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ABSTRACT

This annual report contains information on the federal funding of the research and development (R&D) components of the agency programs as proposed for the fiscal year 2002. Research and development data are classified into the same federal budget function categories as those used in the "Budget of the United States Government, Fiscal Year 2002." The report is divided into three sections. Section 1, "Federal R&D Budget Authority by Budget Function" consists of six tables. For the first tie, table 1 contains total combined R&D and R&D plant data. Tables 2, 3, and 6 provide an overview of Federal R&D funding in the context of requested total Federal budget authority. Table 4 contains data on Federal R&D funding for national defense and civilian programs in current and constant 1996 dollars for FYs 1955-2002. Table 5 contains data on budget authority for basic research by budget function for FYs 2000-2002. Section 2, "R&D by Specific Budget Function" presents data on R&D activities conducted within each budget function. This section consists of 18 tables which provide a summary for FYs 2000-2002. Section 3, "Historical Tables" presents two historical data series: (1) Federal R&D funding by budget function for FYs 1955-2002 and (2) Federal funding of basic research for FYs 1978-2002. (MVL)

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Federal R&D Funding by Budget Function

Fiscal Years 2000-2002

An SRS Special Report

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National Science Foundation

October 2001

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Federal R&D Funding by Budget Function

Fiscal Years 2000-2002

An SRS Special Report

Ronald L. Meeks, Project Officer

**Division of Science Resources Statistics
Directorate for Social, Behavioral, and Economic Sciences**

National Science Foundation



October 2001

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NOTES TO THE READER

This annual report contains information on Federal funding of the research and development (R&D) components of agency programs, as proposed by the administration for fiscal year (FY) 2002. R&D data in this report are classified into the same Federal budget function categories used in the *Budget of the United States Government, Fiscal Year 2002*, prepared by the Office of Management and Budget. Proposed FY 2002 funding levels are for budget authority (defined below), which is the basis for initial congressional action. In future *Budget Function* reports, these data will be revised to reflect congressional appropriation and actual program funding decisions. In July, 2001, Congress approved and the President signed into law a supplemental appropriations bill (Public Law 107-20) that included rescissions and supplementals to R&D. These changes affected the Department of Defense (national defense) and the Department of Agriculture's Forest Service (natural resources and environment) FYs 2001 and 2002 estimates for R&D funding. These changes are reflected in this report.

Detailed data are included on *preliminary* estimates for Federal funding of R&D in FY 2001 that reflect all past congressional actions, but may be revised, since at the time of report preparation, FY 2001 had not yet been completed. This report also includes detailed data (by subfunction) on actual budget authorizations of R&D by Federal agencies in FY 2000 and aggregate data (by broad function) on actual R&D budget authorizations in FY 2000 and earlier years.

REPORT ORGANIZATION

These notes introduce basic budget terms and concepts used in this report. The rest of the report is divided into three sections:

Federal R&D Budget Authority by Budget Function consists of six tables. For the first time, table 1 contains total combined R&D and R&D plant data. Tables 2, 3, and 6 provide an overview of Federal R&D funding in the context of requested total Federal budget authority. Table 4 contains data on Federal R&D funding for national defense and civilian programs in current and constant 1996 dollars for FYs 1955-2002. Table 5 contains data on budget authority for basic research by budget function for FYs 2000-2002.

R&D by Specific Budget Function presents data on R&D activities conducted within each budget function. This section consists of 18 tables (tables 7 through 24), which provide a summary for FYs 2000-2002.

Historical Tables presents two historical data series: (1) Federal R&D funding by budget function for FYs 1955-2002 (tables 25a through 25h) and (2) Federal funding of basic research for FYs 1978-2002 (tables 26a through 26d).

DEFINITIONS

Research and Development

As used in this report, R&D refers to research—both basic and applied—and development activities in the sciences and engineering.

Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objective of the sponsoring agency.

- In **basic research**, the objective of the sponsoring agency is to gain fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind.
- In **applied research**, the objective of the sponsoring agency is to gain knowledge or understanding necessary for determining means by which a recognized and specific need may be met.

Development is systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including design, development, and improvement of prototypes and new processes. It excludes quality control, routine product testing, and production.

Funds for conducting R&D include those for personnel, program supervision, and administrative support directly associated with R&D activities. Expendable or movable equipment needed to conduct R&D—e.g., microscopes or spectrometers—is also included.

R&D plant includes R&D facilities such as reactors, wind tunnels, or particle accelerators or the construction, repair, or alteration of such facilities. For the first time, this report includes data on R&D plant funds. These authorizations are included in tables 1 and 11. All other tables in this report exclude R&D plant and are for R&D authorizations only.

Also excluded are all non-R&D activities performed within budget functions that conduct R&D and all functions in which no R&D is conducted.

Budget Authority, Obligations, and Outlays

The Federal R&D funding data presented here are, with a few noted exceptions, provided in budget authority. Budget authority is used because it is the initial budget parameter for congressional action on the President's proposed budget. Budget authority imposes a ceiling on obligations and outlays; obligations and outlays flow from budget authority.

- **Budget authority** is the primary source of legal authorization to enter into obligations that will result in outlays. Budget authority is most commonly granted in the form of appropriations by the congressional committees assigned to determine the budget for each function.
- **Obligations** represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when the future payment of money is required.
- **Outlays** represent the amounts for checks issued and cash payments made during a given period, regardless of when the funds were appropriated or obligated.

BUDGET FUNCTIONS

All activities covered by the Federal budget, including R&D, are classified into 20 broad functional categories. The Federal budget total comprises funding for these 20 functions. An agency's activities are not necessarily included in only one function. Instead, the programs of one agency typically are distributed across functions, and each function often includes programs from multiple agencies. No overlap occurs between functions or between the various agency programs within those functions. In a few cases, com-

ponents of a major national effort are funded through multiple functions, such as the human genome mapping effort, which is funded under the health and general science categories.

Notably, each specific R&D activity is assigned to only one function area, consistent with the official codes used in budget documents, even though the R&D activity may address several functional concerns. For example, except for those of the U.S. Army Corps of Engineers, all R&D activities sponsored by the Department of Defense (DoD) are classified as defense, even though some activities have secondary objectives such as space or health. Moreover, only R&D funded by the Department of Health and Human Services and the Department of Labor is classified in the health function category. Yet some R&D funding, from at least three additional agencies—DoD and the Departments of Energy and Veterans Affairs—has a major health component.

The functional categories and definitions used in this report are the same as those used in the Federal budget, with one exception. R&D activities categorized as general science, space, and technology (function 250) are reported separately here. Subfunction 251 contains R&D activities for general science and basic research, and subfunction 252 contains R&D activities for space research and technology. Not all federally sponsored basic research is categorized in function 251, however; some basic research is included in 12 of the remaining 19 functional categories.

Five Federal budget functions—Medicare (function 570), social security (function 650), net interest (function 900), allowances (function 920), and undistributed offsetting receipts (function 950)—have no R&D components. Consequently, they are not discussed in this report, except where R&D is described as a proportion of total Federal budget authority.

The agency/function crosswalk on the following page lists—by name and function code—the 16 individual R&D functions funded by agencies.

DATA SOURCES

Within the overall Federal budget there is no separately identified R&D budget as such; nor are most appropriations for R&D so labeled except in the case of certain program areas such as defense, energy, health, and environment. Consequently, most funds

AGENCY/FUNCTION CROSSWALK

AGENCIES	FUNCTIONS															
	National Defense (050)	Health (556)	Space Research and Technology (252)	General Science (251)	Energy (270)	Transportation (400)	Natural Resources and Environment (300)	Agriculture (350)	Education, Training, Employment, and Social Services (500)	Veterans Benefits and Services (700)	International Affairs (150)	Commerce and Housing Credit (370)	Community and Regional Development (450)	Administration of Justice (750)	Income Security (600)	General Government (800)
Agency for International Development											●					
Corps of Engineers (Civil)							●									
Dept. of Agriculture							●	●								
Dept. of Commerce							●					●	●			
Dept. of Defense (Military)	●															
Dept. of Education									●							
Dept. of Energy	●			●	●											
Dept. of Health and Human Services		●							●							
Dept. of Housing and Urban Development												●				
Dept. of Justice														●		
Dept. of Labor		●							●							
Dept. of the Interior							●									
Dept. of the Treasury																●
Dept. of Transportation						●										
Dept. of Veterans Affairs										●						
Environmental Protection Agency							●									
National Aeronautics and Space Administration			●			●										
National Science Foundation				●												
Nuclear Regulatory Commission					●											
Smithsonian Institution									●							
Social Security Administration															●	

KEY: ● = R&D function funded by specified agency

SOURCE: Agencies' submission to Office of Management and Budget, Circular No. A-11, Max Schedule C, "Research and Development Activities"; agency budget justification documents; and supplemental data from the agencies' budget offices.

for R&D are not line items in an agency's budget submission but are included within general program funding. To determine funding for Federal R&D, the Office of Management and Budget (OMB) requires agencies with annual R&D funding greater than \$10 million to submit data on their R&D programs as part of their annual budget submissions. Specifically, the agencies provide data—reported, in accordance with OMB Circular A-11, MAX Schedule C, “Research and Development Activities”—on funding levels for basic research, applied research, development, R&D facilities and major equipment, and R&D support to universities and colleges.

Data in this report represent agencies' best estimates of actual and proposed Federal funding for R&D

collected during the period between February and May 2001. These data are based primarily on information provided to OMB by 23 agencies and account for an estimated 99 percent of all federally sponsored R&D activities. Also incorporated in this report is R&D information that became available from the individual agencies after the administration's budget was prepared and reported in the *Budget of the United States Government*. Such information consists of agency budget justification documents submitted to Congress and supplemental, program-specific information obtained from agency budget and program staff through mid-July 2001. Therefore, budget numbers for individual activities, programs, or agencies may differ slightly from those published in the President's budget or agency budget documents.

FEDERAL R&D BUDGET AUTHORITY
BY BUDGET FUNCTION

Table 1. Federal R&D and R&D plant budget authority, by budget function: fiscal years 2000-2002

2002 rank	Budget function	2000 actual	2001 preliminary	2002 proposed	Percent change	
					[In millions of dollars]	
	Total.....	83,581	91,335	99,093	9.3	8.5
1	National defense.....	43,161	46,243	51,996	7.1	12.4
2	Health.....	18,121	20,814	23,459	14.9	12.7
3	Space research and technology.....	8,437	8,986	9,076	6.5	1.0
4	General science and basic research.....	5,593	6,234	6,156	11.4	-1.2
5	Natural resources and environment.....	2,082	2,272	2,230	9.1	-1.9
6	Transportation.....	1,664	1,686	1,688	1.3	0.1
7	Agriculture.....	1,561	1,713	1,551	9.8	-9.4
8	Energy.....	1,000	1,349	1,076	35.0	-20.2
9	Veterans benefits and services.....	645	703	722	9.0	2.7
10	Education, training, employment, and social services.....	429	450	427	4.9	-5.1
11	Commerce and housing credit.....	530	475	337	-10.4	-29.1
12	International affairs.....	200	216	206	8.0	-4.6
13	Administration of justice.....	73	90	74	23.3	-17.8
14	Community and regional development...	46	55	44	19.6	-20.0
15	Income security.....	25	42	42	68.0	0.0
16	General government.....	14	7	8	-50.0	14.3

NOTES: Because of rounding, components may not add to the totals. Percent change is derived from unrounded data. This is a new table in which data include combined funds for both R&D and R&D plant.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from the agencies' budget offices.

Table 2. Federal R&D budget authority, by budget function: fiscal years 2000-2002

2002 rank	Budget function	2000 actual	2001 preliminary	2002 proposed	Percent change	
					[In millions of dollars]	
	Total.....	78,664	86,270	94,000	9.7	9.0
1	National defense.....	42,580	45,595	51,362	7.1	12.6
2	Health.....	17,869	20,569	23,037	15.1	12.0
3	Space research and technology.....	5,363	6,016	6,143	12.2	2.1
4	General science and basic research.....	4,977	5,393	5,339	8.4	-1.0
5	Natural resources and environment.....	1,999	2,174	2,143	8.8	-1.4
6	Transportation.....	1,636	1,655	1,670	1.2	0.9
7	Agriculture.....	1,426	1,552	1,434	8.8	-7.6
8	Energy.....	996	1,342	1,068	34.8	-20.4
9	Veterans benefits and services.....	645	703	722	9.0	2.7
10	Education, training, employment, and social services.....	418	437	411	4.5	-5.9
11	Commerce and housing credit.....	406	423	299	4.2	-29.4
12	International affairs.....	200	216	206	8.0	-4.6
13	Administration of justice.....	73	90	74	23.3	-17.8
14	Community and regional development....	46	55	44	19.6	-20.0
15	Income security.....	25	42	42	68.0	0.0
16	General government.....	6	7	7	16.7	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 3. Distribution of total Federal R&D budget authority, by function:
fiscal years 2000-2002

(In percentages)

2002 rank	Budget function	2000 actual	2001 preliminary	2002 proposed
	Total.....	100.0	100.0	100.0
1	National defense.....	54.1	52.9	54.6
2	Health.....	22.7	23.8	24.5
3	Space research and technology.....	6.8	7.0	6.5
4	General science and basic research.....	6.3	6.3	5.7
5	Natural resources and environment.....	2.5	2.5	2.3
6	Transportation.....	2.1	1.9	1.8
7	Agriculture.....	1.8	1.8	1.5
8	Energy.....	1.3	1.6	1.1
9	Veterans benefits and services.....	0.8	0.8	0.8
10	Education, training, employment, and social services.....	0.5	0.5	0.4
11	Commerce and housing credit.....	0.5	0.5	0.3
12	International affairs.....	0.3	0.3	0.2
13	Administration of justice.....	0.1	0.1	0.1
14	Community and regional development.....	0.1	0.1	*
15	Income security.....	*	*	*
16	General government.....	*	*	*

* = Less than one-tenth of one percent.

NOTE: Because of rounding, components may not add to totals.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 4. Federally funded R&D for national defense and civilian functions: fiscal years 1955-2002

Page 1 of 2

Fiscal year	Current dollars			Constant 1996 dollars ¹			Percent of total	
	Total	National defense	Civilian functions	Total	National defense	Civilian functions	National defense	Civilian functions
	[In millions of dollars]							
1955.....	2,533	2,151	382	12,910	10,963	1,947	84.9	15.1
1956.....	2,988	2,535	453	14,836	12,587	2,249	84.8	15.2
1957.....	3,932	3,327	605	18,822	15,926	2,896	84.6	15.4
1958.....	4,570	3,801	769	21,236	17,663	3,573	83.2	16.8
1959.....	6,694	5,556	1,138	30,608	25,405	5,203	83.0	17.0
1960.....	7,552	6,107	1,445	34,141	27,608	6,533	80.9	19.1
1961.....	9,059	7,005	2,054	40,388	31,230	9,157	77.3	22.7
1962.....	10,290	7,238	3,052	45,370	31,914	13,457	70.3	29.7
1963.....	12,495	7,764	4,731	54,373	33,786	20,587	62.1	37.9
1964.....	14,225	7,829	6,396	61,183	33,673	27,510	55.0	45.0
1965.....	14,614	7,342	7,272	61,767	31,031	30,735	50.2	49.8
1966.....	15,320	7,536	7,784	63,384	31,179	32,205	49.2	50.8
1967.....	16,529	8,566	7,963	66,275	34,346	31,929	51.8	48.2
1968.....	15,921	8,275	7,646	61,614	32,024	29,590	52.0	48.0
1969.....	15,641	8,356	7,285	57,908	30,937	26,971	53.4	46.6
1970.....	15,339	7,981	7,358	53,840	28,013	25,827	52.0	48.0
1971.....	15,543	8,110	7,433	51,949	27,106	24,843	52.2	47.8
1972.....	16,496	8,902	7,594	52,669	28,423	24,246	54.0	46.0
1973.....	16,800	9,002	7,798	51,360	27,521	23,840	53.6	46.4
1974.....	17,410	9,016	8,394	49,686	25,731	23,955	51.8	48.2
1975.....	19,039	9,679	9,360	49,235	25,030	24,205	50.8	49.2
1976.....	20,780	10,430	10,350	50,193	25,193	25,000	50.2	49.8
1977.....	23,450	11,864	11,586	52,685	26,655	26,030	50.6	49.4
1978.....	25,976	12,899	13,077	54,617	27,122	27,496	49.7	50.3
1979.....	28,208	13,791	14,417	54,858	26,820	28,038	48.9	51.1
1980.....	29,739	14,946	14,793	53,115	26,694	26,421	50.3	49.7
1981.....	33,735	18,413	15,322	54,925	29,979	24,946	54.6	45.4
1982.....	36,115	22,070	14,045	54,953	33,582	21,371	61.1	38.9
1983.....	38,768	24,936	13,832	56,505	36,345	20,160	64.3	35.7
1984.....	44,214	29,287	14,927	62,151	41,168	20,983	66.2	33.8

See explanatory notes and SOURCES at end of table.

Table 4. Federally funded R&D for national defense and civilian functions: fiscal years 1955-2002

Fiscal year	Current dollars			Constant 1996 dollars ¹			Percent of total	
	Total	National defense	Civilian functions	Total	National defense	Civilian functions	National defense	Civilian functions
[In millions of dollars]								
1985.....	49,887	33,698	16,189	67,883	45,854	22,029	67.5	32.5
1986.....	53,249	36,926	16,323	70,753	49,065	21,689	69.3	30.7
1987.....	57,069	39,152	17,917	73,799	50,630	23,170	68.6	31.4
1988.....	59,106	40,099	19,007	74,012	50,212	23,800	67.8	32.2
1989.....	62,115	40,665	21,450	74,901	49,035	25,865	65.5	34.5
1990.....	63,781	39,925	23,856	74,121	46,397	27,723	62.6	37.4
1991.....	65,898	39,328	26,570	73,711	43,991	29,720	59.7	40.3
1992.....	68,398	40,083	28,315	74,556	43,692	30,864	58.6	41.4
1993.....	69,884	41,249	28,635	74,400	43,915	30,485	59.0	41.0
1994.....	68,331	37,764	30,566	71,207	39,354	31,853	55.3	44.7
1995.....	68,791	37,204	31,587	70,166	37,948	32,219	54.1	45.9
1996.....	69,049	37,801	31,248	69,049	37,801	31,248	54.7	45.3
1997.....	71,653	39,591	32,062	70,283	38,834	31,449	55.3	44.7
1998.....	73,569	39,823	33,746	71,150	38,514	32,636	54.1	45.9
1999.....	77,637	41,306	36,332	74,046	39,395	34,651	53.2	46.8
2000.....	78,664	42,580	36,084	73,607	39,843	33,764	54.1	45.9
2001.....	86,270	45,595	40,675	79,045	41,777	37,268	52.9	47.1
2002.....	94,000	51,362	42,638	84,358	46,093	38,265	54.6	45.4

¹Calculated using fiscal year GDP implicit price deflators with 1996 as the base year.

NOTES: The national defense function includes Department of Defense's military activities and Department of Energy's atomic energy defense programs. Civilian functions include all other Federally funded R&D activities. Data for 1955-77 are obligations. Data for 1978-2000 are actual budget authority. Data for 2001 are preliminary estimates of budget authority. Data for 2002 are budget authority proposed by the administration.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from the agencies' budget offices.

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Table 5. Federal budget authority for basic research, by budget function: fiscal years 2000-2002

2002 rank	Budget function	2000	2001	2002	Percent change	
		actual	preliminary	proposed	2000-2001	2001-2002
		[In millions of dollars]				
	Total.....	19,470	22,015	23,302	13.1	5.8
4	National defense.....	1,184	1,369	1,355	15.7	-1.0
1	Health.....	10,099	11,537	12,973	14.2	12.4
3	Space research and technology.....	1,616	2,157	2,066	33.4	-4.2
2	General science and basic research.....	4,722	5,074	5,069	7.5	-0.1
8	Natural resources and environment.....	146	198	193	34.9	-2.5
6	Transportation.....	542	416	421	-23.2	1.3
5	Agriculture.....	651	710	679	9.1	-4.3
12	Energy.....	36	42	25	14.9	-39.9
7	Veterans benefits and services.....	266	290	304	9.0	4.8
9	Education, training, employment, and social services.....	107	109	106	1.9	-2.8
11	Commerce and housing credit.....	39	42	40	7.5	-4.3
10	International affairs.....	42	51	49	21.4	-3.9
13	Administration of justice.....	20	20	21	0.0	5.0
--	Community and regional development....	0	0	0	NA	NA
--	Income security.....	0	0	0	NA	NA
--	General government.....	0	0	0	NA	NA

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.
The order of budget functions is the same as order for Federal R&D budget authority, by budget function shown in table 2.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 6. Federal R&D budget authority as a percentage of total budget authority by budget function: fiscal years 2000-2002

2002 rank	Budget function	2000 actual	2001 preliminary	2002 proposed
	All functions conducting R&D.....	7.6	7.9	7.9
3	National defense.....	14.0	14.4	15.0
4	Health.....	11.1	11.3	11.2
2	Space research and technology.....	42.8	45.1	45.1
1	General science and basic research.....	73.7	70.2	68.9
6	Natural resources and environment.....	8.0	7.6	8.1
8	Transportation.....	3.0	2.7	2.7
5	Agriculture.....	4.2	5.3	9.1
16	Energy ¹	-84.1	-157.4	-265.8
9	Veterans benefits and services.....	1.4	1.5	1.4
12	Education, training, employment, and social services.....	0.8	0.6	0.4
7	Commerce and housing credit ¹	2.6	-6.5	2.9
10	International affairs.....	0.9	1.2	0.9
13	Administration of justice.....	0.3	0.3	0.2
11	Community and regional development.....	0.4	0.5	0.4
15	Income security.....	*	*	*
14	General government.....	*	*	*

¹ R&D as percentage of total budget authority is negative for some years because gross budget authority has been reduced by offsetting receipts. Offsetting receipts can exceed gross budget authority.

* = Less than one-tenth of 1 percent.

NOTES: Total budget authority includes discretionary and mandatory budget authority, less offsets. The order of budget functions is the same as order for Federal R&D budget authority, by budget function shown in table 2.

SOURCES: Agencies' submissions to Office of Management and Budget (OMB), MAX Schedule C; agency budget justification documents; supplemental data obtained from agencies' budget offices; and OMB, *Budget of the United States Government, Fiscal Year 2002*, (Washington, DC, 2001), table 22-1.

R&D BY SPECIFIC BUDGET FUNCTION

Table 7. Federal R&D budget authority for national defense (050): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	42,580	45,595	51,362	12.6
Department of Defense-military (051).....	39,865	42,565	48,274	13.4
Research, development, test, and evaluation (RDT&E).....	38,706	41,315	47,429	14.8
Department of the Army.....	5,330	6,247	6,694	7.2
Department of the Navy.....	9,044	9,555	11,123	16.4
Department of the Air Force.....	14,511	14,190	14,344	1.1
Defense agencies.....	9,525	11,098	15,051	35.6
Ballistic Missile Defense Organization.....	3,428	4,195	7,036	67.7
Defense Advanced Research Projects Agency.....	1,876	1,997	2,281	14.2
Other defense agencies.....	4,221	4,906	5,733	16.9
Developmental test and evaluation ¹	265	0	0	NA
Operational test and evaluation ¹	31	225	217	-3.4
Other military funding ²	1,159	1,251	845	-32.5
Department of Energy-atomic energy defense activities (053).....	2,716	3,030	3,087	1.9
Weapons activities ³	1,731	1,976	2,083	5.4
Naval reactors development ³	593	609	607	-0.3
Environmental restoration and waste management.....	141	171	126	-26.1
Intelligence.....	5	5	5	0.0
Nonproliferation ³	170	184	175	-4.6
Nuclear safeguards and security.....	25	25	25	0.0
Fissile materials disposition ³	50	60	65	9.5

¹ Between FYs 2000 and 2001, the Department of Defense (DoD) combined the developmental test and evaluation account with the operational test and evaluation account.

² This item includes appropriate personnel costs in direct support of conduct of R&D, other appropriations funding certain DoD programs, and medical research funded outside RDT&E accounts.

³ These accounts are now part of the National Nuclear Security Administration (NNSA) within the Department of Energy (DOE).

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: DoD and DOE submissions to Office of Management and Budget (OMB), MAX Schedule C; DoD's "RDT&E Programs (R-1)"; OMB, *Budget of the United States Government, Fiscal Year 2002*, (Washington, DC, 2001), Appendix pp 290-298; and supplemental data obtained from the DOE budget office.

Table 8. Total obligational authority for Department of Defense research, development, test, and evaluation (RDT&E) budget: fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total RDT&E (budget authority).....	38,706	41,315	47,429	14.8
Total RDT&E (TOA) ¹	38,752	41,494	47,429	14.3
Basic research.....	1,139	1,317	1,304	-1.0
Department of the Army.....	201	210	222	5.7
Department of the Navy.....	367	394	406	3.1
Department of the Air Force.....	208	213	221	3.8
Defense agencies.....	362	500	455	-9.1
Applied research.....	3,409	3,676	3,659	-0.5
Department of the Army.....	790	827	689	-16.7
Department of the Navy.....	610	659	627	-4.9
Department of the Air Force.....	587	657	696	6.0
Defense agencies.....	1,422	1,533	1,647	7.4
Advanced technology development.....	3,789	4,015	3,799	-5.4
Department of the Army.....	719	815	667	-18.2
Department of the Navy.....	739	801	681	-15.1
Department of the Air Force.....	564	587	465	-20.8
Defense agencies.....	1,767	1,811	1,986	9.7
Demonstration and validation.....	6,514	7,993	11,381	42.4
Department of the Army.....	507	937	863	-7.8
Department of the Navy.....	2,353	2,558	2,415	-5.6
Department of the Air Force.....	910	1,224	1,037	-15.2
Defense agencies.....	2,744	3,275	7,066	115.7
Engineering and manufacturing development.....	8,879	8,893	10,249	15.3
Department of the Army.....	1,523	1,858	2,339	25.9
Department of the Navy.....	2,226	2,295	4,123	79.7
Department of the Air Force.....	4,295	3,569	3,406	-4.6
Defense agencies.....	835	1,172	381	-67.4

See explanatory information and SOURCE at end of table.

Table 8. Total obligational authority for Department of Defense research, development, test, and evaluation (RDT&E) budget: fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Management support.....	3,076	2,639	2,802	6.2
Department of the Army.....	854	743	756	1.8
Department of the Navy.....	810	656	739	12.6
Department of the Air Force.....	776	602	623	3.5
Defense agencies.....	340	414	466	12.6
Developmental test and evaluation ²	265	0	0	NA
Operational test and evaluation ²	31	225	217	-3.4
Operational systems development.....	11,947	12,961	14,235	9.8
Department of the Army.....	720	895	1,156	29.2
Department of the Navy.....	1,958	2,223	2,134	-4.0
Department of the Air Force.....	7,188	7,418	7,896	6.4
Defense agencies.....	2,081	2,425	3,049	25.8
Adjustment for RDT&E budget authority ¹	-46	-180	0	NA

¹ Detailed budget information on DoD's RDT&E activities is available only in total obligational authority (TOA), which is the sum of new budget authority, unobligated budget authority from previous years, and other authorized credits. Adjustment converts TOA to budget authority by subtracting unobligated budget authority from previous years and other authorized credits from TOA.

² Between FYs 2000 and 2001, the Department of Defense (DoD) combined the developmental test and evaluation account with the operational test and evaluation account.

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Data from DoD, "RDT&E Programs (R-1)." Total RDT&E budget authority data from *Budget of the United States Government, Fiscal Year 2002*, (Washington, DC, 2001), appendix pp. 290-298.

Table 9. Federal R&D budget authority for health (550): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	17,869	20,569	23,037	12.0
Health care services and health research and training (551, 552).....	17,729	20,420	22,889	12.1
Department of Health and Human Services (DHHS):				
National Institutes of Health.....	16,993	19,478	21,988	12.9
Centers for Disease Control.....	470	517	568	9.9
Agency for Healthcare Research and Quality ¹	165	226	255	12.8
Health Care Financing Administration.....	43	139	55	-60.4
Health Resources and Services Administration.....	13	13	13	0.0
Departmental Management	45	47	10	-78.7
Consumer and occupational health and safety (554).....	140	149	148	-0.7
Food and Drug Administration (DHHS).....	132	138	140	1.4
Occupational Safety and Health Administration (Department of Labor).....	8	11	8	-27.3

¹ Formerly the Agency for Health Care Policy and Research, until name changed in FY 2000 under the Healthcare Research and Quality Act of 1999.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from the agencies' budget offices.

Table 10. Federal R&D budget authority for the National Institutes of Health (NIH): fiscal years 2000-2002

Agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total.....	16,993	19,478	21,988	12.9
National Cancer Institute.....	3,249	3,687	4,104	11.3
National Heart, Lung, and Blood Institute.....	1,960	2,222	2,481	11.7
National Institute of Allergy and Infectious Diseases.....	1,738	1,998	2,307	15.5
National Institute of General Medical Sciences.....	1,221	1,379	1,551	12.5
National Institute of Diabetes and				
Digestive and Kidney Diseases.....	1,157	1,359	1,510	11.1
National Institute of Neurological Disorders and Stroke.....	1,005	1,150	1,289	12.0
National Institute of Mental Health.....	924	1,055	1,183	12.2
National Institute of Child Health				
and Human Development.....	830	946	1,064	12.4
National Institute on Drug Abuse.....	679	763	889	16.4
National Center for Research Resources.....	600	738	873	18.2
National Institute on Aging.....	668	765	858	12.1
National Institute of Environmental Health Sciences ¹	486	548	614	12.0
National Eye Institute.....	440	499	559	11.9
National Institute of Arthritis and				
Musculoskeletal and Skin Diseases.....	340	385	431	11.9
National Human Genome Research Institute.....	332	378	422	11.7
National Institute on Alcohol Abuse and Alcoholism.....	284	331	372	12.3
National Institute of Dental and				
Cranofacial Research.....	258	294	329	11.8
National Institute on Deafness and				
Other Communication Disorders.....	255	290	326	12.3

See explanatory notes and SOURCES at end of table.

Table 10. Federal R&D budget authority for the National Institutes of Health (NIH): fiscal years 2000-2002

Agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Office of the Director.....	264	204	223	9.3
National Center for Minority Health and Health Disparities.....	0	124	158	27.7
National Library of Medicine.....	110	129	148	14.9
National Institute of Nursing Research.....	83	95	107	12.8
National Center for Complementary and Alternative Medicine	67	87	98	12.3
John E. Fogarty International Center.....	43	50	56	11.8
National Institute of Biomedical Imaging and Bioengineering.....	0	0	37	NA
Office of AIDS Research ²	NA	NA	NA	NA

¹ Includes funding from Superfund-related transfers and appropriations.

² The Office of AIDS Research (OAR) was created in FY 1995 to consolidate NIH-wide AIDS research. OAR funds AIDS research in other institutes. AIDS research is funded in individual institutes for FY 2000. The FYs 2001 and 2002 requests consolidate AIDS research in the OAR account, but the table distributes the funds to the institutes for comparison purposes. Total AIDS R&D is \$1,969 million in FY 2000, \$2,204 million in FY 2001, and \$2,458 million in FY 2002.

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data. Excludes non-R&D and R&D facilities components of institute budgets.

SOURCES: Departmental submission to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from NIH budget office.

Table 11. Federal R&D and R&D plant budget authority for space research and technology (252):
fiscal years 2000-2002

Funding category	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars for R&D and R&D plant]				
Total.....	8,437	8,986	9,076	1.0
National Aeronautics and Space Administration (NASA):				
Space Station ¹	2,323	2,113	2,087	-1.2
Other human space flight.....	691	788	737	-6.4
Space science.....	2,524	2,625	2,786	6.2
Biological and physical research ²	340	379	361	-4.7
Earth science.....	1,690	1,716	1,515	-11.7
Advanced space transportation.....	637	1,113	1,339	20.3
Commercial technology.....	140	162	147	-9.6
Academic programs.....	139	133	154	15.8
Adjustments ³	-47	-42	-50	NA
[In millions of dollars for R&D]				
Total.....	5,363	6,016	6,143	2.1
National Aeronautics and Space Administration:				
Space Station ¹	0	0	0	NA
Other human space flight.....	277	329	269	-18.2
Space science.....	2,245	2,334	2,515	7.7
Biological and physical research ²	326	363	345	-4.9
Earth science.....	1,667	1,687	1,497	-11.3
Advanced space transportation.....	533	973	1,202	23.6
Commercial technology.....	173	198	187	-5.7
Academic programs.....	109	111	126	13.6
Adjustments ³	33	21	3	NA

¹ Beginning in FY 2000, NASA reclassified Space Station as a physical asset and Space Station research as equipment and transferred funding for the Space Station program from R&D to R&D plant.

² Formerly Life and microgravity sciences.

³ NASA plans to restructure many of its accounts beginning in FY 2002. Adjustments allow for comparability between fiscal years and reconcile R&D data with budget authority.

KEY: NA = Not applicable

NOTES: Includes funds for research and research program management, but excludes fixed capital equipment costs. Because of rounding, components may not add to totals. Percent change derived from unrounded data.

SOURCES: National Aeronautics and Space Administration's (NASA's) submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from the NASA budget and the NASA budget office.

Table 12. Federal R&D budget authority for general science and basic research (251):
fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	4,977	5,393	5,339	-1.0
National Science Foundation.....	2,724	3,016	3,017	0.0
Mathematical and physical sciences.....	756	851	864	1.5
Geosciences.....	488	562	559	-0.6
Biological sciences.....	418	485	483	-0.5
Engineering.....	380	431	431	0.1
Computer and information science and engineering.....	389	478	470	-1.6
U.S. polar research programs.....	190	211	214	1.5
Social, behavioral, and economic sciences.....	162	164	163	-0.8
Education and human resources.....	123	139	139	0.0
Integrative activities.....	129	98	81	-17.5
Budget authority adjustment ¹	-311	-404	-387	NA
Department of Energy.....	2,253	2,377	2,322	-2.3
High energy physics.....	539	578	574	-0.7
Nuclear physics.....	299	310	312	0.7
Fusion energy sciences.....	221	237	240	1.3
Basic energy sciences.....	585	644	630	-2.2
Advanced scientific computing research.....	121	160	156	-2.3
Energy research analyses.....	1	1	1	2.5
Small business innovation research ²	84	0	0	NA
Biological and environmental research.....	403	448	409	-8.7
Human genome.....	87	86	88	2.1
All other research.....	316	362	321	-11.3

¹ Budget authority adjustment subtracts costs for research facilities, major equipment support, and other non-R&D from total National Science Foundation R&D.

² Department of Energy treats this activity as a budget execution program (i.e., funds are collected from existing appropriations and are not allocated until three quarters through the fiscal year).

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 13. Federal R&D budget authority for natural resources and environment (300):
fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	1,999	2,174	2,143	-1.4
Pollution control and abatement (304)				
Environmental Protection Agency.....	537	575	535	-6.9
Science and technology.....	497	533	497	-6.7
Superfund.....	38	37	37	1.1
Leaking underground storage tanks.....	1	1	1	0.0
Oil spill response research.....	1	1	1	0.0
Other accounts.....	1	4	0	-100.0
Conservation and land management (302).....				
Forest Service (USDA).....	203	231	235	1.6
Department of the Interior ¹	63	40	60	50.0
Recreational resources (303).....				
U.S. Geological Survey ² (Interior).....	137	161	149	-7.0
National Park Service (Interior).....	27	30	30	0.0
Water resources (301).....				
Army Corps of Engineers (DoD).....	38	27	27	0.0
Bureau of Reclamation (Interior).....	5	6	6	0.0

See explanatory notes and SOURCES at end of table.

Table 13. Federal R&D budget authority for natural resources and environment (300):
fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Other natural resources (306).....	989	1,104	1,101	-0.3
U.S. Geological Survey ³ (Interior).....	369	389	342	-12.2
Geologic and mineral resource surveys and mapping.....	212	225	214	-5.1
Water resources investigations.....	131	136	101	-25.5
National mapping, geography, and survey.....	27	28	26	-4.6
National Oceanic and Atmospheric Administration (Commerce).....	620	716	759	6.1
Oceanic and atmospheric research.....	257	269	290	7.8
Climate and air quality.....	126	126	141	11.7
All other research.....	132	142	148	4.3
National Marine Fisheries Service.....	254	311	329	6.0
National Ocean Service.....	56	64	64	0.5
National Weather Service.....	20	23	28	20.4
National Environmental Satellite, Data, and Information Service.....	9	13	11	-11.7
Program support.....	8	9	11	15.8
Fleet modernization, shipbuilding, and conversion.....	6	8	8	0.0
Promote Fisheries Products ⁴	1	1	4	204.6
Other NOAA.....	9	17	14	-21.1

¹ Includes Bureau of Land Management, Office of Surface Mining and Reclamation, and Minerals Management Service.

² Natural resources research formerly funded by the National Biological Service.

³ National mapping, water resources, and geological research.

⁴ Actual functional code is 376, other advancement of commerce.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 14. Federal R&D budget authority for transportation (400): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total.....	1,636	1,655	1,670	0.9
Air transportation (402).....	1,250	1,211	1,150	-5.0
National Aeronautics and Space Administration ¹	1,043	923	890	-3.6
Aeronautical research and technology.....	1,043	923	890	-3.6
Federal Aviation Administration (DOT).....	207	287	260	-9.6
Ground transportation (DOT) (401).....	354	402	482	20.0
Federal Highway Administration.....	261	294	374	27.5
National Highway Traffic Safety Administration.....	51	58	59	1.3
Federal Railroad Administration.....	25	27	30	10.7
Federal Transit Administration.....	12	13	5	-61.8
Federal Motor Carrier Safety Administration.....	6	10	14	43.8
Water transportation (DOT) (403).....	20	22	23	2.0
U.S. Coast Guard.....	20	22	23	2.0
Other transportation (DOT) (407) ²	12	20	15	-26.1

¹ Includes funds for research and research program management.

² Includes Office of the Secretary and the Research and Special Programs Administration.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 15. Federal R&D budget authority for agriculture (350): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total.....	1,426	1,552	1,434	-7.6
Agricultural research and services (352):				
Department of Agriculture				
Agricultural Research Service.....	773	850	851	0.1
Research on plant sciences.....	277	316	308	-2.5
Research on commodity conversion and delivery.....	167	179	192	6.8
Research on animal sciences.....	129	138	139	0.9
Research on soil, water, and air sciences.....	83	89	85	-4.2
Research on human nutrition.....	68	73	72	-1.4
Integration of agricultural systems.....	30	36	36	-0.8
Agricultural information and library services.....	19	19	20	1.9
Cooperative State Research, Education, and Extension Service.....				
National Research Initiative.....	119	106	106	0.0
Payments under the Hatch Act.....	181	180	180	0.0
Special research grants.....	60	85	3	-96.8
Initiative for Future Agriculture and Food Systems ¹	64	64	64	0.0
Other research programs.....	121	158	116	-26.8
Economic Research Service.....	64	66	67	1.5
Animal and Plant Health Inspection Service.....	21	22	23	4.5
National Agricultural Statistics Service.....	4	4	4	0.0
Agricultural Marketing Service.....	5	5	5	0.0
Federal Grain Inspection Service.....	3	5	6	20.0
Foreign Agricultural Service.....	1	1	1	0.0
Office of the Secretary ¹	10	5	8	60.0

¹ Mandatory (non-appropriated) program.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: United States Department of Agriculture's (USDA's) submission to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from USDA budget office.

Table 16. Federal R&D budget authority for energy (270): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total.....	996	1,342	1,068	-20.4
Department of Energy.....	943	1,292	1,001	-22.5
Fossil energy (271).....	142	403	376	-6.6
Clean coal technology ¹	-146	9	82	811.1
Cooperative R&D.....	7	8	0	-100.0
Petroleum, coal, and gas program.....	281	386	294	-23.8
Energy supply (271).....	331	404	278	-31.1
Nuclear energy.....	65	80	56	-29.7
Solar and renewables.....	266	324	222	-31.5
Radioactive waste management (271).....	60	45	31	-29.9
Energy conservation (272).....	410	441	316	-28.3
Nuclear Regulatory Commission (276).....	53	50	67	34.0

¹ Negative for some years because of rescissions and deferrals of previously appropriated funds.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; Department of Energy's budget justification documents; and supplemental data obtained from agencies' budget offices.

**Table 17. Federal R&D budget authority for veterans benefits and services (700):
fiscal years 2000-2002**

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	645	703	722	2.7
Department of Veterans Affairs Medical and prosthetic research (703)...	645	703	722	2.7

NOTE: Includes administrative and operating expenses related to agency's research.

SOURCES: Departmental submission to Office of Management and Budget, MAX Schedule C.

**Table 18. Federal R&D budget authority for education, training, employment, and social services (500):
fiscal years 2000-2002**

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	418	437	411	-5.9
Research and general education aids (501, 502, 503).....	249	267	250	-6.4
Department of Education programs.....	146	162	148	-8.6
Smithsonian Institution programs.....	103	105	102	-2.9
Social services (506).....	161	159	156	-1.9
Administration for Children and Families (DHHS).....	37	25	27	8.0
Administration on Aging (DHHS).....	32	31	18	-41.9
Rehabilitation services (Education).....	92	103	111	7.8
Training and employment (504) (Labor's Employment and Training Admin.).....	8	11	5	-54.5

NOTES: Because of rounding, components may not add to totals. Percent change derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

**Table 19. Federal R&D budget authority for commerce and housing credit (370):
fiscal years 2000-2002**

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
[In millions of dollars]				
Total.....	406	423	299	-29.4
Other advancement of commerce (376)				
Department of Commerce				
National Institute of Standards and Technology.....	348	370	276	-25.5
Electronics and electrical engineering.....	38	39	41	3.0
Manufacturing engineering.....	18	19	19	3.1
Chemical science and technology.....	33	35	38	10.9
Physics.....	28	30	35	15.2
Materials science.....	40	42	47	14.1
Building and fire research.....	14	17	15	-9.3
Computer science and applied mathematics.....	43	47	52	8.9
Technology assistance.....	3	3	4	3.1
Research support activities.....	15	15	20	33.4
Critical infrastructure protection.....	0	4	4	0.1
Industrial technology services				
Advanced Technology Program.....	116	118	0	-100.0
Bureau of the Census.....	38	2	2	0.0
National Telecommunications and Information Administration.....	20	51	21	-58.8

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Departmental submission to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 20. Federal R&D budget authority for the Agency for International Development (AID) and other international programs (150): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total (150).....	200	216	206	-4.6
Agency for International Development (151).....	180	200	193	-3.5
International Security Assistance (152).....	20	16	13	-18.8

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agency submission to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

Table 21. Federal R&D budget authority for administration of justice (750): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	73	90	74	-17.8
Department of Justice.....	73	90	74	-17.8
Office of Justice Programs (754).....	60	77	57	-26.0
Federal Bureau of Investigation (751).....	5	5	9	80.0
Federal Prison System (753).....	7	7	7	0.0
Immigration and Naturalization Service (751).....	1	1	1	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

**Table 22. Federal R&D budget authority for community and regional development (450):
fiscal years 2000-2002**

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	46	55	44	-20.0
Department of Housing and Urban Development (451).....	45	54	43	-20.4
Department of Commerce				
Economic Development Administration (452).....	1	1	1	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 23. Federal R&D budget authority for income security (600): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	25	42	42	0.0
Social Security Administration ¹	25	42	42	0.0

¹Actual functional code is 650, Social Security.

NOTE: Percent change is derived from unrounded data.

SOURCES: Agency submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

Table 24: Federal R&D budget authority for general government (800): fiscal years 2000-2002

Funding category and agency	2000 actual	2001 preliminary	2002 proposed	Percent change 2001-2002
	[In millions of dollars]			
Total.....	6	7	7	0.0
Department of the Treasury Engraving and Printing (803).....	6	7	7	0.0

NOTE: Percent change is derived from unrounded data.

SOURCES: Agency submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

HISTORICAL TABLES

Table 25a. Federal R&D obligations, by selected budget function: fiscal years 1955-60

Budget function	1955	1956	1957	1958	1959	1960
[In millions of dollars]						
Total.....	2,533	2,988	3,932	4,570	6,694	7,522
National defense.....	2,151	2,535	3,327	3,801	5,556	6,107
Health.....	67	83	140	177	233	305
All other functions.....	315	370	465	592	904	1,140
[In millions of constant FY 1996 dollars]						
Total.....	12,910	14,836	18,822	21,236	30,608	34,005
National defense.....	10,963	12,587	15,926	17,663	25,405	27,608
Health.....	341	412	670	822	1,065	1,379
All other functions.....	1,606	1,837	2,226	2,751	4,134	5,154

NOTES: Because of rounding, components may not add to totals.
 GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25b. Federal R&D obligations, by selected budget function: fiscal years 1961-66

Budget function	1961	1962	1963	1964	1965	1966
	[In millions of dollars]					
Total.....	9,059	10,290	12,495	14,225	14,614	15,320
National defense.....	7,005	7,238	7,764	7,829	7,342	7,536
Health.....	405	551	626	728	792	900
Space research and technology.....	777	1,413	2,812	4,241	4,887	4,976
Energy.....	373	448	515	571	585	575
General science.....	137	187	246	277	304	377
Natural resources and environment.....	73	108	120	134	159	189
Transportation.....	55	101	142	122	147	251
Agriculture.....	125	136	146	165	195	201
All other functions.....	108	107	125	160	203	315
	[In millions of constant FY 1996 dollars]					
Total.....	40,388	45,370	54,373	61,183	61,767	63,384
National defense.....	31,230	31,914	33,786	33,673	31,031	31,179
Health.....	1,806	2,429	2,724	3,131	3,347	3,724
Space research and technology.....	3,464	6,230	12,237	18,241	20,655	20,588
Energy.....	1,663	1,975	2,241	2,456	2,473	2,379
General science.....	611	825	1,070	1,191	1,285	1,560
Natural resources and environment.....	325	476	522	576	672	782
Transportation.....	245	445	618	525	621	1,038
Agriculture.....	557	600	635	710	824	832
All other functions.....	481	472	544	688	858	1,303

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25c. Federal R&D obligations, by budget function: fiscal years 1967-72

Budget function	1967	1968	1969	1970	1971	1972
	[In millions of dollars]					
Total.....	16,529	15,921	15,641	15,339	15,543	16,496
National defense.....	8,566	8,275	8,356	7,981	8,110	8,902
Health.....	915	1,021	1,088	1,084	1,288	1,547
Space research and technology.....	4,778	4,304	3,799	3,606	3,048	2,932
Energy.....	600	657	597	574	556	574
General science.....	409	437	433	452	513	625
Natural resources and environment.....	320	331	323	340	416	479
Transportation.....	380	304	404	535	728	558
Agriculture.....	218	217	221	238	259	294
Education, training, employment, and social services.....	154	166	169	164	215	235
International affairs.....	18	17	26	32	32	29
Veterans benefits and services.....	41	45	50	59	63	69
Commerce and housing credit.....	43	48	54	79	90	50
Community and regional development.....	37	44	32	47	65	66
Administration of justice.....	*	1	5	9	10	23
Income security.....	48	50	78	136	145	106
General government.....	3	5	5	6	7	8
	[In millions of constant FY 1996 dollars]					
Total.....	66,275	61,614	57,908	53,840	51,949	52,669
National defense.....	34,346	32,024	30,937	28,013	27,106	28,423
Health.....	3,669	3,951	4,028	3,805	4,305	4,939
Space research and technology.....	19,158	16,656	14,065	12,657	10,187	9,361
Energy.....	2,406	2,543	2,210	2,015	1,858	1,833
General science.....	1,640	1,691	1,603	1,587	1,715	1,996
Natural resources and environment.....	1,283	1,281	1,196	1,193	1,390	1,529
Transportation.....	1,524	1,176	1,496	1,878	2,433	1,782
Agriculture.....	874	840	818	835	866	939
Education, training, employment, and social services.....	617	642	626	576	719	750
International affairs.....	72	66	96	112	107	93
Veterans benefits and services.....	164	174	185	207	211	220
Commerce and housing credit.....	172	186	200	277	301	160
Community and regional development.....	148	170	118	165	217	211
Administration of justice.....	*	4	19	32	33	73
Income security.....	192	193	289	477	485	338
General government.....	12	19	19	21	23	26

* = Less than \$500,000

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25d. Federal R&D obligations, by budget function: fiscal years 1973-77

Budget function	1973	1974	1975	1976	1977
	[In millions of dollars]				
Total.....	16,800	17,410	19,039	20,780	23,450
National defense.....	9,002	9,016	9,679	10,430	11,864
Health.....	1,585	2,069	2,170	2,351	2,629
Space research and technology.....	2,824	2,702	2,764	3,130	2,832
Energy.....	630	759	1,363	1,649	2,562
General science.....	658	749	813	858	974
Natural resources and environment.....	554	516	624	683	753
Transportation.....	572	693	635	631	708
Agriculture.....	308	313	342	383	457
Education, training, employment, and social services.....	290	236	239	255	230
International affairs.....	28	24	29	42	66
Veterans benefits and services.....	74	85	95	98	107
Commerce and housing credit.....	50	51	65	69	71
Community and regional development.....	78	82	93	109	101
Administration of justice.....	33	35	44	35	30
Income security.....	106	71	72	48	55
General government.....	7	9	12	12	13
	[In millions of constant FY 1996 dollars]				
Total.....	51,360	49,686	49,235	50,193	52,685
National defense.....	27,521	25,731	25,030	25,193	26,655
Health.....	4,846	5,905	5,612	5,679	5,907
Space research and technology.....	8,633	7,711	7,148	7,560	6,363
Energy.....	1,926	2,166	3,525	3,983	5,756
General science.....	2,012	2,138	2,102	2,072	2,188
Natural resources and environment.....	1,694	1,473	1,614	1,650	1,692
Transportation.....	1,749	1,978	1,642	1,524	1,591
Agriculture.....	942	893	884	925	1,027
Education, training, employment, and social services.....	887	674	618	616	517
International affairs.....	86	68	75	101	148
Veterans benefits and services.....	226	243	246	237	240
Commerce and housing credit.....	153	146	168	167	160
Community and regional development.....	238	234	240	263	227
Administration of justice.....	101	100	114	85	67
Income security.....	324	203	186	116	124
General government.....	21	26	31	29	29

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25e. Federal R&D budget authority, by budget function: fiscal years 1978-83

Budget function	1978	1979	1980	1981	1982	1983
	[In millions of dollars]					
Total.....	25,976	28,208	29,739	33,735	36,115	38,768
National defense.....	12,899	13,791	14,946	18,413	22,070	24,936
Health.....	2,968	3,401	3,694	3,871	3,869	4,298
Space research and technology.....	2,939	3,136	2,738	3,111	2,584	2,134
Energy.....	3,134	3,461	3,603	3,501	3,012	2,578
General science.....	1,050	1,119	1,233	1,340	1,359	1,502
Natural resources and environment.....	904	1,010	999	1,061	965	952
Transportation.....	768	798	887	869	791	876
Agriculture.....	501	552	585	659	693	745
Education, training, employment, and social services.....	345	354	468	298	228	189
International affairs.....	57	117	125	160	165	177
Veterans benefits and services.....	111	123	126	143	139	157
Commerce and housing credit.....	77	93	101	106	104	107
Community and regional development.....	92	127	119	104	63	44
Administration of justice.....	44	47	45	34	31	37
Income security.....	67	57	47	43	32	32
General government.....	20	23	22	22	10	6
	[In millions of constant FY 1996 dollars]					
Total.....	54,617	54,858	53,115	54,925	54,953	56,505
National defense.....	27,122	26,820	26,694	29,979	33,582	36,345
Health.....	6,241	6,614	6,598	6,303	5,887	6,264
Space research and technology.....	6,180	6,099	4,890	5,065	3,932	3,110
Energy.....	6,590	6,731	6,435	5,700	4,583	3,757
General science.....	2,208	2,176	2,202	2,182	2,068	2,189
Natural resources and environment.....	1,901	1,964	1,784	1,727	1,468	1,388
Transportation.....	1,615	1,552	1,584	1,415	1,204	1,277
Agriculture.....	1,053	1,074	1,045	1,073	1,054	1,086
Education, training, employment, and social services.....	725	688	836	485	347	275
International affairs.....	120	228	223	261	251	258
Veterans benefits and services.....	233	239	225	233	212	229
Commerce and housing credit.....	162	181	180	173	158	156
Community and regional development.....	193	247	213	169	96	64
Administration of justice.....	93	91	80	55	47	54
Income security.....	141	111	84	70	49	47
General government.....	42	45	39	36	15	9

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25f. Federal R&D budget authority, by budget function: fiscal years 1984-89

Budget function	1984	1985	1986	1987	1988	1989
	[In millions of dollars]					
Total.....	44,214	49,887	53,249	57,069	59,106	62,115
National defense.....	29,287	33,698	36,926	39,152	40,099	40,665
Health.....	4,779	5,418	5,565	6,556	7,076	7,773
Space research and technology.....	2,300	2,725	2,894	3,398	3,683	4,555
Energy.....	2,581	2,389	2,286	2,053	2,126	2,419
General science.....	1,676	1,862	1,873	2,042	2,160	2,373
Natural resources and environment.....	963	1,059	1,062	1,133	1,160	1,255
Transportation.....	1,040	1,030	917	908	896	1,064
Agriculture.....	762	836	815	822	882	907
Education, training, employment, and social services.....	200	220	248	267	285	347
International affairs.....	192	210	211	223	224	279
Veterans benefits and services.....	218	193	183	215	195	212
Commerce and housing credit.....	110	114	111	110	122	128
Community and regional development.....	46	50	88	99	108	74
Administration of justice.....	24	47	41	49	51	45
Income security.....	26	21	14	25	23	27
General government.....	8	17	14	17	17	15
	[In millions of constant FY 1996 dollars]					
Total.....	62,151	67,883	70,753	73,799	74,012	74,901
National defense.....	41,168	45,854	49,065	50,630	50,212	49,035
Health.....	6,718	7,372	7,394	8,478	8,861	9,373
Space research and technology.....	3,233	3,708	3,845	4,394	4,612	5,493
Energy.....	3,628	3,251	3,037	2,655	2,662	2,917
General science.....	2,356	2,534	2,489	2,641	2,705	2,861
Natural resources and environment.....	1,354	1,441	1,411	1,465	1,453	1,513
Transportation.....	1,462	1,402	1,218	1,174	1,122	1,283
Agriculture.....	1,071	1,138	1,083	1,063	1,104	1,094
Education, training, employment, and social services.....	281	299	330	345	357	418
International affairs.....	270	286	280	288	280	336
Veterans benefits and services.....	306	263	243	278	244	256
Commerce and housing credit.....	155	155	147	142	153	154
Community and regional development.....	65	68	117	128	135	89
Administration of justice.....	34	64	54	63	64	54
Income security.....	37	29	19	32	29	33
General government.....	11	23	19	22	21	18

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCE: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; and supplemental data obtained from agencies' budget offices.

Table 25g. Federal R&D budget authority, by budget function: fiscal years 1990-95

Budget function	1990	1991	1992	1993	1994	1995
	[In millions of dollars]					
Total.....	63,781	65,898	68,398	69,884	68,331	68,791
National defense.....	39,925	39,328	40,061	41,249	37,764	37,204
Health.....	8,308	9,226	10,055	10,280	10,993	11,407
Space research and technology.....	5,765	6,511	6,744	6,988	7,414	7,916
Energy.....	2,726	2,953	3,153	2,677	2,873	2,844
General science.....	2,410	2,635	2,659	2,691	2,712	2,794
Natural resources and environment.....	1,386	1,582	1,688	1,802	2,062	1,988
Transportation.....	1,045	1,231	1,523	1,703	1,888	1,833
Agriculture.....	950	1,052	1,155	1,152	1,193	1,194
Education, training, employment, and social services.....	374	433	365	348	373	369
International affairs.....	375	378	371	382	254	287
Veterans benefits and services.....	216	219	245	250	265	257
Commerce and housing credit.....	140	178	192	220	380	525
Community and regional development.....	67	88	95	57	68	70
Administration of justice.....	44	51	51	49	46	59
Income security.....	33	30	37	36	45	43
General government.....	17	4	4	*	0	1
	[In millions of constant FY 1996 dollars]					
Total.....	74,121	73,711	74,556	74,400	71,207	70,166
National defense.....	46,397	43,991	43,668	43,915	39,354	37,948
Health.....	9,655	10,320	10,960	10,944	11,456	11,635
Space research and technology.....	6,700	7,282	7,351	7,440	7,726	8,074
Energy.....	3,168	3,303	3,437	2,850	2,994	2,901
General science.....	2,801	2,947	2,898	2,864	2,826	2,849
Natural resources and environment.....	1,611	1,769	1,840	1,918	2,149	2,028
Transportation.....	1,214	1,377	1,660	1,813	1,968	1,870
Agriculture.....	1,104	1,177	1,259	1,226	1,244	1,218
Education, training, employment, and social services.....	435	484	398	371	389	376
International affairs.....	436	423	404	407	265	293
Veterans benefits and services.....	251	245	267	267	276	262
Commerce and housing credit.....	163	200	209	234	396	536
Community and regional development.....	78	99	104	61	70	71
Administration of justice.....	51	57	55	52	48	60
Income security.....	38	33	40	39	47	44
General government.....	20	4	4	*	0	1

* = Less than \$500,000.

NOTES: Because of rounding, components may not add to totals.
GDP implicit price deflators used to convert current dollars to constant FY 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 25h. Federal R&D budget authority, by budget function: fiscal years 1996-2002

Budget function	1996	1997	1998	1999	2000	2001 preliminary	2002 proposed
[In millions of dollars]							
Total.....	69,049	71,653	73,569	77,637	78,664	86,270	94,000
National defense.....	37,801	39,591	39,823	41,306	42,580	45,595	51,362
Health.....	11,867	12,670	13,576	15,553	17,869	20,569	23,037
Space research and technology ¹	7,844	7,844	8,198	8,245	5,363	6,016	6,143
Energy ²	2,521	2,372	948	1,131	996	1,342	1,068
General science ²	2,846	2,944	4,360	4,690	4,977	5,393	5,339
Natural resources and environment.....	1,802	1,886	1,855	1,842	1,999	2,174	2,143
Transportation.....	1,795	1,785	1,833	1,725	1,636	1,655	1,670
Agriculture.....	1,176	1,203	1,249	1,288	1,426	1,552	1,434
Education, training, employment, and social services.....	331	373	444	403	418	437	411
International affairs.....	252	190	163	190	200	216	206
Veterans benefits and services ³	259	267	587	644	645	703	722
Commerce and housing credit.....	432	409	398	432	406	423	299
Community and regional development.....	50	48	42	59	46	55	44
Administration of justice.....	56	59	72	88	73	90	74
Income security.....	16	9	18	38	25	42	42
General government.....	2	2	2	3	6	7	7
[In millions of constant FY 1996 dollars]							
Total.....	69,049	70,283	71,150	74,046	73,607	79,045	84,358
National defense.....	37,801	38,834	38,514	39,395	39,843	41,777	46,093
Health.....	11,867	12,428	13,130	14,834	16,720	18,847	20,674
Space research and technology ¹	7,844	7,694	7,928	7,864	5,018	5,512	5,513
Energy ²	2,521	2,326	917	1,079	932	1,230	959
General science ²	2,846	2,888	4,217	4,473	4,657	4,942	4,791
Natural resources and environment.....	1,802	1,850	1,794	1,757	1,870	1,992	1,923
Transportation.....	1,795	1,751	1,773	1,645	1,531	1,517	1,499
Agriculture.....	1,176	1,180	1,208	1,228	1,334	1,422	1,287
Education, training, employment, and social services.....	331	366	429	384	391	400	369
International affairs.....	252	186	158	181	187	198	185
Veterans benefits and services ³	259	262	568	614	604	644	648
Commerce and housing credit.....	432	401	385	412	380	388	268
Community and regional development.....	50	47	41	56	43	50	39
Administration of justice.....	56	58	70	84	68	82	66
Income security.....	16	9	17	36	23	38	38
General government.....	2	2	2	3	6	6	6

¹ Beginning in FY 2000, NASA reclassified Space Station as a physical asset and Space Station research as equipment and transferred funding for the Space Station program from R&D to R&D plant.

² Beginning in FY 1998, a number of Department of Energy programs were reclassified from energy (270) to general science (251).

³ Beginning in FY 1998, the Department of Veterans Affairs (VA) was required to report medical care support funds as part of VA's total research budgetary resources.

NOTES: Data for 1996-2000 are actual budget authority. Data for 2001 are preliminary estimates, and data for 2002 are proposed based on fiscal year 2002 budget. Because of rounding, components may not add to totals. GDP implicit price deflators used to

Table 26a. Federal budget authority for basic research, by budget function: fiscal years 1978-83

Budget function	1978	1979	1980	1981	1982	1983
	[In millions of dollars]					
Total.....	3,665	4,108	4,716	5,107	5,305	6,247
National defense.....	320	365	552	610	696	788
Health.....	1,246	1,579	1,761	1,951	1,953	2,475
Space research and technology.....	412	440	482	445	434	501
Energy.....	157	172	200	220	260	320
General science.....	962	1,026	1,152	1,256	1,296	1,439
Natural resources and environment.....	207	131	136	131	139	156
Transportation.....	70	75	79	89	102	117
Agriculture.....	197	222	246	281	295	326
Education, training, employment, and social services.....	57	59	61	66	78	70
International affairs.....	*	0	0	12	10	10
Veterans benefits and services.....	9	10	14	15	13	14
Commerce and housing credit.....	9	10	15	17	17	19
Community and regional development.....	8	8	8	5	7	6
Administration of justice.....	10	10	9	5	4	4
Income security.....	2	1	1	3	0	0
General government.....	0	*	*	3	2	3
	[In millions of constant FY 1996 dollars]					
Total.....	7,706	7,989	8,423	8,315	8,072	9,105
National defense.....	673	710	986	993	1,059	1,149
Health.....	2,620	3,071	3,145	3,176	2,972	3,607
Space research and technology.....	866	856	861	725	660	730
Energy.....	330	335	357	358	396	466
General science.....	2,023	1,995	2,058	2,045	1,972	2,097
Natural resources and environment.....	435	255	243	213	212	227
Transportation.....	147	146	141	145	155	171
Agriculture.....	414	432	439	458	449	475
Education, training, employment, and social services.....	120	115	109	107	119	102
International affairs.....	*	0	0	20	15	15
Veterans benefits and services.....	19	19	25	24	20	20
Commerce and housing credit.....	19	19	27	28	26	28
Community and regional development.....	17	16	14	8	11	9
Administration of justice.....	21	19	16	8	6	6
Income security.....	4	2	2	5	0	0
General government.....	0	*	*	5	3	4

* = Less than \$500,000.

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26b. Federal budget authority for basic research, by budget function: fiscal years 1984-89

Budget function	1984	1985	1986	1987	1988	1989
	[In millions of dollars]					
Total.....	7,072	7,810	8,193	9,021	9,553	10,648
National defense.....	845	856	960	900	905	965
Health.....	2,813	3,243	3,324	3,851	4,087	4,413
Space research and technology.....	646	498	737	843	944	1,099
Energy.....	365	428	456	511	571	703
General science.....	1,606	1,779	1,795	1,942	2,061	2,265
Natural resources and environment.....	192	206	204	206	210	331
Transportation.....	125	255	184	231	197	287
Agriculture.....	353	406	390	397	428	433
Education, training, employment, and social services.....	77	86	83	78	83	92
International affairs.....	3	4	5	3	3	3
Veterans benefits and services.....	15	15	15	17	17	16
Commerce and housing credit.....	20	23	26	26	28	29
Community and regional development.....	5	6	6	4	7	3
Administration of justice.....	5	4	5	8	8	7
Income security.....	0	0	0	0	0	0
General government.....	3	4	5	4	5	3
	[In millions of constant FY 1996 dollars]					
Total.....	9,941	10,627	10,886	11,666	11,962	12,840
National defense.....	1,188	1,165	1,276	1,164	1,133	1,164
Health.....	3,954	4,413	4,417	4,980	5,118	5,321
Space research and technology.....	908	678	979	1,090	1,182	1,325
Energy.....	513	582	606	661	715	848
General science.....	2,258	2,421	2,385	2,511	2,581	2,731
Natural resources and environment.....	270	280	271	266	263	399
Transportation.....	176	347	244	299	247	346
Agriculture.....	496	552	518	513	536	522
Education, training, employment, and social services.....	108	117	110	101	104	111
International affairs.....	4	5	7	4	4	4
Veterans benefits and services.....	21	20	20	22	21	19
Commerce and housing credit.....	28	31	35	34	35	35
Community and regional development.....	7	8	8	5	9	4
Administration of justice.....	7	5	7	10	10	8
Income security.....	0	0	0	0	0	0
General government.....	4	5	7	5	6	4

NOTES: Because of rounding, components may not add to totals.
GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities"; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26c. Federal budget authority for basic research, by budget function: fiscal years 1990-95

Budget function	1990	1991	1992	1993	1994	1995
	[In millions of dollars]					
Total.....	11,288	12,405	12,973	13,440	13,552	13,772
National defense.....	964	1,188	1,147	1,323	1,174	1,181
Health.....	4,661	5,021	5,506	5,700	5,889	6,068
Space research and technology.....	1,389	1,479	1,499	1,588	1,796	1,614
Energy.....	761	878	921	917	921	930
General science.....	2,306	2,526	2,532	2,553	2,542	2,622
Natural resources and environment.....	336	389	383	376	224	187
Transportation.....	242	246	266	238	220	389
Agriculture.....	456	486	528	553	567	565
Education, training, employment, and social services.....	106	115	118	121	145	153
International affairs.....	4	6	6	8	6	0
Veterans benefits and services.....	16	16	16	16	16	16
Commerce and housing credit.....	31	39	35	34	38	35
Community and regional development.....	3	10	11	10	9	3
Administration of justice.....	9	6	5	5	5	9
Income security.....	0	0	0	0	0	0
General government.....	3	0	0	0	0	0
	[In millions of constant FY 1996 dollars]					
Total.....	13,118	13,876	14,141	14,308	14,123	14,047
Health.....	5,417	5,616	6,002	6,068	6,137	6,189
General science.....	2,680	2,826	2,760	2,717	2,649	2,675
Space research and technology.....	1,614	1,654	1,634	1,690	1,872	1,647
National defense.....	1,120	1,329	1,250	1,408	1,224	1,205
Energy.....	884	982	1,004	976	960	949
Agriculture.....	530	544	576	589	591	576
Natural resources and environment.....	390	435	417	400	233	190
Transportation.....	281	275	290	254	229	397
Education, training, employment, and social services.....	123	129	129	129	151	156
Commerce and housing credit.....	36	44	38	37	40	36
Veterans benefits and services.....	19	18	17	17	17	16
Administration of justice.....	10	7	5	5	6	9
Community and regional development.....	3	11	12	11	9	3
General government.....	3	0	0	0	0	0
International affairs.....	5	7	7	9	6	0
Income security.....	0	0	0	0	0	0

NOTES: Because of rounding, components may not add to totals.
GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26d. Federal budget authority for basic research, by budget function: fiscal years 1996-2002

Budget function	1996	1997	1998	1999	2000	2001 preliminary	2002 proposed
[In millions of dollars]							
Total.....	14,442	14,961	15,523	17,433	19,470	22,015	23,302
National defense.....	1,165	1,090	1,067	1,110	1,184	1,369	1,355
Health.....	6,395	6,852	7,356	8,634	10,099	11,537	12,973
Space research and technology.....	1,685	1,653	1,610	1,667	1,616	2,157	2,066
Energy ¹	1,182	1,288	34	36	36	42	25
General science ¹	2,662	2,753	4,121	4,464	4,722	5,074	5,069
Natural resources and environment.....	147	153	145	142	146	198	193
Transportation.....	456	420	411	358	542	416	421
Agriculture.....	547	548	571	602	651	710	679
Education, training, employment, and social services.....	140	142	133	99	107	109	106
International affairs.....	2	2	1	0	42	51	49
Veterans benefits and services ²	13	14	23	263	266	290	304
Commerce and housing credit.....	37	34	35	41	39	42	40
Community and regional development.....	0	0	0	0	0	0	0
Administration of justice.....	12	13	16	18	20	20	21
Income security.....	0	0	0	0	0	0	0
General government.....	0	0	0	0	0	0	0
[In millions of constant FY 1996 dollars]							
Total.....	14,442	14,675	15,013	16,626	18,218	20,171	20,911
National defense.....	1,165	1,069	1,032	1,058	1,108	1,255	1,216
Health.....	6,395	6,721	7,114	8,235	9,450	10,571	11,642
Space research and technology.....	1,685	1,621	1,557	1,590	1,512	1,976	1,854
Energy ¹	1,182	1,263	33	34	34	38	23
General science ¹	2,662	2,700	3,985	4,257	4,418	4,649	4,549
Natural resources and environment.....	147	150	141	135	137	181	173
Transportation.....	456	412	398	342	507	381	378
Agriculture.....	547	537	552	574	609	650	609
Education, training, employment, and social services.....	140	139	129	94	100	100	95
International affairs.....	2	2	1	0	39	47	44
Veterans benefits and services ²	13	14	23	251	249	266	273
Commerce and housing credit.....	37	33	34	39	36	38	36
Community and regional development.....	0	0	0	0	0	0	0
Administration of justice.....	12	13	15	17	19	18	19
Income security.....	0	0	0	0	0	0	0
General government.....	0	0	0	0	0	0	0

¹ Beginning in FY 1998, a number of Department of Energy programs were reclassified from energy (270) to general science (251).

² The Department of Veterans Affairs (VA) submission to Office of Management, MAX Schedule C included both VA's medical care and research accounts. Also, prior to 1999, many of the VA R&D costs were counted as R&D facilities and therefore were not included in this table. Starting in 1999, the costs were shifted from R&D facilities to conduct of R&D due to a reclassification within R&D.

NOTES: Data for 1996-2000 are actual budget authority. Data for 2001 are preliminary estimates, and data for 2002 are proposed based on the fiscal year 2002 budget. Because of rounding, components may not add to totals.
GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.



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