

Report to the Chairman, Committee on the Budget, House of Representatives

February 1998

# BUDGET FUNCTION CLASSIFICATIONS

Origins, Trends, and Implications for Current Uses





United States General Accounting Office Washington, D.C. 20548

## Accounting and Information Management Division

B-276287

February 27, 1998

The Honorable John R. Kasich Chairman, Committee on the Budget House of Representatives

Dear Mr. Chairman:

This letter responds to your request for information on budget function classifications. Budget functions have long been used as supplementary presentations within budget and financial summaries of the federal government. Specifically in this letter, we discuss the origins and evolution of the current structure and recent spending trends by function. In addition, as agreed with your office, we also describe in this letter possible challenges in using these classifications as a framework for other governmentwide applications, such as the Federal Government Performance Plan, required by the Government Performance and Results Act, and the Statement of Net Cost in the Consolidated Financial Statements of the federal government.

The budgetary information presented in this letter was developed from an automated system used by the Office of Management and Budget (OMB) to collect and process information for the President's annual budget submission. Although these data were not verified at the individual budget account level, we did summarize and reconcile fiscal year net outlays by subfunction to published sources. All growth rates and trend analyses are stated in constant dollars, using fiscal year 1996 as the base year. Appendix I provides additional details on our objectives, scope, and methodology.

## Results in Brief

While the desire to categorize federal spending according to the purpose or mission of government can be traced back nearly 200 years, modern budget function classifications have evolved from a structure first used in 1948. Over the last 50 years, budget functions have been generally stable, with only a few changes overall and none in the last decade. However, this period also saw significant change in the use of budget functions from a purely retrospective summary of federal spending, to a supplemental but subsidiary presentation summarizing the President's budget submission, to the basic prospective framework for the modern congressional budget resolution.

Over the last 20 years, federal spending has become increasingly concentrated in just a few budget functions, with about one-third of the functions accounting for about 90 percent of the growth. Functions with the highest average annual real growth included Medicare, Net Interest, and Health. An alternative trend analysis using a mission area structure based directly on budget subfunction classifications shows that spending related to human resources missions and interest payments increased from 55 percent to nearly 70 percent of total federal spending since 1977 (See figure 4). In fact, nearly all of the growth in federal spending since 1977 can be traced to these two areas. Lastly, a more discrete analysis of federal spending based on subfunctions affirms the prominence of interest and health-related spending compared to other areas but also shows the rapid growth in spending for federal law enforcement activities since 1977. Significant average annual real declines over the last 20 years were associated with general purpose fiscal assistance to state and local governments, certain veterans-related activities, and the central fiscal and personnel management activities of the federal government (See figure 5).

In recent years, the use of budget functions for other than simple historical summaries of federal spending—in effect, the desire to address a variety of governmentwide needs through a convenient and familiar structure—has continued. But as budget functions become the framework for assessments of the performance and cost of government operations, questions about the structure's appropriateness for these emerging uses will likely increase. These questions will stem from two basic concerns: (1) how agencies report specific spending and (2) how this information is aggregated into various function and subfunction categories. Addressing these concerns will be challenging, but necessary, if these evolving uses are to succeed. Newly available mission and strategic goal information arising from the Results Act and new perspectives on the full cost of government operations arising from improvements in federal financial reporting will present an excellent opportunity and an appropriate environment to begin such an examination.

## Background

Budget function classifications are intended to provide a means of arraying budget data according to the major purpose served. Currently, as shown in figure 1 below, the federal budget is divided into 20 functions to provide a coherent and comprehensive basis for analyzing and understanding federal spending. Of the 20 budget functions, 17 are concerned with broad areas of national need; the remaining three

functions—Net Interest, Undistributed Offsetting Receipts,<sup>1</sup> and Allowances<sup>2</sup>—do not address a specific national need but are included to ensure full coverage of the federal budget. Subfunctions are the building blocks of functions; at present, over 70 subfunctions (see figure 1) are defined, with each intended to describe discrete but related groupings of programs and activities. In essence, function classifications are merely summaries of subfunction-based information. To allow for an even higher level aggregation, the function summaries are sometimes combined into six "superfunctions:" National Defense, Human Resources, Physical Resources, Net Interest, Other Functions, and Undistributed Offsetting Collections.

To facilitate preparation of the President's Budget, each budget account is associated with a three-digit subfunction code; this association is intended to reflect the preponderance of spending on activities funded through that account. All spending is totaled by subfunction and then the subfunction totals are added to obtain function totals. In some cases, an account is directly assigned to a function code if the activities funded by the account are spread across multiple subfunctions within a single function. In still other cases, if the activities within the account are associated with multiple functions, the account is associated with a generic three-digit code ("999") to indicate that it is "multi-function." New budget accounts are assigned a subfunction code by OMB; requests for changes in the classification of existing accounts may be made by each agency, subject to approval by OMB.

Each federal activity is placed in a budget function and subfunction that best describes its most important purpose, even though many federal activities may serve more than one purpose. For example, Medicaid spending could be considered a health program or a form of income security benefits. To prevent double-counting and to reflect its primary purpose of financing health care for specific beneficiaries, the Medicaid program is classified as "health care services" within the Health function. To the extent feasible, classifications are made without regard to agency or organizational distinctions.

<sup>&</sup>lt;sup>1</sup>Most offsetting receipts are included as deductions from outlays in the applicable functions and subfunctions. Some are not distributed, however, and are aggregated into this function.

<sup>&</sup>lt;sup>2</sup>This function is used to permit the budget to reflect total estimated budget authority and outlay requirements for future years.

Figure 1: Function and Subfunction Classifications

**National Defense** 

Department of Defense-Military Atomic energy defense activities Defense-related activities

International Affairs

International development and humanitarian assistance

International security assistance Conduct of foreign affairs

Foreign information and exchange activities

International financial programs

General Science, Space and Technology

General science and basic research

Space flight, research, and supporting activities

Energy

Energy supply Energy conservation

Emergency energy preparedness

Energy information, policy, and regulation

Natural Resources and Environment

Water resources

Conservation and land management

Recreational resources Pollution control and abatement

Other natural resources

Agriculture

Farm income stabilization

Agricultural research and services

**Commerce and Housing Credit** 

Mortgage credit Postal Service Deposit insurance

Other advancement of commerce

Transportation

Ground transportation Air transportation Water transportation Other transportation

Community and Regional Development

Community development Area and regional development Disaster relief and insurance

Education, Training, Employment, and Social Services

Elementary, secondary, and vocational education

Higher education

Research and general education aids

Training and employment Other labor services Social services

Health

Health care services

Health research and training

Consumer and occupational health and safety

Medicare

Medicare

Income Security

General retirement and disability insurance (excluding

social security)

Federal employee retirement and disability

Unemployment compensation

Housing assistance

Food and nutrition assistance

Other income security

**Social Security** 

Social security

Veterans Benefits and Services

Income security for veterans

Veterans education, training and rehabilitation

Hospital and medical care for veterans

Veterans housing

Other veterans benefits and services

Administration of Justice

Federal law enforcement activities

Federal litigative and judicial activities Federal correctional activities

Criminal justice assistance

**General Government** 

Legislative functions

Executive direction and management

Central fiscal operations

General property and records management

Central personnel management General purpose fiscal assistance

Other general government

Deductions for offsetting receipts

Interest on the public debt

Interest received by on-budget trust funds Interest received by off-budget trust funds

Other interest

**Undistributed Offsetting Receipts** 

Employer share, employee retirement (on-budget) Employer share, employee retirement (off-budget)

Rents and royalties on the Outer Continental Shelf

Sale of major assets

Other undistributed offsetting receipts

Allowances

# Origins and Evolution of Budget Function Classifications

The current budget function structure, while having antecedents that can be traced back nearly 200 years, is basically a modification of classifications developed for the 1948 Budget. The usefulness of governmentwide summaries of federal spending has long been recognized. Throughout the 19th century, prior to the development of federal budgeting, function presentations were devised and included in financial summaries prepared by the Secretary of the Treasury. Coincident with the beginning of federal budgets covering the entire executive branch in the early 1920s, function summaries became associated with the President's budget submissions. The most recent change involving budget function classifications stems from their use as a framework for congressional budget resolutions under the Congressional Budget Act of 1974. Although some changes in budget function classifications have occurred since 1948, they have been relatively minor; in large part, the structure has remained remarkably stable over this period of time, with no changes in the last decade.

In one sense, the use of function classifications can be traced to the earliest fiscal activities of the federal government. The General Appropriation Act of 1789 contained only four broad authorizations for the expenses of the civil list, the Department of War, discharging warrants of the Treasury, and paying pensions. It could be said that this act provided lump sum appropriations by categories roughly paralleling four of today's functions: General Government, National Defense, Net Interest, and Veterans Benefits and Services. This broad form of appropriations for the executive branch didn't last long. In fact, only 5 years later in 1794, the Congress had differentiated its appropriations into three separate acts, each of which contained numerous specific (line item) appropriations.<sup>3</sup>

The emergence of multiple line-item appropriations in the early 19th century—often specific to the level of individual positions within each office of the government—made it increasingly difficult to track overall federal spending. To address this need, the Treasury Department developed year-end recapitulation reports. For example, the 1876 recapitulation was based on the following categories: civil, miscellaneous, and foreign intercourse; interior; military; navy; and public debt. The recapitulations did not appear until after the end of the fiscal year and served only to provide summary historical perspectives, not to provide information on financial needs for the coming year. Because the major purposes of federal spending were for the most part highly correlated with

<sup>&</sup>lt;sup>3</sup>For a discussion of the history of line item and lump sum budgets, see Louis Fisher, Presidential Spending Power (Princeton, NJ: Princeton University Press, 1975), pp. 59-74, and <u>Budget Object Classification</u>: Origins and Recent Trends (GAO/AIMD-94-147, Sept. 13, 1994).

the separate agencies of government, the Treasury summaries tended to reflect the departmental structure. The problems of concurrence and diffusion of missions across federal departments and agencies were not yet significant issues.

In 1912, President William Howard Taft's Commission on Economy and Efficiency proposed that the President annually submit a "national budget" and recommended that this budget contain supplemental schedules which classified expenditures by the "amount estimated, appropriated or expended for each function or class of work." These schedules were intended to allow a comparison of spending across each of the broad policy areas of the government, not just retrospectively as in the Treasury summaries, but also prospectively by reflecting the President's budget proposals "for the next fiscal year." The Taft Commission's proposal also differed from earlier Treasury summaries by introducing a multi-level classification structure—a precursor to our modern superfunction, function, subfunction structure. For example, the Commission proposed three broad spending categories—General, Public Service, and Local Government. The Commission's Public Service category included a Military function, as in the Treasury recapitulations, but further subdivided this function into "national defense by land," "national defense by sea," and "national defense—expenditures on account of past services." President Taft's statement to the Congress argued that these analyses "will be of great value in considering questions of policy bearing on the future work program of the Government."4

Many of the recommendations of the Taft Commission were incorporated into law as the Budget and Accounting Act of 1921. Although this law is the genesis for modern federal budgeting, it did not require that a function structure be used, but only that the President provide "supplementary information" with his annual budget submission. The 1924 Budget—the first budget prepared after the 1921 Act—contained a supplementary table summarizing requested and enacted appropriations by "governmental functions." This classification was very similar to the earlier Taft Commission proposal but also included a "nonfunctional" category to cover items that were "of a nonorganizational character." (e.g., interest on the debt.)

Given that the 1924 classification structure was oriented toward the purposes of government spending, it is not surprising that it was

<sup>&</sup>lt;sup>4</sup>Message of the President of the United States Submitting for the Consideration of the Congress a Budget, U.S. Senate, 62d Congress, 3d Session, Document No. 1113 (Washington, D.C., 1913), p. 24.

substantially changed as the country struggled through the dominant crises of the next two decades: economic depression and war. In fact, the 1936 Budget presented revised summaries which effectively replaced a function orientation with one focusing on the organizations of government (e.g., "civil departments and agencies") and, most importantly, "recovery and relief" activities. Subsequently, in the 1944 Budget, all spending was recategorized as either "war activities" or "other activities," with subordinate detail summarized by federal department and agency. In both cases, the changes clearly emphasized the near singularity of purpose of federal activities during these periods.

The end of World War II presented an opportunity to revisit the major purposes of the federal government, and thus the budget function classifications. The 1948 Budget presented a revised classification scheme that, in effect, has formed the basis for our modern structure. As stated in the Budget,

"By grouping together items which are functionally related, regardless of the agency that is responsible, this type of classification provides for the Congress and the public a useful summary of what the Government is doing, or expects to do, and, in general, focuses upon the ultimate purpose which the Government programs are designed to serve." <sup>5</sup>

The revised classification included several changes intended to promote a focus on the purposes of government. For example, the earlier public works function, which could be traced to the 1924 Budget, was eliminated, with spending for public works distributed among the functions which such activities served; also, subfunctions once again reflected the missions of government, rather than organizations. Another innovation of the 1948 Budget presentations was the use of three-digit codes for all functions and subfunctions to allow "the reader to know how each individual appropriation is classified."

Finally, the last and arguably most significant change affecting budget function classifications occurred in 1979, as a direct result of the Congressional Budget Act of 1974. This act, among other things, created the congressional budget resolution—in effect, an annual congressional budget plan which relates the disparate parts of the budget to the whole and provides a means to enforce budget targets and coordinate the

<sup>&</sup>lt;sup>5</sup>The Budget of the United States Government for the Fiscal Year Ending June 30, 1948, United States Government Printing Office (Washington, D.C., 1947), p. 1353.

budget authority and outlays be shown "for each major functional category," and that changes to budget function classifications be made "only in consultation with the Committees on Appropriations and on the Budget of both Houses of Congress." Thus, this act defined, for the first time, a statutory foundation for budget function classifications; most importantly, it established budget functions as not merely residual or supplementary schedules to aggregate historical federal spending and presidential budget proposals, but also as the basic prospective framework for the Congress' governmentwide budget planning.

In keeping with the requirement of the act to present budgetary information "in terms of a detailed structure of national needs. . .[and] missions and programs of agencies," OMB proposed several changes to function and subfunction classifications in the 1979 Budget. In addition, a distinction was made between function and subfunction presentations: national needs were intended to be described in the function classifications, with subfunctions representing the resources devoted to agency missions.

Although there have been periodic adjustments throughout the last two centuries, the basic purpose of the classifications—to summarize federal spending governmentwide—remained constant, with any adjustments reflecting changing perspectives on the purposes of such spending. Since 1948, as shown in table 1 below, budget functions have been generally stable. Over the last 50 years, periodic changes in the structure of budget functions occurred, but often these changes simply reordered or renamed existing functions. More recently, between 1979 and 1989, two major federal activities (Social Security and Medicare) were split into separate functions and one (General Purpose Fiscal Assistance) was redefined as a subfunction. Since 1989 there have been no changes to the function classifications.

<sup>&</sup>lt;sup>6</sup>Although not a public law, the budget resolution is in the form of a concurrent resolution, which is agreed to by both Houses and thus binding on them.

<sup>&</sup>lt;sup>7</sup>2 U.S.C. 632(a)(4). The term "budget authority" means authority provided by law to enter into financial obligations which will result in immediate or future outlays.

<sup>831</sup> U.S.C. 1104(c).

<sup>&</sup>lt;sup>9</sup>Now codified at 31 U.S.C. 1105(a)(22).

Table 1: Functions Used in Fiscal Years 1948, 1979, and 1998

		4000
1948	1979	1998
National Defense	National Defense	National Defense
Veterans Benefits and Services	Veterans Benefits and Services	Veterans Benefits and Services
International Affairs and Finance	International Affairs	International Affairs
Social Welfare, Health and Security	Income Security	Income Security
		Social Security
	Health	Health
		Medicare
Housing and Community Facilities	Community and Regional Development	Community and Regional Development
Labor	Education, Training, Employment, and Social Services	Education, Training, Employment, and Social Services
Education and General Research		
	General Science, Space, and Technology	General Science, Space, and Technology
Agriculture and Agricultural Resources	Agriculture	Agriculture
Natural Resources not primarily Agricultural	Natural Resources and Environment	Natural Resources and Environment
	Energy	Energy
Finance, Commerce and Industry	Commerce and Housing Credit	Commerce and Housing Credit
Transportation and Communication	Transportation	Transportation
General Government	General Government	General Government
	General Purpose Fiscal Assistance	
	Administration of Justice	Administration of Justice
Interest on the Public Debt	Interest	Net Interest
Refunds of Receipts		

The relative stability indicated by table 1 tends to mask more frequent changes that have occurred within subfunctions. Since 1979, omb has tried to use subfunctions to more discretely portray the missions of the federal government, and thus these structures have been subject to greater change. For example, prior to the energy crisis of the 1970s, all federal spending for energy programs was included in a single subfunction with

water resource programs because most federal spending was associated with hydroelectric power projects. However, with the growth of other federal energy programs, a separate energy subfunction was created. Subsequently, this subfunction was recast as a function, with four discrete subfunctions (see figure 1) created to distinguish among different types of federal missions. While subfunction changes are driven by changes in federal spending patterns, there is usually a lag from the point at which spending priorities are altered to a resulting change in subfunctions. For example, although spending for deposit insurance increased sharply in the late 1980s, it was not until the President's 1992 Budget that a new subfunction was added.

## Recent Spending Trends by Function and Subfunction

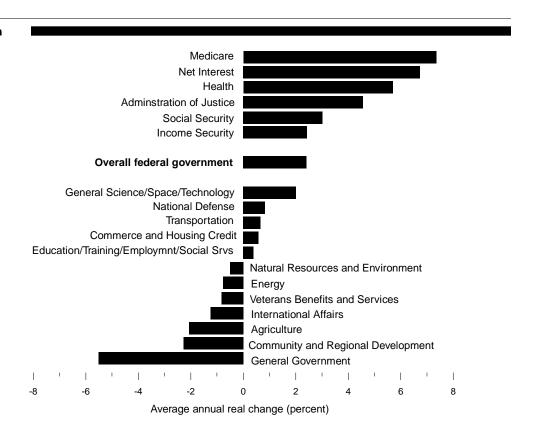
Included as appendixes to this letter are several trend analyses which show federal spending by function and subfunction for the 20 year period 1977 through 1996. There are several ways in which federal spending could be presented for these types of analyses; for example, OMB publishes annual summaries showing budget authority and net outlays. For this letter, we developed a measure we refer to as "adjusted net outlays." This measure is based on reported net outlays by budget account, with one change: we added back to net outlays deductions for collections resulting from the business-type transactions of the government. This approach allows for a more complete analysis of changing federal spending priorities by including all spending, whether arising from governmental or business-type transactions with the public. A further discussion of this approach is included in appendix I.

Between 1977 and 1996, average annual real growth among the functions varied widely, ranging from –5.5 percent (General Government) to 7.4 percent (Medicare). During the same period, adjusted net outlays for the federal government experienced real growth of 2.4 percent, with growth rates for the mandatory and discretionary components of the budget at 3.3 percent and 0.8 percent, respectively. Figure 2 displays the average annual real growth for each budget function, and additional information by function is contained in appendix II. As these analyses indicate, federal spending has become increasingly concentrated in fewer functions, with just five of the 18 functions—Medicare, Net Interest,

<sup>&</sup>lt;sup>10</sup>Typically, federal spending associated with the government's business-type activities with the public is offset by revenues collected from those activities. Although this approach ensures that reported net outlays reflect net governmental rather than market-based transactions, it does understate total federal transactions. Reported net outlays also offsets spending arising from interagency transfers. To prevent double-counting both the original and subsequent outlay, only the original outlay is included; our adjusted net outlay totals reflect this treatment of interagency transactions.

Health, Administration of Justice, and Social Security—accounting for about 90 percent of reported real growth during this period.

Figure 2: Average Annual Real Growth by Budget Function, Fiscal Years 1977-1996



Constructing trends across budget functions can be a useful way to observe shifting patterns in spending priorities. However, the sheer number of functions—17 "areas of national need" plus net interest—and the substantial variation in absolute size across the functions—ranging from about \$350 billion to less than \$15 billion in fiscal year 1996—can present analytical difficulties.

To address these concerns, omb developed six "superfunctions": National Defense, Human Resources, Physical Resources, Other Functions, Net Interest, and Undistributed Offsetting Receipts. These superfunctions are, in effect, summaries of summaries; they are composites of <u>function</u> totals, which, as discussed above, are constructed by adding subfunction totals. Although larger and fewer aggregations can shed light on the

"macro-priorities" of the federal government, the superfunction classifications do not really do that because they are based directly on function definitions. As will be discussed in the concluding section of this letter, current budget functions are marked by structural inconsistencies and merely adding them together to obtain superfunction totals tends to compound the inconsistencies.

To allow for a more discrete analysis of the "macro-priorities" of the federal government, while still reducing the number of classifications needing to be examined, GAO constructed seven federal "mission areas" based directly on subfunction totals—National Security and International Affairs, Human Resources, Natural Resources, Economic Affairs, General Government, Interest, and Undistributed Offsetting Receipts. While any aggregation is essentially subjective, combining subfunctions directly eliminates the arbitrariness arising from function groupings. Each subfunction, regardless of its function affiliation, was separately assigned to one of the mission areas; figure 3 shows these assignments by mission area for each of the subfunctions shown in figure 1. The principal differences between the GAO mission area structure and the OMB superfunction structure occurs in the Natural Resources, Economic Affairs and General Government mission areas. For example within the OMB superfunction structure, the entire budget function Commerce and Housing Credit is placed in one superfunction, Physical Resources. In the GAO mission area presentation, each of the four subfunctions within Commerce and Housing Credit is assigned to a specific mission area: "deposit insurance" and "other advancement of commerce" to Economic Affairs; "postal service" to General Government; and "mortgage credit" to Human Resources.

Figure 3: Federal Mission Areas by Subfunction

#### **Human Resources**

Research and general education aids

Elementary, secondary, and vocational education

Higher education

Training and employment

Veterans education, training and rehabilitation

Consumer and occupational health and safety

Health care services

Medicare

Health research and training

Hospital and medical care for veterans

Housing assistance Mortgage credit

Veterans housing

Other income security

Food and nutrition assistance

Social services

Unemployment compensation

Other veterans benefits and services

Federal employee retirement and disability General retirement and disability insurance

Social security

Income security for veterans

### **Economic Affairs**

Farm income stabilization

Deposit insurance

Disaster relief and insurance Area and regional development

Community development

General purpose fiscal assistance

Other advancement of commerce

Other labor services

Agricultural research and services

General science and basic research

Space flight, research, and supporting activities

Air transportation Ground transportation

Water transportation

Other transportation

#### **Natural Resources**

Emergency energy preparedness

Energy conservation

Energy supply

Energy information, policy, and regulation

Conservation and land management

Other natural resources

Pollution control and abatement

Recreational resources

Water resources

#### **General Government**

Federal correctional activities

Criminal justice assistance

Federal litigative and judicial activities

Federal law enforcement activities

Legislative functions

Executive direction and management

Postal Service

Central fiscal operations

Other general government

Central personnel management

General property and records management

### National Security and International Affairs

Conduct of foreign affairs

International development and humanitarian assistance

Foreign information and exchange activities

International financial programs

International security assistance

Department of Defense-Military

Atomic energy defense activities

Defense-related activities

### Interest

Interest on the public debt

Other Interest

### Offsetting Receipts

Interest Paid to Trust Funds

Rents and Royalties on the Outer Continental Shelf

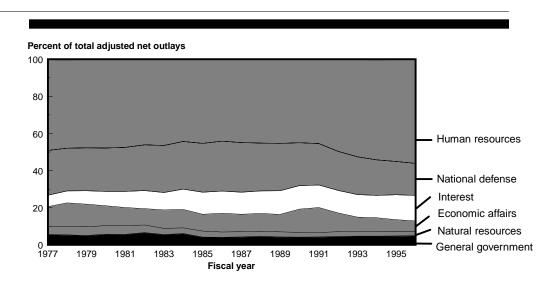
Other Undistributed Offsetting Receipts

Offsetting Receipts

Appendix III contains trend analyses based on the GAO-defined mission areas. This analysis shows that average annual real growth for interest

payments (6.7 percent) and Human Resources spending (3.1 percent) dominated the period 1977 through 1996, accounting for over 95 percent of the total real growth in federal spending over the last 20 years. Alternatively, average annual real growth in the General Government (1.7 percent) and National Security and International Affairs (0.5 percent) mission areas has risen, but much slower than real growth in overall federal spending (2.4 percent); two mission areas, Natural Resources (–0.6 percent) and Economic Affairs (–1.1 percent), experienced real declines during this period. Figure 4 presents an alternative representation of these trends over the last 20 years. As shares of total federal spending, interest payments more than doubled (from over 6 percent to almost 14 percent) and Human Resources spending increased from about 49 percent to about 56 percent. All other mission areas experienced declines as shares of total federal spending during this period.

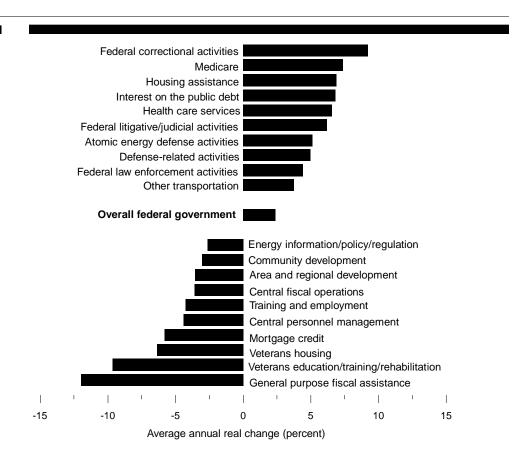
Figure 4: Spending Trends by Mission Area, Fiscal Years 1977-1996



Appendix III also includes specific trend information on each budget subfunction by mission area. Figure 5 captures some of this information by displaying the 10 subfunctions with the highest average annual real growth and the 10 with the largest average annual real decline, since 1977. Although health-related and interest spending are predictably among the fastest growing areas of federal activity, this summary shows that federal spending for corrections and in other law enforcement areas also experienced substantial growth during this period. The largest real decline over the last 20 years was in "general purpose fiscal assistance" and was the result of terminating general revenue sharing for state and local

governments; large real declines were also associated with certain veterans-related spending and with the central fiscal and personnel management activities of the federal government.

Figure 5: Highest Average Annual Real Growth or Decline by Subfunction, Fiscal Years 1977-1996

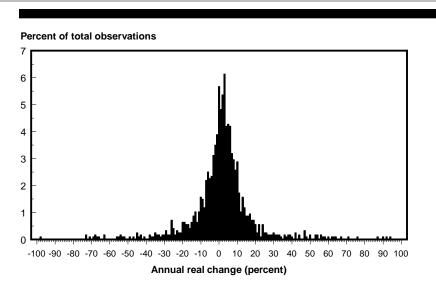


The preceding discussions describe the nature of spending trends by subfunction over a 20-year period. But subfunctions can also be used to estimate the extent of spending change that occurs on a year-to-year basis. <sup>11</sup> This type of analysis provides insight on the relative stability in spending "according to the major purpose served." Figure 6 displays the magnitude and frequency of annual real change in adjusted net outlays for all subfunctions since 1977. As this figure indicates, most subfunction spending changes little from year to year. Over 40 percent of total annual real changes in subfunction spending falls within plus or minus 5 percent;

<sup>&</sup>lt;sup>11</sup>For a more extensive discussion of this type of analysis, see James L. True, "Why Budgets Change a Little. . .Or a Lot: The Earthquake Budget Theory," presented at the Annual Meeting of the Association for Budgeting and Financial Management, Washington D.C., October 1996.

over two-thirds of the observations fall within plus or minus 10 percent. The median annual real change during this period—half the observations of real annual change in subfunction spending falling above and half below—was about 1.5 percent.

Figure 6: Distribution of Annual Real Changes in Subfunction Spending, Fiscal Years 1977-1996



## New Uses Will Pose Challenges for Budget Function Classifications

Recent federal initiatives concerned with the performance and cost of government operations demonstrate the continued need for governmentwide, mission-based classifications. Although using the well-known and available budget function classifications will clearly benefit these initiatives initially, it will also likely surface certain structural and procedural inconsistencies within the current classifications. One approach to moderate the challenges presented by the current budget functions will be to use the results of these new initiatives to reassess and, as needed, change the underlying function and subfunction structures. This approach would ensure that the budget function classifications reflect modern statements of federal missions and goals and, correspondingly, that an agency's reporting of spending by function and subfunction reflects an accurate, complete, and consistent portrayal of its missions and activities.

Two major and very recent developments within the federal government—governmentwide performance plans and consolidated

Page 16

financial statements—use budget function classifications to provide a needed cross-agency, mission-based perspective.

- Under the Government Performance and Results Act (the "Results Act"), the President is required to prepare and submit a Federal Government Performance Plan with the Budget submission. To meet the expectation that this plan "provide a single cohesive picture of the annual performance goals for the fiscal year," the Director of OMB was given broad discretion regarding "the best manner and useful form" for the plan. Budget functions were selected as the principal organizing framework to summarize the annual performance goals of federal departments and agencies. Recently, in a letter to the Director of OMB, the majority leadership of the Congress emphasized its expectation that "each budget function should have a clear mission with clear strategic goals" within the Federal Government Performance Plan.
- Beginning with the prototype Consolidated Financial Statement of the United States Government for fiscal year 1996, a new presentation was added—the Statement of Net Cost. This statement is intended to show the annual net cost of government operations and is organized around budget functions. According to the Treasury, this change was made to support the implementation of the Results Act. Specifically, "classifying each activity solely in the function defining its most important purpose... permits adding the cost of each function to obtain the total cost." 

  13

These new uses will likely generate questions about the adequacy of the current budget functions as an organizing framework. Budget function classifications clearly remain a convenient and well-known mechanism for governmentwide reporting needs. Nevertheless, current practices regarding how information is coded within this framework, as well as questions about both the function and subfunction categories themselves, may focus attention on the capacity of these structures to meet the newly evolving needs. Specifically, (1) some function and subfunction categories do not portray a cohesive, mission-based grouping of federal activities and (2) agency discretion regarding how spending is coded may not promote an accurate, complete, or consistent portrayal of mission activities.

<sup>&</sup>lt;sup>12</sup>"The functions in the Statement of Net Cost are the same functions as those in the budget with one exception. The income security function in the budget includes federal employee retirement and disability costs; these costs are allocated to the other major functions in the Statement of Net Cost.

 $<sup>^{13}</sup> Consolidated$  Financial Statement, U.S. Government, Fiscal Year 1996, U.S. Government Printing Office (Washington, D.C., 1997), p. 13.

# Structural Inconsistencies in Budget Function Classifications

A long-standing problem for any function presentation is that a single federal activity might reasonably be associated with more than one purpose. For example, waste water treatment grants are directly linked with pollution control and abatement activities but could also be associated with area and regional development goals. To prevent double-counting, agencies are supposed to associate their spending with its main or primary purpose—and budget function. But even this approach poses difficulties given structural inconsistencies within current function and subfunction categories.

For example, the 17 budget functions that are intended to indicate specific "areas of national need" reflect a variety of organizing principles. While some functions comprise a set of clearly mission-related activities (i.e., National Defense, Administration of Justice, Health), others reflect beneficiary (e.g., Veterans Benefits and Services), or functional themes (i.e., Transportation). In other cases, such as the Education, Training, Employment, and Social Services function, an amalgamation of very different federal missions and activities can be represented within a single budget function. This function includes, for example, such diverse activities as basic knowledge and skills development (i.e, elementary through higher education programs), vocational training and employment services, and various social programs for children, families, and the elderly. But this last set of activities corresponds closely with other federal cash and food assistance programs to needy individuals and families, which are separately included in the Income Security function, and with related assistance programs to specific beneficiaries such as the elderly or veterans, which are coded to the Social Security and Veterans Benefits and Services functions, respectively.

Conforming agency missions and strategic goals developed under the Results Act to current budget function classifications may not fully capture the significance and breadth of often complex federal entities. The Department of Transportation offers one example. Virtually all departmental spending is coded to one of the modal subfunctions (i.e., ground, air, or water transportation) within the Transportation function. However, the Department's recently issued strategic plan describes strategic goals including, among others, promoting public health and safety, enhancing economic growth and competitiveness, and advancing the nation's vital security interests. Each of these goals and related agency spending could be associated with a different, more representative mission-related budget function.

Although subfunctions are more homogeneous than functions, there are comparable definitional problems. <sup>14</sup> For example, in the Commerce and Housing Credit function, after excluding spending coded to the "mortgage credit," "deposit insurance," and "postal service" subfunctions, all remaining commerce-related spending is coded to that function's other generic subfunction: "other advancement of commerce." However, this subfunction includes such dissimilar federal activities as the Securities and Exchange Commission, the Census Bureau, the Small Business Administration, and the National Institute of Standards and Technology. Perhaps more importantly, this subfunction does not include federal efforts associated with commercial assistance and regulation of transportation-related activities; instead, these activities are coded to the modal transportation subfunctions.

An additional structural challenge arising from current budget functions is a by-product of their most conspicuous feature—their remarkable stability through the years. In effect, the persistence of the structure could become an obstacle as agencies reassesses their missions and principal activities under the Results Act and as new questions arise based on those reassessments. One example of this type of question stems from the complexities posed by fragmented federal missions and overlapping programs. <sup>15</sup> For example, to compare the performance or costs of housing programs that are spread across several federal departments and agencies, a user would have to consider spending that is now coded to several subfunctions in at least four functions (i.e., Income Security, Veterans Benefits and Services, Commerce and Housing Credit, and Community and Regional Development). There is no direct way using budget function classifications to relate activities which, from a mission perspective, are essentially comparable.

## Similar Activities May Not Be Coded Similarly

Currently, agencies are expected to code each budget account according to the preponderance of spending on activities funded through that account. If activities within a given account are spread across multiple subfunctions, the account is coded to the corresponding function; if spread across multiple functions, then a generic multifunction code is used. By its nature, this coding convention tends to produce less

<sup>&</sup>lt;sup>14</sup>For a detailed analysis of federal spending in fiscal year 1996 by department/subdepartment and by function/subfunction, see <u>Budget Issues</u>: <u>Fiscal Year 1996 Agency Spending by Budget Function</u> (GAO/AIMD-97-95, May 13, 1997).

<sup>&</sup>lt;sup>15</sup>For a discussion of this issue, see Managing for Results: Using the Results Act to Address Mission Fragmentation and Program Overlap (GAO/AIMD-97-146, Aug. 29, 1997).

informative results, as federal spending is generalized to function or multifunction classifications. More importantly, this apparently straightforward convention does not necessarily produce consistent results across agencies, because of the wide range of activities that can be associated with a given budget account and because of the discretion afforded agencies in how they treat certain common activities.

Even if an agency is able to associate a budget account with a discrete subfunction, the resulting subfunction totals may not provide a clear or complete indication of primary mission or total cost. For example, based on strategic goals<sup>16</sup> developed during its implementation of the Results Act, the National Oceanic and Atmospheric Administration would seem likely to associate some of its spending with such subfunctions as "water resources," "general science and technology," or "water transportation." However, in fiscal year 1996, all of its spending was coded to "other natural resources" and "other advancement of commerce," providing little if any insight into its basic missions. Similarly, the mission of the National Park Service, as defined in its strategic plan, is to "preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations." However, virtually all of the Service's spending is coded to "recreational resources;" none is coded to "conservation and land management."

Achieving a better understanding of the total cost of federal operations through budget function classifications will also be hindered because agencies sometimes code similar activities differently. For example, many agencies finance central support activities through common or departmentwide budget accounts. There is no apparent convention for how agencies will code this type of spending within function and subfunction classifications. The Department of Housing and Urban Development allocates its management and administration accounts across four of the five subfunctions charged by the department. <sup>17</sup> Conversely, the Department of Health and Human Services places its departmental management accounts within a single subfunction (i.e., "health care services") from among the eight subfunctions associated with its broad mission responsibilities. In a related example, although all major departments and agencies have an Office of Inspector General, these

<sup>&</sup>lt;sup>16</sup>Advance short-term warning and forecast services; implement seasonal to interannual climate forecasts; predict and assess decadal to centennial climate change; promote safe navigation; build sustainable fisheries; recover protected species; and sustain healthy coasts.

<sup>&</sup>lt;sup>17</sup>The one subfunction used by the department for which no allocation of central support charges was made in fiscal year 1996 accounted for only about 0.04 percent of total department obligations.

comparable entities are coded differently. In the departments of Justice and Education, Inspector General spending is assigned to the "federal law enforcement activities" subfunction; in all other cases, Inspector General activities are coded to either one of the specific subfunctions associated with the department's or agency's missions, or to a general (i.e., "other. . .") subfunction.

# Addressing the Challenges of Budget Function Classifications

The preceding discussion should not be interpreted to suggest that budget function classifications have little or no value for the emerging focus on governmentwide performance and cost. On the contrary, as a long-standing method to categorize the purpose of government without regard to organizational arrangements, budget functions are an obvious and available approach to apply to these important concerns.

Nevertheless, the structural and procedural issues described above would seem to suggest that initial expectations should be tempered. For example, achieving the congressional expectation of a clear mission and strategic goals for each budget function will likely be very difficult; in many cases, the function structure will produce mission and goal definitions which are (1) fragmentary, as in the case of federal housing missions, or (2) unclear, as in the case of functions which reflect non-mission themes.

To gain the benefits of using a classification structure that is well-known and currently available, while still addressing its shortcomings, some attention could be given toward moderating the known challenges of the current structure. For example, focusing on subfunction classifications, which are inherently more discrete than function classifications, or recasting certain budget functions to emphasize a more consistent mission focus, will help avoid potential confusion and misinformation.

Another perhaps more promising approach would be to use the department and agency missions and strategic goals recently defined under the Results Act as a baseline for comparison against current function and subfunction classifications. Just as the end of World War II presented an opportunity to reassess the purposes of government spending and led to broad changes in budget function classifications, department and agency implementation of the Results Act, as well as

various financial management improvements<sup>18</sup> that are intended to provide a better understanding of the full cost of federal activities, will present an appropriate environment to begin a modern reexamination. Moreover, the convergence of these initiatives focusing on performance and cost offers a unique opportunity for such a reassessment by providing a complete, consistent and fact-based foundation. This evaluation will likely reaffirm many of the current subfunctions, identify instances where agency coding decisions might be changed to be clearer and more mission-based, and disclose any significant gaps or inconsistencies which might require new subfunction or function classifications. Collectively, these actions should result in function and subfunction classifications better structured to continue their historic role as a governmentwide reporting mechanism.

We are sending copies of this report to the Ranking Minority Member of the House Committee on the Budget; to the Chairmen and the Ranking Minority Members of the House Committee on Government Reform and Oversight and its Subcommittee on Government Management, Information and Technology, the Senate Committee on the Budget, and the Senate Committee on Governmental Affairs; to the Director of the Office of Management and Budget; and to other interested parties. We will also make copies available to others upon request.

If you have any questions, please call me at (202) 512-9573. Major contributors to this report were Michael J. Curro, Assistant Director, and John W. Mingus, Jr.

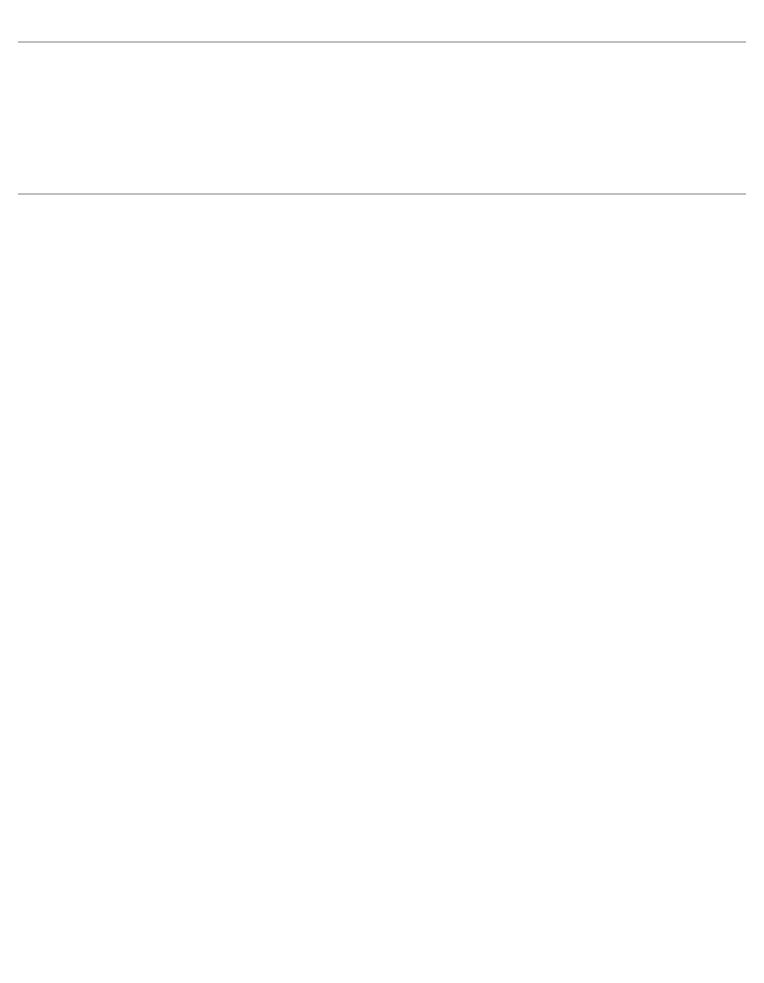
Sincerely yours,

Paul L. Posner

Director, Budget Issues

Paul J. Posner

<sup>&</sup>lt;sup>18</sup>These improvements stem from several statutes, notably the (1) Chief Financial Officers Act of 1990, as amended by the Government Management Reform Act of 1994, which established chief financial officer positions across the government and required the preparation and audit of annual financial statements, and (2) the Federal Financial Management Improvement Act of 1996, which requires federal financial management systems to support full disclosure of federal financial data, including the full cost of programs and activities.



## Contents

Letter		1
Appendix I Objectives, Scope, and Methodology		26
Appendix II Trend Analyses by Function		32
Appendix III Trend Analyses by Mission Area	Human Resources National Security and International Affairs Economic Affairs General Government Natural Resources Interest	34 36 40 42 44 46 48
Related GAO Products		52
Tables	Table 1: Functions Used in Fiscal Years 1948, 1979, and 1998 Table I.1: Adjusted Net Outlays and Net Outlays: Fiscal Years 1977 and 1996	9 28
	Table I.2: Adjusted Net Outlays by Subfunction, Fiscal Year 1996 Table II.1: Spending Trends and Growth Rates by Function Table III.1: Shares of Federal Spending and Growth Rates by Mission Area	29 32 34
	Table III.2: Subfunction Shares and Growth Rates, Human Resources Mission Area	37
	Table III.3: Subfunction Shares and Growth Rates, National Security and International Affairs Mission Area	40
	Table III.4: Subfunction Shares and Growth Rates, Economic Affairs Mission Area	42
	Table III.5: Subfunction Shares and Growth Rates, General Government Mission Area	44
	Table III.6: Subfunction Shares and Growth Rates, Natural Resources Mission Area	46

### Contents

	Table III.7: Subfunction Shares and Growth Rates, Interest Mission Area	48
Figures	Figure 1: Function and Subfunction Classifications	4
	Figure 2: Average Annual Real Growth by Budget Function, Fiscal Years 1977-1996	11
	Figure 3: Federal Mission Areas by Subfunction	13
	Figure 4: Spending Trends by Mission Area, Fiscal Years 1977-1996	14
	Figure 5: Highest Average Annual Real Growth or Decline By Subfunction, Fiscal Years 1977-1996	15
	Figure 6: Distribution of Annual Real Changes in Subfunction Spending, Fiscal Years 1977-1996	16
	Figure I.1: Net Outlays and Adjusted Net Outlays, Fiscal Years 1977-1996	29
	Figure II.1: Shares of Federal Spending by Function, Fiscal Years 1977-1996	33
	Figure III.1: Shares of Federal Spending by Mission Area, Fiscal Years 1977-1996	35
	Figure III.2: Human Resources Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996	38
	Figure III.3: Shares of Human Resources Spending by Major Subfunction Groups, Fiscal Years 1977-1996	39
	Figure III.4: National Security and International Affairs Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996	41
	Figure III.5: Economic Affairs Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996	43
	Figure III.6: General Government Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996	45
	Figure III.7: Natural Resources Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996	47
	Figure III.8: Interest Subfunctions as Shares of Total Federal Spending Fiscal Years 1977-1996	49

## **Abbreviations**

BEA Budget Enforcement Act
OMB Office of Management and Budget

## Objectives, Scope, and Methodology

Our objectives were to (1) discuss the origin and evolution of budget function and subfunction classifications, (2) describe recent federal spending trends in the context of this framework, and (3) comment on the implications of using this framework for modern applications. Information on the origins and historical development of budget function classifications was developed primarily through a literature search. Comments on recent uses for these classifications were based on published material from OMB and the Department of the Treasury.

For appendixes II and III, we developed historical summaries based on automated data collected by OMB. As part of their annual budget submissions to OMB, federal departments and agencies are required to provide a variety of budgetary data for each budget account, the basic building block of their submissions. Each budget account is required to be associated with, among other things, a specific three-digit function or subfunction code. OMB collects and processes this information through the MAX budget system (formerly referred to as the Budget Preparation System), which is used to prepare the President's annual budget submission. We accumulated these annual data at the budget account level in a GAO database. Although much of the information provided by agencies is subject to verification processes and edit checks by OMB, it is not audited, and we did not independently verify the data.<sup>1</sup>

For purposes of this analysis, we chose to focus on the 20-year period, 1977 through 1996. We selected this period because it was sufficiently lengthy to show changes in federal spending patterns while minimizing the amount of necessary data manipulation. Because the GAO database is a compilation of annual files, it does not reflect changes in budget structure or concept that occur after a specific fiscal year file has been appended. Thus, to portray spending trends against a consistent structure, we needed to modify the coding of budget accounts throughout this period to ensure that all data were coded according to the function/subfunction structure used in the President's fiscal year 1998 budget submission. The process used for standardizing coding involved identifying each account that had an "old" function code in any fiscal year prior to a change in the function/subfunction structure and to recategorize that account with the new code. For example, "social security" was not a separate subfunction prior to 1983, and its associated budget accounts were coded to the "retirement programs" subfunction. For purposes of this analysis, individual "social security" budget accounts were recoded to the current

<sup>&</sup>lt;sup>1</sup>Some recent GAO work has indicated significant problems in the accounting information underlying certain revenue and expenditure presentations in the budget. See, for example, Financial Audit: Examination of IRS' Fiscal Year 1995 Financial Statements (GAO/AIMD-96-101, July 11, 1996).

Appendix I Objectives, Scope, and Methodology

subfunction; other budget accounts coded to "retirement programs" in earlier years were similarly assigned to an appropriate and current classification.

There were two exceptions to the above approach. First, to ease analysis, various offsetting receipt subfunctions (code 95x) were merged into a single subfunction; certain interest subfunctions (codes 902-908) were treated similarly. Second, during the period 1977 through 1982, certain receipt accounts were coded to function rather than subfunction codes; to maintain consistency with later years, these accounts were recoded to the offsetting receipts subfunction.

After standardizing the function/subfunction structure, we needed to select a unit of measure for the trend analyses. Typically, federal spending is described in terms of (1) budget authority—the authority to enter into financial commitments, (2) obligations—the amount of orders placed, contracts awarded, services rendered, or similar financial commitments that will require payment either immediately or in the future, or (3) outlays—the issuance of checks or disbursement of cash to liquidate an obligation during a given fiscal year. Sometimes, the measure that is used is determined by the nature of the analysis; for example, trend analyses according to budget object class require using obligation data, because that is the only unit of measure associated with object class presentations. For budget functions, although any of the above measures could be used, we chose to concentrate on reported outlays to reflect actual "spending" in each fiscal year, regardless of outstanding commitments or the extent of budget authority available.

In budget presentations in the President's Budget, departments and agencies report outlays in both "gross" and "net" terms. Net outlays are gross outlays minus collections received from either federal or nonfederal sources. Deducting collections from federal sources prevents double-counting on a governmentwide basis; deducting collections from nonfederal sources ensures that reported net outlays reflect only governmental transactions with the public. This latter deduction subtracts (or "offsets") from gross outlays any revenues collected by the government as part of a business-type transaction with the public.

To achieve the purposes of this analysis—that is, to summarize federal spending by "purpose" or mission—we chose to construct a unique

measure, which we refer to as "adjusted net outlays." We calculated this measure for each budget account by excluding from reported gross outlays only collections from federal sources while retaining collections from nonfederal sources. Another way to describe this measure is to say that it takes reported net outlays and adds back collections from nonfederal sources. To make this calculation, we extracted the relevant budgetary data from the GAO database and converted the data to constant 1996 dollars using the GDP implicit deflator reported in the Fiscal Year 1998 Historical Tables. These constant dollar totals were then used to calculate the share figures displayed in appendixes II and III.

We believe that "adjusted net outlays" better ensures that the measure of spending used in this letter fully reflects all outlays of federal agencies, whether on not such spending arose from governmental or business-type transactions. The implications of this calculation can be shown by example. In fiscal year 1996, the Postal Service "spent," in net outlay terms, negative \$504 million—that is, it ran a surplus of over \$500 million. In fact, gross outlays totaled over \$56.3 billion, but were offset by about \$55.5 billion in collections from nonfederal sources and about \$1.4 billion in collections from federal sources. For this analysis, we report adjusted net outlays for the Postal Service of about \$55.0 billion (\$56.3 billion minus \$1.4 billion; or \$-\$0.5 billion plus \$55.5 billion).

Adding back to reported net outlays the deductions for offsetting collections from non-federal sources consistently increased reported net outlays. Table I.1 and Figure I.1 show, over the period we examined, the relationship between net and adjusted net outlays.

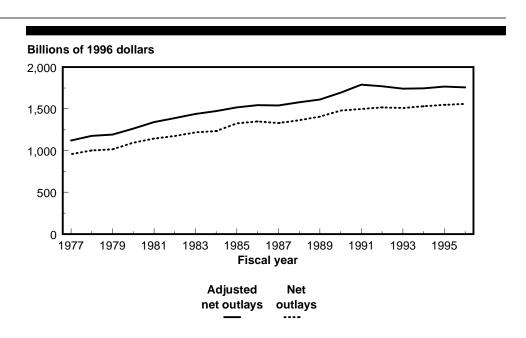
Table I.1: Adjusted Net Outlays and Net Outlays: Fiscal Years 1977 and 1996

	Billions of 1996 dollars		
	1977	1996	
Adjusted net outlays	\$1,122.1	\$1,756.7	
Net outlays	958.4	1,560.3	
Difference (offsetting collections from nonfederal sources)	\$ 163.7	\$ 196.4	

Note: This table includes undistributed offsetting receipts which are excluded from analyses in appendixes II and III.

<sup>&</sup>lt;sup>2</sup>To create this measure, we extracted budget data from three OMB MAX data series: Line Type "A" (Analysis of Outlays), Line Type "P" (Program and Financing Data), and Line Type "R" (Receipts data).

Figure I.1: Net Outlays and Adjusted Net Outlays, Fiscal Years 1977-1996



Although calculating adjusted net outlays affected virtually all subfunctions, its impact was most pronounced in a rather small subset. Table I.2 notes that most of the difference in fiscal year 1996 between adjusted net outlays and net outlays can be traced to just 7 of the over 70 budget subfunctions.

	Adjusted net			Cumulative percent of
Subfunction	outlays	Net outlays	Difference	total difference
Postal Service	\$55.0	-\$0.5	\$55.5	28.2
Medicare	194.3	174.2	20.0	38.5
International financial programs	15.7	-2.2	17.8	47.5
Energy supply	17.5	1.6	15.8	55.6
Mortgage credit	8.4	-4.8	13.2	62.3
Deposit insurance	2.7	-8.4	11.1	67.9
Farm income stabilization	16.2	6.5	9.7	72.9
All other subfunctions	1,447.1	1,393.8	53.2	27.1
Total	1,756.7	1,560.3	196.4	100.0

To provide further insight into the nature of any changes observed during this period, we also extracted for each budget account the code that is Appendix I Objectives, Scope, and Methodology

used to distinguish discretionary and mandatory spending under the Budget Enforcement Act (BEA) of 1990. However, because this coding structure did not exist prior to the enactment of the act, we determined appropriate BEA codes for all pre-1990 budget accounts. If a specific budget account existed both pre- and post-1990, the post-1990 BEA code was simply added to all earlier data. Accounts that did not exist after 1990 were coded based on logical matches to similar types of accounts and activities.

For appendixes II and III, we computed real average annual growth rates using the constant dollar totals for each budget function and subfunction for fiscal years 1977 and 1996. We used the "@RATE" formula from an automated spreadsheet application to compute growth rates. This formula determines the periodic interest rate needed for an investment to grow to a future value—or conversely the growth rate displayed between two known values—over the number of compounding periods.

Lastly, to ensure that the process of standardizing function codes and adding BEA codes to individual budget accounts did not affect overall accuracy, reported net outlay totals for subfunctions and for mandatory and discretionary spending were compared to omb's published sources. After controlling for the shift of some budget accounts between subfunctions or BEA categories, only one subfunction had greater than a 1-percent difference between the calculated dataset for this analysis and published data. That subfunction, deductions for offsetting receipts, did not significantly affect the substance of our analysis.

We performed our work from August through December 1997 in accordance with generally accepted government auditing standards. We provided a draft of this report to omb for technical review.

Appendix I Objectives, Scope, and Methodology
Objectives, Scope, and Methodology

# Trend Analyses by Function

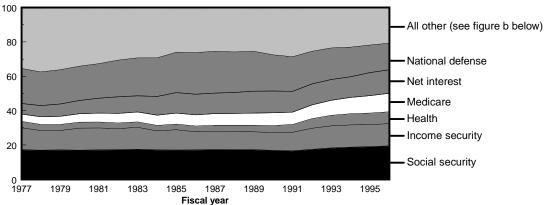
The 17 budget functions which reflect areas of national needs and spending for net interest have experienced widely varying trends over the last 20 years. As shown in figure II.1, just 6 functions accounted for almost 80 percent of total adjusted net outlays in 1996; those same functions accounted for about two-thirds of spending in 1977. As table II.1 shows, average annual growth rates varied substantially across the functions, with most of the growth arising from mandatory spending (i.e., spending not controlled through the appropriations process but rather by authorizing laws which define eligibility or set benefit or payment rules).

	Billions of 1996 dollars		Average annual growth rate (percent)		
Budget function	1977	1996	Mandatory	Discretionary	Tota
National defense	\$235.9	\$275.4	-9.1	0.9	0.0
International affairs	43.4	34.1	-1.3	-1.2	-1.3
General science, space and technology	11.5	16.8	2.6	2.0	2.0
Energy	22.5	19.4	0.3	-2.3	-0.8
Natural resources and environment	27.5	25.0	8.7	-1.2	-0.5
Agriculture	28.5	19.1	-2.8	1.9	-2.1
Commerce and housing credit	63.5	70.9	1.0	-3.4	0.6
Transportation	35.8	40.5	0.7	0.6	0.7
Community and regional development	20.9	13.5	-5.4	-1.6	-2.3
Education, training, employment, and social services	50.0	53.8	3.0	-0.4	0.4
Health	43.3	124.0	7.2	1.9	5.7
Medicare	50.5	194.3	7.5	2.6	7.4
Income security	148.0	233.0	2.0	5.7	2.4
Social security	199.2	349.7	3.1	-1.1	3.0
Veterans benefits and services	46.6	39.8	-2.4	2.1	-0.8
Administration of justice	8.6	20.0	35.9	3.9	4.6
General government	44.2	15.0	-12.7	-0.4	-5.5
Net interest	71.4	246.0	6.7	n/a	6.7
Total (excluding undistributed offsetting receipts)	\$1,151.4	\$1,790.5	3.3	0.8	2.4

Figure II.1: Shares of Federal Spending by Function, Fiscal Years 1977-1996

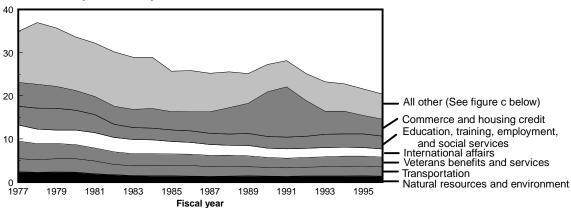
### a. Largest functions

Percent of total adjusted net outlays



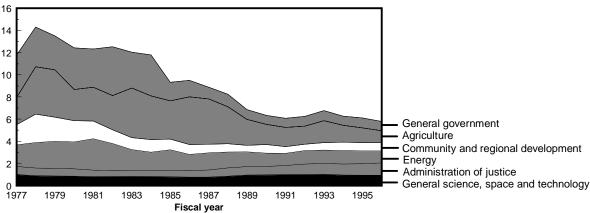
## b. Detail of "all other" in figure a.

Percent of total adjusted net outlays



## c. Detail of "all other" in figure b.

Percent of total adjusted net outlays



Page 33

## Trend Analyses by Mission Area

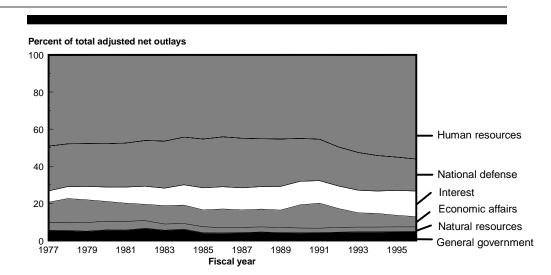
To better reflect the major spending priorities of the federal government, GAO developed the six "mission areas" shown in table III.1, below. Each of these mission areas was constructed by aggregating reported subfunction totals; table 3 in the preceding letter, and the subsequent analyses in this appendix, define which subfunctions are associated with which mission areas.

As table III.1 and figure III.1 show, there have been some significant shifts in federal spending by mission area over the last 20 years. Human resources spending has increased from about 49 percent of total spending to almost 56 percent; in constant dollar terms, spending has increased nearly 80 percent in this mission area. Even more dramatically, interest spending has increased almost 250 percent in constant dollar terms. These two mission areas now constitute almost 70 percent of total federal spending.

The remainder of this appendix provides an overview of the factors underlying the changes in each mission area.

	Billions of 1996 dollars		Average annual growth rate (percent)		
Mission areas	1977	1996	Mandatory	Discretionary	Total
Human resources [e.g., health; retirement and disability; education and training; income support]	\$563.0	\$1,002.0	3.3	1.9	3.1
National security and international affairs	279.3	309.5	-1.9	0.7	0.5
Interest	71.4	246.0	6.7		6.7
<b>Economic affairs</b> [i.e., area/rural/community development; financial institution oversight; transportation; science and research]	123.5	100.3	-3.6	0.1	-1.1
General government [i.e., legislative and executive functions; postal service; administration of justice]	64.2	88.2	1.8	1.5	1.7
Natural resources [i.e., energy conservation and supply; natural resources; environment]	50.1	44.4	1.3	-1.5	-0.6
Total (excluding undistributed offsetting receipts)	\$1,151.4	\$1,790.5	3.3	0.8	2.4

Figure III.1: Shares of Federal Spending by Mission Area, Fiscal Years 1977-1996



# **Human Resources**

As noted above, the human resources mission area has been consistently the largest mission area as a share of total federal spending during this period and has also experienced the second highest average annual real growth (3.1 percent). (See table III.1.) However, growth rates and shares of total federal spending vary considerably across the large number of subfunctions within this mission area and across the period of this analysis. To help show some of these differences, table III.2 displays four principal groups of subfunctions within this mission area: (1) education and training, (2) health, (3) income support, and (4) retirement and disability.

Although the "social security" subfunction continues to dominate the mission area overall (figure III.3), health-related spending—notably "medicare" and "health care services"—has shown the most rapid real growth during this period, now collectively representing almost 19 percent of federal spending. (See table III.2 and figure III.2.) Much of the increase in health-related programs—and in general for this mission area—has arisen from mandatory spending programs, rather than through discretionary appropriations.

Perhaps more so than other mission areas, human resources spending reflects significant demographic (e.g., veterans-related spending) and economic (e.g., "unemployment compensation") changes during the period of this analysis. For example, the large (–5.8 percent) real decline in the "mortgage credit" subfunction is largely driven by interest rates associated with the selected start (unusually high rates) and end dates (unusually low rates) for this analysis. Also, the decline in "training and employment" spending (–4.3 percent) reflects the large temporary increases for public sector jobs as part of an economic stimulus program in 1977 and 1978, coupled with the termination of the Comprehensive Employment and Training Act after 1982; since 1983, the "training and employment" subfunction has been virtually flat.

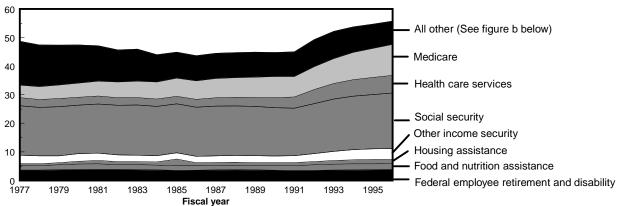
Appendix III Trend Analyses by Mission Area

	Percent of fe		<b>A</b>			
B. Lata 16 and an	spending		Average annual growth rate (percent) <sup>a</sup>			
Budget subfunctions	1977	1996	Mandatory	Discretionary	Tota	
[Education and training subfunctions]	3.98	2.20	-0.8	-0.8	-0.8	
Elementary, secondary, and vocational education	0.94	0.83	n/a	1.7	1.7	
Higher education	0.70	0.78	10.8	0.5	2.9	
Training and employment	1.40	0.39	62.6	-5.1	-4.3	
Research and general education aids	0.18	0.12	-2.4	0.3	0.3	
Veterans education, training, rehabilitation	0.76	0.07	-9.6	-14.0	-9.6	
[Health subfunctions]	9.11	18.74	7.4	2.1	6.3	
Medicare	4.38	10.85	7.5	2.6	7.4	
Health care services	2.89	6.20	7.2	2.6	6.5	
Hospital and medical care for veterans	0.96	0.96	41.9	2.3	2.4	
Health research and training	0.72	0.61	n/a	1.4	1.4	
Consumer and occupational health and safety	0.16	0.12	-6.4	0.8	8.0	
[Income support subfunctions]	12.01	10.14	0.6	5.2	1.4	
Other income security	2.93	3.75	3.7	3.2	3.7	
Food and nutrition assistance	1.73	2.12	3.0	10.0	3.4	
Housing assistance	0.66	1.50	-6.0	7.3	6.9	
Unemployment compensation	3.12	1.39	-2.1	0.0	-1.9	
Social services	1.04	0.83	0.4	2.3	1.1	
Mortgage credit	2.28	0.47	-6.7	17.3	-5.8	
Other veterans benefits and services	0.13	0.07	-2.2	-1.0	-1.2	
Veterans housing	0.12	0.02	-8.1	n/a	-6.4	
[Retirement and disability subfunctions]	23.80	24.88	2.6	-1.2	2.6	
Social security	17.30	19.53	3.1	-1.1	3.0	
Federal employee retirement and disability	3.68	3.87	2.6	2.7	2.6	
Income security for veterans	2.08	1.10	-1.0	n/a	-1.0	
General retirement and disability insurance	0.73	0.39	-0.9	-3.1	-1.0	
Total (excluding undistributed offsetting receipts)	48.90	55.98	3.3	1.9	3.1	

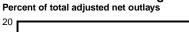
 $<sup>^{\</sup>rm a_{\it ''}}$  n/a" in growth rate columns occurs when growth rate cannot be measured because of sign changes in data or absence of data.

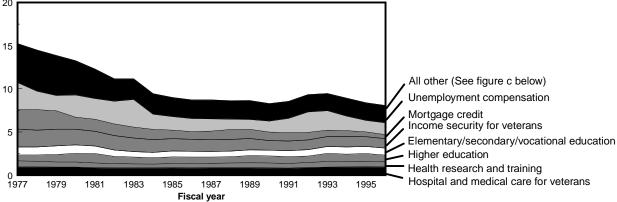
Figure III.2: Human Resources Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996



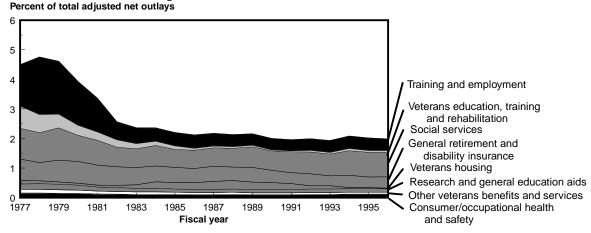


#### b. Detail of "all other" in figure a.



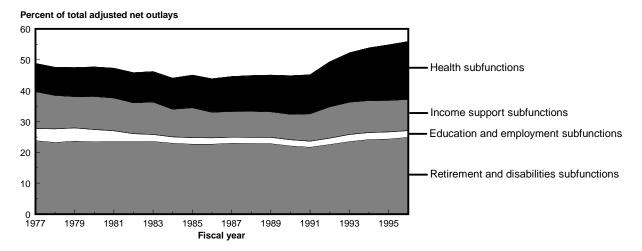


# c. Detail of "all other" in figure b.



Page 38

Figure III.3: Shares of Human Resources Spending by Major Subfunction Groups, Fiscal Years 1977-1996



# National Security and International Affairs

Like the human resources mission area, national security and international affairs is dominated by a single subfunction: "Department of Defense - Military." (See table III.3.) Although this subfunction has declined sharply as a share of total federal spending—from about 20 percent to about 15 percent over the last 20 years—it has consistently maintained about 80 percent of the spending in this mission area. "International security assistance" and "international financial programs" were the largest declining subfunctions, both as a share of overall federal spending and in real terms. (See figure III.4.)

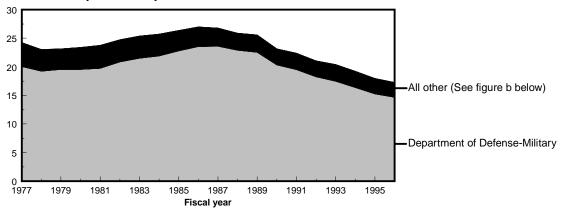
Table III.3: Subfunction Shares and Growth Rate	s, National Security and International Affairs Mission Area

	Percent of federal spending		Average annual growth rate (percent) <sup>a</sup>		
Budget subfunction	1977	1996	Mandatory	Discretionary	Total
Department of Defense-Military	20.06	14.68	-11.1	0.7	0.7
International financial programs	2.15	0.88	-1.2	-11.9	-2.4
Atomic energy defense activities	0.39	0.65	n/a	5.1	5.1
International development and humanitarian assistance	0.67	0.44	-7.2	0.3	0.1
International security assistance	0.66	0.31	n/a	-1.8	-1.7
Conduct of foreign affairs	0.20	0.22	-6.3	2.8	2.8
Foreign information and exchange activities	0.08	0.07	4.2	1.5	1.5
Defense-related activities	0.03	0.05	6.4	4.6	4.9
Total (excluding undistributed offsetting receipts)	24.25	17.29	-1.9	0.7	0.5

<sup>&</sup>lt;sup>a</sup>"n/a" in growth rate columns occurs when growth rate cannot be measured because of sign changes in data or absence of data.

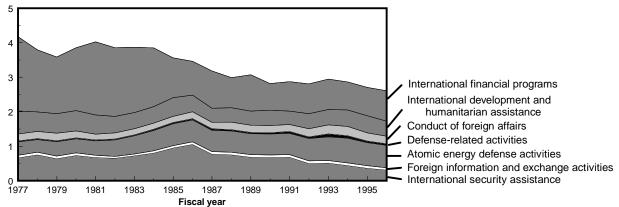
Figure III.4: National Security and International Affairs Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996





#### b. Detail of "all other" in figure a.

Percent of total adjusted net outlays



# **Economic Affairs**

The overall real decline in spending for this mission area (table III.4) reflects several significant shifts in federal priorities: the near ending of "general purpose fiscal assistance"—most notably general revenue sharing and several other federal payments to state and local governments—and a decline in regional and community development spending. However, overall growth rates mask several subfunctions which experienced substantial volatility during this period. For example, as shown in figure III.5, the "disaster relief and insurance" subfunction experienced several periods of rapid increase in response to natural disasters, and "deposit insurance" spending sharply surged in the late 1980s in response to the savings and loan crisis.

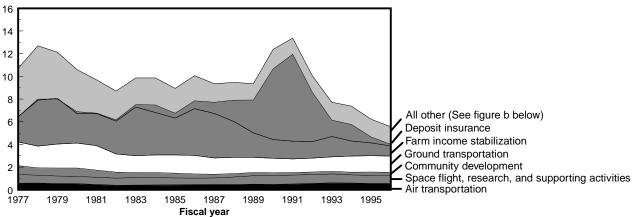
	Percent of fe	deral			
	spending		Average annual growth rate (percent) <sup>a</sup>		
Budget subfunction	1977	1996	Mandatory	Discretionary	Total
Ground transportation	2.09	1.43	0.8	0.3	0.3
Farm income stabilization	2.24	0.90	-2.8	6.0	-2.4
Space flight, research, and supporting activities	0.78	0.71	-100.0	1.9	1.9
Air transportation	0.58	0.57	-100.0	2.4	2.3
Area and regional development	0.86	0.28	-2.8	-3.0	-3.6
Community development	0.78	0.28	-7.1	-1.7	-3.0
Other advancement of commerce	0.32	0.27	21.8	-0.9	1.4
Water transportation	0.43	0.24	2.9	-1.1	-0.7
General science and basic research	0.22	0.22	3.7	2.5	2.5
Disaster relief and insurance	0.18	0.20	3.7	2.7	2.9
Agricultural research and services	0.23	0.17	1.5	0.5	0.6
Deposit insurance	-0.04	0.15	n/a	n/a	n/a
General purpose fiscal assistance	1.96	0.11	-13.3	-9.3	-12.0
Other labor services	0.08	0.05	-100.0	0.3	0.3
Other transportation	0.02	0.02	n/a	3.5	3.8
Total (excluding undistributed offsetting receipts)	10.72	5.60	-3.6	0.1	-1.1

a"n/a" in growth rate columns occurs when growth rate cannot be measured because of sign changes in data or absence of data.

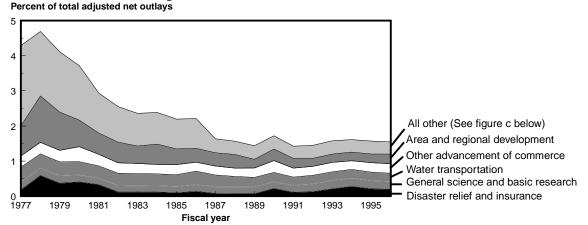
Figure III.5: Economic Affairs Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996

#### a. Largest subfunctions and deposit insurance

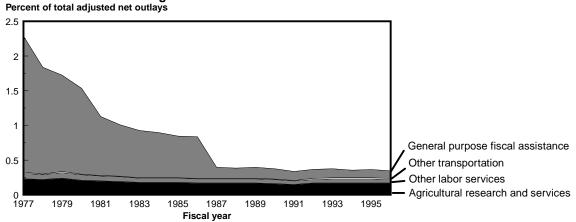
Percent of total adjusted net outlays



### b. Detail of "all other" in figure a.



### c. Detail of "all other" in figure b.



Page 43

# General Government

Throughout the first half of the 20-year trend period of this analysis, two subfunctions—"postal service" and "central fiscal operations"—dominated the general government mission area. (See figure III.6.) Postal service spending continued throughout this period to be a significant share of this mission area and of total federal spending, but spending for central fiscal operations fell off sharply. However, this decline merely reflects a technical change in the budgetary treatment of agency borrowing from the Federal Financing Bank.

Notwithstanding the dominance of postal service spending, the highest real growth in this mission area over the last 20 years occurred in three other subfunctions: "federal correctional activities" (9.4 percent), "federal litigative and judicial activities" (6.2 percent), and "federal law enforcement activities" (4.4 percent). (See table III.5.) Collectively, spending in these Administration of Justice subfunctions exhibited real growth four times greater than the other subfunctions in this mission area (4.6 percent versus 1.1 percent). The large real decline since 1977 in "central personnel management" (–4.4 percent) reflects the recent downsizing of the Office of Personnel Management.

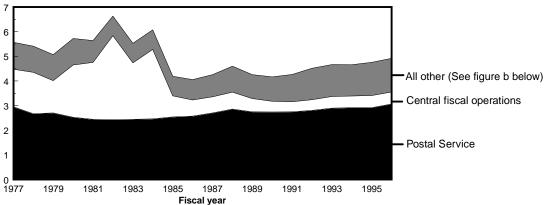
Table III.5: St	ibtunction Sr	ares and Grov	vtn Rates, Gen	erai Government	Mission Area

	Percent of federal spending		Average annual growth rate (percent) <sup>a</sup>			
Budget subfunction	1977	1996	Mandatory	Discretionary	Total	
Postal service	2.95	3.07	3.5	-19.6	2.6	
Federal law enforcement activities	0.35	0.52	25.3	3.6	4.4	
Central fiscal operations	1.53	0.49	n/a	3.0	-3.6	
Federal litigative and judicial activities	0.17	0.35	n/a	5.5	6.2	
Federal correctional activities	0.05	0.18	5.8	9.3	9.2	
Legislative functions	0.17	0.11	n/a	-0.3	-0.1	
Criminal justice assistance	0.17	0.08	n/a	-2.3	-1.7	
General property and records management	0.05	0.06	6.4	-8.0	3.6	
Other general government	0.09	0.06	9.3	2.9	0.1	
Executive direction and management	0.02	0.01	n/a	1.9	1.9	
Central personnel management	0.02	0.01	n/a	-4.4	-4.4	
Total (excluding undistributed offsetting receipts)	5.58	4.93	1.8	1.5	1.7	

a"n/a" in growth rate columns occurs when growth rate cannot be measured because of sign changes in data or absence of data.

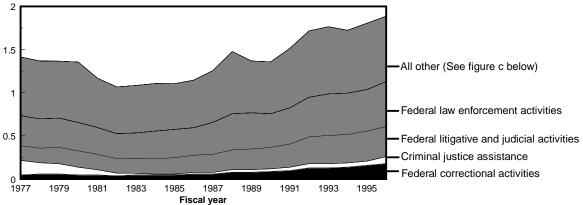
Figure III.6: General Government Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996

Percent of total adjusted net outlays



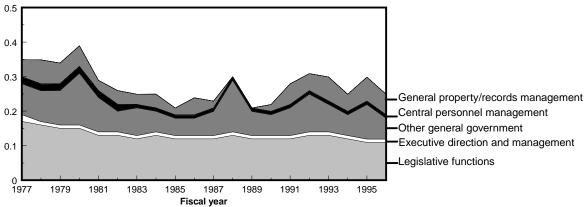
#### b. Detail of "all other" in figure a.

Percent of total adjusted net outlays



#### c. Detail of "all other" in figure b.

Percent of total adjusted net outlays



Page 45

# **Natural Resources**

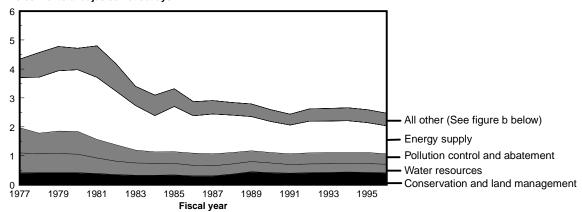
Over the last 20 years, the natural resources mission area has consistently been the smallest area of federal spending, with each of the six subfunctions associated with this mission generally being less than 1 percent of total federal outlays over this period. (See table III.6 and figure III.7.) Spending in this mission area was dramatically affected by the federal response to the energy crisis in the late 1970s, which resulted in periods of rapid growth and subsequent decline for energy-related subfunctions. The surge in spending in the "emergency energy preparedness" subfunction (figure III.7b) in 1981 was the result of oil purchases for the Strategic Petroleum Reserve.

	Percent of federal spending		Average annual growth rate (percent) <sup>a</sup>		
Budget subfunctions	1977	1996	Mandatory	Discretionary	Tota
Energy supply	1.74	0.97	0.3	-2.7	-0.7
Conservation and land management	0.41	0.41	12.7	0.3	2.3
Pollution control and abatement	0.87	0.36	3.0	-2.3	-2.3
Water resources	0.69	0.30	3.7	-2.3	-2.1
Other natural resources	0.21	0.16	4.0	0.6	1.0
Recreational resources	0.21	0.16	43.1	1.0	1.1
Energy information, policy, and regulation	0.16	0.06	n/a	-2.6	-2.6
Energy conservation	0.04	0.04	n/a	2.3	2.3
Emergency energy preparedness	0.03	0.01	n/a	-1.0	-1.0
Total (excluding undistributed offsetting receipts)	4.35	2.48	1.3	-1.5	-0.6

a\*\*n/a\*\* in growth rate columns occurs when growth rate cannot be measured because of sign changes in data or absence of data.

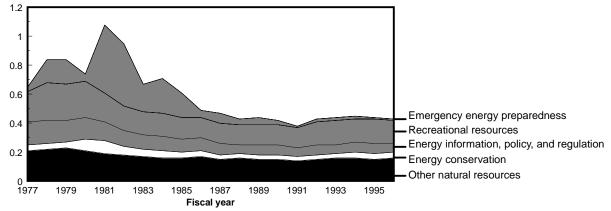
Figure III.7: Natural Resources Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996

Percent of total adjusted net outlays



#### b. Detail of "all other" in figure a.





#### Appendix III Trend Analyses by Mission Area

# Interest

This mission area, which includes interest payments on the public debt as well as interest received by trust funds and interest paid by the federal government, experienced the highest rate of real average annual growth during the last 20 years, almost 7 percent. (See table III.7.) "Interest on the public debt" as a share of total spending has more than doubled in constant dollar terms.

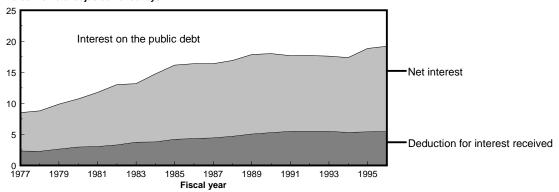
# Table III.7: Subfunction Shares and Growth Rates, Interest Mission Area

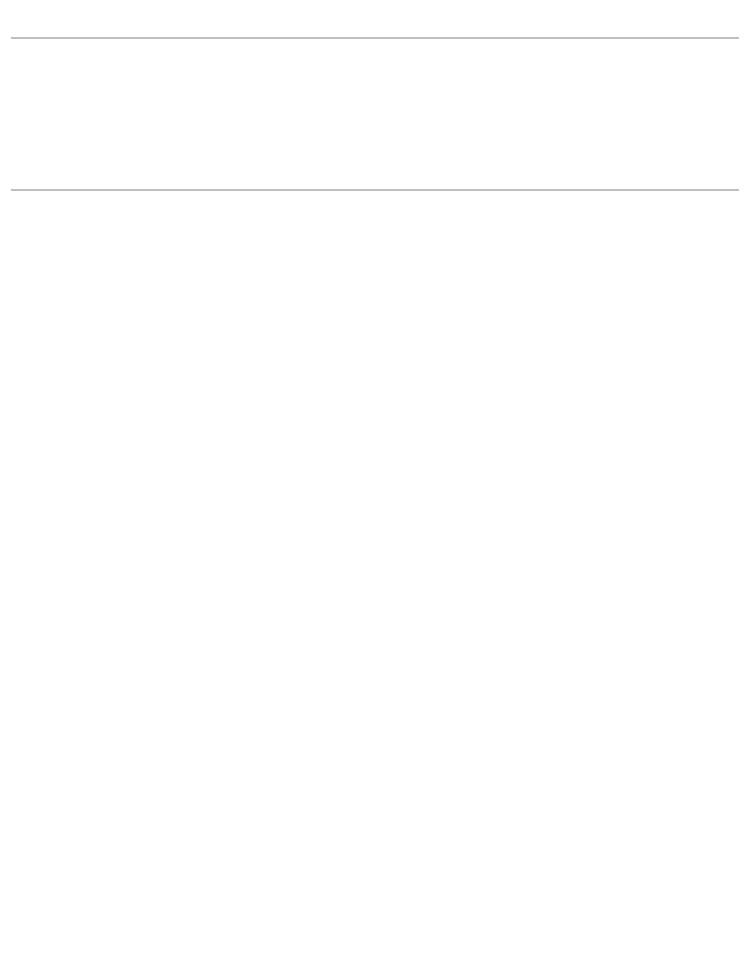
Budget subfunctions	Percent of fe spendin	Average annua	
	1977	1996	(percent)
Interest on the public debt	8.52	19.21	6.8
Other interest	-2.32	-5.47	7.1
Total (excluding undistributed offsetting receipts)	6.20	13.74	6.7

Note: All spending in this mission area is mandatory.

Figure III.8: Interest Subfunctions as Shares of Total Federal Spending, Fiscal Years 1977-1996









# Related GAO Products

Budget Issues: Fiscal Year 1996 Agency Spending by Budget Function (GAO/AIMD-97-95, May 13, 1997)

Federal Fiscal Trends: Fiscal Years 1971-1995 (GAO/AIMD-97-3, November 1996)

Budget Function Classification: Agency Spending by Subfunction and Object Category, Fiscal Year 1994 (GAO/AIMD-95-116FS, May 10, 1995)

Budget Function Classification: Agency Spending and Personnel Levels for Fiscal Years 1994 and 1995 (GAO/AIMD-95-115FS, April 11, 1995)

#### **Ordering Information**

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

#### Orders by mail:

U.S. General Accounting Office P.O. Box 37050 Washington, DC 20013

or visit:

Room 1100 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

United States General Accounting Office Washington, D.C. 20548-0001

Bulk Rate Postage & Fees Paid GAO Permit No. G100

Official Business Penalty for Private Use \$300

**Address Correction Requested** 

