments vary from one state to another, and even within states. As a consequence, there is some seeming duplication of functions in Table 13.<sup>9</sup>

Differences in the degree of urbanization, and therefore the needs, of the people served by the several types of local unit also help determine the patterns in Table 13. Local transport and other utility services in cities but not counties account for the larger importance of municipal public enterprise expenditures. Park and recreation facilities are sufficiently important in cities for workers operating them to be shown separately; this class of employees is not distinguished in the records of the county governments (Table B15).

benefit of consumers, business, or society at large.

The following tabulation shows the purposes for which grants-in-aid were made in 1942:

FUNCTIONAL CLASSIFICATION OF PAYMENTS FOR GRANTS-IN-AID, 1942 (millions of dollars)				
	<i>Federal</i>	<i>State</i>	<i>Local</i>	<i>Total</i>
General control	.....	.....	....	.....
National defense	101	.....	....	101
Public safety, other	.....	17	....	17
Highways	154	338	7	499
Natural resources	29	1	....	30
Sanitation	.....	.....	....	.....
Health & hospitals	29	10	4	43
Public welfare	376	389	2	767
Veterans' services & benefits	.....	.....	....	.....
Schools	29	766	24	819
Miscellaneous operation	119	230	11	360
Total	837	1,751	48	2,636

Grants by local governments are almost entirely to other local governments, for example, by counties to school districts. Federal and state data are from *Governmental Finances in the United States: 1942, Compendium of State Government Finances in 1949*. The local total is from the *Historical Review of State and Local Government Finances* and the breakdown by function is partly from that source and partly estimated from *City Finances, 1944 and 1945*. (These are all publications of the Bureau of the Census.)

<sup>9</sup> Another reason, already noted, for some of the apparent duplication arises from qualitative differences among the several types of government units in the services appearing in any particular class. What real duplications exist are likely to be of minor importance (Chatters and Hoover, p. 3). For example, when the federal government undertakes to regulate competition, state laws tend to become dead letters.

The complementary character of the several parts of our government structure is reflected also in employment and capital assets. Chart 9 shows the percentage which the federal government accounts for of total expenditures and employment, and the percentage which state governments account for of state and local expenditures and employment. For most functions, both expenditures and employment are divided among the government levels in the same pattern. Because of deficiencies in classification, capital assets are not charted. But when we allow for these deficiencies, capital assets show a distribution of functions consistent in most respects with that revealed by the other data.

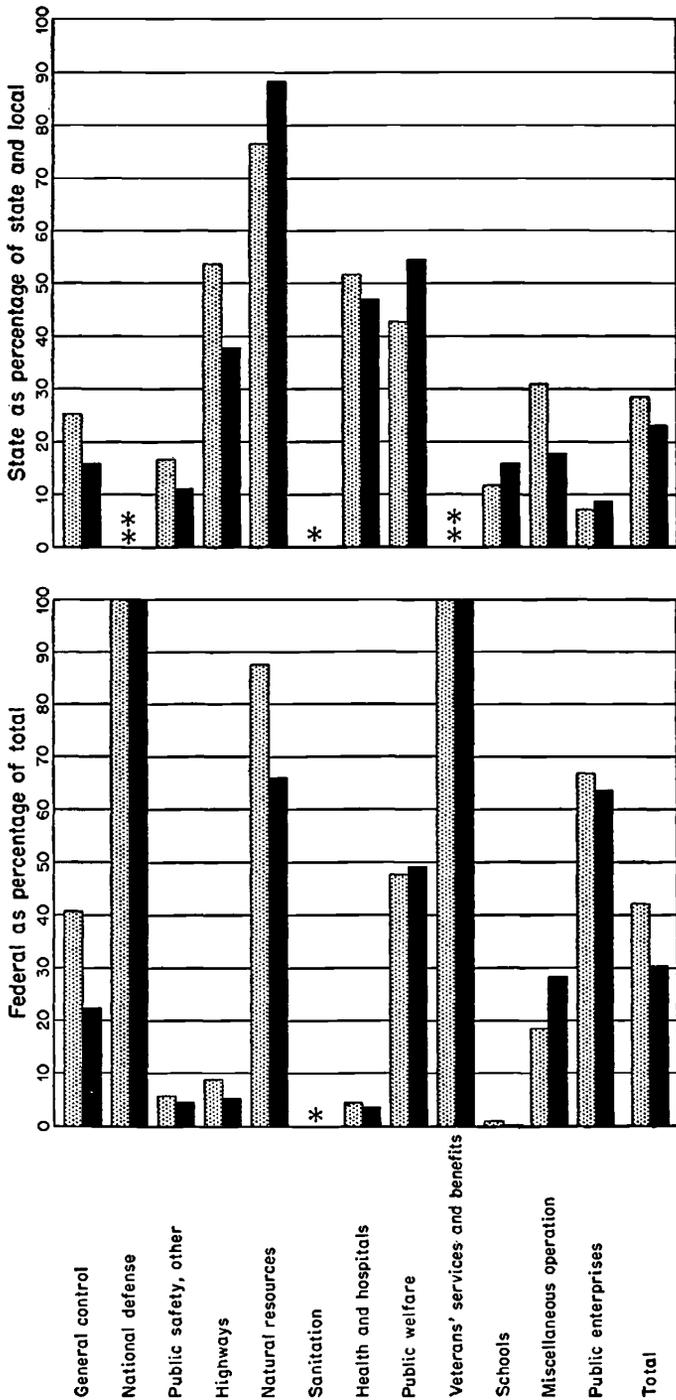
### *Change in the Functional Distribution of Input*

Ceaseless change in the relative importance of private industries seems to be characteristic of economic development. During the last half-century, relative declines in agricultural employment, relative rises followed by declines in mining, domestic service, and rail transport, and almost continuous relative rises in electric light and power, insurance, real estate, and personal and business service (other than domestic) are some of the changes revealed in the industrial distribution of private employment. And other types of input, and output as well, would show similar trends.

Within government, too, there have been changes. The pre-World War II functional pattern is that of a section cut across trends of varying slope. While total expenditures of government rose 9-fold between 1903 and 1942, the multiplications for individual major functions ranged from 4 to 76 (Table 14). The same wide variation is found on each of the two main levels of government distinguished in the table: a rise ranging from 4- to 375-fold for federal functions, and from 4- to 57-fold for state and local governments.

A look at the whole half-century, although it requires moving to less complete and somewhat different expenditure data, leaves the same general impression of wide variation, as the reader will see when he inspects later tables. Federal expenditures, including the grants-in-aid excluded from Table 14, were 68 times larger in 1949 than in 1900 (Table 16). The functional group with the smallest rise went up 19-fold; the biggest increase was over 2,000-

Chart 9  
**Division of Functions among Major Types of Government, Just Before World War II**  
 Expenditures, 1942 (1939 for National Defense)  
 Employment, 1940



\* Numerator is zero.

\*\* Both numerator and denominator are zero.

Table 14  
FOUR DECADES OF CHANGE IN THE FUNCTIONAL  
DISTRIBUTION OF GOVERNMENT EXPENDITURES

MILLIONS OF DOLLARS

	1942 (1939 for National Defense)			1903		
	Fed- eral	State & Local	Total	Fed- eral	State & Local	Total
General control	471	686	1,157	73	186	259
National defense	1,179	.....	1,179	176	.....	176
Public safety, other	47	790	837	6	102	108
Highways	141	1,465	1,606	27	207	234
Natural resources	1,197	170	1,367	15	3	18
Sanitation	.....	228	228	.....	47	47
Health & hospitals	27	604	631	3	35	38
Public welfare	1,125	1,230	2,355	3	59	62
Veterans' services & benefits	556	.....	556	144	.....	144
Schools	23	2,520	2,543	2	268	270
Misc. & unallocable	122	538	659	2	71	73
Public enterprises	1,759	873	2,632	139	92	231
Grand total	6,647	9,106	15,753	589	1,069	1,658

PERCENTAGE OF COLUMN TOTAL

	1942 (1939 for National Defense)			1903		
	Fed- eral	State & Local	Total	Fed- eral	State & Local	Total
General control	7.1	7.5	7.3	12.4	17.4	15.6
National defense	17.7	.....	7.5	29.9	.....	10.6
Public safety, other	.7	8.7	5.3	1.0	9.5	6.5
Highways	2.1	16.1	10.2	4.6	19.4	14.1
Natural resources	18.0	1.9	8.7	2.5	.3	1.1
Sanitation	.....	2.5	1.4	.....	4.4	2.8
Health & hospitals	.4	6.6	4.0	.5	3.3	2.3
Public welfare	16.9	13.5	14.9	.5	5.5	3.7
Veterans' services & benefits	8.4	.....	3.5	24.4	.....	8.7
Schools	.3	27.7	16.1	.3	25.1	16.3
Misc. & unallocable	1.8	5.9	4.2	.3	6.6	4.4
Public enterprises	26.5	9.6	16.7	23.6	8.6	13.9
Grand total	100.0	100.0	100.0	100.0	100.0	100.0

Expenditures cover current operations and outlays on capital assets, including all expenditures of enterprises and transfers to the public; they exclude interest payments, grants-in-aid, and contributions to trust funds and enterprises.

Table 14 (concluded)

	1942 RELATIVE TO 1903 (1939 FOR NATIONAL DEFENSE)			% OF INCREASE IN GRAND TOTAL		
	Fed- eral	State & Local	Total	Fed- eral	State & Local	Total
General control	6.5	3.7	4.5	2.8	3.5	6.4
National defense	6.7	.....	6.7	7.1	.....	7.1
Public safety, other	7.8	7.7	7.8	0.3	4.9	5.2
Highways	5.2	7.1	6.9	0.8	8.9	9.7
Natural resources	80.	57.	76.	8.4	1.2	9.6
Sanitation	.....	4.9	4.9	.....	1.3	1.3
Health & hospitals	9.0	17.3	16.6	0.2	4.0	4.2
Public welfare	375.	21.	38.	8.0	8.3	16.3
Veterans' services & benefits	3.9	.....	3.9	2.9	.....	2.9
Schools	11.5	9.4	9.4	0.1	16.0	16.1
Misc. & unallocable	61.	7.6	9.0	0.9	3.3	4.2
Public enterprises	12.7	9.5	11.4	11.5	5.5	17.0
Grand total	11.3	8.5	9.5	43.0	57.0	100.0

fold (ignoring two relatively small functional groups that would show infinitely large increases, because nothing — or nothing important enough to be accounted for separately — was spent on them in 1900). So goes the story for state governments: while aggregate expenditures, excluding enterprises, multiplied 58 times between 1903 and 1949, the range for major functions was from 11 to 375 (Table 18); and similarly, too, for local governments (Table 19).

Because we deal with major groups, we are obviously limiting the extent of the dispersion: increasing the number of functional classes by subdivision would widen the range still further. But we need not labor the point. Expenditures on the various functions, and related employment and volume of capital assets as well,<sup>10</sup> rose at different rates. The great expansion in government input meant widely divergent, not substantially uniform, increases in all kinds of activity.

What is perhaps more surprising is that *every* major function grew in some degree. No function for which separate data are available failed to expand its input. Even the function that grew

<sup>10</sup> Tables B16-18 and C4-7.

least rapidly, during the 40 years covered by Table 14, multiplied its expenditures four times, more than enough to make up for the rise in prices.

Moreover, a general upward trend characterized the functions of every type of government. In not a single major function of the federal government, the state governments, or the several types of local government did expenditures fall, or even rise less than prices over the 40 or 50 years for which we have information.<sup>11</sup>

Our employment data show the same generality of increase. In not a single function of the federal government, the cities, or New York and Vermont, two states for which we have detailed records, did the number of workers actually decline.<sup>12</sup>

The results are almost as striking when the rates of increase in government functions are measured against growth in population. Thus, to continue with the employment data — the expenditure data run in the same direction — every federal function pushed employment up more than population grew. Every New York state and Vermont function pushed employment up more than the population of the state grew. As for the cities, all except three functions pushed employment up more than urban population grew.

If figures were available on *minor* functions, they would undoubtedly show more declines, relative to population or even absolute. Indeed, some minor functions must have been superseded by others and dropped entirely. It is noteworthy, however, that the detailed histories of state and local activities, cited below, fail to report any substantial number of activities dropped after 1900. Those mentioned include activities associated with expositions and similar temporary business, state bounties on coyotes, regulation

<sup>11</sup> Expenditures on two functions, general control and highways, in local governments other than cities and counties, are reported to have risen very slightly, even less than prices. But this seems to be due to defects in the data: cities of less than 8,000 are included in the "other local governments" group in 1903 but not in 1942; and in the case of general control, where the rise was least, inadequate accounts or reports in 1903 might well tend to inflate it by including items that should have been classified elsewhere. Increased specialization after 1903, as government activity expanded and small government units gave way to larger, also might have caused a transfer of activities from general control to other functions.

<sup>12</sup> Tables B16-18.

of midwives, and the servicing of police booths for foot patrolmen.

Which major functions were the laggards and which the leaders? The expenditure data in Table 14, being most complete, give a first view. Between the opening of the century and the period before the effects of World War II became serious, general control,<sup>13</sup> sanitation, and veterans' services and benefits rose at a percentage rate considerably below the average. The big percentage expansions of expenditures came in activities connected with the development and conservation of natural resources, public welfare, and health. The big *absolute* additions to expenditures came from expansion in public welfare, schools, and public enterprises. These, together with highways and natural resources, accounted for over two-thirds of the \$14 billion increase in government expenditures.<sup>14</sup> The federal government provided the larger part of the increase in expenditures (excluding grants-in-aid) on natural resources and public enterprises; the state and local governments, the larger part of the increase in highways and schools; and the rise in public welfare expenditure was split between the two levels of government.

A closer view, to get inside the broad functional groups summarized in Table 14, and to consider fluctuations in rate of growth as well as changes during the last decade, requires dealing with fragmentary data. Because these do not lend themselves to easy combination, we must consider them piecemeal.

We may pause for a moment, however, to glance at the comprehensive employment data spanning the full period, insufficiently detailed though they are (Table 15). Unaffected by price changes and the swelling of transfers to the public, these figures confirm the importance of schools and enterprises in accounting for the rise during the four decades before World War II. With national defense, these functions contributed over half the increase in employment (excluding emergency workers). Over the full period, national defense is of course outstanding.

<sup>13</sup> Recall, however, the qualification mentioned in footnote 11.

<sup>14</sup> The larger part of the increase in welfare and a good part of the increase in natural resources (and veterans' services and benefits as well) represent, however, transfers to the public (under social security, relief, agricultural and other acts) and therefore the rise in input as we have defined it is exaggerated. We must keep in mind the estimates in Table 7.

Table 15  
 CLASSIFICATION OF GOVERNMENT WORKERS, BY MAIN FUNCTIONAL CATEGORY, 1900, 1940, AND 1949

	FULL-TIME EQUIVALENT NUMBER (1,000)		% OF TOTAL		RELATIVE TO 1900		% OF INCREASE IN TOTAL	
	1900	1949	1900	1949 <sup>a</sup>	1940	1949	1900- 1940	1900- 1949
National defense	166	2,524	14.3	12.7	4.7	15.2	19.1	39.8
Schools	467	1,368	40.1	19.8	2.6	2.9	23.4	15.2
Public enterprises	129	531	11.1	8.5	4.1	5.6	12.4	10.0
All other regular employees	402	1,868	34.5	30.1	4.6	6.2	45.1	35.0
Total regular employees	1,164	4,415	100.0	71.0	3.8	6.1	100.0	100.0
Public emergency workers	0	1,800	0.0	29.0	*			
Grand total	1,164	6,215	100.0	100.0	5.3	6.1		

\* Denominator is zero.

<sup>a</sup> Percentage of total excluding emergency workers: national defense, 17.8; schools, 27.8; public enterprises, 12.0; all other regular employees, 42.3.

*Growth of Federal Activities*

The percentages in Table 16 provide fuller functional detail for federal expenditures for enough years to mark the trends and important changes in trends up to World War II, and the net change since then. Here we can find information not given in our introductory survey of the expenditure data: the decline in the relative importance of national defense expenditures during the 40 years before World War II was the reflection of a trend; even after World War I expenditures on veterans bulked no larger in the budget than in the early 1900's — because the budget had swelled so much; there appeared in the 1930's and continued thereafter large new items for social security, unemployment compensation, and business loans and guaranties; at the same time aids to agriculture, already in existence before the depression, were greatly expanded; the heavy burden of work- and direct-relief was shouldered during the 1930's and virtually disappeared when war came; a highway program (by grants to the states) and a federal reserve system appeared after World War I; conservation expenditures began in the early 1900's; the merchant marine and housing programs brought by World War I were expanded during the 1930's; our current expenditures on international affairs took on a new character in recent years; and there was hopefully removed from the national defense budget and placed under "natural resources not primarily agricultural" a large item called "development and control of atomic energy".

The data plotted in Chart 10, for the broad groups available, show how federal expenditures fluctuated from year to year as well as in response to the great episodic events of world war and severe depression. What happened to federal employment and property over these years is shown in Charts 11 and 12, in which the functional classifications are somewhat different from those in Chart 10.<sup>15</sup>

The bits of information we have on capital assets add a few interesting details to our story. In 1902 federal nonmilitary property consisted almost entirely of waterway improvements and pub-

<sup>15</sup> See Table B16 for more details on employment than appear in Chart 11.

Table 16

CHANGE IN THE FUNCTIONAL DISTRIBUTION OF FEDERAL  
GOVERNMENT EXPENDITURES, 1900-1949

	1900	1913	1923	1929	1939	1949	1949 Relative to 1900
PERCENTAGE DISTRIBUTION							
National defense	32.1	26.4	24.6	23.1	12.2	33.0	70
Veterans' services & benefits	27.4	19.6	28.6	26.2	6.3	18.5	46
Pensions	26.7	18.7	15.8	14.4	4.7	6.0	
Insurance			3.6	8.9	.5	.3	
Readjustment benefits			5.6	*	.01	9.3	
Hospitals, other services, & administrative costs	.8	.9	3.6	2.9	1.1	3.0	
International affairs & finance	.6	.5	.6	.4	.2	18.0	2,153
Conduct of foreign affairs	.6	.5	.6	.4	.2	.5	
International recovery & relief						15.9	
Foreign economic development					.02	(-1)	
Foreign military assistance						1.2	
Philippine war damage & & rehabilitation						.5	
Social welfare, health & security	.9	1.4	1.5	1.6	44.7	5.3	381
Retirement & dependents' insurance					1.2	1.6	
Assistance to the aged & other special groups		.5	.2	.3	7.4	2.9	
Work & direct relief		.02	*	.01	35.2	.02	
Promotion of public health	.2	.3	.6	.4	.4	.5	
Crime control & correction	.8	.6	.6	.8	.3	.2	
Other			.1	.1	.06	.04	
Housing & community development			.04	.02	(-1.7)	.8	**
Education & general research	.6	.6	.6	.6	.4	.2	23
Promotion of education	.2	.3	.4	.4	.3	.1	
Educational aid to special groups			*	*	.01	.01	
Library & museum service	.1	.1	.02	.1	.06	.03	
General purpose research	.2	.2	.2	.2	.05	.05	
Agriculture & agric. resources	.6	1.6	2.3	2.1	13.6	7.0	837
Development & improve- ment of agric., excl. financial aids & conservation	.6	1.5	1.8	1.7	.8	.5	
Loan & investment pro- gram to aid agriculture			.4	.4	3.2	5.5	
Other financial aids					9.2	.9	
Conservation & develop- ment of agric. land & water resources		.1	.04	.03	.3	.2	

\* Less than .005 percent.

\*\* Denominator is zero.

Table 16 (concluded)

	1900	1913	1923	1929	1939	1949	1949 Relative to 1900
PERCENTAGE DISTRIBUTION							
Natural resources not primarily agricultural	1.7	2.4	1.2	1.8	2.6	4.2	168
Development & control of atomic energy						1.7	
Other conservation & development	1.7	2.4	1.2	1.8	2.6	2.5	
Postal service	20.4	28.0	22.4	26.5	8.9	6.0	20
Transportation & communication, other	4.7	10.1	10.6	9.0	5.2	3.2	46
Promotion of the Merchant Marine			3.1	.5	.5	.3	
Provision of navigation aids & facilities	4.5	9.8	3.1	4.6	1.8	.9	
Provision of highways		.02	3.2	3.2	2.0	1.3	
Regulation of transp. & communication	.1	.2	.2	.3	.2	.06	
Other		.1	.9	.2	.8	.7	
Finance, commerce, & industry		.2	.5	.6	.6	.3	**
Control of money supply & private finance			.2	.2	.1	.02	
Promotion or regulation of trade & industry							
Business loans & guarantees					.5	.2	
Other					(-.2)	(-.04)	
Labor	.04	.02	.1	.1	.8	.5	965
Unempl. compensation & placement activities				.01	.7	.5	
Other	.04	.02	.1	.1	.1	.08	
General government	11.0	9.0	7.0	7.8	6.3	3.0	19
Legislative	1.9	1.0	.4	.4	.2	.09	
Judicial	.6	.4	.6	.6	.1	.05	
Executive direction & management	.04	.02	.02	.02	.01	.02	
Federal financial management	4.3	2.8	3.1	2.5	1.2	1.1	
Govt. payment toward civilian employee general retirement systems				.7	.8	.7	
Other	4.2	4.9	2.9	3.5	3.9	1.2	
Total expenditures	100.0	100.0	100.0	100.0	100.0	100.0	68
BILLIONS OF DOLLARS							
Total expenditures	529	936	2,487	2,947	8,827	35,964	

Blank spaces mean zero or not identifiable. Expenditures include payrolls, current purchases, outlays on capital assets, loans and investments (which are negative when repayments exceed new loans), grants-in-aid, and transfers to the public, but not interest. For this reason they differ from expenditures reported in Tables 11 and 13.

Chart 10  
 Functional Classification of Federal Government Expenditures  
 1900 - 1949

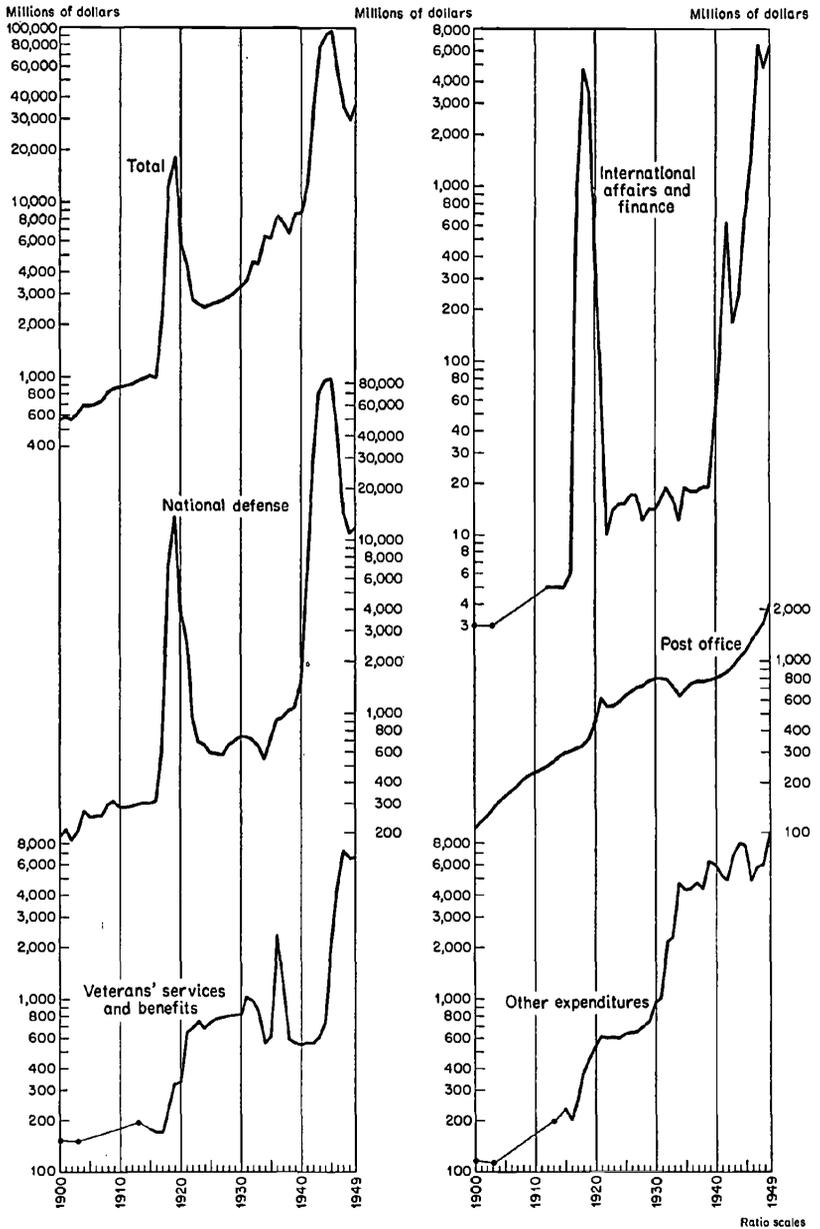
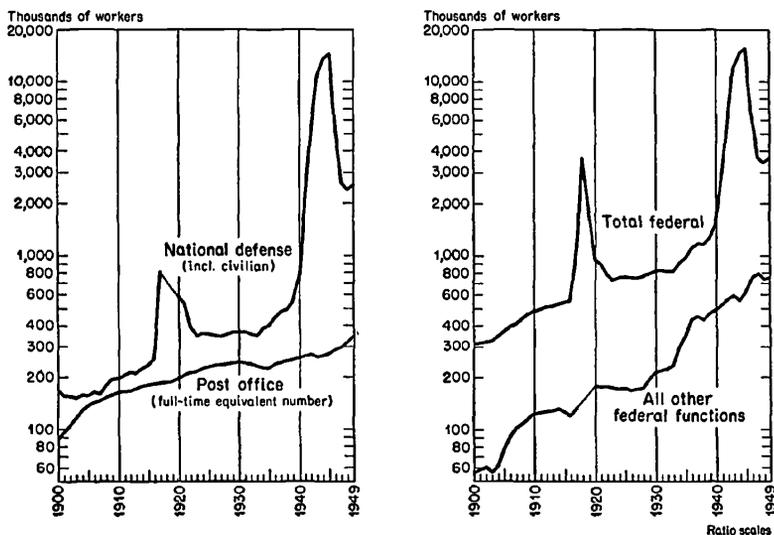


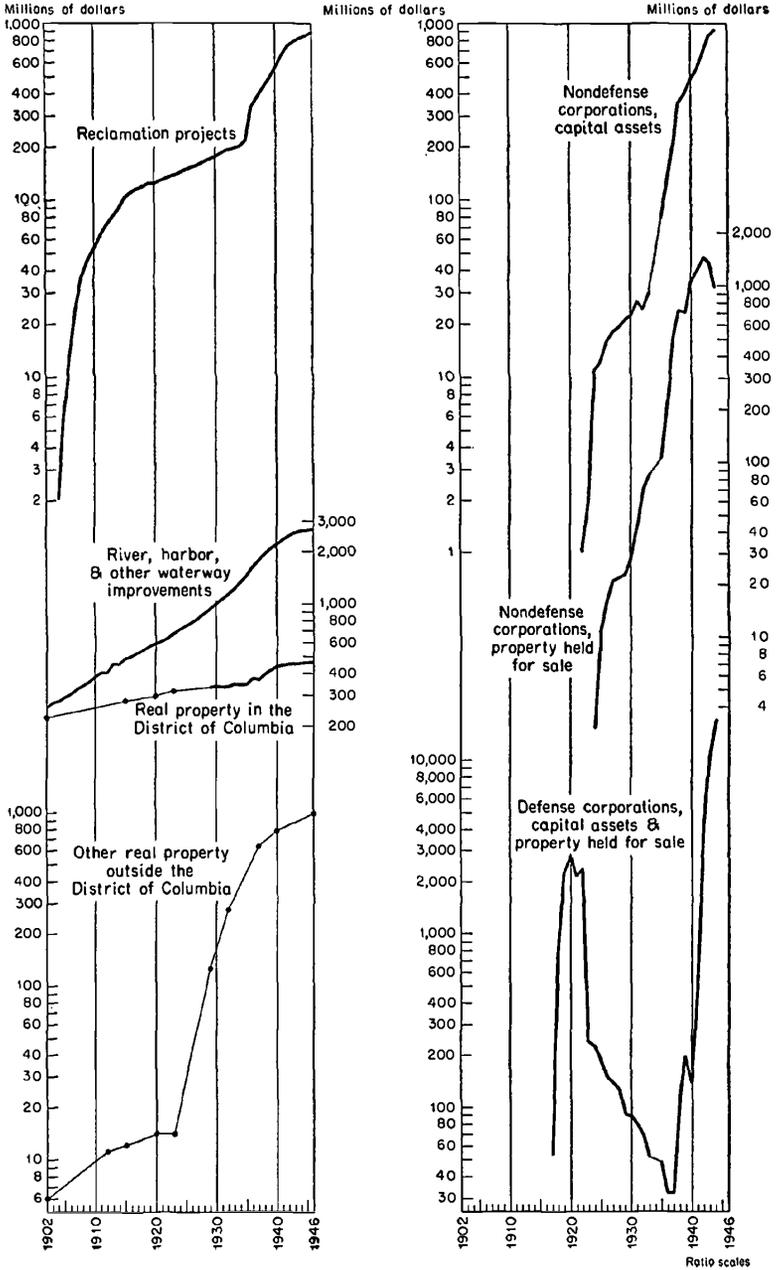
Chart 11  
Federal Government Workers, Major Functional Categories  
1900 - 1949



lic buildings, most of the latter in the District of Columbia. Reclamation projects were started in the first decade. Later, especially in the 1930's, other real property outside the District of Columbia — such as that of the Forest Service and the Farm Security Administration — and the assets of federal corporations — for example, the Tennessee Valley Authority and the U. S. Housing Authority — came to be substantial parts of the total (Chart 12). During the two war and immediate postwar periods the property of federal defense corporations, of course, assumed preponderant importance. Today, to judge from the 1946 data, the groups of assets important in 1902 make up little more than half when defense property (chiefly defense plants and the Merchant Marine) is excluded, only a fifth when defense property is included.<sup>16</sup>

<sup>16</sup> Like contract workers, property rented by government from private owners is excluded. We cannot be sure how much change in the proportion of rented to owned property has affected the trend we report in capital assets. At any rate, we take account of any change in rented property in our measure of purchases from private industry. In the case of federal property, the accelerated growth of federal building outside the District of Columbia, beginning in the late 1920's (Chart 12), apparently reflected a decision by Congress to turn to  
(Footnote concluded on p. 67)

Chart 12  
 Federal Government Property, Major Categories, 1902-1946  
 (Reported or estimated values)



The expansion of federal activities is also revealed in the new agencies established during the period with which we are concerned or as close to it as the records permit (Table 17).<sup>17</sup> Some agencies have since disappeared and others have been born, but taking our stand in 1939 we find almost 20 percent of federal employment — omitting emergency workers — in agencies that had come into existence since 1896. Exclusive of the two great federal services, national defense and the Post Office, over half the 1939 employment was in twentieth century agencies. Corresponding or even larger proportions characterize agencies associated with such functions as industrial and commercial development, labor, welfare, regulation, and public service enterprises (other than the postal system). The Women's Bureau, National Labor Relations Board, and Wage and Hour Division helped to swell the number dealing with labor. Welfare now includes the vast and various relief, social security, and other programs instituted under the New Deal, as well as the Veterans Administration. In 1896 the only "welfare" activities of the federal government we could identify as such were supervision of Indian affairs and operation of federal penitentiaries.

Measured by 1939 employment, the big additions to federal agencies came during the seven years beginning with 1933. Yet,

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(Footnote concluded from p. 65)

government ownership of federally used buildings in lieu of renting private property.

Much property is still rented, partly because of small requirements in many areas, partly because of the rapid expansion of federal activity during the war. As of December 31, 1947, and not including space costing \$2,000 a year or less, the federal government had under lease space, mostly for offices, for which it paid an annual rent of about \$50 million, equivalent to a property value of perhaps  $\frac{1}{2}$  billion. (Survey of Space Leased by the Federal Government, 80th Cong., 2d Sess., *Senate Report 1617*, June 14, 1948.)

Some government property is rented to private lessees; e.g., municipal docks.

<sup>17</sup> Strictly speaking, the list of new agencies would include the Bureau of the Census and the Bureau of Labor Statistics, a substantial part of whose activities was carried over from predecessors. However, we excluded these from the list of new agencies, although much in the way of new activities was added even in these, as we shall illustrate below. The advantage of dealing with agencies, despite the difficulty caused by the fact that new agencies and new activities are not the same, is that we have employment figures: these provide a measure of importance superior to the simple enumeration of new activities.

Table 17  
GROWTH OF FEDERAL GOVERNMENT ACTIVITIES, 1897-1939

FUNCTION	AGENCIES IN EXISTENCE IN 1896		AGENCIES ESTABLISHED 1897-1939	
	Number Employed, Dec. 1939 (1,000)	% of Total Employment, Dec. 1939, in Old Agencies	Number Employed, Dec. 1939 (1,000)	% of Total Employment, Dec. 1939, in All New Agencies with Given Function
General control	89.8	8.7	7.6	2.7
Law enforcement	11.3	1.1	2.8	1.0
Highways & waterways	27.2	2.6	2.9	1.0
Conservation & development	32.6	3.1	34.3	12.0
Agriculture	8.3	.8	4.9	1.7
Industrial & commercial development	.2	°	23.2	8.1
Regulation	5.9	.6	33.2	11.6
Labor & industrial relations	.0	.0	3.1	1.1
Health & hospitals <sup>a</sup>	9.7	.9	.0	.0
Welfare	3.3	.3	137.4	48.1
Veterans' services & benefits <sup>b</sup>	.0	.0	38.5	13.5
Other <sup>c</sup>	3.3	.3	98.9	34.6
Indian affairs	13.8	1.3	.0	.0
Postal service <sup>d</sup>	249.0	24.1	.0	.0
Other public enterprises	.1	°	35.4	12.4
General information & research	5.8	.6	.7	.2
Education & reference	2.5	.2	.0	.0
National defense	575.8	55.6	.1	°
Total	1,035.3	100.0	285.7	100.0
Total excl. postal service & national defense	210.5		285.6	57.6

<sup>a</sup> Some hospitals are included under veterans' services and benefits. <sup>c</sup> Includes correction.

<sup>b</sup> Separate data on employment connected with the payment of veterans' pensions in 1896 are not available. Growth in this category is therefore somewhat overstated.

<sup>d</sup> Fewer than 50 workers.

<sup>e</sup> Less than .05 percent.

<sup>f</sup> Full-time equivalent number.

Table 17 (continued)

AGENCIES IN EXISTENCE IN 1939 AND ESTABLISHED AFTER 1896,  
WITH DATE OF ESTABLISHMENT

*General Control*

Equatorial Islands (1898)  
 High Commissioner, Philippines  
 (1899)  
 Governor of Hawaii (1900)  
 Governor of Alaska (1912)  
 Alien Property Custodian (1917)  
 Governor of the Virgin Islands  
 (1917)  
 Bureau of the Budget (1921)  
 Board of Tax Appeals (1924)  
 Division of Territorial and Island  
 Possessions (1934)  
 National Archives (1934)  
 Division of Savings Bonds (1936)  
 Temporary National Economic  
 Committee (1938)  
 Federal Works Agency-Administra-  
 tor (1939)  
 Public Works Administration (1939)

*Law Enforcement*

Federal Bureau of Investigation  
 (1908)  
 Bureau of Narcotics (1930)

*Highways and Waterways*

Alaska Road Commission (1905)  
 Public Roads Administration (1939)

*Conservation and Development*

Bureau of Reclamation (1902)  
 Forest Service (1905)  
 National Park Service (1906)  
 Commission of Fine Arts (1910)  
 Bureau of Mines (1910)  
 National Capital Park and Planning  
 Commission (1924)  
 Grazing Service (1934)  
 Soil Conservation Service (1935)  
 War Minerals Relief Commission  
 (1939)

*Industrial and Commercial  
Development*

Bureau of Standards (1901)  
 Bureau of Foreign and Domestic  
 Commerce (1912)

*Industrial and Commercial  
Development*

Tariff Commission (1916)  
 Mount Rushmore National Memo-  
 rial Commission (1929)  
 Reconstruction Finance Corporation  
 (1932)  
 Home Owners' Loan Corporation  
 (1933)  
 Electric Home and Farm Authority  
 (1934)  
 Export-Import Bank (1934)  
 Federal Housing Administration  
 (1934)  
 Rural Electrification Administration  
 (1935)  
 Golden State International Exposi-  
 tion Commission (1939)  
 New York World's Fair Commission  
 (1939)  
 Federal Loan Agency Administrator  
 (1939)

*Agriculture*

Bureau of Plant Industry (1902)  
 Extension Service (1914)  
 Bureau of Dairy Industry (1924)  
 National Agricultural Research  
 Center (1934)  
 Bureau of Entomology and Plant  
 Quarantine (1935)

*Regulation*

Board of Governors of the Federal  
 Reserve System (1913)  
 Federal Trade Commission (1914)  
 National Advisory Committee for  
 Aeronautics (1915)  
 Farm Credit Administration (1916)  
 Federal Power Commission (1920)  
 Food and Drug Administration  
 (1928)  
 Federal Home Loan Bank Board  
 (1932)  
 Federal Savings and Loan Insurance  
 Corporation (1932)  
 Agricultural Adjustment Adminis-  
 tration (1933)

Table 17 (concluded)

**AGENCIES IN EXISTENCE IN 1939 AND ESTABLISHED AFTER 1896, WITH  
DATE OF ESTABLISHMENT**

*Regulation (concl.)*

Commodity Credit Corporation (1933)  
 Federal Surplus Commodities Corporation (1933)  
 Federal Deposit Insurance Corporation (1933)  
 Securities and Exchange Commission (1934)  
 Federal Communications Commission (1934)  
 Consumers' Counsel (1935)  
 Federal Alcohol Administration (1935)  
 Petroleum Conservation Service (1935)  
 Commodity Exchange Administration (1936)  
 Maritime Commission (1936)  
 Civil Aeronautics Authority (1938)  
 Federal Crop Insurance Corporation (1938)  
 Agricultural Marketing Service (1939)  
 Bituminous Coal Division (1939)

*Labor and Industrial Relations*

Conciliation Service (1913)  
 Employees' Compensation Commission (1916)  
 Women's Bureau (1918)  
 Division of Labor Standards (1934)  
 National Mediation Board (1934)  
 National Labor Relations Board (1935)  
 Division of Public Contracts (1936)  
 Maritime Labor Board (1936)  
 Wage and Hour Division (1938)

*Welfare*

Children's Bureau (1912)  
 Veterans Administration (1930)  
 Prison Industries Fund (1934)  
 Farm Security Administration (1935)  
 Railroad Retirement Board (1935)  
 Social Security Board (1935)  
 National Youth Administration (1935)  
 Puerto Rico Reconstruction Administration (1935)  
 Works Projects Administration (1935)  
 Civilian Conservation Corps (1937)

*Public Enterprises*

Panama Canal (1912)  
 Alaska Railroad Commission (1914)  
 Tennessee Valley Authority (1933)  
 Alley Dwelling Authority (1934)  
 U. S. Housing Authority (1937)  
 Bonneville Project (1937)

*General Information and Research*

Bureau of Home Economics (1923)  
 International Labor Office (1934)  
 National Resources Planning Board (1939)  
 Office of Government Reports (1939)

*Indian Affairs*

Indian Arts and Crafts Board (1935)

*National Defense*

American Battle Monuments Commission (1923)

having stressed that important fact, we must not overlook another fact — in every decade the agencies and functions of the federal government were increased: the Bureaus of Reclamation, Mines, Standards, Plant Industry, and the FBI, among others, were set up in the first decade; the Tariff Commission, Extension Service, Federal Reserve Board, Federal Trade Commission, Children's and Women's Bureaus, and Panama Canal, for example, in the second decade; the Bureau of the Budget, Narcotics, Dairy Industry, and Home Economics, in the third decade; and in the fourth decade, the Reconstruction Finance Corporation and Federal Home Loan Bank Board before the New Deal, and a large group of temporary and permanent agencies with the New Deal.

And in almost every period the older agencies also expanded their functions and services. In 1940 the postal service, for example, transported and delivered 120 percent more letters, 1,200 percent more packages, and 100 percent more newspapers, magazines, and other printed material, than in 1908. In addition, in 1940 the postal system performed the extra services required by 35 percent more registered letters, 275 percent more money-orders, and 600 percent more special deliveries than in 1908; and in 1940 took care of millions of insurance transactions and postal savings accounts that were not its responsibility in 1908. Further, the postal system extended its delivery routes, increased the frequency and speed of its service, provided and serviced more mailboxes, chutes and branch offices, and introduced metered postage and the return envelope.

The Census Bureau is another example. Its product consists, of course, largely of the wealth of detailed information streaming out as releases, bulletins, and volumes, including material in the monthly *Survey of Current Business* and the annual *Statistical Abstract*.<sup>18</sup> Compared with 1900 we are provided today with information about a population twice as great. This information covers many more activities: the Census of Trade, Service Establishments, Construction, and Housing has become part of our

<sup>18</sup> "Bylines" do not tell the whole story. The Bureau of the Census is more and more frequently a fact-gathering and tabulatory agency for other federal departments.

statistical wealth only since 1929. Far more details and useful tabulations are available now than in 1900: the 1940 Census of Population was the first to give information on incomes, for example, and the 1930 Census was the first to cover unemployment adequately. The census information is available more promptly than in the past: some of the earlier censuses took many years to compile. Censuses have become more frequent (except for the interruption during World War II): the Census of Agriculture became quinquennial after 1919. Current information on a monthly, quarterly, or even annual basis hardly existed at the opening of the century; what we have today, notably the *Monthly Report on the Labor Force*, many monthly statistics on factory output, and quarterly reports on state and local government employment, is in substantial part the product of the Census Bureau. And the information has improved greatly in quality, based as it is on clearer concepts, questionnaires, and field procedures. The appendices to this report show in a number of ways how the Census Bureau's product has grown in volume and quality since 1900.<sup>19</sup>

#### *Growth of State Activities*

The outline of change in state government expenditures is easily drawn from Table 18.<sup>20</sup> Here we need only note the substantial rise in the relative importance of highways in the first half of the period covered, and of public welfare in the second half ("other general expenditures" were huge in 1948 and 1949 because they included

<sup>19</sup> The Bureau of the Census has added to the nation's real income in more than one way. Who does not enjoy reading that "all the beer consumed in the United States in a year would make a river 20 feet deep, 100 yards wide, extending from Washington, D. C., to Bridgeport, Conn.?" (*Uncle Sam: How He Grew*, "150 Years of American History as Recorded in the U. S. Census", by Roscoe Wright, Chief of Public Relations for the Census Bureau. Bureau of the Census, 1943, p. 57.)

<sup>20</sup> Expenditures by state enterprises are not covered. However, in 1942 operating expenses of all such enterprises amounted to only \$38 million, and very much less in 1903.

Grants-in-aid to local governments also are excluded. Giving aid is itself an activity, of course, and one that has increased greatly, as we have noted: state aid in 1903 was well under \$100 million; by 1949 it had mounted to over \$3.5 billion. But for our present purpose the activity is not measured by the sums handled.

Table 18

CHANGE IN THE FUNCTIONAL DISTRIBUTION OF STATE GOVERNMENT EXPENDITURES, 1903-1949

	1903	1915	1927	1939	1942	1948	1949	1949 Relative to 1903
PERCENTAGE DISTRIBUTION								
General control	23.9	13.9	8.5	7.3	6.8	4.7	4.6	11.2
Public safety	6.0	8.3	5.2	5.0	5.2	3.7	3.5	34.0
Highways	4.3	18.1	42.0	32.6	31.1	26.1	27.6	375.4
Sanitation & health	2.6	1.7	1.5	1.9	2.2	1.9	1.7	38.3
Hospitals & instn. for the handicapped	45.3	15.3	11.5	10.7	10.2	9.8	10.4	41.2
Public welfare		9.4	5.0	20.4	20.8	16.7	19.3	
Correction		8.9	4.8	3.2	3.1	2.6	2.5	
Schools	13.7	16.4	14.5	10.9	11.9	14.2	14.3	60.9
Natural resources	4.3	5.0	5.5	4.3	5.1	4.8	4.9	218.6
Other general expenditures		3.1	1.4	3.7	3.6	15.5 <sup>a</sup>	11.2 <sup>a</sup>	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	58.1

MILLIONS OF DOLLARS

Total	117	360	1,309	2,562	2,531	5,776	6,799
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<sup>a</sup> Includes 10.7 percent, \$616 million, veterans' bonus in 1948; 7.4 percent, \$505 million, in 1949.

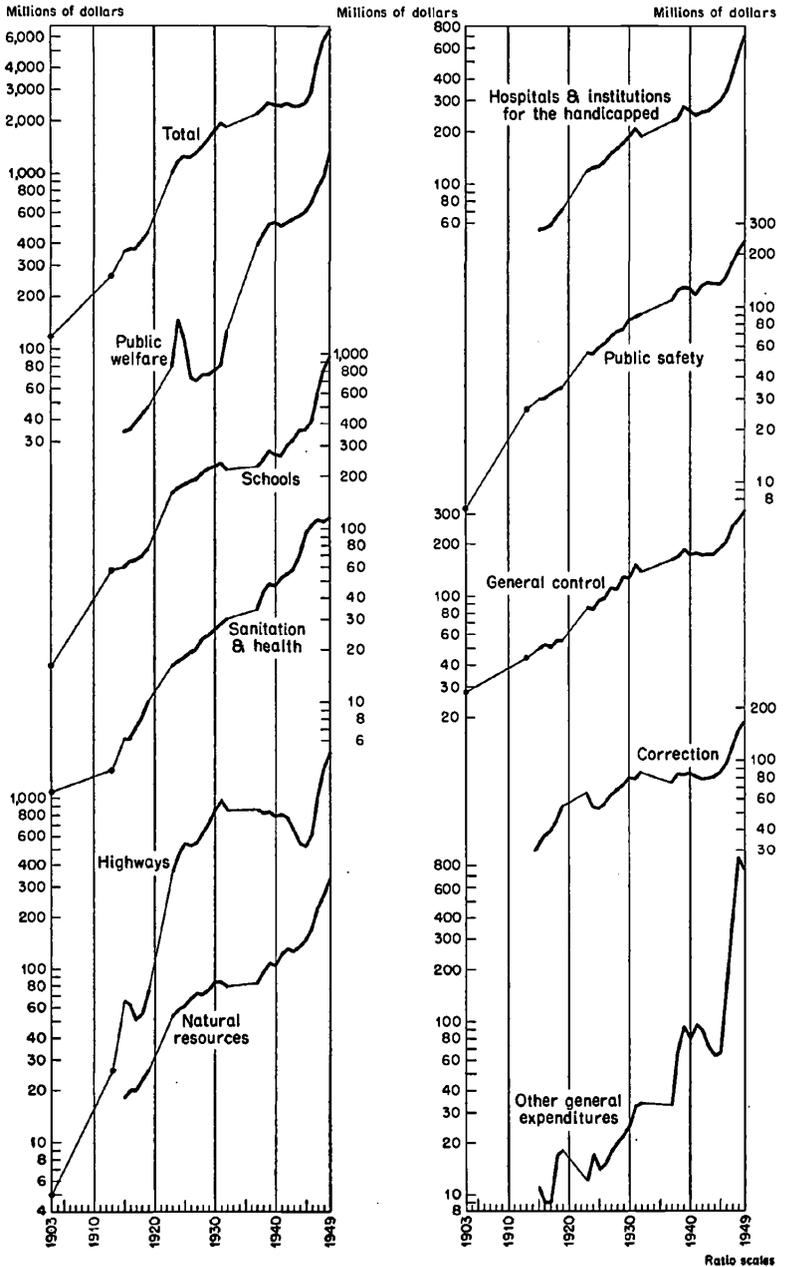
Expenditures cover current operations, outlays on capital assets, and transfers to the public, except interest payments; they exclude grants-in-aid and enterprises, and contributions to trust funds.

large bonuses to veterans), and the substantial declines through most of the period in the relative position of general control, hospitals, and correction. The chart gives the annual data, when available.<sup>21</sup>

When we peer within the broad groups presented in Table 18 and Chart 13 we find the big rise in public welfare to be due almost entirely to the recent provision of public assistance outside

<sup>21</sup> We need not stop to study the data on change in the functional distribution of employment, available only for New York 1900-40 and Vermont 1900-45, or the more complete information on capital assets, available, however, only for 1915-31; see Tables B17 and C5. The main trends seem to agree fairly well with those of expenditures, as far as we can judge from the disparate data.

Chart 13  
**Functional Classification of State Government Expenditures  
 1903 - 1949**



of institutions.<sup>22</sup> In 1915, the earliest year for which these details are available, the largest item of this kind was veterans' aid, accounting for \$9 million; the rest — outdoor poor relief, care of the blind, deaf, and mute, mothers' pensions and gratuities, etc. — was only about \$3.9 million. In 1949 aid to the blind alone amounted to \$36 million and total public assistance — general relief, old-age, aid to dependent children, child welfare, and other items as well as aid to the blind — accounted for over a billion.

The increase in highway expenditures, especially between 1903 and 1927, reflects the meteoric rise of the motor vehicle. In addition, just before the turn of the century, the state governments began taking a hand in what hitherto had been entirely a function of the local agencies. It began with aid to the local governments, but then — especially under the stimulus of the Federal Highway Act of 1916, which extended federal aid to state (not local) highway departments — the states went on to assume direct responsibility for a large fraction of road building and maintenance. Thus Maine's first permanent participation in highway construction was undertaken in 1901, and its first comprehensive highway program formulated in 1913.<sup>23</sup> New York inaugurated its highway activity in 1898, and floated the first bond issue for the purpose in 1905. It took over the maintenance of state improved roads in 1906, and in 1907 launched a large scale state-county highway program.<sup>24</sup>

The rise in expenditures on natural resources includes, besides substantial increases in developmental functions related to forestry and fish and game, the development of farm extension services, experiment stations, and the like. The growth of activities of California illustrates some of these.<sup>25</sup> In 1900 the state government

<sup>22</sup> The details are taken from the Bureau of the Census annual reports, *Financial Statistics of States*, and related documents (see note to Table D9).

<sup>23</sup> F. E. Jewett, *A Financial History of Maine* (Columbia University Press, 1937).

<sup>24</sup> N. Y. State, Special Joint Committee on Taxation and Retrenchment, report on *State Expenditures, Tax Burden, and Wealth*, 1926.

<sup>25</sup> H. D. Anderson, *Our California State Taxes, Facts and Problems* (Stanford University Press, 1937), Ch. I.

It is tempting to *measure* the growth of state government activities in Cali-

carried on a few activities related to agriculture through several state boards, agriculture and forestry experiment stations, and a dairy bureau. Between 1900 and 1935 a poultry experiment station, pathology laboratories, dealers' exchange services, and similar agencies swelled the list of state agencies several-fold. And the state took on the regulation of strays and fertilizer salesmen, and of fertilizers, feeds, seeds, and other items purchased by farmers; the inspection of several types of fruits and animals; the control of various pests; and the application of standardization to several farm products.

The big increase in "other general expenditures" reflects two items: first, employment security administration, nonexistent before the great depression; and second, in 1948 and 1949, a very large bonus to veterans.

Even some of the functions relatively lagging in terms of percentage of total expenditures include some activities showing big rises. Examples are finance, reflecting the tapping of new sources of revenue and expansion of old, to meet the very great expansion in other state government expenditures; state police, expenditures for which were under a million in 1915, over \$72 million in 1949; regulation of the sale of alcoholic beverages, health laboratories, and public utility regulation.<sup>26</sup> And when the so-called "enforcement stage" of labor law administration was reached in the 1900's, expenditures on factory and mine inspection and other labor law administration increased sharply.<sup>27</sup>

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fornia between 1900 and 1935 by Anderson's counts of the number of activities. Thus in 1900 he lists 10 activities under agriculture and animal husbandry, and 66 in 1935, a rise of 460 percent. Unfortunately, it is impossible not to be arbitrary in defining an activity. The count will therefore necessarily depend on the judgment of the counter; e.g., is a new state hospital with a nursing school attached one new activity, two new activities, or merely the extension of an old activity? It must be admitted, however, that even simple description, as in the text above, inevitably conveys a sense of quantity by the mere number of items mentioned or space covered.

The difficulty is an exaggerated case of the one met when counting rising and declining functions.

<sup>26</sup> The Division of State Police of New York was created only in 1917. And state utility regulation did not begin until 1907 — in Wisconsin and New York.

<sup>27</sup> Elizabeth Brandeis, *op. cit.*, pp. 635 ff.

There came also additions to the enterprises operated by state governments. State liquor stores and workmen's compensation — outstanding today — appeared on the scene only after 1900.

In California, before 1900, state agencies dealing with public health and safety were few compared with the laboratories, stations, bureaus, and camps concerned with communicable diseases, foods and drugs, and sanitary engineering, among other things, added after 1900. Regulation, limited to dairy containers, olive oil, and renovated butter in 1900, was extended to drugs, condensed milk, fish dealers, elevators, imported meats, clothes cleaning establishments, auto camps, serum manufacturers, and other products, facilities, and industries. And as in the case of the federal government, these accretions to the state's activities came in every decade both before and after 1900.<sup>28</sup>

### *Growth of Local Activities*

The big percentage increases in local government expenditures between the opening of the century and 1940 or 1942 were in hos-

Table 19

#### CHANGE IN THE FUNCTIONAL DISTRIBUTION OF LOCAL GOVERNMENT EXPENDITURES, 1903-1942

	1903	1942	1942 Relative to 1903
	PERCENTAGE DISTRIBUTION		
General control	20.7	9.4	3.6
Public safety	13.5	12.0	7.1
Highways	16.8	10.3	4.9
Sanitation & health	4.6	4.8	8.1
Hospitals, public welfare & correction	7.9	18.3	18.
Schools & libraries	33.0	40.1	9.7
Recreation	1.9	1.7	6.8
Misc. & unallocable	1.5	3.2	17.
Total	100.0	100.0	7.9
	MILLIONS OF DOLLARS		
Total	667	5,301	

Expenditures cover current operation and transfers to the public, except interest payments; they exclude enterprises and outlays on capital assets.

<sup>28</sup> Anderson, *op. cit.*

Table 20  
CHANGE IN THE FUNCTIONAL DISTRIBUTION OF MUNICIPAL  
GOVERNMENT EXPENDITURES, 1902-1940  
(Cities with Populations over 100,000)

	1902	1912	1927	1940	1940 Relative to 1902			
PERCENTAGE DISTRIBUTION								
General control	8.7	8.3	6.4	5.8	6.2			
Public safety	17.5	15.1	12.3	11.3	6.0			
Highways	} 24.2	{ 18.6	{ 18.0	{ 7.5	} 5.2			
Sanitation						8.8	9.4	4.9
Health						1.6	1.1	1.0
Hospitals						2.3	2.6	4.1
Public welfare	} 3.5	{ 2.2	{ 2.0	{ 11.5	} 32.7			
Correction						1.0	.8	.7
Schools	} 21.6	{ 21.3	{ 26.2	{ 21.5	} 9.7			
Libraries						1.0	1.0	.9
Recreation	6.7	5.1	4.3	3.6	5.1			
Misc. & unallocable	.9	1.3	1.0	.9	9.3			
Enterprises	14.9	13.9	14.8	26.3 <sup>a</sup>	16.5			
Total	100.0	100.0	100.0	100.0	9.3			
MILLIONS OF DOLLARS								
Total	343	690	2,562	3,207				

<sup>a</sup> Including outlays on the New York City transit system, which amounted to 10.2 percent of total expenditures.

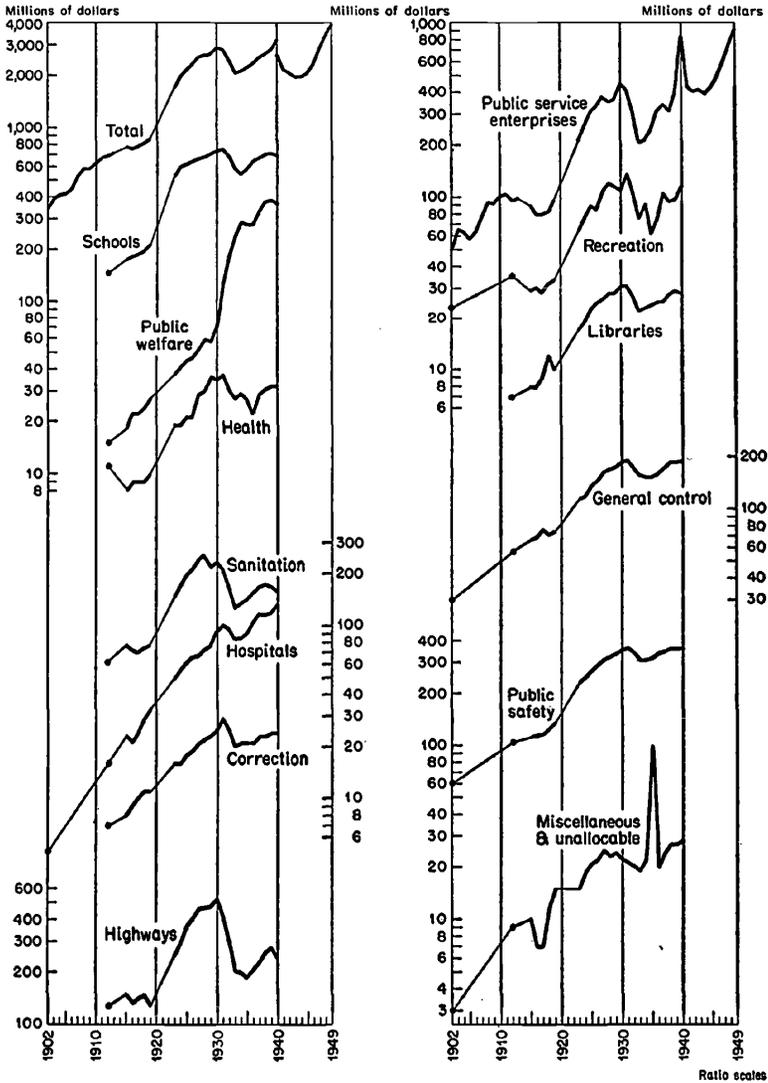
Expenditures cover current operations and outlays on capital assets, including enterprises and transfers to the public (except interest payments).

pitals, public welfare, and enterprises (Tables 19 and 20). The below average increases were in general control, highways, recreation, and sanitation. Similar trends characterize employment, to judge from the data for cities (Table B18).<sup>29</sup> (The three municipal functions whose employment failed to rise as rapidly as urban population, referred to earlier, are administrative, legislative, and judicial, included under general control.)

Chart 14 may help the reader see some of the very considerable changes that occurred, at least in municipal expenditures, in the years between the opening of the century and World War II.

<sup>29</sup> Data on change in the functional distribution of capital assets, exclusive of streets, schools, and sewage systems, are available for municipal governments only (Table C7). Pattern changes seem to have been rather slight, although they do show the relative increase in hospitals and decline in recreational facilities.

Chart 14  
 Functional Classification of Municipal Government Expenditures  
 Cities with Populations over 100,000  
 1902 - 1949



There was a general tendency for the growth of all kinds of expenditures to slacken during World War I, the great depression, and World War II; public welfare was an obvious exception in the depression and World War I.

Much of the decline during these three periods, however, reflects contraction in outlays on new construction and equipment rather than in current service rendered. Through most of the last half-century municipal services have expanded. In Detroit, for example, many activities were added in all of the five decades.<sup>30</sup> There was literary censorship by the police department, high pressure water systems for fire protection, and inspection of smoke, signs, inflammables, etc. in the protection category. Various types of clinics, hospitals, sanitary inspection, and expert inspection of school children appeared under the health conservation category in the twentieth century; and street name signs and traffic lights, under highways. Expansion in welfare activities included organized old-age support, ambulance service, family adjustment service, employment bureau, care of municipal lodging house, insurance advisory service, assistance to mothers; and psychiatry was provided for criminals. Listed as additions under education are special classes for handicapped children, evening and summer high school, school buses, continuation classes, branch libraries (including a bookmobile), and an elephant ride. Various recreational facilities like playgrounds, community centers and concerts were developed.

The course of events in Detroit was paralleled by expansion in

<sup>30</sup> L. D. Upson, "The Growth of a City Government", Detroit Bureau of Governmental Research, *Report No. 164*, 1942.

Numbers are given, but as was mentioned in an earlier note, they are rather arbitrary measures. Thus the list of additions between 1900 and 1941, 256 in number, is far longer than the list of activities carried on in 1900, only 140. Yet it is fair to presume that the basic services already established in 1900, such as streets, sewerage, water, elementary and high schools, police, garbage collection, and street cleaning, were item for item at least as important (in terms of cost or value of service rendered) as the *new* services added after 1900. (Table 20 shows very great expansion in expenditures, but this was through wider coverage and better quality of old services, as well as addition of new services.) The ratio of 256 to 140 therefore overstates the relative importance of the additions. However, the impression made of wider scope of activity, greater variety of services, and improvements in methods of satisfying needs is reasonable, even though the measure lacks precision.

other cities. A survey of 34 cities for 1915-32<sup>81</sup> shows that every city added new activities — 21 installed traffic lights; 9, police teletypes; 9, venereal disease clinics; 10, classes for the deaf; 11, playgrounds.

The history of the Department of Health of New York City is a good illustration. At the time of the consolidation of the five boroughs in 1898 the Department devoted itself primarily to sanitary inspection and prevention of the spread of contagious diseases. School inspection, for example, consisted merely of a search for contagious diseases. Not one health clinic for the provision of medical care existed in 1898. By 1948 the Department visited schools systematically to check children's eyesight, teeth, and state of nutrition, produced and distributed vaccines and serums, and operated 170 clinics and 21 health centers. The diagnosis and treatment of venereal disease in particular had become largely a monopoly of the Department, since a means test was no longer applied.<sup>82</sup>

Changes in patterns of activity of counties, townships, and special districts are essentially like those of other types of government, after allowance is made for their different functions (recall Table

<sup>81</sup> C. H. Woody, "The Growth of Governmental Functions," Ch. 25, *Recent Social Trends in the United States* (McGraw-Hill, 1933). (The end-year of the period covered is not mentioned; we assumed it to be 1932.) Woody also makes the following interesting comparison, which is relevant to the point made in footnote 30:

FUNCTION	RANK OF ABSOLUTE INCREASE IN	
	<i>Expenditures (1915 prices), 1915-29</i>	<i>Activities, 1915-32</i>
Education	1	5
Highways	2	8
Protection	3	4
Miscellaneous	4	2
Health and sanitation	5	1
Recreation	6	3
Charities, hospitals, and correction	7	6
General control	8	7

For example, health and sanitation accounted for the largest number of new activities but ranked fifth in additions to dollar expenditures.

<sup>82</sup> We are indebted to Eugene Levine for a review of the annual reports of the New York City Department of Health and related material.

13).<sup>83</sup> In addition, there has been a partial transfer of the highway function from these local governments to state governments, and of the school function from counties and cities to special school districts.<sup>84</sup>

### *Change and Continuity*

The major conclusions that we may draw from our review of change in functions can be put briefly.

First, hardly any function of any type of government actually declined over the last half-century. Whether measured by workers employed, capital assets, or expenditures (with allowance, naturally, for price changes), practically every function in every type of government expanded. The few apparent exceptions, namely certain functions in local governments other than counties and cities, are usually accounted for by known deficiencies in the figures. Even the loss of part of a function to another type of government meant slower growth rather than decline.<sup>85</sup>

This conclusion can be put almost as strongly in terms of input per capita. The exceptions are few.

Second, there was considerable variation among the several functions in degree of rise of input, however measured, and in all types of government. In the rear guard, among the types of government where these functions are significant, were general control, public safety, and sanitation; and in the van were public welfare, natural resources, and regulation of business and industrial relations (including factory legislation). Schools lagged in growth of employment, but not in growth of capital or expenditures.

Third, while the trend — or at least the net change — of input in every function was up, there were considerable fluctuations in rate of growth. Some functions were pushed up violently during the two wars and then down when they were over; many others

<sup>83</sup> Little separate information is available on counties, townships, and special districts beyond that included in Table 19. What there is is given in Tables D11 and D12 for those especially interested.

<sup>84</sup> Other functions as well have been transferred to special districts, to lessen costs or make possible the provision of services that could not otherwise be provided; cf. Ch. 5.

<sup>85</sup> It hardly seems necessary to note that some *individual* local governments had to cut input, when the population of the area served by them shrank enough.

declined during the wars, then rose; at least one, veterans' services, rose immediately after the wars, then began to decline. The great building booms centered at about 1909 and 1925 and the one current today pushed up outlays of cities; the two wars and the great depression pushed them down. The wars also reduced state government outlays and federal outlays on nonwar functions; but the great depression pushed them up. Peacetime functions in general, whether federal, state, or local, declined during World War II and probably also during World War I.

In addition to fluctuations involving positive and negative changes, there were changes in speed of rise, and these varied from function to function. To illustrate: conservation got its start in the early 1900's and rose most rapidly at that time; outlays on highways shot up until the 1920's, then continued to grow but at a slower pace in the 1930's; functions stimulated by the New Deal rose most rapidly during the 1930's.

Fourth, the biggest part of the half-century rise in total input came not from the spectacular appearance of "new" functions but, putting aside the effects of the cold war on national defense, from the more moderate but nevertheless substantial increase of functions already well established in 1900. Thus the big *percentage* expansions came in activities connected with public welfare, health, conservation of resources, public works, and, at the federal level, regulation. The big *absolute* additions to government input came, however, from those functions already important in 1900. Expansion in national defense, schools, and public enterprises accounted for over half the rise in government employment between 1900 and 1940; and for two-thirds between 1900 and 1949.

This leads us to our final conclusion. Many of the government functions relatively most important in 1900 were still very important in 1940 and 1950: schools, highways, municipal services, defense, public enterprises, are among these. A few, such as general control, declined; some new ones appeared. But measured by input the beginning and end patterns bear a distinct family resemblance to each other. Measured by input, though not necessarily also by impact on the economy's efficiency, there has been change, but no revolution, in the functional pattern of government activity: change, but also persistence.