

April 1990

BUDGET ISSUES

Human Resource Programs Warranting Consideration as Human Capital



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Accounting and Financial
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April 30, 1990

The Honorable Jack Brooks
Chairman, Committee on the Judiciary
House of Representatives

Dear Mr. Chairman:

In an April 3, 1989, letter, you expressed concern that our proposal¹ for restructuring the current unified budget—which would include a capital and an operating budget within the unified budget—did not include human capital programs in the capital component. You stated some people believe that human capital investments should be included in a capital budget. Consequently, you asked us to identify, describe, and categorize all federal human resource programs that could be candidates for inclusion in a capital budget.

Results in Brief

Human capital is not clearly defined in either the public or private sector. The Office of Management and Budget (OMB) uses the term “human resources” in the budget to describe federal programs that are designed to enhance individuals’ well-being. We identified 154 such federal programs warranting consideration as human capital investments, with total outlays of \$534 billion in fiscal year 1988. The programs, in our judgment, represent a universe of programs from which human capital programs may be identified. As requested, we classified these programs into four categories (and included their fiscal year 1988 outlays): (1) education and training (\$25 billion), (2) health (\$131 billion), (3) social assistance (\$69 billion), and (4) retirement and disability (\$309 billion). In the private sector, many economists and researchers agree that some education and training programs are investments in human capital. However, there is no consensus on what other programs should also be classified as human capital.

Background

For nearly 4 years, we have been examining the concept of a restructured unified budget as a step in strengthening financial management

¹Budget Issues: Capital Budgeting for the Federal Government (Exposure Draft) (GAO/AFMD-88-44, July 1988).

within the federal government.² In an October 1989 report, Managing the Cost of Government: Proposals for Reforming Federal Budgeting Practices (GAO/AFMD-90-1), we proposed a restructured budget which provides sections and subtotals on trust funds, enterprise-type funds, and other government funds, and then divides these into capital and operating components.

In our published restructured budget proposals, we have only included physical investments (such as equipment, construction, and land) and financial investments (such as notes and loans receivable) in the capital component of our restructured budget. As we stated in our report, Budget Issues: Restructuring the Federal Budget—The Capital Component (GAO/AFMD-89-52), excluding human capital (and research and development) investments from the capital component of the budget does not reflect a belief that these investments are of lesser importance to the nation or to the individuals whom they serve. Nevertheless, we have not included human capital investments (or research and development) in the capital component of our restructured budget because of the conceptual and technical difficulties involved in defining and identifying them. For example, it is not easy to measure the investment portion and the depreciation rate of many such programs' outputs.

There are varying opinions as to whether or not human capital investments should be included in a capital budget. By excluding these investments from a capital budget, some organizations and individuals argue that this will create a budget bias in favor of physical investments. They contend that federal programs designed to assist segments of the American population in areas such as education, job training, and health represent an investment in human capital and, therefore, should also be included in a capital budget. They point out that federal outlays for human capital investments are just as important to the nation's economy as the government's physical investments.

At your request, we will convene a panel of individuals from within and outside the federal government who are familiar with human capital to study the issues surrounding this subject. In the meantime, this report

²Budget Issues: Capital Budgeting Practices in the States (GAO/AFMD-86-63FS, July 15, 1986); Capital Budgeting for the Federal Government (GAO/T-AFMD-88-3, December 8, 1987); Budget Reform for the Federal Government (GAO/T-AFMD-88-13, June 7, 1988); Budget Issues: Trust Funds and Their Relationship to the Federal Budget (GAO/AFMD-88-55, September 30, 1988); Budget Issues: State Practices for Financing Capital Projects (GAO/AFMD-89-64, July 1989); and Budget Issues: Restructuring the Federal Budget—The Capital Component (GAO/AFMD-89-52, August 24, 1989).

provides a starting point for identifying possible human capital programs.

Objectives, Scope, and Methodology

The basic objective of this study was to identify, describe, and categorize all human resource programs in the federal budget that could conceivably be included in a capital budget. Initially, we reviewed books, articles, and other published reports on human capital investments in the private sector as well as human resource programs in the federal government to obtain information and insight on this issue. (See bibliography.) Also, we talked with various legislative and executive branch officials in the Congressional Budget Office (CBO), the Congressional Research Service (CRS), the Office of Management and Budget, and other federal agencies to obtain their views on what federal programs they believe should be classified as human capital investments.

In developing our list of human resource programs warranting consideration as human capital investments, we selected programs contained in the “human resources superfunction” of the Budget of the United States Government, Fiscal Year 1990 and the Budget of the United States Government, Fiscal Year 1990—Appendix that were established to assist segments of the American population in obtaining education and training, housing assistance, income assistance, health care, and social assistance. We were unable to add the training of federal civilian and military employees to our human resource list because of the difficulty in obtaining accurate information on such programs.

As you requested, we classified the human resource programs that could be candidates for inclusion in a capital budget into four categories based on the type of assistance provided: (1) education and training, (2) health, (3) social assistance, and (4) retirement and disability. We did not include programs representing the government’s investment in loans and other financial instruments, since they are currently included in the capital component of our restructured budget proposal. Our methodology is discussed in more detail in appendix VIII.

As agreed with the Committee, we did not obtain formal comments on this report from OMB or CBO. However, we discussed our work with their officials and incorporated their comments where appropriate in the report. Our work was performed in Washington, D.C., from June 1, 1989, through March 21, 1990.

Human Capital Not Clearly Defined

Human capital is not clearly defined in either the public or private sector. OMB uses the term human resources to categorize such programs as education and training. The private sector researchers, on the other hand, consider many types of human resource spending as investments in human capital. According to most private sector researchers, such investments would include expenditures for education and training programs. However, there is less consensus among the researchers on what other programs are human capital investments.

Applying the concept of human capital in budgeting and accounting poses many challenges. These challenges include resolving conceptual issues, such as the breadth of activities that represent investments (as opposed to consumption or operating expenses), and addressing practical issues of measurement.

One key conceptual issue is whether human capital programs should be restricted to those increasing productivity, such as many education and training programs, or also include those increasing well-being—such as some health programs. Another issue concerns the classification of programs that provide benefits for more than 1 year—investment-type programs—or less than 1 year—consumption-type programs. A third issue is the measurement of the human capital share of a given program and its rate of depreciation. To date, the conceptual and practical issues surrounding implementation of the human capital concept have not been resolved.

Federal Perspective

The federal government, specifically OMB, has not defined human capital. As such, OMB does not use the term human capital to describe any federal human resource programs, including those that it classifies as investment-type activities. Federal agencies use OMB Circular A-11, "Preparation and Submission of Budget Estimates," to prepare data for the budget document entitled "Special Analysis D, Federal Investment Outlays" of the Budget of the United States Government. The OMB circular defines an investment-type activity as "one whose budget outlays are expected to yield benefits in the future." The circular categorizes education and training programs as an investment-type activity, and it includes such programs as Student Financial Assistance, Compensatory Education for the Disadvantaged, Education for the Handicapped, Guaranteed Student Loans, Training and Employment Services, Health Resources and Services, and Rehabilitation Services and Handicapped Research.

Private Sector Perspective

In the private sector, most economists and researchers generally consider human capital as a nonphysical investment which provides a long-term measurable benefit and increases an individual's productivity and well-being. For example, economists and researchers generally agree that many education and job training programs are good candidates for human capital investments. They cite numerous studies conducted over the years which show that the more education and/or training a person receives, the higher that person's future income potential.

The impact of education and training on productivity can be substantial. A May 1989 report issued by the American Society of Training and Development reported that productivity research over the last 50 years found that on-the-job training contributed 55 percent and formal learning in schools and colleges provided 26 percent of all productivity improvement.

Further, a May 1989 study prepared by Isabel Sawhill and Jason Juffras entitled Financing Human Capital states that estimates of private sector expenditures for formal training range between \$10 billion and \$35 billion a year and that the informal, on-the-job training that occurs daily in businesses may represent an investment worth hundreds of billions of dollars.

In our research, we found that some researchers also consider health care programs as candidates for human capital investments. Those who support classifying health care as human capital believe that expenditures which reduce the incidence of death and disability in the population generally lead to long-term increases in productivity and welfare.

However, this view is not uniformly accepted by all researchers. Dissenters note that not all expenditures for health care increase future productivity. In addition, they believe that it is extremely difficult to separate the investment and consumption components of health care in order to determine which components produce future benefits and which produce present benefits.

We also found that social services and social welfare programs, such as food assistance, appear to give private sector researchers the most difficulty in terms of whether or not they should be considered human capital. Some feel these programs include both human capital and consumption elements since some of them provide potential future economic benefits, while others provide no benefit beyond the current period.

Furthermore, our research showed that most researchers do not consider retirement and disability programs as examples of human capital. These programs are viewed as sustaining the immediate living standard of the beneficiaries rather than enhancing their skills and future productivity.

Human Resource Programs Warranting Consideration as Human Capital

We identified 154 federal human resource programs,³ with total outlays of \$534 billion in fiscal year 1988, that could be potentially classified as human capital investments. In examining the programs, we found that they ranged from those designed to show a potential return of some future economic benefit, such as education programs, to those whose main purpose is providing a minimum standard of living, such as rental housing assistance and food stamps. As requested, we classified the programs into four categories based on the type of service or assistance they provide—(1) education and training, (2) health, (3) social assistance, and (4) retirement and disability—to illustrate the range of human resource activities that can be considered as candidates for inclusion in a capital budget. Our description of each of the four categories follows:

- Education and training - programs that improve individuals' abilities to obtain an education and marketable job skills. (See appendixes I and II.)
- Health - programs that finance and support activities involving health care services and disease prevention. (See appendixes I and III.)
- Social assistance - programs that provide cash and noncash benefits to individuals, states, localities, and public and private institutions to enhance the quality of an individual's life. (See appendixes I and IV.)
- Retirement and disability - programs that provide statutorily defined benefits to retired or disabled individuals and their beneficiaries. (See appendixes I and V.)

³The 154 programs include 7 programs which we classified in two categories.

Table 1: Human Resource Programs Warranting Consideration as Human Capital in the Capital Budget, Fiscal Year 1988

Dollars in billions

Category	Number of programs	Human resource outlays	Percentage of total human resource outlays	Percentage of total federal outlays ^a
Education and training	79	\$25	5	2
Health	15	131	24	11
Social assistance	36	69	13	5
Retirement and disability	24	309	58	25
Total	154	\$534	100	43

^aFor fiscal year 1988, total outlays were \$1,233 billion. This figure includes OMB's reported outlays (\$1,064 billion) plus offsetting collections from the public (\$134 billion) and proprietary receipts from the public (\$35 billion).

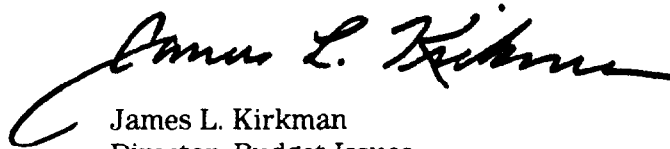
Table 1 shows the outlays made in each of the four human resource categories. Together, they accounted for 43 percent of total federal outlays in fiscal year 1988. The retirement and disability category accounted for the largest outlays—25 percent of total federal outlays and 58 percent of total human resource outlays. On the other hand, education and training accounted for the smallest outlay amounts—2 percent of total federal outlays and 5 percent of total human resource outlays. Appendix I lists for each of the four categories, the programs included in each category and their fiscal year 1988 outlays. Appendix VII analyzes the impact of including human capital programs in our capital budget proposal.

As discussed earlier, in identifying human resource programs warranting consideration as human capital, we did not include education and training costs associated with federal civilian and military personnel because of problems in obtaining accurate information. For example, an Office of Personnel Management official told us that non-Defense agencies' education and training costs in fiscal year 1988 were about \$1 billion, but that this figure did not include all non-Defense agencies' costs. A Department of Defense official told us that about \$18 billion was spent on manpower training in fiscal year 1988.

As agreed with your office, unless you publicly announce the contents of this report earlier, we will not distribute it until 30 days from its date. At that time, we will send copies of this report to the Director of the Congressional Budget Office, the Director of the Office of Management and Budget, and interested congressional committees. Copies will be made available to other parties on request.

Please contact me at (202) 275-9573 if you or your staff have any questions. Other major contributors are listed in appendix IX.

Sincerely yours,



James L. Kirkman
Director, Budget Issues

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Abbreviations

AFDC	Aid to Families With Dependent Children
CBO	Congressional Budget Office
CRS	Congressional Research Service
GAO	General Accounting Office
HIV	human immunodeficiency virus
HUD	Department of Housing and Urban Development stIHA
OMB	Office of Management and Budget
PHA	Public Housing Agency
VA	Department of Veterans Affairs

Human Resource Programs Warranting Consideration as Human Capital in a Capital Budget

This appendix lists four categories of human resource programs—education and training, health, social assistance, and retirement and disability—that warrant consideration as human capital investments in a capital budget. For each category, we identify the individual program by its budget subfunction (for example, Ground Transportation, 401) and its fiscal year 1988 outlays. Some programs in this appendix are included in more than one category and/or have a research and development component. These programs are designated by an asterisk (*). In addition, we listed program administration accounts for consistency purposes because administrative costs are buried in many of the program amounts. These programs are designated by a pound sign (#). A plus sign (+) denotes amounts totaling less than \$500,000.

Dollars in millions

	1988 outlays
Education and Training Programs	
General Science and Basic Research (251)	
Science and Engineering Education Activities*	\$88
Agricultural Research Services (352)	
Extension Service	\$318
Foreign Agricultural Service	85
National Agricultural Library	12
Cooperative State Research Service*	7
Total	\$422
Other Advancement of Commerce (376)	
Minority Business Development	\$40
Ground Transportation (401)	
Research, Training, and Human Resources*	\$18
Water Transportation (403)	
Operation and Training*	\$73
Elementary, Secondary, and Vocational Education (501)	
Compensatory Education for the Disadvantaged*	\$4,031
Education for the Handicapped*	1,443
Vocational and Adult Education*	1,261
Impact Aid	654
School Improvement Programs*	442
Operation of Indian Education	273

(continued)

**Appendix I
Human Resource Programs Warranting
Consideration as Human Capital in a
Capital Budget**

	1988 outlays
Indian Education	18
Bilingual, Immigrant, and Refugee Education*	157
Special Institutions for the Handicapped*	23
Program Administration* #	19
Total	\$8,320

Higher Education (502)

Student Financial Assistance	\$5,273
Higher Education*	401
Howard University*	164
Special Institutions for the Handicapped*	62
James Madison Memorial Fellowship Foundation	13
Harry S. Truman Scholarship Trust Fund	3
Barry Goldwater Scholarship and Excellence in Education Fund	0
Payment to the Institute of American Indian and Alaska Native Culture and Arts Development	0
Program Administration* #	72
Total	\$5,988

Research and General Education Aids (503)

Corporation for Public Broadcasting	\$214
Grants and Administration	166
National Endowment for the Humanities	134
Libraries*	96
Education Research and Statistics*	25
Grants and Administration	21
National Capital Arts and Cultural Affairs	5
Collection and Distribution of Library Materials	+
Commission on Education of the Deaf	+
Gifts and Donations, Humanities	+
Gifts and Donations, Arts	+
Gifts and Donations, Museum Services	+
National Center for the Study of Afro-American History and Culture	+
National Commission on Libraries and Information Science, Contributions	+
Science, Space, and Technology Education Trust Fund	0
Payment to Endowment Challenge Fund	0
Program Administration* #	132
Total	\$793

Training and Employment (504)

Training and Employment Services*	\$3,695
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(continued)

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Human Resource Programs Warranting
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	1988 outlays
Unemployment Trust Fund*	1,009
Community Service Employment for Older Americans	324
Work Incentives	90
Program Administration*#	62
Total	\$5,180
Social Services (506)	
Rehabilitation Services and Handicapped Research*	\$1,484
Human Development Services*	41
Payments to States for Foster Care and Adoption Assistance*	3
Program Administration*#	19
Total	\$1,547
Health Care Services (551)	
Health Resources and Services*	\$10
Education and Training of Health Care Work Force (553)	
Health Resources and Services*	\$227
National Institute of General Medical Sciences*	63
National Library of Medicine*	43
National Heart, Lung, and Blood Institute*	40
Alcohol, Drug Abuse, and Mental Health*	29
National Cancer Institute*	25
National Institute of Diabetes, and Digestive and Kidney Diseases*	22
National Institute of Neurological (and Communicative) Disorders and Stroke*	15
National Institute of Child Health and Human Development*	14
National Institute of Allergy and Infectious Diseases*	12
National Institute of Environmental Health Sciences*	11
National Institute on Aging*	8
National Institute of Arthritis, Musculoskeletal, and Skin Diseases*	6
National Institute of Dental Research*	5
National Eye Institute*	5
National Center for Nursing Research*	2
Research Resources*	2
National Institute of Deafness and Other Communication Disorders*	0
Office of the Director#	10
Total	\$539

(continued)

**Appendix I
Human Resource Programs Warranting
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	1988 outlays
Other Income Security (609)	
Refugee and Entrant Assistance*	\$66
Supplemental Security Income Program*	13
Total	\$79
Social Security (651)	
Federal Disability Insurance Trust Fund*	\$18
Veterans Education, Training, and Rehabilitation (702)	
Readjustment Benefits	\$700
Post-Vietnam Era Veterans Education Account	303
Veterans Job Training	25
Total	\$1,028
Hospital and Medical Care for Veterans (703)	
Medical Care*	\$541
Assistance for Health Manpower Training Institutions	+
Total	\$541
Criminal Justice Assistance (754)	
National Institute of Corrections*	\$6
Total Education and Training Programs	\$24,690
Health Programs	
Health Care Services (551)	
Grants to States for Medicaid	\$30,462
Health Resources and Services Administration*	1,217
Federal Indian Health Service	935
Alcohol, Drug Abuse, and Mental Health Administration*	720
Disease Control, Research, and Training*	484
Public Health Service Emergency Fund	27
Federal Indian Health Administration	0
Vaccine (Injury Compensation) Improvement Program	0
Program Management* #	51
Public Health Service Management* #	43
Total	\$33,939
Health Research (552)	
Disease Control, Research, Training*	38
Program Management*	11
Public Health Service Management* #	45
Total	\$94

(continued)

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Human Resource Programs Warranting
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	1988 outlays
Medicare (571)	
Federal Hospital Insurance Trust Fund	\$52,730
Federal Supplementary Medical Insurance Fund	34,947
Federal Catastrophic Drug Insurance Trust Fund	0
Federal Supplementary Medical Insurance, Catastrophic	0
Federal Hospital Insurance Catastrophic Coverage Reserve Fund	0
Total	\$87,677
Hospital and Medical Care for Veterans (703)	
Veterans Health Service and Research Administration*	\$9,139
Total Health Programs	\$130,849
Social Assistance Programs	
Farm Income Stabilization (351)	
Temporary Emergency Food Assistance Program	\$49
Social Services (506)	
Social Services Block Grant	\$2,666
Human Development Services*	2,135
Payments to States for Foster Care and Adoption Assistance*	988
Community Services Block Grant	408
Interim Assistance to States for Legalization	10
Housing Counseling Assistance	3
Total	\$6,210
Unemployment Compensation (603)	
Unemployment Trust Fund*	\$17,589
Federal Unemployment Benefits and Allowances	131
Total	\$17,720
Housing Assistance (604)	
Rental Housing Assistance	\$11,042
Payments for Operation of Low-Income Housing Projects	1,489
Rental Housing Assistance Fund	70
Emergency Shelter Grants Program	23
Rural Housing Voucher Program	15
Very Low-Income Housing Repair Grants	13
Transitional and Supportive Housing Demonstration Program	11
Congregate Services	5
Interagency Council on the Homeless	+
Nonprofit Sponsor Assistance	0
HUD Public Housing Interest Subsidy Payments	0

(continued)

**Appendix I
Human Resource Programs Warranting
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	1988 outlays
Flexible Subsidy Fund	(36)
Total	\$12,632
Food and Nutrition Assistance (605)	
Food Stamp Program	\$12,265
Child Nutrition (Programs) Payments to States	4,286
Special Supplemental Food Program for Women, Infants, and Children	1,852
Nutrition Assistance for Puerto Rico	880
Funds for Strengthening Markets, Income, and Supply (Section 32)	382
Cash and Commodities for Selected Groups	194
Emergency Food and Shelter Program	120
Special Milk Program	18
Food Program Administration#	85
Total	\$20,082
Other Income Security (609)	
Family Support Payments to States	\$10,764
Low Income Home Energy Assistance	1,585
Refugee and Entrant Assistance*	255
Payments to States from Receipts for Child Support	+
Payments to States for Aid to Families With Dependent Children (AFDC) Work Programs	0
Family Support Administration* #	68
Total	\$12,672
Total Social Assistance Programs	\$69,365
Retirement and Disability Programs	
General Retirement and Disability Insurance (601)	
Railroad Social Security Equivalent Benefit Account	\$6,396
Rail Industry Pension Fund	2,468
Special Benefits for Disabled Coal Miners	919
Black Lung Disability Fund	639
Federal Windfall Subsidy	349
Supplemental Annuity Pension Fund	114
Special Workers' Compensation Expenses	75
Special Benefits	4
Pension Benefit Guaranty Corporation Fund	222
Total	\$11,186

(continued)

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Human Resource Programs Warranting
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	1988 outlays
Federal Employee Retirement and Disability (602)	
Civil Service Retirement and Disability Trust Fund	\$28,140
Military Retirement Fund	19,009
Foreign Service Retirement and Disability Trust Fund	287
Federal Employees' Compensation Act Benefits	212
Judicial Survivors' Annuities Fund	4
Retired Pay, Defense	2
Tax Court Judges Survivors Annuity Fund	+
Judicial Officers' Retirement Fund	0
Panama Canal Commission Fund	0
Total	\$47,654
Other Income Security (609)	
Supplemental Security Income*	\$15,191
Social Security (651)	
Federal Old-Age and Survivors Insurance Trust Fund	\$197,902
Federal Disability Insurance Trust Fund*	22,339
Total	\$220,241
Income Security for Veterans (701)	
Compensation	\$11,252
Pensions	3,935
Reinstated Entitlement Program for Survivors Under Public Law 97-377	(1)
Total	\$15,186
Total Retirement and Disability Programs	\$309,458
Total Human Resource Programs	\$534,362

Description of Education and Training Programs

This appendix describes the individual programs listed under the education and training category in appendix I.¹ Some of the programs in this appendix have parts which are included in more than one category and/or have a research and development component. This information is provided in the description for those programs.

General Science and Basic Research

Science and Engineering Education Activities—This program provides funding for the following activities: research career development; materials development research and informal science education; teacher preparation and enhancement; studies and program assessment; and undergraduate science, engineering, and mathematics education. This program has a research and development component; see appendix VI. (Z-72)

Agricultural Research and Services

Extension Service—This service provides funds that are used primarily for the employment of county extension workers and paraprofessionals who provide advice and assistance in the application of improved methods for agricultural production, marketing, nutrition, family living, and community development. (E-12)

Foreign Agricultural Service—This service provides assistance to American farmers and traders by helping them take maximum advantage of increased opportunities to (1) sell U.S. agricultural commodities abroad and (2) increase their farm income. (E-16)

National Agricultural Library—This library acquires, preserves, and disseminates a comprehensive collection of reliable information in all phases of the agricultural and allied sciences. (E-13)

Cooperative State Research Service—This service administers grants and payments to state institutions for agricultural research and higher education. This program has a research and development component; see appendix VI. (E-10)

Other Advancement of Commerce

Minority Business Development—This program fosters, promotes, and develops minority business enterprise by providing grants, contracts, and other agreements with public or private organizations. (F-12)

¹The summaries were condensed from the Budget of the United States, Fiscal Year 1990—Appendix. The corresponding budget page number follows each summary.

Ground Transportation

Research, Training, and Human Resources—This program provides grants for advance training in the field; grants to public and private organizations for establishing or continuing pilot projects and research for mass transportation systems with the purpose of developing, testing, and demonstrating the feasibility of improving the cost-effectiveness of mass transportation services; grants for entrepreneurial activities; grants for minority business enterprises; and grants for human resources research and development.

Water Transportation

Operation and Training—This program provides funding for the Merchant Marine Training Program and for supplementary training of merchant marine personnel. This program has a budget of \$1.5 billion. (R-45)

Elementary, Secondary, and Vocational Education

Compensatory Education for Disadvantaged Children—This program provides funds to local educational agencies for the purpose of providing educational services to low-income, culturally handicapped, or neglected children and their parents. It also provides for the development of activities. This program has a budget of \$1.5 billion. (I-1)

Education for the Handicapped—This program provides educational agencies and state educational services to provide (1) special education services, (2) media and captioning services, (3) technical assistance, (4) research and development component.

Vocational and Adult Education—This program provides vocational education and training for the purpose of obtaining a high school diploma or equivalent. This program has a budget of \$1.5 billion. (R-45)

Impact Aid—This program provides (a) payments to school districts for losses incurred due to the federal activities in their areas, (b) disaster assistance, and (c) funds for construction in school districts that serve children who have a parent connected with a federal activity. (I-2)

School Improvement Programs—These programs provide grants to states to (1) improve the quality of elementary and secondary education for children in public and private schools, (2) assist educators in adopting various educational programs, (3) combat drug and alcohol abuse in schools and communities, (4) educate teachers in drug and alcohol abuse, and (5) provide financial assistance to eligible magnet schools, students, and educators. This program has a research and development component; see appendix VI. (I-2)

Operation of Indian Education—This Department of the Interior program provides financial assistance to Indian students for chapter 1 programs such as education for the handicapped, bilingual education, math and science education, and drug education. (N-48)

Indian Education—This Department of Education program provides grants to local educational agencies and tribal schools for supplementary elementary and secondary education programs to meet the special educational and culturally-related academic needs of Indian children. Also, it funds special programs for Indian students and adults. (I-4)

Bilingual, Immigrant, and Refugee Education—This program provides grants to school districts to help finance educational services for immigrant students. This program has a research and development component; see appendix VI. (I-5)

Special Institutions for the Handicapped—This program supports the production of free educational materials for blind students below the college level by the American Printing House for the Blind. Also, it supports Gallaudet University's Model Secondary School for the Deaf and the Kendall Demonstration Elementary School for younger children. This program has a research and development component; see appendix VI. (I-9)

Program Administration—This program provides centralized support, administrative services, and overall policy development and strategic planning. (I-25)

Higher Education

Student Financial Assistance—This program provides grants, loans, and work-study opportunities to eligible students in postsecondary schools. (I-11)

Higher Education—This program provides financial assistance to historically black colleges and universities, legal training for the disadvantaged, scholarships and fellowships for outstanding students, aid to college students from disadvantaged backgrounds, training programs for the unemployed and disadvantaged, and other programs. This program has a research and development component; see appendix VI. (I-18)

Howard University—This program provides partial support for university programs and for the teaching hospital facilities. This program has a research and development component; see appendix VI. (I-19)

Special Institutions for the Handicapped—This program provides support for the National Technical Institute for the Deaf, a national residential center which provides postsecondary technical education to prepare deaf people for employment. Also, it provides support for Gallaudet University's undergraduate higher education program for deaf persons, a preparatory program for students who need training to qualify them for college admission, a graduate program in fields of study related to deafness, and continuing education and public service programs. This program has a research and development component; see appendix VI. (I-9)

James Madison Memorial Fellowship Foundation—This fund awards fellowships to individuals selected for their academic achievement and their potential to become secondary school teachers of social studies and American history. (Z-53)

Harry S. Truman Scholarship Trust Fund—This fund awards scholarships to qualified college students who demonstrate outstanding potential for and interest in careers in local, state, or federal service. (Z-42)

Barry Goldwater Scholarship and Excellence in Education Fund—This fund awards scholarships and fellowships to outstanding graduate and undergraduate students who intend to pursue careers or advanced degrees in science or mathematics. (Z-6)

Payment to the Institute of American Indian and Alaska Native Culture and Arts Development—This nonprofit corporation provides grants to

native Americans who wish to pursue a postsecondary education in various fields of Indian art and culture. (Z-45)

Program Administration—This program is described under “Elementary, Secondary, and Vocational Education” in this appendix. (I-25)

Research and General Education Aids

Corporation for Public Broadcasting—This corporation provides direct payments to public television and radio stations to be used at their discretion for purposes related primarily to program production or acquisition. (Z-12)

Grants and Administration—This National Endowment for the Arts fund provides grants to, or contracts with, groups or individuals of exceptional talent, and state or regional organizations engaged in or concerned with the arts. (Z-65)

National Endowment for the Humanities—This program funds activities intended to improve the quality of education and teaching in the humanities, to strengthen the scholarly foundation for humanities study and research, and to advance understanding of the humanities among general audiences. (I-11)

Libraries—This program provides grants to public library systems, library programs at institutions of higher education, and major research libraries. This program has a research and development component; see appendix VI. (I-24)

Education Research and Statistics—This program (1) provides funding to research centers that focus on topics of national concern in education, (2) collects statistics on educational institutions and on individuals to monitor trends in education, and (3) surveys young Americans to provide reliable information about the nation’s attainment in certain important skill areas. This program has a research and development component; see appendix VI. (I-24)

Grants and Administration—This Institute of Museum Services program provides competitive grants to a broad range of museums. (Z-67)

National Capital Arts and Cultural Affairs—This program provides general operating support to Washington, D.C., arts and other cultural organizations. (Z-8)

Collection and Distribution of Library Materials—This Library of Congress program collects and distributes copies of foreign library material to libraries and research centers in the United States. (A-14)

Commission on Education of the Deaf—This commission studies the availability and quality of education programs provided to deaf individuals. (Z-103)

Gifts and Donations, Humanities—This program uses money and other donated property to support the activities of the Institute of Museum Services. (Z-67)

Gifts and Donations, Arts—This National Endowment for the Arts program uses money and other donated property to support art projects and activities. (Z-66)

Gifts and Donations, Museum Services—This Institute of Museum Services program uses money and other donated property to support the activities of the Institute. (Z-67)

National Center for the Study of Afro-American History and Culture—This program provides support for a commission which is responsible for making recommendations on the development and operation of the National Center for the Study of Afro-American History and Culture. (Z-56)

National Commission on Libraries and Information Science, Contributions—This commission uses contributions to develop and coordinate plans to meet the Nation's library and information needs, and for advising the President and the Congress on national library and information science policy. (Z-60)

Science, Space, and Technology Education Trust Fund—This program provides grants for activities directed at improving science, space, and technology education in the United States. (W-7)

Payment to Endowment Challenge Fund—This fund provides income for the educational and administrative activities of the Woodrow Wilson International Center for Scholars. (Z-101)

Program Administration—This program is described under “Elementary, Secondary, and Vocational Education” in this appendix. This program has a research and development component; see appendix VI. (I-25)

Training and Employment

Training and Employment Services—This program provides grants to states and federally administered programs for the purpose of establishing job training programs and providing other services for economically disadvantaged persons. This program has a research and development component; see appendix VI. (P-1)

Unemployment Trust Fund—This program provides benefit payments to eligible unemployed individuals. One component of this program is veterans’ employment and training. Most of this program is included in the social assistance category; see appendix IV. (P-6)

Community Service Employment for Older Americans—This program provides part-time work experience in community service activities to unemployed, low-income persons aged 55 and over. (P-3)

Work Incentives—This program provides assistance to individuals receiving support from the Aid to Families with Dependent Children program to achieve self-support through a program of training, employment, and support services. (K-4)

Program Administration—This Employment and Training Administration program provides (1) job training, policy direction, and management for the administration of the nationwide public employment service system and the unemployment insurance services in each state, (2) the settlement of trade adjustment petitions, (3) a system of collecting and analyzing labor market information, and (4) financial and administration management. This program has a research and development component; see appendix VI. (P-1)

Social Services

Rehabilitation Services and Handicapped Research—This program provides matching funds to state vocational rehabilitation agencies to assist physically and mentally handicapped individuals to become employed. It includes the following programs: Vocation Rehabilitation State Grants, Supported Employment, Client Assistance, Service and Demonstration Projects, Helen Keller Center, Independent Living Training, National Institute on Disability and Rehabilitation Research, and Technology

Assistance. This program has a research and development component; see appendix VI. (I-7)

Human Development Services—This program provides grants to states for services for children, the elderly, and other special groups. It funds the following programs: Head Start; Child Development Associate Scholarships; Runaway and Homeless Youth; Child Abuse State Grants; Child Abuse Discretionary Activities; Child Abuse Challenge Grants; Dependent Care Planning and Development Grants; Temporary Child Care and Crisis Nurseries Grants; Child Welfare Services; Child Welfare Training; Child Welfare Research and Demonstration; Adoption Opportunities; Family Violence Grants; Family Crisis Programs; Title III Services and Meals; Grants to Indian Tribes; Research, Training and Discretionary Programs; State Grants and Advocacy; Administration for Native Americans; and Human Services Research, Training, and Demonstration. Most of this program is included in the social assistance category; see appendix IV. Also, the program has a research and development component; see appendix VI. (K-41)

Payments to States for Foster Care and Adoption Assistance—This program provides assistance for children who must be placed outside the home and subsidies for families adopting children with special needs. Its programs include: Foster Care, Independent Living, and Adoption Assistance. Most of this program is included in the social assistance category; see appendix IV. Also, the program has a research and development component; see appendix VI. (K-43)

Program Administration—This program is described under “Elementary, Secondary, and Vocational Education” in this appendix. (I-25)

Health Care Services

Health Resources and Services—This program supports health resources and health services categorical programs, and the Maternal and Child Health block grant. Most of this program is included in the health category; see appendix III. (K-3)

Education and Training of Health Care Work Force

Health Resources and Services—This program is described under “Health Care and Services” in this appendix. (K-3)

National Institute of General Medical Sciences—This institute supports biomedical research and research training in the areas of cellular and

molecular basis of disease, genetics, pharmacological sciences, physiology, biophysics, physiological sciences, human genome research, and minority access to research careers. This program has a research and development component; see appendix VI. (K-16)

National Library of Medicine—This institute supports medical library services, and research and development in biomedical communications. This program has a research and development component; see appendix VI. (K-22)

National Heart, Lung, and Blood Institute—This institute supports research and research training in the areas of heart, lung, blood vessel, and blood diseases. This program has a research and development component; see appendix VI. (K-13)

Alcohol, Drug Abuse, and Mental Health—This institute supports treatment, prevention, research, and research training in the areas of alcohol, drug abuse, and mental health. Most of this program is included in the health category; see appendix III. Also, the program has a research and development component; see appendix VI. (K-25)

National Cancer Institute—This institute attempts to reduce the incidence of morbidity and mortality from cancer through a broad range of basic and applied research, prevention, control, and resource development activities. This program has a research and development component; see appendix VI. (K-13)

National Institute of Diabetes, and Digestive and Kidney Diseases—This institute supports research and research training in the areas of diabetes, and digestive and kidney diseases. This program has a research and development component; see appendix VI. (K-15)

National Institute of Neurological (and Communicative) Disorders and Stroke—This institute supports research and research training in the areas of neurological disorders and stroke. This program has a research and development component; see appendix VI. (K-15)

National Institute of Child Health and Human Development—This institute supports research and research training in maternal and child health and in population sciences. This program has a research and development component; see appendix VI. (K-17)

**Appendix II
Description of Education and
Training Programs**

National Institute of Allergy and Infectious Diseases—This institute supports research and research training in allergy, immunology, and transplant programs and in microbiology and infectious diseases. This program has a research and development component; see appendix VI. (K-16)

National Institute of Environmental Health Sciences—This institute supports biomedical research and research training related to environmental health hazards and toxicology research. This program has a research and development component; see appendix VI. (K-18)

National Institute on Aging—This institute supports biomedical research and research training in the field of aging. This program has a research and development component; see appendix VI. (K-19)

National Institute of Arthritis and Musculoskeletal and Skin Diseases—This institute supports biomedical research and research training in the areas of arthritis, and musculoskeletal and skin diseases. This program has a research and development component; see appendix VI. (K-19)

National Institute of Dental Research—This institute supports research and research training in diseases of the teeth and supporting tissue and in disorders of craniofacial structure, functions, and behavior. This program has a research and development component; see appendix VI. (K-14)

National Eye Institute—This institute supports research and research training in the areas of eye diseases and visual disorders. This program has a research and development component; see appendix VI. (K-17)

National Center for Nursing Research—This institute supports biomedical research and research training in the field of nursing. This program has a research and development component; see appendix VI. (K-20)

Research Resources—This National Institutes of Health program develops and supports specialized transdisciplinary research resources in the nation's research institutions. This program has a research and development component; see appendix VI. (K-20)

National Institute of Deafness and Other Communication Disorders—This institute supports biomedical research and research training in the field of deafness and other communication disorders. This program has a research and development component; see appendix VI. (K-21)

Office of the Director—This office provides overall administration of the National Institutes of Health through centralized services, policy development, and program coordination. (K-22)

Other Income Security

Refugee and Entrant Assistance—This program provides assistance to refugees seeking employment, job training, and English-as-a-second-language training. Also, it provides payments to states for administering the refugee assistance program. Most of this program is included in the social assistance category; see appendix IV. (K-39)

Supplemental Security Income Program—This program provides vocational rehabilitation and monitors the treatment extended to alcoholics and drug addicts who receive supplemental security income. Also, it provides a minimum income benefit to individuals or couples who are either aged, blind, or disabled. A part of this program is included in the retirement and disability category; see appendix V. (K-37)

Social Security

Federal Disability Insurance Trust Fund—This program reimburses states for vocational rehabilitation, funds research and development projects, and provides income to insured disabled workers and their dependents. Most of this program is included in the retirement and disability category; see appendix V. Also, it has a research and development component; see appendix VI. (L-2)

Veterans Education, Training, and Rehabilitation

Readjustment Benefits—This program finances the education and training of veterans and service persons whose service was, at least in part, between February 1, 1955, and December 31, 1976, and certain peacetime veterans and eligible dependents of those veterans. Also, it provides vocational rehabilitation to certain disabled veterans, grants for specially adapted housing, and grants for cars with the approved adaptive equipment. (T-5)

Post-Vietnam Era Veterans Education Account—This program provides educational assistance payments to eligible Vietnam era veterans. (T-21)

Veterans Job Training—This program provides job training and related benefits to eligible veterans who entered the program prior to March 31, 1990. (T-8)

Hospital and Medical Care for Veterans

Medical Care—This Veteran's Health Service and Research Administration program provides payments for residency and other health training services. Most of this program is included in the health category; see appendix III. (T-24)

Assistance for Health Manpower Training Institutions—This program awards grants to assist in the establishment of five new state medical schools located in proximity to and operated in conjunction with VA medical centers. (T-28)

Criminal Justice Assistance

National Institute of Corrections—This program awards contracts and grants to correctional organizations for technical assistance, training, research, and evaluation of correctional activities, and to maintain an information service on the latest developments in the field of corrections. This program has a research and development component; see appendix VI. (O-21)

Description of Health Programs

This appendix describes the individual programs listed under the health category in appendix I.¹ Some of the programs in this appendix have parts which are included in more than one category and/or have a research and development component. This information is provided in the description for those programs.

Health Care Services

Grants to States for Medicaid—This program assists the states in providing medical care to their low-income populations by granting federal matching payments under Title XIX of the Social Security Act. (K-30)

Health Resources and Services—This program provides funding for health resources and health services categorical programs, and the Maternal and Child Health block grant. A part of this program is included in the education and training category; see appendix II. (K-2)

Federal Indian Health Administration—This program provides funding for medical care and public health services for American Indians and Alaska natives. (K-9)

Alcohol, Drug Abuse, and Mental Health Administration—This program provides federal support for the treatment, prevention, research, and research training in the areas of alcohol and drug abuse, and mental health. A part of this program is included in the education and training category; see appendix II. Also, the program has a research and development component; see appendix VI. (K-25)

Disease Control, Research, and Training—This program includes preventive health block grants; efforts to prevent and avoid complications from sexually transmitted diseases; provisions for immunization against such diseases as polio; efforts to improve or develop preventive, diagnostic, and control methods for infectious diseases; efforts to reduce or prevent illness associated with certain chronic diseases and to reduce the adverse impacts of environmental hazards; efforts to eliminate and control occupational safety and health hazards; efforts to contain epidemics; efforts to collect, maintain, analyze, and disseminate statistics on health; and efforts to prevent the spread of human immunodeficiency virus (HIV). A part of this program is included under “Health Research” in this appendix. Also, the program has a research and development component; see appendix VI. (K-11)

¹The summaries were condensed from the Budget of the United States, Fiscal Year 1990—Appendix. The corresponding budget page number follows each summary.

Public Health Service Emergency Fund—This fund provides grants to states for the purchase of drugs effective against HIV-related illnesses. (K-27)

Federal Indian Health Administration—This program provides medical care, public health services, and health professions scholarships for American Indians and Alaska natives. (K-9)

Vaccine (Injury Compensation) Improvement Program—This program provides compensation for vaccine-related injuries or deaths. (S-10)

Program Management—This Health Care Financing Administration program provides funding for research, medicare contractors, state certification, and administrative costs. (K-31)

Public Health Service Management—This account provides funds for management staffing of the Public Health Service, health services research, disease prevention and health promotion; programs on adolescent family life, family planning, and minority health, and physical fitness and sports. (K-26)

Health Research

Disease Control, Research, and Training—This program is described under “Health Care Services” in this appendix. (K-11)

Program Management—This Health Care Financing Administration program is described under “Health Care Services” in this appendix. (K-31)

Public Health Service Management—This program is described under “Health Care Services” in this appendix. This program has a research and development component; see appendix VI. (K-26)

Medicare

Federal Hospital Insurance Trust Fund—This fund pays for the hospital and related care for most individuals age 65 or older and for disabled people. (K-32)

Federal Supplementary Medical Insurance Trust Fund—This fund pays for physician and certain other medical services, and the treatment of end-stage renal disease for eligible enrollees. (K-34)

Federal Catastrophic Drug Insurance Trust Fund—This fund, beginning in 1990, will phase in coverage of outpatient prescription drugs in

accordance with the Medicare Catastrophic Coverage Act of 1988.
(K-36)

Federal Supplementary Medical Insurance, Catastrophic—This fund pays for medical services provided to eligible program participants when the cost of those services exceeds the federal medicare limit.
(K-35)

Federal Hospital Insurance Catastrophic Coverage Reserve Fund—This fund provides financing for hospital insurance (Part A) catastrophic benefits. (K-33)

Hospital and Medical Care for Veterans

Veterans Health Service and Research Administration—This program provides payments for the (1) maintenance and operation of VA facilities, (2) hospitalization of patients in VA and other federal hospitals, (3) care given to veterans in community nursing homes and VA-sponsored state home care facilities, (4) outpatient care, (5) medical and prosthetic research, and (6) other miscellaneous health-related services provided to veterans. A part of this program is included in our education and training category; see appendix II. (T-24)

Description of Social Assistance Programs

This appendix describes the individual programs listed under the social assistance category in appendix I.¹ Some of the programs in this appendix have parts which are included in more than one category and/or have a research and development component. This information is provided in the description of those programs.

Farm Income Stabilization

Temporary Emergency Food Assistance Program—This program provides funds to states for the storage and distribution costs incurred by Commodity Credit Corporation commodities, and for the purchase of additional commodities. (E-32)

Social Services

Social Services Block Grant—This block grant provides grants to states to (1) prevent, reduce, or eliminate economic dependency, (2) prevent neglect, abuse, or exploitation of children and adults, (3) prevent or reduce inappropriate institutional care, (4) secure admission or referral for institutional care when other forms of care are not appropriate, and (5) provide services to individuals in institutions. (K-41)

Human Development Services—This program provides grants to states for services for children, the elderly, and other special groups. It funds the following programs: Head Start; Child Development Associate Scholarships; Runaway and Homeless Youth Child Abuse State Grants; Child Abuse Discretionary Activities; Child Abuse Challenge Grants; Dependent Care Planning and Development Grants; Temporary Child Care and Crisis Nurseries Grants; Child Welfare Services; Child Welfare Training; Child Welfare Research and Demonstration; Adoption Opportunities; Family Violence Grants; Family Crisis Programs; Title III Services and Meals; Grants to Indian Tribes; Research, Training and Discretionary Programs; State Grants and Advocacy (Developmental Disabilities); Administration for Native Americans; and Human Services Research, Training, and Demonstration. A part of this program is included in the education and training category; see appendix II. Also, this program has a research and development component; see appendix VI. (K-41)

Payments to States for Foster Care and Adoption Assistance—This program provides support maintenance assistance for children who must be placed outside the home and subsidies for families adopting children with special needs. Its programs are: Foster Care; Independent Living;

¹The summaries were condensed from the Budget of the United States, Fiscal Year 1990—Appendix. The corresponding budget page number follows each summary.

and Adoption Assistance. A part of this program is included in the education and training category; see appendix II. Also, the program has a research and development component; see appendix VI. (K-43)

Community Services Block Grant—This block grant provides funds to states for services and activities having a measurable or potential major impact on causes of poverty in the community or those areas of the community where poverty is a particularly acute problem. (K-40)

Interim Assistance to States for Legalization—This program provides grants to states to assist in providing financial, medical, and educational assistance to newly legalized aliens. (K-41)

Housing Counseling Assistance—This program provides comprehensive housing counseling services to eligible homeowners or tenants, including default, prepurchase, and renter counseling. (M-4)

Unemployment Compensation

Unemployment Trust Fund—This program provides benefit payments to eligible unemployed individuals. It includes the following programs: federal-state unemployment insurance, state administrative expenses, federal administrative expenses, interest on refunds, repayment of advances from the general fund, and railroad unemployment insurance. A part of this program is included in the education and training category; see appendix II. (P-6)

Federal Unemployment Benefits and Allowances—This program provides resources, including weekly cash benefits, training, job search and relocation allowances to workers displaced by trade conditions and/or natural disasters. It includes the following programs: trade adjustment assistance benefits, trade adjustment assistance training, and unemployment assistance and payments under other federal unemployment programs. (P-3)

Housing Assistance

Rental Housing Assistance—This program provides funding for the following housing programs: Lower Income Housing (section 8); Public and Indian Housing; Rent Supplement; Homeownership and Rental Housing Assistance (sections 235 and 236); Rental Housing Development Grants; Rental Rehabilitation Grants; and Nehemiah Grants. (M-2)

Payments for Operation of Low-Income Housing Projects—This program provides operating subsidy payments to local Public Housing

Agencies (PHA) and Indian Housing Authorities (IHA) to assist in meeting certain deficits in operation of PHA-owned and IHA-owned low-income housing. (M-17)

Rental Housing Assistance Fund—This fund contains rental collections in excess of the established basic rents for units in section 236 subsidized projects. (M-13)

Emergency Shelter Grants Program—This program provides grants to voluntary organizations at the local level to supplement their programs for emergency food and shelter. (M-26)

Rural Housing Voucher Program—This program provides tenants with vouchers that will cover the difference between 30 percent of a recipient's income and the median rent cost in the recipient's residential area. (E-53)

Very Low-Income Housing Repair Grants—This program provides grants to very low-income, elderly residents of rural areas to improve or modernize their dwellings. (E-53)

Transitional and Supportive Housing Demonstration Program—This program provides assistance to deinstitutionalized homeless individuals; homeless families with children; homeless individuals with mental disabilities; and other homeless persons in obtaining, rehabilitating, and operating housing structures. (M-4)

Congregate Services—This program provides payments to local public housing agencies and other nonprofit corporations who supply support services for the elderly or the handicapped. (M-4)

Interagency Council on the Homeless—This program reviews federal activities and programs to help the homeless; works with state and local governments and private organizations on homeless-related efforts; collects and disseminates information; and prepares reports on the homeless issue for the President and the Congress. (Z-104)

Nonprofit Sponsor Assistance—This program provides interest-free loans to nonprofit organizations which in turn plan housing projects that are financed under section 202 of the Housing for the Elderly or Handicapped Program. (M-15)

HUD Public Housing Interest Subsidy Payments—This program provides payments to cover the additional interest expenses incurred on direct loans to local public housing projects under section 5(c) of the United States Housing Act of 1937. (S-7)

Flexible Subsidy Fund—This program provides funding for essential repairs to correct deficiencies resulting from deferred maintenance and for major capital improvements in subsidized projects. (M-14)

Food and Nutrition Assistance

Food Stamp Program—This program provides to eligible members of low-income households food stamp coupons that can be used to purchase food at retail stores. (E-85)

Child Nutrition (Programs) Payments to States—This program provides cash and commodity meal subsidies to eligible participants through the School Lunch, School Breakfast, Summer Food Service, and Child Care Food programs. (E-87)

Special Supplemental Food Program for Women, Infants, and Children—This program provides food supplements to low-income pregnant, postpartum, and breastfeeding women, as well as to infants, children, and low-income elderly. (E-88)

Nutrition Assistance for Puerto Rico—This program provides a grant to the Commonwealth of Puerto Rico for the establishment of a food assistance program tailored to the needs of its low-income households. (E-86)

Funds for Strengthening Markets, Income, and Supply (Section 32)—This program provides funding for expanding outlets for nonbasic commodities and for child nutrition programs. Its activities include child nutrition program purchases, emergency (food) surplus removal, disaster relief, and sunflower oil purchases. (E-80)

Cash and Commodities for Selected Groups—This program provides food commodities to individuals on Indian reservations and the Island of Palau, and to nonprofit charitable institutions serving homeless persons. It also provides cash and commodity subsidies for meals served to the elderly. (E-89)

Emergency Food and Shelter Program—This program provides grants to volunteer organizations at the local level to supplement their programs for emergency food and shelter. (Z-28)

Special Milk Program—This program subsidizes the purchase of milk by low-income students in schools and institutions that do not participate in other federally funded meal programs. (E-86)

Food Program Administration—This program provides federal operating expenses of the Food and Nutrition Service programs. (E-85)

Other Income Security

Family Support Payments to States—This program provides grants to states for (1) the federal share of expenditures for AFDC, (2) child support enforcement, and (3) related activities. (K-38)

Low Income Home Energy Assistance—This program provides grants to states and Indian tribes to aid low-income households, energy suppliers, and building operators with high energy costs. (K-39)

Refugee and Entrant Assistance—This program provides payments to states for administering the refugee assistance program and provides federal subsidies for the normal state share of AFDC and Medicaid costs for new refugees. This program also provides employment services, primarily job skills and English-as-a-second-language training. A part of this program is included in the education and training category; see appendix II. (K-39)

Payments to States From Receipts for Child Support—This account receives Internal Revenue Service collections obtained on behalf of the child support enforcement program. The collections are given to the states to pay for related services. (K-41)

Payments to States for AFDC Work Programs—This program provides funds for the job opportunities and basic skills training program and for transitional work incentives funding for states. (K-40)

Program Administration—This Family Support Administration program provides for administration and related research and evaluation costs. This program has a research and development component; see appendix VI. (K-38)

Description of Retirement and Disability Programs

This appendix describes the individual programs listed under the retirement and disability category in appendix I.¹ Some of the programs in this appendix are included in more than one category and/or have a research and development component. This information is provided in the description for those programs.

General Retirement and Disability Insurance

Railroad Social Security Equivalent Benefit Account—This program funds the retirement income of railroad retirees, which is the equivalent of a social security benefit. (Z-93)

Rail Industry Pension Fund—This program provides to railroad retirees payments that are generally equivalent to a social security benefit. (Z-90)

Special Benefits for Disabled Coal Miners—This program provides monthly benefits to coal miners disabled from pneumoconiosis, to surviving widows, and to dependents. (K-37)

Black Lung Disability Fund—This program pays compensation, medical, and survivor benefits to eligible miners and their survivors, if mine employment terminated prior to 1970 or no mine operator can be assigned liability. (P-14)

Federal Windfall Subsidy—This program provides a federal subsidy to the rail industry pension fund for costs not financed by the railroad sector. (Z-87)

Supplemental Annuity Pension Fund—This Railroad Retirement Board program provides supplemental annuities to railroad workers retiring at age 60 with 30 years of creditable railroad service or at age 65 with 25 to 29 years of creditable service. (Z-92)

Special Workers' Compensation Expenses—This program provides supplementary compensation benefits to individuals or their beneficiaries who received secondary injuries which, when combined with a previous disability, result in increased permanent partial disability, permanent total disability, or death. (P-14)

¹The summaries were condensed from the Budget of the United States, Fiscal Year 1990—Appendix. The corresponding budget page number follows each summary.

Special Benefits—This program provides compensation benefits for eligible participants covered under the Longshore and Harbor Workers' Compensation Act and the Federal Employees' Compensation Act. (P-12)

Pension Benefit Guaranty Corporation Fund—This program provides benefit payments, investment management assistance, and legal and financial services to insolvent employers whose pension benefit plans are about to be terminated. (P-9)

Federal Employee Retirement and Disability

Civil Service Retirement and Disability Trust Fund—This program pays annuities to retired employees or their survivors; makes refunds to former employees for amounts withheld and to beneficiaries of employees who died before retirement or before the annuities equaled the amount withheld; and pays the administrative expenses of the Office of Personnel Management and the Merit Systems Protection Board in administering the program. (X-6)

Military Retirement Fund—This program provides retirement pay to retired Army, Navy, Marine Corps, and Air Force personnel, including the reserve components thereof, and retainer pay for inactive fleet reserve personnel. (H-11)

Foreign Service Retirement and Disability Trust Fund—This program provides payments to eligible former foreign service personnel retiring or leaving the system due to disability. (Q-7)

Federal Employees' Compensation Act Benefits—This program provides payments to eligible participants covered under the Federal Employees' Compensation Act and the Longshore and Harbor Workers' Compensation Act. (P-12)

Judicial Survivors' Annuities Fund—This program provides benefits to eligible beneficiaries, upon the deaths of justices, judges, the director of the Federal Judicial Center, and the director of the Administrative Office of the U.S. Courts. (B-9)

Retired Pay, Defense—This program provides payments to retired military personnel. (H-11)

Tax Court Judges Survivors Annuity Fund—This program provides payments to eligible surviving spouses and dependent children of deceased judges of the U.S. Tax Court. (A-22)

Judicial Officers' Retirement Fund—This program provides payments to retired judicial officers. (B-9)

Panama Canal Commission Fund—This program provides funds to meet the Panama Canal Commission's obligations for workers' compensation costs. (P-13)

Other Income Security

Supplemental Security Income Program—This program provides a minimum income benefit to individuals or couples who are either aged, blind, or disabled. Also, it provides vocational rehabilitation and monitors treatment for alcoholics and drug addicts who receive supplemental security income. A part of this program is included in the education and training category; see appendix II. (K-37)

Social Security

Federal Old-Age and Survivors Insurance Trust Fund—This program provides income to retired workers, their dependents, and survivors. (L-1)

Federal Disability Insurance Trust Fund—This program provides income to insured disabled workers and their dependents and reimburses states for vocational rehabilitation. A part of this program is included in the education and training category; see appendix II. Also, the program has a research and development component; see appendix VI. (L-2)

Income Security for Veterans

Compensation—This program provides benefit payments to veterans for disabilities incurred or aggravated during active military service. Death and indemnity compensation is paid to survivors of servicepersons or veterans whose death occurred while on active duty or as a result of service-connected disabilities. (T-12)

Pensions—This program provides benefit payments to (1) veterans who were either on active duty for a specific length of time during a designated war period or who were permanently and totally disabled during their service or (2) their survivors. (T-3)

**Appendix V
Description of Retirement and
Disability Programs**

Reinstated Entitlement Program for Survivors Under Public Law 97-377—This program provides social security benefits to certain surviving spouses or children of veterans who died of service-connected causes. (T-7)

Human Resource Programs With a Research and Development Component

This appendix lists by category—education and training, health, social assistance, or retirement and disability—the human resource programs listed in appendix I which also have a research and development component. Currently, the federal government expenses research and development costs. Some experts believe, however, that these costs should be capitalized and thus included in a capital budget. In this study, we identified human resource programs included in our analysis that had a research and development component. We used OMB's Circular A-11 criteria in identifying those programs with a research and development component. This appendix only includes human resource programs with a research and development component and not all federal programs with a research and development component. The plus sign (+) represents amounts less than \$500,000.

Dollars in millions

	1988 outlays
Education and Training Programs	
General Science and Basic Research (251)	
Science and Engineering Education	\$9
Agriculture Research Services (352)	
Cooperative State Research Service	\$277
Ground Transportation (401)	
Research, Training, and Human Resources	\$1
Water Transportation (403)	
Operation and Training	\$0
Elementary, Secondary, and Vocational Education (501)	
Compensatory Education for the Disadvantaged	\$2
Education for the Handicapped	14
Vocational and Adult Education	15
School Improvement Programs	2
Bilingual, Immigrant, and Refugee Education	3
Special Institutions for the Handicapped	+
Total	\$36

(continued)

**Appendix VI
Human Resource Programs With a Research
and Development Component**

	1988 outlays
Higher Education (502)	
Higher Education	\$1
Howard University	3
Special Institutions for the Handicapped	4
Total	\$8
Research and General Education Aids (503)	
Libraries	\$+
Education Research and Statistics	17
Total	\$17
Training and Employment (504)	
Training and Employment Services	\$6
Employment and Training Administration	2
Total	\$8
Social Services (506)	
Rehabilitation Services and Handicapped Research	\$52
Criminal Justice Assistance (754)	
National Institute of Corrections	\$5
Total Education and Training Programs	\$413
Health Programs	
Health Care Services (551)	
Disease Control, Research, and Training	\$63
Health Research (552)	
National Cancer Institute	\$1,379
National Heart, Lung, and Blood Institute	917
National Institute of Allergy and Infectious Diseases	530
National Institute of General Medical Science	523
National Institute of Diabetes, and Digestive and Kidney Diseases	496
National Institute of Neurological (and Communicative) Disorders and Stroke	492
Alcohol, Drug Abuse, and Mental Health Administration	445
National Institute of Child Health and Human Development	349
National Institutes of Health, Research Resources	329
National Institute of Environmental Health Sciences	236
National Eye Institute	212

(continued)

**Appendix VI
Human Resource Programs With a Research
and Development Component**

	1988 outlays
National Institute on Aging	172
National Institute of Arthritis, Musculoskeletal, and Skin Diseases	135
National Institute of Dental Research	116
Disease Control, Research, and Training	24
National Library of Medicine	19
National Center for Nursing Research	17
National Institute of Deafness and Other Communication Disorders	0
Public Health Service Management	20
Total	\$6,411
Total Health Programs	\$6,474
Social Assistance Programs	
Social Services (506)	
Human Development Services	\$40
Payments to States for Foster Care and Adoption Assistance	13
Total	\$53
Other Income Security (609)	
Family Support Administration	\$10
Total Social Assistance Programs	\$63
Retirement and Disability Programs	
Social Security (651)	
Federal Disability Insurance Trust Fund	\$3
Total Retirement and Disability Programs	\$3
Total Human Resource Programs With Research and Development Component	\$6,953

Analysis of Including Human Resource Programs in GAO's Capital Budget Proposal

In our recent report on restructuring the federal budget, Budget Issues: Restructuring the Federal Budget—The Capital Component (GAO/AFMD-89-52, August 24, 1989), we identified \$141 billion in capital investments for fiscal year 1988. The amount represented \$106 billion in physical investments and \$35 billion in financial investments. Because we did not include human capital programs in our capital budget proposal, capital investments represented 11 percent of total federal outlays in fiscal year 1988.

As table VII.1 shows, if we had included the \$25 billion in education and training programs—generally recognized as human capital—in our proposed capital budget, capital investments would have represented 13 percent of total federal outlays in fiscal year 1988—11 percent for physical and financial investments and 2 percent for education and training. By also including health programs (11 percent)—which some private sector researchers consider human capital—in our capital budget proposal, capital investments would have represented 24 percent of total federal outlays. If we had included the entire \$534 billion in human resource outlays in our proposed capital budget, the total capital budget for fiscal year 1988 would have represented 54 percent of all federal outlays.

Table VII.1: Human Resource, Physical, and Financial Investments Warranting Consideration as Capital Investments in a Capital Budget, Fiscal Year 1988

Dollars in billions			
Category	Human resource, physical, and financial outlays	Percentage of total human resource, physical, and financial outlays	Percentage of total federal outlays ^a
Education and training	\$25	4	2
Social assistance	69	10	5
Health	131	19	11
Physical and financial investments	141	21	11
Retirement and disability	309	46	25
Total	\$675	100	54

^aFor fiscal year 1988, total outlays were \$1,233 billion. This figure includes OMB's reported outlays (\$1,064 billion) plus offsetting collections from the public (\$134 billion) and proprietary receipts from the public (\$35 billion).

Methodology Used for Selecting Human Resource Programs

In identifying human resource programs that warrant consideration as human capital in a capital budget, we first reviewed various publications on human capital investments in the private sector and human resource programs in the federal government to obtain information and insight on this issue. (See bibliography.) Also, we interviewed various officials in CBO, CRS, OMB, and other federal agencies to obtain their views on what federal programs they believe should be classified as human capital investments.

In developing our list of human resource programs warranting consideration as human capital investments, we used four principal sources of information. They included the Budget of the United States Government, Fiscal Year 1990; Budget of the United States Government, Fiscal Year 1990—Appendix; “Special Analysis D, Federal Investment Outlays” of the Budget of the United States Government; and the 1989 Catalog of Federal Domestic Assistance.

Using the Budget of the United States Government, Fiscal Year 1990, we found that human resource programs in the federal budget are included in six budget functions, which are collectively known as the “human resources superfunction.” The following is a description of each budget category in the human resources superfunction:

- Social security - provides cash benefits for retired workers, their eligible dependents, and eligible survivors of deceased workers and for disabled workers and their eligible dependents.
- Income security - provides funding for retirement and disability programs other than social security; unemployment compensation; food and housing assistance for low-income people; and cash welfare for needy people who are aged, blind, disabled, or for families with dependent children.
- Medicare - provides funding for physician and related services, and inpatient health care for people age 65 and older and certain disabled people.
- Health - provides funding for medicaid, grants to states for various health resource services, funding for the National Institutes of Health, education and training of health care workers, and the regulatory activities of the Food and Drug Administration and the Occupational Safety and Health Administration.
- Education, training, employment, and social services - provides grants to states and local governments for (1) elementary, secondary, and vocational education programs, (2) job training programs, and (3) social services for the elderly, families with children, the disabled, and other

Appendix VIII
Methodology Used for Selecting Human
Resource Programs

groups. This program also helps postsecondary students finance their education.

- Veterans benefits and services - provides cash assistance for needy and disabled veterans and survivors of veterans, veterans' education benefits, the Veterans Administration hospital and medical care program, and veterans housing benefits.

Again using the Budget of the United States Government, Fiscal Year 1990, we identified the subfunctions contained in each of the six human resource budget functions. We selected the budget functions and subfunctions listed below for further study because, in our judgement, they represent activities directed towards improving the education, training, health, and general well-being of the American people.

Education, Training,
Employment, and Social
Services (500)

- Elementary, secondary, and vocational education (501)
- Higher education (502)
- Research and general education aids (503)
- Training and employment (504)
- Other labor services (505)
- Social services (506)

Health (550)

- Health care services (551)
- Health research (552)
- Education and training of health care work force (553)
- Consumer and occupational health and safety (554)

Medicare (570)

Income Security (600)

- General retirement and disability insurance (excluding social security) (601)
- Federal employee retirement and disability (602)
- Unemployment compensation (603)
- Housing assistance (604)
- Food and nutrition assistance (605)
- Other income security (609)

Social Security (650)

Veterans Benefits and Services (700)

- Income security for veterans (701)
- Veterans education, training, and rehabilitation (702)
- Hospital and medical care for veterans (703)
- Veterans housing (704)
- Other veterans benefits and services (705)

To identify the accounts and outlays in the budget subfunctions shown above, we used OMB's fiscal year 1990 budget tape. The budget tape only provides account numbers; therefore, we used OMB's Budget of the United States Government, Fiscal Year 1990—Appendix to obtain the title and description of each account.

In addition, we analyzed the OMB printout "Summary of Total Outlays by Investment Category by Defense (Grants/Nongrants) and Nondefense (Grants/Nongrants)" and selected nonphysical and nondefense investment-type activities in the education and training and the research and development categories. Using the document, we obtained the titles and fiscal year 1988 outlay data for the accounts in both categories. In addition, we used the Budget of the United States Government, Fiscal Year 1990—Appendix to obtain the descriptions of the accounts.

Based on our analysis of the human resource accounts and the investment-type accounts, we grouped them into four categories, which we define as:

- Education and training - programs that improve individuals' abilities to obtain an education and marketable skills.
- Health - programs that finance and support activities involving health care services and disease prevention.
- Social assistance - programs that provide cash and noncash benefits to individuals, states, localities, and public and private institutions to enhance the quality of a person's life.
- Retirement and disability - programs that provide statutorily defined benefits to retired and disabled individuals, and their beneficiaries.

Finally, we systematically reviewed the descriptions provided for each budget account in the Budget of the United States Government, Fiscal Year 1990—Appendix and the 1989 Catalog of Federal Domestic Assistance to ensure that we had identified the human resource programs

that, in our judgement, represented an investment in the American population. We subsequently added the following programs:

- Education and training
 - Science and Engineering Education Activities, National Science Foundation
 - Extension Service, Department of Agriculture
 - Research, Training, and Human Resources, Urban Mass Transportation Administration
 - Cooperative State Research, Department of Agriculture
 - Maritime Administration, Operation and Training
 - National Institute of Corrections, Department of Justice
 - Foreign Agricultural Service
 - National Agricultural Library
 - Minority Business Development

- Social assistance
 - Temporary Emergency Food Assistance Program

In developing our list of human resource programs warranting consideration as human capital investments, we had intended to include the training of federal civilian and military employees. However, we were unable to because of the difficulty in obtaining accurate information on these programs. In addition, we excluded research and development programs from consideration because they were not the focus of our assignment. Also, we did not include programs that represent the government's investment in loans and other financial instruments, since they are currently included in the capital component of our restructured budget proposal.

Appendix I provides our list of human resource programs in the fiscal year 1990 federal budget that could conceivably be classified as human capital investments in a capital budget. Appendixes II, III, IV, and V describe each program included in our education and training, health, social assistance, and retirement and disability categories. Appendix VI lists those programs in appendix I which have a research and development element. Appendix VII provides an analysis of including human resource programs in our capital budget proposal.

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Major Contributors to This Report

Accounting and
Financial Management
Division,
Washington, D.C.

Charles W. Culkin, Jr., Senior Assistant Director, Budget Issues
(202) 275-1981
Phillis L. Riley, Evaluator-in-Charge
Nell E. George, Evaluator

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